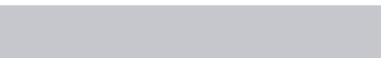# Trader Workstation Users' Guide

Download the software to your PC and ...sed version allows you to access your ... internet browser, and is always ... memory and may run faster, but ... new features. To download to

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Interactive Brokers
The Professional's Gateway to the World's Markets

Trader Workstation Users Guide
March 11, 2010
Current with TWS Build 901

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Get Started

This section provides the basic information you need to get started using TWS, including how to:

- Log In to TWS
- Add Market Data
- Add Market Data using Class or Symbol
- Use Quick Data
- Import Tickers from a File
- Create an Order
- Modify an Order
- Transmit an Order
- Cancel an Order
- Use the Order Wizard
- Deactivate an Order
- Trade Bonds and Treasuries
- Trade Mutual Funds
- Trade FX from the Trading Window

Log In to TWS

You can run TWS from your Internet browser (recommended), or download the software to your PC and launch it directly from your desktop. The browser-based version allows you to access your account and execute trades from any Java™-enabled internet browser, is always running the latest release, and allows you to save your settings from your primary machine to a server so that they will download to any machine, and your TWS will look exactly the same regardless of what internet machine you use to log in. The installed version uses less memory and may run faster, but requires you to download each release to take advantage of new features. To download to your PC, see the Installation Instructions on the website.
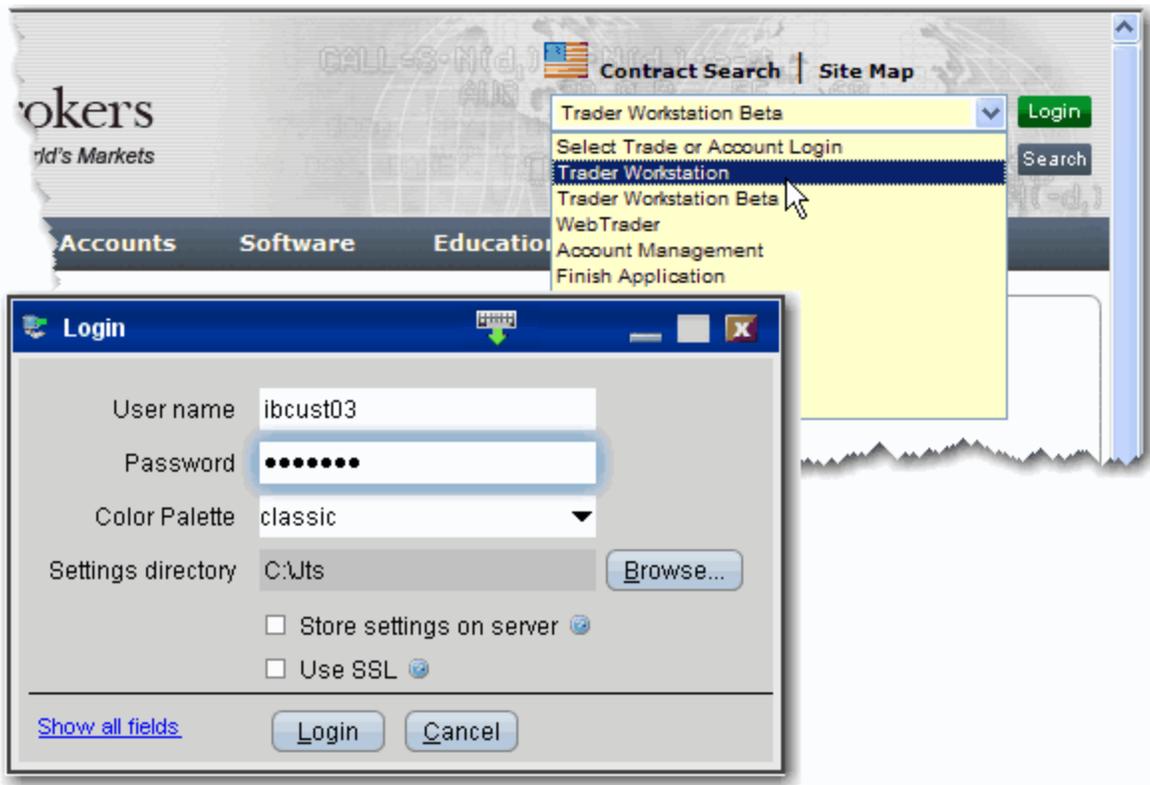
To log in from your browser

1   In the Login box in the upper right corner of the homepage, select *Trader Workstation* from the drop-down list.

>   **Note:** If you are a first-time user, select Account Management, enter your username and password, and click Login.

2   In the Login box, enter your username and password, and click *Login*.

>   Options:

- The color palette allows you to choose a new color skin for TWS. If you select a palette and want to change it once you have logged in, use the Style page in **Global Configuration**.

- Settings Directory - By default, TWS files are saved in C:\Jts. If you would like to change the location of your TWS settings files, use the Browse button to specify a new directory.

- Use/store settings on server - This option allows you to save your TWS settings, including market data, pages etc., on our server instead of on your local machine. If checked, your workstation will have the same data and look regardless of your login location. If unchecked, settings are only saved on the computer you are currently using. See details in the Restore and Save Settings topic.

- Use SSL - Your identity and trading information are always protected. Checking the *Use SSL* option gives added privacy and integrity to your order information as it travels over the internet. Minor performance impacts may be experienced depending on the capabilities of your PC.

- Click *Show all fields* to select a different language for TWS, and to have the system migrate settings that you may have saved under a different user name.

- Mouse-driven login - Click the Keyboard icon in the title bar to enter your username and password using the mouse instead of your computer keyboard. Use the mouse to click the appropriate keys on the clickable keyboard display.

To log in from your desktop

1 Double-click the application icon on your desktop.

2 Enter your username and password.

3 If you are prompted to install the free Java™ Runtime plug-in, see the Java™ Plug-In installation document.

For help logging in with your secure device, click to watch the video.

Add Market Data

Before you trade, you'll want to add market data lines for your assets. A market data line represents an individual ticker, and displays the product type, order destination, ask and bid prices, and other defining attributes. You can add a market data line by typing directly in the Underlying column of the trading screen, or by using the *Request Ticker by Underlying* box.

Note: Advanced/options traders can add security definitions by entering the exchange contract class or contract symbol.

