# <u>motive</u> uve<sup>®</sup>

## analyze. trade. evolve.

# MotiveWave™

#### User's Guide Version: 5.0

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## 1 Introduction

Welcome to the MotiveWave<sup>™</sup> User's Guide! If you are reading this document then you have already installed MotiveWave<sup>™</sup> on your computer and you are ready to start using the application.

If you have not yet installed MotiveWave<sup>™</sup> or registered for a trial on our website, please read the <u>Installation Guide</u> before continuing on with this document.

#### 1.1 MotiveWave™ Editions and Modules

If you are currently working with the trial version of MotiveWave<sup>™</sup> (available from our website), then you most likely have the Ultimate Edition of MotiveWave<sup>™</sup>. This edition includes all of our features and functionality (Note: excludes partner modules and studies). If you are currently on a trial and you would like to try a specific edition/module, please contact <u>sales@motivewave.com</u>.

#### 1.1.1 Editions

There are several editions of MotiveWave<sup>™</sup> available to address the different needs and budgets of traders and market analysts. Detailed information on these editions and the functionality that they provide can be found on our website: <u>http://www.motivewave.com/purchase/compare-editions.htm</u>

- 1. Ultimate Edition This edition includes all of our features and is recommended if you are a professional trader and you are using advanced features such as Elliott Wave, Gann or Gartley.
- 2. **Professional Edition** This is for professional traders that do not used advanced features such as Elliott Wave, Gann or Gartley
- 3. **Strategy Edition** Expands on the Trade Edition to provide support for strategy back testing and optimization.
- 4. Trade Edition Expands on the Charts Edition to provide trading capabilities
- 5. **Charts Plus Edition** Expands on the Charts Edition and adds popular features such as Replay Mode, Chart Templates, Multi-Time Frame studies and more.
- 6. **Charts Edition** This entry level edition contains a full set of studies and basic tools for doing analysis.

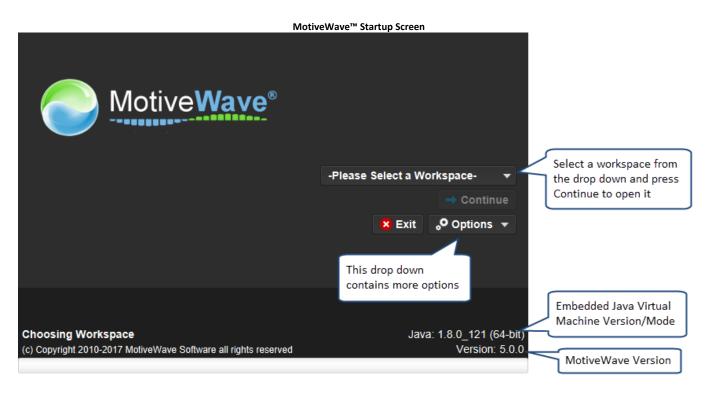
#### 1.1.2 Modules

Modules can be added to editions to extend their capabilities. For a full list of available modules and their capabilities see: <u>http://www.motivewave.com/purchase/modules.htm</u>

#### 1.2 Starting MotiveWave™

If you are on Mac OSX<sup>™</sup>, MotiveWave <sup>™</sup> will be found from your *Launch Pad* or in your *Applications* folder. Just click on the MotiveWave<sup>™</sup> icon to start the application. If you installed MotiveWave<sup>™</sup> on a Windows<sup>™</sup> machine double click on the MotiveWave<sup>™</sup> icon on your desktop. Alternatively, choose *Start* -> *All Programs* -> *MotiveWave* -> *MotiveWave.exe* 

The first screen that you will see when you start MotiveWave is the startup screen. Normally you will open a workspace from this screen. Select the workspace from the drop down and press the *Continue* button.



Depending on the broker or data service that you have chosen for the workspace, you may see a dialog that asks for login information. The example below is a login dialog for a CQG workspace. In this case enter your User ID and password for your CQG account.

**Please Note:** there is no user name or password for MotiveWave<sup>™</sup>, just a license key. If you are being asked for a login ID and password, then this would be for the broker or data service that you chose for the workspace.

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Connecting to (c) Copyright 2010	Service: CQG -2017 MotiveWave Soft	ware all rights reserved	Java: 1.8	8.0_121 (64-bit) Version: 5.0.0

#### 1.3 License

When you create a trial for MotiveWave<sup>™</sup> from our website, you will be sent an email that contains a license key. This key will need to be entered as part of the installation process (see the Install Guide). This license key uniquely identifies your profile and will not change (even when you purchase).

If you think this key has been compromised, you can send a request to our support team (<u>support@motivewave.com</u>) to request a new key. This key will be sent to the email address that you registered with.

#### 1.3.1 Changing your License Key

Your license key can be changed from the startup screen in MotiveWave<sup>™</sup>. From the **Options** menu button select the **Licence** option.

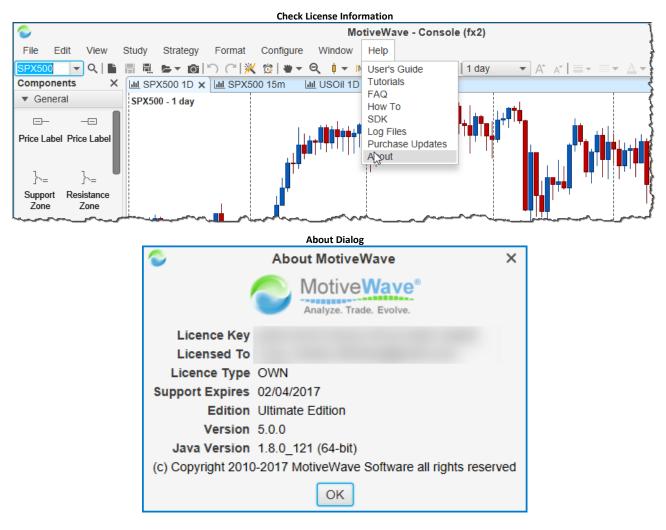
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(c) Copyright 2010-2017 MotiveWave Software all rights	reserved			Version: 5.0.0

Enter your new licence key into the *Licence Key* field. Press the *Update* button to validate this key and change the licence key that MotiveWave<sup>™</sup> will use going forward. Note: to avoid mistyping the licence key, it is recommended that you copy and paste the key from the email message instead.

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licence a	g: Do not share this key, it is specific to your account and it will violate your agreement if shared with a third party. If you suspect your licence key may be nised contact customer support (support@motivewave.customer support support@motivewave.customer support support@motivewave.customer support support@motivewave.customer support support@motivewave.customer suppo	
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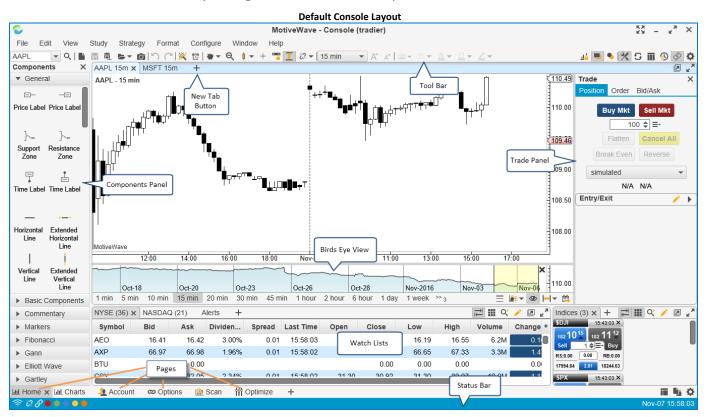
#### 1.3.2 Licence Status

You can easily check which MotiveWave<sup>™</sup> Edition and Modules that are assigned to your license by choosing *Help -> About* from the top menu bar of the Console. The *About* dialog will display your license key, email address, edition, modules and lease/support expiry dates.



## 2 Console

After you have installed MotiveWave<sup>™</sup> and configured your workspace the first window that you will see when opening that workspace will be the **Console**. The console provides access to all the features in MotiveWave<sup>™</sup> and it is initially configured with a default layout.

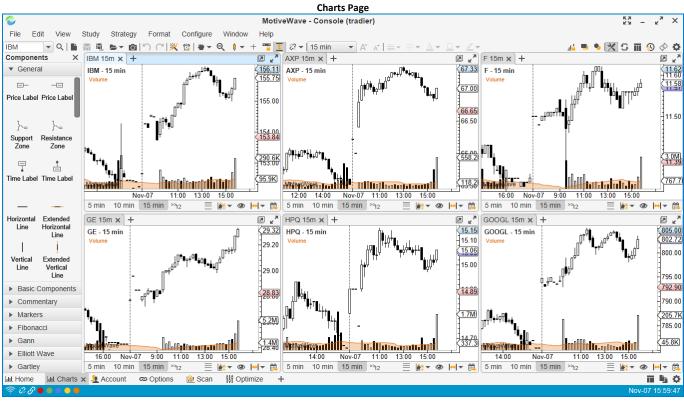


The console is organized into different *pages* (see screen shot above, please note: pages are only available in the Professional and Ultimate editions of MotiveWave<sup>™</sup>). To access a different page, simply click on the page tab at the bottom of the console window. The default set of pages are as follows:

- 1. **Home** The home page contains a sample layout that has a single chart area and two spots at the bottom for watch lists.
- 2. Charts Sample layout of 6 charts
- 3. **Account** Layout containing information about your account, orders, positions and historical trades.
- 4. **Options** Sample layout containing Option Chains. Note: this page is only available on brokers that support options trading.
- 5. Scan Layout for using the scanning functionality within MotiveWave™
- 6. **Optimize** Contains a strategy optimizer panel for Back Testing, Optimization and Walk Forward testing of automated strategies.
- 7. News If supported by your Broker/Data service, you may see a page for news

The following screen shots illustrate the default set of pages in the console:





#### Accounts Page

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oss Loss					(\$2,999.00)		(\$1,5	00.00)		(\$1,499.00
ommission					\$0.00			\$0.00		\$0.0
ofit Factor					1.040			0.855		1.22
ax. Drawdo					\$876.00			65.00		\$379.0
ax Drawdov					0.88%			0.67%		0.389
otal # Trade ercent Profi					153 33.99%			76 0.26%		7 37.669
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MotiveWave™ User's Guide

### 2.1 Preferences

The Preferences Dialog (choose *Configure -> Preferences* from the Console menu bar) provides a centralized location for configuring MotiveWave<sup>™</sup>. This dialog contains many configuration panels organized under tabs (and sub tabs).

Prefe	rences
<ul> <li>●</li> </ul>	MotiveWave - Console (google)
File Edit View Study Strategy Format Cor	figure Window Help
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General Theme Chart Top Level Tabs Ratios Ellio	tt Wave Gartley Tick Charts OFA® Orders Alerts 💌
General Keyboard Mouse Fonts Quick Search Ticker	Tape Linking Dock Trading Hours Simulated Accol 💌
This panel contains general preferences t	e for MotiveWave.
24 Hour Clock:	
Confirm Exit: 🗸	
Use Native Windows:	
News In Browser:	
Link Stacked Charts: V	
Show Bar Size in Tabs: 🗸	
Show Watch List Count: ✔	
Auto Save Enabled:	
Auto Save Interval: 300 🗢 (Seconds)	
Google Poll Interval: 5 € (Seconds)	
Tick History Limit: 2000 🜩	
Filter Bad Historical Ticks:	
OK Appl	y Cancel

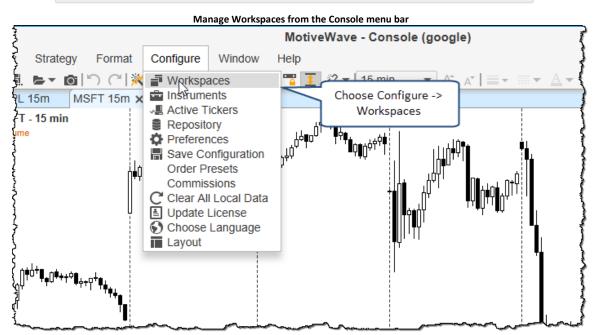
Feel free to explore the configuration options within MotiveWave<sup>™</sup> by looking at the tabs and sub tabs available in this dialog. More detail on specific configuration options can be found in other parts of this document.

#### 2.2 Workspaces

Connections to Brokers and Data Services are managed through workspaces. Each workspace is a separate instance of MotiveWave<sup>™</sup> and contains its own local database. All data, settings and analyses are separate between each workspace (with the exception of themes and historical data).

Workspaces can be managed from the *Console* or from the startup screen (click on the *Options* drop down and select *Workspaces*).





The **Manage Workspaces** dialog enables you to create new workspaces or to edit/modify existing workspaces. The order in which they appear in the startup workspace drop down can also be modified from this dialog. Click on the **New Workspace** button to create a new workspace.

	Manage Workspaces Dialog												
i	Manage Workspaces												
	Workspaces are used to manage connection(s) to brokers and/or data services and to store information such as analyses, scans, open charts, layouts, instruments or watch lists. The table below contains existing workspaces.												
		Name		Service	+								
	test			Google/Yahoo									
	rithmic1	r		Rithmic									
	iq		These are	e existing									
	tk			spaces 9									
	iqtest2	l		14,004									
	iqtest1			IQFeed									
	esignal			eSignal									
	GAIN			GAIN									
	amp_test			AMP Global Clearing									
	CQG2	Click here to cr a new worksp		CQG									
	goog			Google/Yahoo									
		New Workspace Modif	fy Remo	vve up down Close									

#### 2.2.1 Professional/Ultimate Editions

Starting with version 4.0 the Professional and Ultimate editions allow multiple broker and/or data service connections within a single workspace.

Create Workspace Dialog	
+ Create Workspace	×
General Information	
The workspace name uniquely identifies a workspace. All information related to the workspace (configuration, market data, analysis files etc) are stored in a local database.  Workspace Name	cť
Service	٦
Click here to add a connection to the workspace. Click "Add Connection"	
Create Workspace Cancel	

From the connection dialog (see below) you can choose the broker or data service that you want to add to the workspace. Connection information will depend on the broker/data service that you choose.

	Add Conn	ection Di	alog	
Ň	Add Co	onnectior	1	×
A Connection connection inf	represents a connection to a specific brook	oker or dat	a service and enapsul	ates the required
General Info	ormation			
The name union as the name of	quely identifies the name of the Connecti f the Service.	on within tł	ne workspace. Typica	lly the name is the same
Connection:				
Connection	Information			
The name union as the name of	quely identifies the name of the Connecti f the Service.	on within ti	ne workspace. Typica	lly the name is the same
Service:	-Select Service-	Choos	Select broker or	e from the drop down list
	-Select Service-	of to see	data service from	
	Google/Yahoo	You m	drop down	tion' button to test if the
	OANDA	MotiveV	/ave can connect succ	correct and that cossfully.
	AMP Global Clearing - Rithmic			,
	AMP Global Clearing			
	BarChart			
	IQFeed			
	QuoteMedia			
	eSignal			
	TradeStation			
	Add Conne	ction	ancel	

The following dialog shows an example of a workspace with three connections (TradeStation, OANDA and TD Ameritrade).

+	Create Wo	orkspace	×
General Information			
The workspace name uni (configuration, market da			on related to the workspace database.
Workspace Name My	Workspace		Eg: 'jsmith123' or 'simulated acct'
Connections			
Click Add Connection to Modify to change its prop	add a new connection		onfigured for this workspace. ng connection and click
Na	me		Service
тѕ		TradeStation	
OANDA		OANDA	
TDA		TD Ameritrade	
	Create Worksp	ace Cancel	

#### 2.2.2 Single Broker Editions

For the other editions of MotiveWave (Charts, Charts Plus, Trade and Strategy) only a single connection to a broker or data service is allowed within a workspace. The following diagram illustrates the create workspace dialog for these editions. Simply choose a name for the workspace and choose the connection type from the service drop down.

	Create Workspace	e Single Broker Editions									
+	Create	Workspace 2	×								
General Info	ormation										
			-								
	e name uniquely identifies a workspace. Inalysis files etc) are stored in a local da	All information related to the workspace (configuration, tabase.									
Workspace Name <- Enter Workspace Name Enter workspace name Eg: "jsmith123" or 'simulated											
Connection	Information										
The name union as the name of		ion within the workspace. Typically the name is the same	-								
Service:	-Select Service-	Choose your broker/data service from the drop down lis	t								
	-Select Service-	to see specific help.									
	Google/Yahoo	Select Broker/Data Service utton to test if the									
	OANDA	infor from the drop down ct and that									
	AMP Global Clearing - Rithmic										
	AMP Global Clearing										
	BarChart										
	IQFeed										
	QuoteMedia										
	eSignal										
	TradeStation										
	Create Worl	rspace Cancel									

#### 2.3 Changing the Default Layout

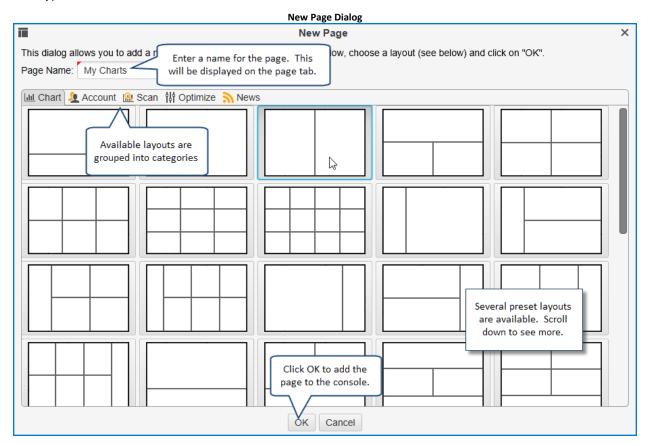
The console layout is highly configurable. All pages can have their layouts modified and pages can be added or removed. The following screen shot illustrates the page area and some of the available options:

			<b></b>					Page Are	a				
201	l6 Jai	n- <del>1</del> 7	eb-2016	b-14	Mar-2016	- Ma	ar-20 Ap	r-2016	Sep-20	Oct-201	6 0	Oct-16 Nov-2016 00:00	
1 min - 5	5 min 10 min	15 min	20 min 30 mir	1 45 min	1 hour 2	hour 6 hou	r 1 day 1	week 2 v	/eek 1 m	onth >> 1			
NYSE (35	) × NASDAG	Q (21) A	lerts +						$\xrightarrow{ }$	약 📑 🥖		Indices (10) × +	× ×
Symbo	Exchange	Last Pr	Last Time	Change	% Chan	Open	Close	High	Low	EPS	P/ER +		
AEO	NYSE	85.20	10:44:00	0.14	0.79%	17.67	17.72	17.92	17.51	1.260	1.	187 66 <sup>97</sup> 187 67 <sup>01</sup> 85 04 <sup>62</sup> 85 04 <sup>66</sup> 52 00 <sup>03</sup> 52 00 <sup>07</sup> Sell 199 Buy Sell 199 Buy Sell 199 Buy Sell 199 Buy	
AXP	NYSE	70.05	10:44:00	-0.06	-0.09%	69.97	70.11	70.34	69.75	5.630	1:	RS:0.00 0.00 RB:0.00 RS:0.00 0.00 RB:0.00 DB:0.00 DB:0.00	
BTU	NYSE	47.58				2.07	2.07	0.00	0.00	-112.960	1	L:0.00 0.04 H:0.00 L:0.00 0.04 H:0.00 This button will	
ÇSX	NYSE	31.69			click on a p o activate it		34.53	34.47	34.06	1.800	1:	.NDX 10:44:00 X .INX 10:44:00 X create a copy of	
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F the act	tive page	51.95	10:44:00			4.12	13.80	14.26	13.10	-6.763	i (	Sell 14= Buy Sell 14= Buy Sell 14	
	10/05	~~ ~~	10 10 00		0.570	100.00		100.00		0.000	-	RS:0.00 0.00 RE:0.00 RS:0.00 0.00 RS:0.00 0.00 R	2
Lill Home	× 🔟 Charts	🤽 Acco	unt 🗙 <u> </u> Scan	해 Opti	mize 🔊	News +		chere to ad	da			Click this button to	<b>\$</b>
🗟 i S	• • • •		a,					new page.				choose a preset layout	:44:13
			Click the 'X' to										
			remove a page										

#### 2.3.1 Creating a new page

To add a page to the console, click on the **New Page** button (see above). The **New Page** dialog will appear (see below). You will need to specify a name for your page. This name is displayed on the page tab when it is added to the console.

There are many different layouts available for your page. Just choose the one that most closely matches what you want to have on the page. Several categories are available in the tabs at the top of the dialog. The icon matching the category will be displayed on the page tab that you are creating (making it easier to identify).



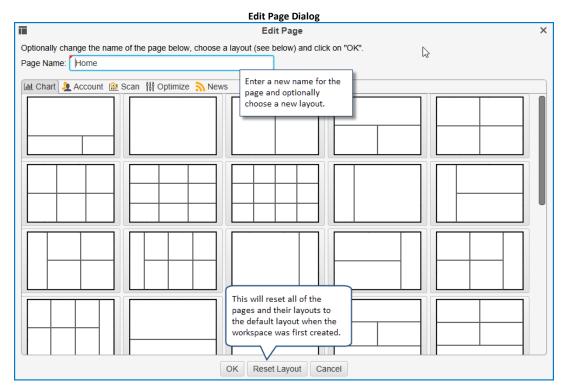
#### 2.3.2 Modifying a Page

You can change the name of a page and optionally its layout. To modify the current page, click on the **Edit Page** button on the right hand side of the page area.



This will open the Edit Page dialog where you can change the name of the page and optionally select a new layout for the page.

At the bottom of the **Edit Page** dialog you will see a button called **Reset Layout**. This button can be used to reset the console layout to the default. This will reset all of the pages including their layouts to be the same as when you first created the workspace (see <u>Default Console Layout</u> screen shot).



#### 2.3.3 Changing the Page Order

If you would like to change the order of the pages, simply click and drag the page tab to the desired location:

				c	hange Page	Order					
ALO	$\sim$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
AXP	NYSE	<b>†</b> 71.02	11:04:00	-0.28	-0.40%	69.97	70.11	70.34	69.75	5.630	- 1:5
BTU	NYSE	<b>1</b> 47.49		0.00	0.00%	2.07	2.07	0.00	0.00	-112.960	ų.
CSX				0.00	0.00%	34.21	34.53	34.47	34.06	1.800	11
DE		and drag the left or right	11:04:00	0.04	0.04%	90.47	90.70	90.98	89.69	4.990	11
FCX		iert of right	11:04:00	-0.20	-1.45%	14.12	13.80	14.26	13.10	-6.763	
		• 00 00	10 0000	o tol til til	÷		cal blue bar		vhere .	0.000	~`}
	ne 🗙 🛄 Charts	Le Account	<u> </u> Scan	tật Opti	mize <u>m</u>	the p	age will be o	dropped			- {

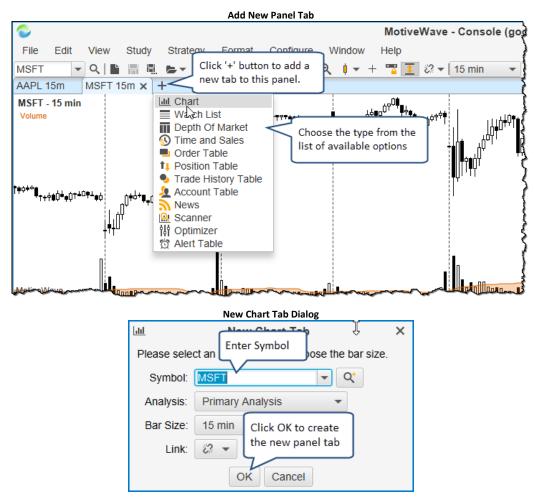
#### 2.3.4 Resizing Panels

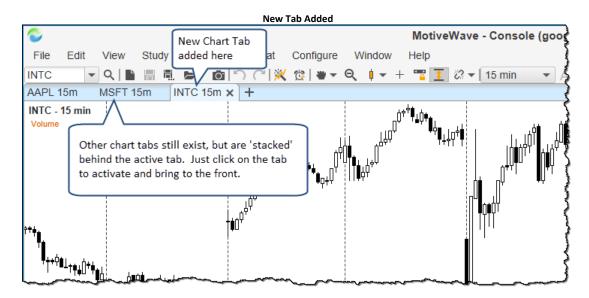
The size of the panels displayed in a page can be resized by clicking and dragging the area between each panel. Notice that the mouse cursor will change when you hover over these areas. The following screen shot illustrates changing the vertical space between the chart area and watch list area in the **Home** page:

and the	And the first of the		ilin				Resize Panel	s				~~~~~	<u> </u>
07	12:00	14:00	Nov-08	5	4:00 Nov-09			v-10 12:	00 14:00	) Nov-1	1 12:00 14:	00	
F	eb-14	Ma		M	ar-20 Ap	 r-2016	Sep-20	Oct-2016	Oc	 t-16	Nov-2016	<b>×</b> 60.00 50.00	
) mir Į	n 45 mi	Click	and drag own (in th	resize are is case).	· · ·	week 2	week 1 m	onth ≫ <sub>1</sub> Q* 🛢  ∕		Indices	≣ 🗗 🛛 🖉 🗏 🖉 s (10) 🗙 🕂	>  ⊷  ▼	
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5:00	0.1	13	0.73%	17.67	17.72	17.92	17.51	1.260	14		Click and drag t		. 33 <sup>2</sup> ∎ вк
3:00	-0.3	34 -	0.48%	69.97	70.11	70.34	69.75	5.628	1:	Sell RS:0.0	between panels	s to resize.	RB:0
ξ	0.0	00	0.00%	2.07	2.07	0.00	0.00	-112.960	(	L:0.00	0.04 H:0.00	L:0.00 0.0	
ł	0.0	00	0.00%	34.21	34.53	34.47	34.06	1.800	1:	.NDX	11:10:00 ×	.INX	11:10:00
§:00	0.2	26	0.29%	90.47	90.70	90.98	89.69	4.990	18	47 23	<sup>23</sup> 47 <b>23</b> <sup>27</sup>	21 <b>55</b> 64	21 55 <sup>6</sup>
5 <u>:00</u>	-0.;	32	2.32%	14.12	13.80	14.26	13.10	-6.763	man	Sell	1 <b>♦</b> ⊟• Buy	Sell 1	€∎ B

#### 2.3.5 Adding New Panel Tabs

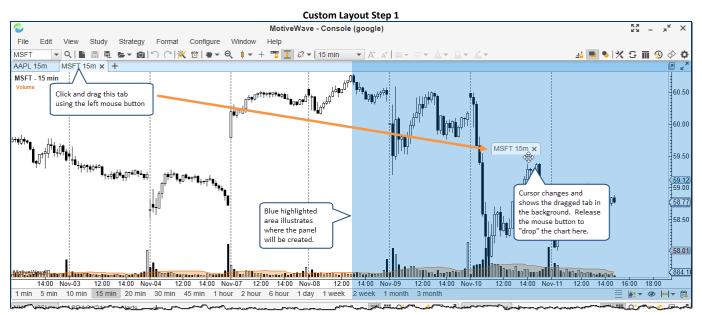
New panel tabs can be added to each panel area in the active page. Simply click on the **New Tab** button to the right of the existing tabs. The follow screen shots show the sequence to add a new chart to the main panel of the **Home** page. In this example, three charts are stacked on top of each other with the active chart showing with the highlighted tab (in white).

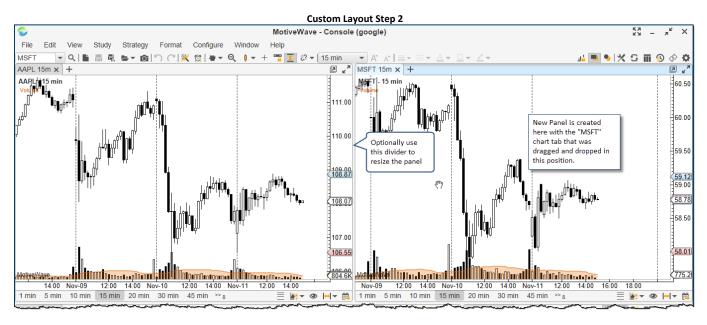




#### 2.3.6 Creating a Custom Layout

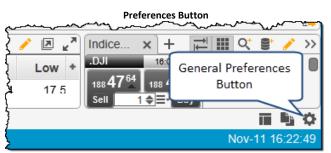
MotiveWave<sup>™</sup> includes a number of built-in page layouts which are available when you create or edit the page. You can organize the panels in the page however you like by left clicking and dragging the tabs around. As you drag the tab, you will see a highlighted blue area where the panel will be created when you release the mouse button. This feature provides you the flexibility to create any layout with any number of panels. The following screen shot illustrates moving the chart tab that we created in the previous section (MSFT symbol) and creating a new panel area by horizontally dividing the existing panel into two.





## 2.4 Changing the Look and Feel

MotiveWave<sup>™</sup> provides several options for changing the look and feel of the window decorations, docking framework, table colors and chart colors. Use the **Preferences** dialog to change these attributes (as well as many others). This dialog can be opened by pressing the **Preferences** button at bottom right of the console window or by choosing *Configure -> Preferences* from the top menu bar.



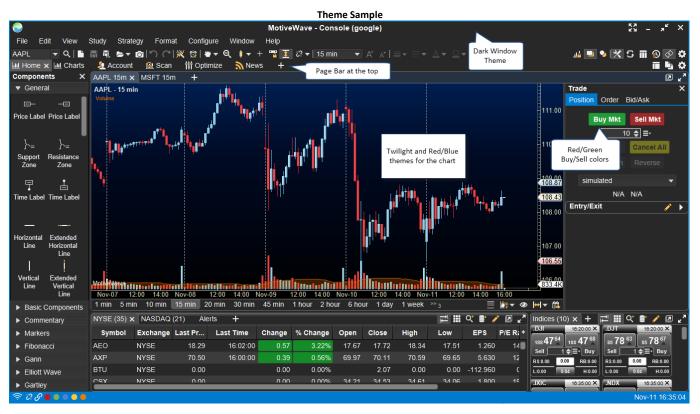
If you would like to modify the preferences for the docking framework, click on the **General** tab then on the **Dock** sub tab. Several options are available from this panel (see below):

Dock Preferences	
C Preferences	×
General Theme Chart Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Ema	
General Keyboard Mouse Fonts Quick Search Ticker Tape Linking Dock Trading Hours Simulated Ac	οι 💌
This panel contains preferences for the dependent tabs Tab Location: Top Top Location of the panel tabs Page Bar Location: Bottom Location of the Page tabs Show Tab Icons Confirm Remove Page	
OK Apply Cancel	

The Themes tab provides several options for changing the look and feel of the window decorations as well as the colors for the chart, tables and buy/sell boxes. Custom **Chart** and **Bar** themes can be defined under the corresponding tabs of this section:

Themes Preferences X												
Preferences												
General Theme	e Chart Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Email											
Themes are used	emes Chart Themes Custom bar and chart themes can be defined under these tabs. to change the look of the UI components (winnow memory, chart cours) (Chart Theme) and bar colors drop down options below to configure themes for MotiveWave. Click <b>OK</b> to apply your changes.	s (Bar										
Window Theme:												
Chart Theme:												
Bar Theme:												
Buy/Sell Colors:	Colors to be used when											
	displaying P/L or Bid/Ask											
	le la											
	N											
	OK Apply Cancel											

The following screen shot shows an example of some theme changes:



Fonts and icon sizes can be changed from the **Fonts** panel. Select the **General Font/Icon Size** option to adjust the overall size of the icons and fonts for the windows and dialogs. This option can be particularly useful on a high resolution screen.

¢		F	references							×
General Theme Char	rt Tool Bar Sounds	Ratios	Elliott Wave	Gartley	Tick	Charts	OFA®	Orders	Alerts	
General Keyboard M	louse Fonts Quick	Search	Ticker Tape	Linking	Dock	Tradin	g Hours	Simulate	ed Accol	
System Fonts Chart Fo	onts									
The fields below allow yo	u to adjust the general	fonts us	ed within the a	unlication	l.					
General Font/Icon Size:	Default		nd icon size o ws and dialog							
Watch List		-								
News Table	Small .0	1	Enabled							
Quote Sheet Group			Enabled							
DOM Table	-		Enabled							
Time & Sales Table	Extra Large		Enabled							
		ОК	Apply Ca	ancel						

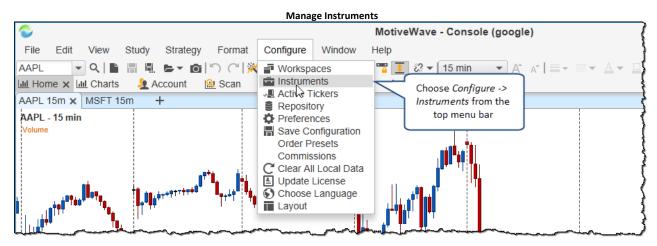
Fonts can also be adjusted for the charts on the **Chart Fonts** tab:

\$						F	Preferences								×
General Th	heme C	hart	Tool Bar	Sounds	R	atios	Elliott Wav	e Ga	artley	Tick	Charts	OFA®	Orders	Alerts	
General Ke	eyboard	Mou	se Fonts	Quick	Sea	rch	Ticker Tape	Link	ing	Dock	Tradin	g Hours	Simulate	ed Accol	
System Fon	ts Char	t Font	s												
The fields bel	ow allow	you t	o adjust the	e fonts di	spla	yed (	on charts.								
Time A			al;13.0				abled								
Birds Eye Vi	ew	Ari	al;13.0			En	abled								
Vertical A	xis	Ari	al;13.0			En	abled								
Indica	tor	Ari	al;13.0			En	abled								
Ratio La	bel	Ari	al;12.0			En	abled								
Info Poir	nts	Ari	al;12.0			En	abled								
Comme	ent	Ari	al;12.0	<b>*</b>		En	abled								
Chart T	itle	Arial I	Bold;13.0	1		En	abled								
Chart La	bel	Arial	Bold;12.0	1		En	abled								
Study La	bel	Arial	Bold;12.0			En	abled								
Lege	nd	Ari	ial;11.0	1		En	abled								
TH La	bel	Arial	Bold;11.0			En	abled								
TH II	nfo	Ar	ial;11.0	<b>*</b>		En	abled								
TH Arr	ow	Arial	Bold;11.0			En	abled								
					(	ЭK	Apply	ancel							

#### 2.5 Instruments

Stocks, FOREX pairs, futures contracts, indices etc are generically referred to as *Instruments* in MotiveWave<sup>™</sup>. The available instruments will depend on the broker or data service that you chose for the workspace. When you initially create a workspace in MotiveWave<sup>™</sup> a default set of instruments will be populated in the local database. Additional instruments can be added by searching for them or defining them.

All instruments can be centrally managed from the **Manage Instruments** dialog available from the Console (*Configure -> Instruments* from the top menu bar).



The **Manage Instruments** dialog displays all of the instruments that are defined in the local database. You can filter the list by typing in a symbol (or partial symbol) or choosing a specific instrument type or exchange.

			Mar	nage Instrume	ents					>
The following table these instruments.					lataba	ase. From this	s dialog you ca	an add, re	move or ed	lit
Symbol:			Туре:	All	•	Exchange:	All	•		
Underlying 🔺	bol	Des	cription	Туре	E	Expiry Date	Currenc	;y	Exchange	4
.DJI	Type symbol h	ere to	nes Indus	Index			USD			
.DJT	filter the list		nes Trans	Index			USD			
FTSE	FTSE	FTSE '	100	Index			USD			
.HSI	.HSI	HANG	SENG Ind	Index			USD			
.INX	.INX	S&P 50	00 Index	Index			USD			
.IXIC	.IXIC	NASDA	AQ Compo	Index			USD			
.N225	.N225	NIKKE	225	Index			USD			
.NDX	.NDX	NASDA	Q 100 Ind	Index			USD			
.TWII	.TWII	TSEC	Weighted I	Index			USD			
AAC	AAC	Austral	ian Agricul	Stock			AUD	ASX		
AAD	AAD	Ardent	Leisure Gı	Stock			AUD	ASX		
Click to search	f = 1	Apple I	nc	Stock			USD	NASD	AQ	
instruments	TOP	Ausen	co Limited	Stock		Select one	or more rows	above	ו	
available from	your	Adelaid	le Brightor	Stock			Delete" to rer			
broker/data se	rvice	Abacus	s Property	Stock		them from	the local <mark>d</mark> ata	abase		
Total Instrumer						$\sim$ $-$			<u> </u>	
	5. 400					V				

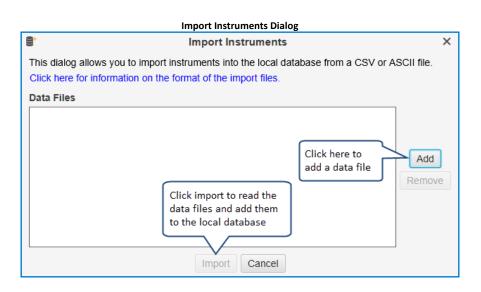
Additional instruments can be added to the local database by either clicking the *Search, Import* or *Define* buttons (Note: the Define and Import buttons are not available for all brokers/data services).

The **Search** button will utilize the broker/data service's search capabilities to discover new instruments that you can add to the local database.

#### 2.5.1 Importing Instruments

For convenience, the Import button will allow you to import a set of instruments from a CSV (comma separated values) file. This file can be created using a spreadsheet (such as Microsoft Excel) and saving it as a CSV file. For details on the format of the file, see:

http://www.motivewave.com/data/import instruments.htm



#### 2.5.2 Trading Hours

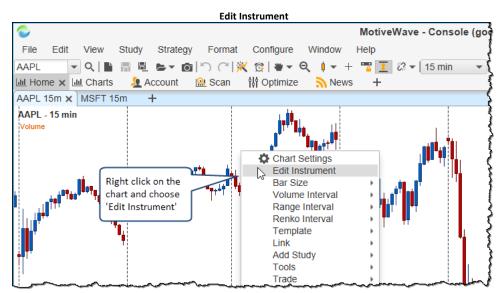
**Trading hours** define the days and time of day that an **Instrument** is traded. For most instruments the trading hours may be assigned automatically by MotiveWave<sup>™</sup>. When you create your workspace, MotiveWave<sup>™</sup> will create a default set of **Trading Hours**. You can create your own trading hours and override the instrument settings. Trading hours can be created/modified from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar, click on **General** then on **Trading Hours**).

	Trading Hour Preferences												
¢	Preferences	х											
General Theme Chart Tool Bar So	unds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Email												
Gen Select trading hours below and	lick Search Ticker Tape Linking Dock Trading Hours Simulated Accou												
click here to edit. Note: built-in hours cannot be edited. To assign trading hours for historical data retrieved from your data provider. Click on the '+ To assign trading hours to an instrument, edit the instrument and choose the trading hours from the <b>Trading Hours</b> drop down.													
Name	Built In												
New	true												
N Click here to add custom Trading Hours	true												
	true												
отс	true												
CHX	true												
Xetra	true												
ASX	true												
	OK Apply Cancel												

The **Trading Hours** dialog will appear when you click the add button ('+' icon) above. If an exchange is chosen, then the hours defined in this dialog will be used as the default trading hours for instruments on that exchange.

					Tradin	g Ho	urs Dia	log					
+	- Trading Hours X												×
will be defined may have two instruments that	This panel allows you to define trading hours that may be applied to a single instrument or an exchange. Most trading hours will be defined as a time frame (session) Monday - Friday as regular trading hours. Some instruments such as CME futures may have two trading sessions within a day (see Start2, End2 below). Optionally, <b>extended hours</b> may be defined for instruments that have trading hours outside of the regular session. Specifying an exchange below will set these hours as the default for instruments within that exchange.												
Name:	Name: Custom Hours 1 Note: name must be unique												
Time Zone:	America/N	ew_York			-								
Exchange:	-Select Ex	change-	•	+		Def	ault Tradi	ing Hour	s for Se	lected E	Exchange	е	
Week Begins On Saturday This will make the Trading Regular Hours: Hours the default for a													
Sunday:	09 🗸	30 🔻	End	16 🔻	specifi	c excl	hange.		00 🔻	End 2	00 🔻	00 🔻	Enabled
Monda Fo	or some exc	hanges,	End	16 🔻	30 🕶		Start 2	00 🔻	00 🔻	End 2	00 🕶	00 🕶	Enabled
rucsuu	uch as Sau		End	16 🔻	30 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
Wodpoedat	rabian) trad arts on Sati	0	End	16 🔻	30 🕶		Start 2	00 🔻	00 🔻	End 2	00 🕶	00 🔻	Enabled
Thursday.			End	16 🔻	30 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
Friday: S	Start 09 🔻	30 🕶	End	16 🔻	30 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
Saturday: \$	Start 09 👻	30 🔻	End	16 🔻	30 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
Extended	Hours:												
unday: 3	Start 08 🔻	• 00 <b>•</b>	End	18 🔻	00 🕶		Start 2	00 🕶	00 🕶	End 2	• 00	00 🕶	Enabled
Clinkthink	ox to defin	<b>—</b>	End	18 🔻	00 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
hours outs		e ) 🔻	End	18 🔻	00 🕶		Start 2	00 🕶	00 🕶	End 2	• 00	00 🕶	Enabled
W regular tra	ding period		End	18 🔻	00 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
Thursday:	Start 08 🔻	00 ▼	End	18 🔻	00 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
Friday: 3	Start 08 🔻	• 00 •	End	18 🔻	00 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
Saturday: 3	Start 08 🔻	• 00 •	End	18 🔻	00 🕶		Start 2	00 🕶	00 🕶	End 2	00 🕶	00 🕶	Enabled
					O	ĸ	Cancel						

The **Trading Hours** for an instrument can be assigned from the **Advanced** tab of the **Instrument** dialog. This dialog can be accessed from the **Manage Instruments** dialog (*Configure -> Instruments* from the Console menu bar) or from the context menu of a chart (right click on a chart and choose *Edit Instrument*).



Edit Instrument – Trading Hours											
e 1990 - 19900 - 19900 - 19900 - 19900 - 1990 - 1990 - 1990 - 1990 - 1990 - 199	Edit Instrument - AAPL										
Modify the fields General Com	below and press <b>OK</b> to save yo Click on the Advanced Advanced	_									
Trading Hours:	Custom Hours 1 - +										
Minimum Tick:	-Select Trading Hours-										
Point Size:	ASX CHX										
Display Mask:	Custom Hours 1 Select the Trading										
	Nasdaq Nasdaq Hours that you defined from the drop down										
	NYSE										
	отс										
	TSX										
	Xetra										
	OK Order Presets Delete Cancel										

#### 2.6 Watch Lists

**Watch Lists** provide a convenient way to organize a related set of instruments together in one location. MotiveWave<sup>™</sup> will create a default set of **Watch Lists** when you first create your workspace.

There are two ways to view a Watch List:

- 1. **Table View** In this tabular view, each row displays an instrument. The table view will have a default set of columns, but these can be configured by the user to show or hide any of the available instrument values. Optionally, you can sort this table view by any of the columns in ascending or descending order.
- Buy/Sell View This view shows a Buy/Sell box for each instrument. The current Best Bid and Best Ask values are shown along with the last price, last time, daily high/low and spread. Market orders can be placed directly by clicking on the Buy or Sell areas.

The following screen shot shows the default set of watch lists displayed on the **Home** page.

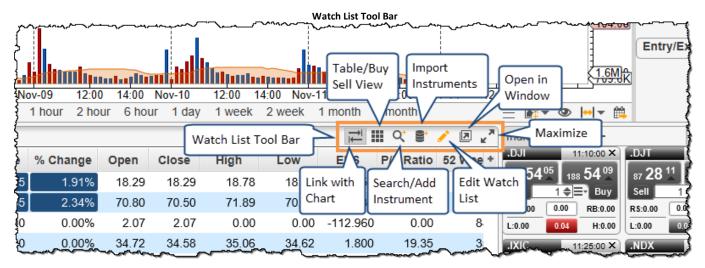
~~~ <u>~</u>		·····		·	\ <u>~</u>		D	efault Wa	tch Lists	; 		<u>کر محمد ا</u>	~~~~~	marker	<del>74.00</del>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<del>4</del>	
MotiveWa												switch	is buttor betwee Jy/Sell vi	n table	<u> </u>	Entry/Exit		/ >
14:00	0 Nov-07 12:00 5 min 10 min		ov-08 12:00 min 30 min	14.00 140	v-09 12:00 1 hour 2 ho	) 14:00	Nov-10	12.00 1	4:00 Nov-1	1 12.00	14:00 No 3 monun	v-1						
	5 min 10 min (	15 min 20	min 30 min	45 min	1 hour 2 ho	ur 6 hou	ur 1 da	y 1 week	2 week				= •	▼ @   <del>+</del>  ▼	· 🖽			
NYSE (3	35) × NASDAQ	(21) Aler	ts +								이 Q <sup>+</sup> 물 <sup>+</sup>	Z Z		; (10) × +			9* 🧪	` IZ _ ~
Symb	ol Exchange	Last Pr	Last Time	Change	% Change	Open	Close	High	Low	EPS	P/E Ratio	52 Wee +	.DJI	11:10:00				
AEO	NYSE	18.64	11:24:00	0.35	1.91%	18.29	18.29	8.78	18.26	1.257	14.75	1:	188 <b>54</b> Sell	<sup>05</sup> 188 54 <sup>0</sup>		s7 28 <sup>11</sup> s7 28 <sup>15</sup> Sell Buy		
AXP	NYSE	72.15	11:25:00	1.65	2.34%	70.80	70.	Click on any	column to	sort.	12.77	7:	RS:0.00	0.00 RB:0	_	Sell Buy R\$:0.00 0.0 RB:0.00		
BTU	NYSE	<b>4</b> 19.95		0.00	0.00%	2.07		First click so			0.00	8	L:0.00	0.04 H:0	.00	L:0.00 Buy/Sell Box	ך	
CSX	NIVOE	0.00	7	0.00	0.00%	34.72		second desc			19.35	3	.IXIC	11:25:00	×	.NDX	J	
DE	Note: Defau		11:25:00	0.41	0.45%	90.97	91.	third click re	moves the	sort.	18.37	9:	52 17	<sup>25</sup> 52 17 <sup>2</sup>	19	47 02 <sup>67</sup> 47 02 <sup>71</sup>		
FCX	Lists and con vary dependi		11:25:00	-0.25	-1.79%	14.04	13.94	14.05	13.71	-6.760	0.00	1.	Sell	1¢≣• Bu	у	Sell 1≑ = Buy		
FDX	broker or dat	0	11:24:00	1.27	0.69%	184.50	183.69	185.68	183.46	6.690	27.68	18	RS:0.00	0.00 RB:0		RS:0.00 0.00 RB:0.00		
GS	HIOL	200.01	11:25:00	5.07	2.49%	204.15	203.94	211.77	204.15	12.461	16.81	21	5192.04	0.04 5247		4677.41 0.04 4753.27		
наі	NYSE	📕 9 20	11:25:00	an n	0 12%	/17 61	//৪ በ1	18 51	17 39	-6 571	0.00	5	.INX	11:25:00	_	OSPTX 11:10:00 ×		
ن بې چې چې	S 🔴 🕘 🔍 🔴 I	Nov-11 11:15	5,105.64 O:108.	11 H:108.2	7 L:107.90 C:	108.20 V	797.9K	R:0.37					A n'i	••••••••••••••••••••••••••••••••••••••			ov-14	11:25:23

#### 2.6.1 Watch List Tool Bar

Several features are available from the tool bar in the top right area of the watch list panel. These buttons are as follows:

- 1. Link With Chart If this button is on (shaded background), clicking on a row in the watch list will set the instrument for the active chart on this page.
- 2. **Table/Buy Sell View** Toggles the view of the watch list between the table view and the Buy/Sell boxes view
- 3. **Search/Add Instrument** Launches the search dialog to search for an instrument and add it to the watch list.
- 4. **Import Instruments** Click this to import a set of instruments from a CSV file (not available on all workspaces)
- 5. Edit Watch List Edits the watch lists properties
- 6. **Open in Window** Opens this watch list in a separate window
- 7. Maximize Maximizes the watch list panel to use all of the available space on the page

The following screen shot shows these buttons in the tool bar:



#### 2.6.2 Sorting Options

The table view of the watch list can be either sorted or unsorted. This mode can be toggled by clicking on the column headers within the table view. Clicking a column header once sorts it by ascending order. Clicking a second time will sort in descending order. A third click will make the table unsorted returning it to its natural order.

#### 2.6.2.1 Unsorted View

In the unsorted view, you can arrange the instruments in the list by clicking and dragging them to the desired location. Alternatively, right click on a row and choose **Move Up / Move Down** to adjust their locations.

					Unsorted wa	itch List						
NYSE (35) 🗙	NASDAQ	(21) Alerts	+							$\overrightarrow{\vdash}$	약 🛢 🥖	× 🛛 🖓
Symbol	Exchange	Last Price	Last Time	Change	% Change	Open	Close	High	Low	EPS	P/E Ratio	52 We 1
AEO	NYSE	18.78	13:47:00	0.49	2.68%	18.29	18.29	18.80	18.26	1.260	14.96	-
AXP	NYSE	72.63	13:47:00	2.13	3.02%	70.80	70.50	72.58	70.62	5.630	12.89	
BTU	NYSE	0.00		0.00	0.00%	2.07	2.07	0.00	0.00	-112.960	0.00	
CSX	NYSE	0.00	Click and dr	ag (left	0.00%	34.72	34.58	35.12	34.62	1.800	19.45	
DE	NYSE	91.62	mouse butte	0.	0.57%	90.97	91.10	92.00	90.97	4.990	18.37	
FCX	NYSE	13.89	desired loca	ation	-0.36%	14.04	13.94	14.05	13.55	-6.763	0.00	
FDX	NYSE	185.85	13:46:00	2.16	1.18%	184.50	183.69	186.44	183.46	6.690	27.88	1
GS	NYSE	209.48	13:47:00	5.54	2.72%	204.15	203.94	211.77	204.15	12.460	16.85	2
наі	NYSE	/17 87	13.12.00	-0.14	-0.29%	/7 61	/18 በ1	18 51	17 31	<u>-6 570</u>	0.00	

Lincorted Mictole List

#### 2.6.3 Buy/Sell Boxes

A Buy/Sell box shows the current Best Bid and Best Ask prices for an instrument and makes it easy to quickly place a market order to buy or sell the instrument. The following diagram shows the elements of a Buy/Sell box:



The colors of the box will change as the prices change. If the price goes up the label will flash blue (or green depending on preferences). If the price goes down, the label will flash red.

You can modify the preferences for the **Buy/Sell** boxes from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar).

C Preferences X	Preferences X
t Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Email Trade History Buy/Sell 💽	Theme Chart Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Email Trade His 💌
Use this dialog to configure how buy/sell boxes are displayed in the Instrument Organizer.	Theme Bar Themes Chart Themes
See Orders > Submission panel to configure order options for these boxes. Box Size: Tiny C Default size is Tiny. Other options are: small, Medium and Large Show Bid/Ask Sprear	Themes are used to change the look of the UI components (Window Theme), chart colors (Chart Theme) and bar colors (Bar Theme). Use the drop down options below to configure themes for MotiveWave. Click <b>OK</b> to apply your changes. Window Theme: Ught Chart Theme: Ught Bar Theme: Red/Blue Use the drop down to switch between blue and green
OK Apply Cancel	OK Apply Cancel

#### 2.6.4 Create Watch List

Choose *File -> New -> New Watch List* from the Console menu bar to create a new watch list.

#### **Create New Watch List** Μ File Edit View Format Study Strategy Configure Window He Q ↓ - + • New New Page ٠ Open E New Watch List News e New Desktop Save All Ctrl+L Chart III New Chart Window Ctrl+N Þ Sackup New DOM Window Restore New Time&Sales Window Disconnect Custom Instrument Shutdown فللد

On the first page of the **New Watch List** wizard, you will be asked for the name of the **Watch List**. This name will be displayed on the panel tab.

New Watch List – Page 1	
New Watch List	×
New Watch List/Quote Sheet	
This Wizard will enable you create a watch list or quote sheet to display a tabular view of instruments (or Buy/Sell box view).	
1. Specify Name of the Watch List 2. Specify Columns to Display 3. Specify Instruments to Display	
Click 'Next' to continue.	
Name Top 50 Stocks Quote Sheet This is the name displayed in the panel tab. Quote Sheets allow you to group the instruments in a watch list (not available in all editions).	
Click Next to choose columns	
< Back Next > Cancel	

On the next page of the wizard, you will be asked to specify the columns. If you would like to add one or more columns to the list, select them from the **Available Columns** list (hint: use the **Ctrl** key or **Cmd** key on OSX to select multiple rows) and press the '>' button to move them to the **Selected Columns** list. If you would like to remove one or more columns, select them from the **Selected Columns** list and press the '<' button.

	New Watch List	
Choose Columns Select the columns that you wish to display.		
Available Columns	Selected Columns	
Account	Symbol Exchange	
Avg Price Bid Day Range % Day Ran Volume Description Dividend A Dividend Yierg	Click this button to add the selected columns Low Open Close Change % Change	Use these button to change the column order
Expiry Date Change (Inv) % Change (Inv) % Off High	EPS Use this button to remove columns 52 Week Low	
% Off Low % Off Conen Pip Pos drag columns to add/remove or change the order in the watch list.		Click Next to select

The last step is to choose the set of instruments that will be displayed in the **Watch List**. Type the name of the symbol in the **-Choose Symbol**- field and press **Enter** to add it to the list. Alternatively, select a



name from the drop down. You can also search for a particular symbol by clicking the **Search/Add** button. If supported by your broker/data service you can import a set of symbols by clicking on the import button (see below).

New Watch List – Choose Instruments	
Add Instrumen	×
Select the instruments to and a watch nist by pressing the '+' or search buttons bel	ow.
-Choose Symbol-	
AAPL - Opple Inc	
BRK.A erkshire Hathaway Import from CSV file	
MSFT osoft Corporation	
OR Type a symbol and press GO "Enter" to add it to the	
GO list. Alternatively, select	
from the drop down.	
	Click to save the
Total Instruments: 6	watch list.
Iotal monumento. 0	
	< Back Save Cancel
	< Back Save Cancel

#### 2.6.5 Edit Watch List

Click on the **Edit Watch List** button (pencil icon) on the **Watch List** tool bar to open the **Edit Watch List** dialog. From this dialog you can change the name, available columns or the instruments.

	Edit Wa	atch List		>
Natch Lists are used to organize relative organize relative or are finished, click <b>OK</b> to save your		Jse the > and < button	s to add or remove columr	ns. Wher
Configuration Instruments			Use this panel to chang	ze 📗
Name NYSE			the name or columns displayed in the Watch	liet
Available Columns		Selected Columns	displayed in the watch	list
Account		Symbol		
Ask		Exchange		
Avg Price		Last Price		
Bid		Last Time		
Day Range		Change		
% Day Range		% Change		
Volume		Open		
Description	<	Close		1
Dividend Amount		High		+
Dividend Yield	>>	Low		+
Expiry Date	<<	EPS		
Change (Inv)		P/E Ratio		
% Change (Inv)		52 Week High		
% Off High		52 Week Low		
% Off Low	Clie	here to save these	٦	
% Off Open		mns as the default		
Pips		new watch lists.		
Position				

Edit Watch List - Instruments										
Edit Watch List X										
Watch Lists are used to organize related instruments. Use the > and < buttons to add or remove columns. When you are finished, click <b>OK</b> to save your changes.										
Configuration Instruments										
-Choose Symbol- 💌 Q <sup>+</sup> 🛢 <sup>+</sup> × ↑ ↓										
AEO - American Eagle Outfitters										
AXP - American Express										
BTU - Peabody Energy										
CSX - CSX Corporation										
DE - Deere Co.										
FCX - Freeport-McMoRan Copper & Gold Inc.										
FDX - Fed Ex										
GS - Goldman Sachs										
HAL - Halliburton										
HD - Home Depot										
HES - Hess Corporation										
KO - Coca-Cola, Co.										
LOW - Lowes Companies										
PBR - Petro Brasileiro Petrobas										
PHM - Pulte Group										
POT - Potash Saskatchewan										
RIG - Transocean										
UA - Under Armor, Inc.										
Total Instruments: 35										
OK Save Columns Cancel										

For convenience, columns can be modified directly from the **Watch List**. Click and drag a column header to change the order. On the right hand side of the column header, there is a button that can be used to show or hide columns.

					Edit Watch	List Colun	nns					
NYSE (3	5) NASI	DAQ (21)	Alerts To	p 50 Stocks	; (10) × +	•					약 🛢 🧪	
Symbol	Exchange	Last Pr	Last Time	High	Low	Open	Close	Change	% Chan	EPS	P/E Ratio	52 W +
AAPL	NASDAQ	105.50	13:56:0	0 107.81	104.08	107.71	108.43	2.93	-270%	8.310	12.68	$\Lambda$
BRK.A	NYSE	236146.00	13:52:00	0 237100.00	234930.00	36150.003	34860,00	4000.00	0.550/	155.24		
MSFT	NASDAQ	57.93	13:56:00	0 59.08	57.28	59.02	00.	lick and dra	0	2.08	Choose to add columr	
ORCL	NYSE	0.00		39.67	39.11	39.39	39. <sup>he</sup>	eader to ch	ange order.	0.44	this button	
GOODY	SAUDI	0.00		0.00	0.00		0.00	0.00	0.00%	0.00	0.00	
GOOGL	NASDAQ	756.67	13:56:0	771.78	743.59	771.76	771.75	-15.08	-1.95%	27.320	27.65	
GOZDE	SAUDI	0.00		0.00	0.00		0.00	0.00	0.00%	0.000	0.00	
IBM	NYSE	158.16	13:56:00	0 161.86	5 157.58	161.25	161.27	-3.11	-1.93%	12.270	12.86	
STR	۵sx	0 00		0 00	0 0 0		0 00	0 00	በ በበ%	-0.040	0.00	

#### 2.7 Quote Sheets

A **Quote Sheet** is a special version of a **Watch List** that can be divided into sub groups. When creating Watch List, make sure to select the **Quote Sheet** option on the first page of the **Watch List** wizard.

On the first page of the Watch List Wizard, you will be asked to enter a name for the **Quote Sheet**. Similar to the Watch List, this will be displayed in the tab of the **Quote Sheet Panel**. Make sure to check the **"Quote Sheet"** option below the **Name** entry field.

New Quote Si	heet Wizard	
New Quot	e Sheet	Х
New Watch List/Quote Sheet		
This Wizard will enable you create a watch list or quote sheet t view).	o display a tabular view of instruments (or Buy/Sell box	
Specify Name of the Watch List     Specify Columns to Display     Specify Instruments to Display     Click 'Next' to continue.	L <sub>2</sub>	
Name Key Stocks		
Quote Sheet Check this box to make a Quote Sheet.	Click next to select the columns. < Back Next > Cancel	

Choosing the columns for the Quote Sheet is the same as you would for a Watch List. Select the column(s) you would like to add from the **Available Columns** list and use the '>' button to add them to the **Selected Columns** list.

New Que	ote Sheet – Select Columns	
=	New Watch List	×
Choose Columns		
Select the columns that you wish to display.		
Available Columns	Selected Columns	
Account	Symbol	
Ask	Exchange	
Avg Price	Click this button to	
Bid	add the selected	Use these buttons
Day Range	columns	to change the
% Day Rar	Low	column order
Volume Click a column to select. Hold down <b>Ctrl</b>	Open	
Description key to select multiple	Close	V
Dividend A (Cmd on OSX)	Change	T
Dividend Yiera	Change	<b>↓</b>
Expiry Date	EPS	
Change (Inv)	Use this button to	
% Change (Inv)	remove columns	
% Off High	52 Week Low	
% Off Low		
% Cff Open		
Pip Note: you can also click and		
Pos drag columns to add/remove		Click Next to select
or change the order in the watch list.		instruments
watch list.		
		< Back Next > Cancel

**Quote Sheets** organize instruments into groups. Click on the **New Group** button to add one or more groups to the **Quote Sheet**. You can add instruments to each group by selecting the group from the **Group** drop down and then using the **Add Instrument/Search Instrument** buttons (see below).

	New Quote Sheet	
Add Instruments		
nstruments are organized into g vatch list by pressing the '+' or s	roups. Click on <b>New Group</b> to create a new grou earch buttons below.	up. Select the instruments to add to the
Group -Select Group- 👻	New Group Remove	
Choose Symbol-		Label Colors
	Click here to	✓ Use Default
	create a group	Foreground
]	New Group	× Background -
	Quote Sheets are organized in to groups. Choo unique name for your group and press the <b>OK</b> b	
		name and
otal Instruments: 0 otal: 0		

The following screen shot shows a sample Quote Sheet. Noticed that there are groups in the Quote Sheet table that divide the instruments into different categories. Optionally each group can have different colors for the dividers.

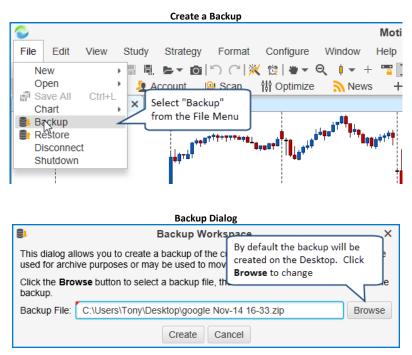
				San	nple Quote	Sheet						
NYSE (35)	NASDAQ	(21) Ale	erts Top 50 S	tocks (10)	Key Sto	ocks (17)	× +			t ↓ Q <sup>+</sup>	9* 🧨 🗵 ,	2
Symbol	Exchange	Last Pr	Last Time	High	Low	Open	Close	Change	% Chan	EPS	P/E Ratio	+
▼ Tech Sec	tor											
AAPL	NALDAQ	105.74	16:00:00	107.81	104.08	107.71	108.43	-2.69	-2.48%	8.310	12.72	
AMZN	NASD/ Q	718.93	16:00:00	746.00	710.10	745.51	739.01	-20.08	-2.72%	4.360	164.72	
CSCO	NASDAQ	31.37	16:00:00	31.67	31.35	31.43	31.36	0.01	0.03%	2.110	14.86	
YHOO	NASDAQ	39.30	16:00:00	40.39	38.87	40.36	40.42	-1.12	-2.77%	-5.107	0.00	
MSFT	NASDAQ	58.12	16:00:00	59.08	57.28	59.02	59.02	-0.90	-1.52%	2.088	27.87	
GOOGL	NASDAQ	1	Course Frick	771.78	743.59	771.76	771.75	-18.53	-2.40%	27.320	27.55	
INTC	NASDAQ	-	e Groups. Each can have a	34.73	34.20	34.56	34.61	-0.13	-0.38%	2.130	16.20	
HPQ	NYSE		ent color.	16.19	15.80	15.85	15.82	0.28	1.77%	1.880	8.56	
ORCL	NYSE	05.00	10.00.00	39.67	39.11	39.39	39.45	-0.15	-0.38%	2.110	18.69	
Energy												
AGK	ASX	0.00		0.00	0.00		0.00	0.00	0.00%	-0.610	0.00	
BPT	ASX	0.76	11:10:00	0.78	0.75	0.78	0.79	-0.03	-3.80%	-0.396	0.00	
HSE	TSE	14.30	15:52:00	14.35	14.15	14.26	14.35	-0.05	-0.35%	0.620	23.18	
GDPAQ	OTCMKIS	0.00	Oct-11 10:31:00	0.00	0.00		0.00	0.00	0.00%	-5.489	0.00	
UPL	FRA	6.62	15:00:00	6.63	6.63	6.63	6.67	-0.05	-0.75%	0.902	7.35	
▼ Industria	ls 👘											
DAL	NYSE	47.47	16:01:00	47.44	46.61	46.62	46.38	1.09	2.35%	6.170	7.69	
DLX	ASX	6.07	11:10:00	6.16	6.05	6.13	6.09	-0.02	-0.33%	0.340	18.12	
<u></u>	ND/OF	7.00	10.00.00	7.07	7.07	7.40	7.40		1 0000	5 5 4 6	1.00	

## 2.8 Backup/Restore

The Backup/Restore feature enables you to export settings, analyses, instruments, watch lists, scans and open windows/positions to a single backup file. This backup file can be archived to be restored later in case something happens to your computer. Alternatively, you can use this feature to transfer your workspace to another computer.

#### 2.8.1 Creating a Backup

Choose *File -> Backup* from the Console menu bar to create a backup file. When you choose this option, you will see the **Backup Workspace** dialog.

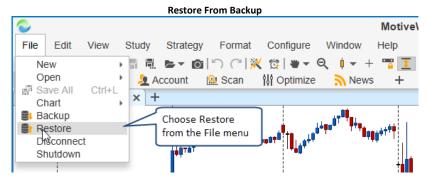


When you click the **Create** button, a backup file will be created on your computer desktop. This backup file will be named **<Workspace Name> <Date>.zip** (where **<**Workspace Name**> is the name of your workspace and <b><**Date**> is the current date/time**). If you would like to change the name and location, click on the **Browse** button.

You can store this file in a safe place (such as Drop Box or Google Drive) or move it to another computer to restore it into an existing workspace.

### 2.8.2 Restore From Backup

Choose *File -> Restore* from the Console menu bar to restore from a previously created backup.



Restore Dialog	
Et Restore Workspace	×
This dialog allows you to restore a workspace from a recent utility will overwrite analysis files that currently exist wi the file previously creat	ted
Click the <b>Browse</b> button to select a backup file, then click the workspace.	
Backup File: Brow	se
<ul> <li>Restore Console/Windows</li> <li>Restore Preferences</li> <li>Restore Watch Lists</li> <li>Restore Scans</li> <li>Restore Strategy Analyses</li> </ul>	
Restore Cancel	

Click on the **Browse** button and locate the backup file that you created previously. The options available for restore are as follows:

- 1. **Restore Console/Windows** Restores console layout/pages and open windows from the backup file.
- 2. Restore Preferences These are the settings from the Preferences dialog.
- 3. Restore Watch Lists Watch Lists and Quote Sheets
- 4. Restore Scans Scan criteria saved from the backup
- 5. Restore Strategy Analyses Restore back test/optimization executions.
- 6. **Delete Existing Analyses** If you check this option, all of the existing analyses in the workspace will be deleted before importing the analyses from the backup.

Click the **Restore** button to begin the restore process. You will see a progress indicator that reports the status of the restore. Depending on your computer and the size of the backup, this could take up to a minute or two to complete.

Note: The file format for the backup has changed in version 5 (compressed zip format).

#### 2.8.2.1 Restoring to a Different Workspace Service

In the typical case, the workspace service (ie broker or data service) will match the service from the backup. You can restore from a backup that was created with a different service, but you may encounter some issues. Each service has a different naming symbology for the instruments that they support and the target service may not support all of the instruments that are in the backup.

MotiveWave<sup>™</sup> will attempt to map the symbols from the backup service to the target service. However, you may find that some analyses are missing in the new workspace if MotiveWave<sup>™</sup> could not find a mapping.

### 2.9 Repository

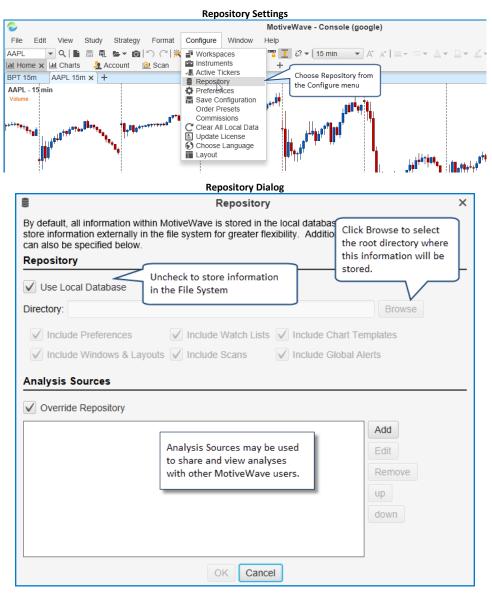
MotiveWave<sup>™</sup> maintains a local database for each workspace. This database contains the following information:

- 1. Instruments/Exchanges/Trading Hours/Order Presets
- 2. Preferences/Keyboard Shortcuts
- 3. Watch Lists/Quote Sheets
- 4. Historical News

- 5. Analysis
- 6. Alerts
- 7. Chart Templates
- 8. Scan Criteria
- 9. Strategy Analyses
- 10. Historical Trades
- 11. **Historical Data** Historical data is stored in 1, 5, 30 and daily bars. This is used to reduce load on the servers and is also available in *Offline* mode.

Optionally, data that is normally stored in the local database can be stored in the file system. This can be very useful if you want to synchronize this data (using Google Drive or Drop Box) with other computers or use as an alternative way to create backups.

Choose *Configure -> Repository* from the Console menu bar to access the Repository settings.



Uncheck the **Use Local Database** option to store information in the File System instead of the database. You will need to choose the root directory for this information by clicking the **Browse** button. If you would like to share this data using Google Drive or Drop Box, make sure to choose a location inside the shared folder.

Optionally you can choose to store the following types of information by checking the boxes below:

- 1. Include Preferences this is the settings in the Preferences dialog and other configured settings.
- 2. Include Watch Lists watch lists and quote sheets
- 3. Include Chart Templates any study templates that you have setup in your system
- 4. Include Windows & Layouts open window information and locations as well as the Console layout
- 5. Include Scans scan criteria
- 6. Include Global Alerts this applies to price alerts.

#### 2.9.1 Sharing using Google Drive or Drop Box

Storing data in the File System provides the flexibility to share this information with other computers using utilities such as Google Drive or Drop Box. Note: this feature is not limited to these two services. Any cloud based service that interacts with your local file system should work just as well.

For more information on these services, see their websites:

- 1. <a href="https://www.dropbox.com/">https://www.dropbox.com/</a>
- 2. <u>https://drive.google.com/</u>

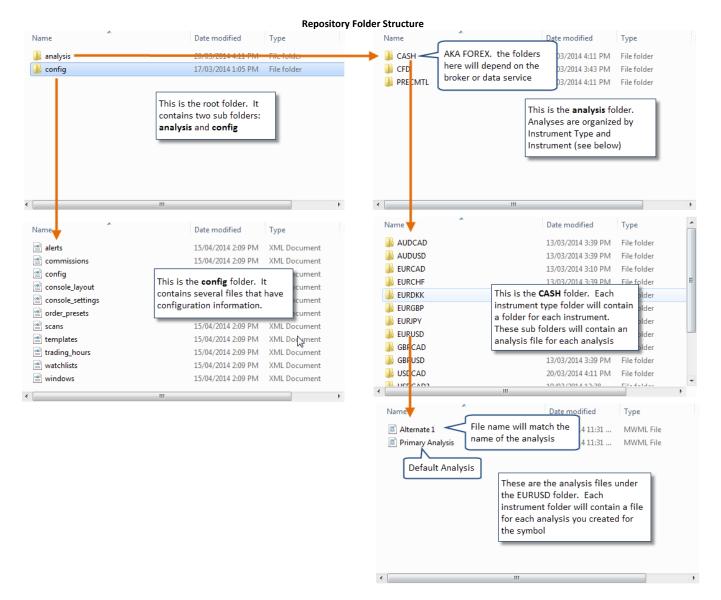
**Note**: some issues have been found with Google Drive. These issues are related to the behavior of Google Drive when sharing files. For more information see: <u>http://www.techrepublic.com/blog/google-in-the-enterprise/steering-around-the-potholes-with-google-drive/</u>

#### 2.9.2 Folder Structure

If you look at the root folder for the repository you will see two folders:

- 1. **analysis** contains analysis files. This directory contains several sub folders that organize analysis by instrument type and instrument symbol.
- 2. config contains configuration files

The following diagram shows an example repository structure for an FXCM workspace.



#### 2.9.3 Analysis Sources

**Analysis sources** provide a way to share specific analyses or to access analyses from other MotiveWave<sup>™</sup> users. **Analysis sources** are defined by a folder that exists in your local file system. You would need to use a service such as Google Drive or Drop Box to perform the sharing and synchronization.

**Analysis sources** are defined in the Repository Dialog (*Configure -> Repository* from the Console menu bar)

Repository Dialog – Analysis Sources						
Repository	×					
By default, all information within MotiveWave is stored in the local database. Use the options below to store information externally in the file system for greater flexibility. Additional sources for analysis files can also be specified below. <b>Repository</b>						
✓ Use Local Database						
Directory: Browse						
✓ Include Preferences ✓ Include Watch Lists ✓ Include Chart Templates						
✓ Include Windows & Layouts ✓ Include Scans						
Analysis Sources						
Verride Repository  If an analysis with the same name exists in your repository, it will be overridden by the analysis source.  Click here to add an Analysis Source  Add Edit Remove up down						
OK Cancel						

Click on the **Add** button to define an **analysis source**. You can have multiple **analysis sources**. The **Override Repository** option is important if there are naming conflicts between your local repository and the **analysis sources**.

For example if you created an analysis called "Wave 3 Intraday" for the EUR/USD pair and one of the **analysis sources** also has an analysis called "Wave 3 Intraday" for EUR/USD, MotiveWave<sup>™</sup> will need to determine which one to display. If **Override Repository** is checked, it will display the one from the **analysis source** (instead of the local repository).

The following dialog will appear when you click the **Add** button. Each **analysis source** will require a name. This name can be anything you like, but should reflect the source of the analyses. In the example below, we chose the name "Trading Analysis" (this is one of our partners). Choose a directory (folder) for the source by clicking on the **Browse** button. (Note: this will be a folder that is synchronized using Google Drive/Drop Box).

The **Read Only** attribute indicates if you are going to be modifying the analyses or just viewing them. Uncheck this option if you are intending to publish analyses to this source.

Add Analysis Source Dialog	
Analysis Source	×
An analysis source specifies a directory where additional analysis file and choose a directory below (click the <b>Browse</b> button). Check the intending to modify Analyses from this location Name: Trading Analysis Give the source a name	
Directory: C:\Users\Tony\D Uncheck if you intend to share Read Only your analyses to this source. OK Cancel	Browse Select the root directory

### 2.9.3.1 Publishing Analyses

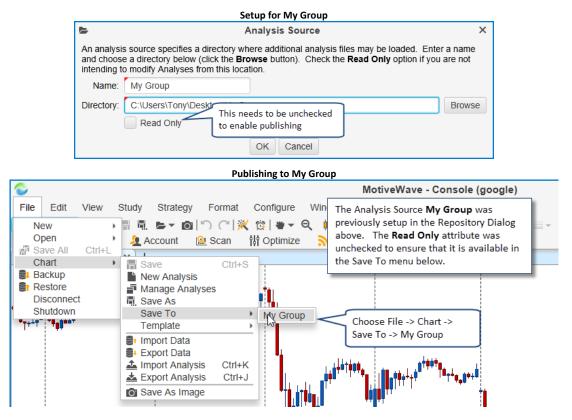
If you are planning to share your analyses with other users, then you would create an **analysis source** and uncheck the **Read Only** attribute. Analyses that exist in your repository are not automatically shared; you will need to explicitly publish each analysis to this new source.

If you would like to publish an analysis to an **analysis source**, choose *File -> Save To -> <Analysis Source Name>* (where <Analysis Source Name> is the name you chose in the Add Analysis Source Dialog) from the chart menu bar (Note: it is *File -> Chart -> Save To -> <Analysis Source Name>* from the *Console*).

This action will save this analysis (make a copy) to a sub folder in the *analysis source* folder that you defined earlier.

The file synchronization software that you setup (ie Drop Box etc) will take care of synchronizing that file with the folders of all your users.

In the following example, we have created an **analysis source** called **My Group**. The **Read Only** attribute has been unchecked to tell MotiveWave<sup>™</sup> that it can publish analyses to this location. This **analysis source** will now be available in the *Save To* menu (see below).



# 2.10 Email Configuration

MotiveWave<sup>™</sup> may be configured to send out email messages as part of alerts or signals generated by studies. You will need to configure the SMTP (Simple Mail Transfer Protocol) settings in the **Preferences** dialog to enable this feature. These settings will be found under the **Email** tab. Choose *Configure -> Preferences* from the Console menu bar to display the Preferences dialog.

					Email P	references D	Dialog					
¢					Р	references						×
General	Theme	e Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
This dialog	g allows		igure your : Dutgoing Ei		Check t	his box to ena	able			Click o Email		]
SMTP Se	erver:											
SMTP	Port:	25										
Userna	ame:											
Passv	vord:							SMTP set	tings will	vanu		
From E	mail:							dependin	g on you	email p		
To E	mail:							If this is a address,				
Prot	ocol:	Plain Tex	t 💌					administr	ator for s	pecific		
	Th	end a test	nail buttor e email to v ttings are t	/erify								
					ОК	Apply Car	ncel					

If you are using a corporate email address, you will need to contact your network administrator to get the specific SMTP settings.

Settings for public email addresses can be found online, just do a web search. Here are some useful links for some common email providers:

#### 2.10.1 Gmail

Gmail settings can be found here: <a href="http://email.about.com/od/accessinggmail/f/Gmail\_SMTP\_Settings.htm">http://email.about.com/od/accessinggmail/f/Gmail\_SMTP\_Settings.htm</a>

For some user accounts you may need to create an application specific password in order for this to work. For more information see: <u>https://support.google.com/mail/answer/1173270?hl=en</u>

#### 2.10.2 Yahoo Mail

Yahoo mail settings can be found here: http://email.about.com/od/accessingyahoomail/f/Yahoo Mail SMTP Settings.htm

Similar to Gmail you may need to setup an application specific password if you have to bypass the second sign-in verification: <u>https://help.yahoo.com/kb/yahoo-account/SLN5013.html?impressions=true</u>

#### 2.10.3 Windows Live / Hotmail

The following link explains the Hotmail SMTP settings: <a href="http://email.about.com/od/accessinghotmail/f/Windows\_Live\_Hotmail\_SMTP\_Settings.htm">http://email.about.com/od/accessinghotmail/f/Windows\_Live\_Hotmail\_SMTP\_Settings.htm</a>



There is also a two-step verification process for Hotmail as well. For more information see: <u>http://windows.microsoft.com/en-ca/windows/two-step-verification-fag</u>

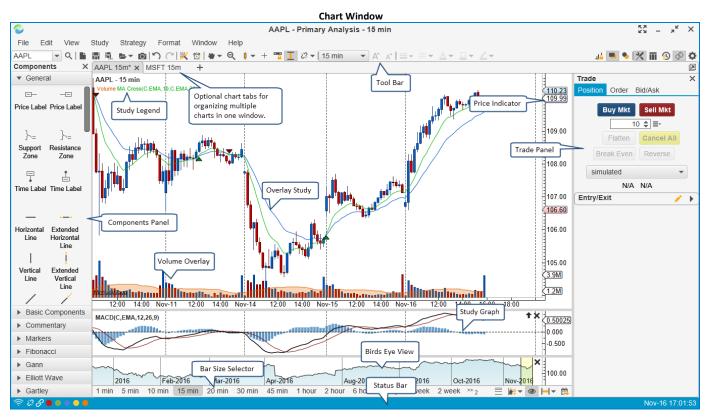
# 3 Charts

MotiveWave<sup>™</sup> has perhaps some of the most advanced charting capabilities of any charting application available. In this section we will be exploring some of the basics of working with charts in MotiveWave<sup>™</sup>.

You can work with charts within the Console window or you can open separate chart windows to work with charts independently. The simplest way to open a chart window is to press the **Open Chart Window** button from the top right section of a chart panel. Alternatively, choose *File -> New -> New Chart Window* from the top menu bar.



This action will open a chart window similar to the one in the screen shot below. Regardless of whether you choose to work with charts in the console or separate chart windows, the features described in this section are the same.



## 3.1 Settings

### 3.1.1 Default Chart Settings and Options

Default chart settings can be set from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). You will find the settings for charts in the tabs underneath the **Chart** tab.

Global Chart Settings											
¢				P	references						×
General	Theme Cha	art Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	OFA®	Orders	Alerts	
Chart Se	ttings Indicat	tors Labels	Templat	es Optio	ons Bar Size	s Bar Siz	ze Selector				
The fields	below allow y	ou to adjust th	e default	settings f	or charts.						
	Default Tool:	* *			Max Lir	near Bars:	25000 🖨	]			
Revert to	Default Tool:	$\checkmark$			Max Non Lir	iear Bars:	15000 🜩	]			
	Bar Type:	• •			Minin	num Bars:	0 \$	]			
	Bar Scheme:	Normal	•		Popup Delay (	seconds):	2.0 ;	🛊 🗸 E	nabled		
	Bar Size:	15 min	•		Bar Widt	h (Pixels):	6 🜲	]			
В	ar Thickness:				Price Axis	Spacing:	25 🜲	]			
	Axis Style:	Inside	•		Time Axis	Spacing:	25 🜲	]			
	Shade:	None	•		Top Inse	et (pixels):	5 🜲	]			
	Shift + Click:	Text		•	Bottom Inse	et (pixels):	5 🜲	]			
	Ctrl + Click:	Price Guide		•	Dis	play Bars:	90 🌲	%			
Ctr	+ Alt + Click:	Time Guide		•	Study Heigh	nt (pixels):	90 🗢	]			
	Line Method:	Time/Price	-		Stud	dy Layout:	Horizontal	•			
	Fill Area:				т	ime Zone:	America/Ne	ew_York		-	
	Fill Alpha:	25 🜲					VUse Defa	ault			
							Calenda	r Days			
					Apply	naal					
				OK	Apply Ca	ncel					

The following are options that are available from the **Chart Settings** tab:

- 1. **Default Tool** This is the default tool to use on a chart.
- 2. **Revert to Default Tool** When completing an action with the selected tool, the chart will automatically switch back to the default tool (see above)
- 3. Bar Type The default type of bar to display when opening a chart
- 4. **Bar Scheme** Determines the color scheme for the bars. Normal displays bar color based on if the close is higher/lower than the open value. Available Bar Schemes include:
  - a. **Normal –** Displays a different color if the bar closes higher than open verses lower than open
  - b. **Inside/Outside** Colors change if bar closes higher/lower than open, if the bar has a lower high/higher low than previous bar (inside) and if the bar has a higher high/lower low than the previous bar (outside)
  - c. Day Of Week Bar color changes based on the day of the week
  - d. Alternate Day Bar color alternates each day
  - e. Alternate Hour Bar Color alternates each hour
- 5. Bar Size default bar size when opening a new chart
- 6. Bar Thickness Default thickness for the bar outline (default 1 pixel)
- 7. Axis Style Style of the price and time axis
- 8. Shade draws a shaded area at time or price intervals on the

- 9. **Shift + Click** Object to draw when the user holds down on the Shift Key and clicks the left mouse button on the chart.
- 10. **Ctrl + Click** Object to draw when the user holds down on the Ctrl Key and clicks the left mouse button on the chart.
- 11. **Shift + Alt + Click** Object to draw when the user holds down on the Ctrl and Alt Keys and clicks the left mouse button on the chart.
- 12. Line Method Calculation method for calculating the lines on a wedge (Time/Price or Angle)
- 13. Fill Area If true, the area of a wedge will be filled
- 14. Fill Alpha Alpha value for the fill color
- 15. Max Linear Bars Maximum number of linear bars to load when opening a chart
- 16. Max Non Linear Bars Maximum number of non-linear bars (ie Range, Renko etc) to load when opening a chart
- 17. Minimum Bars Minimum number of bars to load when opening a chart.
- 18. Bar Width (pixels) Default spacing for the price bars
- 19. Price Axis Spacing Default spacing between the numbers that are displayed on the price axis
- 20. Time Axis Spacing Default spacing between the labels that are displayed on the time axis
- 21. Top Inset (pixels) Default spacing to add to the top of the price plot when auto scale is enabled
- 22. Bottom Inset (pixels) Default spacing to add to the bottom of the price plot when auto scale is enabled
- 23. Display Bars percentage of bars to display when first opening a chart (ie fill 90% of the chart area)
- 24. Study Height (pixels) Default height for study plots
- 25. **Study Layout** Layout preference for the study labels displayed in the legend area (horizontal or vertical)
- 26. Time Zone Default time zone for the chart.
- 27. **Calendar Days** If enabled, space will be preserved for non-trading days when displaying daily bars (normally this space is removed)

Additional chart options can be found under the **Options** tab of the **Chart** section in the **Preferences** dialog.

	G	ilobal (	Chart Optio	ons						
¢		Pre	ferences							×
General Theme Chart Tool Bar	Sounds R	atios E	Elliott Wave	Ga	rtley	Tick Charts	OFA®	Orders	Alerts	
Chart Settings Indicators Labels	Templates	Options	Bar Sizes	Ba	ar Siz	e Selector				
The fields below allow you to adjust the	e default sett	ings for	charts.							
Show Extended Data	✓ Double	Cross H	lair	$\checkmark$	Expa	and Status Ba	r Link			
Show Instrument Title	Solid C	ross Haii	r	$\checkmark$	Show	w Bar Size Se	lector			
Snap Open/Close	✓ Auto So	ale			Shov	w Bird's Eye V	'iew			
Show Components Panel	Auto So	ale Price	e Only	$\checkmark$	Shov	w Bird's Eye L	ines			
Show Trade Panel	Semi Lo	og Scale			Reso	olve Trend Lin	es			
Show DOM Panel	Lock So	roll			Grou	ip Studies				
Show Grid	Lock St	udies		$\checkmark$	Shov	w Study Label	s			
Show Major Times	Show Ir	nfo on Se	elect		Stud	y Bar Updates	6			
Show Chart Buttons	Show Ir	ıfo		$\checkmark$	Stud	y Dock Long I	Names			
Show P/L Ladder	Show F	ange Ou	utline		Use	Account Posit	ion			
Show Exchange	Show N	liddle Lir	ne		Shov	w Values In Le	egend			
Show Symbol	Show N	lenu Bar	r	$\checkmark$	Simp	ole Study Title				
Show Bar Size	Show T	ool Bar		$\checkmark$	Over	lay Volume				
Show Analylsis Name	Show S	tatus Ba	ır	$\checkmark$	Draw	v Candle Outli	ne			
Show Cross Hair	✓ Confirm	on Clos	se	$\checkmark$	Auto	Load Studies				
Global Cross Hair	Link Mi	nimize/R	estore							
		ок А	opply Can	icel						

- 1. Show Extended Data If true, after hours data is show by default when opening a chart
- 2. Show Instrument Title Displays the title of the instrument in the top left corner of the chart
- 3. **Snap Open/Close** If this is enable the mouse tools will automatically snap to open and closing points on the price bars
- 4. Show Components Panel Displays the components panel by default when opening a new chart.
- 5. Show Trade Panel Displays the Trade panel by default when opening a new chart
- 6. Show DOM Panel Displays the DOM (Depth of Market) panel by default when opening a new chart
- 7. Show Grid Displays horizontal and vertical lines on the chart
- 8. Show Major Times Show vertical dashed lines for major time on the chart
- 9. **Show Chart Buttons** Enables the display buttons on the chart for adjusting the vertical space and bar width. This also applies to the remove study button on study plots.
- 10. Show P/L Ladder Displays the profit/loss ladder on the chart.
- 11. Show Exchange Toggles the display of the exchange as part of the title on the chart
- 12. Show Symbol Displays the instrument symbol on the chart.
- 13. Show Bar Size Displays the current bar size on the chart
- 14. Show Cross Hair Toggles the default display of the cross hair feature for the mouse cursor
- 15. **Global Cross Hair** If enabled, the cross hair (where enabled) will be updated across multiple charts that display the same instrument
- 16. **Double Cross Hair** Displays two vertical lines encompassing the bar where the cursor is currently (instead of a single vertical line)
- 17. Solid Cross Hair Displays a solid line instead of a dashed line for the cross hair
- 18. Auto Scale Default scale setting when opening a new chart
- 19. Auto Scale Price Only If enabled, only the price action will be included in the auto scaling of the chart (components are excluded)
- 20. Semi-Log Scale displays a chart using semi-log scale by default.

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- **m**otive**U**ave<sup>®</sup>
- 21. Lock Scroll Default lock scroll state (see Lock Scroll feature)
- 22. Lock Studies Default Lock Studies state (see Lock Studies feature)
- 23. Show Info on Select Turns on the Show Info feature when selecting a component
- 24. Show Info Enables the show info feature when creating a new component
- 25. Show Range Outline Turns on the range outline on the latest bar for Range/Renko bars
- 26. Show Middle Line Turns on the display of the middle line for channel components
- 27. Show Menu Bar Turns on the display of the menu bar for windows
- 28. Show Tool Bar Turns on the display of the tool bar for windows
- 29. Show Status Bar Turns on the display of the status bar at the bottom of the windows
- 30. Confirm on Close If enabled will display a warning message when closing a chart window
- 31. Link Minimize/Restore If enabled, for linked chart windows all windows in the group will be minimized when one of them is minimized. Likewise when one of them is restored, all windows in the group will be restored
- 32. Expand Status Bar Link Expanded mode for the color link control in the status bar
- 33. Show Bar Size Selector Toggles the default display of the Bar Size Selector on charts
- 34. Show Bird's Eye View Toggles the default display of the Bird's Eye View when opening a chart
- 35. Show Bird's Eye Lines Display of the vertical lines on the Bird's Eye plot
- 36. **Resolve Trend Lines** If enabled, MotiveWave<sup>™</sup> will attempt to load enough data to properly display all trend lines on a chart. By default it will estimate where the starting point of a trend line is based on the available data. This option will force the loading of data all the way back to the beginning of trend lines to improve the accuracy of the plot. **Warning:** this option can cause a lot of data to be loaded from your broker or data service. It is recommended that you leave this option of and turn it on where desired from the Chart Settings dialog (see next section).
- 37. **Group Studies** If enabled, study plots will be grouped together at the bottom of the chart in a stacked panel.
- 38. Show Study Labels Enables the display of study labels in the legend
- 39. **Study Bar Updates** Toggles the live updating of studies from level 1 data verses calculating the most recent study values on the close of a bar.
- 40. **Show Values in Legend** If enabled, current study values will be displayed next to the study label in the study legend
- 41. Simple Study Title Simplified display of the title in the legend area
- 42. **Overlay Volume** Displays the volume information as an overlay on the chart instead of a separate plot.
- 43. Draw Candle Outline Draws the outline of the candle rectangle.

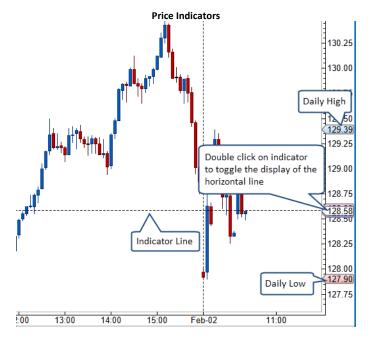
### 3.1.2 Chart Specific Settings

Chart settings that apply to the selected chart only can be accessed by right clicking on the chart and choosing **Chart Settings** (you can also double click on the chart). The settings configured here can be saved as default settings by clicking on the **Save Defaults** button. Descriptions of items below can be found in the preceding sections.

	Chart Settings Dialog	
¢	Chart Settings	×