To add market data to the trading screen

1   Click in the *Underlying* field in an empty row.

2   Enter an underlying symbol and press **ENTER**.

3   Select a contract from the list on the trading screen. For instruments that require an expiry, choose a month and year, or select *All* to open the contract selection box. It's important to note that selecting *Smart* or *Directed* in this step affects both market data and default order routing, as explained in the bubbles below. You can modify the routing destination on a per-order basis using the *Destination* order field.

4   In the **Contract Selection** box, select a contract(s) and click OK. You can limit the contracts displayed in the right pane by selecting criteria from the Filter section. Choose Smart as the exchange to use SmartRouting.
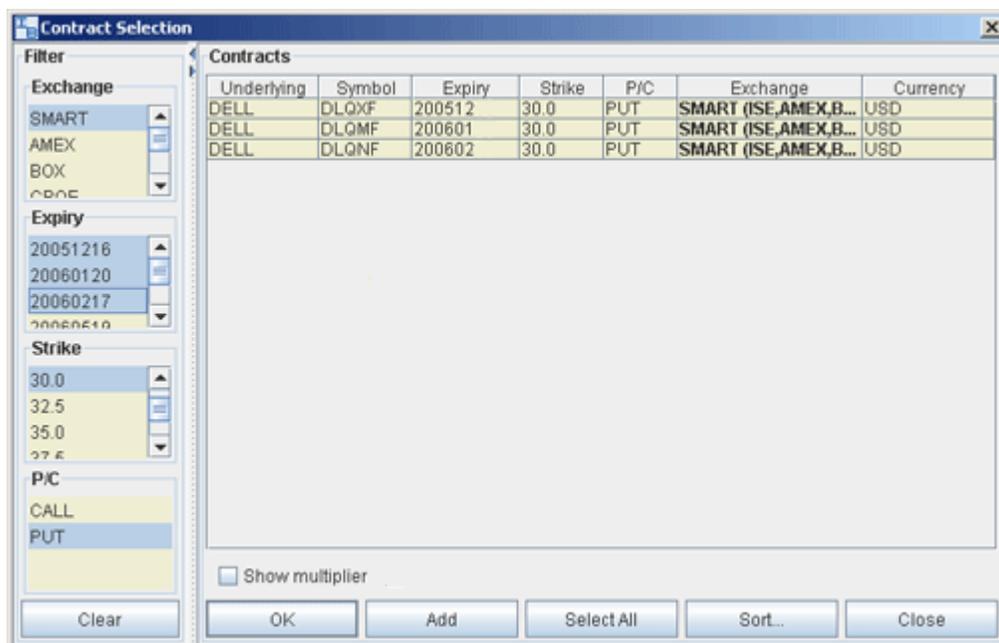
- Market data lines are active when visible, regardless of where they originate.

- Each alarm always uses one line of market data whether or not you are viewing the asset that contains the alarm.

- Market data requested through an API has top priority, followed by data requested by alarms, and finally basic market data display. This means that if you are viewing a trading page that includes 100 lines of market data, and you also have price-activated alarms set for 6 other contracts, those 6 contracts will receive market data, and your trading page will only show data for 94 contracts.

- The option chains on OptionTrader do not count against available market data lines.

For details on market data fees and allocation rules, see the Market Data and News Subscriptions overview on the IB web site.

To add an asset using the Request Ticker by Underlying box

1   Click the **Add Ticker** icon on the Trading toolbar, or select *Add Symbol* from the **Ticker** menu.

2   Enter a symbol and follow from Step 2 above.

Note: If you add a market data line for a derivative instrument, TWS will ask if you want the underlying symbol added to the page. If you answer yes, it will be included above its derivatives.

Add Market Data using Class or Symbol

Advanced options traders can enter the contract symbol or class as defined by the exchange on which it's trading.

To add an options security definition directly to the trading screen

1 Click in an empty row in the **Underlying** column.

2 Enter the security definition by contract class or contract symbol, and press **ENTER**. Use the formats in the table below.

Symbol Entry Formats		
contract class	@	exchange acronym
contract symbol	#	exchange acronym

To add a security definition using Request Ticker form

1 In symbol mode, do one of the following to open the Request Ticker by Exchange Symbol form:

- Click the **Ticker** icon on the Trading toolbar.
- On the Ticker menu select Add Symbol.
- Right click anywhere on the trading screen and select **Insert Ticker.**

2 In the Instrument Type field select Option.

3 Select the Symbol Type.

If you select	Do this
Class	Enter the contract class symbol, exchange, expiration date and strike price, and select the right.
Contract	Enter the exchange local symbol and the exchange.

Note: If you add a market data line for a derivative instrument, TWS will ask if you want the underlying symbol added to the page. If you answer yes, it will be included at the bottom of the page (unless the underlying is already on the page).

Use Quick Data

You can use market data shorthand to quickly request data for stock, options or futures contracts.
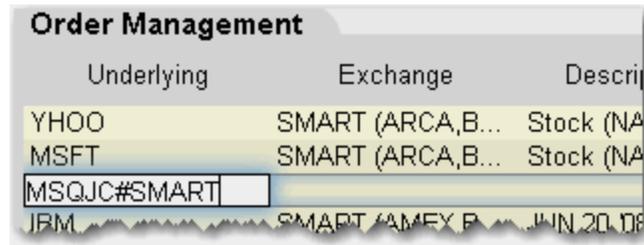
Use Quick Data for Stocks

- In the Underlying field using the format *symbol **pipe** exchange*, as in:

    IBM|SMART or DELL|ISLAND.

Note: For NASDAQ listed contracts, use ISLAND as the destination.