General	Scaling Bar Settings Theme Display Labels Watermark Trade Elliott Wave OFA®	
	elow allow you to adjust general settings <b>specifically for this chart</b> . Default settings may be changed from th Dialog (Configure -> Preferences from the Console Menu Bar).	e
Mouse Too	Bar Width (Pixels): 6 €	
Shade	e: None ▼ Price Axis Spacing: 25 ♦	
Axis Style	E: Inside	
	Semi-Log Scale Minimum Bars: 0 🗢	
	Show Cross Hair Resolve Trend Lines	
	Solid Cross Hair Calendar Days	
	✓ Double Cross Hair Time Zone: America/New_York ▼ ✓ Use Default	
	Global Cross Hair	
	Lock Scroll	
	Group Studies	
	Show Study Labels	
	Lock Studies This dialog allows you to configure preferences specifically for this chart. Use the "Save Defaults" button below to apply changes to other charts.	
	OK Save Defaults Reset Defaults Cancel	

### 3.2 Price Indicators

Price indicators display current price, high low (etc) on the price axis of a chart. By default, MotiveWave<sup>™</sup> will display (where available) the **Last Price, Best Bid, Best Ask, Daily High** and **Daily Low**. Other indicators may be (optionally) displayed in the vertical axis from overlays such as a Moving Average. If you would like to show a vertical line that moves with the indicator just double click on it (this will toggle the display of the line).

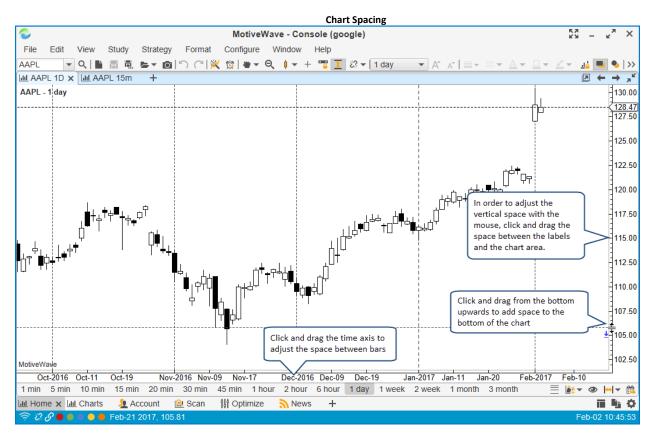


You may change the price indicators that are displayed from the Preferences dialog. Click on **Chart**, then on **Indicators**.

Price Indicator Settings	
C Preferences	×
General Theme Chart Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts OFA® Orders Alerts	
Chart Settings Indicators Labels Templates Options Bar Sizes Bar Size Selector	
The fields below allow you to adjust the default settings for indicators displayed on the price axis.	
Last Price: 🕜 🗹 Enables Click on the check box	
Best Bid: 🕜 Enabled to show/hide indicator	
Best Ask: 🥜 V Enabled	
Bid/Ask Midpoint: 🥜 🔲 Enabled	
Daily High: 🥜 🗸 Enabled	
Daily Low: 🥜 Enabled	
Opening Price: Enabled	
Closing Price: Click on the Edit button to modify colors, show lines	
OK Apply Cancel	

## 3.3 Chart Spacing

There are several options for adjusting the horizontal and vertical spacing on the chart. The simplest way is to use the mouse to drag either the time axis (horizontal spacing) or the price axis (vertical spacing). Note: in order to adjust the vertical spacing, you need to click and drag the space between the price labels and the chart area (see below)

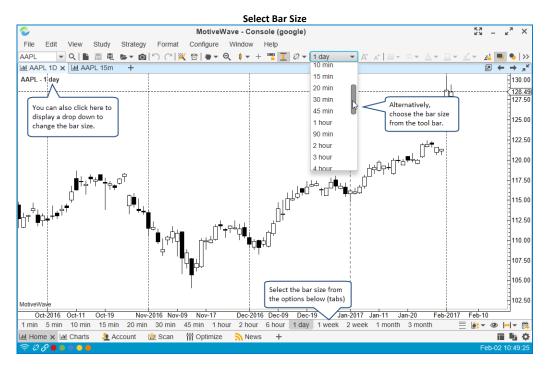


## 3.4 Bar Sizes

Bar sizes are useful for changing the resolution of a chart based on time, price or volume movements. MotiveWave<sup>™</sup> supports several different types of bars:

- 1. Linear time interval based bars (such as 1 minute, 15 minute, 1 day, 2 week etc)
- 2. Range bars are based on price movements of a specific price range
- 3. **Renko/Hybrid Renko** these are special price range based bars
- 4. Tick these bars are based on a specific number of price ticks (or trades)
- 5. Volume each of these bars will have a fixed trading volume
- 6. Point & Figure

There are several ways to change the bar size and type. Perhaps the most convenient way is to use the **Bar Size Selector** at the bottom of the chart. Alternatively, you can use the bar size drop down from the tool bar or right click on the chart and select the bar size from the context menu.



#### 3.4.1 Custom Bar Sizes

MotiveWave<sup>™</sup> comes with a default set of bar sizes, but you can create your own bar sizes from the Preferences Dialog (*Configure -> Preferences* from the Console menu bar). You can create second based bars provided you have access to historical tick data.

		Cus	tom Bar Size	s					
\$		P	references						×
General Theme Char	Tool Bar Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Chart Settings Indicator	rs Labels Templat	es Optio	ons Bar Sizes	Bar Siz	e Selector				
This panel allows you to co	onfigure the available	bar sizes	s for each chart						
Add Remove Re	set								
			ו						
Click to add a	Bar Sizes can also b removed to reduce	-							
new bar size.		crutter.	J						
4 mm									
5 min						_			
10 min	+	Ne	ew Bar Size		×				
15 min	Please enter the								
20 min	(Month, Week, D	ay, Hour,	Minute) and a	interval v	alue.				
30 min	Interval Type: 1	vinute	•	Choose t	he Interval Ty	'pe			
45 min	Interval:	15 \$			minute, hour,				
1 hour		_		and seled	t the interva				
90 min		C	Cancel						
2 hour						_			
3 hour									
4 hour									
5 hour									
6 hour									
8 hour									
10 hour									
12 hour									
1 day									
2 day									
		OK	Apply Car	ncel					

### 3.4.2 Bar Size Selector

The **Bar Size Selector** is a convenient way access common bar sizes by simply clicking on one of the tabs at the bottom of the chart. The **Bar Size Selector** is visible by default on all charts. If you would like to hide this, choose *View -> Display -> Bar Size Selector* from the top menu bar to toggle its visibility. (Note: the default behavior can modified in the **Preferences** dialog, click on **Chart** the on **Options**, see **Show Bar Size Selector** option).

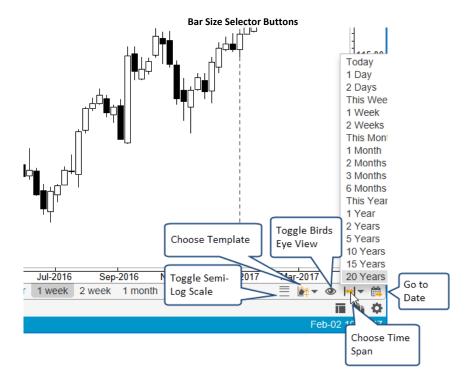
You can configure the tabs available in the **Bar Size Selector** by right clicking on one of the tabs and choosing *Configure*. You can put any type of bar size in the selector. For example you could have Range(3) or Constant Volume(500).

			_	Conf	igure Bar	Size Seleo	ctor		
			Т						
			ſ	Right click		and			
ct-19	Nov-201	6 Nov-0	19 N	choose <b>Co</b>	nfigure	~	0	ec-19 Jan-2017 Jan-	11 Jan-20
15 min	20 min	30 min	45 m	in 1 hour	2 hour	6 hour	1	Configure	nth 3 m
SDAQ (2	1) 🛛 🖄 🖉	Alerts	[≣ To	op 50 Stock	s (10) 🗙	+ >>1		Remove Bar Size	Indices
st Pr	Last Tim	e H	igh	Low	Open	Close	c	Next Bar Size Shift+ Previous Bar Size Shift+	JUI

ŀ			Pr	eferences						×
General Theme Ch	art Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Chart Settings Indica	tors Labels	Femplates	Optior	ns Bar Sizes	Bar Siz	ze Selector				
Add Remove F 1 mm 5 m Use the Add/Rem to configure the in the Bar Size Se	Reset nove buttons tabs available	bar sizes	available	in the Bar Si	ze Selecto	pr.				
20	+	_	Ad	d Bar Size			×			
30 min	Select the typ	o of har s	ize and i	arameters b	Nole					
45 min 1 hour							<u> </u>			
2 hour	Bar Size	Linear		•		Choose the Ba and settings. J				
6 hour	Interval Type	: Minute	• •			ype is allowe		lize		
1 day	Interval	: 1	5 \$		Ľ	,pe is anone		- 1		
1 week					1					
2 week			Oł	Cancel	J					
1 month										
3 month										
omonur										
		_	ОК	Apply Car	ncel					

The **Bar Size Selector** also has some buttons on the right hand side (configurable in **Preferences**). These can be convenient for the following (in order from left to right):

- 1. Toggle Semi-Log Scale Toggles semi-log scaling
- 2. Choose Study Template Allows you to choose a study template
- 3. Toggle Birds Eye View Toggles the display of the Birds Eye View
- 4. **Display Time Frame** Choose a specific time frame to display on the chart (ie 2 week, 1 day etc)
- 5. **Go To Date** Go to a specific date in history



# 3.5 Importing Data

Historical data may be imported into MotiveWave<sup>™</sup> by choosing *File -> Import Data* from the top menu bar (*File -> Chart -> Import Data* from the Console menu bar). Two types of data formats are supported:

- 1. **CSV** Comma Separated Values. This is a very common format for many historical data services. The format of the data file will be automatically detected when specifying files of this type.
- 2. **MetaStock<sup>™</sup> Database** MetaStock<sup>™</sup> Database files containing 1 or more instruments may be imported into MotiveWave's historical database.

This dialog has the following elements:

- 1. **Data Files** Specify one or more data files by clicking on the Add button to left of the Data Files list.
- 2. **Time Zone** Choose the time zone for the input file. This is important for resolving the data/time values for each historical price bar in the input file.
- 3. Exchange Optionally Choose the Exchange for the instrument(s) in the input file(s).
- 4. **Trading Hours** If a value is chosen for Trading Hours, it will be assigned to the instrument when it is created from this dialog.
- 5. Adjust for Stock Splits If the file does not contain split adjusted values, this will detect and adjust historical prices for splits.
- 6. Automatically Create Instrument (Do Not Prompt) If the instrument does not already exist in the local database, it will be automatically created if this is checked.
- 7. Replace Existing Data Replaces data that is already in the local historical database.
- 8. Monitor Input File For Changes If checked, MotiveWave<sup>™</sup> will monitor the timestamp on the input file to see if it changes in the future. If it does change, the new data will be automatically loaded into MotiveWave<sup>™</sup> when a chart is loaded.

St Import Data	×
This dialog allows you to import data from a MetaStock Database, CSV or ASCII file. Data Files: Click here to add 1 or more data files	
Time Zone: America/New_York  Use Default Exchange: -Select Exchange- + Trading Hours: -Select Trading Hours- + Adjust for Stock Splits (Stocks Only) Replace Existing Data Automatically Create Instument (Do Not Prompt)  Monitor Input File for Changes Import Cancel	

## 3.6 Exporting Data

Historical data may be exported from MotiveWave<sup>M</sup> in several different formats. Choose *File -> Export Data* from the top menu bar (*File -> Chart -> Export Data* from the Console menu bar). This dialog has the following elements:

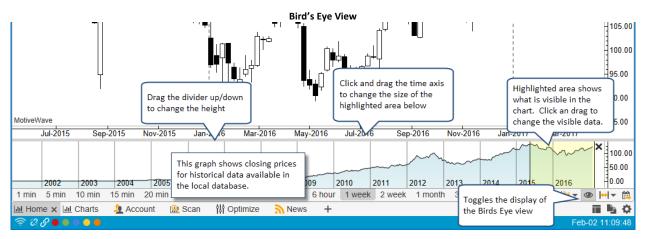
- 1. **Symbol** Choose the instrument that you would like to export. By default this is the instrument from the chart where the dialog was launched.
- 2. Bar Size Choose the Bar Size for the historical data
- 3. **Bar Count** Number of Bars to Export. Choose All Available to export all available data in the historical database
- 4. **Regular Trading Hours (RTH) Data** Check this to only include bars that are part of the regular trading session
- 5. **Data File** Click on the Browse button to the right to choose the data file where the data will be saved.
- 6. Format Choose the Export Format
  - a. CSV yyyyMMdd HHmmss,O,H,L,C,V
  - b. CSV dd/MM/yyyy HH:mm:ss,O,H,L,C,V
  - c. Ninja Trader Start Of Bar Time
  - d. Ninja Trader End Of Bar Time

	Export Data Dialog	
00 <mark>1</mark>	Export Data	×
Symbol:	AAPL  Q <sup>+</sup>	
Bar Size:	1 min 👻	
Bar Count:	500 🖨 🔲 All Available	
	Regular Trading Hours (RTH) Data	
	Chart Data	
Data File:	C:\Users\Tony\Desktop\AAPL - 1 min - RTH.csv	Browse
Format:	CSV - yyyyMMdd HHmmss,O,H,L,C,V	
	OK Cancel	

## 3.7 Bird's Eye View

The **Birds Eye View** provides a convenient way to view the larger picture of the available historical data. Choose *View -> Display -> Bird's Eye View* from the top menu bar to toggle the display of this feature.

The **Bird's Eye View** is displayed at the bottom of the chart. The highlighted area (transparent yellow area) illustrates the data that is currently visible in the chart. You can click and drag this area to the left/right to move the visible area. The width of the highlighted area depends on the bar width for the chart. If you would like to change the width, click and drag the time axis.



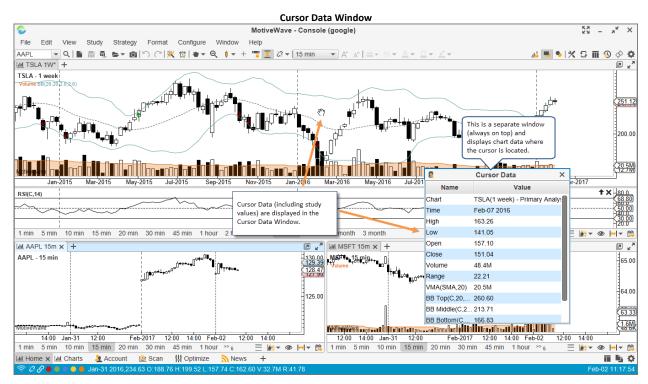
# 3.8 Cursor Data

**Cursor Data** refers to the data points and their values at the current position of the mouse cursor. There are several different ways to view cursor data.

### 3.8.1 Cursor Data Window

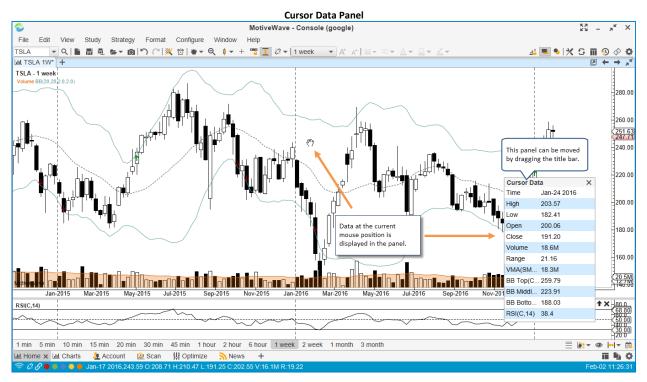
The Cursor Data Window is a separate window that displays data at the current mouse location. This window works across all charts. This window may be opened by choosing *View -> Display -> Cursor Data* 

*Window* from the top menu bar. For convenience this window is always displayed on top of other windows.



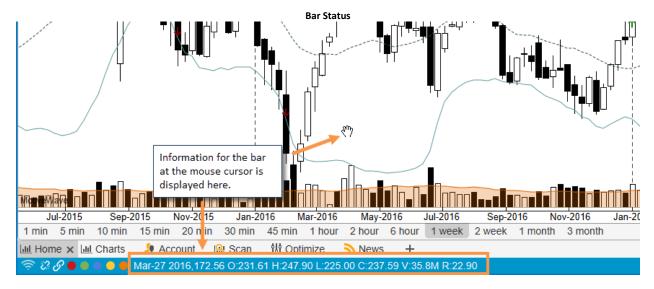
### 3.8.2 Cursor Data Panel

The **Cursor Data Panel** is essentially the same as the **Cursor Data Window** except that it is a panel inside of the chart. This panel only works for the enclosing chart. To open this panel, choose *View -> Cursor Data* from the top menu bar.



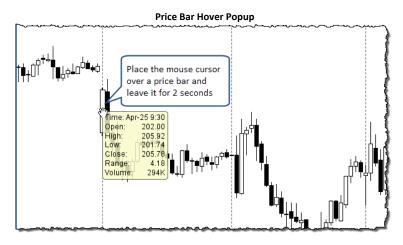
#### 3.8.3 Bar Status

Data on the selected price bar can be found in the status bar at the bottom of the window. This reflects the price bar at the position of the mouse cursor.



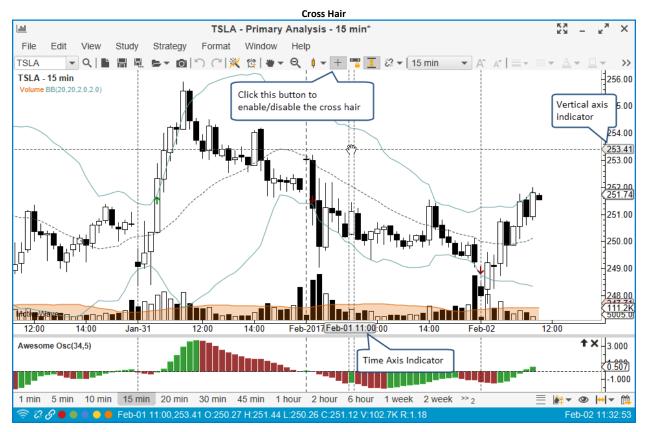
#### 3.8.4 Hover Popup

A popup will be displayed with information about the price bar if you place the mouse cursor over a price bar and leave it there for about 2 seconds.



#### 3.8.5 Cross Hair

The cross hair feature draws thin horizontal and vertical lines at the current mouse cursor location to indicate the vertical axis and time axis values.



There are several configuration options for the cross hair. These can be found under the *Chart -> Options* tab of the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar).

	Cross Hair P	Telefences	
\$	Prefere	nces	×
General Theme Chart Tool Bar	Sounds Ratios Elliot	Wave Gartley Tick Charts Orders Alerts Email	
Chart Settings Indicators Labels	Templates Options B	ar Sizes Bar Size Selector	
The fields below allow you to adjust t	e default settings for char	te	
Show Extended Data	✓ Double Cross Hair	<ul> <li>Expand Status Bar Link</li> </ul>	
Show Instrument Title	Solid Cross Hair	Show Bar Size Selector	
Snap Open/Close	Auto Scale	Show Bird's Eye View	
Show Components Panel	Auto Scale Price Or	ly Show Bird's Eye Lines	
Show Trade Panel	Semi Log Scale	Resolve Trend Lines	
Show DOM Panel	Lock Scroll	Group Studies	
Show Grid	ck Studies	Show Study Labels	
Show Major T Cross Hair Op	tions ow Info on Select	Study Bar Updates	
Show Chart Buttons	Show Info	Study Dock Long Names	
Show P/L Ladder	Show Range Outline	Use Account Position	
Show Exchange	Show Middle Line	Show Values In Legend	
Show Symbol	Show Menu Bar	Simple Study Title	
✓ Show Bar Size	Show Tool Bar	Volume	
🖌 Show Analylsis Name	Show Status Bar	✓ Draw Candle Outline	
Show Cross Hair	Confirm on Close	✓ Auto Load Studies	
Global Cross Hair	Link Minimize/Resto	re	
	OK Apply	Cancel	

### 3.8.5.1 Global Cross Hair

The **Global Cross Hair** provides a convenient way to locate the mouse cursor position between several different charts that are displaying the same instrument. This option can be enabled in the **Preferences** dialog (see previous section). In the following screen shot you will notice that the current location of the mouse cursor in one chart adjusts the cross hair location in the other charts that show the same instrument.



## 3.9 Time & Sales

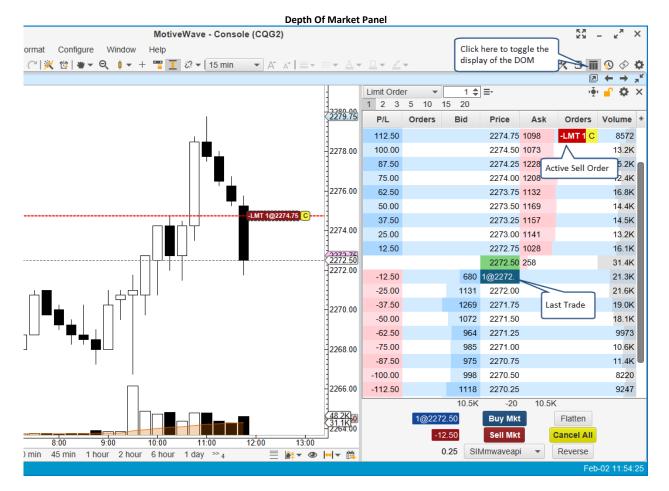
The **Time & Sales** panel shows historical ticks for the selected instrument. The data and columns available in this panel will depend on the broker or data service that you have chosen. The following example shows the Time & Sales panel for the e-Mini S&P contract:

	Time & Sales Pa	anel						
MotiveWave - Consol	(CQG2)					K.7 K.9	- r <u>v</u>	×
figure Window Help ₩▼ Q I ▼ + ъ 🚺 🐼 ▼ [15 min	A* A*   ≡ + ▲ + □ +	r <u>1</u> v			ere to shov ne&sales pa		<u>}</u> } } ↓ ↓	¢
		Rows:	100 🜲			2	<b>•</b>	>
		Time	Price	Bid	Ask	Volume		
	2279.75	11:49:26	2273.50	2273.50	2273.75	1	N	
	3	11:49:26	2273.50	2273.50	2273.75	2	Ν	
	2278.00	11:49:26	2273.50	2273.50	2273.75	13	N	
		11:49:26	2273.75	2273.50	2273.75	1	Y	
		11:49:26	2273.50	2273.50	2273.75	15	N	
	Historical Ticks 6.00	11:49:26	2273.75	273.50	2273.75	1	Y	
		11:49:26	2273.50	2.173.50	2273.75	2	Ν	
لجا جے لے دے		11:49:25	2273.50	0070.50	0070.75	1	Ν	
	2274 00 3372 7E 2273.50	11:49:25	2273.75	Red/Blue o	olors: the tick wa	1	Y	
	]	11:49:25	2273.50	fill at the A		2	Ν	
	2272.00	11:49:25	2273.50	at the Bid		2	Ν	
	2272.00	11:49:25	2273.50	2210.00	2210.10	1	N	
	-	11:49:24	2273.50	2273.50	2273.75	13	Ν	
	2270.00	11:49:24	2273.75	2273.50	2273.75	1	Y	
		11:49:24	2273.50	2273.50	2273.75	19	Ν	
╵┩╈╧╧╎╎╴╎╴╴╶╶╝╵	-	11:49:24	2273.50	2273.50	2273.75	1	Ν	
	2268.00	11:49:24	2273.50	2273.50	2273.75	3	Ν	

For convenience, a button is available on the tool bar to toggle the display of this panel. Alternatively choose *View -> Display -> Time & Sales Panel* from the top menu bar.

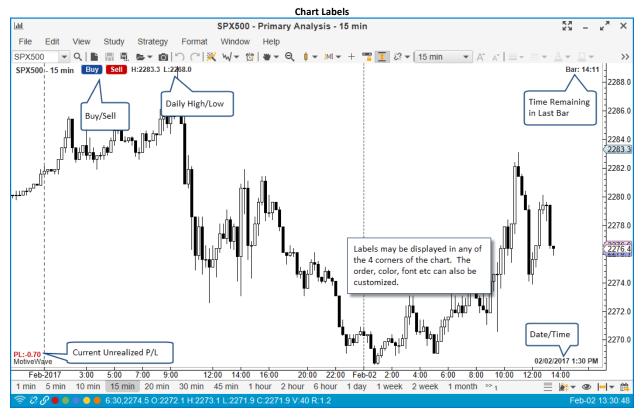
## 3.10 Depth Of Market (DOM) Panel

The **Depth Of Market (DOM)** panel shows a tabular view of the current bid and ask sizes. Choose *View* - > *Display* -> *DOM Panel* from the top menu bar to show or hide this panel on a chart. For convenience a toggle button is also available on the tool bar. For details on how to use the DOM panel see <u>Depth Of</u> <u>Market</u> section.



## 3.11 Chart Labels

Chart labels display information on the Price Plot of the chart. These labels can appear in any of the 4 corners. The following example shows some chart labels:



You can configure the labels displayed on a chart from the **Chart Settings** dialog (double click on the chart). You will find the labels under the **Labels** tab:

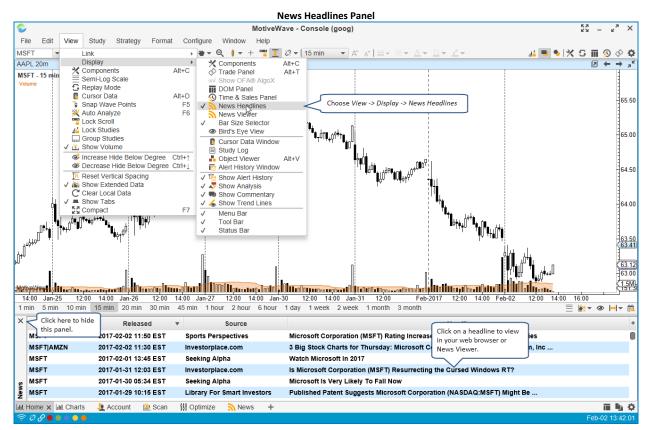
¢.		Chart S	ettings			
General Scaling Bai	Settings Theme	Display Labels	Watermark	Trade Elliot	t Wave	
The list below shows the Available Labels	labels that are displ	ayed on the price	graph (such as Labels	s Spread, Day	Range etc).	
13 Week High			Buy Button			
13 Week Low			Sell Button		Adjust the order here	
26 Week High			Day High		to change the order	
26 Week Low			Day Low		displayed on the chart.	
52 Week High			Bar Countdo	wn		
52 Week Low			Date/Time			
ATR			Profit/Loss			
Account						
Ask Price						
Bid Price	1	Chart L	abel: Bar Co	ountdown	×	
Change	The fields hel	ow allow you to a	direct the cotting	ac for the char	t labol	-
Change %			ujusi ine setting	js ior the char	LIADCI.	
Cursor Close	Label Prefix:	Bar:				
Cursor High	Location:	Top Right	•			
Cursor High Cursor Low			•	Specific pro	perties of the	
5	Location: Outline:	Top Right None			perties of the	d
Cursor Low			▼ 	label can be	perties of the e configured in (Double click on	6
Cursor Low Cursor Open	Outline: Border:		<ul> <li>■ 1.0 •</li> <li>✓ Use Defa</li> </ul>	label can be this dialog.	configured in	
Cursor Low Cursor Open Cursor Price	Outline: Border: Text Color:		✓ Use Defa	label can be this dialog. label or sele	configured in (Double click on	4
Cursor Low Cursor Open Cursor Price Cursor Time	Outline: Border:			label can be this dialog. label or sele	configured in (Double click on ect and press the	d
Cursor Low Cursor Open Cursor Price Cursor Time Cusor Volume	Outline: Border: Text Color:		Use Defa	label can be this dialog. label or sele	e configured in (Double click on ect and press the on the right).	
Cursor Low Cursor Open Cursor Price Cursor Time Cusor Volume Date	Outline: Border: Text Color: Fill Color:	None •	Use Defa	label can be this dialog. label or sele Edit button	e configured in (Double click on ect and press the on the right).	
Cursor Open Cursor Open Cursor Price Cursor Time Cusor Volume Date Day Close	Outline: Border: Text Color: Fill Color:	None •	Use Defa	label can be this dialog. label or sele Edit button	e configured in (Double click on ect and press the on the right).	
Cursor Low Cursor Open Cursor Price Cursor Time Cusor Volume Date Day Close Day Open	Outline: Border: Text Color: Fill Color:	None •	Use Defa	label can be this dialog. label or sele Edit button	e configured in (Double click on ect and press the on the right).	4

MotiveWave™ User's Guide

Double click on one of the labels in the right hand box (or select and press the edit button, ie pencil icon) to edit the properties of the label (see embedded dialog above). From there you can choose which corner to display the label and adjust the color, font etc. The order in which the labels are displayed is determined using the up/down arrow buttons in the **Chart Settings** dialog (see above).

### 3.12 News

If supported by your Broker/Data Service, news articles specific to the instrument can be displayed on the chart by showing the **News Headlines** panel. Choose *View -> Display -> News Headlines* from the top menu bar.



If you click on a headline in the news headlines panel, it will display the news article in the internal news viewer by default. If you right click on the headline, you can optionally display the news article in your web browser.

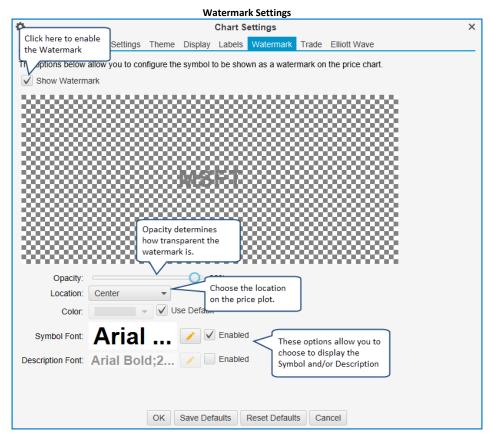
				Show News Article	
d¥184				: (۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬ ۲٬۵۵٬	63.00 1.5M
	Jan-25 12:00	11.00 001120 12.00 1	4:00 Jan-27 12:00 14:00 Jan-30	) 12:00 14:00 Jan-31 12:00 Feb-2017 12:00 14:00 Feb-02 12:00 14:00	0 16:00 18:00
1 r	nin 5 min 10 min	15 min 20 min 30 min	45 min 1 hour 2 hour 6 hour	1 day 1 week 2 week 1 month 3 month	≣ 🚑 ▼ 👁 🛏 ד 🛱
×	Symbols	Released	Source	Headline	+
	MSFT	2017-02-02 11:50 EST	Sports Pe Click to show in	Microsoft Corpo Right click to choose to open in Neutral at Atlantic Securities	
	MSFT AMZN	2017-02-02 11:30 EST	Investorp News Viewer	3 Big Stock Cha Browser or the News Viewer ation (MSFT), Amazon.com, Inc	
	MSFT	2017-02-01 13:45 EST	Seeking Aip	Watch Microsoft In 20	
	MSFT	2017-01-31 12:03 EST	Investorplace.com	Is Microsoft C show In Browser Resurrecting the Cursed Windows RT?	
ų	MSFT	2017-01-30 05:34 EST	Seeking Alpha	Microsoft Is Show In Viewer Now	
News	MSFT	2017-01-29 10:15 EST	Library For Smart Investors	Published Patent Suggests Microsoft Corporation (NASDAQ:MSFT) Might Be	
<u> 11 </u>	Home 🗙 🛄 Charts	🧕 Account 🛛 🔐 Scan	👭 Optimize 🛛 News 🕂		ii 🕒 🔅
<u></u>	° 🖓 🔴 🕘 🔴 🔴 🛑				Feb-02 13:45:09

The following screen shot shows an example of displaying a news article in the News Viewer:

News Viewer	
News Viewer - Is Microsoft Corporation (MSFT) Resurrecting the Cursed Windows RT?	_ <sup>_</sup> × ×
< Back Forward > http://investorplace.com/2017/01/microsoft-windows-10-cloud/	Go
Protect Your Business Now Con Effective Protection Against Malware, Ransomware & Other Zero-Day Exploits. Go to buy malware bytes.com	
investorPlace	Menu 🔻
f 🔹 in 😏 G• 🖾 🚭	
Is Microsoft Corporation (MSFT) Resurrecting the Cursed Windows RT?	<u>þ</u>
Don't look now, but Windows RT just might be back as Windows 10 Cl	oud
By Brad Moon, InvestorPlace Contributor   Jan 31, 2017, 12:10 pm EST	
Don't look now, but <b>Microsoft Corporation</b> (NASDAQ: <u>MSFT</u> ) looks to be taking another run <b>Alphabet Inc's</b> (NASDAQ: <u>GOOGL</u> , NASDAQ: <u>GOOG</u> ) Chrome operating system. Reference have begun popping up in builds of the Windows 10 Creators Update (which is due to arrive April) to Windows 10 Cloud.	es
Speculation is growing that Windows 10 Cloud is in fact a new simplified version of Microsoft's operating system, designed to run on devices powered by	e: Microsoft

## 3.13 Watermark

The **Watermark** feature in MotiveWave<sup>™</sup> enables you to display a semi-transparent label with the instrument's symbol and/or description. You can also choose the location and font of this label. The watermark can be configured from the **Chart Settings** dialog, see **Watermark** tab.



The following screen shot shows the watermark description for Microsoft:



# 3.14 Scaling

Several different scaling options are available for scaling the price/time range of the price plot. By default the chart price range is automatically scaled from the visible data and components (Auto Scale). The following are the available scaling options:

- 1. **Auto Scale** Price range is adjusted according to visible data and visible components (optionally, only the data range can be considered). This option will lock the vertical movement of the chart.
- 2. **Price Range** This option keeps the price range constant and enables you to manually move the graph up/down.
- 3. **Square** This option will set a fixed number of points per bar width. If the bar width is expanded (or contracted) the price range will be updated to reflect.

Scaling options can be found under the **Scaling** tab of the **Chart Settings** dialog.

Scaling Options
Chart Settings X
General Scaling Bar Settings Theme Display Labels Watermark Trade Elliott Wave
Choose the scaling type and settings below. This yell affect the certificate the certicate the
OK Save Defaults Reset Defaults Cancel

## 3.15 Analyses

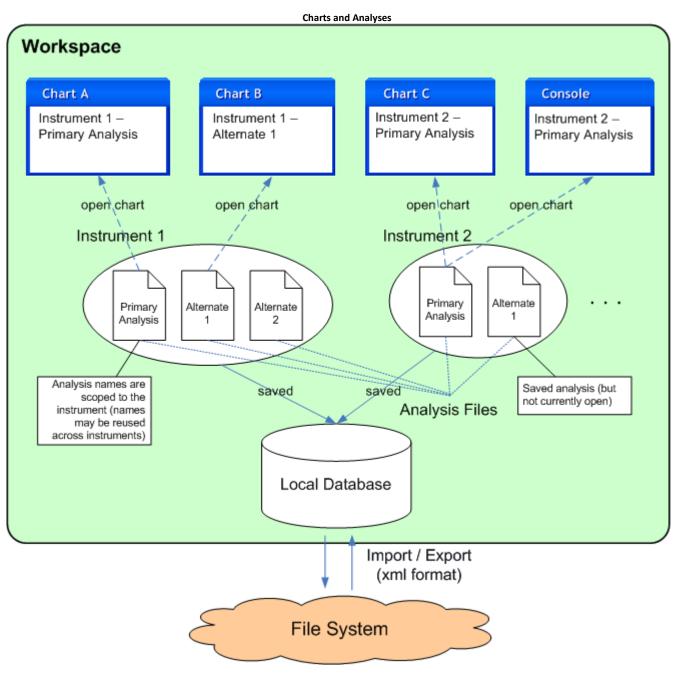
MotiveWave<sup>™</sup> employs the concept of an Analysis to encapsulate the work that you have done in a chart to analyze price movement. An analysis will contain the following types of information:

- 1. **Components** any components that you have added to the chart including: trend lines, Elliott Waves, Gann components, Gartley patterns, commentary etc
- 2. Studies Any studies that you have added to the chart
- 3. **Time/Price Guides** These are guides that you have added to the horizontal or vertical axes.

It is important to understand that an **analysis** is a separate entity from a **chart**. A **chart** is a **view** or an analysis file. This is an important distinction and is fundamental to the underlying design of MotiveWave<sup>™</sup>. While this concept may seem a little confusing at first, it has numerous advantages:

- 1. View in Multiple Time Frames A single analysis can be viewed at multiple time frames simultaneously. You can have several open charts that reference the same analysis and edit them from each chart.
- 2. Alternate Analyses Each instrument can have any number of analyses. The name of an analysis is scoped to the instrument so it does not have to be unique across symbols.
- 3. Saved in Repository You can save an analysis and load it later after the chart has been closed
- 4. **Share with other People** Analyses can be exported in XML format and shared with your friends. You can also share analyses using the <u>Analysis Sources</u> feature.

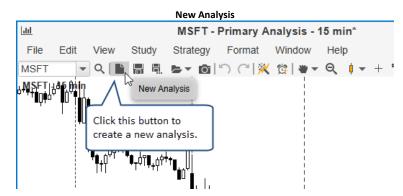
The following diagram illustrates the relationship between charts and analyses. Each instrument may have multiple analyses which are saved in the local database (repository). When you open a chart, you are opening an analysis. MotiveWave<sup>™</sup> allows you to open an analysis from more than one chart at the same time. Changes made in either chart are synchronized between the two so you do not have to worry about overwriting you modifications.



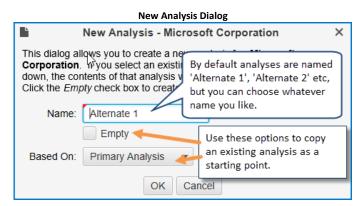
### 3.15.1 Creating a New Analysis

The default analysis for any instrument is called the **Primary Analysis**. Whenever you open a chart for the first time, it will open the **Primary Analysis**. The net effect of this behavior is that all changes between the open charts for that instrument will be synchronized between them.

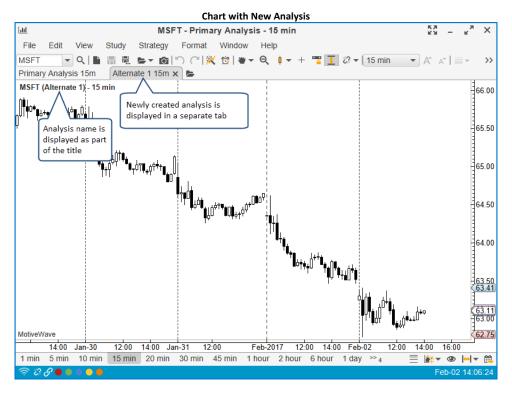
If you do not want these changes to be synchronized, you can create one or more **Alternate Analyses**. There are several ways to do this; perhaps the most convenient is to use the **New Analysis** button on the tool bar.



The following dialog will appear when you create a new analysis. Enter a name for the analysis. By default, analyses are named *Alternate 1, Alternate 2* etc. You can however choose any name you like for the analysis. A new analysis may be empty (just price bars) or you can base an analysis on an existing analysis by choosing one from the **Based On** drop down.

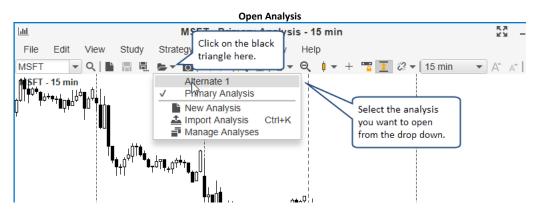


Once you have created the new analysis, the chart will display a set of tabs at the top where the active tab is named with the new analysis.



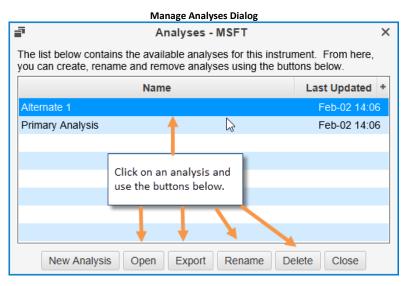
### 3.15.2 Open Existing Analysis

If you want to quickly open an analysis, just click on the small black triangle next to the open button on the tool bar. Alternatively, choose *File -> Open/Manage Analyses* from the top menu bar (*File -> Chart - > Open/Manage Analyses* from the Console menu bar).



#### 3.15.3 Manage Analyses

The **Manage Analyses** dialog allows you to open, export, rename, delete or create new analyses for the given instrument. This dialog can be access from the menu bar: *File -> Open/Manage Analyses* from the top menu bar (*File -> Chart -> Open/Manage Analyses* from the Console menu bar).



#### 3.15.4 Import/Export Analyses

Import and export are very valuable tools for sharing your analysis with another MotiveWave<sup>™</sup> user.

When you export an analysis file, the file will contain all of the information related to your analysis as well as information about the instrument. The exported file will be in JSON format and will have an extension of .mwml (MotiveWave Markup Language).

Choose File -> Export Analysis from the top menu bar (File -> Chart -> Export Analysis from the Console) to open the Export Analysis dialog. By default the analysis file will be saved on your computer desktop in the form <Symbol> - <Analysis Name>.mwml. You may change this name and location if you like. Click on the Save button to export the analysis to the selected file.

			Export Analysis Dialog				
Export Analysis							×
	→ This P	PC → Des	ktop 🗸 🗸 🗸	Ō	Search Desktop		Q
Organize 🔻 🛛 Nev	w folder	(		٦			?
Documents	* ^	Name	By default the file is saved	Da	te modified	Туре	,
🕂 Downloads	*	📕 analy	to your Desktop	12	/22/2016 4:52 PM	File folder	
Pictures	*	Archi	ve	12	/30/2015 12:42	File folder	
cursors		Certs		12	/8/2016 12:05 PM	File folder	
FXCM Test		docs		11,	/7/2016 9:02 AM	File folder	
install		FXCN	1 Test	1/	17/2017 5:02 PM	File folder	
MotiveWave		GIMP		3/1	12/2012 4:57 PM	File folder	
montenare		iStocl	k Photos	3/2	22/2012 1:29 PM	File folder	
a OneDrive	Def	ault nam	e for	9/2	27/2016 1:51 PM	File folder	
This PC		Analysis		7/1	12/2016 11:25 AM	File folder	
-		_		4/2	23/2016 11:00 AM	File folder	
📃 Desktop	_ ~ >	$\checkmark$			Click Save to		>
File name:	MSFT.N/	ASDAQ - A	Alternate 1		create the		~
Save as type:	Analysis	Files			analysis file		~
oure us type	, analysis						
∧ Hide Folders					Save	Cancel	

Similarly, to import an analysis file, choose *File -> Import Analysis* from the top menu bar (*File -> Chart -> Import Analysis* from the *Console*) to display the Import Analysis dialog. Locate the analysis file, select it and press the Open button. If the chart you are currently using has the same instrument as the imported analysis file, it will be opened in another analysis tab. If the instrument does not match the chart, a message dialog will be displayed indicating that the import was successful and how to open the imported file.

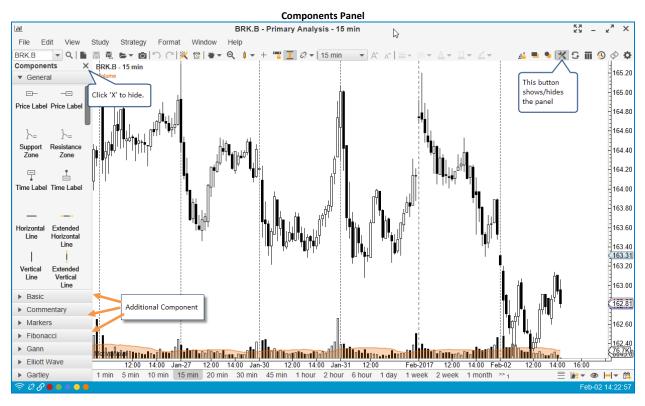
				Import Analysis Dia	log			
Select an Analysis File	e to l	mpo	rt					×
$\leftarrow \rightarrow \cdot \cdot \uparrow$	. >	This	PC > Desktop	>	~ Ū	Search Desktop		P
Organize 👻 🛛 N	ew fo	older					== -	?
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Documents	$ \mathcal{R} $		process exp	lorer	6	/24/2016 10:43 AM	File folder	
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Pictures	*		repo		1	0/19/2016 1:36 PM	File folder	
cursors			repository		2	/1/2015 11:01 AM	File folder	
FXCM Test			Stock Image	25	2	/28/2012 2:32 PM	File folder	
install			TA Analyses	(	1	1/14/2016 4:57 PM	File folder	- 1
MotiveWave			Taxes	Select the file	8	/29/2016 11:52 AM	File folder	
INIOLIVEWAVE			Transact	to import	8	/23/2012 1:03 PM	File folder	
\land OneDrive			- Downloads		1	0/15/2012 1:27 PM	Shortcut	
This PC			MSFT.NASD	AQ - Alternate 1.mwml	2	/2/2017 2:20 PM	MWML File	
			My Scans -	Documents	7	/31/2014 11:19 AM	Shortcut	
📃 Desktop			My Scans -	Pictures	6	/12/2015 11:39 AM	Shortcut	~
Documents		× . •	c					>
	File	e nar	me: MSFT.NASD			Analysis Files		$\sim$
			L	Click Open to import the ar		Open	Cancel	

### 3.16 Components

Many different types of components can be added to a chart as part of your analysis. Examples of components include **Trend Lines, Price Labels, Channels, Commentary, Elliott Waves,** and **Markers**. Components can be added to a chart from the **Components Panel** or by using the **Mouse Tools** (available from the tool bar).

#### 3.16.1 Components Panel

The **Components Panel** organizes the available components in MotiveWave<sup>M</sup>. This panel is displayed on the left hand side of the chart area and is organized into folders. You can hide this panel by clicking on the 'X' in the top right corner of the panel. A toggle button is available on the right hand side of the tool bar to show/hide this panel as well. Alternatively, choose *View -> Display -> Components* from the top menu bar.

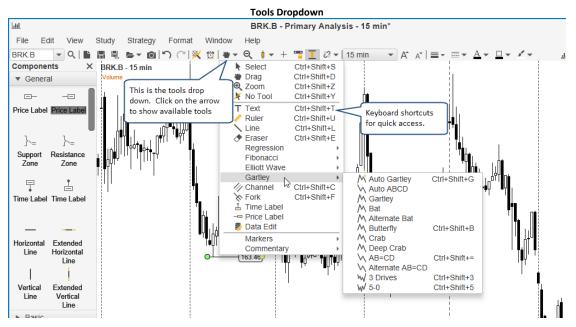


#### 3.16.2 Adding a Component

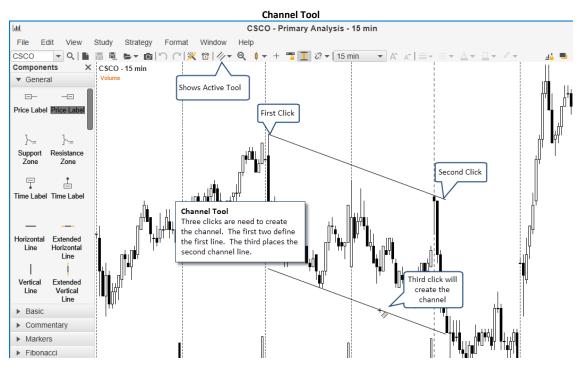
To add a component from the **Components Panel**, simply click and drag (using the left mouse button) the component onto the chart area (see below). Alternatively, you can double click on a component, or right click and choose *Add To -> <Graph>* to add it to the center of the chart.



Mouse Tools are available for some of the more common components. In some case these tools can be more convenient than using the **Components Panel**. These mouse tools can be found under the **Tools** dropdown on the tool bar. You can customize the tool bar to make certain mouse tools more convenient to access. Short-cut keys are also available to quickly select tools. These keys typically take the form of **Ctrl + Shift + <Key>** (see tool menu for key combinations, Note: on Mac OS X use Cmd instead of Ctrl.)

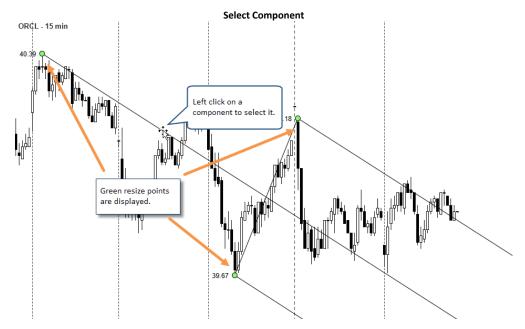


The following example shows the usage of the **Channel Tool** to create a channel. This particular tool requires three clicks to define the channel. Also the channel is drawn as you click the mouse.

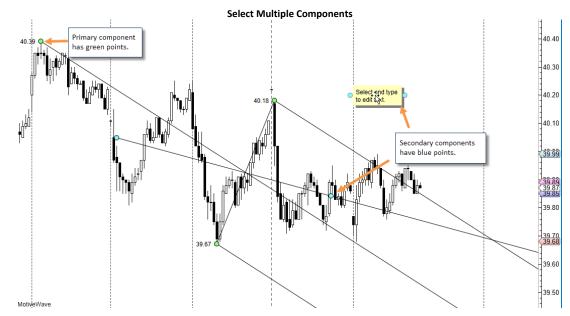


#### 3.16.3 Selecting Components

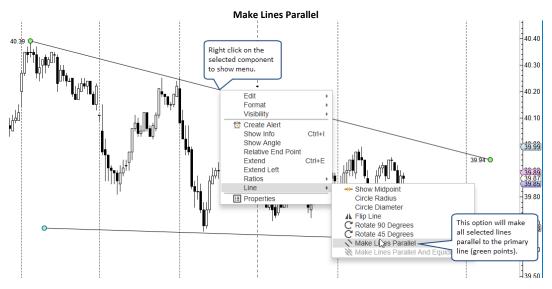
You can select components on a chart by simply clicking on them with the left mouse button. When a component is selected, you will typically see green resize points that indicate areas that you can move to modify the component.



If you want to select multiple components, simply hold down on the Shift key while clicking on other components. The first component selected will have green resize points (primary component) and the other components will display blue resize points (secondary components).



Selecting multiple components can be useful if you want to move them as a group or delete them. Some components such as trend lines have options from the right click menu (right mouse click) that apply to the group. In the following example, you can make two (or more) lines parallel by selecting them and choosing the "**Make Lines Parallel**" option from the right click menu. (Note: lines will be drawn parallel to the primary component, ie the one selected first):



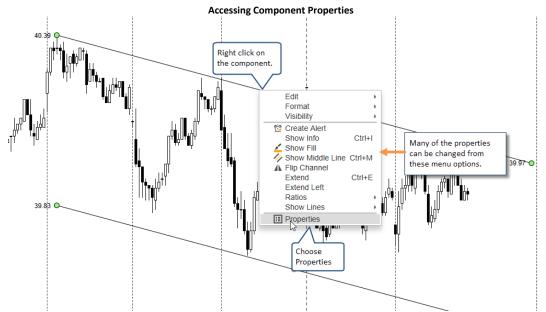
#### 3.16.4 Deleting a Component

Deleting (removing) a component from a chart is straight forward. Simply click on the component to select it and then press the 'Delete' key on the keyboard. Alternatively, right click on it and choose *Edit* -> Delete.

If you want to delete all components from a chart, choose *Edit -> Delete All* from the top menu bar.

#### **3.16.5 Component Properties**

Components may be modified from the **Component Properties** dialog and (in many cases) by using the right click menu that is available via right click on a component. You can open the Properties dialog by double clicking on a component or right click and choose Properties.

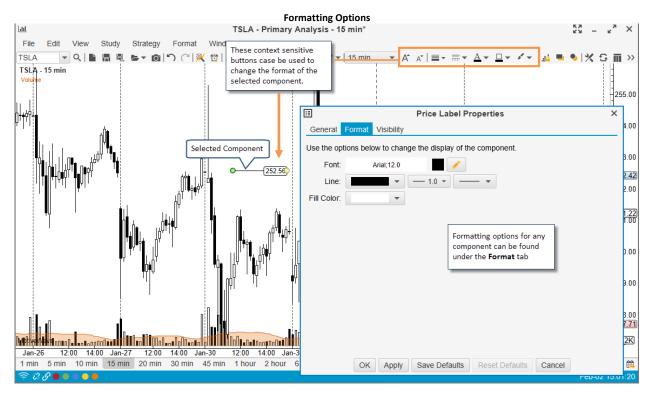


The following screen shot shows the **Component Properties** dialog for the **Channel** component. The options available in this dialog will vary depending on what component you are editing.

Channel Properties Dialog	
Channel Properties	×
General Format Visibility Ratios	
Use the options below to change the display of the component.	
Lines: 2 Lines 🔻	
Show Info	
Show Angle	
Show Middle Line	
Extend	
Extend Left	
OK         Apply         Save Defaults         Reset Defaults         Cancel	

#### 3.16.5.1 Formatting

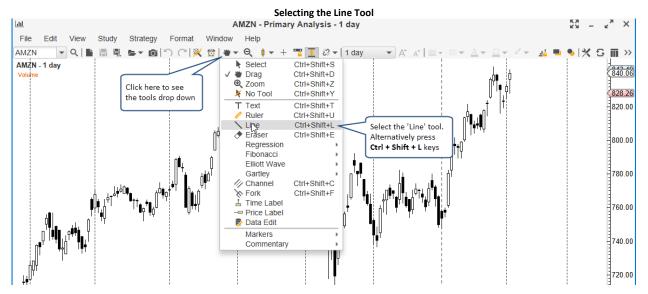
Formatting options such as color, font, line width/style, shading etc can be found under the **Format** tab of the **Properties** dialog (double click on the component). For convenience several formatting options are available on the tool bar for changing the component format. These buttons are context sensitive and will apply to the selected component (see below). These buttons will appear inactive (greyed out) if no component is selected.



#### 3.16.6 Working with Trend Lines

Trend lines are an important element of most all forms of market analysis. Several features are built into MotiveWave<sup>™</sup> to make working with trend lines easier.

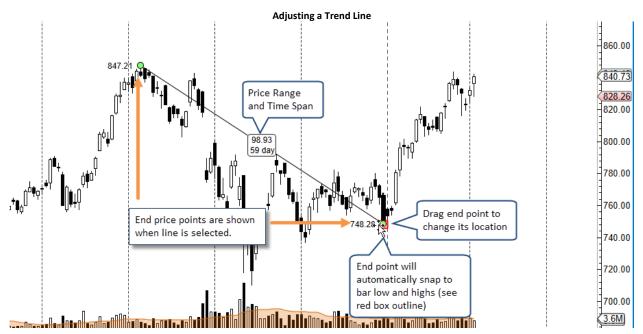
Trend Lines can be created by using the Line Tool that is available from the tools drop down.



Creating a trend line requires two left mouse clicks. The first click defines the starting point for the line and the second defines the end point. Once you have created the Trend Line, you can press the Space bar to switch the tool back to the default **Time Drag tool**.



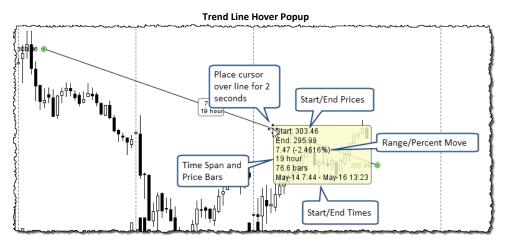
When a trend line is selected it will display basic information about that trend line (such as the price range and time span). You can adjust the line by moving the end points (green resize points). These points will snap to key locations such as the top or bottom of price bars (hold down on the 'Alt' key to disable this feature).



Common angles (such as horizontal, vertical, 45 degree etc) can be set by holding down on the *Shift* key while moving one of the end points. Hold down on the **Ctrl** key while moving one of the end points to maintain the current slope (angle) of the trend line.



Detailed information about the trend line can be found if you place the mouse cursor over the trend line and leave it there for 2 seconds.

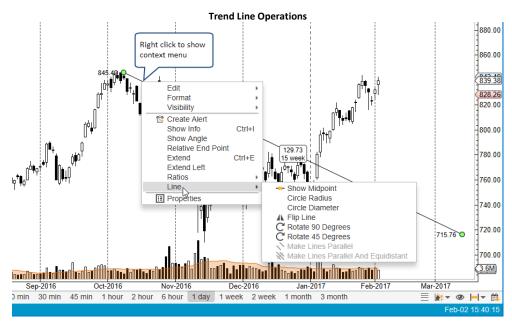


Several operations for working on trend lines can be found by right mouse clicking on the line to show its context menu.

- 1. **Create Alert** Create an alert when the price crosses the trend line (see <u>Component Alerts</u> section)
- 2. Show Info Shows information about the trend line
- 3. Show Angle Displays the angle of the trend line (in degrees)
- 4. **Relative End Point** Calculates the end point relative to the start point instead of using a specific time/value for the end point
- 5. Extend Extends the Trend Line to the Right
- 6. Extend Left Extends the Trend Line to the Left
- 7. Show Midpoint displays the midpoint on the line
- 8. Flip Line Flips the values on the start and end points
- 9. Circle Radius Draws a circle using the trend line as the radius
- 10. Circle Diameter Draw a circle using the trend line as the diameter
- 11. Rotate 90 Degrees Rotates the trend line 90 degrees clock wise
- 12. Rotate 45 Degrees Rotates the trend line 45 degrees clock wise
- 13. **Make Lines Parallel** If you select multiple trend lines this will make them all parallel to the primary line (the one with the green resize points)



14. Make Lines Parallel and Equidistant – If you select multiple trend lines this will make them all parallel to the primary line (the one with the green resize points) and equidistant between the top and bottom lines.



#### 3.16.7 Custom Tools

Custom tools are based on existing mouse tools. A custom tool allows you to configure the default properties of the component that is drawn using the tool. For example, you could create a custom trend line tool that draws a blue dashed line (instead of a black solid line).

Custom tools can be created from the **Preferences Dialog** (*Configure -> Preferences* from the Console menu bar). Click on **Tool Bar**, then on **Custom Tools.** 



¢					Р	references						Х
General	Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Tool Bar	Custom	n Tools	Tool Grou	ps								
Custom to	ols can b	e create	d based on	existing t	ools. Cli	ick the add but	ton below	to create a ne	ew custor	n tool.		
+ 🧪	×											
$\Lambda$					]							
Click here	e to creat	.e										
a new Cu	stom Too	bl										
					ок	Apply Ca	ncel					

From the Custom Tools section, click on the add button (plus sign) to open the **Add Custom Tool** dialog. The tool must be based on an existing tool, select this from the **Base Tool** drop down (**Line** tool in this case). Optionally, you can change the color(s) for the tool icon (to make it more distinguishable). For the purposes of this example we will choose blue as the primary icon color.

+	Add Custom Tool	×
choosing new	are based on an existing tool. Icon colors can be customized by colors below. Click on the properties button below to customize r the component that will be created from using this tool.	
Name:	Blue Dashed Line	
Base Tool:	Line  Choose the base	
Icon Color 1:		
Icon Color 2:	Optionally, change the icon colors.	
Icon Color 3:	· · · · · · · · · · · · · · · · · · ·	_
	Customize Click on Customize to change the properties of the OK Car component that will be create	d

Click the **Customize** button to open the **Component Properties** dialog and adjust the default settings. In this case we would like to create a blue dashed line. This can be adjusted from the **Format** tab.

<b>II</b>	Trend Line Properties	×
General For	mat Visibility Ratios	
Use the options	s below to change the display of the component.	
Line:	▼ <u>− 1.0</u> ▼ <u>− −−−−</u> ▼	
	In our case, we want to	
	make a blue dashed line.	
	OK Cancel	

After clicking the OK button in the two previous dialogs, you will see the custom tool added to the list below:

¢					Р	references						×
General	Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Tool Bar	Custom	Tools	Tool Grou	ps								
Custom to	ols can b	e create	ed based on	existing t	ools. Cli	ick the add but	ton below	to create a ne	ew custor	n tool.		
+ /	× Dashed L	.ine	Н	ere is the	custom	٦						
We chang	·		to	ol we just	created							
primary contropic primary contropic primary control primary co		e										
	~~~~				Lon			-	~~~~~~	~~~~~	~~~~	

The next step in using the custom tool is to add it to a tool bar so it can be accessed using the mouse. Click on the **Tool Bar** tab to customize the tool bar. In this case we are going to customize the **Top Tool Bar** to add our Blue Dashed Line tool to the left of our tools drop down.

¢					P	references						×
General	Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
			Tool Grou the actions		on the to	oolbar. Select	the tool ba	ar you wish to	configure	e from th	e drop do	own.
Tool Bar:	Тор		•	V Enab	led							
Available					_	Tool Bar Actio	ns:			_		
Arrov						Q Quick Sea	irch					
\∕ Auto						Q Search for	r Instrume	nt				
M Auto						Separat	or					
¢∕ Auto						New Anal	/sis					
	on Callout	[				R Save						
¢o Bar S	settings					🗒 Save As						
M Bat	Deshad	in e				🝃 Open/Mar		/ses				
	Dashed L	ine				Save As I	•					
B Bold	<b>•</b>			_	*	Separat	or			Ŧ		
Box (	Callout				4	ר" Undo						
M Butte			/			C Redo						
			l above an			Separat				l⇔I		
			outton to ac			X Auto Anal	,					
	he tool ba					W My Group						
						Create Ale						
			ag and drop			Separat Tools	01					
the to			ilable Acti	ons		Q Zoom Out						
list to	the Iool	Bar A	ctions list)			Bar Type						
© Circle	9			_		IAl Bar Data						
					eset	Reset All						
				R	esei	Reset All						
					ОК	Apply Ca	ncel					

After making the modifications above, the Blue Dashed Line tool will be added to the top tool bar (see below). Click on the button to activate the custom mouse tool. Note: the tool tip for this button will display the name of the tool.

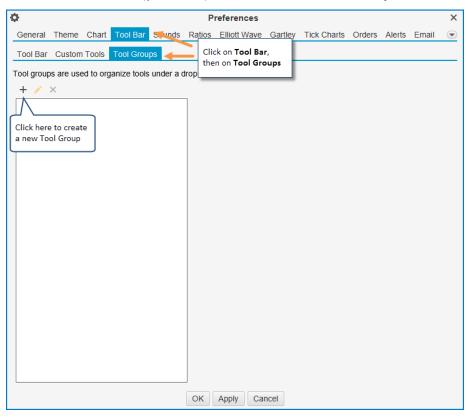
C MotiveWave - Console (fx2)	кх - Кх	××	×
File Edit View Study Strategy Format Configure Window Help			
USOII 🔷 🔍 🖺 🖩 🖷 🖕 🖝 🖄 (*) (*) 💥 🛶 🎕 🔪 🖤 🔍 🍦 🕬 🛨 🕂 🎬 🧵 🔅 🗸 (15 min 🖙 A* A*   ☰ = =	- <u>A</u>	-	>>
Lint EUR/GBP 1h     Lint USOil 15m x +       USOil - 15 min     Tool tip shows the name		← →	<mark>я"</mark> 53.20
Custom tool icon added here			
			53.07 53.02

The screen shot below illustrates the new tool in action creating a blue dashed line:



#### 3.16.8 Tool Groups

**Tool Groups** may be used to create a custom drop down button for organizing existing and custom tools. This can help to optimize the available space on the tool bar(s). **Tool Groups** can be created from the **Preferences Dialog** (*Configure -> Preferences* from the Console menu bar). Click on **Tool Bar**, then on **Tool Groups**. Click on the add button (plus icon) to create a new **Tool Group**.



Choose a name for the tool group and add the desired tools from the **Available Actions** list to the **Tool Group Actions** list. Click on the OK button to create the tool group. Note: the name identifies the tool group and will also be used as the tool tip.

Tool groups enable you to o add/remove/re-order the too Name: My Tools	Choose a name for	a single drop down. Use the form below to	
Available Actions:	the Tool Group	Tool Group Actions:	
👼 Data Edit		No. Blue Dashed Line	
M Deep Crab		i ≫ Fork	
Diamond		O Ellipse	
👋 Drag		1// Channel	
✓ Ending Diagonal		M Auto Gartley	
🕭 Eraser		* Auto Wave	
/₹ Expansion			
Z Extension			Ť
K Fan			Ŧ
M Gartley	-		
,√ Impulse			
√Leading Diagonal	Drag and drop the	desired tools	
Line	from the Available		
,⊮ <sup>r</sup> Line	the Tool Group A	ctions list.	
🔰 No Tool			
Note			
Octogon			

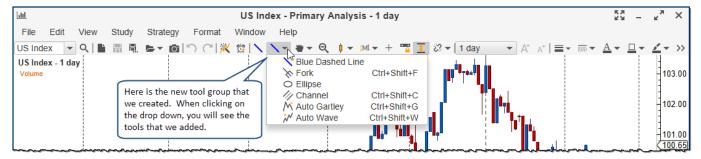
The newly created **Tool Group** will be added to the Tool Groups list in the **Preferences** dialog. The icon for the first tool in the tool group will be used for the tool group.

¢					Р	references						×
General	Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Tool Bar	Custom	Tools	Tool Grou	ps								
Tool group	s are use	d to org	anize tools	under a c	drop dow	n menu on a to	ool bar.					
+ 🧪 🗧	×				_							
Ny To	ools											
		_										
The first t	ool in the											
list will be		n										
for the too	ol group											

The next step is to add the tool group to a tool bar so it can be used. Click on the **Tool Bar** tab in the **Preferences** dialog and select the **Top** tool bar from the **Tool Bar** drop down. In this case we will add the **My Tools** tool group just after the **Blue Dashed Line** tool that we created in the previous section.

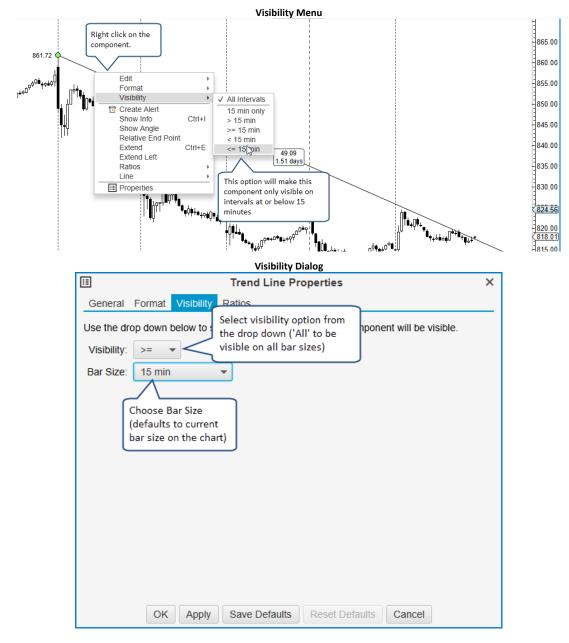
Tool Bar Custom Tools Tool Groups         Use this panel to configure the actions available on the toolbar. Select the tool bar you wish to configure from the drop down.         Tool Bar. Top	¢					Р	references						×
Use this panel to configure the actions available on the toolbar. Select the tool bar you wish to configure from the drop down. Tool Bar: Top	General	Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Tool Bar. Top   Available Actions:     Valiable Actions:     Line   # Line   Line   # Line Callout   © Load Extensions   Marker Tools   Move To Back   Move To Back   Move To Front   My Tools   Note   • Note   • Object Viewer   Select the tool group above and click the right arrow button to add it to the tool bar.   (Alternatively, just drag and drop the tool from the Available Actions   Tool Bar Actions:   Tool Bar Actions:     Outch Search   Q Quick Search   Q Search for Instrument   i: - Separator   Watto Analyze   © Create Alert   i: - Separator   Blue Dashed Line   Tools   Q Zoom Out													
Line       Quick Search         With Line       Search for Instrument         Line Callout       New Analysis         Load Extensions       New Analysis         Marker Tools       Save As         Move To Back       Open/Manage Analyses         My Tools       Save As         News Headlines       Jundo         Note       Select the tool group above and click the right arrow button to add it to the tool bar.         (Alternatively, just drag and drop the tool from the Available Actions       Blue Dashed Line	Tool Bar:	Тор	ingure			led			ar you wish to	coniigure	e from th	e arop a	iown.
Ist to the Tool Bar Actions list)     Image: Bar Type       IAI Bar Data     Reset       Reset     Reset All	Line Line Line Line Line Load Move Move Move Note Objec Select the it to the (Alterna the tool	Callout Extension: er Tools Too Back Too Front Headlines tool gr e right arre- tool gr	oup al ow bu st drag <b>Avail</b> :	tton to add ; and drop a <b>ble Action</b>		+	Q. Quick Sea Q. Search for i Separat New Analy G. Save As Open/Mar Save As Depn/Mar Save	rch r Instrume or ysis nage Anal mage or or yze ert or yze ert or					

The screen shot below shows the new tool group added to the top tool bar. When you click on the drop down you will see the tools that were added in this tool group.



#### 3.16.9 Visibility

Visibility is a very useful feature in MotiveWave<sup>™</sup> that enables you to specify the bar sizes where a component is visible. This can be very useful to avoid clutter when switching bar sizes on a chart. Visibility setting can be set from the **Properties** dialog or via the right click menu on the component.



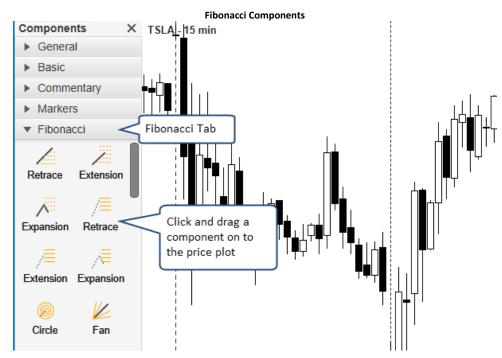
#### 3.16.10 Object Viewer

The **Object Viewer** is a convenient dialog for managing components on a chart from a single location. Components can be deleted from the chart and you can adjust the visibility and draw order. The **Object Viewer** can be displayed from the top menu bar: *View -> Display -> Object Viewer* 

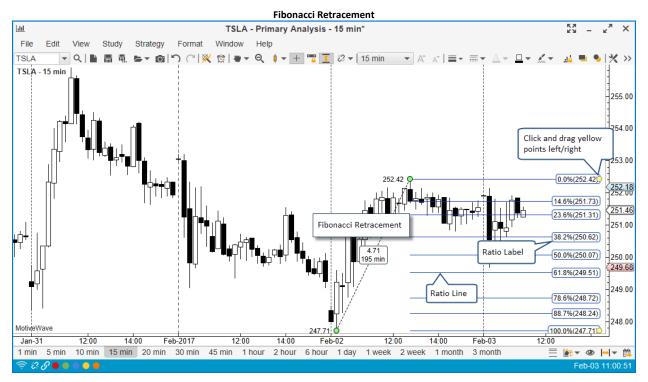
•			Object Viewer:	TSLA - Prima	ry Ana	alysis - 15 min		;
The follo	owing table contail	ns all obj	ects that are in this an	alysis.				
Filter:			1	Type: All		▼ Visible: All ▼		
XO	۵ 🍢 ۴				•	$\overline{}$		
ID	These buttons		Туре		<u> </u>	Filter View using	Visibility	
4	the draw order		Study	BB(20,20,2.0,2	2.0)	these fields.	>= 15 min	
1			Study	Volume	l		All	
7	Price Graph	true	Impulse	Minor: 11/14/2	016 12	2:45 - 03/15/2017 08:30	All	
8	Price Graph	true	Impulse	Minute: 11/14/	2016 1	2:45 - 12/28/2016 09:30	All	
58	Price Graph	true	ABC Correction	Minute: 12/28/	2016 0	9:30 - 01/03/2017 09:30	All	
64	Price Graph	true	Impulse	Minute: 01/03/	2017 0	9:30 - 01/25/2017 09:30	All	
85	Price Graph	true	ABC Correction	Minute: 01/25/	2017 0	9:30 - 01/30/2017 10:45	All	
89	Price Graph	true	Impulse	Rroperties	2017 1	10:45 - 03/15/2017 08:30	All	
9	Price Graph	true			4/2016	6 12:45 - 28/2016 10:30	All	
10	Price Graph	truc	Right click to show context menu		11/14/2	2016 Double click a row to	All	
14	Price Graph	true	ADD CONCEILON	Move Back Delete	11/18/2	2016 edit the properties	All	
19	Price Graph	true	Impulse		11/22/2	2016 09:30 - 11/23/2016 11:15	All	
21	Price Graph	true	ABC Correction	Subminuette:	11/23/2	2016 11:15 - 11/23/2016 15:00	All	
23	Price Graph	true	Impulse	Subminuette:	11/23/2	2016 15:00 - 11/28/2016 10:30	All	
25	Price Graph	true	Impulse	Subminuette:	11/28/2	2016 10:30 - 12/01/2016 09:30	All	

#### 3.17 Ratios

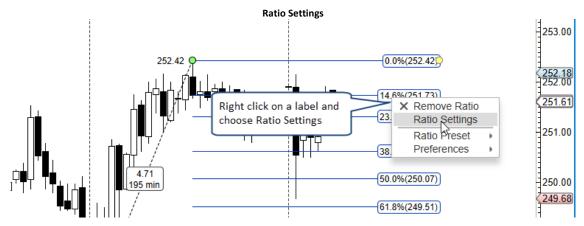
MotiveWave<sup>™</sup> provides many different options for identifying time and price ratios. Fibonacci ratios are perhaps the most commonly used ratios for analysis. Available components for Fibonacci analysis can be found under the **Fibonacci** tab of the **Components panel** (not available in all editions):



The screen shot below shows an example of a **Fibonacci Retracement**. Yellow resize points can be used to change the position of the labels and length of the ratio lines.



MotiveWave<sup>™</sup> provides a lot of flexibility for working with ratios. If you would like to modify the ratio properties for a particular component, right click on a ratio label and choose *Ratio Settings* (or just double click on the label).



The *Ratio Settings* option will open the **Properties** dialog for the component and switch to the *Ratios* -> *Ratios* tab.

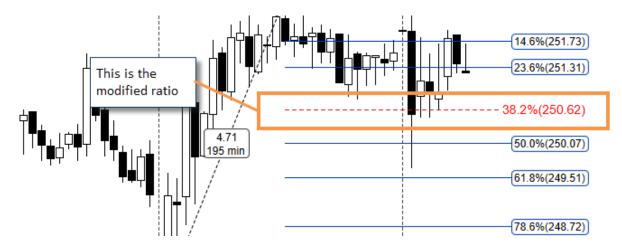
	Ratio Settings Dialog											
:::	Retrace Properties >							×				
Ge	neral Form	at	Visibility	Rati	os							
Rat	tio Type Ra	atios	Display	ý								
$\checkmark$	0.0	%	<ul> <li>Image: A set of the set of the</li></ul>	$\checkmark$	14.6	%	1		23.6	%	1	
$\checkmark$	38.2	%	1	$\checkmark$	50.0	%	1		61.8	%	1	
$\checkmark$	78.6	%	<ul> <li>Image: A start of the start of</li></ul>	$\checkmark$	88.7	%	1		100.0	%	1	
$\checkmark$	114.6	%	1	$\checkmark$	123.6	%	1		127.2	%	1	
$\checkmark$	138.2	%	1	$\checkmark$	150.0	%	1		161.8	%	1	
$\checkmark$	178.6	%	<ul> <li>Image: A start of the start of</li></ul>	$\checkmark$	188.7	%	1		200.0	%	1	
$\checkmark$	261.8	%	<ul> <li>Image: A start of the start of</li></ul>	$\checkmark$	423.6	%	1		686.0	%	1	
	0.0	%	1		0.0	%	1	$\Box \Lambda$	0.0	%	1	
	0.0	%			0.0	%	/	Check to e ratios. Cli				
For convenience, presets can be saved and applied to other components Save Preset												
	OK Apply Save Defaults Reset Defaults Cancel											

#### **3.17.1 Customized Ratios**

For each ratio, use the check box to the left to enable/disable. The input field can be used to enter the ratio (in percent). Click on the edit button (pencil icon) to the right to specify how the ratio should be formatted.

Ratio Settings Dialog					
1	Ratio Settings ×				
This dialog allo preferences.	ws you to choose the spec	ific ratios and set display			
Ratio:	38.2 %	Custom formatting can be defined below by			
Use Defaults:		unchecking Use Defaults			
Outline:	None 🔻				
Line:	▼ 1.	0 • Use Default			
Text Color:	•				
Fill Color:	-				
Font:	Arial;14.0	🧨 📃 Use Default			
OK Cancel					

The custom settings chosen above for this ratio will look like the following:



#### 3.17.2 Ratio Display Preferences

The **Display** tab allows you to change how the ratios are displayed. The settings on this tab apply to all ratio labels/lines in the component (unless explicitly adjusted for each ratio, see previous section).

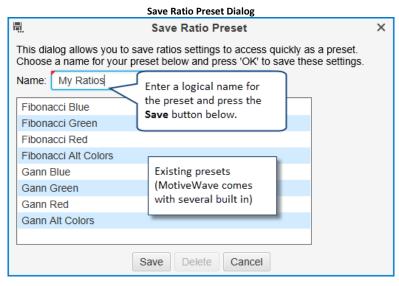
Ratio Preferences							
E Retrace Prop	perties X						
General Format Visibility Ratios							
Ratio Type Ratios Display							
Use Defaults	These option affect all of						
Label Align: Right	the ratio labels/lines (unless explicitly changed on the <b>Ratios</b> tab)						
Label Outline: Rounded -							
Label Color: Enabled							
Line:	<ul> <li>Alternating Colors</li> </ul>						
Fill Alpha: 25 🜲 📄 Fill Ratios							
Show Ratio Labels 🗸 Sho	w Ratio Price 📄 Show Source Lines						
Extend Left Exte	end Right						
Save Preset							
OK Apply Save Defaults	Reset Defaults Cancel						

#### 3.17.3 Ratio Presets

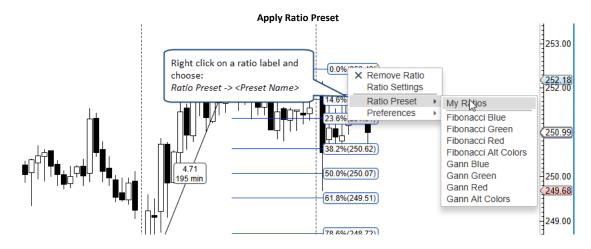
**Ratio Presets** can be very useful save a ratio configuration and apply it to another component. This can help to avoid a lot of duplicate work. Use the **Save Preset** button to save the current ratio configuration for later use.

Save Preset												
II Retrace Properties							×					
Gen	neral Form	at	Visibi	lity Rati	os							
Rati	io Type Ra	atios	Dis	play								
$\checkmark$	0.0	%	1		14.6	%	1		23.6	%	1	
$\checkmark$	38.2	%	1		50.0	%	1		61.8	%	1	
$\checkmark$	78.6	%	1		88.7	%	2		100.0	%	1	
	114.6	%	1		123.6	%	/		127.2	%	1	
	138.2	%	1		150.0	%	1		161.8	%	1	
	178.6	%	1		188.7	%	/		200.0	%	1	
	261.8	%	1		423.6	%	1	$\checkmark$	686.0	%	1	
	0.0	%	1		Ratio pre				0.0	%	1	
	0.0	%	1		of the rat propertie				0.0	%	1	
					and lines							
Save Preset												
	C	ОK	Ар	oly Sa	ve Defaults		Reset	Defaults	Cancel			

When you save the preset, you will need to choose a name. Enter the name in the **Save Ratio Preset** dialog (see below) and click the **Save** button.



Right click on a ratio label and choose *Ratio Preset -> <Preset Name>* to quickly apply a preset to a component. In the example below, we are going to choose **My Ratios** that we defined above:



#### 3.17.4 Global Ratio Preferences

Global ratio preferences can be configured in the **Preferences** dialog from the **Ratios** tab. This section has two sub tabs, Presets and Defaults:

Global Ratio Preferences								
¢		Preferences	5					×
General Theme Chart Too	Bar Sounds Rati	os Elliott Wav	e Gartley	Tick Charts	Orders	Alerts	Email	
Presets Defaults	$\sim$							
Choose the								
This panel allows you to manage Ratio Presets Ratios tab. button to define a new preset.								
+ / ×	T			1				
Name	<b>A</b>	Built In						
Fibonacci Alt Colors		true						
Fibonacci Blue		true						
Fibonacci Green		true	These are	all of the av	ailable R	atio		
Fibonacci Red		true		Double click o				
Gann Alt Colors		true	non built-in presets to edit. Click on					
				button ('+') to create a new reset.				
Gann Green		true	Ratio Tres					
Gann Red		true						
My Ratios		false						
	OK	Apply	Cancel					

The **Defaults** section enables you to assign the default presets to each type of ratio component. Ratio components consist of retracements, fans, circles, Elliott Waves etc.

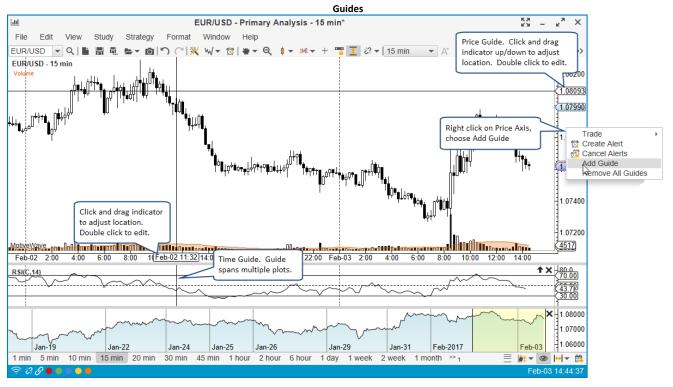
¢.	Preferences						Х
		Orantiau	Tisl. Obests	Orders	A la sta	E	
General Theme Chart Tool Bar Sounds Ratio	s Elliott Wave	Gartiey	TICK Charts	Orders	Alerts	Email	
Presets Defaults							
Ratios may be configured using presets.							
Use the options below to specify the default preset to							
Component: Choose Component-	Choose a comp specific preset						
Preset: My Ratios	when creating a						
The follow attributes apply to the ratio tools (ie: Fibor	the component.						
Show Ratio Source Lines							
Show Ratio Range Lines							
Allow Vertical Resize							
Allow vertical adjustments				N.			
of ratio height to quickly							
hide/expose ratios.							
OK	Apply Ca	ncel					

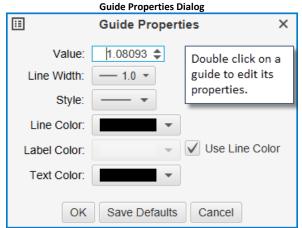
#### 3.18 Time/Price Guides

Guides can be added to the vertical and time axes. A guide is essentially a vertical (or horizontal) line that has an attached indicator to show its value. There are two types of guides:

- 1. Price/Value Guide Displays a horizontal line with an attached indicator in the vertical axis
- 2. Time Guide Displays a horizontal line (across plots) with an attached indicator in the time axis

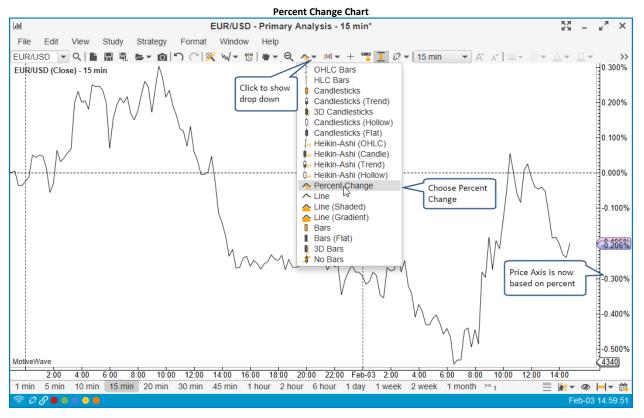
Guides can be added to a chart from the right click menu of the axis (choose *Add Guide*). This menu can also be used to edit the guide or remove it. The location of the guide can be changed by clicking and dragging it.



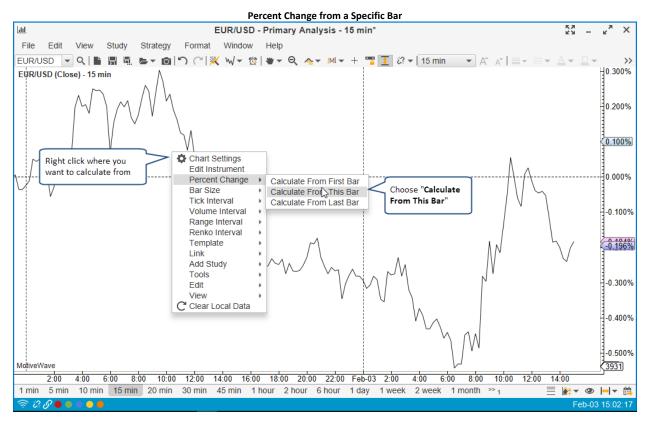


### 3.19 Percent Change Charts

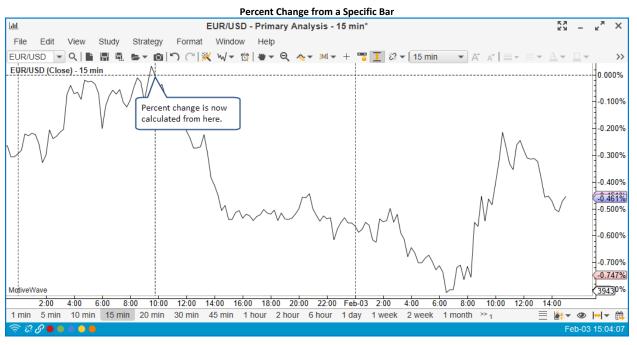
Normally the price plot shows the historical prices. Percent change charts are an alternate view that shows the change in the price between each bar as a percentage movement. A percent change chart can be displayed by changing the bar type from the drop down on the tool bar to **Percent Change**.



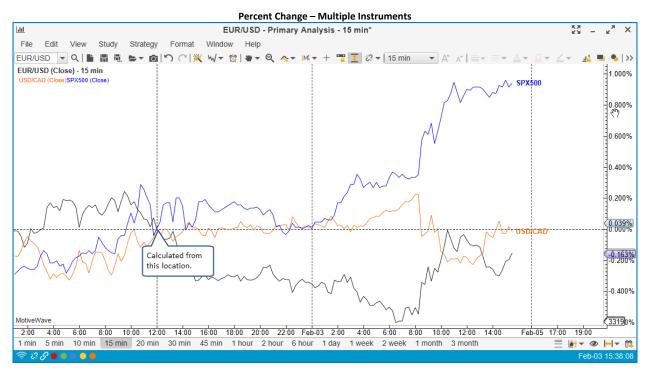
By default, percent change charts are calculated from the left most point of the chart. This can be changed to a specific bar by right clicking on the chart where you would like the calculation to begin.



Two dashed lines will be displayed to visually indicate where the charts are being calculated (see below).



When combined with the <u>Instrument Overlay</u>, you can compare relative moves between instruments directly on one chart:



### 3.20 Studies

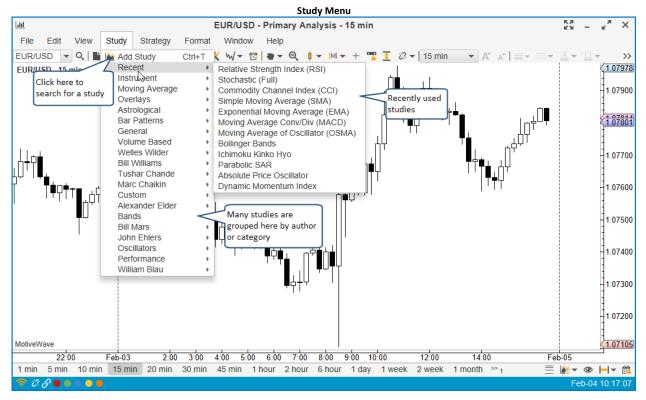
MotiveWave<sup>™</sup> has over 275 built in studies that can be used to display information on the price plot or separately in a plot below the price.

There are essentially two types of studies:

- 1. Overlays display information that is drawn on top of an existing plot (most typically the price plot)
- 2. Study Plots display information that is displayed in a plot that is separate from the price plot.

#### 3.20.1 Adding a Study

A study may be added to a chart by choosing one of the available studies can be found under the *Study* menu from the top menu bar. This menu organizes some (not all) of the studies into logical groups (based on author or function). The *Add Study* option enables you to search for a study instead of trying to find it in a sub-menu. For convenience, a *Recent* menu is available to access recently used studies.



If you choose Add Study, you will see the following dialog. This is a convenient way to search for a study by typing it in into the Filter input (see below):

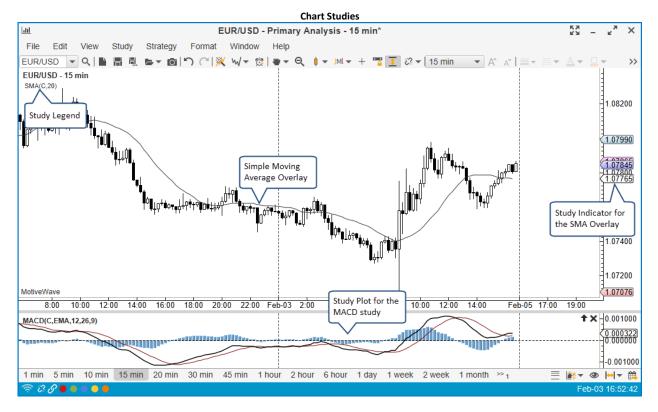
	Add Study			>
The following table contains all available stu Filter:	Idies. Select the desired study below and ch	oose OK to configure	e the settings.	
Enter text here to Nam	ie 🔺	Overlay	Signal	+
AGGZ search for a study		false	true	
ATR Channer		true	false	
ATR Trailing Stops		true	true	
Absolute Price Oscillator		false	false	
Acceleration Bands		true	true	
Acceleration Oscillator		false	false	
Accelerator Decelerator Oscillator		false	true	
Accumulation/Distribution Line		false	false	
Accumulative Swing Index		false	false	
Adaptive Smoothing Indicator T3		true	false	
Alligator		true	false	
Aroon		false	false	
Aroon Oscillator		false	false	
Auto Trend Line	You can import third party studies from here.	true	false	
Average Directional Index (ADX)	studies from here.	false	false	
	V			

When you add or edit a study you will see the study dialog similar to the one displayed below. Each study will have different settings and configuration options. The available tabs will depend on the study, but all study dialogs will have an **Options** tab and a **Signals** tab (if it generates signals).

Study Dialog - SMA						
Simple Moving Average (SMA)	×					
SMA is an unweighted mean of the previous n bars. For example, a 10-day moving average of closing price is the mean of the previous 10 days' closing prices.						
General Advanced Signals Options Click here for general study options						
If the study generates Input: Signals, you can configure them here Period (bars): 0 ◆ Fill Forward: ✓ Display						
Line: This button will save the settings from this study as the default the next time you create this study.						

Adjust the settings for the study and click on the **Create** button to add the study to the chart. For convenience, you can click on the **Save Defaults** button to save the study settings for the next time you create this study.

The following screenshot shows the **Simple Moving Average (SMA)** study from the **Study** dialog above. Also shown is a Study Plot for the **MACD** study.



#### 3.20.2 Editing a Study

If you would like to edit the settings on a study simply double click or right click and choose Edit Study.



#### 3.20.3 Study Options

All studies will have an **Options** tab as the last tab when you create or modify its settings. This tab will contain different values if it is an overlay or a study plot.

Study Options - Overlay						
Simple Moving Average (SMA) ×						
SMA is an unweighted mean of the previous n bars. For example, a 10-day moving average of closing price is the mean of the previous 10 days' closing prices.						
General Advanced Signals Options						
Graph: Price Graph  Graph/Plot where this study is drawn						
Bar Size: 15 min    ✓ Use Chart Bar Size    By default, the chart bar size is used. You can specify a different bar size if you like.    Show Values In Legend    Use Real Values						
Bar Updates Check this to update the study from live ticks vs the close of the bar						
Update Apply Remove Save Defaults Help Cancel						

Study Options – Plot						
Moving Average Conv/Div (MACD) ×						
Shows the difference between a fast and slow moving average of prices. MACD is often used to indicate changes in market trends. Created by Gerald Appel in the 1960s.						
General Display Advanced Signals Options						
Graph: MACD(C,EMA,12,26,9)   Optionally you can overlay a study plot on						
Visibility: All 👻 15 min 💌 another plot.						
Bar Size: 15 min 🗸 🗸 Use Chart Bar Size						
Instrument: EUR/USD 🗨 🔍 Use Chart Instrument						
Show Values In Legend Inverted						
Bar Updates Use Real Values						
Top Inset: 5 🗢						
Bottom Inset: 5 Space (in pixels) to add to the top/bottom of the plot.						
Update Apply Remove Save Defaults Help Canc	el					

#### 3.20.3.1 Overlay Plot

When you create an overlay study, by default it will use the **Price Plot**. Optionally, you can choose one of the existing plots to display the study. When you change the graph for the study, it will change the input options. For example, if you want to display a simple moving average (SMA) on an RSI study plot, you would choose the RSI(C,14) plot from the **Options** tab. When you choose this, the Input field (under the **General** tab) will be updated to reflect the inputs available from the RSI plot.

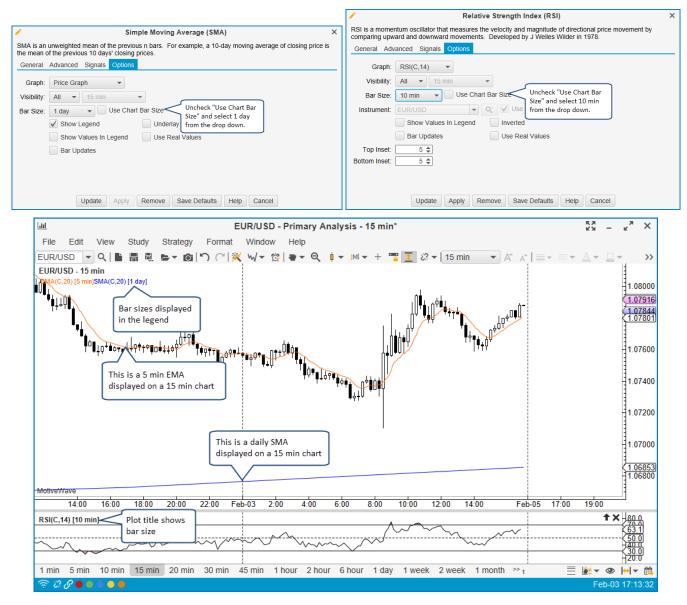
Simple Moving Average (SMA) ×	Simple Moving Average (SMA) ×
SMA is an unweighted mean of the previous n bars. For example, a 10-day moving average of closing price is the mean of the previous 10 days' closing prices.	SMA is an unweighted mean of the previous n bars. For example, a 10-day moving average of closing price is the mean of the previous 10 days' closing prices.
General Advanced Signals Options	General Advanced Signals Options
Graph: RSI(C,14) Choose RSI plot. This plot must already exist on the chart prior to creating/editing this study. Bar Size: 15 min V Use Chart Dar Size Show Legend Underlay Show Values In Legend Use Real Values Bar Updates	Inputs       Available inputs are updated here to reflect the values available in the study plot that you chose under Options         Period (bars):       20 \$ Shift:         Period (bars):       20 \$ Shift:         Piplay       Uncertain the value of the value o
Update Apply Remove Save Defaults Help Cancel	Update Apply Remove Save Defaults Help Cancel
MotiveWave           8:00         10:00         12:0         SMA Overlay on         8:00         20:00         22:00         Feb-03         2:00	4:00 6:00 8:00 10:00 12:00 14:00 Feb-05 17:00 19:00
RSI(C,14) SHARSHC 14(20)	SMA Indicator 5470 30.0 20.0
1 min 5 min 10 min 15 min 20 min 30 min 45 min 1 hour 2 hour 6	Shour 1 day 1 week 2 week 1 month ≫ 1 📃 🚔 ▼ 👁 🛏 🖛
🤝 🔅 🖉 🖷 🖷 🗧 🗧	Feb-03 17:07:05

#### 3.20.3.2 Study Bar Size

By default when you create a study, it will use the bar size of the chart. When the chart bar size changes, the study will be automatically updated to reflect the new bar size. MotiveWave<sup>™</sup> does allow

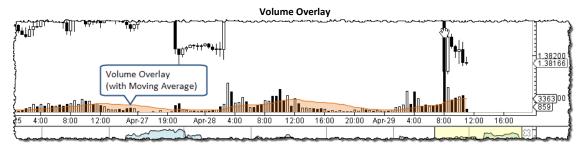


you to choose a specific bar size for the study. This allows you to, for example, display a 1 day SMA (Simple Moving Average) on a 15 minute chart. This feature also applies to study plots so you could display a 10 minute RSI on a 15 minute chart (see example below):



#### 3.20.3.3 Study Plot Overlay

Study plots may be overlaid on other plots. You may have noticed this feature already with the Volume overlay on the default layout of the Console:



You can change the overlay plot for a study from the **Options** tab. A study plot can be overlaid on the Price Plot or other study plots. The following examples show a CCI plot on the Price Plot and an RSI plot on a Stochastic plot:



#### 3.20.3.4 Study Visibility

For convenience, you can specify that a study is only visible on certain bar sizes. This is similar to the visibility feature for components. By default a study is visible on all bar sizes. You can change this from the **Options** tab:

Study Visibility		
Commodity Channel Index (CCI)	×	
CCI was designed to identify cyclical turns in commodities. CCI assumes that c highs and lows coming at periodic intervals. It is recommended to use 1/3 of a (ie: for a 60 day cycle use 20 day CCI). General Advanced Signals Options		
Graph: Price Graph Visibility: <= 30 min Bar Size: Select the applicable bar size Instrumen Choose the operation here d Use Chart Bar Size Use Chart Instrument Duble Chart Instrument		
Show Values In Legend Inverted		
Bar Updates Use Real Values		
Top Inset: 5 ♦ Bottom Inset: 5 ♦ Overlay: Bottom ▼ Height: 90 ♦	In this case the CCI study will only be visible on the charts display 30 min or smaller bar sizes	
Update Apply Remove Save Defaults Help Cancel		

#### 3.20.4 Signals

Some studies generate signals. Signals occur when a specific event occurs with the study. For example, a signal may be generated in a CCI study where the CCI value crosses above the top guide. These signals can be used to show alerts, play sounds or even send an email notification. Note: if you want to send emails, you will need to configure your email (SMTP) settings in the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). You will find these options under the **Email** tab.

Study Signals		
A	Commodity Channel Index (CCI) ×	
highs and lows c	d to identify cyclical turns in commodities. CCI assumes that commodities move in cycles, with oming at periodic intervals. It is recommended to use 1/3 of a complete cycle as a time frame cycle use 20 day CCI).	
Signal:	CCI Above Top Guide	
Enabled:	This can be used to specify that	
All Bar Sizes:		
Show Alert:	Yes	
Play Sound: Yes 👻 Use Preset Sound		
Sound File:	Browse	
Send Email:	Send Email: No 👻 🗸 Attach Image	
Email Address:	Note: In order to send an email you will need to configure your SMTP settings in the Preferences Dialog.	
	Update Apply Remove Save Defaults Help Cancel	

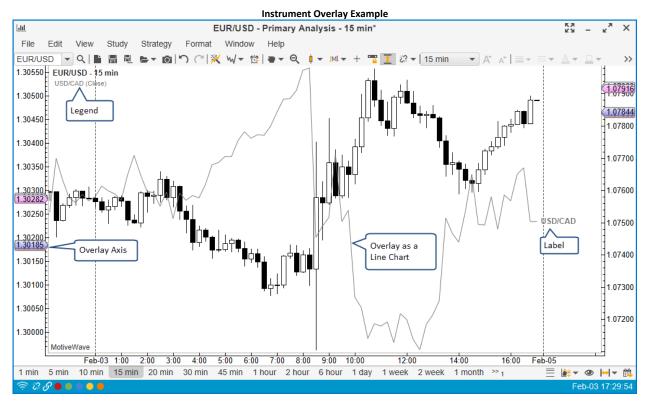
### 3.20.5 Instrument Overlay

An instrument can be overlaid on top of the price plot by choosing *Study -> Instrument -> Instrument Overlay* from the top menu bar. This action will open the dialog displayed below. Type (or select from the drop down) the instrument that you would like to overlay in the **Instrument** field. Click on the **Create** button to add this overlay to the price plot. This dialog has the following elements:

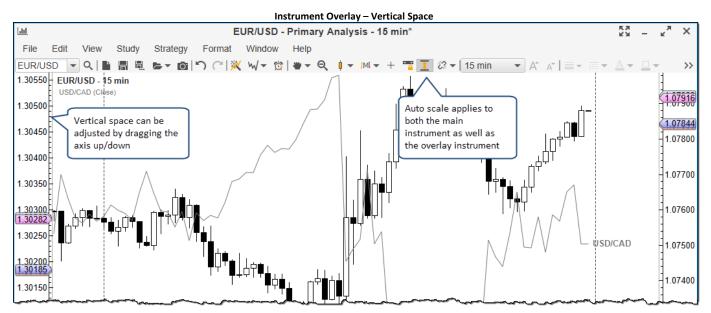
- 1. Instrument Type or select the instrument.
- 2. **Bar Type** Choose the type of bar you would like to display for the overlay (default is a line chart)
- 3. Line Source If a line chart is chosen, this option allows you to choose the input source for that line (ie closing price, opening price etc)
- 4. **Shift** the number of bars to shift the study forward (negative value for backward). Uncheck **Lock Shift** to enable dragging of the overlay backward or forward using the mouse.
- 5. **Style** For line charts, choose the color, thickness and style of the line.
- 6. Show Axis displays the axis for the instrument on the left hand side of the price plot
- 7. Inverted Click to display the overlay upside down
- 8. **Bar Updates** Click to enable live updates to the overlay instead of updates on the close of the bar
- 9. Show Legend Shows the overlay in the study legend area
- 10. Show Label Displays a label at the end of the overlay for the Instrument symbol

	Instrument Overlay Dialog	
1	Instrument Overlay	×
on the search	lows you to overlay an instrument on the price graph. C o or add existing instrument button to specify the Click <b>Create</b> to create the study.	lick
Instrument:	-Choose Symbol-	
Bar Type:	Type or select the	
Line Source:	Close symbol from this drop down	
Shift:	0 🛊 🖌 Lock Shift	
Style:	▼ <u>− 1.0</u> ▼	
	Show Axis Show Legend	
	Inverted Show Label	
	Bar Updates	
	Create Cancel	

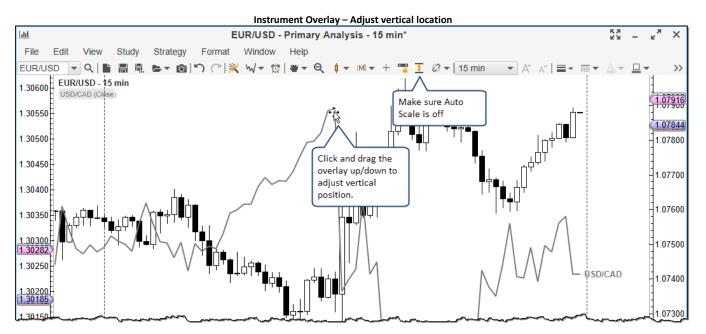
The example below shows an instrument overlay for the USD/CAD pair on top of the price plot for the EUR/USD pair. The axis for the USD/CAD pair is displayed on the left hand side and has indicators for the current prices. With Auto Scale enabled, dragging the chart left or right will automatically scale the values for the overlay.



The vertical scale of the overlay can be adjusted by clicking and dragging the space between the overlay axis and the price plot. Dragging from the top or bottom will add more top/bottom space. Drag from the middle to adjust both at the same time.

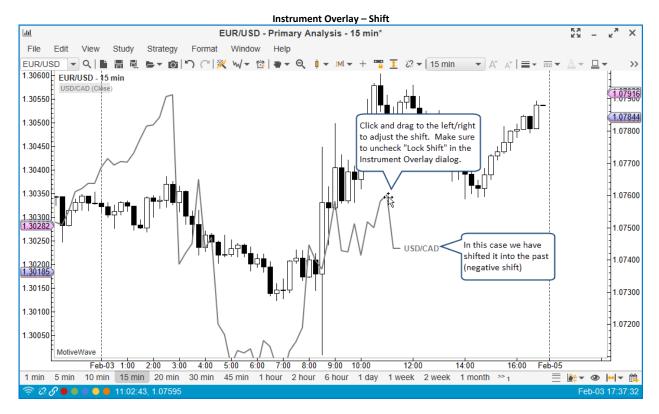


If auto scale is disabled, you can click and drag the overlay up or down to adjust the location of the overlay relative to the main instrument axis.



The horizontal location of the overlay can be adjusted by changing the value of the Shift field in the **Instrument Overlay** dialog. A positive value will shift the overlay into the future and a negative value will shift it into the past. If you uncheck the **Lock Shift** option you will be able to adjust the shift by dragging the overlay to the left or right with the mouse.

	Instrument Overlay Dialog – Disable Lock Shift	
1	Instrument Overlay	×
Modify the pro	operties below and click Update to apply your changes.	
Instrument:	USD/CAD 🗸 Qt	
Bar Type:	~ -	
Line Source:	Close	
Shift:	0 CLock Shit Uncheck to allow	
Style:	- 1.0 • the overlay.	
	Show Axis Show Legend	
	Inverted Show Label	
	Bar Updates	
	Update Remove Cancel	



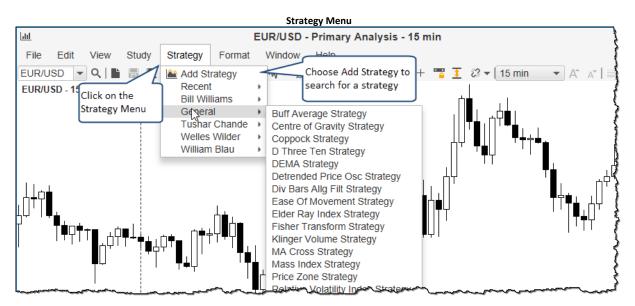
### 3.21 Strategies

A *strategy* is a special type of study that may be used to automate or partially automate trading. In addition to displaying the study information, a **Control Box** is made available that allows the user to activate/deactivate a strategy and view important runtime information.

MotiveWave<sup>™</sup> supports two modes for strategies:

- 1. Automatic Once the user activates the strategy, it will automatically buy and sell based on the internal logic.
- 2. **Manual** In this mode, the user tells the strategy when it is OK to enter.

MotiveWave<sup>™</sup> comes with around 30 built-in strategies. These can be found under the *Strategy* menu (from the top menu bar).



The following screen shot illustrates the Moving Average Cross strategy. This strategy will buy when the **Fast MA** crosses above the **Slow MA** and sell when it crosses below (see triangle markers below). Each strategy will have a control box (bottom left corner). This will enable you to edit the strategy and activate it. The control box also displays status information.



### 3.21.1 Manual Strategies

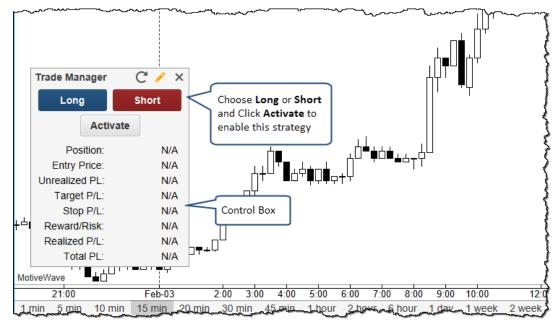
MotiveWave<sup>™</sup> allows you to create strategies that respond to user input to enter or exit a position. This can be very useful as a way to help direct and manage exit points for user initiated trades. For an example of how this works, see the Trade Manager strategy.



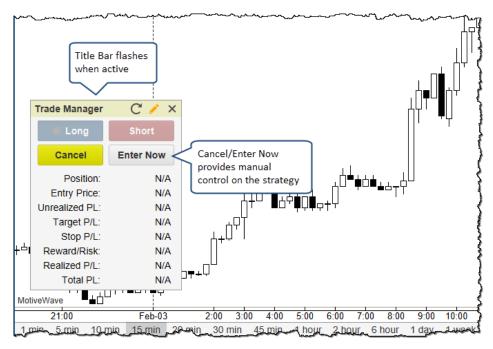
The following screen shots show the configuration options for **Trade Manager**. On the first tab (**Entry/Exit**) you can setup the entry order and up to 3 exit orders. The **Stop Loss** tab provides options for the stop loss order.