Use Quick Data for Options and Futures

- Enter shorthand in the Underlying field using the format *exchange symbol **pound sign** exchange* as in:

    MSQJC#SMART (option) or

    MSFT1CU8#ONE (future)

Import Tickers from a File

You can now populate a trading page with market data by importing a text file containing a comma-delimited list of ticker descriptions. Create the list using any word processing program and save the file with a .txt file extension.
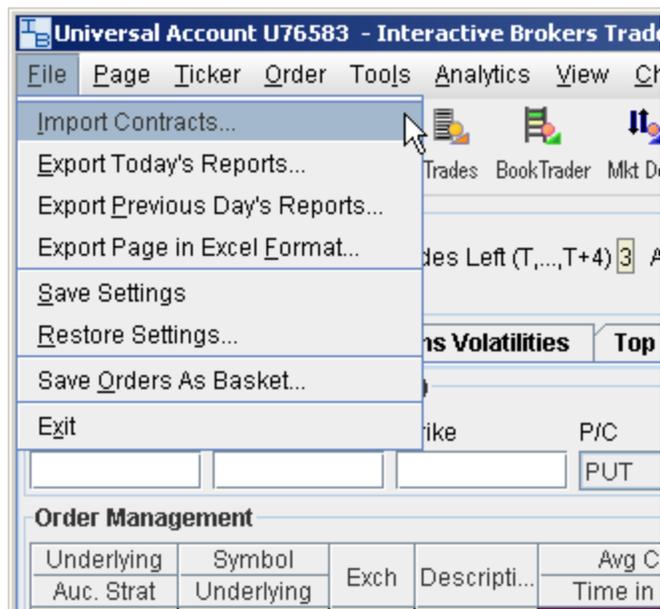
To create a text file of ticker symbols to import

1   Create a file with the extension .txt, for example twsTickers.txt.

2   In the file, create one comma-delimited line for each line of market data you want using the syntax described below. Note that the first field designation is the line type: DES, SYM, and CON.

   DES, UNDERLYING, SECTYPE, EXCHANGE, EXPIRATION, STRIKE, PUT/CALL, MULTIPLIER

   SYM, SYMBOL, EXCHANGE

   CON, CONID, EXCHANGE

The DES line type requires information or placeholders for information, with the strike, Put/Call and multiplier fields being optional. Format for the expiry is YYYYMM, or YYYYMMDD. All entries must be in caps. An example for an options contract XYZ would be:

   DES, XYZ, OPT, ISE, 200607, 75, CALL,

A stock contract for symbol XYZ in this line type would look like this:

   DES, XYZ, STK, SMART,,,,

where the commas are placeholders for fields you don't define for stocks.

Using the SYM line type for a stock would look like this:

SYM, XYZ, SMART

Use the CON type to quickly enter contracts with a conid, for example

CON, 12348765, SMARTTo import a contracts file

When you import a file, the contract lines will be entered on the bottom of the active trading page unless you elect to enter them on a new page.

1 On the **File** menu, select *Import Contracts*.

2 Use the *Browse* button to find the .txt file you created.

3 To populate a new page with these contracts, check the *New Page* box and enter a page name; otherwise the contracts will appear at the bottom of the currently selected page.

4 Click OK.

Create an Order

There are many ways to create orders in TWS. This topic shows you how to create and transmit an order directly from a market data line in the trading window.

To create and transmit an order from the trading window

1 Click the "Ask" or "Bid" price of an asset (or use your buy or sell hot key on the selected Market Data line) to create an Order Management line directly below the selected asset.

- Click the **Ask Price** to create a **Buy** order.

- Click the **Bid Pr**ice to create a Sell order.

2 On the Order Management line, modify the order parameters Time in Force, Action, Quantity, Price, Order Type, or Destination, if needed.

> **Note:** To trade more efficiently, create order Presets with default order settings using the Order Presets in Global Configuration.

3 To transmit your order, click the "T" in the Status field.

Note: By default, a working order will display on any page that has the ticker, regardless of the page on which the order was created. You can modify where you want working orders to display from a specific page's settings. From Global Configuration, select Trading Window, then select Pages, then select a specific page. Select one of the following:

Show all orders for tickers on this page - Displays working orders for all tickers on this page, regardless of where they were created.

Show only orders created on this page- Orders created on the page will only display on the page.

Show inactive orders only, move active orders to Pending page - Shows deactivated or non-transmitted orders only. Working orders created from this page will only display on the Pending page.

Modify an Order

You can modify an order up until the time it has been executed at the order destination. Until this occurs, the order remains visible and editable on both the asset's order management line and the **Pending** page. An order is "working" if the order status is green. **Note that VWAP orders are accepted immediately and cannot be modified.**

Note: If you want to modify parameters other than Price and Quantity, you must cancel this working order, and create and transmit a new order. This practice is commonly required by order destinations.

To modify price and quantity in a working order

1   On the Order Management line, click in the **Action**, **Price** or **Quantity** field and make your change.

> **Note:** Orders that have child orders associated with them, such as bracket or scale orders, cannot have the order side flipped. Eligible orders say (Reverse) next to the opposite-side action. When you flip the order side, a cancel request is sent for the original order and both the original with the cancel request and the new reversed order are displayed.

2   Click the "T" in the status column to transmit your modified order.

To undo changes before you transmit, right-click and choose *Restore*.

Note: You may receive an execution on the original order before your modified order has replaced it on the exchange. Please see the Customer Agreement for specific details on modifying and canceling an order.

Transmit an Order

Once you have verified the order parameters on an order management line, you are ready to transmit your order.

To transmit an order

- Click the "T" in the Status field, or

- Use the right-click menu on the order management line and select *Transmit.*

After a transmitted order is accepted at the order destination, it becomes a "working" order. All working orders appear on the Pending page and on each page that displays the asset. The page name on any page that displays the asset will turn red.

To transmit multiple orders

- To transmit all orders on a page, on the **Order** menu select *Transmit Page*.

    Note: The dollar value in parenthesis reflects the value of all orders on the active page.

- To transmit all orders throughout TWS, on the **Order** menu select *Transmit All*.

Hold your mouse over the *Status* field to see field level help for the displayed color. For information on status colors, see the Order Status Colors topic.

Cancel an Order

For a non-transmitted order, the **Cancel** command deletes the selected order from your trading screen. For a working order, the **Cancel** command sends a cancellation request to the order destination. See the table below for the meaning of status colors on an order management line.

You can cancel a working order up until the time it has been executed at an order destination. You can also choose to cancel all orders on a page or all orders on your workstation. When you choose a "Cancel all" command, both non-transmitted and working orders are cancelled.

To cancel a working order

- Click the yellow "C" in the Status field

To cancel all orders (working and non-transmitted) on a trading page

1 Open the page that contains the orders you want to cancel.

2 On the **Order** menu, select *Cancel Page*.

3 At the prompt asking if you want to cancel all orders on the page, click **Yes**.

To cancel all orders (working and non-transmitted) in TWS

1   On the **Order** menu, select *Cancel All*.

2   At the prompt asking if you want to cancel all orders, click **Yes**.

For information on the colors displayed in the Status field, see the Order Status Colors topic.

Note: Your working order is not confirmed CANCELED until the status field turns red. Please see the Customer Agreement for further information on order confirmation/cancellation.