🖍 Trade Manager	×	Trade Manager X			
This simple trading strategy allows you to setup an entry point and automatically create exit orders with bre even and an ATR stop. Market entry occurs when the latest bar closes up (if long) or the latest bar closes (if short).	This simple trading strategy allows you to setup an entry point and automatically create exit orders with break even and an ATR stop. Market entry occurs when the latest bar closes up (if long) or the latest bar closes down (if short).				
Entry/Exit Stop Loss Strategy Panel		Entry/Exit Stop Loss Strategy Panel			
Entry		Break Even			
Trade Lots:       3 ¢       Time In Force:       GTC ▼         Exit		Max Loss:     10 $\Leftrightarrow$ Break Even (Pips):     6 $\Leftrightarrow$ ATR Stop       ATR Enabled: $\checkmark$ ATR Period:     20 $\Leftrightarrow$ ATR Multiplier:     2.5 $\diamondsuit$			
Create Save Defaults Cancel		Create Save Defaults Cancel			

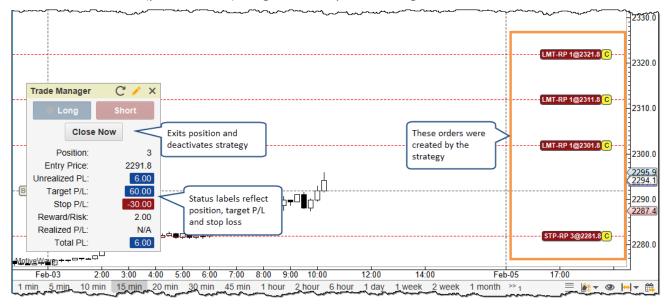
From the **Trade Manager Control Box**, you can choose Long (buy) or Short (sell). When you click the **Activate** button, the strategy will enter on the close of the bar.



Once the strategy is active, the title bar will flash (indicates an active strategy) and the **Activate** button will be replaced by **Cancel** (deactivates the strategy) and **Enter Now** (creates a market order to enter the position).



When a position is entered in the strategy, the labels in the control box will display the open position, current unrealized P/L (profit or loss), target P/L, stop P/L among other information.



## 3.21.2 Strategy Configuration

The configuration options for a strategy will vary, but there are some settings that apply to many strategies.

The first panel is the **Trading Options** panel. This panel enables you to configure the following:

#### Trading Options:

- 1. **Trade Lots** This determines the quantity on the orders that are used to entry and exit positions. The Trade Lot is multiplied by the default quantity to determine the actual quantity.
- 2. **Position Type** Use this option to indicate if the strategy can have long and/or short positions
- 3. Use Account Position Use the existing position that exists in the selected account.

- 4. Enter On Activate If enabled the strategy will create an initial position when you activate the strategy
- 5. Close On Deactivate If a position is open when the strategy is deactivated, it will be closed at market price.
- 6. **Bar Updates** If enabled, the strategy will respond to live bar updates instead of waiting until the close of the bar.
- 7. **Underlay** If enabled, the strategy will be drawn behind the price bars.

#### Trading Sessions:

The **Trading Sessions** section enables you to define sessions where the strategy may be active. In between trading sessions, the strategy will be automatically deactivated.

- 1. Session 1 defines the first trading session with a start and end time
- 2. Session 2 defines the second trading session
- 3. Time Zone optionally specify the time zone for the hours defined in Session 1&2
- 4. Close On Session End Closes an open position when the session ends

Trading Options Panel
MA Cross Strategy X
The strategy is based off the Moving Average Cross study. Trades occur when the fast moving average crosses the slow moving average.
General Display Trading Options Strategy Panel Signals
Trading Options
Trade Lots: 1 Number of lots to trade in each order
Use Account Position Close On Deactivate Underlay
Enter On Activate Bar Updates
Trading Sessions
Session 1: Start:       10:00 AM       End:       12:00 PM       Image: Constraint of the second
Time Zone: America/New_York  V Use Default
Close On Session End
Create Save Defaults Help Cancel

#### Strategy Panel

The **Strategy Panel** tab allows you to choose what labels are displayed on the control box. The available labels will depend on the strategy.

- 1. Show Position displays the current open position
- 2. Show Entry Price shows the average entry price for the open position
- 3. Show Unrealized P/L shows the current unrealized profit/loss for the open position
- 4. Show Realized P/L shows the current realized P/L
- 5. Show Stop P/L shows what the profit/loss would be if the stop loss level is reached
- 6. Show Target P/L shows that the profit/loss would be if the target level is reached
- 7. Show Risk Ratio shows the risk level (target p/l divided by stop p/l)
- 8. Show Total P/L current total profit/loss since this strategy was activated

Strategy Panel Options									
MA Cross Strategy ×									
The strategy is based off the Moving Average Cross study. Trades occur when the fast moving average crosses the slow moving average.									
General Display Trading Options       Strategy Panel       Signals         ✓       Show Position       These are labels to display in the control box.         ✓       Show Unrealized P/L       These are labels to display in the control box.         ✓       Show Realized P/L       Show Total P/L         ✓       Show Total P/L       Example 1         ✓       Show Total P/L       Example 2         ✓       Show Total P/L       Example 2         ✓       Show Total P/L       Example 3         ✓       Show Total P/L       Example 3									

### 3.22 Software Development Kit (SDK)

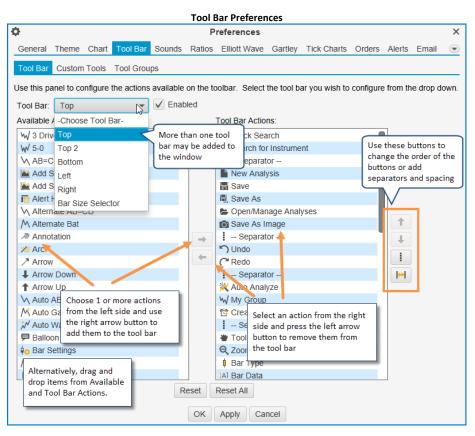
Custom studies and strategies can be programmed using our Software Development Kit. For more information on this, please visit our website: <u>http://www.motivewave.com/support/sdk.htm</u>

### 3.23 Tool Bar

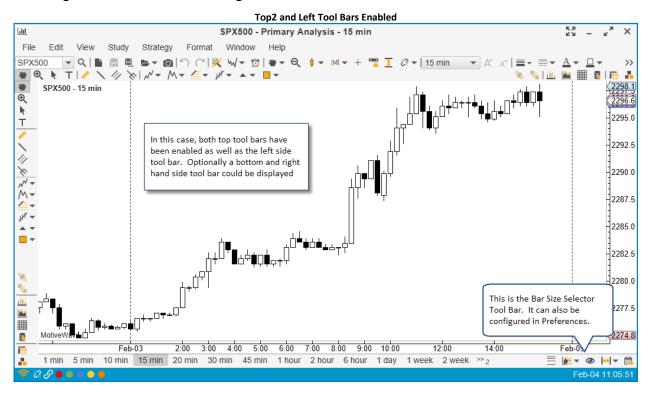
A tool bar is available from the Console or from a Chart Window and contains a convenient set of buttons for performing common operations on a chart. This tool bar may be configured from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). Additional tool bars may be added to the bottom or sides of the window.

Actions can be added or removed from a tool bar by selecting them on the right side (to add) or left side (to remove or re-order) and use the left and right arrow buttons in the center. You can re-order the buttons and add separators (or spacing) by selecting the action on the right and side and using the buttons to the far right.





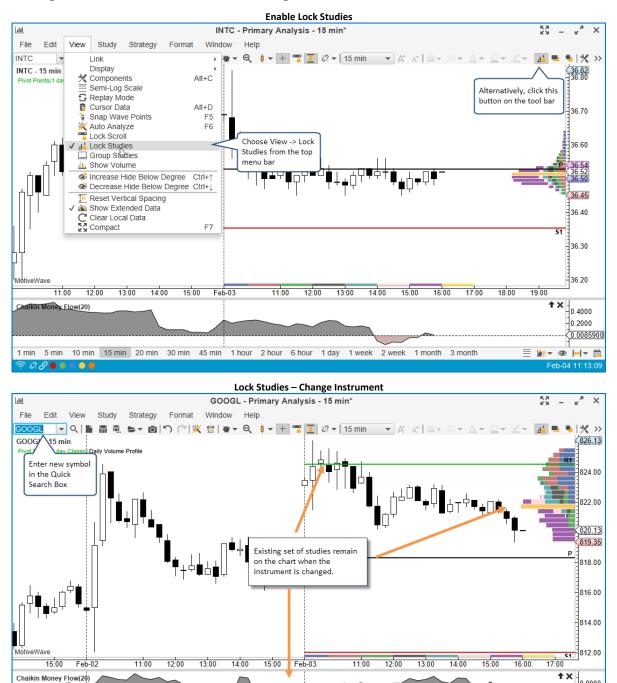
Additional tool bars can be added to the windows by selecting the desired tool bar from the drop down and checking the **Enabled** box to the right.



### 3.24 Lock Studies

The **Lock Studies** feature is a convenient way to keep the current set of studies on a chart when you change the instrument. Choose *View -> Lock Studies* from the top menu bar to enable this feature on the selected chart. To change the instrument on a chart, type the new symbol into the **Quick Search** box on the left side of the tool bar and press the *Enter* key.

The following two screen shots illustrate the usage of the Lock Studies feature



1 min 5 min 10 min 15 min 20 min 30 min 45 min 1 hour 2 hour 6 hour 1 day 1 week 2 week 1 month 3 month

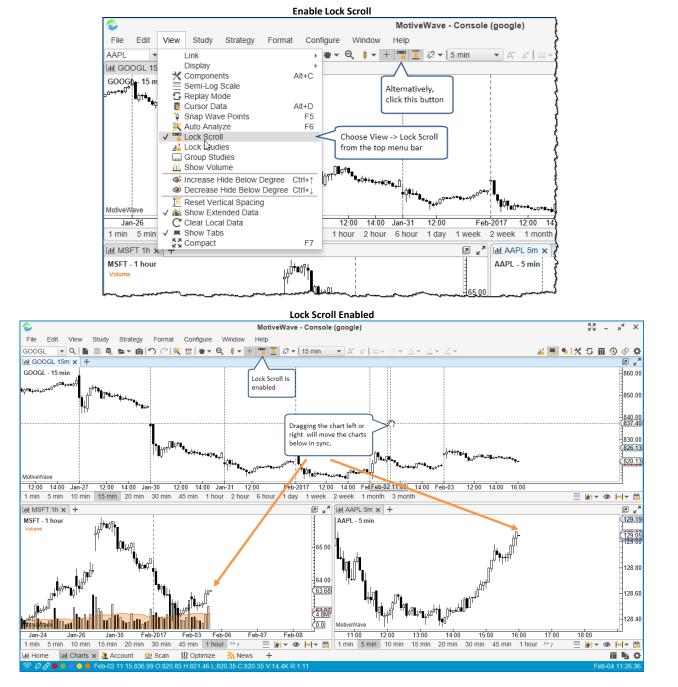
0.0000 -0.0760 -0.2000

Eeb-04 11:15:13

## 3.25 Lock Scroll

Lock scroll is a convenient way to maintain the same position across multiple charts when using the scrolling feature to move forward or backward on the historical price axis. Choose *View -> Lock Scroll* (from the top menu bar) or use the button available on the tool bar to enable this feature.

When this feature is enabled all charts that are part of the same **Link Group** will scroll to the same position when one of the charts is scrolled. If the chart is not part of a link group, but rather on a Console page. All charts that are on the same page will scroll with chart.

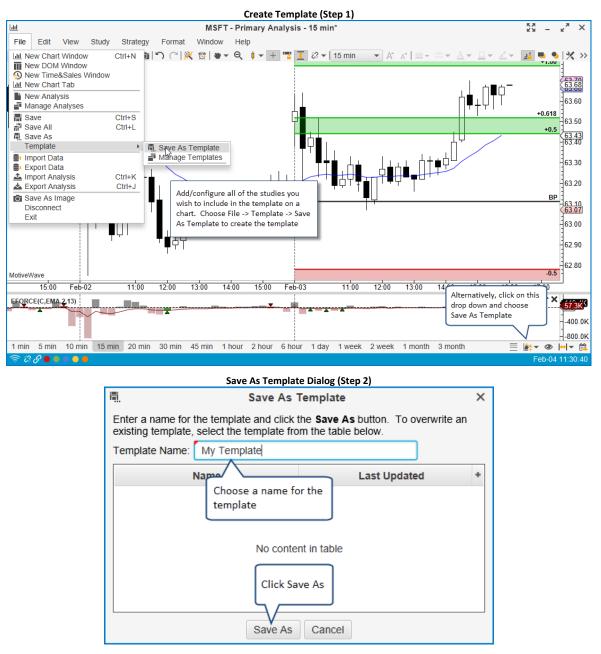


## 3.26 Study Templates

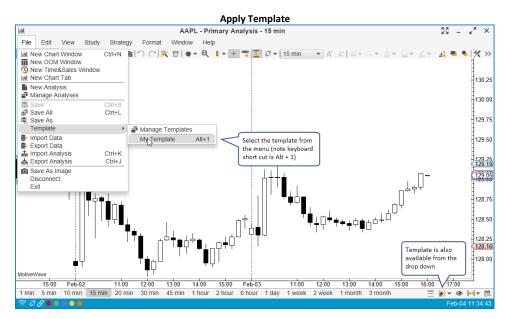
For convenience, studies can be organized into templates. A template contains one or more studies with specific settings. To create a template, simply add and configure all of the studies you want to



include on a chart. When you are satisfied with the studies and their settings, choose *File -> Template -> Save As Template* (from the top menu bar, Note: *File -> Chart -> Template -> Save As Template* from the Console).



A study template can be applied to another chart by choosing *File -> Templates -> <Template Name>* from the top menu bar (Note: *File -> Chart -> Templates -> <Template Name>* from the Console). Short cut keys are available to make this more convenient. Short cut keys are Alt + 1, Alt + 2 etc where the number key applies the template in the order they were created.





### 3.26.1 Removing a Template

To remove a template from a chart (including any associated plots). Right click on the template name (in the study legend).

Remove Template									
AAPL - Primary Analysis - 15 min*									
File Edit View Otor gy Format Window Help									
AAPL       ▼       Right click on the template name       Image: Complete name<	.ii 💷 🍨								
AAPL - 15 min		130.50							
My Terminata I Edit → つ Undo Ctrl+Z	+1.00								
C <sup>4</sup> Redo Ctri+Y									
		130.00							
Copy Ctrl+C									
	+0.618	129.50							
	+0.5	H							

### 3.26.2 Managing Templates

Your existing templates can be managed from the **Manage Templates** dialog. Choose *File -> Templates - > Manage Templates* (from the top menu bar). From this dialog you can rename, delete or change the order of the templates. The template order affects the short cut keys (Alt + 1, Alt + 2 etc). Changing the order will affect which template applies to each short cut key sequence.

	available templates. From here, you can rename				
and remove templates using Name	Last Updated	+			
My Template					
Moving Averages 1					
Moving Averages 2					
Trade Setup 1					
Exit Strategy 1	The order of these templates affects the short cut keys (Alt+1, Alt+2 etc). To change the order select and use the up/down buttons below.				

### 3.26.3 Import/Export Templates

For convenience study templates can be exported and imported into a workspace. This can be useful for sharing templates or moving them between workspaces. Both of these operations can be done from the **Manage Templates** dialog (see previous section). The **Import/Export** buttons can be found at the bottom of the dialog.

1	Manage Templates									
	The list below contains the available templates. From here, you can rename and remove templates using the buttons below.									
Name Last Updated										
My Template	My Template									
Moving Average	s 1									
Moving Average	s 2									
Trade Setup 1										
Exit Strategy 1		Select a template above and click <b>Export</b> to save it								
		to an external file								
Click the Import button to import an existing template. Rename Delete up down Import Export Close										

### 3.26.4 Template Preferences

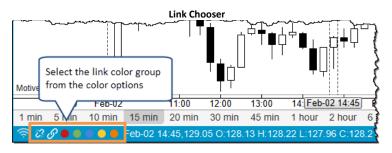
Preferences for study templates can be found in the **Preferences** dialog. Click on **Chart** then on **Templates**. A default template can be configured (check the **Use Default** option). This will be displayed whenever you create a new chart.

The **Link Templates** option will apply a template to all charts that are part of the link group (if configured, see the **Chart Linking** section).

				Temp	ate Preferen	ices					
¢				Р	references						×
General Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Chart Settings	ndicators	Labels	Template	s Optio	ons Bar Sizes	Bar Si	ize Selector				
The settings below all charts.	/ enable y	ou to char	nge the be	havior of	chart template				ed) will	be addeo	l to
Default Template:	Му Те	mplate		Use	Default 🧹		otion enables op a default	you			
Template Title:	e: Name Only										
	V Ove	rwrite Stu	dies			analys	es				
	✓ Con	firm Over	write Studi	This o	ption affects						
	Link Templates what is displayed in the Study Legend										
					uuy Legenu						
			hat templ								
		d work in Chart Link	conjunctio ing	n							
				ОК	Apply Car	ncel					

## 3.27 Linking Charts

Chart linking is a powerful feature that enables you to apply an action to a set of charts (instead of a single chart at a time). By default charts are unlinked (no link group assigned). There are a few different ways to assign a link group to a chart. The simplest is to choose the link group from the status bar at the bottom of the window (Note: this also works for DOM and Time/Sales windows).



There are three modes for linking charts:

- 1. **Instrument (Symbol)** In this mode, changing the symbol on one chart will change all charts in the link group to the same symbol
- 2. **Time (Bar Size)** If the bar size is changed on a chart in this mode, all linked charts will change to the same bar size
- 3. None (Replay Mode) This mode is for linking charts together for use in replay mode (linked charts are part of a replay group)

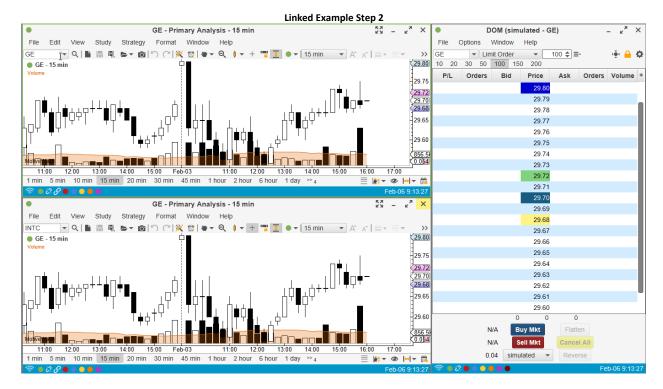


Link modes can be chosen for each link color individually. These options can be found in the **Preferences** dialog (*Configure -> Preferences* from the console menu bar).

General Keyboard M This panel defines the typ size or none (used for rep	pe of linking to	Quick S	Ratios	Preferences Elliott Wave Ticker Tape				Orders		Email	×
General Keyboard M This panel defines the typ size or none (used for rep	louse Fonts pe of linking to	Quick S									
This panel defines the typ size or none (used for rep	pe of linking to		earch	Ticker Tape	Linking	Dock	Tradin	a Hours	Cimulat		
size or none (used for rep		he used i							Simula	ted Accou	
Default Link Towns .	play mode).	De useu i	in Motiv	veWave. Linkin	ig may be	e tied to	the sel	ected ins	trument	(default),	bar
Default Link Type: Ir	nstrument	NV	Use D	Default							
	nstrument			Type of link ca	n ho cho						
Red Link:	ar Size			for each link c		sen					
	lone (Replay)	-	L	individually.							
Blue Link:	nstrument	-									
Yellow Link:	nstrument	-									
Orange Link:	nstrument	-									
Purple Link:	nstrument	-									
Maroon Link:	nstrument	-									
Navy Link:	nstrument	-									
Pink Link:	nstrument	-									
Dark Green Link:	nstrument	-									
Brown Link:	nstrument	-									

Other windows such as the DOM and Time/Sales windows can also be given a link group. In the example below, two charts and a DOM Window have been assigned the same link color. Choosing a new symbol from the quick search box from one of the windows will automatically change the symbol for all windows in the link group.



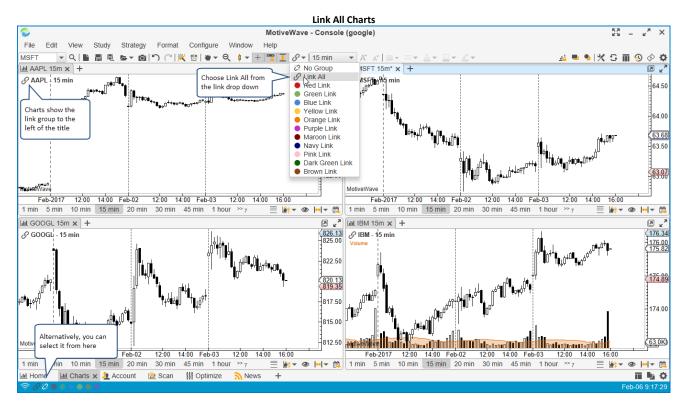


### 3.27.1 Linking With Templates

As discussed in the <u>Study Templates</u> section the linking feature can be used in conjunction with the Study Templates. If enabled (see **Preferences** dialog, *Chart -> Templates* tab), applying a template to one chart in the link group will apply the template to all charts in the link group.

### 3.27.2 Link All

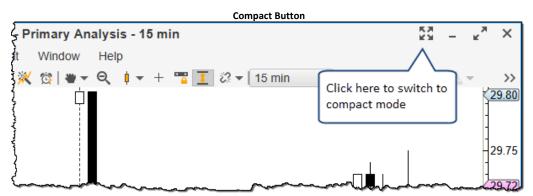
If you are working with the Console window (or a Desktop), you will notice an additional linking option, **Link All**. This option will link all charts that are on the current page. This provides a convenient way to link all the charts on a page with one click (instead of choosing a link for each chart).



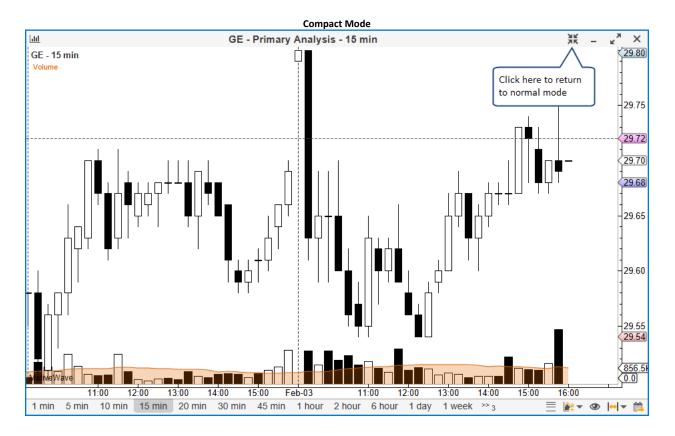
### 3.28 Working with Chart Windows

### 3.28.1 Compact Mode

Compact mode strips away the tool bar, menu bar and status bars to maximize the chart area on a chart window. Use the compact/uncompact button on the right hand side of the title bar to switch between regular and compact modes.



The screen shot below illustrates a chart window in compact mode. Notice that the chart area fills the entire window to optimize the use of screen space. Click on the uncompact button on the tool bar to return to normal mode.

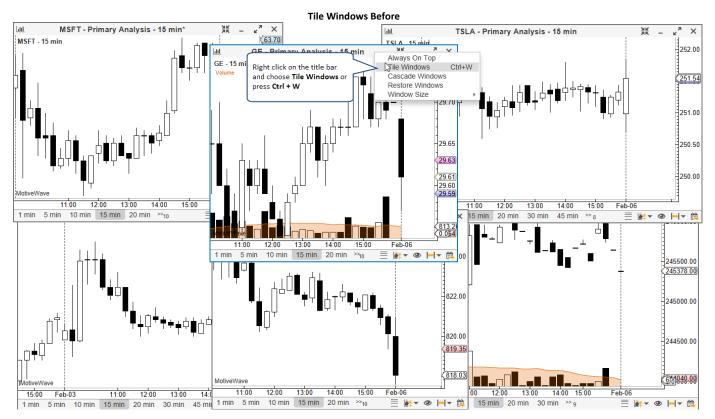


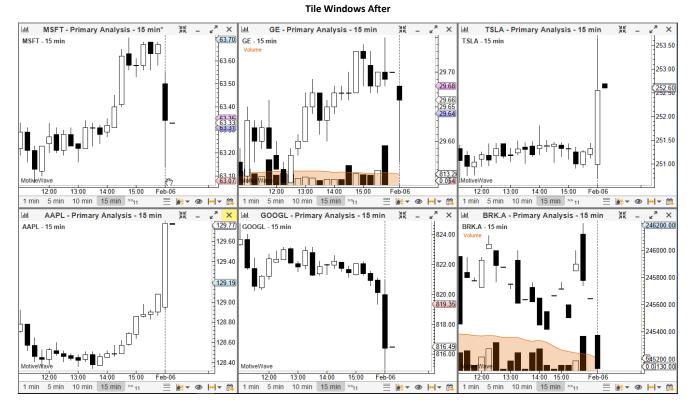
The behavior of compact mode can be configured in the **Preferences** dialog (*Configure -> Preferences* from the console menu bar). This allows you to specify what elements should be displayed in **Compact Mode**.

¢	Preferences	×
General Theme Chart Tool Bar	Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Email	
arch Ticker Tape Linking Dock	Trading Hours Simulated Account Watermark Auto Update Compact Mode	
Select the features below that you we while in <b>Compact Mode</b> .	uld like to show or hide when viewing a Chart window, Chart Group or the Console	
Show Tabs 🔸	These apply to the	
Show Page Bar 🔫	Console and Desktops	
Show Menu Bar		
Show Tool Bar		
Show Status Bar		
	OK Apply Cancel	

#### 3.28.2 Tile Windows

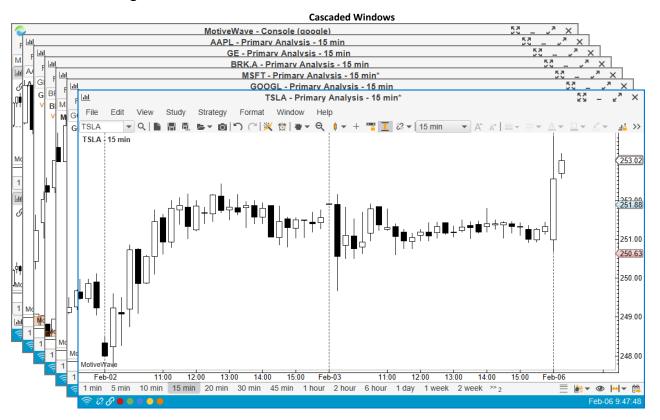
The Tile Windows feature is useful to arrange your charts on a single monitor without having to position the windows manually. Start by arranging the chart windows roughly where you would like to place them. Once you have done this, right click on the title bar of one of the chart windows and choose *Tile Windows* (alternatively, press Ctrl + W). Note: on Mac OS X choose *Window -> Tile Windows* from the top menu bar.





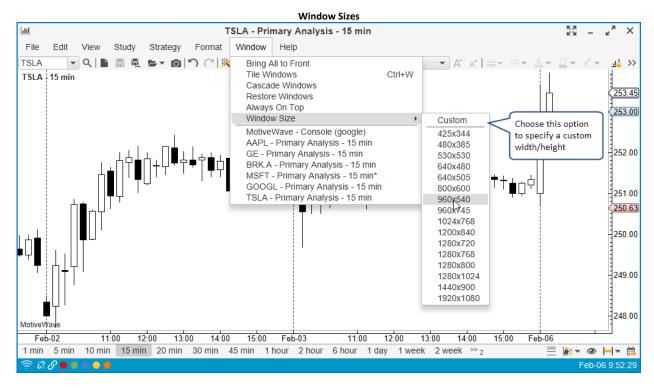
### 3.28.3 Cascade Windows

Similar to the **Tile Windows** feature, **Cascade Windows** arranges the windows that are on the screen on top of each other offset from the top left corner. Choose *Window -> Cascade Windows* from the top menu bar to arrange the windows in this fashion.



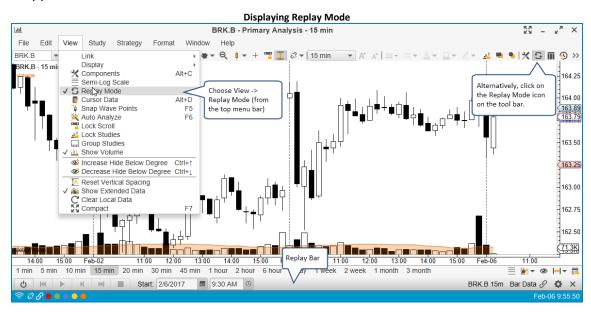
### 3.28.4 Window Sizes

For convenience, the window size can be set from the *Window* menu (*Window* -> *Window Size* -> <*Size*>). This can be a useful feature for taking a screen shot or video. Choose *Custom* to specify a size that is not one of the presets.



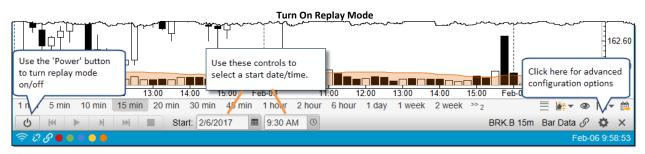
### 3.29 Replay Mode

Replay mode is a very useful feature that enables you to go back in time and replay market data. This can be very useful to practice your trading or to test your custom studies and/or strategies. The replay mode control can be accessed from the chart menu bar: *View -> Replay Mode* (Note: there is also a button on the right hand side of the tool bar). When you click this menu item you will see the **Replay Mode** bar appear at the bottom of the chart.





Replay mode can be started by choosing a start date and pressing the power button.



Use the play, fast forward, reverse and stop buttons to step forward through the data. These buttons work as follows:

- 1. Rewind This will restart the replay mode from the beginning
- 2. Play Step forward in time by 1 tick
- 3. Forward Play ticks until the next bar is reached
- 4. Fast Forward Play ticks continuously
- 5. **Stop** Stop playing ticks. This is only active if forward or fast forward buttons have been clicked above.

				Replay	Buttons					
MotiveWave	Step forwar by 1 tick	rd 12:00	Stop Replay	15:00 Feb-2017	/ 11:00 1	2:00 13:00	14:00 15	:00 16:00	17:00	163.25 66.1K
1 min 5	min 10 min	15 min 20	7 30 min	45 min 1 hour 2 h	our 6 hour 1 day	1 week 2	week >> 2		<b>≱</b> ∓ @	⊷  - 🛱
<b>小</b>	( 🕨 🖌	<b>₩ </b>	Start: 2/1/201	7 🔳 9:30 AM	③ Feb-01 9:30		BRI	K.B 15m Ba	r Data 🔗	$\Rightarrow \times$
₹ <i>2</i> /	•••					_			Feb-06	6 10:04:53
Restart from beginning	Play to next bar	Play continuous	sly		Current replay date/time					

When you are working in replay mode will work as if you are trading live back in that time frame. A special replay account is created to manage orders, positions and historical trades.

### 3.29.1 Replay Settings

Replay settings can be accessed by clicking the gear icon on the right hand side of the **Replay Mode** bar.

	Replay Settings Dialog	
5	Replay Settings	×
Replay Mode enab strategy or practicin If supported by you minute bars. Replay mode may	Choose from Bar Data, Minute Data and Historical Tick Data (if available) other wise MotiveWave will re Use the replay account to	r testing a pent using charts).
Source Data:	Bar Data  Generate Ticks Replay Account	
	<ul> <li>Real Delay</li> <li>Account ID: REPLAY-1</li> <li>Base Currency: USD ▼</li> </ul>	
Speed Factor:	1.00 🗢	1
Tick Delay (ms):	0 €	]
Bar Delay (ms):	200	SSIONS
Replay Link:	Page - replay several charts together in sync.	
	Update Save Defaults Cancel	

#### Replay Data Settings:

The following settings apply to the playback of data in replay mode:

- 1. Source Data Options for source data include:
  - a. Bar Data Each bar is used to generate 4 ticks: open, high, low and close
  - b. **Minute Data** Minute data will be loaded from the data service to generate ticks (each minute bar will have 4 ticks: open, high, low and close
  - c. **Tick Data** If your broker/data service provides historical tick data, then this may be used
- 2. **Generate Ticks** If this is enabled MotiveWave will generate a set of ticks to (beyond OHLC) for playback. This option does not apply to the Tick Data option
- 3. **Step Until Price Change** If enabled it will keep playing ticks until the price changes when pressing the play button (instead of a single tick at a time).
- 4. **Real Delay** If this option is checked, MotiveWave will simulate the delay between ticks by using the tick timestamps. Use this if you would like to simulate the actual playback of ticks in real time
- 5. **Speed Factor** Applies to Real Delay option above. Allows you to speed up (or slow down) the play back of ticks in real time
- 6. **Tick Delay** this is the delay to add between the play of each tick.
- 7. Bar Delay this is the delay to wait between the playback of each bar.
- 8. Replay Link Use these options to link the replay mode across multiple charts.

#### **Replay Account:**

The replay account is useful if you intend to place trades in replay mode. If this is enabled, a special account will be created (see **Account** page in the Console) to track all orders, positions and historical trades for the replay session.

- 1. Account ID This is the name of the account ID that will track trades
- 2. Base Currency This will default to your base currency, but you can change it if you like
- 3. Cash Balance Opening cash balance when you enable replay mode
- 4. Include Commissions Check if you want trade commissions to be included in the P/L calculations.

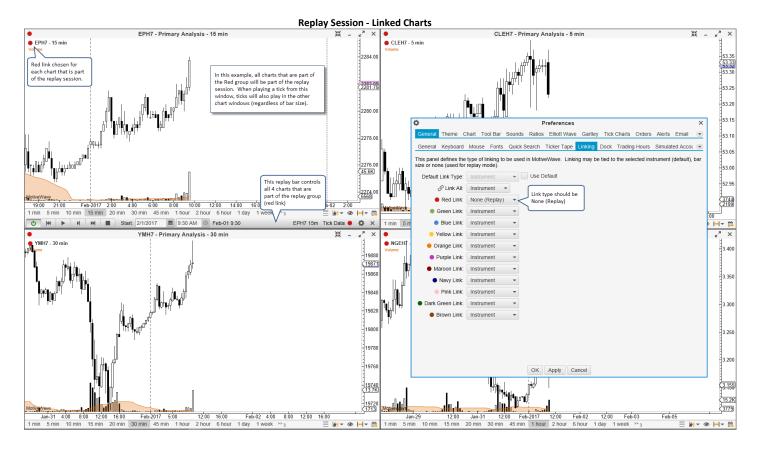
### 3.29.2 Linking in Replay Mode

The linking feature in MotiveWave<sup>™</sup> enables you to use replay mode across several different charts at the same time. The following steps explain how to include multiple charts in the same replay session:

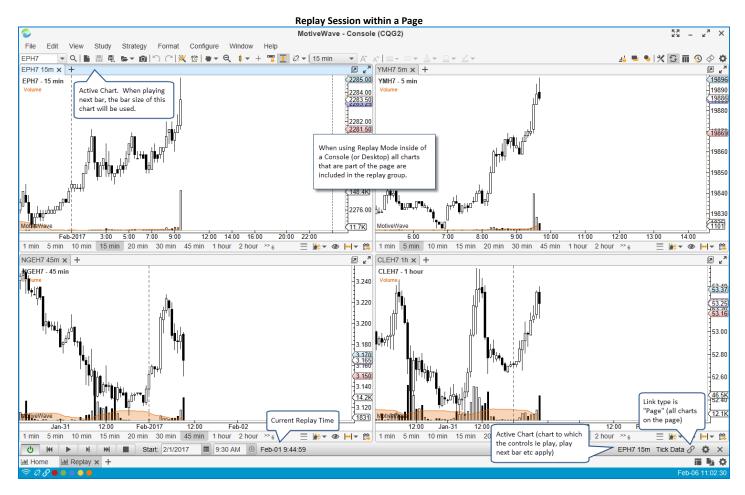
- 1. Select the charts that you want to include and choose the instruments and bar sizes
- 2. Choose the same link color for each chart (make sure the link type is "Replay")
- 3. Edit the Replay Settings
- 4. Choose the link and press the "Update" button

		Replay Linked Settings
5		Replay Settings X
		movements using historical data. This may be useful for testing a such as Elliott Wave Counts).
If supported by you minute bars.	r broker, tick data may b	e used, other wise MotiveWave will reconstruct the movement using
Replay mode may	be linked with other oper	n charts (either in a Chart Group or Console or set of linked charts).
Source Data:	Bar Data 🔹	Generate Ticks Replay Account
	Real Delay	Account ID: REPLAY-1
Croad Factor:		Base Currency: USD •
Speed Factor:	1.00 🗢	Cash Balance: 100000.00 \$
Tick Delay (ms):	0 \$	✓ Include Commissions
Bar Delay (ms):	200 🜲	
Replay Link:	🔗 Page 👻	
	S Page	
		te Save Defaults Cancel
	Green Link	
	Blue Link Yellow Link	
	Orange Link	Note: if choosing a
	Purple Link	color link, make sure the
	Maroon Link	link type is "Replay"
	Navy Link Pink Link	
	Dark Green Link	
	<ul> <li>Brown Link</li> </ul>	

The following screen shot shows 4 charts that are part of the Red group and using the same replay session:



Using replay mode inside of the Console (or a Desktop) can be much more convenient when Page linking is used (default). All charts that are part of the page will be included in the replay session.



### 3.30 Alerts

Alerts are a useful way to receive a notification when a particular event has occurred. This could be as simple as a price for a particular instrument has been reached or a trend line has been crossed. More advanced examples include comparing values from different studies.

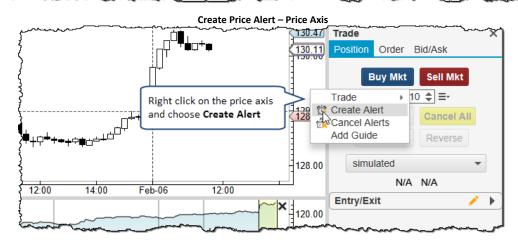
Active alerts can be managed centrally from the Alerts panel in the Console. By default, this is included on the Home page. You can add an alerts panel anywhere in the console from the **Add Tab** button to the right of any panel tab.

					s Panel					
			**************************************	·····		rice Crosses EMA(C,100) C 63.57	simulate	ed	*	
				Å∐n∎, "o <sup>⊥</sup> ∎, .	+Looto+++			N/A N/#	4	
MotiveW	tab chow	s activated				Active alert on a chart	Entry/Exit		<u>/</u>	▶
Jai	ts (history	12.00	AT an in the set		4:00 Feb-03 12:00 14:00 F week 2 week 1 month >> 1	Feb-06				
Alerts (4) His	/	ASDAQ (21) 🕅 🖄 Alerts 🗙	the New	nywhere from Tab button				in 🔁	ö 💰 🕛 .	7
Symbol 🔺	Replay	Nar	Watch List	Last Value	Order	Expires Activa	ted	Chart		
AAPL	N	Price Crosses 127.15	Time and Sales	130.2	1			Chart	С	
GE	Ν	Price Crosses Tenkan-Sen(9	Order Table     Position Table	29.66	6 A	Click the Chart button		Chart	С	
BRK.B	Ν	Price Crosses 163.03	Trade History Table	163.60	6 <u>_</u> / <u></u>	to show the chart that		Chart	С	
MSFT	Ν	Price Crosses EMA(C,100)	Account Table	63.44	4 Optionally, orders	contains this alert		Chart	C	
			News R Scanner		can be triggered					
			🔢 Optimizer				The 'C' k	outton will		
			없 Alert Tab				cancel (	delete) this	alert	
Lill Home 🗙	III Charts	🧕 Account 🛛 🔒 Scan	News	+						¢
🛜 i? S 🔸	• • • •							F	eb-06 11:26:2	29

### 3.30.1 Price Alerts

The simplest type of alert is a **Price Alert**. A price alert does not require a chart in order to execute. It will triggered by the bid/ask or last price of an instrument. Price Alerts can be created directly from the Alerts panel or from the Price Axis of a chart.

			Crea	ate Price Alert					
Feb-2017 1	2:00 14:0	0 Feb-02 12:00 14	00 Feb-03	12:00 14:00	Feb-06	12:00 14:0	m		
1 min 5 min	10 min	15 min 20 min 30 n	nin 45 min 1	1 hour >>7		≣ 🚔 < <	୭  +  ▼ 🛱		
<b>NYSE (35)</b>		SDAQ (21) 🛛 🖄 Alerts	× +					101 I	🛱 🖄 🚳 🖉
Alerts (3) Hist	ory (2)							/	Create Alert
Symbol 🔺	Replay	Name	Last Value		Order		Expires	Click here to cr	art
AAPL	Ν	Price Crosses 127.15	130.12					a Price Alert	art C
BRK.B	Ν	Price Crosses 163.04	163.55						art C
MSFT	Ν	Price Crosses EMA(C,1	63.50						Chart C
								_	~



The following dialog is shown when an alert is created from the Alerts panel. Alerts created from the **Price Axis** are similar except for the ability to choose an instrument (this is assumed from the chart).

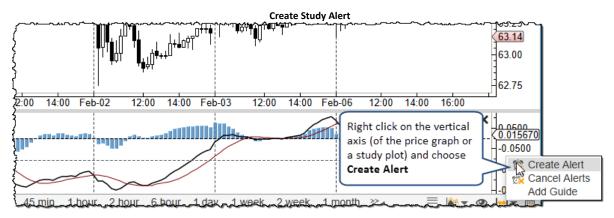
		C	reate Ale	rt Dialog				
Ċ			Create	Alert				×
Alert Adva	pced Trade							
Instrument	Choose Symbo	ol						
								_
Symbol: AAF	٥٢	•	Q <sup>+</sup>					
Sy	mbol	Position	Bid Size	Bid	Ask	Ask Size	Last Price	
AAPL			0	130.02	130.06	0	130.04	
Parameters	i							
Condition:	Price		osses	• 1	130.05 🜲	Indicato	DF	
Label: Comments: Notification	If this is not c alert will disa the first time	ppear after			be includ	d commen led if an e on is sent	mail	
Show Alert: Play Sound: Sound File:	Yes  Ves  Ves	Use Prese	et Sound	E	notificat	tion defin tion is sen t is trigger	t when	
Send Email:	No 🔻				🗸 Atta	ach Image		
		OK Save	e Defaults	Delete	Cancel			

Settings available in this panel are as follows:

- 1. Parameters
  - a. Condition This defines the criteria for triggering the alert. The first field (input) can be any of the ticker inputs (last price, bid/ask high/low etc). The last field can be an absolute price. Alternatively, it could be a relative value (click the Indicator box) such as Last Price, Best Bid or Best Ask. In the case of a Price Alert, this will be an absolute value in most cases. Three types of operators are available for comparison:
    - i. Crosses Input crosses above or below the second input
    - ii. Crosses Above Triggers the alert only if it crosses above the second input
    - iii. Crosses Below Triggers the alert only if it crosses below the second input
    - iv. Touches Triggers an alert if the target value is touched or crossed
  - b. **Trigger Multiple** If this option is checked, the alert will still be valid after it is first triggered. In this case this alert will be triggered indefinitely until it is explicitly cancelled.
  - c. Label / Comments These fields enable you to add your own text to an email notification that is sent when the alert is triggered
- 2. Notification
  - a. Show Alert If true the Alert History window will be displayed when the alert is triggered
  - b. **Play Sound** A sound will be played when the alert is triggered. This can either be the preset sound or a specific sound file that you can specify.
  - c. **Send Email** If enabled (and email sending has been configured), an email will be sent to the given email address when the alert is triggered.

#### 3.30.2 Study Alerts

Alerts can be based on values that are generated as part of a study. These types of alerts execute in the context of a chart and require the chart to be open in order to be active. Similar to a price alert, you can create a study alert by right clicking on the vertical axis (of the Price Plot or a Study Plot) and choosing *Create Alert*.



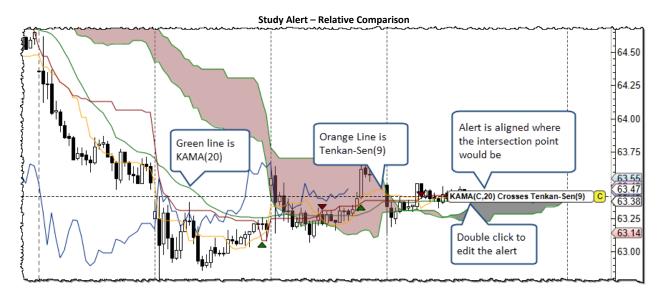
	Create Study Alert Dialog
Ċ.	Create Alert X
Alert Adva	nced Trade
Parameters	; 
Condition:	MACD(C,EMA,12,26)  Crosses -0.1174  Indicator
	Trigger M/ liple
Label:	Contains available If Indicator is checked, the
Comments:	study inputs from the selected study plot study inputs relative comparison
Notification	
Show Alert:	Yes 👻
Play Sound:	Yes 🗸 🗸 Use Preset Sound
Sound File:	Browse
Send Email:	No 🔻
	OK Save Defaults Delete Cancel

Two types of comparisons can be made with a study alert:

- 1. **Absolute Comparison** A study value is compared to a specific value (ie -0.1174 in the above example)
- 2. **Relative Comparison** A study value is compared against another study value (in the same plot). Click on the *Indicator* field to enable a relative comparison.

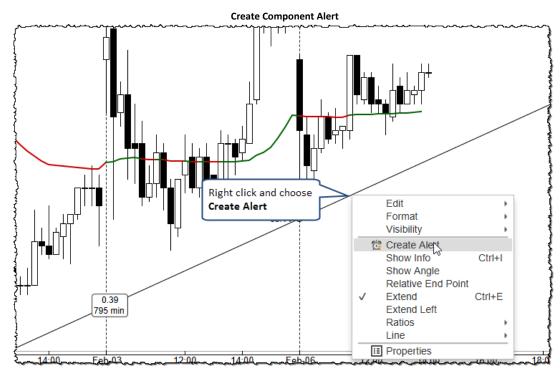
		Relative Compari	son
<sup>1</sup>		Create Alert	
Alert Adva	nced Trade		Check Indicator Box
Parameters	i		
Condition:	MACD(C,EMA,12,26)	Crosses	MACD Signal(9)
Condition.		+ 0103363	
	Trigger Multiple		MACD (C,EMA,12,26)
Label:		These are the values from all studies within	MACR Signal(9)
Comments:		the same plot.	MACD Hist(12,26,9)
			EMA(MACD(C,EMA,12,26),20)
Notification			
Nouncation			
Show Alert:	Yes 🔻		
Play Sound:	Yes 👻 🗸 Use Prese	et Sound	
Sound File:		► Browse	
Send Email:	No 🔻	V A	ttach Image
		OK Save Defaults Dele	ete Cancel

The example below illustrates a study alert where the value of one study KAMA(C,20) crosses the value of another study (Tenkan-Sen(9)). The alert is displayed where the intersection point would be between these two values.



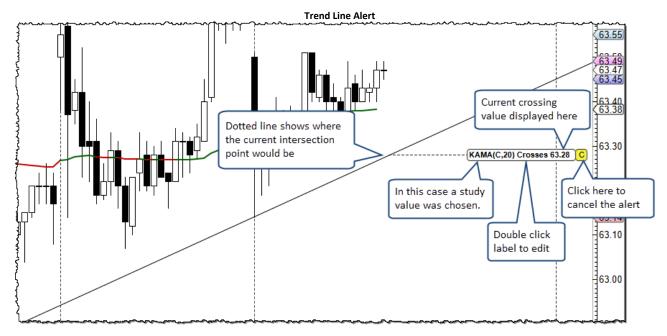
### **3.30.3 Component Alerts**

Some components can be used to generate alerts. For example, you could create an alert for when a moving average crosses a trend line. If you would like to create this type of alert, right click on a trend line and choose Create Alert.



Create Alert	×
Crosses   Trend Line	
Some components (such as Fork, Channel) have multiple options have	
h	
Preset Sound	
Study values can be used here as well	
Attach Image	
	h v Study values can be Browse

In the example below the study value KAMA(C,20) was chosen to cross the trend line. The alert label shows the current crossing value. Press the 'C' button to cancel the alert. The alert may be edited by double clicking the alert label or via right click and choosing *Edit Alert*.



### 3.30.4 Trading From Alerts

Trades can be placed when an alert triggers. Click on the **Trade** tab of the alert dialog to define an order that will be placed when the alert is activated.

		1	Alert - Trad	le Options					
	Ö			Edit Al	ert				х
	Alert Adva	nced Trade							
	V Place Tra	ide on Alert Act	ivated						
	Symbol: MS	FT	•	Q*	1	ely, choose instrument	а		
Check this box to		mbol	Position	Bid Size	BId	ASK A	sk Size	Last Price	
place an order who the alert is activat	DET			0	63.47	63.51	0	63.49	
the alert is activat	Buy Account: Quantity: Type: Expires: Limit Stop Trail	simulated 100 \$ ≡ MKT LMT STP MIT TRAIL	Choo: Op (pi	rofit) and/or	u can attach stop/trail o	rder.			
			OK Sav	e Defaults	Delete	Cancel			

Orders can be placed on a different instrument from where the alert was triggered. Market, Limit and stop orders are supported as order types. Optionally, you can attach a limit (profit) order and/or stop/trail order.

### 3.30.5 Advanced Alert Settings

Additional options on an alert can be specified from the **Advanced** tab. This tab enables to you adjust time times when the alert is applicable (or expires) and the display properties.

	Alert – Advanced Settings	
1 C	Edit Alert	×
Alert Adv	anced Trade	
Time In Fo	prce	
Time Zone:	America/New York	-
Expires:	Sets an expiration date/time	
Session 1:	Start: 9:00 AM O End: 4:00 PM O V Enabled	
Session 2:	Start: 12:00 AM O End: 12:00 AM O Enabled	
Display		
Alert Align:	Right       ✓         ✓       Show Cancel Btn         ✓       Show Label         ✓       Show Label         ✓       Show Line	
	OK Save Defaults Delete Cancel	

#### Time In Force

The **Time In Force** section allows you to set an expiry date/time for an alert and optionally define times of the day when the alert is active.