Use the Order Wizard

The Order Wizard is a live order-creation panel at the bottom of the trading that sorts order types by category, and helps you to create an order by presenting valid attributes for each order type you select.

To use the Order Wizard

1   Click the **Order Wizard** icon on the trading toolbar to display or hide the Order Wizard panel. The Order Wizard opens below your trading window.

Note: You can instruct the wizard to open each time you create an order using the General page on Global Configuration.

2   Click a category in the left pane, and use the associated attributes in the right pane to customize your order.

The Summary section along the top of the Order Wizard panel always displays the current order description, and immediately reflects any changes to the active order. The changes are also reflected on the order line in your trading window.

3   Use the **Preview** button to review your complete order description. Use the **Transmit** button to send the order, and use the **Cancel** button to cancel the order.

Deactivate an Order

When you deactivate an order, the order is cancelled at the exchange, but remains on your trading screen for you to resubmit.

To deactivate an order

- Right-click an order management line and select *Deactive*.

You can also use the DTC time in force to deactivate a day order that has not executed by the close of the market.

Trade Bonds and Treasuries

TWS lets you trade Smart-routed US Treasury bonds, notes and bills, and US-traded corporate bonds.

Before you can trade bonds, you must upgrade your trading permissions. To access Account Management, on the **View** menu select *Account Management*. Under **Trading Access** select *Trading Configuration.* In the Trading Permissions section of the page, check **Fixed Income**.

To trade bonds and treasuries

This procedure assumes that you have market data for a contract on your trading page. If you don't, see the procedures below to add data.

1 To trade a contract from your trading page, click the **Ask** price to create a BUY order; click the **Bid** price to create a sell order.

2 Modify order parameters including time in force (TIF), action, quantity, order type and price as necessary.

3 Click "T" to transmit your order.

Add Treasuries market data to your trading page

1 Click the **Treasuries** icon on the Trading toolbar, or use the **View** menu and select *Treasuries*.

2 In the Contract Selection box, use the Type list in the left pane to choose Bills, Bonds or Notes.

3 Filter your contracts using the Maturity date, Issue Date and Coupon filter lists.

4 Select the contract(s) from the right pane and click **OK**.

If you want to add multiple types of treasuries to your screen, click **Add** instead of OK. This will add the selected contracts to your trading screen and then allow you to select a different type and add more contracts. Click OK to close the box.
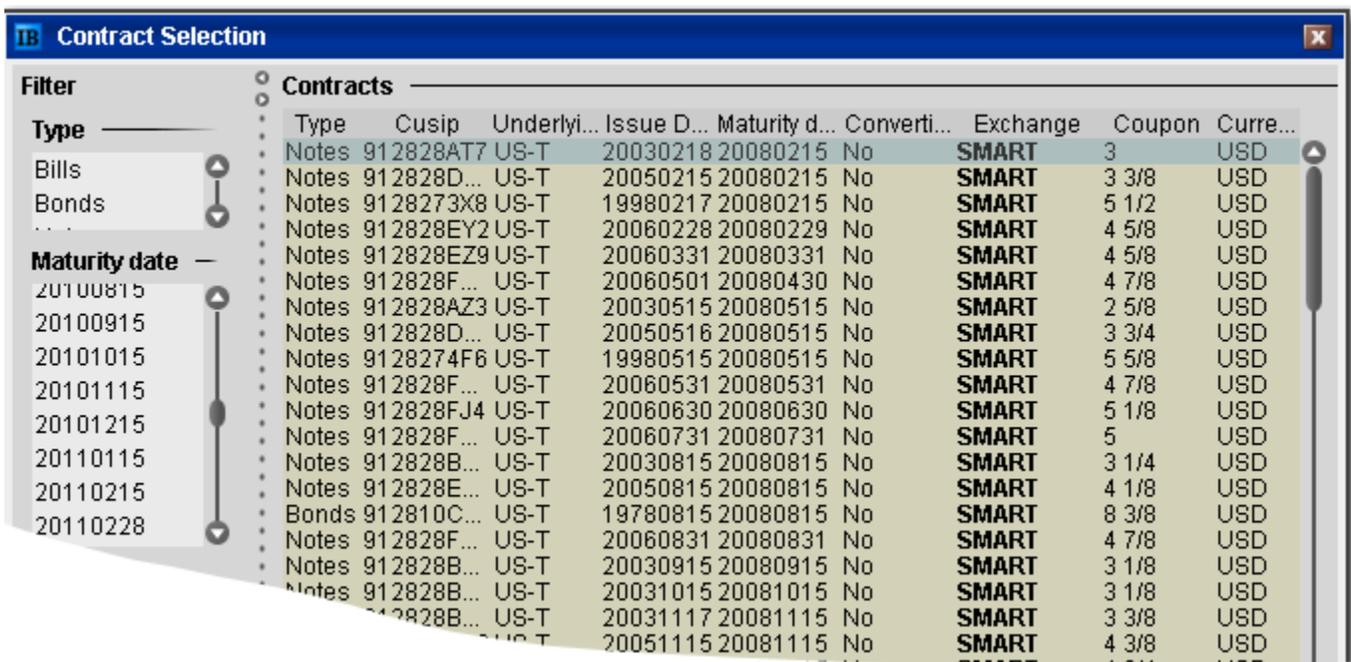
Add corporate bonds market data to your trading page

1   Enter an underlying symbol and hit enter, then select the *Bond* instrument from the selection list.

2   In the Contract Selection box, use the Maturity date, Issue Date and Coupon filter lists to narrow your display choices.

3   Select the contract(s) from the right pane and click **OK**.

If you want to add multiple contracts with different maturities, click **Add** instead of OK. This will add the selected contracts to your trading screen and then allow you to select a different maturity date and add more contracts. Click OK to close the box.

Market data for the bond is displayed on the trading page. The following information is noted in the Description field of the market data line:

- Instrument type - For treasuries. Labeled as bond, note, or bill.

- Coupon - the interest rate used to calculate the amount you will receive as interest payments over the course of a year.

- Maturity date - the date on which the issuer must repay the face value of the bond.

- CUSIP number - a nine-character ID for a specific security.

- Bond rating - For corporate bonds. Identifies the credit rating of the issuer. A higher credit rating generally indicates a less risky investment. The bond ratings are from Moody's and S&P, respectively.

Note: To see contract details, right-click a market data line and select Contract Info, then select Description.

Trade Mutual Funds

Choose a fund from our families of no load mutual funds, and trade from the trading window or the Order Ticket.

Before you can trade funds, you must upgrade your trading permissions. To access Account Management, on the **View** menu select *Account Management*. Under **Trading Access** select *Trading Configuration.* In the Trading Permissions section of the page, check **Mutual Funds**.

To trade a fund

1   Add fund contracts to your trading window.

    a   Click the **Mutual Funds** icon from the trading toolbar, or from the **View** menu select *Mutual Funds*.

    b   In the **Contract Selection** box, select a fund family in the left pane, and then choose the contract(s) you want to trade in the right pane. Click OK.

       Note: Data for funds only appears in the Last or Close price fields. Mutual funds are accumulated throughout the day and transmitted to the funds at 15:59 for pricing.

2   From the trading window, click the *Bid* field for a sell order and the *Ask* field for a buy order.

    a   For a Sell order, define the number of shares you want to sell by entering a dollar value in the Lmt Price field, or the number of shares in the Quantity field.

If you enter a dollar value, the number of shares is calculated using the prior day's closing price.

    b   For a Buy order, enter a dollar value in the price field. The number of shares purchased is calculated after the funds are priced.

3   Click "T" to transmit your order.

> **Note:** Only the Market order type is available for funds, and FUNDSERV is the only available routing destination.

For more details on mutual funds, and to view electronic prospectuses, go to the IB website **Trading** menu, and select *Product Listings*, then click the *Funds* tab.

Trade FX from the Trading Window

If you have a multi-currency margin account, you can trade domestic and foreign securities and currencies from that same account.

To use FXTrader for trading FX, see the FXTrader topic.

To trade FX from the trading window

1   Add a market data line using the traded currency symbol.

2   Select the instrument type Forex, and choose the trading currency.

Completed Orders			EFP		ETFs		Mut Funds		Portfoli
Relevant EFPs		Stock Borrow/Loan		Top % Gainers		Top % Losers		Volatility 1	Watc

Order Management

Undrlyng	Description	Exch	Bid Size	Bid	Ask	Ask Size	Change	Last	Div
			TIF	Action	Quantity	Type	Lmt Price	Destination	S
GBP	GBP.USD...	IDE...	3,000,0...	1.6433⁵	1.6434⁵	1,800,000	+0.00605	C1.6373⁵	
			DAY	BUY	13,000	LMT	1.64295	IDEALPRO	T
USD	USD.GBP...	IDEAL	59,229	0.5950	0.6230	34,411	-0.0018	C0.6108	
			DAY	BUY	25,000	LMT	0.6230	IDEAL	T
BPX	Index BPX	ISE					-0.24	60.85	
ES	Index ES	GLO...						C1063.41	
ES	SEP09 F...	GLO...	?	?	?	?	?	?	
FHMO		SMA	50...	3.0980	0.1000	100...			

Example 1

If you want to buy/sell a specific amount of GBP, set up the market data line by entering the symbol GBP (as the transaction currency) and selecting Forex as the instrument type. In the Contract Selection box, choose USD as the Currency (settlement currency) from the list in the right pane. You will then receive the quote GBP.USD, with the Bid: 1.6433 Ask: 1.6434. This means that GBP 1 = USD 1.64XX

To buy GBP 10,000, click on the ask and enter 10,000 as the quantity of GBP that you wish to buy. You will pay $1.6434 for each GBP. Thus, you will pay $16,434.

To sell GBP 10,000, click on the bid and enter 10,000 as the quantity of GBP that you wish to sell. You will receive $1.6433 for each GBP. Thus, you will receive $16,433.

Example 2

If you want to buy/sell a specific amount of USD, set up the market data line by entering the symbol USD (as the transaction currency) and selecting Forex as the instrument type. In the

Contract Selection box, choose GBP as the Currency (settlement currency) from the list in the right pane. You will then receive the quote USD.GBP, with the Bid: 0.5950 Ask: 0.6230. This means that USD 1 = GBP 0.62XX

To buy USD 10,000, click on the ask and enter 10,000 as the quantity of USD that you wish to buy. You will pay GBP 0.6230 for each USD. Thus, you will pay GBP 6,230.

To sell USD 10,000, click on the bid and enter 10,000 as the quantity of USD that you wish to sell. You will receive GBP 0.5950 for each USD. Thus, you will receive GBP 5,950.

Interactive Brokers provides two vehicles for the exchange of currencies: IDEALPRO which allows a customer to trade Forex, and IDEAL which allows a customer to convert their balances from one currency to another. Whatever currency balances you may hold, we generally pay higher interest on credit balances, and charge lower interest rates on debit balances than other brokers.

For market center details on IDEAL and IDEALPRO, see the Forex Products pages on the IB website.

Trading Tools

TWS provides a comprehensive collection of specialized trading tools that function separately as stand-alone windows, and in conjunction with other TWS tools. Our expanding family of order management applications include:

- BasketTrader
- BookTrader
- Stock Borrow/Loan
- TWS Blotter
- ChartTrader
- ComboTrader
- DepthTrader
- FXTrader
- The Integrated Stock Window (ISW)
- OptionTrader
- Options Penny Pricing
- The Order Ticket
- Calculate Order Quantity
- Rapid Order Entry
- SpreadTrader
- Merger Arb
- Relevant EFPs
- Update Orders

BasketTrader

Introduction

Use the BasketTrader to manage groups of orders on multiple products, and to easily create an order group modeled on a popular index. This section shows you how to:

- [Send a Basket Order](#)
- [Create a Basket File in TWS](#)
- [Manually Create a Basket File](#)
- [Create a Sample Excel Basket File](#)
- [Use the IndexTrader](#)

Send a Basket Order

Before you can select and transmit a basket order, you must create and save the basket file.

You can modify a basket order before you send it by adding or removing assets, changing the multiplier and quantities, and reversing the order sides and then converting limit orders to market or relative orders. You can also elect to create a basket file based on a selected **index** using the index composition or statistical composition. Use the criteria selections to fine-tune your index basket. If you choose to base your index basket on the index composition, the system automatically keeps the basket in line with the index composition as it changes.

When you send a basket order, each order in the basket is cleared individually. If your account does not meet margin requirements, it is possible that only a portion of the basket order will execute.

To send a basket order

1 On the **Tools** menu, select *BasketTrader,* or click the Basket icon on the trading toolbar.

2 In the **Basket File** field, use the drop-down list to select a basket, or click the *Browse* button to find a basket file that doesn't appear in the list. Use the IndexTrader panel to create a basket based on an index or a portion of an index.