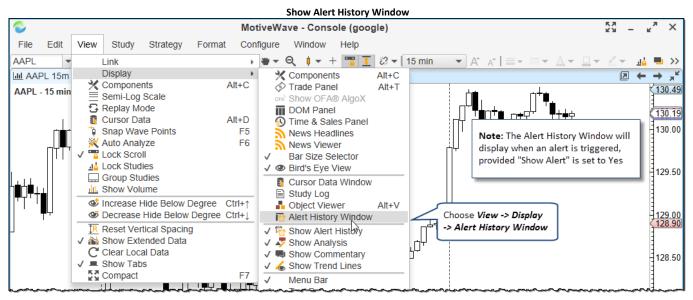
- 1. **Time Zone** The dates and times specified in this section will use the same time zone defined for the chart. This may optionally be overridden by unchecking the Use Default box.
- 2. **Expires** Check the Enabled field to the right to specify a date/time when the alert will expire and be removed.
- 3. Session 1 Defines a time of the day when the alert will be active
- 4. **Session 2** Define a secondary time of the day when the alert will be active.

#### Display

The **Display** section allows you to override default display attributes for the alert.

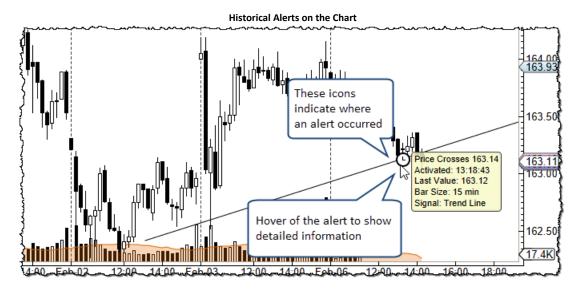
### 3.30.6 Alert History

The Alert History window displays alerts that have been triggered in the past. Choose *View -> Display -> Alert History Window* from the top menu bar. If the chart where they were activated is still available, a *Chart* button will be available to view the chart that they originated from.



<mark>0</mark>				Alert History					)
The following	alert(s) have be	en triggered.	Press Close	to cancel this di	ialog.				
Symbol	Bar Size	Replay	Signal	Name	Last Value	Order	Activated ▼	Chart	+
BRK.B	15 min	N	Trend Line	Price Crosses	163.12		13:18:43	Chart	
GE	15 min	Ν		Price Crosses	29.65		11:26:37	Chart	
MSFT	15 min	Ν		Price Crosses	63.41		11:25:03	Chart	
				ill clear all aler	-		This button the chart wi alert was tri	here the	,
			history	from the works					

Historical alerts are also visible directly on the chart. Icons are displayed when and where (what price) and alert occurred. If you place the mouse cursor over one of the alarm clock icons, you can view detailed information.



Alert history can also be found under the History tab of the Alerts panel (in the Console):

C	lick on Histo	<b>ry</b> tab		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		<u></u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
<b>NYSE</b> (35)		DAQ (21)	🏷 Alerts 🗙	+				🔯 🛱 🕅	🔅 🛍 🗸
Alerts (1) His	tory (3)								
Symbol 🔺	Bar Size	Replay	Signal	Name		Last Value	Order	Activated	Chart
BRK.B	15 min	Ν	Trend Line	Price Crosses 163	.14	163.12		13:18:43	Chart
GE	15 min	Ν		Price Crosses Ten	kan-Sen(9	29.65		11:26:37	Chart
MSFT	15 min	Ν		Price Crosses EM	A(C,20)	63.41		11:25:03	Chart
🔟 Home 🗙 🖟	III Charts	🧕 Αссоι	unt <u> </u> Scan	해 Optimize	News	+			<b>≣ №</b> ¢
🛜 i? S 🔴 🕯								Feb	-06 14:32:36

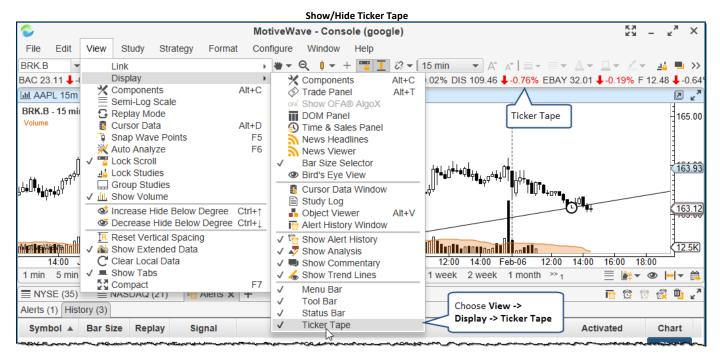
### 3.30.7 Alert Preferences

Global alert preferences can be configured in the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). The alert preferences will be found under the **Alerts** tab (see below).

Alert Preferences	
Preferences	×
General Theme Chart Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Email	
The following fields allow you to configure preferences for Alerts. Display	
Alert Align: Right  Show Buttons  Show Labels  Show Lines	
✓ Show Alert ✓ Play Sound       Send Email ✓ Attach Image       Default notifications         Other       Max Alert History:       10 ♦ (Days)       Show a triggered alert on the chart.         ✓ Show Alert History (on Chart)       ✓ Alert Order Warning       Show a warning if closing a chart that has active alerts.	
Show Warning on Clear Alert History	

# 3.31 Ticker Tape

Ticker tape displays a rolling set of prices for a selected set of instruments across the top of the Console, Desktop or Chart Window. This option can be turned on by choosing *View -> Display -> Ticker Tape* from the top menu bar.



The instruments and display of the ticker tape can be configured from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). Click on the General tab, then on the **Ticker Tape** sub tab. This panel has the following options:

- 1. **Instruments** Instruments may be added or removed by using the tool bar at the top of the list box on the left
- 2. Font Font size for the instruments displayed on the ticker tape section
- 3. Scroll Speed Relative speed for scrolling the instruments
- 4. Show Ticker Tape Default for displaying the ticker tape in a chart window
- 5. Show Change Shows the change since the day open
- 6. Show Change % Shows the change since the day open as a percent

	Ticke	r Tape Prefer	ences					
\$		Preferences						Х
General Theme Chart Tool Ba	r Sounds Ratio	s Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
General Keyboard Mouse Fon	ts Quick Search	Ticker Tape	Linking I	Dock Tradii	ng Hours	Simulat	ed Accou	
This panel allows you to configure th	e instruments that	are displayed in	the ticker	tape panel a	as well as	other disp	olay setti	ngs.
-Choose Symbol-	$\times + +$			Font:	Aria	;14.0	1	
AAPL - Apple Inc	$\wedge$		Scr	oll Speed:	Medium	-		
AEO - American Eagle Outfitters	\				/ Show T	icker Tar	20	
AMZN - Amazon.com Inc	Use these butto	ons to					Je	
AXP - American Express	add/remove ins	truments			Show C	hange		
BAC - Bank Of America Corp				N	/ Show C	hange %	b	
BTU - Peabody Energy								
C - Citigroup Inc								
CAT - Caterpillar Inc								
CSX - CSX Corporation								
DE - Deere Co.								
DIS - Walt Disney Company								
EBAY - eBay Inc								
F - Ford Motor Company								
FCX - Freeport-McMoRan Copper 8	Gold Inc.							
FDX - Fed Ex								
GE - General Electric								
GS - Goldman Sachs								
HAL - Halliburton								
HD - Home Depot								
HMC - Honda Motor Co Ltd								
HPQ - Hewlett-Packard Co								
IBM - International Business Machin	nes							
Total Instruments: 37								
	ОК	Apply Ca	ncel					

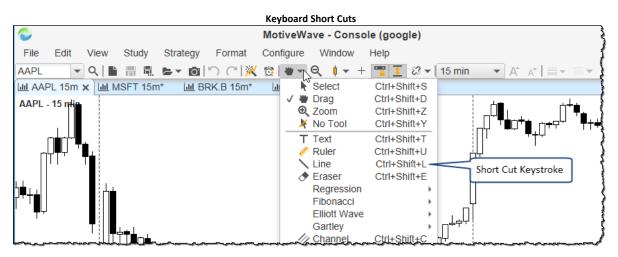
### 3.32 Short Cuts

MotiveWave<sup>™</sup> provides a number of convenient ways to do common tasks quicker. This section explores some of these options.

#### 3.32.1 Menu Short Cut Keys

You may have noticed already that when displaying a menu, a key combination is displayed on the right hand side for some of the items in that menu. This key combination may be used as a short cut to access that item without using the mouse to show the menu and select the item.

In the example displayed below, the short cut keystroke for accessing the Line tool is: **Ctrl + Shirt + L.** This means that you can hold down on the **Ctrl** (Control key), **Shift** and press the **L** key on the keyboard (all at the same time) to switch your mouse tool to the line tool. You may find this to be much faster than using the mouse to select the tools drop down and choose the line tool menu item.



Please Note: by convention tool short cuts all have the sequence **Ctrl + Shift + <key>**. This makes it easier to remember them.

### 3.32.1.1 Custom Keyboard Short Cuts

Keyboard short cuts can be customized in the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). Start by unchecking the **Use Default** option. With this option unchecked, you can double click on any of the actions (or select and press the edit button) to assign a keyboard short cut.

	Custom Keyboard Preferenc						
General Theme Chart Tool Bar	Sounds Ratios Elliott W	ave Gartley	Tick Char	ts Orders	Alerts	Email	_
General Keyboard Mouse Fonts	Quick Search Ticker Ta	pe Linking	Dock Trac	ding Hours	Simulat	ed Accou	
	om kevboard shortcuts for o check to modify yboard short cuts	commonly use	d features.	Double clic	k on an a	action bel	0
Action	S	hortcut					
₩ 3 Drives Mouse Tool	Ctrl+	Shift+3					
₩ 5-0 Mouse Tool	Ctrl+	Shift+5					
V AB=CD Mouse Tool	Ctrl+	Shift+=					
Je Active Tickers							
🚵 Add Strategy							
🚵 Add Study	Ctrl+	Т					
Rent History Window							
		_					
M Alternate Bat Mouse Tool	Double click on an						
Always On Top	action to assign a						
Annotation Mouse Tool	keyboard short cut						
🚔 Apply Template 1	Alt+1	-					
Apply Template 2	Alt+2						
😭 Apply Template 3	Alt+3						
Apply Template 4	Alt+4						
😭 Apply Template 5	Alt+5						
Apply Template 6	Alt+6						
Apply Template 7	Alt+7						
Apply Template 8	Alt+8						

From the **Edit Shortcut** dialog, simply press down on the key sequence that you would like to assign to the action. The key sequence will appear in the grey box (see below).

Edit Shortcut Dialog	
C Edit Shortcut	×
Type the keyboard shortcut or press the delete button to clear the current shortcut for the selected action.	
Æ Annotation Mouse Tool: Ctrl+Shift+L ×	
OK Cancel Press down on keyboard keys to assign a short cut	

#### 3.32.2 Mouse Wheel

If your mouse has a wheel, you can use this to perform the following actions on the chart:

- 1. **Time Shift** Move the graph to the left or right (depending on wheel direction)
- 2. Adjust Bar Width This will effectively zoom the graph in or out
- 3. Adjust Vertical Space Changes the space available at the top or bottom of the graph

The default action for the mouse wheel is to time shift when it is moved back or forward. If you hold down on the Alt key and move the mouse wheel, it will adjust the bar width (ie zoom in or out).

This behavior can be adjusted from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). Click on the **General** tab, then on the **Mouse** sub tab.

Mouse Wheel Preferences	
C Preferences	×
General Theme Chart Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Email	
General Keyboard Mouse Fonts Quick Search Ticker Tape Linking Dock Trading Hours Simulated Account	
You can configure the mouse wheel to do one of the following (Note: Alt Wheel Action is the using the mouse wheel while pressing the Alt key): - Time Shift - Moves the time period. (Hint: use the Ctrl & Shift keys to change the scrolling speed) - Bar Width - Changes the width of the price bars Vertical Spacing - Adds/removes space from the top and bottom of the graph.	e
Wheel Action: Time Shift	
Alt Wheel Action: Bar Width	
Disable Mouse This is the action performed when the Alt key is pressed while moving the wheel.	
OK Apply Cancel	

#### 3.32.3 Mouse Click Options

Keyboard modifiers: **Shift**, **Ctr**l and **Ctrl + Alt** when used with a left mouse click can be configured to do specific actions. The default behavior is as follows:

- 1. **Shift + Click** Creates *Text Comment*. When you perform this short cut an entry box will appear for you to enter text. Just type your comment and press Enter (or Esc) to create it.
- 2. **Ctrl + Click** Creates a *Price Guide* at the location of the mouse.
- 3. **Ctrl + Alt + Click** Creates a Time Guide at the location of the mouse.

These actions may be configured from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). Click on the **Chart** tab then on the **Chart Settings** sub tab. The following actions are available to choose from for each click shortcut:

- 1. Price Guide Creates a price guide at the mouse location
- 2. Horizontal Line Creates a horizontal line at the mouse location (extended left and right)
- 3. Time Guide Creates a time guide at the mouse location
- 4. Vertical Line Creates a vertical line (extended up and down) at the mouse location
- 5. Text Creates a text box to enter text
- 6. Note Creates a Note component
- 7. Box Callout Creates a Box Callout component
- 8. Balloon Callout Creates a Balloon Callout component
- 9. Line Callout Creates a Line Callout component
- 10. Annotation Creates an Annotation component
- 11. Curly Annotation Creates a Curly Annotation component

						Mou	se Cli	ick Short	cuts					
\$							Prefe	rences						×
Ge	eneral	Theme	e Cha	rt Tool Ba	ar Sounds	Ratio	s Elli	iott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Cl	hart Sett	tings	Indicate	ors Labels	Template	s Op	tions	Bar Sizes	s Bar Si	ze Selector				
The	e fields b	below a	allow yo	u to adjust	the default s	ettings	for ch	iarts.						
	[	Default	Tool:	* *				Max Lin	ear Bars:	25000 🗢	]			
Re	vert to [	Default	Tool:	$\checkmark$			Ма	ax Non Lin	ear Bars:	15000 🜲	]			
		Bar	Туре:	• •				Minim	ium Bars:	0 \$	]			
	E	Bar Sch	neme:	Normal	•		Рорг	up Delay (s	seconds):	2.0 :	🛊 🗸 Er	abled		
		Bar	Size:	15 min	•			Bar Width	n (Pixels):	6 🜲	]			
	Ва	r Thick	ness:	1.0 -	•			Price Axis	Spacing:	25 🜲	]			
		Axis	Style:	Inside	•			Time Axis	Spacing:	25 🜲	]			
		S	hade:	None	•			Top Inse	t (pixels):	5 🜲	]			
	:	Shift +	Click:	Text	•	·	B	ottom Inse	t (pixels):	5 🜲	]			
		Ctrl +	Click:	Price Guid	de 🤻	•	$\leq$	Mouse Cli	ck Bars:	90 🗢	] %			
	Ctrl -	+ Alt +	Click:	Time Guid	de 🔻			Short Cuts	els):	90 🗢	]			
	L	_ine Me	ethod:	No Action				Stud	ly Layout:	Horizontal	•			
		Fill	Area:	Price Guid				Ti	me Zone:	America/Ne	ew York		•	
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				Line Callo	ut									

#### **3.32.4 Other Shortcuts**

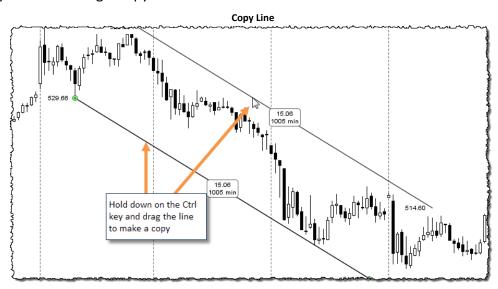
The following are some other shortcuts that you may find useful.

#### Ctrl + Mouse Drag (Copy)



Hold down on the **Ctrl** key and drag a component to create a copy of it. This can be very useful for example to create a line that is parallel to another line. The mouse cursor will change to the following to

indicate that you are creating a copy:



#### Revert To Default Tool (Space Bar)

When switching to a mouse tool, you can quickly switch back to the default mouse tool (Time Drag Tool) by pressing the *Space Bar*. This can be more convenient than pressing **Ctrl + Shift + D**. Alternatively, you can change the behavior of the mouse tools to automatically revert to the default tool when an action is completed. This can be adjusted from the Preferences Dialog. Click on the **Chart** tab then on the **Chart Settings** tab.

			1	Default I	Nous	e Tool					
¢				Prefe	rence	s					×
General The	eme Cha	art Tool Bar S	ounds	Ratios Ell	iott Wa	ve Gartley	Tick Charts	Orders	Alerts	Email	-
Chart Settings	s Indicat	ors Labels To	emplates	Options	Bar Si	zes Bar Si	ze Selector				
The fields below	w allow yo	ou to adjust the o	lefault se	ettings for cl	arts.						
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Revert to Defa	ault Tool:		can be		AX NON	Linear Bars:	15000 🖨	]			
B	Bar Type:	• •		this option		nimum Bars:	0 🖨	]			
Bar	Scheme:	Normal		to the defa tool after		y (seconds):	2.0	🛊 🗸 Er	abled		
E	Bar Size:	15 min 🔹	action	is complet	ed	idth (Pixels)	6 🜲	]			
Bar Th	nickness:	1.0 -			Price A	xis Spacing:	25 🜲	]			
A	xis Style:	Inside 🔹			Time A	xis Spacing:	25 🜲	]			
	Shade:	None	•		Top II	nset (pixels):	5 🖨	]			
Shift	t + Click:	Text	•	в	ottom II	nset (pixels):	5 🖨	]			
Ctr	1 + Click:	Price Guide	•		0	)isplay Bars:	90 🖨	%			
Ctrl + Al	t + Click:	Time Guide	•	s	udy He	ight (pixels):	90 🜲	]			
Line	Method:	Time/Price	•		S	tudy Layout	Horizontal	-			
I	Fill Area:					Time Zone:	America/N	ew_York		•	
F	ill Alpha:	25 🜲					V Use Def	ault			
							Calenda	r Days			
				ОК Ар	nlv	Cancel					

# 4 Trading

There are lots of ways to place and manage trades within MotiveWave<sup>™</sup>. In this section will explore some of the convenient features for dealing with orders, positions and trades. Some of the trading features such as supported order types may vary depending on the broker you have chosen for the workspace.

## 4.1 Account Management

The **Account** page in the console provides a convenient view of current account information as well as open orders, positions and historical trades. The columns displayed in each section will vary depending on the broker or data service that you chose for your workspace.

					Me	otiveWave	- Console	(fx2)							53 - F3
e View Configure	Window Help		[	Active Accour	its										
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н	istorical Trades	]									Attaci	hed Orders			
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ositions 🗙 🍨 Trades (	58) +														+ ;
Positions (8) Summar	y Closed Position	ıs													
count Ticket	Symbol	Q	uantity	Entry Price	Stop/Trail	Stop P/L	. Lim	it Li	mit P/L	Unrizd P&	L Pips R	oll Last Pr	ice Open T	ime Clo	se 🔺
en Positions -2	EUR/JPY		10K	128.382						-741	.09 -827.8		0.000 25-Jan-16 1	0:41:44 CI	ose
-7	SPX500		1	2276.8					ĺ	13	3.80 13.8		0.0 Feb-02 1	3:29:32 CI	ose
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4250 28092818	3 /00		1	2276.3							3.67 14.3 -1 2.85 -12	3.2	0.0 Feb-02 1	3:30:20 CI	ose

This is the default layout for the **Account** page. You can add these panels anywhere within the Console or Desktop. Simply click on the **Add Tab** button (Plus Icon) next to the existing tab where you want to add the panel.

#### Add Account Panel

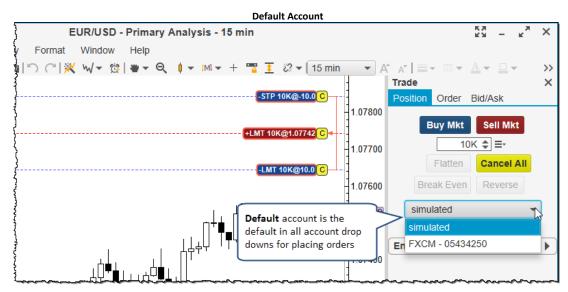
<b>NYSE (35)</b>	NASDAQ (21)	Click	Add	.+				
Account	Ticket	o Tab E	Button	Lill Chart ■ Watch List	Time	Action	Quantity	Avg Price
Simulated	SIM-12	SIM-13	USD/CAE		16-Jun-16 9:1	1:02 SLD	30K	1.30
Simulated	SIM-7	SIM-11	USD/CA		15 Jun 16 11:00	2-27 ELD	20K	1.28
Simulated	SIM-12	SIM-11	USD/CA	Order Table     Position Table	Choose one o	of these to add	10K	1.28
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Simulated	SIM-4	SIM-7	USD/CA	Account Table	Account Pane	1	10K	1.32
Simulated	SIM-4	SIM-6	USD/CAE	Scanner	09-Mar-16 15:4	1:03 BOT	10K	1.32
Simulated	SIM-4	SIM-5	USD/CAE		 08-Mar-16 14:4	1:48 SLD	10K	1.33
Simulated	SIM-2	SIM-3	EUR/JPY	🖄 Alert Table	 02-Feb-16 14:43	3:05 SLD	10K	131.
Simulated	SIM-2	SIM-1	EUR/JPY		25-Jan-16 10:41	1:44 BOT	10K	128.
05434250	24732295	64278443	USD/CAE	)	04-Jul-16 15:55	5:29 BOT	10K	1.28
05424258	a aa26825800a - a ave			and the second from a star	 43-80 mm 40:5	2:13-BQT		

### 4.1.1 Account Panel

The **Account** panel displays information about each available account in your workspace. The columns displayed will differ depending on the broker that you chose for your workspace. The **Unrealized PL** column is common to all brokers and displays the current unrealized profit/loss for all positions that belong to each account.

						Account	s Panel					
🧕 Αссоι	ints (2) 🗙	+										C 2
Default	Account	Curre	Balance	Equity	Unrealized PL	Total PL	Day P/L	Usd Mr	Usbl Mr	Usbl Mr%	Gross P/L	Hedging 🔺
Υ	Simulated	USD	99,640.41		-728.62	-359.59						false
Ν	054342 Se	As Default	t Account	6,390.60			41.10	120.00	6,270.60	98.12%	Click ł	nere to choose ns to display
		t click and As Default /			Summary of un profit/loss for o positions for ea	pen			columns will ker(s) choser pace.			

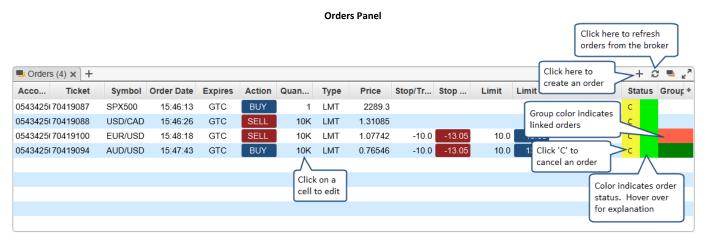
The **Default** column indicates which account is the default for placing orders. You can change the primary account by right clicking on the desired account and choosing **Set As Default Account**. This setting is important to avoid accidentally placing orders on the wrong account.





#### 4.1.2 Orders Panel

The Orders panel displays the currently active orders in one convenient location. The **Group** column indicates orders that are linked as either OCO (One Cancels Other) or OSO (One Submits Other). The **Status** column displays the current order status (green for active). Click on the 'C' to cancel an active order.



Orders can be edited from here directly by clicking on the appropriate table cell (see below). If an order has outstanding changes, the status column will change to show a 'T' and a 'D'. Click on the 'T' to transmit (submit) the changes to the broker or on 'D' to discard the changes.

							Edi	t Order								
Orders	s (4) × +														+ 2	; 🖦 🗸
Acco	Ticket	Symbol	Order Date	Expires	Action	Quan	Туре	Price	Stop/Tr	Stop	Limit	Limit	Fill Pr	Filled	Status	Group +
0543425(	70419087	SPX500	15:46:13	GTC	BUY	1	LMT	2289.3							С	
0543425(	70419088	USD/CAD	15:46:26	GTC	SELL	10K	LMT	1.31085							С	
0543425(	70419100	Click on	a 18.18	DAY N	SELL	10K	LMT	1.07742	-10.0	-13.05	10.0	13.05			T D	
0543425(	70419094	A cell to e		GTC "	BUY	10K	мт	0.7 <mark>00</mark> 46	710.0	-13.05	10.0	13.05			$\wedge$	
				DAY								٢	Dress 'T'	to transm	it ordor	ר
							[	Click on the						card chan		
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Alternatively, right click an order to see additional options. Double clicking on an order will show the **Order Ticket** dialog.

Orders Panel Ontions

					-		er option.	-							
🔜 Orders (4) 🗙 🕇														+ 2	; 🖦 🗸
Acco Ticket	Symbo	Order Date	Expires	Action	Quan	Туре	Price	Stop/Tr	Stop	Limit	Limit	Fill Pr	Filled	Status	Group +
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### 4.1.3 Positions Panel

The Positions panel shows the currently open positions (and closed for some brokers). Individual positions can be closed (at market price) by clicking on the **Close** button (right hand side). If you would like to close all positions, right click on a position and choose *Close All Positions*.

**Positions Panel** 

	X Summar		•									Click he	Click here to refresh posit	
Account	Ticket	Sym	bol Quantity	Entry Price	Stop/Trail	Stop P/L	Limit	Limit P/L	Unrizd P&L	Pips	Roll	1	is that are outside roker account	Close 🔺 +
Simulated	SIM-2	EUR/JP		128.382					-742.15	-829.4		0.000	25-Jan-16 10:41:44	Close
Simulated	SIM-7	SPX50	Edit Position	2276.8					14.30	14.3			Feb-02 13:29:32	se
0543425	0.4700005	- Aug	× Delete Position	.28506	Actual colu	umns available	will		229.25	229.7	7.26	0.00000	Click here to con	figure
0040420	ight click on a p		+ Add Position	2129.6		the broker(s)			210.83	161.5	-31.39	0.0	1 visible columns	
0543425	show context r	nenu	Close Now Close All Position	2129.6	configured	l for the worksp	ace		210.83	161.5	-31.39	0.0	13-Sep-16 10:58:13	Close
05434250	25025992	SPX50	Open Chart Tat	2120 6					210.83	161.5	-31.39	Click on "C	lose" to close 🍃	Close
05434250	24948889	SPX50	Open Chart Wir				Total	unrealized P/L	137.72	105.5	-35.15	individual p		Close
05434250	28092818	SPX50	Open DOM Win Edit Instrument	2210.0			for all	positions	19.32		-1.12	market pric	:e :20	Close
									290.94		-123.2			

If you have enabled the <u>simulated account</u>, you can add positions manually by clicking the **Add Position** (Plus Icon) button on the top right corner of the panel. This is a useful feature if you would like to track positions that are managed outside of the broker or data service that you are using. The following diagram shows the **Add Position** dialog. It has the following fields:

- 1. Instrument select the symbol for the instrument
- 2. **Opened Date** This is when the position was originally opened
- 3. Quantity Number of shares, contracts etc
- 4. **Avg Price** Average entry price for the position
- 5. **Commission** Optionally enter a commission to track fees.

Add Position Dialog						
+	+ Add Position ×					
Use this dialog to a Choose an sition to the <b>Simulated</b> Account. This feat Instrument I to monitor existing positions that you hav mean excernal broker.						
Instrument:	GOOGL 🗸					
Opened Date:	2017-02-06 17:14					
Quantity:	10 \$ ≡-					
Avg Price:	821.62 CEnter quantity					
Commission:	0.00 0.					
	OK Cancel					

For some brokers (such as FXCM) they provide a bit more information on position such as the recently closed positions. Specifically for FXCM hedging accounts, a summary tab is included to roll up individual position totals.

#### **Open Positions**

Positi	nt Open ions • • • • • • • • • • • • • • • • • • •	+ sed Positions	Positio	ly Closed					av	ailable will dep	columns and op oend on the bro for your works	oker(s) that		+ 3 2
Account	Ticket Symbol	Quantity	Entry Price	Stop/Trail	Stop P/L	Limit	Limit P/L	Unrizd P&	L	Pips Roll	Last Price	Open Tim	e	Close 🔺 🕈
Simulated	SIM-2 Summary of Po	sitions K	128.382					-746	6.64	-839.6	0.000	25-Jan-16 10:	41:44	Close
Simulated	SIM-7 (if multiple per		2276.8					20	0.00	20.0	0.0	Feb-02 13:	29:32	Close
05434250	28103 instrument is a	allowed)	1.31085			-		-65	5.60	-65.8	0.00000	0:	10:11	Close
05434250	24732295 USD/CAD	10K	1.28506					320	).73	321.7 7.30	0.00000	04-Jul-16 15:	55:29	Close
05434250	25025990 SPX500	1	2129.6	_				219	9.60	167.2 31.62	0.0	13-Sep-16 10:	58:13	Close
05434250	25025991 SPX500	1	2129.6		Double click on th	nese cells	1	219	9.60	167.2 31.62	0.0	13-Sep-16 10:	58:13	Close
05434250	25025992 SPX500	1	2129.6		to add stop and/or limit			219	9.60	167.2 31.62	0.0	13-Sep-16 10:	58:13	Close
05434250	24948889 SPX500	1	2185.6		orders to these po	ositions			6.05 0.38	-124.3	0.0	23-Aug-16 22:	42:58	Close

#### **Summary Positions**

1 Positions ×	< 🎐 Trades (72)	+													+ 2	к"
Open Positions (10) Summary Closed Positions (1)																
Account	Symbol	Sell P/L	Sell Pips	Sell Amt	Avg Sell	Close Buy	Close Sell	Avg Buy	Buy Amt	Buy P/L	Buy Pips	P/L	Pips	Roll	Close ▲	+
Simulated	EUR/JPY	0			0.000	0.000	120.023	128.382	10K	-743.50	-835.9	-743.50	-835.9	0.00	Close	
Simulated	SPX500	0			0.0	0.0	2297.3	2276.8	1	20.50	20.5	20.50	20.5	0.00	Close	
05434250	USD/CAD	-57.24	-66.8	-10K	1.31085	1.31659	1.31640	1.28506	10K	312.51	313.4	255.27	256.0	7.30	Close	
05434250	SPX500	0			0.0	0.0	2297.3	2189.9	6	845.82	107.4	845.82	107.4	-131.59	Close	
	If multiple positions per instruments are allowed, this tab will roll them up into a single summary row for each instrument				gle											
		-57 34								434 81		377 47		-124.3		_



1 Positions ×	🍤 Trades (72)	+									+ 0 *
Open Positions (1	10) Summary	Closed Positions (1)									
Account	Ticket	Symbol	Quantity	Open Price	Close Price	P/L	Pips	Open Time	Close Time	Roll	Commission 🔺 🕈
05434250	2810312	8 AUD/USD	10K	0.76546	0.76431	-15.05	-11.5	Feb-06 18:03:32	Feb-06 19:04:30		0
						$\wedge$					
						Realiz	ed P/L				
							,-				
						-15.05				0.0	

#### 4.1.4 Trades Panel

The Trades panel displays historical trades (ie filled orders). Columns displayed on this page will vary depending on the broker chosen for the workspace. Some brokers only report a limited number of historical trades. For this reason, you should rely on the account management tools provided by your broker to ensure accurate reporting of historical trades.

	Trades Panel									
1 Positions	🍤 Trades (	72) × +							🔀 👜	رة 10 <sup>1</sup>
Account	Ticket	Order ID	Symbol	Time	Action	Quantity	Avg Price	P/L	Commission ▲	+
Simulated	SIM-12	SIM-13	USD/CAD	16-Jun-16 9	:11:02 SLD	30K	1.30305	-328.38	0	
Simulated	SIM-7	SIM-11	USD/CAD	15-Jun-16 11	:28:27 SLD	20K	1.28998	-0.15	0	
Simulated	SIM-12	SIM-11	USD/CAP	15-Jun-16 11	28:27 SLD	10K	1.28998	-208.67	0	
Simulated	SIM-7	SIM-8	USD/CAL Columns dis	played here will	21:26 SLD	10K	1.29099	7.75	0	
Simulated	SIM-4	SIM-7	000/0/4	ing on the broker	24:56 SLD	10K	1.32151	-235.75	0	
Simulated	SIM-4	SIM-6	USD/CAL chosen for th	ne workspace.	41:03 BOT	10K	1.32447	-54.58	0	
Simulated	SIM-4	SIM-5	USD/CAD	08-Mar-16 14	1:41:48 SLD	10K	1.33993	-323.95	0	
Simulated	SIM-2	SIM-3	EUR/JPY	02-Feb-16 14	1:43:05 SLD	10K	131.121	227.95	0	
Simulated	SIM-2	SIM-1	EUR/JPY	25-Jan-16 10	):41:44 BOT	10K	128.382	227.95	0	
05434250	28103125	70419088	USD/CAD	Feb-07 (	):10:11 SLD	10K	1.31085	-50.75	0	

# 4.2 Simulated Account

For convenience, MotiveWave<sup>™</sup> has a built in simulated account that you can use to practice your trading. If you chose a data service for your workspace, then this account will be enabled by default. If you are using a broker, it is recommended that you use a demo account if provided by your broker instead. Broker demo accounts will provide a better simulation of their trading environment and supported order types and behaviors.

The simulated account can be configured from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). Click on the **General** tab then on the **Simulated Account** tab. This panel has the following fields:

- 1. Enabled Check this box to enable or disable this account
- 2. Base Currency Base currency for the account
- 3. Case Balance Initial Cash Balance
- 4. **Fill Immediate** If checked market orders will be filled immediately at the current bid/ask value instead of waiting for the next trade
- 5. Include Commission If checked, commissions will be included when placing trades.
- 6. **Reset Account** Click this button to reset the account back to the initial cash balance.

Simulated Account Preferences	
C Preferences	×
General Theme Chart Tool Bar Sounds Ratios Elliott Wave Gartley Tick Charts Orders Alerts Ema	
neral Keyboard Mouse Fonts Quick Search Ticker Tape Linking Dock Trading Hours Simulated Account	nt 💌
The Simulated Account is that locally tracks orders, positions and trades against a virtual 'account information is transmitted to your broker. Enabled: Check this box to enable this account information is transmitted to your broker. Enabled: 99640.41 Fill Immediate Include Commission Reset Account	unt".
OK Apply Cancel	

If you have the simulated account enabled, you will see an entry in the Accounts panel for this account. The account id will be 'Simulated'.

	Simulated Account							
🧕 Αссоι	unts (1) 🗙 占	F					2	К.
Default	Account	Currency	Balance	Unrealized PL	Session PL	Total PL 🔺		+
Y	Simulated	USD	100,000.00					
	$\wedge$							
	Simulate	d Account						
L								

### 4.3 Commissions

Commissions can be calculated by MotiveWave<sup>™</sup> using the simulated account, in replay mode or as part of Strategy Back Testing. If you would like to include commissions, these can be configured from the Commissions dialog (Configure -> Commissions from the Console menu bar).

- 1. **Base Cost** This is the base cost of a trade. Some brokers offer flat rates for commissions. If this is the case, just enter the cost here.
- 2. Unit Cost Some brokers charge based on the number of units (ie quantity) that are part of an order (ie shares, contracts etc).
- 3. Unit Size If a unit cost has been specified this is the lot size.

Commissions Dialog					
0	Commissions	×			
The following tabs allow you to set the default commission structures for each type of instrument.					
Stock Cash	h (Forex)				
	Base cost for a trade				
Base Cost:	0.00 \$				
Unit Cost:	0.00 🗢 Use these fields to define a				
Unit Size:	1 🗢 cost per number of units				
	traded. Ignore if your broke	r			
	Update Can has a flat rate per trade				

The above dialog enables you to define a commission structure that applies to each type of instrument. Some instruments may have their own specific commission structure. If this is the case, you can override this from the **Instrument** dialog (right click on the chart and choose *Edit Instrument*, click on the **Commissions** tab).

Instrument Commissions	Instrument Commissions					
Edit Instrument - AAPL	×					
Modify the fields below and press <b>OK</b> to save your changes.						
General Commissions Advanced						
Base Cost: 0.00 🗢						
Unit Cost: 0.00 🗢						
Unit Size: 1 🌲						
Use Default Commission						
Uncheck this to override the default commission structure						
OK Order Presets Delete Ca	ncel					

### 4.4 Order Presets

Order presets are convenient for defining default order attributes. Defaults can be defined generically by the type of instrument or specific to an instrument. General order presets can be accessed by choosing *Configure -> Order Presets* from the Console menu bar.

This dialog has a tab for each type of instrument. Each panel will have the following fields:

- 1. **Order Type** Default type of order to be placed
- 2. **Time In Force** Defines the expiration time of the order. Available types will depend on the broker.
- 3. **Trigger OTH** If checked, the order can be triggered outside of regular trading hours
- 4. Offset Default offset (in pips) from the current price when placing an order
- 5. Limit Offset Default offset (in pips) from the current price when placing a limit order
- 6. Stop Offset Default offset (in pips) from the current price when placing a stop order
- 7. **Trail Offset** Default offset (in pips) from the current price when placing a trail order
- 8. Default Quantity Default quantity when creating a new order
- 9. Increment Increment (or decrement) size when adjusting the order quantity
- 10. **Preset Quantities** The quantities in the list box will be available from a drop down menu next to each quantity field. These values are also available from Quantity Selector in the DOM.

General Order Presets Dialog	
C General Order Presets	Х
The following tabs allow you to set the default values when placing a new order per type of instrument. Order presets can be tailored for a specific instrument by right clicking on the instrument and from the popup menu click: Edit -> Order Presets.         Stock       Index       Cash (Forex)         Settings       A tab will exist for each type of instrument by your broker(s) or data service(s)	r
Order Type:       LMT       Offset:       10 \$ (Ticks)         Time In Force:       DAY       Limit Offset:       10 \$ (Ticks)         Stop Offset:       10 \$ (Ticks)         Default order quantity       Trail Offset:       10 \$ (Ticks)         Order Sizes       0	
Default Quantity: 100 Add Remove Reset Increment: 10 Increment for adjusting the order quantity Increment f	
Update Cancel	

If you would like to change the order presets for a specific instrument, edit the instrument (right click on a chart and choose *Edit Instrument*) and click on the **Order Presets** button at the bottom of the dialog.

	Edit Instrument Dialog					
1	Edit Instrument - AAPL	×				
Modify the fields below	Modify the fields below and press <b>OK</b> to save your changes.					
General Commission	General Commissions Advanced					
Туре:	Stock -					
Symbol:	AAPL					
Historical Instrument:	-Choose Symbol-					
Symbol Display:	AAPL					
Title:	Apple Inc					
Exchange:	NASDAQ - +					
Description:	Apple Inc Click here to adjust the Order Presets for this instrument OK Order Presets Delete Cancel					

	Order Presets - Instrument				
/ C	Order Presets: Apple Inc X				
This form sets the default values when placing a new order for this instrument. These values override the values that are set in <i>General Order Presets</i> (from the top menu: <i>Configure -&gt; Order</i> <i>Presets</i> ). Settings					
Jettings					
Order Type: LMT 👻	Offset: 10 🗢 (Ticks)				
Time In Force: DAY -	Limit Offset: 10 🜲 (Ticks)				
DAT •	Stop Offset: 10 🜩 (Ticks)				
	Trail Offset: 10 🜩 (Ticks)				
Order Sizes					
Default Quantity:   10 ♀   I     Add   Remove   Reset	ncrement: 10 🜩				
10					
20					
30					
50					
100					
150					
200					
	Update Cancel				

## 4.5 Chart Trading

Perhaps the most convenient way to create orders in MotiveWave<sup>™</sup> is by using the tools available from a chart. There are several ways to do this:

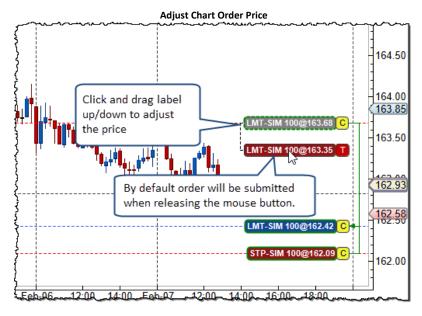
- 1. Price Axis Trades can be placed directly from the price axis
- 2. Buy/Sell buttons The Buy/Sell button labels can be optionally added to a chart
- 3. Context Menu Use the trade items available in the context menu of the chart (right click)
- 4. Trade Panel Use the trade panel that may be displayed on the right hand side of the chart
- 5. DOM Panel The Depth of Market panel can be displayed on the right hand side
- 6. **Strategies** As explained in the section: <u>Strategies</u>

### 4.5.1 Chart Orders

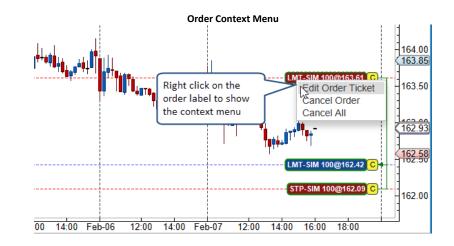
Active and filled orders may be displayed and adjusted directly on the chart. Click on the **Show Orders** button on the tool bar to toggle the display of orders on the chart.



The price of an order can be adjusted by clicking and dragging the order label up or down. By default the order will automatically be submitted with the modified price. This default can be changed in the **Preferences** dialog (see **Order Preferences** section). If "**Auto Submit Modified Orders**" is turned off, then you will need to press the 'T' button to transmit the modified order to the broker.

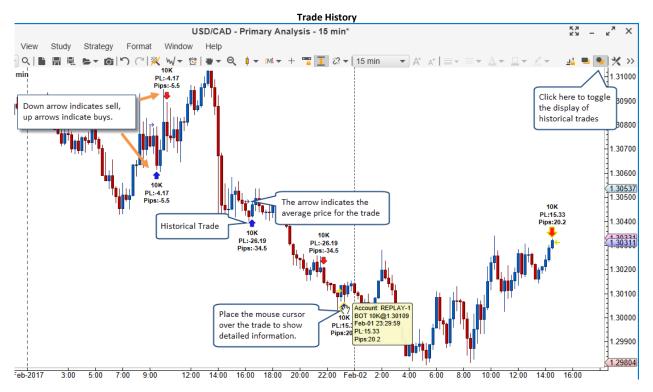


Double click on the order label to display the **Order Ticket** dialog. A context menu can also be accessed by right clicking on the order label.



### 4.5.2 Trade History

Historical trades can be displayed directly on the chart by clicking the **Show Trades** button on the tool bar. Detailed information on each trade can be displayed by placing the mouse cursor over one of the trade arrows.



## 4.5.3 Price Axis Trading

Orders can be created directly from the price axis by simply clicking where you want to place a limit order. If you move the mouse over the price axis, you will notice that the mouse cursor will change to a blue/red target (depending if you are above or below the current price). You will also notice that there is a label that shows the price.



Press the left mouse button once to create a limit order at that price using the default quantity for the **Instrument** (see Order Presets). **Note:** place the cursor above the current price to create a **Limit Sell** order, and below to place a **Limit Buy** order.

By default, this order will just be created (not submitted to the broker). You can optionally modify this order and click the 'T' (transmit) button to submit the order to the broker.



#### 4.5.3.1 Price Axis Order Types

You can place different types of orders from the price axis by holding down on the following keys while clicking the left mouse button. The quantity for all of these orders will be the default quantity assigned to the instrument.

1. No Key – Limit Order, the limit price will be the value at the current mouse location

-{

- a. Limit Buy cursor is below the current price
- b. Limit Sell cursor is above the current price
- 2. Ctrl Key Stop Order, the stop price will be the value at the current mouse location
  - a. Stop Buy cursor is above the current price

<del>. (</del>

b.

- STP Stop Sell cursor is below the current price
- 3. Shift Key Market Order, sell or buy at the current market price (best bid/best ask)
  - a. Mr Buy Market cursor is below the current price.
  - b. Sell Market cursor is above the current price
- 4. **Ctrl + Shift Key** Limit Order + Attached Limit & Stop orders. A limit order will be placed with the limit price equal to the current mouse location. A limit and stop loss order will be attached to the limit (parent) order.
  - <del>. [}</del>

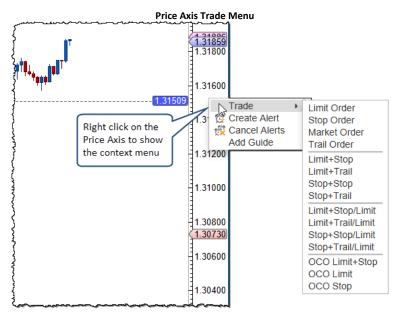
```
- 🧃
```

b. 🖛 🗉 Sell Limit + Buy Stop/Limit

The mouse cursor will change depending on which modifier key you are pressing when moving the cursor over the price axis.

#### 4.5.3.2 Price Axis Context Menu

The context menu (right click on the price axis) also has a menu for creating orders (see diagram below).



#### 4.5.4 Buy/Sell Buttons

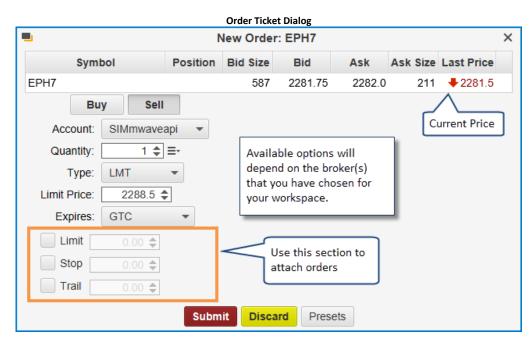
For convenience, buy and sell buttons can be added to the chart. These buttons are available as <u>Chart</u> <u>Labels</u>. Double click on the chart (or right click and choose *Chart Settings*) to open the **Chart Settings** dialog. You will find the **Buy Button** and **Sell Button** labels under the **Label** tab.

Enable Buy/Sell Buttons						
Chart Settings	×					
General Scaling Bar Settings Theme Display Labels Watermark Trade Elliott Wave						
Centeral Scaling bal settings memory balay tables watermark made Endot wave						
OK Save Defaults Cancel						

If you would like to create a buy or sell order, click on the Buy or Sell buttons that are directly on the chart. This will open an **Order Ticket** dialog that you may use to create your order.

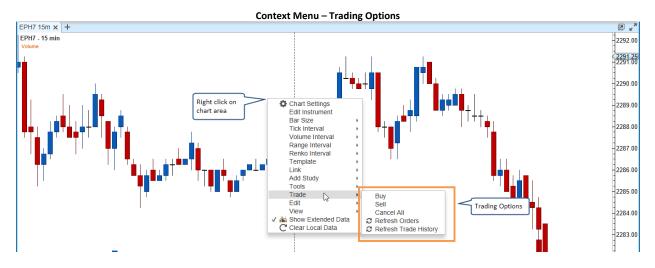


The **Order Ticket** dialog may look different depending on the broker you are using. The following dialog is from a workspace configured for CQG:



#### 4.5.5 Context Menu

The context menu (right click on the chart area) has options for placing orders and adjusting trading settings.



#### 4.5.6 Trade Panel

The trade panel is a convenient tool for managing orders and positions from the chart. This panel can be displayed by choosing *View -> Display -> Trade Panel* from the top menu bar (or press Alt + T). There is also a button available on the tool bar that toggles the display of this panel.

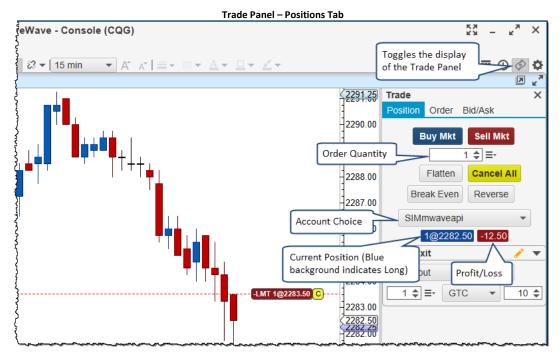
The Trade Panel has three tabs that provide different trading options.

#### 4.5.6.1 Position Tab

The Position tab may be used to manage your current position for the chart instrument. It has the following elements:

- 1. Buy Market Button Creates a market order to buy the given quantity at the market price
- 2. Sell Market Button Creates a market order to sell the given quantity at the market price

- 3. **Quantity** This is the quantity for the market orders. It will default the value in order presets
- 4. **Flatten Button** If you currently have an open position, this button will close the position at market price
- 5. Cancel All If you have open orders for the chart instrument, this will cancel these orders
- 6. Break Even Creates an exit order at the break even price.
- 7. **Reverse Button** If you have an open position this will close that position and open a position in the opposite direction. For example, if you were currently long 10K, this would close the long position and open a short position for 10K
- 8. Account Choice Enables you to choose the account for the orders
- 9. **Position Label** Displays the current position (N/A for no position). If the label background is blue, then the position is long. Short positions will have a red background as well as a negative number for the quantity.
- 10. **P/L Label** Displays the current unrealized profit/loss for the open position. A loss will be displayed with a red background (and a negative sign). A profit will be displayed with a blue background. If there is no open position, this label will display N/A.

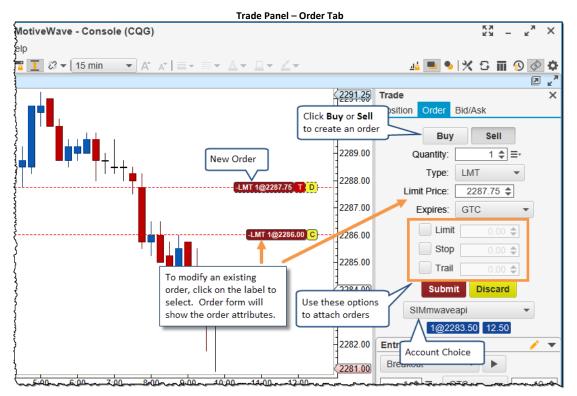


#### 4.5.6.2 Order Tab

The **Order** tab is used to create or modify existing orders. New orders can be created by clicking on the Buy or Sell buttons. An existing order can be modified by selecting it on the chart (left click on the label).

- 1. **Buy Button** Indicates if the order is a buy or sell. If no order is selected on the chart, you may click on this button to create a buy order.
- 2. **Sell Button** Indicates if the order is a buy or sell. If no order is selected on the chart, you may click on this button to create a sell order.
- 3. **Quantity** quantity for the selected order. This will default to the order preset if it is a new order.
- 4. **Order Type** list of available order types (broker dependent). The selected choice will influence the visible fields below (ie limit price, stop price etc).

- 5. Limit/Stop Price Depending on the type of order these fields may be visible underneath the Order Type field.
- 6. **Time In Force** effective time for the order. Day orders will expire at the end of the day. GTC orders last until they are cancelled (Good Till Cancelled). The options available in this field will vary depending on the broker.
- 7. Limit Use this option to attach a limit (profit) order. This order will be activated when the primary order is filled
- 8. **Stop** Use this option to attach a stop order. This order will be activated when the primary order is filled and will be an OCO (one cancels other) order with the limit order above.
- 9. Trail Use this option to attach a trailing stop order (instead of the stop order above).
- 10. **Submit/Modify Button** Click this button to submit the order to the broker. This button will have a red background for sell orders and a blue background for buy orders
- 11. Discard/Cancel Discards (for new orders) or cancels the order
- 12. Account Choice Account for the order. For new orders, this will default to the Primary account (set in the Accounts panel).



### 4.5.6.3 Bid/Ask Tab

The Bid/Ask tab shows a Buy/Sell box (with best bid and best ask prices). This tab is convenient for placing buy and sell orders at market and monitoring the spread between the bid/ask prices. You can double click on either the Sell or Buy boxes to submit a market order.

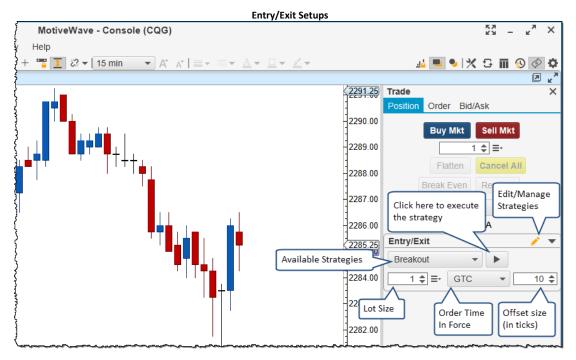


### 4.5.6.4 Entry/Exit Strategies

Entry/Exit strategies provide a convenient way to place combinations of orders in a single click. The entry/exit section can be found on the **Trade Panel** as well as the DOM (Depth of Market, hidden by default).

The following screen shot shows the Entry/Exit section of the Trade Panel. Strategies can be created, modified or removed by clicking on the edit button located in the top right corner of the section.

If you would like to execute a strategy, select it from the available strategies drop down and press the execute button. Parameters such as **Lot Size, Time In Force** and **Offset Size** can be adjusted in the fields below.



MotiveWave<sup>™</sup> comes with several built-in strategies that you use or modify to suit your needs:

- 1. **Breakout** Creates buy/sell stop OCO (one cancels other) orders above and below the current market price. This can be useful if you are expecting the price to shoot up or down in the near future and you want to get in on the trend.
- 2. Fade Creates limit OCO orders above and below the current market price.
- 3. **Brk Up/Fade Down** Creates a Buy Stop Order (above the current price) and a Buy Limit Order (below the current price) (OCO Orders) to enter the market long.
- 4. **Brk Dn/Fade Up** Creates a Sell Stop Order (below the current price) and a Sell Limit Order (below the current price) (OCO Orders) to enter the market short.
- 5. **Bracket Exit** Creates a limit order to exit a position and a stop order as a stop loss. Both of these orders are OCO orders.
- 6. Scale Out 2 Creates two limit exit orders and two stop loss orders to scale out of a position.
- 7. Scale Out 3 Creates three limit exit orders and three stop loss orders to scale out of a position.

Entry/Exit strategies can be managed by clicking on the edit button to show the dialog below.

Manage Entry/Exit Strategies Dialog							
Entry	/Exit Strategies	Х					
The list below contains the available Entry/Exit Strategies. These strategies make it easy to quickly setup entry and exit orders.							
Breakout							
Fade							
Brk Up/Fade Dn							
Brk Dn/Fade Up	k - K						
Bracket Exit							
Scale Out - 2							
Scale Out - 3	Select one of the						
	strategies to activate						
Click here to create	the buttons below.						
a new strategy							
New Edit Re	emove up down Close						

Click on the **New** button to create a new strategy or select an existing strategy and click on the **Edit** button. The **Entry/Exit Strategy** dialog will be displayed to allow you to configure Entry and/or Exit orders for this strategy. If it has both types of orders, the exit orders will be created when the entry orders are filled. The following fields apply to this dialog:

- 1. Name This is the name of the entry/exit strategy and will be displayed in the drop down
- 2. **Absolute Offset** By default the offset will be multiplied by the Offset Size in the Entry/Exit panel. If you specify an absolute offset the offset (ticks) will be used as is.
- 3. **Offset** This is the distance (in ticks) from the current price. If the absolute offset is not checked, this value will be multiplied by the offset size in the Entry/Exit panel.
- 4. Lots This is the number of trade lots that will be setup as the quantity for the order. This number will be multiplied by the Lot Size field in the Entry/Exit panel.

#### **Entry Orders**

MotiveWave™ User's Guide

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You can specify up to five entry orders for the strategy. Each entry may have one or two orders. If two orders are specified, then these orders will be submitted as an OCO (One Cancels Other) pair.

					ntry/Exit Strategy Dialog	×
-					Entry/Exit Strategy	
	erent offs	set va			entry and/or exit strategy. Relative (vs absolute) o ent. In this case the actual offset will be a multiple	
Name: Tra	ade Setu	ip 1				Absolute Offse
Entry Orde	rs Exit	Orde	ers			
	s an OC				y may consist of 1 or 2 orders. If two orders are sp s Other). The <b>Offset</b> and <b>Lots</b> fields are relative to	
C Entry 1	LMT	•	SELL	•	offset 1 💠 Lots 1 💠	
	LMT	*	BUY		offset Enabled	
Entry 2	LMT	*	SELL		Offset 1 Cots 1 Optionally seture orders for this st	
	LMT	-	BUY	*	Offset Enabled Each entry may	
Entry 3	LMT	-	SELL	*	offset 1   Lots 1  configured as O	
_ Linuy 5						
Linuy 5	LMT	*	BUY	*	Dffset1 🗢 Enabled	
Entry 3	LMT LMT	*	BUY SELL	•	offset1	
				* * *		
	LMT	•	SELL	* * *	offset 1 \$ Lots 1 \$	

#### Exit Orders

Similar to the entry orders, you can specify up to 5 exit orders. If this strategy has entry orders, then these orders will be created after the corresponding entry order has been filled. Each exit can have a limit (profit taking order) and a stop/trail order (stop loss order). These orders will be submitted as an OCO (One Cancels Other) pair. If **Auto Adjust Size** is checked, the lot size will be adjusted to match the currently open position.

2			Entry/Exit St	rategy	×
	erent offset val				s absolute) offsets may be used be a multipier of the <b>Offset</b> field
Name: Tra	ade Setup 1				Absolute Offset
Entry Orde	ers Exit Orde	rs			
specified, th			t consists of a Limit an OCO order (One Cano		Trail order. If two orders are
🗸 Exit 1	Limit	Offset	1 🖨 🗸 Enabled	Loto 1 着	Optionally setup exit orders for this strategy.
	STP •	Offset	1 🌲 📃 Enabled	Lots 1 🜲	Each exit may have up to two orders which will be
Exit 2	Limit	Offset	1 🜲 🗸 Enabled	Lots 1 🜲	configured as OCO orders.
	STP	Offset	1 🜲 📄 Enabled	LOIS	
Exit 3	Limit	Offset	1 🜲 🗸 Enabled	Lots 1 🜲	
	STP	Offset	1 🜲 📄 Enabled	LOIS	
Exit 4	Limit	Offset	1 🜲 🗸 Enabled	Loto 👘	
	STP -	Offset	1 🌲 📄 Enabled	Lots 1 🌲	
E an C	Limit	Offset	1 🜲 🗸 Enabled	Lots 1 🜲	
Exit 5					

### 4.5.7 Preferences

The behavior and appearance of orders can be modified from the **Preferences** dialog (*Configure -> Preferences* from the Console menu bar). Click on the **Orders** tab

- 1. Price Axis Trading Enables or disables the ability to trade from the price axis
- 2. Buy/Sell Box Trading Enables or disables the ability to trade from the Buy/Sell boxes
- 3. Use Pips for Attached Orders Indicates if pips vs price should be used when determining the offset from the parent order.
- 4. **Confirm Closing Positions** Displays a confirmation dialog when clicking on the close button for a position.
- 5. Auto Submit Modified Orders If this option is enabled, dragging an order on a chart will automatically submit the price change to the broker (instead of requiring an extra step to transmit the change by clicking on the 'T' button)
- 6. **Send Email on Filled Order** Sends an email to the configured email address when an order is filled. Note: you must configure your email settings (see Email tab)
- 7. **Send Email on Rejected Order** Sends an email to the configured email address when an order is rejected. Note: you must configure your email settings (see Email tab)
- 8. Show Client OCO Warning Display a warning when placing a client OCO order. Some brokers do not support server side OCO orders. In these cases MotiveWave<sup>™</sup> will simulate the OCO order on the client side.
- 9. Show Client Attach Warning Similar to the option above, MotiveWave<sup>™</sup> will display a warning to remind you that the attached order is a client order (not submitted to the server initially).
- 10. Create Order Mouse click to create (but not submit) an order
- 11. Show Order Ticket If checked, the Order Ticket dialog will be displayed when creating an order.
- 12. Auto Submit Mouse click to create and submit an order (double click by default)
- 13. **Price Axis Key Modifiers** This section may be used to customize what types of orders may be created from the price axis.
  - a. **Default (No Key)** defines the type of order created when the mouse is clicked with no modifier key
  - b. **Shift Key** defines the type of order created when the mouse is clicked while pressing the Shift Key
  - c. **Ctrl Key** defines the type of order created when the mouse is clicked while pressing the Ctrl Key
  - d. **Ctrl + Shift Key** defines the type of order created when the mouse is clicked while pressing the Ctrl and Shift Keys

					Orde	er Preferenc	es				
¢					P	references					×
General	Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders Aler	ts Email	
Submiss	ion Disp	olay									
Limit, stop	and mar	ket orde	rs can be c	reated (a	nd submi	itted) directly fr	om the pr	ice axis.			
						ou the opportur ically submittin			· (clicking the 'T er.	' button).	Auto
									+Shift) may be Alt key to plac		
Options	•										
V Price	Axis Tra	ding		VE	Buy/Sell E	Box Trading					
Conf	irm Closir	ng/Rever	sing Positio	ons 🗸 A	Auto Sub	mit Modified O	rders				
Send	I Email Oi	n Filled (	Order		Send Em	ail On Rejected	d Order				
V Shov	v Client O	CO War	ning	<b>V</b> \$	Show Clie	ent Attach War	ning				
Creat	e Order:	Single	Click -	Sho	ow Order	Ticket					
Auto	Submit:	Doubl	e Click	-							
Price A:	kis Key I	Modifie	rs								
Default (I	No Key):	Limit (	Order	•							
s	hift Key:	Marke	t Order	-	G	These fields m	av be	L			
	Ctrl Key:	Stop C	Order	-		used to change	e the				
Ctrl+S	hift Key:		Limit	•	ر م	orice axis beha	avior	J			
					ОК	Apply Ca	ncel				

The *Display* tab provides options for displaying orders on charts:

¢					Р	references						×
General	Theme	Chart	Tool Bar	Sounds	Ratios	Elliott Wave	Gartley	Tick Charts	Orders	Alerts	Email	
Submissi	on Disp	lay										
Use this di	Use this dialog to configure how orders are displayed on charts.											
Ord	ler Align:	Right	-									
		V She	ow Buttons ow Lines ow Filled O			Use these of change how displayed o	v orders a					
		V She	ow Filled Li	ines								
Filled Ord	ler Align:	Left	•									
					ОК	Apply Car	ncel					

# 4.6 Depth Of Market (DOM)

MotiveWave<sup>™</sup> provides a Depth of Market (DOM) feature that allows you to see bid and ask prices/sizes beyond the best bid and best ask provided this is supported and permissioned from your broker/data service. Depth of Market can be accessed as a panel on a chart, a panel in the console or from a separate DOM window (*File -> New -> New DOM Window* from the Console menu bar).

The following screen shot shows an example of a DOM window. Current position information can be found at the bottom of the window. The table area contains several different columns which are configurable from the Preferences dialog.

- 1. **P/L** Displays what the profit/loss would be for your open position at each price interval. Profit levels are displayed with a light blue background, losses show in pink.
- 2. **Orders** Shows active orders. Sell orders are in the left **Orders** column, buy orders are in the right **Orders** column. The example below shows a limit sell order for 1 contract on the right hand side. You can click and drag the label to adjust the limit price or cancel the order by clicking on the 'C'.
- 3. **Bid** shows the current bid sizes at each price level. For convenience a histogram is displayed in the background to show the size of the bid relative to the other prices.
- 4. **Price** This is the price ladder. It shows prices in increments of 1 tick. The last price has a dark blue background and shows the last traded size. Best bid and best ask prices have yellow and green backgrounds. Day high and day low have blue and red backgrounds.
- 5. **Ask** shows the current ask sizes at each price level. For convenience a histogram is displayed in the background to show the size of the offer relative to the other prices.
- 6. **Volume** Displays historical price action at each price level. This column will update as live trades are made.

		DOM Window				
D D	OM (1685	7688 - EPH7	')		-	$^{\kappa_{_{\mathbf{M}}}}$ $\times$
File Options Window	Help					
EPH7   Limit Order	•	1 ‡ ≡-	ſ	Re-center	>	i 🔒 🏟
1 2 3 5 10 15 20			L			<u>_</u>
P/L Orders	Bid	Price	Ask	Orders	Vo	lun +
Order Quantity		2291.50			Lock/L	Jnlock
Selector This co	lumn	2291.25			Tradin	g
	s active	229/00				
137.50 buy ord	lers	Day High				
125.00	L L	2290.50 1	346			412
112.50		2290.25 <mark>1</mark>	079			11.3K
100.00	_	2290.00 1	382			14.5K
87.50 Profit/Los	s	2289.75 1	374	-LMT1 C	;	17.2K
75.00 Ladder		2289.50 1	247			28.7K
62.50		2289.25 <mark>1</mark>	218	This column		26.4K
50.00		2289.00 1	162	displays act sell orders	tive	15.9K
37. Last trade price	and	2288.75 1	395	Self of delis		10.5K
25. quantity (curren		2288.50 1	146			17.9K
12 covering best of	fer)	1@2288.25 4	04			15.6K
	400	2288.00			_	18.1K
-12.50	1105	228 75		Volume		20.2K
-25.00	1334	2. Best Bio	ł	Histograr	n	15.3K
-37.50	1274	2207.20				7327
-50.00	1440	2287.00				6720
-62.50	1177	2286.75				8721
Account Choice	1181	2286.50	44.01	,		10.5K
Positio	11.1K n: 1@228	-611 8.00 P/L: N/	11.8k A Spread	-		
SIMmwaveapi - Flatt	en Cano	el All Reve	rse	Buy N	/ikt	Sell Mkt
?? ● ● ● ● ● ●					Feb-08	3 11:39:47

#### 4.6.1 Trading From the DOM

By default the DOM is locked, this prevents trades from being placed directly from the table. Click on the **Lock/Unlock** button on the tool bar to enable trading from the DOM table. Limit and stop orders can be placed by clicking on the Bid and Ask columns. You will notice the mouse cursor changes when you move it over the bid and ask columns:

- Buy Limit This cursor will display over the Bid column and below the current best bid price. A limit order will be placed with the given quantity when a row is clicked with the left mouse button.
- Buy Stop This cursor will display over the Bid column and above the current best ask price. A stop order will be placed with the given quantity when a row is clicked with the left mouse button.

- This cursor will display over the **Ask** column and above the current best ask 3. Sell Limit price. A limit order will be placed with the given quantity when a row is clicked with the left mouse button.
- <sup>2</sup> srP This cursor will display over the **Ask** column and below the current best bid price. 4. Sell Stop A stop order will be placed with the given quantity when a row is clicked with the left mouse button.

	DOM Orders		
DC DC	OM (16857688 - EPH	7)	<sup>_</sup> ×
File     Options     Window       EPH7 <ul> <li>Limit Order</li> <li>1</li> <li>2</li> <li>3</li> <li>5</li> <li>10</li> <li>15</li> <li>20</li> <li>P/L</li> <li>Orders</li> <li>Orders</li> </ul>	Help	Preset Quantities can also be accessed from here Ask Orders	
Quantity Selector	2289.75	-LMT 1	the DOM is
75.00	2289.50		unlocked
62.50	2289.25		26.4K
50.00	2289.00		15.9K
37.50	2288.75	1150	10.5K
25.00	2288.50	1061	17.9K
12.50	2288.25	1145	16.4K
	2288.00	1084	26.2K
-12.50	2287.75	1193	24.0K
-25.00	2287.50	1093	17.4K
Mouse cursor changes to	2287.25	1020	11.5K
show what type of order	2287.00	1020	15.7K
will be placed. Left click with mouse button to	2286.75	960	15.2K
create and submit order.	1@2286.50	<mark>31</mark> 8	12.1K
-87.50	813 2286.25		7051
-100.00	2286.00		11.0K
Position:	10.6K 534 1@2288.00 P/L: -76	10.0K 5.00 Spread: 0.25	44.417
SIMmwaveapi 🝷 Flatte	n Cancel All Reve	erse Buy	Mkt Sell Mkt
奈 않 🔵 🖉 🖉 💆 👘			Feb-08 11:55:18

#### **Order Combinations**

Other types of order combinations can be created by choosing a different option from the order type drop down on the tool bar. The following example shows the Limit + Stop/Limit option. A limit order will be placed and a stop/limit order will be appended as a bracket order.

		DOM Order Ty	/pes		
III	$-\kappa_{_{M}} \times$				
File Options	s Window Help				
EPH7 💌	Limit Order 🔹 👻	1 ‡ ≡-			👾 🔒 🌣
1 2 3 5	Limit Order				
P/L	Stop Order	Price	Ask	Orders	Volume +
87.50	Trail Order	2289.75		-LMT1 C	17.2K
75.00	Limit+Stop	2289.50	1068		28.7K
62.50	Limit+Trail	2289.25	1154		26.4K
50.00	Stop+Stop	2289.00	1307		15.9K
37.50	Stop+Trail	2288.75	1119		10.5K
25.00	Limit+Stop/Limit	2288.50	1102		17.9K
12.50	Limit+Trail/Liffit	2288.25	1135		16.4K
	Stop+Stop/Limit	2288.00	1120		26.2K
-12.50		2287.75	1131		24.0K

In the example below, the **Limit + Stop/Limit** option has chosen. The cursor will display LMT SL when hovering over the **Bid/Ask** columns. One left mouse click will create a limit order at that price and attach a stop and limit order above and below the current price.

		Placing a	Limit + Sto	op/Limit Or	der			_
III		DOM (1685	57688 - E	PH7)			- <sup>к</sup> л	×
File Opti	ions Window	Help						
EPH7	▼ Limit+Stop/	Limit 👻	1 🜲	<b>-</b> *			) 🛉 i 🛉	¢
1 2 3 5	5 10 15 20	$^{\circ}\Lambda$		1				
P/L	Limit + Stor	o/Limit	Price	Ask	0	rders	Volume	+
25.00	type chose		2288	.50 1182	-LM1	[1 C	17.9K	
12.50			2288	.25 1108			16.4K	
			1@2288	.00 699			26.3K	
-12.50		369	2287				25.1K	
-25.00		1246	2287	.50			18.2K	
-37.50		1135	2287	.25			13.2K	
-50.00		989	2287	.00			17.3K	
-62.50		992	2286	.75			19.6K	
-75.00		951	2286	.50			14.1K	ſ
-87.50		1120	2286				7135	I
-100.00	+LMT1 C	<mark>€</mark> 13€	2286	A limit + ap and limit o			11.0K	
-112.50	-	CMT SL C47	2285	created wh			11.4K	
-125.00		1068	2285				9581	
-137.50			2285	.25			8154	
-150.00			2285	.00			17.4K	
-162.50			2284	.75			16.5K	
-175.00			2284	.50			19.1K	
-187.50			2284	.25			21.5K	
-200.00			2284	.00			21.5K	
-212.50			2283	.75			33.4K	
-225.00			2283	.50	-STP	1 C	33.7K	
-237.50		40.014	2283				21.0K	
	Position	10.2K n: 1@2288	-11 .00 P/L:		1.3K pread: 0.2	25		
SIMmwave				Reverse		Buy Mk	t Sell Mk	ct
🛜 % 🔴 🌒						Fe	b-08 12:01:	15

#### Adjusting Orders

The price of a stop or limit order can be adjusted by dragging the order label up or down. The order ticket dialog can be displayed by double clicking on the order label. From this dialog you can change other attribute such as the **Time In Force** or the order quantity. An order may be cancelled by clicking on the 'C' button to the right of the order label.

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Adjustir	g Orders fr	om the DOM	~~ <b>~</b> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
112.50		2290.25 1237				11.3K
100.00		2290.0	00 1391			14.5K
87.50	Double clic	k on an	172			17.2K
75.00		order label to see the 115				28.7K
62.50	Order Ticke	et dialog.	239	_		26.4K
50.00		2289.0	<del>JU 1</del> 344	Clic	k 'C' to Ca	ncel
37.50		2288.7	75 264		$\overline{}$	10.6K
25.00	706	2@2288.5	50	-L₩ <del>‡</del> 91	С	19.3K
12.50	1065	2288.2	25			17.4K
	880	2288.	Click and dra	e the		28.2K
-12.50	1060	2287.	order label u			26.6K
-25.00	1054	2287.	to adjust the	price.		18.4K
-37.50	1042	2287.2	25			13.2K
-50.00	996	2287.0	00			17.3K
	and and the second		25,	-		, <u>عما</u> م عد

### 4.6.2 Position Panel

The panel at the bottom of the DOM displays information on your current position and provides management options. It has the following elements:

- 1. **Position** Current open position. This is displayed as quantity@average entry price. A blue background indicates a long position (red for short)
- 2. **P/L** Current profit/loss. Blue background for profit, red for loss.
- 3. Spread Difference between the bid and ask price
- 4. Account account to use for placing orders
- 5. Flatten Button Closes the open position at market price
- 6. Cancel All Button Cancels all active orders for this instrument
- 7. Reverse Button Reverses the currently open position at market price
- 8. Buy Mkt Button Buys at market price using the quantity at the top of the DOM
- 9. Sell Mkt Button Buys at market price using the quantity at the top of the DOM

p-^^~	Position Panel	~~ <u>~</u> ~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
-75.00	055 2286.50		14.1K
-87.50	Current open position 6.2 Current unrealized		7135
Account for	for selected account 6.0 profit/loss		11.0K
placing orders	10.4K -484 10.9K		
	Position: 1@2288.00 P/L: 12.50 Spread: 0.25		
SIMmwaveapi	Flatten     Cancel All     Reverse	uy Mkt	Sell Mkt
🤶 🕉 ● ● ● 🤅	0.00	Feb-	08 12:07:22

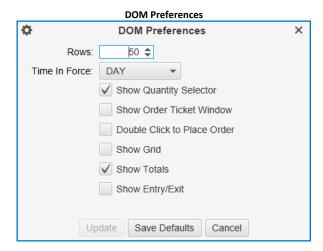
### 4.6.3 Centering

In an active market, bid and ask prices may change quite rapidly. In some cases these values may appear above or below the current price ladder. The price ladder will automatically center itself in 5 second intervals, but you can manually re-center the DOM prices by clicking on the **Re-Center** button.

#### 4.6.4 Preferences

DOM preference can be adjusted by choosing *Options -> DOM Preferences* from the top menu bar. Alternatively, click on the **Preferences** button on the tool bar. This dialog has the following fields:

- 1. Rows number of rows to display in the DOM table
- 2. Time In Force expiration for orders placed through the DOM
- 3. Show Quantity Selector toggles the display of the bar that allows you to quickly choose a preset quantity
- 4. **Show Order Ticket Window** if enabled the order ticket dialog will be displayed when creating an order from the DOM
- 5. **Double Click to Place Order** if enabled a double click (instead of a single left click) will be required to create an order from the DOM
- 6. Show Grid shows the outline around each cell in the DOM table
- 7. Show Totals displays the totals bar at the bottom of the table
- 8. Show Entry/Exit toggles the display of the Entry/Exit strategies panel at the bottom of the DOM



The columns displayed in the DOM table can be chosen from the plus button on the right hand side of the column header:

			Display	Columns			
III		DOM (168	- <sup>2</sup> 2 3	×			
File Opti	ons Winde	ow Help					
EPH7	▼ Limit+Ste	op/Limit 💌	1 ‡ ≡•			) 🛉 📔	¢
1 2 3 5	5 10 15	20					
P/L	Orders	Bid	Price	Ask	Orders	Volume	1
75.00			2289.50	1162		28.7K	
62.50			2289.25	1062		26.7K	✓ Orders ✓ Bid
50.00			2289.00	1142		21.4K	V Diu V Price
37.50			2288.75	1066		29.0K	
25.00			2288.50	1128	-LMT1 C	33.2K	✓ Orders ✓ Volume
12.50			2288.25	1167		28.7K	v volume

# 4.7 Option Chains

Groups of options (Stock and Future Options) can be managed from the Option Chain panel in the Console. If your broker supports options, you will see an "**Options**" page at the bottom of the Console window.

An option chain panel enables you to see the available options organized by strike price for a given expiry date. In the example below we are showing available options for AAPL that expire on Feb 24, 2017. By default 20 options (configurable) are displayed that are nearest the money. For convenience, a black divider line shows where the current price is trading for the underlying symbols.

Buy and sell orders can be placed directly from the option table by clicking on the Buy/Sell buttons that are next to each Put/Call pair. Current positions and profit/loss are also visible on the table for each option.

								Op	otion Chain	I									
S MotiveWave - Console (tradier)													K 7	- r <sub>u</sub>	×				
File Viev	w Cor	nfigur	میں اور میں میں اور میں اور میں اور میں	Sume la sel															
AAPL Feb-24 17 x + Underlying Symbol								⇒ ÷∳ +‡	• <b>←</b> →	<b>ж</b> қ									
Underlying	AAPL		<u>ि</u> ९ ः	Search	eb-24 17		Av	ailable Expir	y Dates										
Sy	mbol		Position	Bid Size	Bid	Ask	Ask Size	Last Price											
APL				9	131.65	131.6	6 8	131.66	Underly	ing Price									
Position	P/L	O	rders	Bid Size	Bid	Ask	Ask Size	Last Price	Strike Price	Last Price	Bid Size	Bid	Ask	Ask S	Ord	ers	P/L	Pos	sitior
1@0.10		Buy	Sell	277	0.10	0.11	234	0.10	138.00		83	6.90	7.20	661	Buy	Sell			
_		Buy	Sell	336	0.14	0.15	215	0.15	137.00		112	5.95	6.20	812	Buy	Sell			
		Buy	Sell	219	0.21	0.22	261	0.20	136.00	5.10	1,030	5.00	5.20	650	+1@4.90	C			
		Buy	Sell	515	0.31	0.32	150	0.31	135.00	4.37	1,039	4.10	4.25	169	Juy	Sell			
		Buy	Sell	146	0.48	0.48	142	0.47	134.00	3.70	534	3.30	3.40	472	Buy	Sell			
		Buy	Sell	117	0.72	0.74	90	0.72	133.00	2.64	31	2.59	2.62	36	Buy	Sell			
		Buy	Sell	120	1.07	1.10	186	1.08	132.00	1.98	99	1.93	1.95	66	Buy	Sell			
		Buy	Sell	86	1.54	1.56	82	1.52	131.00	1.43	118	1 40	1 42	68	Buy	Se			
		Buy	Sell	66	2.12	2.15	50	2.14	130.00	1.06	101	Active	e Orders	179	Buy	"At The	Money"	Line	
		Buy	Sell	84	2.82	2.86	46	2.75	129.00	0.69	120	0.68	0.70	143	Buy				
		Buy	Sell	985	3.65	3.75	33	3.57	128.00	0.50	343	0.47	0.48	133	Buy	Sell			
		Buy	Sell	1,196	4.50	4.75	547	4.51	127.00			0.33	0.34	153		Sell			
-1@5.40	-35.00	Buy	Sell	673	5.50	5.75	154	5.58	126.00			0.24	0.25	194		Sell			
		Buy	Sell	1,151	6.50	6.75	647	6.54	125.00			0.19	0.20		+1@0.30				
		Buy	Sell	1.038	7.55	7.75	673	7.60	124.00			0.15	0.16	225		Sell			
		Buy		Click on the Options Pag		Target Ac		Order Quan				0.13	0.14	227	Buy	Sell			
_		Buy	Sell		9.00	9.75	561	9.60	122.00			0.12	0.13	937	Buy	Sell			
Buy Call M	ikt Sell	I Call Mi	kt Buy P	ut Mkt	Put Mkt	simulate	d 🔻	1 ‡ ≡-	DAY 🔻		r Time						Flatten	Cance	el All
III Home	Lill Cha	irts 🤰	Account	ඟ Optio	ns 🗙 <u> 8</u> S	Scan 🕴	Optimize	+		In Fo	ce								ù ≮
🗟 i? S 🗕	$ullet$ $\odot$ $ullet$	•															Fet	o-08 13:	27:1

### 4.7.1 Placing and Managing Orders

The easiest way to place a limit or stop order is to click on the Buy or Sell button next to the call or put option that you would like to trade. When you click on this button an **Order Ticket** dialog will appear that will enable you to adjust the order. Defaults such as Account, Quantity and Time In Force can be set at the bottom of the panel.

File View	Con	figure Win	dow Help			Motiv	veWave - C	onsole (tradi	ier)							КУ КУ	- <sup>-</sup> * >
AAPL Feb-24	17 ×	+															$\leftrightarrow$ $\rightarrow$ ,
Underlying	AAPL		Q Search	Feb-24 17		•											
Syn	ibol	Posi	tion Bid S	ize Bid	Ask	Ask Size	Last Price										
APL .				14 131.62	131.6	3 2	131.62										
Position	P/L	Orders	Bid Siz	e Bid	Ask	Ask Size	Last Price	Strike Price	Last Price	Bid Size	Bid	Ask	Ask S	Ord	ers	P/L	Positio
1@0.10	1.00	Buy S	ell 21	5 0.11	0.12	353	0.10	138.00		424	6.90	7.20	671	Buy	Sell		
		Buy S	ell 21	7 0.15	0.16	221	0.15	137.00		88	5.95	6.20	95	Buy	Sell		
		Buy S	20	0.21	0.23	234	0.20	136.00	5 10	529	5.05	5 20		+1@4.90	С		
		0				Ор	tions Orde	r: AAPL					×	Buy	Sell		
			Symbol	6	Irrent price	s for the	ize	Bid	Ask	Ask	Size L	ast Price		Buy	Sell		
		AAPL			iderlying as		ne 14	131.62	13	1.63	2	131.6	2	Buy	Sell		
		AAPL17022	4P00134000	) < of	tion are sh	nown here	190	Adju	ust the prope	rties of you	r 52	3.7	0	Buy	Sell		
									er and click t					Buy	Sell		
		Account: s	imulated	Custor	n				on below to er to the brok					Buy	Sell		
		Spread		Side	Qty	Exp		Strike	er to the brok		order T	ype TIF		Buy	Sell		
		Single	•	BUY 🔻	1 \$	≡- Feb	-24 17 🔹	134.00	Put 🔹	3.25	LMT	▼ DAY	<ul> <li>The second second</li></ul>	Buy_	Sell		
						1	Submit	Close					-	- С	lick Buy/	Sell butto	n
-1@5.40	-30.00	,														rder Tick	et
		Buy S	ell 1,13	6.50	6.70	614	6.54	125.00	0.19	253	0.19	0.20	50	+1@0 <sup>D</sup>	ialog		
		Buy S	ell 60	02 7.55	7.70	526	7.60	124.00	0.16	215	0.16	0.17	1,040	Buy	Sell		_
		Buy S	ell 1,05	i1 8.50	8.70	488	8.63	123.00	0.14	272	0.14	0.15	1,432	Buy	Sell		
		Buy S	<b>all</b> 58	4 9.55	9 75	703	9.65	122.00	0.1		0.40		1,261	Buy	Sell		
Buy Call Mk	t Sell	Call Mkt B	uy Put Mkt	Sell Put Mkt	simulate	d 🔹	1 \$ ≡-	DAY -		Use these f default for						Flatten	Cancel A
I Home	III Cha	ts 🛛 🧕 Acc	ount രാ	Options 🗙 🔝	Scan 👔	optimize	+			Quantity ar	nd Time In	Force)					i i i i i i i i i i i i i i i i i i i

Open orders can be canceled by clicking on the 'C' button next to the order. All open orders in the option chain can be cancelled by clicking on the **Cancel All** button in the bottom right corner.

Market orders can be placed by using the buttons in the bottom left corner. These orders will be placed on the put/call option that is selected in the table above.

If you have open positions, these can all be closed by clicking on the **Flatten** button in the bottom right corner.

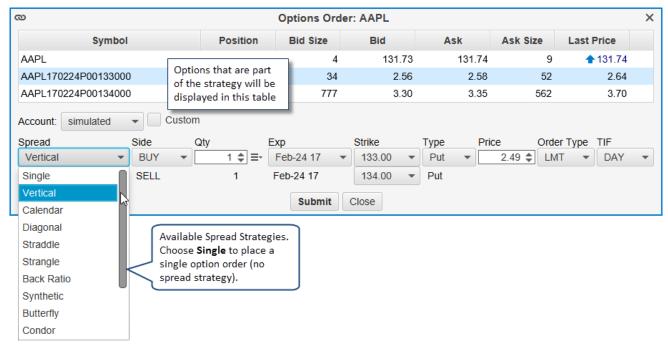
2							Motiv	eWave - C	onsole (tra	dier)							K 2	- Ľ <sup>A</sup>
File View	Con	figure	Window	Help														
APL Feb-24	17 X	+																• <del>+</del> +
Jnderlying	AAPL		Q 5	earch	Feb-24 17													
Syr	nbol		Position	Bid Size	Bid	Ask	Ask Size	Last Price										
APL				13	131.67	131.68	3 18	<b>1</b> 31.68										
Position	P/L	Or	ders	Bid Size	Bid		Ask S L		Strike Price	Last Pri		Bid	Ask	Ask S	Orders	5	P/L I	Position
		Buy	Sell	263	0.08	0.09	210	0.08	139.00		569	7.80	8.15	298	Buy	Sell		
1@0.10	1.00	Buy	Sell	202	0.11	0.12	232	0.10	138.00		375	6.85	7.20	799		Sell		
		Buy	Sell	200	0.16	0.17	314	0.15	137.00		322	5-00-	0.00		Buy	Sell		
		Buy	Sell	172	0.23	0.24	193	0.20	136.00	5.10	770	<b>a</b>	ble click or I to modify	20	<b>∓1@4.82</b>	Ç		
		Buy	Sell	163	0.34	0.35	186	0.33	135.00	4.37	725	4 Tabe	er to modify	Вб	Buy	Sel'	_	
		Buy	Sell	144	0.51	0.53	337	0.51	134.00	3.70	11	3.35	3.40	247	Press 'C			
		Buy	Sell	176	0.77	0.79	124	0.75	133.00	2.64	38	2.59	2.64	222	_	his order		
		Buy	Sell	71	1.12	1.14	69	1.12	132.00	1.97	61	1.95	<b>+</b> 1.97	65		Sell	_	
		Buy	Sell	96	1.58	1.60	54	1.60	131.00	1.43	66	1.41	1.44	53		Sell		
		Buy	Sell	50 13	2.17 2.86	2.19 2.89	76 32	2.16 2.90	130.00 129.00	1.02 0.70	26 128	1.00 0.71	♦ 1.02 0.72	105 600		Sell Sell		
		Buy	Sell	404	2.86	2.89	32	3.67	129.00	0.70	128	0.71	0.72	268		Sell		
	Market	orders	can be pla		4.60	4.75	401	4.69	120.00	0.40	188	0.40	0.35	474		Sell		
-1@5.40			These but		5.60	5.75	545	5.61	126.00	0.26	242	0.25	0.26	170		Sell	Cancels	
	apply t	o the se	lected rov		6.60	6.75	529	6.66	125.00	0.20	239	0.19	0.21	200	+1@0.30	С	orders fo	
		Buy	Sell	672	7.60	7.75	554	7.60	124.00	0.16	200	0.16	0.17	Closes	all open	ell		~ ~
uy Call Mk	t Sell	– Call Mk	t Buy P	ut Mkt	ell Put Mkt	simulate	 1	1 🜲 🖃	DAY	•	057	~ · ·	0.15	positio	ns at		Flatten	Cancel
-	Jul Char		Account		tions 🗙 🔐 S		Optimize	+						market	price.	~		

### 4.7.2 Option Spread Strategies

MotiveWave<sup>™</sup> supports several common spread strategies:

- 1. Vertical
- 2. Calendar
- 3. Diagonal
- 4. Straddle
- 5. Strangle
- 6. Back Ratio
- 7. Synthetic
- 8. Butterfly
- 9. Condor
- 10. Iron Condor
- 11. Vertical Roll
- 12. Double Diagonal
- 13. Double Calendar

The spread strategy can be chosen when creating an option order (click on the Buy/Sell buttons on the option chain table).



### 4.7.3 Preferences

Preferences for the Option Chain can be modified by clicking on the **Preferences** button (gear icon) in the top right corner. This dialog has the following elements:

- 1. **Max Rows** Maximum number of rows to display for the option chain. Click on Show All Options to display all available options
- 2. **Show Calls/Puts** By default both calls and puts are displayed in the table. This drop down allows you to choose Calls or Puts or both.
- 3. Table Font Font and size for the text displayed in the table
- 4. Show Grid Displays a border around each cell in the table

- 5. Sort Descending Sorts descending by strike price
- 6. Show Order Ticket Shows the order ticket dialog when placing a market order
- 7. Show Order Panel Shows the section at the bottom of the option chain for managing orders
- 8. Show Quote Panel Shows the quotes for the underlying symbol at the top of the panel
- 9. Update Button Applies these changes and closes the dialog
- 10. Call Columns Button Click on this button to choose the columns displayed for Call Options
- 11. Put Columns Button Click on this button to choose columns displayed for Put Options
- 12. Save Defaults Button Saves these settings as the default for other Option Chain panels
- 13. Cancel Button Cancels changes and closes the dialog.

	Option Chain Preferences	s Dialog	
¢	Option Chain Prefere	ences	×
Max Rows:	20 🖨 🗌 Show A	II Options	
Show Calls/Puts:	Calls and Puts 🔹		
Table Font:	Arial;13.0	1	
	Show Grid		
	Sort Descending		
	Show Order Ticket		
	Show Order Panel	Click here to choose	
	Show Quote Panel	Call and Put columns.	
Update Call C	olumns Put Columns	Save Defaults Cancel	

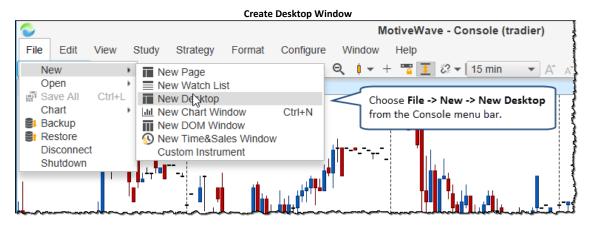
Call and Put columns can be adjusted by clicking on the **Call Columns** or **Put Columns** button (see dialog above). The columns available will depend on what is supported by your broker. The dialog below shows available columns for Tradier Brokerage.

	Choos	ing Call	/Put Columns	
e	Cho	ose Cal	l Columns	>
	the columns displaye buttons to add or ren			ng the column below and
Available Columns	5		Selected Columns	
Change			Position	
% Change			P/L	
Delta	Select columns on		Orders	
Gamma 🔶	left or right and us '>' and '<' buttons		DIU SIZE	
Implied Vol	and < buttons add or remove the		Bid	
Intrinsic Value	add of remove the		Ask	
Rho		>	Ask Size	
Spread	× ×		Last Price	· · · · · · · · · · · · · · · · · · ·
Symbol				
Theta		>>		+
Time Value		<<		
Vega				Use these buttons
Volume				to change the
				column order.
	able columns will			
	nd on what is			
suppo	orted by your broker.			
	ſ	ок	Cancel	
	l		ounou	

## 5 Desktops

**Desktops** provide a convenient way to organize charts and other panels in one window. A **Desktop** is essentially another Console window and uses the same docking framework to layout pages.

Choose *File -> New -> Desktop* from the Console menu bar to create a Desktop window.



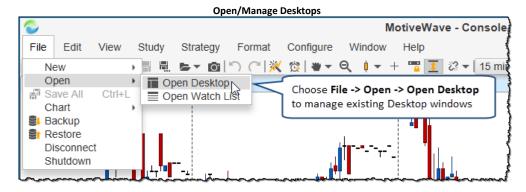
Enter a unique name for the **Desktop** from the **New Desktop** dialog and click the **OK** button to create.

New Desktop Dialog	
New Desktop	×
Desktops can be used to organize, charts, watch lists etc together into a single window. Enter the name of the Desktop below and press the <b>OK</b> button. If a Decktop with the name already exists, it will be opened Name: My Charts	
OK Manage Cancel	

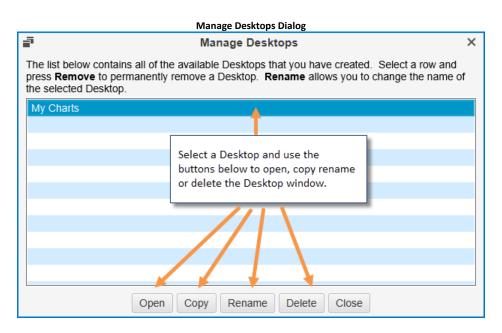
The follow screen shot shows the default layout for a Desktop window when it is first created. The default layout includes two pages: **Charts** and **Charts 2**.



To open or manage existing Desktops, select *File -> Open -> Open Desktop* from the Console menu bar:



When you close a Desktop (by clicking on the 'X' button in the top left corner), the group is not deleted but still exists in the repository. If you want to permanently remove a Desktop, select it in the **Manage Desktops** dialog and click the **Remove** button.



### 5.1 Changing Desktop Layout

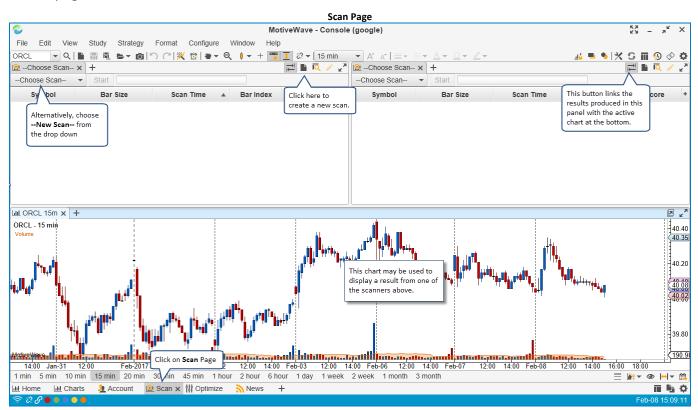
Since a Desktop is essentially another Console window, see the section: <u>Changing the Default Layout</u> for details on how to configure a custom layout.

## 6 Scanner

MotiveWave<sup>™</sup> has a built-in scanner for looking for trade setups across a given set of instruments and bar sizes. There three types of patterns that you can search for:

- 1. Elliott Wave Elliott Wave patterns such as Wave 2, 3, 4, 5 and Wave E (in a triangle)
- 2. Gartley Harmonic patterns including all XABCD type patterns, AB=CD, 5-0 and Alternate AB=CD
- 3. Study Conditions Criteria based on study values

When you first start MotiveWave<sup>™</sup> you will see a page at the bottom of the window named **Scan**. Click on the page tab to show the screen below.



### 6.1 Creating a Scan (Gartley Scanner)

If you would like to create a new scan, choose **–New Scan**—from the **–Choose Scan**—drop down or press the **New Scan** button on the right hand tool bar of the scanner panel. This will open a wizard that will guide you through the process of creating a scan.

		New Scan			
<u></u> Choose Scan 🗙	+			T T	R 🧪 🖌
New Scan	Start				
Choose Scan	Bar Size	Scan Time	Bar Ind	Or, press	re 4
New Scan 📐 -	SelectNew from the drop			this button	

The screen shot below shows the first page of the scanner wizard. Enter a name for the scan and select the type of scanner from the drop down below. In this example, we will choose Gartley as the type.

Scanner Wizard Page 1	
Rew Scanner	×
New Scanner	
This Wizard will enable you create a scannner to scan for specific patterns or conditions across a number of different instruments.	
Specify Name and Type of Scan     Specify Instruments to Scan     Specify Criteria	
Click 'Next' to continue.	
Name: Gartley XABCD Patterns Enter a name for Type: Gartley Elliott Wave Gartley Select the type from Study the drop down	
Press the Next button to continue to the next page	
<pre></pre>	cel

On the next page of the wizard, you will be prompted to select 1 or more instruments and/or watch lists. If a watch list is chosen, all of the instruments that are in the watch lists will be included in the scan. The order of the instruments and watch lists will be considered when the scan is executing.

Scanner Wizard - Instruments	
🔒 Scan for Gartley Patterns	×
Specify Instruments	
Add instruments below by clicking on the 'Add' (+ sign) or 'Search' (magnifying glas add a WatchList by clicking on the 'Add Watch List' button. MotiveWave will scan to below. Use the Up and Down arrows to adjust the order.	
-Choose Symbol- Use this control to add specific instruments. Q ST NYSE NASDAQ Indices ASX Top 50 Stocks Key Stocks	
	The next button will activate when 1 or more instruments/watch lists are added.
Total Instruments: 0	< Back Next > Cancel

Click on the **Add** button to add a bar size to the list box. Any size linear bar or non-linear bar (ie Range, Renko, etc) may be added. Check the **Extended Data** box at the bottom of the dialog to use data that is outside of regular trading hours.

	Scanner Wizard – Bar Sizes	
<u>ല</u>	Scan for Gartley Patterns	×
Specify Bar Size	es	
	below by clicking on the Add (green '+') or Remove (red 'X') buttons below. MotiveWave will scan the us panel) using each bar size in the order specified below. Use the Up and Down arrows to adjust	e
$\wedge$		
Click here to add a		
bar size to the list.	+ Add Bar Size ×	
	Select the type of bar size and parameters below.	
	Bar Size: Linear 💌	
	Interval Type: Minute  You can choose any bar size, even Range,	
	Interval: 15 🜩 Renko etc	
	OK Cancel	
Extended Data -	if this is checked, data         outside of regular trading         hours will be included.             < Back	

The final page of the Gartley scanner wizard enables you to choose the type of Gartley pattern to search for as well as the historical data range where the pattern may occur. If you would like to search for all forms of the XABCD pattern (ie Gartley, Bat, Butterfly, Shark, etc) then choose **XABCD (All)** as the pattern.

Scanner Wizard – Gartley Pattern	
🔝 Scan for Gartley Patterns	×
Specify Criteria	
Select your scanning criteria below. The <b>Pattern</b> determines the type of Gartley pattern that you would like to find. Fo example, <b>Butterfly</b> will search for Butterfly Pattern that is nearly complete.	r
Minimum and Maximum bars may be used to help constrain the timeframe.	
Pattern: XABCD (All) Choose the Gartley Pattern Minimum Bars: 250	
Maximum Bars: 250 🜲 Use All Available Data	
Min/Max bars may be used to define the historical range where the pattern may be identified. All available data will use all of the data that is currently available in the local database. Finish button will	
Finish button will create the scan and make it available in the drop down.	
< Back Finish Car	ncel

#### 6.2 Executing a Scan

The following screen shot shows the new scan 'Gartley XABCD Patterns' that we created above and the results from running executing it on the latest available data. If you would like to execute this scan,

select it from the drop down and press the **Start** button (see below in the upper left scanner panel). The progress bar will show how far the scan is progressing (see upper right scanner panel below).

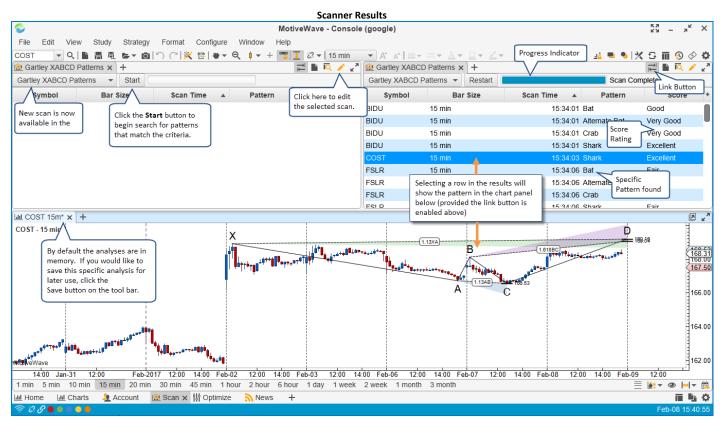
Results will display in the table area of the scanner panel as they are found. This table will display:

- 1. Symbol instrument where the pattern was found
- 2. Bar Size Bar Size the pattern was found on
- 3. Scan Time When the pattern was found
- 4. Pattern The specific pattern that was found
- 5. Score Score rating: Fair, Good, Very Good, Excellent

To display a scan result in the chart panel below left mouse click on the table row. **Note:** this will only work if the **Link** button is selected (see top right button area for the scanner panel below)

The results displayed in the scanner table are **unnamed analyses** that are kept in computer memory. If not explicitly saved, these analyses will disappear the next time you execute the scan or if MotiveWave<sup>™</sup> is restarted. When one of these results is opened in a chart window or panel, you may save the analysis to the repository by clicking on the **Save** button (see tool bar).

You may find that the full pattern that was found is not entirely visible when you display it in the chart. Click and drag the time axis to the right to zoom out or select a higher bar size.



### 6.3 Editing a Scan

You can edit a scan to change its instruments, bar sizes or criteria. Select the scan from the drop down in the scanner panel and click the **Edit** button from the button area in the top right corner of the panel. Alternatively, click on the **Manage Scans** button to open the **Manage Scans** dialog.