3 Modify the **Multiplier** if necessary. This value multiplies the quantity of each order in the basket.

4 Click **Load** to populate the Orders tab with the orders in the basket.

5 Modify order parameters if necessary, and click Transmit in the **Execute Basket** panel to transmit the entire basket order. You can transmit individual orders within the basket using the market data lines in the **Orders** tab and clicking the "T" in the status field.

Create a Basket File in TWS

TWS will automatically create a basket file from a group of non-transmitted orders on a trading page. When you want to trade or manage baskets, open the basket file from the BasketTrader. You can also create a basket file manually, outside of TWS, but we recommend using the TWS automated process to get the file started.
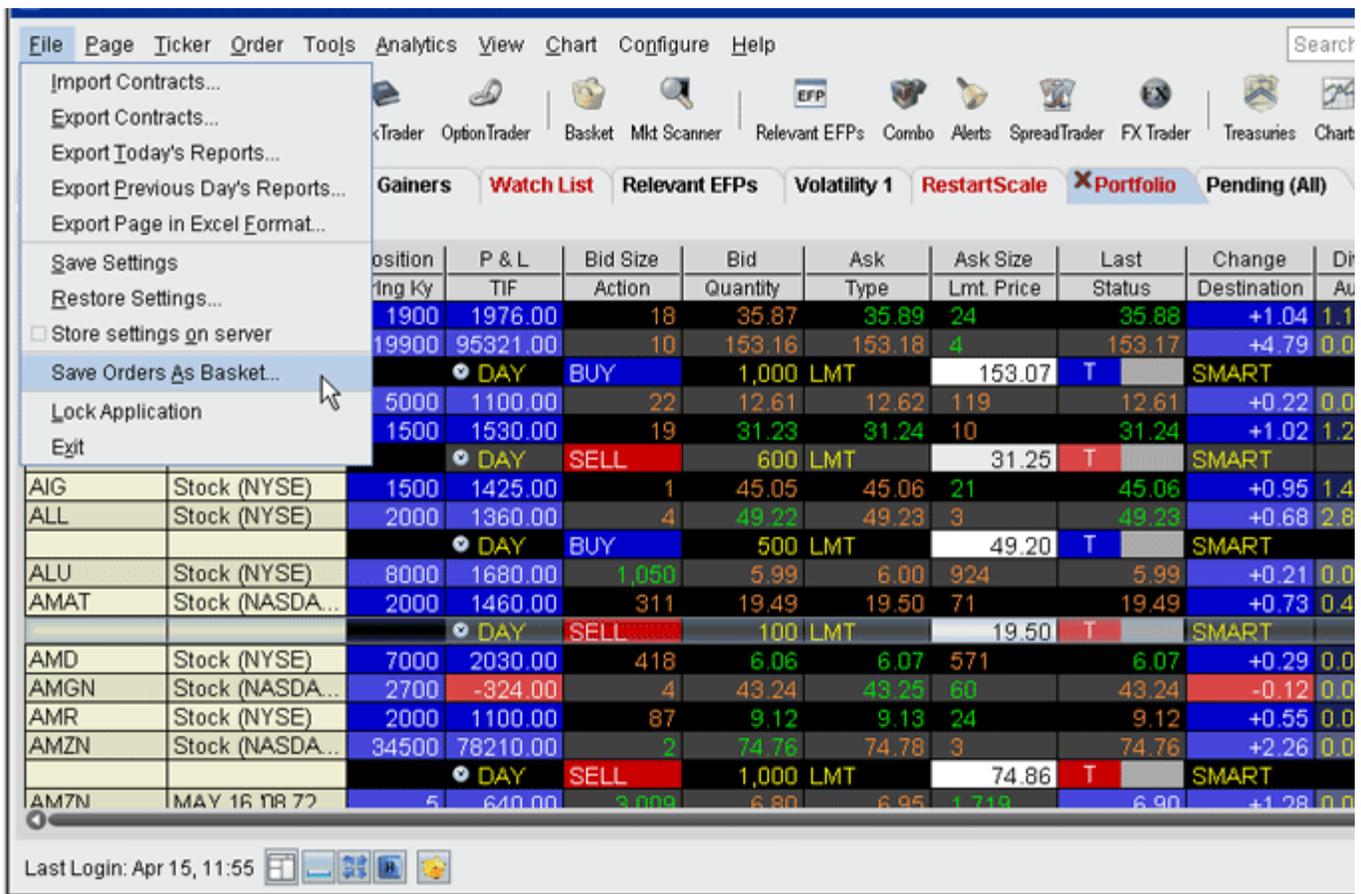
Note: TWS creates a basket file from orders on a single trading page. You can easily combine orders from multiple files into one using MS Excel.

To automatically create a basket file

1 Create orders to include in the basket file.

- Click the Ask Price on a market data line to create a BUY order.
- Click the Bid Price on a market data line to create a SELL order.

2 Modify order parameters and define order attributes.

3 On the **File** menu, select *Save Orders as Basket*.

4   In the dialog box, review or rename the file and use a .csv extension (i.e. stocks.csv) and click OK.

> **Note:** The system uses the Trading page name as the default basket name.

5   Cancel the orders you created. Use the **Order** menu and select *Cancel Page*.

The BasketTrader supports Bracket orders, but baskets that include brackets will have the Reverse and Cancel and Reverse features disabled.

Manually Create a Basket File

We highly recommend that you first create a TWS basket file from a trading page using several different order types and products. Then open the sample file in Excel and use this as your starting point to edit the fields and create new rows. The key to the basket file is the relationship between the header row and order rows. The header fields can occur in any order as long as the values in the order rows correspond to the Header field. T

The basket file is formatted as follows, where the top row is the Header row, and subsequent rows are orders rows. The Header Row includes field titles for each order value. The Order Row includes order values that correspond with the required field title for that order type. You can leave blank fields in an order row if the order does not require that field value.

Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8
value	value	value		value	value		value
value	value	value	value	value		value	value
value	value	value	value	value	value	value	value

The Sample Excel Basket File topic shows how a basket file with multiple order types would look in Excel.

Notes about creating basket files:

- Child values in the order row fields must match the fields in the parent Header Row in content. For example, if your Header Row field is *Symbol* and you enter the value **STK** in that field of the order row, your file will not be readable.

- Basket files created in a text editor must be saved as a .csv (preferred) or .bsk file.

   Note: Although not recommended for new files, the .bsk file extension is still supported in the new basket layout.