		Edit Scan		
<u> Gartley</u> XABCD Patterns 🗙	+			🛋 🖿 💽 🦯 🖉
Gartley XABCD Patterns 🔹	Start			A
Symbol 🥄 Bar :	Size	Scan Time 🔺	Pattern	s +
		the scan from the drop and click the Edit buttor		Manage Scans button

The **Manage Scans** dialog enables you to create, open, edit, rename or remove existing scans. Select a scan from the list area and use the buttons on the tool bar to open, edit or delete existing scans.

М	anage Scans Dialog		
īQ	Manage Scans		х
The list below contains all of the a and press <b>Remove</b> to permanent name of the selected scan. +	vailable scans that you ha	ve created. Select a row e allows you to change the	2
	Close		

			E	dit Scan Dia	llog	
1		Ed	it Scan:	Gartley XAB	CD Patterns	×
General	Instruments	Bar Sizes	Criteria		Adjust other properties from these tabs.	L
Optionally	, change the n	ame of the s	can belov	<i>N</i> .	from these tabs.	
Name:	Gartley XABC	) Patterns				
Туре:	Gartley	•		otionally chan e name here	ge	
				the OK buttor		
			when	n you are finisl	hed.	
			V			
			OK	Apply	Cancel	

#### 6.4 Elliott Wave Scanner

The example shown above is for the Gartley scanner. You can also search for Elliott Wave patterns by choosing **Elliott Wave** as the type when you create a new scan. Selecting instruments and bar sizes is the same for all scan types.

New Elliott Wave Scan – Page 1	
Rew Scanner	×
New Scanner	
New Scanner This Wizard will enable you create a scanner to scan for specific patterns or conditions across a number of different instruments. Specify Instruments to Scan Specify Criteria Click 'Next' to continue. Name: Elliott Wave 2 Type: Elliott Wave Choose Elliott Wave as the type	
< Back Next > Cance	el

On the **Specify Criteria** page you can choose the Elliott Wave pattern that you are searching for. The following patterns are currently supported:

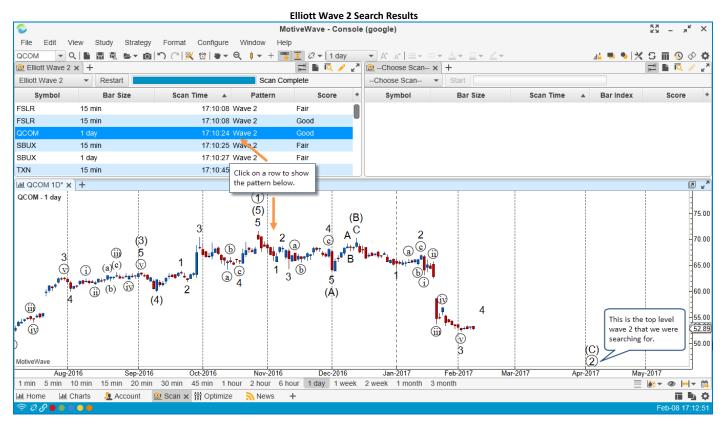
- Wave 2 This will search for an Elliott Wave pattern when the top level wave is currently in a Wave 2. Wave 2s are commonly used as trading setups since wave 3 tends to be the longest wave.
- 2. Wave 3 Finds patterns where the top level wave is currently in wave 3
- 3. Wave 4 Finds patterns where the top level wave is currently in wave 4
- 4. Wave 5 Find patterns where the top level wave is currently in wave 5
- 5. Wave E (Triangle) Finds patterns where the top level wave is in wave E of a triangle

The **Decompose Levels** specify how many levels down the top level wave should be decomposed in to smaller waves. Choose **Decompose All** to decompose the wave to all possible levels.

The Minimum and Maximum bar settings can be used to define the historical data range. If you check **Use All Available Data** MotiveWave<sup>™</sup> will load all data from the local database.

	Elliott Wave Scan Criteria	
	Scan for Elliott Wave Patterns	Х
Specify Criteria	3	
	criteria below. The <b>Pattern</b> determines the high level wave pattern that you would like to find. For search for a top level Impulse Wave that is currently in Wave 2.	
Minimum and Maximu decomposed to 1 or m	m bars may be used to help constrain the degree of the top level wave. Optionally, the results may nore levels.	be
Pattern:	Wave 2 Select the type of pattern	
Minimum Bars:	250 \$	
Maximum Bars:	250 🗢 Use All Available Data	
Decompose Levels:	2 🗢 Decompose All	
	< Back Finish Cance	:

The following screen shot shows the results of searching for a Wave 2 pattern. To view a particular result, click on the row in the results table. You may need to zoom the chart out to see the full pattern depending on how much data you specified in the scan criteria.



#### 6.5 Study Scanner

The study scanner enables you to search for study conditions that include 1 or more studies. When you create a new scan, choose Study as the type from the Type drop down. Selecting instruments and bar sizes is the same for all scan types (see <u>Creating a Scan (Gartley Scanner</u>) section for details).

	Study Scanner – Page 1	
	New Scanner	Х
New S	canner	
This Wiza	ard will enable you create a scannner to scan for specific patterns or conditions across a number of different nts.	
2. Spe	ecify Name and Type of Scan ecify Instruments to Scan ecify Criteria	
Click 'Ne:	xt' to continue.	
Name:	Trade Setup	
Type:	Study Choose Study	
	as the type.	
	< Back Next > Cance	

On the **Choose Studies** panel, you can select one or more studies to include as part of the scan. Click on the add study button to add a study to the list box below. When you click this button, you will be able to search for the study that you want to add and configure its settings (see following screen shots).

Choose Studies Panel	
🔒 Scan for Study Conditions	×
Choose Studies	
Specify the studies (and their settings) that you want to include in this scan.	
Minimum Bars: 250 🜩	
$+ \checkmark \times \uparrow \downarrow$	
Click here to add and	
configure a study for the scanner	
< Back Next > Cance	a

	Add Study Dialo	)g			
2	Add Study				×
Filter: RSI Type	ns all available studies. Select the desired study the study name Type: All •	/ below and cho	oose OK to configure	e the settings.	
to fill	ter the list	*	Overlay	Signal	+
Fast&Slow RSI			false	true	
Laguerre RSI			false	false	
RSI Bars			true	true	
RSI Divergence			false	true	
Relative Strength Index (	RSI)		false		
Reversing MACD	$\wedge$		false	true	
Stochastic RSI	Select the study and click OK below to configure its parameters		false	true	
	OK Import Car	ncel			

	Configure Study	
/	Relative Strength Index (RSI)	×
	tum oscillator that measures the velocity and magnitude of directional price movement ward and downward movements. Developed by J Welles Wilder in 1978.	
General Adva	inced	
Inputs		
Input:	Close 👻	
Method:	SMMA 👻	
Period (bars):	14 🗢	
Lines		
RSI Line:	▼ <u>− 1.0</u> ▼ /	
Top Fill:	▼ ✓ Display	
Bottom Fill:	🗸 🗸 🗸 Display	
RSI Indicator:	✓ Line  Display	
	Update Cancel	

In the screen shot below, we have added one study to the scan, RSI(C,14). Additional studies could be added by clicking the add button. In this example, we are just going to work with one study.

Scan for Study Conditions	×
Choose Studies	
Specify the studies (and their settings) that you want to include in this scan.	
Minimum Bars: 250 His is the minimum number of bars to load when evaluating the studies study just added studies study studies study just added studies study studies study just added studies study studies studies study studies studies study studies study studies stud	

The last page of the scanner wizard asks you to define the criteria for evaluating the scan. Click on the add condition button to add a condition to the list. There are two types of evaluation methods:

- 1. **All** In this method, all conditions defined on this page must be met in order for it to be considered a match. This is the default evaluation method.
- 2. **One or More** In this method, only one of the conditions defined on this page must be met for it to be considered a match for this scan
- 3. Lookback Bars Number of bars to look back and evaluate the study criteria. 0 indicates the most current bar.

Scan for Study Conditions          Study Criteria         Specify scanning criteria based on the studies entered in the previous panel.         Eval Method:         All         Lookback Bars:         O          Number of bars to look back when evaluating. '0' will just look at the latest bar.         Click here to add a conditions must be met the studies defined on the previous page.         Two options here:         All - all conditions must be met One or More - only one of the study conditions need to be met	Study C	riteria
	Scan for Study Study Criteria Specify scanning criteria based on the studies entered in the pr Eval Method: All Lookback Bars: 0 +	Y Conditions × evious panel. ↓ Number of bars to look back when evaluating. '0' will just look at the latest bar.
< Back Finish Cancel		< Back Finish Cancel

In the **Study Condition** dialog (see below) you can define a condition based on a variable that is generated from one of the studies you defined. A variable may be compared against a specific value or compared against another variable. The fields in this dialog are as follows:

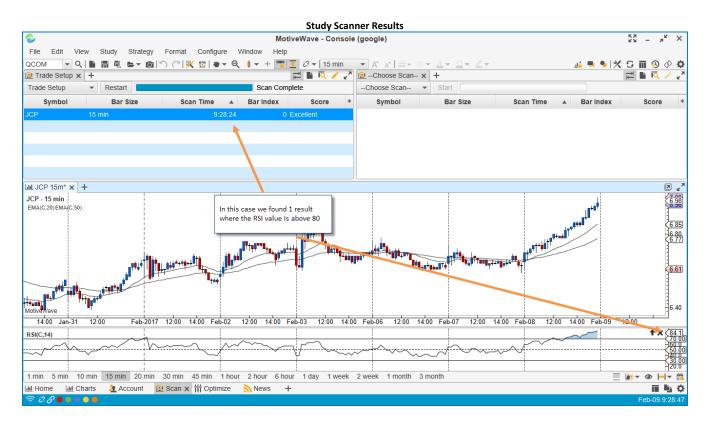
- 1. Study Choose the study that you configured on the Choose Studies page
- 2. **Bar Index** In most cases the comparison is done with the current bar, but you may choose historical bars by choosing a specific index
- 3. **Variable** This field will be populated when you choose the study. Each study will export 1 or more variables. You can see these variables in the Cursor Data Window/Panel
- Operator This is the comparison operator for comparing the variable to the value. Valid options include: > (greater than), >=, < (less than), <=, =, Crosses, Crosses Above, Crosses Below</li>
- 5. Relative Comparison Indicates if the variable should be compared against a specific value or against another variable.
- 6. Value If not a relative comparison, this field will contain the specific value you are comparing against.

Add Study Condition Dialog				
<u></u>	Study Condition	×		
This dialog scan.	allows you to specify a condition to evaluate as part of the			
Study:	RSI(C,14)  Choose the study			
Bar Index:	1 🖨 🗸 Use Current Bar			
Variable:	RSI  These are output			
Operator:	> variables generated by the study			
	Relative Comparison			
Value:	80			
	Add Cancel			

If you checked the Relative Comparison option, the dialog will change to allow you to choose a study and variable for comparison. The Price Bar option allows you to compare to the Open/High/Low/Close values of the price bar. In the example below, two EMAs were added to the studies list and its comparing the EMA(C,20) value to the EMA(C,50) value to see if the first value is above the second.

Ac	dd Study Condition Dialog – Relative Comparison	
<u>(9</u>	Study Condition	×
This dialog scan.	allows you to specify a condition to evaluate as part of the	
Study:	EMA(C,20) -	
Bar Index:	1 🜲 🗸 Use Current Bar	
Variable:	EMA -	
Operator:	> •	
	Relative Comparison	
Study:	EMA(C,50) 💌	
Bar Index:	1 🖨 🗸 Use Current Bar	
Variable:	EMA 👻	
	Add Cancel	

The screen shot below shows the results of running this scan. In this case we only found one result where the RSI value is greater than 80.



## 7 Strategy Back Testing

Strategy back testing is a special type of historical testing that allows you to determine how a strategy would have performed if it had actually been run during past historical time periods and market conditions. It does not guarantee how your strategy will perform in future market conditions, but will allow you to identify any potential issues or vulnerabilities against past market conditions. This allows you to 'test' and tweak your strategy without having to place actual trades. See the Wikipedia page on strategy back testing for more information.

MotiveWave<sup>™</sup> has highly advanced strategy back testing options through our **Strategy Optimizer**. The default layout of the MotiveWave<sup>™</sup> Console has a page called **Optimize** (see bottom of the console window). Click this tab to show the strategy optimizer page.

>		Motive	Nave - Console	(google)				<u>ка</u> – а
File View Cor	nfigure Window Help							
† Untitled +								
Symbol	Parameters	Start End	Net Profit	Gross Profit	Gross Loss	Executions	Commissions Click here to creat new strategy anal	
etrics Chart Re	ports Periods Trades Exe Metric	cutions All Trades		Loi	ng Trades		Short Trades	
			No conten	t in table				
		This is the Optimize page that comes with the default layout of the Console						
LHome 🔟 Cha	irts 🤰 Account 😥 Scan	that comes with the default layout of the Console						пĿ

### 7.1 Creating a Strategy Analysis

From the **Optimize** tab of the Console, click on the **New Analysis** button (see screen shot above). This will launch a wizard that will walk you through the process of creating an analysis of your selected strategy.

MotiveWave supports 3 types of Strategy Analysis:

- 1. **Back Test** This option enables you to execute your strategy with specific settings over a given set of instruments and a specific bar size/time frame. This can be useful to determine how your strategy may have performed with past data and specific settings.
- 2. **Optimize** The profitability of a strategy will vary depending on how it is configured. This option will enable you to specify a range of settings for the strategy and test many different combinations of these settings to determine which combination is "optimal".
- 3. Walk Forward Sometimes knowing the optimal settings for a specific range of data is not enough. Just because a strategy performed well for a specific bar size and time frame does not

guarantee that it will continue to perform well in the future. Walk forward testing helps to mitigate this problem by stepping forward in time after every iteration of a time frame.

The following screen shot shows the first panel of the **New Strategy Analysis** wizard. From here you can choose your strategy and specify the type of analysis you wish to perform.

New Strategy Analysis – Page 1	
গগ New Strategy Analysis	×
New Strategy Analysis	
This Wizard will enable you to create and configure a new <b>Strategy Analysis</b> to optimize a strategy across 1 or m instruments.	ore
1. Choose Strategy     Click here to choose       2. Specify Instruments     Click here to choose       3. Specify Criteria     your strategy	
Click 'Next' to continue.	
Strategy: Choose Strategy	
Type: Back Test Back Test Optimize Walk Forward Back Test - Run the strategy with specific settings over the given range of data Walk Forward - Optimize strategy and move the data range forward after every iteration.	
< Back Next >	Cancel

#### 7.1.1 Strategy Settings Panel

Once you have chosen the strategy and analysis type, click on the **Next** button to specify the settings for the strategy. If you chose **Back Test**, then you will just need to specify the specific settings for this strategy (see below). In this case we have chosen the "MA Cross Strategy":

M	A Cross Strategy Settings	
ប៉ុរ៉ា Strategy	Settings (MA Cross Strategy)	×
MA Cross Strategy		
The strategy is based off the Moving Average Cr moving average. Settings Trading Options	oss study. Trades occur when the fast moving average crosses the slo	)W
Fast Input Close -		
Fast Method EMA -		
Fast Period 10 🜩		
Slow Input Close -	Back Test - These settings are specific to the strategy that you chose	
Slow Method EMA -	on the previous panel. In this case we just need to choose what we want	
Slow Period 20 🗢	for the MA Cross Strategy	
	< Back Next > Can	:el

Alternatively, if you chose **Optimize** or **Walk Forward** as the type, the next page of the wizard will look more like the following screen shot. This panel will enable you to specify the range of possibilities for the configuration of the strategy. MotiveWave<sup>™</sup> will build combinations of the strategy settings based on this input.

	Optimize/Walk Forward Strategy Settings	
ŶŲŶ	Strategy Settings (MA Cross Strategy)	×
MA Cross	Strategy	
The strategy is moving average	based off the Moving Average Cross study. Trades occur when the fast moving average crosses the slow e.	
Settings Tra	ding Options	
Fast Input	Open Close Midpoint High Low	
Fast Method	SMA       EMA       SMMA       MEMA       WMA   Use this panel to define the range of parameters to use for this study. MotiveWave will generate	
Fast Period	Min:         10 \$         Step:         1 \$         combinations based on this input.	
Slow Input	Open Close Midpoint High Low	
Slow Method	SMA EMA	
	< Back Next > Cancel	

#### 7.1.2 Choose Instruments Panel

The next page of the wizard allows you to choose the set of instruments (symbols) for the analysis. A specific set of instruments may be chosen by clicking on the **Add Instrument** button or the **Search Instrument** button. Additionally, you may specify one or more watch lists to specify a group of instruments.

Choose Instruments P	age	
Strategy Settings (MA Cross	Strategy)	×
Add instruments Add instruments below by typing the symbol in the search box or by clickin Alternatively you can add a WatchList by choosing one from the Watch List strategy on the instruments in the order specified below. Use the Up and I -Choose Symbol- Choose Sy	g the 'Search' (magnifying glass) button below t drop down. MotiveWave will backtest the	
and press Enter to add it to the list.	This panel allows you to choose 1 or more instruments for the analysis. Optionally, you may choose one or more watch lists that contain a set of instruments.	
	< Back Next > Cance	el

#### 7.1.3 Data Settings Panel

If you choose **Back Test** or **Optimize** as the analysis type, then your data settings panel will look like the following. This panel allows you to choose the range of data and bar size for the analysis. Ideally you should use historical tick data (see **Source Data** field) for the analysis since will give the closest approximation of a real world test. Unfortunately not all brokers or data services provide this data (or enough of it). In these cases you can generate ticks from either the source data or 1 minute bars.

	Data Settings	
111	Strategy Settings (MA Cross Strategy)	×
Data Setti	ings	
	elow allow you to specify the time frame and bar size for analysis. If historical tick data is not available, you ick data from the source bars.	
Bar Size	: 1 day Select the bar size	
Start Date	: 11/8/2016 Choose the date range	
End Date	2/8/2017 for this analysis.	
Source Data	Bar Data  Generate Ticks	
	Bar Data - Use the source bar size to generate an Open, High, Low and Close ticks Minute Data - Load minute data and generate OHLC ticks from those Tick Data - Use historical tick data (if available from your data service/broker)	
	< Back Next > Cancel	

The walk forward data settings are a little bit different. Two more parameters are available to define the **Optimize Period** and **Walk Forward Period**. **Optimize Period** defines the size of the optimization window (the number of days to include in each walk forward iteration). If the **Anchor** option is enabled, the Start Date will remain fixed for each iteration. Effectively, this means that the optimize period will increase by the walk forward period each walk forward iteration (ie: 60, 90, 120 etc days in this example).

	Data Settings – Walk Forward 1	<b>Festing</b>
††	Strategy Settings (MA Cross Str	ategy)
Data Settings		
The settings below allow you to can generate tick data from the	specify the time frame and bar size for analys source bars.	is. If historical tick data is not available, you
Bar Size: Start Date: End Date: Source Data: Optimize Period (Days): Walk Forward Period (Days):	11/8/2016 2/8/2017 Bar Data Generate Ticks Regular Trading Hours (RTH) Data 60 Anchor	
		< Back Next > Cancel

#### 7.1.4 Execution Settings Panel

Execution settings specify the runtime behavior for the analysis. Commissions can be included in the profit/loss calculation and can be configured from the Console menu bar (*Configure -> Commissions*). **Slippage** can also be enabled to account for market orders. During periods of lower volume market orders may not be filled at the current bid/ask prices. This parameter assumes that the order will be filled the given number of ticks away from the bid/ask price.

Executio	on Settings	
해 Execution Settings	(MA Cross Strategy)	×
Execution Settings		
The options below allow you to specify order and account set	tings when the strategy is optimized.	
Initial Account Value: 100000 🜩		
Include Commission:		
Fill On Bid Ask:		
	This panel is used to specify the account and execution settings. Optionally,	
Slippage (Ticks): 0 🗢	commissions may be included.	
	Slippage enables you to account for	
	market orders that are not always filled at	
	the bid/ask price. This can enable you to	
	get more realistic results.	
	< Back Next > C	Cancel

#### 7.1.5 Optimizer Settings Panel

If you chose **Optimize** or **Walk Forward** as the analysis type, then you will see the **Optimizer Settings** panel as the last panel in the wizard. MotiveWave currently supports two types of optimizer algorithms:

- 1. **Exhaustive** this algorithm will evaluate all combinations of the strategy settings to find the optimal result. This algorithm will find the optimal settings for the strategy. This is a good option if the number of combinations is relatively low.
- 2. **Genetic** employs a **natural selection** approach to find an optimal combination without having to evaluate all possible combinations of the strategy settings. For more details on how this works see Wikipedia: <u>Genetic Algorithm</u>.

#### 7.1.5.1 Exhaustive Optimization vs. Genetic Optimization

There are many types of optimization. The most common types used for strategy optimization are Exhaustive Optimization and Genetic Optimization. Both types of optimization have benefits. It's just a matter of figuring out which type of optimization is most appropriate for the results you're looking for.

#### 7.1.5.2 Exhaustive Optimization

Exhaustive Optimization will run through and test every possible combination of inputs to determine the absolute best possible performance solution. But, because it will run through every possible combination, running an exhaustive optimization can take a very long time. The time required to run an exhaustive optimization is dramatically increased when a large number of inputs or parameters are used in the search.

To reduce the amount of time required to run the exhaustive optimization, you can limit the number of inputs or parameters used to a small number, or use genetic optimization instead.

#### 7.1.5.3 Genetic Optimization

Genetic Optimization (or Genetic Algorithm Optimization) is based on the concept of biological evolution, or natural selection. In relation to trading strategy optimization, genetic optimization will start by randomly selecting a number of combinations to test. From those selected, it will determine which of those combinations have the best potential and discard the rest. Then it will continue to test the remaining 'best potential' combination candidates until it arrives at the close-to-best input or parameter performance solution.

Because genetic optimization does not test every possible combination, it will not arrive at the absolute best possible performance solution, like with exhaustive optimization, but the time it takes to arrive at a close-to-absolute best performance solution is dramatically shorter.

Genetic Optimization is best suited for running an optimization with many inputs or parameters. The larger the sample size is, the longer it will take to complete the optimization, but if the sample size is too small, the genetic optimization results may be less accurate.

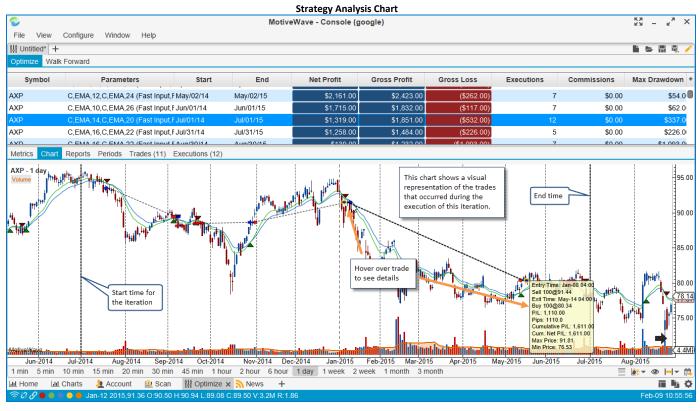
		Optimizer Set	tings	
†ļ†		Optimizer Sett	ings	×
Optimizer Setti	ngs			
The options below allo	w you to configure how the	e optimizer behaves		
Max Results:	10 🜲			
Optimize Metric:	Net Profit	•		-
Optimizer Algorithm:	Exhaustive Exhaustive		This panel is applicable to <b>Optimize</b> and <b>Walk Forward</b> Testing types.	
	Genetic		Exhaustive will evaluate all possible combinations of the strategy settings.	
			Genetic optimization applies a genetic algorithm to find an optimal combination (without evaluating all possible combinations).	
			< Back Finish Ca	ancel

### 7.2 Strategy Analysis

Once you have created and executed a strategy analysis, you can look at the results in the strategy optimizer (see below). The analysis will contain one or more execution instances in the summary table at the top of the window. Select the instance that you want to view and it will be displayed in the panel below the table.

-				trategy Analysis					
			Motive	Wave - Console (go	oogle)			5	<u>х – к</u> у х
File View	Configure Window Help								
해 Untitled* 🕂	When you save the you can specify a r								i 🖻 🖩 🗟 🥖
Optimize Wa	alk Forward								
Symbol	Parameters	Start	End	Net Profit	Gross Profit	Gross Loss	Executions	Commission: Click h	ere to save
AXP	C,EMA,16,C,EMA,20 (Fast In	put,FMar/03/14	Mar/03/15	\$1,696.00	\$1,924.00	(\$228.00)	8	\$0.00	arysis.
AXP	C,EMA,14,C,EMA,20 (Fast Inj	put,FApr/02/14	Apr/02/15	\$2,076.00	\$2,333.00	(\$257.00)	10	\$0.00	\$195.0
AXP	C,EMA,12,C,EMA,24 (Fast Inj	put,FMay/02/14	May/02	\$2,161.00	\$2,423.00	(\$262.00)	7	\$0.00	\$54.0
AXP	C,EMA,10,C,EMA,26 (Fast Inj	put,FJun/01/14	Ju Select an execu	ution 15.00	\$1,832.00	(\$117.00)	7	\$0.00	\$62.0
AXP	C,EMA,14,C,EMA,20 (Fast In	out,FJul/01/14	Ju instance from t		\$1,851.00	(\$532.00)	12	\$0.00	\$337.0
AXP	C,EMA,16,C,EMA,22 (Fast Inj	put,FJul/31/14	Ju see the details	below. 58.00	\$1,484.00	(\$226.00)	5	\$0.00	\$226.0
Metrics Charl	rt Reports Periods Trades (1	1) Executions (12)							
	lav different informa	/ EMA,20 (i	Fast Input,Fast Method	,Fast Period,Slow Inp	ut,Slow Method,Slow	Period)			
Type Wal Symbol AXF	P These tabs show	/ EMA,20 (i	Fast Input,Fast Method	,Fast Period,Slow Inp		Period) Trades		Short Trades	
Type Wal Symbol AXF Bar Size 1 da	alk Forward P These tabs show different informa about the analys	/ EMA,20 (i	-	,Fast Period,Slow Inp \$1,319.00		Trades	30.00)	Short Trades	\$1,449.00
Type Wal Symbol AXF Bar Size 1 da	Alk Forward p lay Metric These tabs show different informa about the analys Metric	/ EMA,20 (i	-			Trades (\$1	30.00) 30.00)	Short Trades	\$1,449.00 \$1,449.00
Type Wal Symbol AXF Bar Size 1 da Total Net Profit	Alk Forward p lay Metric These tabs show different informa about the analys Metric	/ EMA,20 (i	-	\$1,319.00		Trades (\$1 (\$1		Short Trades	
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Gro	Alk Forward p lay Metric These tabs show different informa about the analys Metric	/ EMA,20 (i	-	\$1,319.00 \$1,319.00		Trades (\$1 (\$1 \$2	30.00)	Short Trades	\$1,449.00
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Gro Gross Profit	Alk Forward p lay Metric These tabs show different informa about the analys Metric	/ EMA,20 (i	-	\$1,319.00 \$1,319.00 \$1,851.00		Trades (\$1 (\$1 \$2	30.00) 285.00	Short Trades	\$1,449.00 \$1,566.00
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Gru Gross Profit Gross Loss	Alk Forward p lay Metric These tabs show different informa about the analys Metric	/ EMA,20 (i	-	\$1,319.00 \$1,319.00 \$1,851.00 (\$532.00)		Trades (\$1 (\$1 \$2 (\$4	30.00) 285.00 15.00)	Short Trades	\$1,449.00 \$1,566.00 (\$117.00)
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Gro Gross Loss Commission Profit Factor Max. Drawdown	Alk Forward p lay Metrie t (Inc Commissions) ross - Loss)	/ EMA,20 (i	-	\$1,319.00 \$1,319.00 \$1,851.00 (\$532.00) \$0.00 3,479 \$337.00		Trades (\$1 (\$1 \$2 (\$4 \$2 \$2	30.00) 285.00 15.00) \$0.00 0.687 277.00	Short Trades	\$1,449.00 \$1,566.00 (\$117.00) \$0.00 13.385 \$60.00
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Gri Gross Loss Commission Profit Factor Max. Drawdown Max Drawdown	Alk Forward p tay Metric ti (Inc Commissions) ross - Loss) vn n (%)	/ EMA,20 (i	-	\$1,319.00 \$1,319.00 \$1,851.00 (\$532.00) \$0.00 3.479 \$337.00 0.33%		Trades (\$1 (\$1 \$2 (\$4 \$2 \$2	30.00) 285.00 15.00) \$0.00 0.687 277.00 0.28%	Short Trades	\$1,449.00 \$1,566.00 (\$117.00) \$0.00 13.385 \$60.00 0.06%
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Grr Gross Loss Commission Profit Factor Max. Drawdown Total #Trades	Alk Forward p lay Metric ti (Inc Commissions) ross - Loss) vn n (%)	/ EMA,20 (i	-	\$1,319.00 \$1,319.00 \$1,851.00 (\$532.00) \$0.00 3.479 \$337.00 0.33% 11		Trades (\$1 (\$1 \$2 (\$4 \$2	30.00) 285.00 15.00) \$0.00 0.687 277.00 0.28% 5	Short Trades	\$1,449.00 \$1,566.00 (\$117.00) \$0.00 13.385 \$60.00 0.06% 6
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Grr Gross Loss Commission Profit Factor Max. Drawdown Total # Trades Percent Profital	Alk Forward p lay Metric ti (Inc Commissions) tross - Loss) vn m (%) able	/ EMA,20 (i	-	\$1,319.00 \$1,319.00 \$1,851.00 (\$532.00) \$0.00 3.479 \$337.00 0.33% 11 36.36%		Trades (\$1 (\$1 \$2 (\$4 \$2	30.00) 285.00 15.00) \$0.00 0.687 277.00 0.28% 5 0.00%	Short Trades	\$1,449.00 \$1,566.00 (\$117.00) \$0.00 13.385 \$60.00 0.06% 6 50.00%
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Grr Gross Loss Commission Profit Factor Max. Drawdown Total # Trades Percent Profital # Winning Trad	Alk Forward p lay Metric tricent informa about the analys metric tricent informa about the analys ross - Loss) vn n (%) s able des	/ EMA,20 (i	-	\$1,319.00 \$1,319.00 \$1,851.00 (\$532.00) \$0.00 3.479 \$337.00 0.33% 11 36.36% 4		Trades (\$1 (\$1 \$2 (\$4 \$2	30.00) 285.00 15.00) \$0.00 0.687 277.00 0.28% 5	Short Trades	\$1,449.00 \$1,566.00 (\$117.00) \$0.00 13.385 \$60.00 0.06% 6 50.00% 3
Type Wal Symbol AXF Bar Size 1 da Total Net Profit Total Profit (Grr Gross Profit Gross Loss Commission Profit Factor Max. Drawdown Total # Trades Percent Profital Winning Trad	Alk Forward p lay Metric tricent informa about the analys metric tricent informa about the analys ross - Loss) vn n (%) s able des	4 ation is.	All Trades	\$1,319.00 \$1,319.00 \$1,851.00 (\$532.00) \$0.00 3.479 \$337.00 0.33% 11 36.36%		Trades (\$1 (\$1 \$2 (\$4 \$2	30.00) 285.00 15.00) \$0.00 0.687 277.00 0.28% 5 0.00%	Short Trades	\$1,449.00 \$1,566.00 (\$117.00) \$0.00 13.385 \$60.00 0.06% 6 50.00%

The following screen shot shows an example of the **Chart** tab of the strategy analysis. This tab displays a visual representation of the executed trades that occurred for the selected execution instance.



Several visual reports are available under the **Reports** tab. The available report types can be found in the **Report** dropdown.

٥			MotiveWa	ive - Console (g	joogle)				$\frac{\kappa_{N}}{\kappa_{N}} = \frac{\kappa_{N}}{\kappa_{N}} >$
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Untitled*									🖹 📂 🖩 🖳 d
Optimize W	/alk Forward								
Symbol	Parameters	Start	End	Net Profit	Gross Profit	Gross Loss	Executions	Commissions	Max Drawdowr
AXP	C,EMA,12,C,EMA,24 (Fast In	n May/02/14	May/02/15	\$2,161.00	\$2,423.00	(\$262.00)	7	\$0.00	\$54.0
XP	C,EMA,10,C,EMA,26 (Fast In	n Jun/01/14	Jun/01/15	\$1,715.00	\$1,832.00	(\$117.00)	7	\$0.00	\$62.0
XP	C,EMA,14,C,EMA,20 (Fast In	n Jul/01/14	Jul/01/15	\$1,319.00	\$1,851.00	(\$532.00)	12	\$0.00	\$337.0
AXP	C,EMA,16,C,EMA,22 (Fast In	n Jul/31/14	Jul/31/15	\$1,258.00	\$1,484.00	(\$226.00)	5	\$0.00	\$226.0
AXP	C,EMA,16,C,EMA,22 (Fast In	n Aug/30/14	Aug/30/15	\$139.00	\$1,232.00	(\$1,093.00)	7	\$0.00	\$1,093.0
\$1,500. Ne Cui \$1,250. Tra Ent \$1,000. Exi	t Profit mulative Profit ides Profit/Loss try Efficiency t Efficiency ciency	Day Of Week	Long/Short	Both			reports for the instance. Ch	ontains various vis re selected execut noose the report ty <b>port</b> drop down.	tion
(\$250.00)									
(\$500.00)	Sunday	Monday	Tuesday	v We	ednesday	Thursday	Frida	зу	Saturday
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The **Periods** tab groups trades together based on the selected period (hourly, daily weekly etc). Each row in this table displays summary information.

File View	Configure V	Vindow Help												
해 Untitled* -														🖹 🖻 🖩 🔍 🥖
Optimize Wa	alk Forward													
Symbol	F	Parameters		Start	End	Net P	rofit (	Gross Profit	Gross Lo	ss Ex	ecutions	Commi	issions	Max Drawdown
AXP	C,EMA,12,C	EMA,24 (Fast I	nput,Fa: May/0	2/14	May/02/15		\$2,161.00	\$2,423.00	(\$	262.00)	7		\$0.00	\$54.0
AXP	C,EMA,10,C	EMA,26 (Fast I	nput,Fa: Jun/01	1/14	Jun/01/15		\$1,715.00	\$1,832.00	(\$	117.00)	7		\$0.00	\$62.0
AXP	C,EMA,14,C	EMA,20 (Fast I	nput,Fa: Jul/01	/14	Jul/01/15		\$1,319.00	\$1,851.00	(\$	532.00)	12		\$0.00	\$337.0
AXP	C,EMA,16,C	EMA,22 (Fast I	nput,Fa: Jul/31	/14	Jul/31/15		\$1,258.00	\$1,484.00	(\$	226.00)	5		\$0.00	\$226.0
AXP	C,EMA,16,C	EMA,22 (Fast I	nput,Fa: Aug/3	0/14	Aug/30/15		\$139.00	\$1,232.00	(\$1.	093.00)	7		\$0.00	\$1,093.0
Metrics Char	rt Reports Per	iods Trades (1	1) Execution	s (12)										
Period: Dail	y 🔻	Long/Short: E	Both 💌											
Peric 30 M	lin Interval	Gross Profit	Gross Loss	# Trades	% Winning	Avg Trade	Ava Winni	Avg Losing	Largest Wi	Largest Lo	MFE	MAE	ETD	% of Trades
	Interval	\$411.00	\$0.00	" Hudeb	1 100.00%	\$411.00	-	\$0.00	\$411.00	\$0.00	\$776.00	\$55.00	\$365.00	9.09
Sep-10 Day	Of Week	\$0.00	(\$130.00)		1 0.00%	(\$130.00)	\$0.00	(\$130.00)	\$0.00	(\$130.00)	\$43.00	\$165.00	\$173.00	9.09
Sep-23 Daily	/	This re	eport groups		1 0.00%	(\$45.00)	\$0.00	(\$45.00)	\$0.00	(\$45.00)	\$122.00	\$258.00	\$167.00	9.09
Sep-24 Weel	kly	<	based on the		1 0.00%	(\$8.00)	\$0.00	(\$8.00)	\$0.00	(\$8.00)	\$71.00	\$32.00	\$79.00	9.09
Oct-30 Mont	thly	select	ed period		1 0.00%	(\$12.00)	\$0.00	(\$12.00)	\$0.00	(\$12.00)	\$1,006.00	\$52.00	\$1,018.00	9.09
Jan-08	\$285.00	\$285.00	\$0.00		1 100.00%	\$285.00	\$285.00	\$0.00	\$285.00	\$0.00	\$630.00	\$65.00	\$345.00	9.09
May-14	\$1,110.00	\$1,110.00	\$0.00		1 100.00%	\$1,110.00	\$1,110.00	\$0.00	\$1,110.00	\$0.00	\$1,491.00	\$37.00	\$381.00	9.09
Jun-17	(\$70.00)	\$0.00	(\$70.00)		1 0.00%	(\$70.00)	\$0.00	(\$70.00)	\$0.00	(\$70.00)	\$126.00	\$154.00	\$196.00	9.09
Jun-18	(\$60.00)	\$0.00	(\$60.00)		1 0.00%	(\$60.00)	\$0.00	(\$60.00)	\$0.00	(\$60.00)	\$18.00	\$122.00	\$78.00	9.09
Jun-30	(\$207.00)	\$0.00	(\$207.00)		1 0.00%	(\$207.00)	\$0.00	(\$207.00)	\$0.00	(\$207.00)	\$168.00	\$250.00	\$375.00	9.09
Jul-01	\$45.00	\$45.00	\$0.00		1 100.00%	\$45.00	\$45.00	\$0.00	\$45.00	\$0.00	\$52.00	\$24.00	\$7.00	9.09
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The **Trades** tab shows all of the trades that occurred. A trade includes the entry into the trade as well as the exit out of the trade. This allows you to see the profit/loss that occurred with each trade.

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Symbol	U,LIWA,	Parame		pur'i agailoi		Ju	Ena 1/31/13		0111 1,200.00	Gross Profit		5 LOSS (9220.00)	Executions	Commis	au.uu	Max Di	rawdown J220.0
XP	C,EMA,	16,C,EMA,	22 (Fast In	put,Fa Aug/3	0/14	Au	ıg/30/15		\$139.00	\$1,232.0	00	(\$1,093.00)		7	\$0.00		\$1,093.0
ХР	C,EMA,	14,C,EMA,	20 (Fast In	put,Fa Sep/2	9/14	Se	ep/29/15		\$475.00	\$1,600.0	00	(\$1,125.00)		9	\$0.00		\$1,125.0
XP	C,EMA,	16,C,EMA,	22 (Fast In	put,Fa Oct/29	9/14	O	ct/29/15	(	\$509.00)	\$1,232.0	00	(\$1,741.00)		9	\$0.00		\$1,741.0
XP	C,EMA,	16,C,EMA,	26 (Fast In	put,Fa Nov/2	8/14	No	ov/28/15	(	\$361.00)	\$1,119.0	00	(\$1,480.00)		8	\$0.00		\$1,480.0
AXP.	C.EMA.	16.C.EMA.	26 (Fast In	put.Fa Dec/2	8/14	De	ec/28/15	(	\$215.00)	\$1.265.0	loo	\$1.480.00)		8	\$0.00		\$1.480.0
Metrics Chart	Reports	Periods	Trades (11	) Execution	ns (12)												
Trade # Sym	Quantit	ty▲ Entr	y Price	Exit Price	Entry	Time	Exit Time	P/L	Pips	Commission	Cumulativ	. Cum. Com	MAE	MFE	ETD		Bars
1 AXP		100	93.51	89.40	Jul-14 4	:00:00	ep-14 4:00:00	\$411.00	411.	0.00	\$411.0	0 \$0.00	\$55.00	\$776.00	\$365.0	00	
2 AXP		100	89.40	88.10	;ep-14 4	:00:00)	ep-14 4:00:00	(\$130.00)	-130.	\$0.00	\$281.0	0 \$0.00	\$165.00	\$43.00	\$173.0	00	
3 AXP		100	88.10	88.55	ep-14 4	:00:003	ep-14 4:00:00	(\$45.00)	-45.	\$0.00	\$236.0	0 \$0.00	\$258.00	\$122.00	\$167.0	00	
4 AXP		100	88.55	88.47	эер-14 4	:00:003	ep-14 4:00:00	(\$8.00)	-8.	\$0.00	\$228.0	0 \$0.00	\$32.00	\$71.00	\$79.0	00	
5 AXP		100	88.47	88.59	эер-14 4	:00:00	0ct-14 4:00:00	(\$12.00)	-12.	\$0.00	\$216.0	0 \$0.00	\$52.00	\$1,006.00	\$1,018.0	00	
6 AXP		100	88.59	91.44	Oct-14 4	:00:00	an-15 4:00:00	\$285.00	285.	\$0.00	\$501.0	0 \$0.00	\$65.00	\$630.00	\$345.0	)0	
7 AXP		100	91.44	80.34	lan-15 4	:00:00 \$	ay-15 4:00:00	\$1,110.00	1110.	0 \$0.00	\$1,611.0	0 \$0.00	\$37.00	\$1,491.00	\$381.0	)0	
8 AXP		100	80.34	79.64	1ay-15 4	:00:00 J	un-15 4:00:00	(\$70.00)	-70.	\$0.00	\$1,541.0	0 \$0.00	\$154.00	\$126.00	\$196.0	00	
9 AXP		100	79 64	80.24	lun-15 4	.00.00 l	un-15 4:00:00	(\$60.00)	-60.	\$0.00	\$1,481.0	0 \$0.00	\$122.00	\$18.00	\$78.0	)0	
10 AXP		100					un-15 4:00:00	(\$207.00)	-207.	\$0.00	\$1,274.0	0 \$0.00	\$250.00	\$168.00	\$375.0	)0	
11 AXP		100		ry and exit) his execution		urred	lul-15 4:00:00	\$45.00	45.	\$0.00	\$1,319.0	0 \$0.00	\$24.00	\$52.00	\$7.0	)0	
			intu	is execution													
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#### The **Executions** tab displays all of the filled orders.

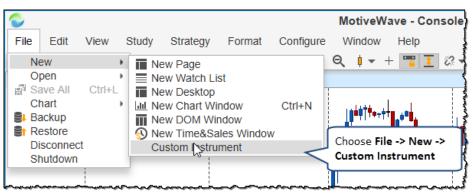
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AXP		C,EMA,22 (Fast Input,Fa Aug		Aug/30/15		\$139.00	\$1,484.00	(\$220.00)		7	\$0.00	\$1,093.0
XP		C,EMA.20 (Fast Input,Fa Sep		Sep/29/15		\$475.00	\$1,600.00	(\$1,125.00)		9	\$0.00	\$1,030.0
AXP		C,EMA,22 (Fast Input,Fa Oct		Oct/29/15		(\$509.00)	\$1,232.00	(\$1,741.00)		9	\$0.00	\$1,741.0
AXP		C,EMA,26 (Fast Input,Fa Nov		Nov/28/15		(\$361.00)	\$1,119.00	(\$1,480.00)		8	\$0.00	\$1,480.0
AXP		C.EMA.26 (Fast Input Fa Dec		Dec/28/15		(\$215.00)	\$1.265.00	(\$1.480.00)		8	\$0.00	\$1,480.0
Metrics	Chart Reports Pe	eriods Trades (11) Execut	ons (12)									
ID	Symbol	Time		Action	Quantity	Avg Price	Entry Price	Туре	P/L	Pips	Commission	Position
162035	AXP	22-Jul-14	04:00	SELL	100	93.51	93.51	Entry	\$0.00	0.0	\$0.0	0 -10
162036	AXP	08-Sep-14	04:00	BUY	200	89.40	93.51	SAR	\$411.00	411.0	\$0.0	0 10
162037	AXP	10-Sep-14	04:00	SELL	200	88.10	89.40	SAR	(\$130.00)	-130.0	\$0.0	0 -10
162038	AXP	23-Sep-14	04:00	BUY	200	88.55	88.10	SAR	(\$45.00)	-45.0	\$0.0	0 10
162039	AXP	24-Sep-14	04:00	SELL	200	88.47	88.55	SAR	(\$8.00)	-8.0	\$0.0	0 -10
162040	AXP	30-Oct-14	04:00	BUY	200	88.59	88.47	SAR	(\$12.00)	-12.0	\$0.0	0 10
162041	AXP	08-Jan-15	04:00	SELL	200	91.44	88.59	SAR	\$285.00	285.0	\$0.0	0 -10
162042	AXP	14-May-18	5 04:00	BUY	200	80.34	91.44	SAR	\$1,110.00	1110.0	\$0.0	0 10
162043	AXP		00	SELL	200	79.64	80.34	SAR	(\$70.00)	-70.0	\$0.0	0 -10
162044	AXP	Tabular view of all the	00	BUY	200	80.24	79.64	SAR	(\$60.00)	-60.0	\$0.0	0 10
162045	AXP	executions that occurred (executed orders).	00	SELL	200	78.17	80.24	SAR	(\$207.00)	-207.0	\$0.0	0 -10
162046	AXP	(executed orders).	00	BUY	100	77.72	78.17	Exit	\$45.00	45.0	\$0.0	0
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## 8 Custom Instruments

MotiveWave<sup>™</sup> allows you to create custom instruments that are based on 2 or more existing instruments. There are 3 types of custom instruments:

- 1. Spread Displays the difference between two instruments
- 2. Ratio Displays the ratio by dividing the price of one instrument by another
- 3. Index Allows you to combine the prices of 2 or more instruments into an index

To create a new custom instrument, choose *File -> New -> Custom Instrument* from the Console menu bar:



This will open a wizard to guide you through creating a custom instrument. You will need to enter a unique symbol for the instrument (it cannot match any existing instrument in the workspace). In the following example we are going to create a custom index (US Dollar Index). The minimum tick value specifies the minimum amount for each change in the instrument price.

٥	Create Custom Instrument	×
Custom Ins	trument	
A custom instrum symbol for your in	ent allows you to combine and display live and historical data from multiple instruments. Enter a unique strument and choose from the following types:	
<ol><li>Ratio - Disp</li></ol>	splays the difference between two instruments lays the ratio by dividing the price of one instrument by another ws you to combine the prices of 2 or more instruments in to a unified index.	
Symbol:	US Index Symbol must be unique	
Туре:	Index  In	
Title:	US Dollar Index	
Description:		
Minimum Tick:	0.01 Enter the minimum tick	
	< Back Next > Cance	

The US Dollar Index measure the relative value of the US Dollar vs a set of foreign currencies. For more information see the definition on Wikipedia: https://en.wikipedia.org/wiki/U.S.\_Dollar\_Index. In this case we need to include 6 different currency pairs and use the exponent option to assign a weight to each one (**Note:** EUR/USD and GBP/USD need to be inverted):

- 1. EUR/USD 57.6% weight (inverted) (Euro dollar)
- 2. USD/JPY 13.6% weight (Japanese Yen)
- 3. GBP/USD 11.9% weight (inverted) (British Pound)
- 4. USD/CAD 9.1% weight (Canadian Dollar)
- 5. USD/SEK 4.2% weight (Swedish Krona)
- 6. **USD/CHF** 3.6% weight (Swiss Franc)

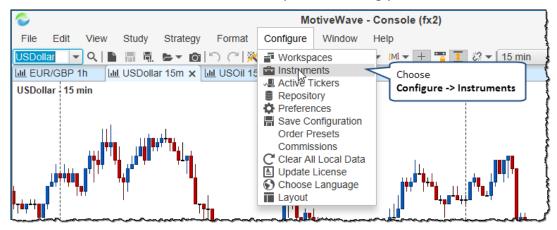
These values are multiplied together and then multiplied by 50.14381 (see link above for the reason for this number).

Edit Custom Instrument - US Index (Index) ×
Choose Instruments (Index)
Click the <b>Add</b> button to add instruments to your custom index (minimum 2). When adding an instrument, you can optionally specify a multiplier to adjust (or normalize) the price. The index will be calculated using the sum of each instrument muliplied Click here to add a symbol a symbol a symbol a symbol and a symbol a symbol and a symbol a sy
Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system     Image: Constraint of the second system       Image: Constraint of the second system     Image: Constraint of the second system
(USD/SEK^0.042) (USD/CHF^0.036) Instrument Dependency × Select an instrument from the drop down and optionally specify a multiplier to adjust the weighting for the index. Instrument: EUR/USD  Q <sup>+</sup> Multiplier: 1 Exponent is used to assign the weight Value OK Cancel
< Back Finish Cancel

The following chart shows daily candles for the custom index that we created above. Incoming price updates will also be calculated using the formula that was defined for the instrument.



Custom instruments can be edited/managed from the **Manage Instruments** dialog (*Configure -> Instruments* from the Console menu bar). The easiest way to display all custom instruments in the workspace is to sort the table by the **Type** column (ascending). If you double click on a custom instrument, the **Custom Instrument Wizard** will be opened allowing you to edit the instrument.



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Symbol	Туре 🔻	Currency	Exch	ange	Des	cription		Source	+
CAD Oil	Custom	USD	USD NONE		adian Dollar Vs	F	FXCM		
JS Index	Custom	USD	NONE	US E	Oollar Index		F	FXCM	
JSDollar	CFD	USD	FXCM				F	FXCM	
JPN225	CFD	JFY	FXCM		Double click	or select	F	FXCM	
GER30	CFD	Custon	1		and press the button below		F	FXCM	
RA40	CFD	Instrum				v.	F	FXCM	
TA40	CFD	LOIN	1.0001				F	FXCM	
SUI30	CFD	EUR	FXCM				F	FXCM	
ESP35	CFD	EUR	FXCM				F	FXCM	
HKG33	CFD	HKD	FXCM				F	FXCM	
AUS200	CFD	AUD	FXCM				F	FXCM	
NAS100	CFD	USD	FXCM	NAS	DAQ 100		F	FXCM	
SPX500	CFD	USD	FXCM	<u></u>	500		F	FXCM	
JS30	CFD	USD	FXCM	Click here to	-		F	FXCM	
JSOil	CFD	USD	FXCM	define a ne custom inst			F	FXCM	