- For basket files created in a text editor, do not leave a space between a value and its comma, or TWS will not be able to read the file.

- If you create your basket file in Excel, enter only one value (or no value) per cell and DO NOT use commas.

- Save your Excel basket file as a .csv file.

- Fields in the Header Row need not be in any specific order as long as they have a corresponding correct value in the order row field.

The major differences between the original and improved basket file formats include:

Old Basket File	New Basket File
Old version supported only limited number of pre-defined fields.	New version supports all TWS fields.

Old Basket File	New Basket File
Old version required you to enter order values in a specific sequence.	New version **does not** require any specific order sequence for fields.
Old version required only order values (since the "header" fields were hard-coded into TWS).	New version requires a header row with order-specific field titles. Use multiple header rows in a single basket for order types that require different field values.
Old version required blank placeholders for values that were not required.	New version requires an exact one-to-one relationship between a header field and an order value; you cannot leave an order field blank if there is a header field defined.
Old version was saved as .bsk (TWS-specific) file.	New version uses .csv (generic) file extension.

Basket Fields

The table below list some of the fields you can specify in your basket order. We recommend creating sample file rows via the TWS basket creation process to see any fields you may have a question about.

Some Basket File Header Fields/Order Values	
Contract Description Fields	
Header Field	**Order Values**
Symbol	e.g. IBM, AMZN
SecType	The security type including stk, opt, fut, fop, war, cash, fund, efp, bag* *Use the bag security type for spreads and combination orders.
Expiry	YYYYMM e.g. 200910 (for Oct. 2009 expiry)
Strike	e.g. 42.5 or 37.0
Right	P or C
Currency	e.g. USD
Exchange	Any valid destination, e.g. Smart, or NYSE or PHLX or VWAP or IBEFP. **Note:** To clarify any ambiguity for Smart routed contracts, include the primary exchange along with Smart for the destination, for example: Smart/NYSE.
Basic Order Fields	
Header Field	**Order Values**
Action	BUY or SELL
Quantity	e.g. 100 or 1
OrderType	As defined in TWS Type field, e.g. LMT, REL, VWAP, STP LMT.

Some Basket File Header Fields/Order Values	
LmtPrice	e.g. 96.47 or 96
	For EFPs, use a decimal number for the raw price, or a percent value followed by A or C to designate Annualized or Compounded rate, for example 5.200%A.
AuxPrice	e.g. .05 or 1.25 or 2
PercentOffset	Any decimal value between 0 and 1, e.g. .05
BasketTag	Any unique string of alpha or numeric characters used to identify the basket order. This tag appears in the Order Reference field of the Trade report.
Time in Force Fields	
Header Field	**Order Values**
TimeInForce	e.g. day, gtc, gtd, ioc, fok, opg, auc
GoodTilDate	YYYYMMDD hh:mm:ss [zzz] where zzz is an optional time zone. If you do not designate a time zone, TWS uses the time zone from which the order originated.
GoodAfter	YYYYMMDD hh:mm:ss [zzz] where zzz is an optional time zone. If you do not designate a time zone, TWS uses the time zone from which the order originated.
Advisor Fields	
Header Field	**Order Values**
Account	Existing account number.
Group	Existing Account Group name.
Method	Allocation Method, valid if a Group is named.
	• PctChange
	• AvailableEquity
	• NetLiq
	• EqualQuantity
	• PctOfPortfolio
Percent	Use if Method = PctChange.
Profile	Existing Allocation Profile name.
Non-Cleared Fields	
Header Field	**Order Values**
Account	Account number.
OpenClose	e.g. open, close
ShortLocation	MPID of third party
ShortSale	-1 (cust. has shares)
	-2 (shares are with 3rd party)
Clearing	Identify your clearing choice.

Some Basket File Header Fields/Order Values	
ClearingAccount	Identity of the true beneficiary of the order.
Volatility Fields	
Header Field	**Order Values**
ReferencePriceType	**A** (average of best bid/ask) or **B** (NBB when buying a call or selling a put; NBO when selling a call or buying a put)
HedgeOrderType	Lmt, Mkt or Rel
HedgeAuxPrice	Use to set the price if HedgeOrderType is used.
StockRangeLower	Low stock price of the range used to cancel the order if the underlying price falls below.
StockRangeUpper	High stock price of the range used to cancel the order if the underlying price goes above.
ContinuousUpdate	True. If you don't want to use continuous update do not include the field in the header row.
Miscellaneous Fields	
Header Field	**Order Values**
Algo maxPctVol	Max percent of volume for option algo.
Algo riskAversion	Get done, Aggressive, Neutral, Passive
Algo forceCompletion	True
DiscretionaryAmt	Price off the limit price to create Discretionary order.
DisplaySize	Defines the quantity of the order to be made public, creates an Iceberg order.
OutsideRth	True to allow order to trigger or fill outside regular trading hours.
BlockOrder	True
SweepToFill	True
Hidden	True
AllOrNone	True
MinimumQuantity	Number for minimum acceptable fill quantity for order to execute.
OcaGroup	Value that IDs order as part of a group.

Sample Excel Basket File

The easiest way to create a basket file is to start with a sample formatted order that you create through TWS. Use the sample layout as a starting point for adding your own header/order row basket components. The picture below gives you an idea of how orders will look in the Excel file. Note that different order types require different fields, and blank fields in an order row are accepted.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Action	Quantity	Symbol	SecTyp	Exchan	Curre	Timeli	OrderTyp	Hidden	LmtPric	Discr	AuxPri	Trigger	Expiry
2	BUY	100	ABC	STK	SMART	USD	DAY	MKT	TRUE					
3	BUY	5000	ABU	STK	SMART	GBP	DAY	LMT		0.235				
4	SELL	100	AMZN	STK	SMART	USD	DAY	LMT		74.43	0.25			
5	SELL	100	ARBA	STK	SMART	USD	DAY	STP LMT		16.36		16.16	Default	
6	BUY	1	IBM	OPT	ISE	USD	DAY	LMT		0.45				2E+0
7														

The bold font in the header row is used for illustrative purposes only, and will not display in your Excel basket file.

Note: TWS-created basket files only include orders from a single trading page. Using Excel, you can easily combine separate .cvs basket orders into one file.

To combine basket files in Excel

1 Open a .csv basket file in Excel.

2 Highlight all of the populated rows, and click Ctrl + C to copy the rows.

3 Open another .csv basket file, and place your cursor in a blank row at the bottom of the page.

4 Click Ctrl + P to paste all of the orders from the first file into the second file.

For more details on the .csv basket file format, see the manual basket file topic.

IndexTrader

The IndexTrader helps you create a basket order based on an index. Use the IndexTrader as a standalone window, or as the Index Panel in the BasketTrader window.

To open the IndexTrader

- From the **Trading** menu, select *IndexTrader* fromthe Advanced Tools group.

Stock Borrow/Loan

Introduction

Customers who have been approved for Portfolio Margin can use the Stock Borrow/Loan feature to borrow and lend US stocks electronically via the AQS[®] electronic stock loan and borrow marketplace.

- About Stock Borrow/Loan
- Access Stock Borrow/Loan
- Borrow/Loan Fields
- Borrow/Loan Transactions
- Returns/Recalls/Rerates
- Trades and Positions

About Stock Borrow/Loan

Eligibility

- Stock Borrow/Loan is available for Portfolio Margin customers.

- To enable stock/borrow permissions, you must log into Account Management and enable *United States (AQS Stock Borrow)* in the Stock column of the Trading Permissions page under the **Trading Access** menu.

The Borrow/Loan Market

- Trading takes place in two "markets;" the auction market, which runs for one minute periodically throughout the day (approximately every two hours), and the continuous market, which fills orders throughout the day.

- The market's regular hours are from 6:45 am - 2:45 pm.

- Auctions occur at 7:00am, 9:00am, 11:00am, 1:00 pm and 2:30pm, and run for 1 minute.

Recalls and Rerates

- As a borrower, if you request a rerate on the borrow, the lender has 25 minutes in which to respond. If there is no response or if the rerate request is rejected, the transaction is closed and borrowed shares are returned to the lender.

Rates and Fees

- The borrow and lend rates display in the data line for the stock underlying in the *Borrow* and *Lend* fields.

- When you hover your mouse over the borrow rate, you see the Total rate, which is:

  Interest Rate - Borrow Rate

- The interest rate is always the current opening Fed Funds Effective rate.

- The borrow/lend rates change based on availability of underlying contract.

- The borrow rate is applied to the collateral to calculate the daily borrow fee.

- The borrower is responsible for the daily borrow fee and for collateral on the transaction. The collateral is equal to the settlement price x quantity. The settlement price is 102% x mark price rounded up to the nearest 1.00 with a 1.00 minimum.

- Collateral is returned to the borrower when the borrowed shares have been returned to the lender.

- In the case of dividend-paying shares, since shares are only being lent (not sold) by the lender, dividends paid during the borrow belong to the lender who actually owns the shares. The borrower of the shares must pay dividends to the lender in what is called *Payment in Lieu of Dividends*.

Transaction Information

- If your transaction does not fill during an auction, it will be eligible to fill during continuous trading.

- Orders are only eligible to fill during regular trading hours.

- There is a price minimum of 200k for borrow transactions of easy-to-borrow shares. This minimum is in affect from the market's open at 6:45 am up until 11:00 am. Shares are considered easy-to-borrow if the borrow rate is less than or equal to 0.00.

- To lend, you must own the shares, and they must be physically available and held at the DTC. Your lendable quantity is shown in the **SBL Eligible** field.

- Only day limit orders are supported.

Access Stock Borrow/Loan

The Stock Borrow/Loan page has been configured specifically to support all of the borrow/loan fields and functionality.
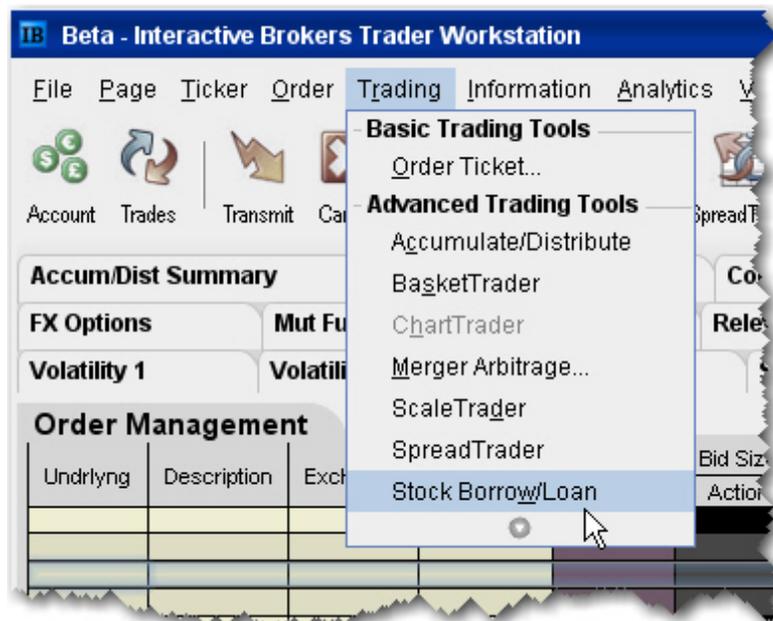
To open Stock Borrow/Loan

- From the **Trading** menu, select *Stock Borrow/Loan*.

The Stock Borrow/Loan opens as a blank trading page.

To add tickers

1. Enter a stock symbol in the Underlying field and hit enter.

2. Choose the market, AQS and/or AQS_P.

> **Note:** Only agent lenders can lend in the primary (_P) markets, but anybody can borrow. Since an agent lender may be less likely to recall the stock, you may want to consider borrowing from the _P market if you need to hold the short for an extended period of time.

In addition, you can manage borrow/loan transactions on a regular trading page by first entering the underlying stock symbol and then selecting SBL as the instrument type. You will need to manually add the relevant borrow/loan fields using the Layout manager.

Borrow/Loan Fields

The Stock Borrow/Loan window includes fields used specifically for stock loan and borrow transactions. You can add any of these fields to other trading pages using the Layout manager. TWS trading pages display both ticker lines and order lines. When you create an order, the order line appears directly below its ticker line. Accordingly, the field labels are also laid out in a top/bottom row format.

① The ticker line uses the top row of field labels.

② The order line uses the bottom row of labels.

Note: To make labels appear as a single large label like the **Underlying** field, you must add the same field from both the Market Data and the Order Columns tabs.

To view the Stock Borrow/Loan and other fields that can be added to a trading window, right-click anywhere within the field titles and select *Customize Layout.* The fields below are displayed by default in the Stock Borrow/Loan page.
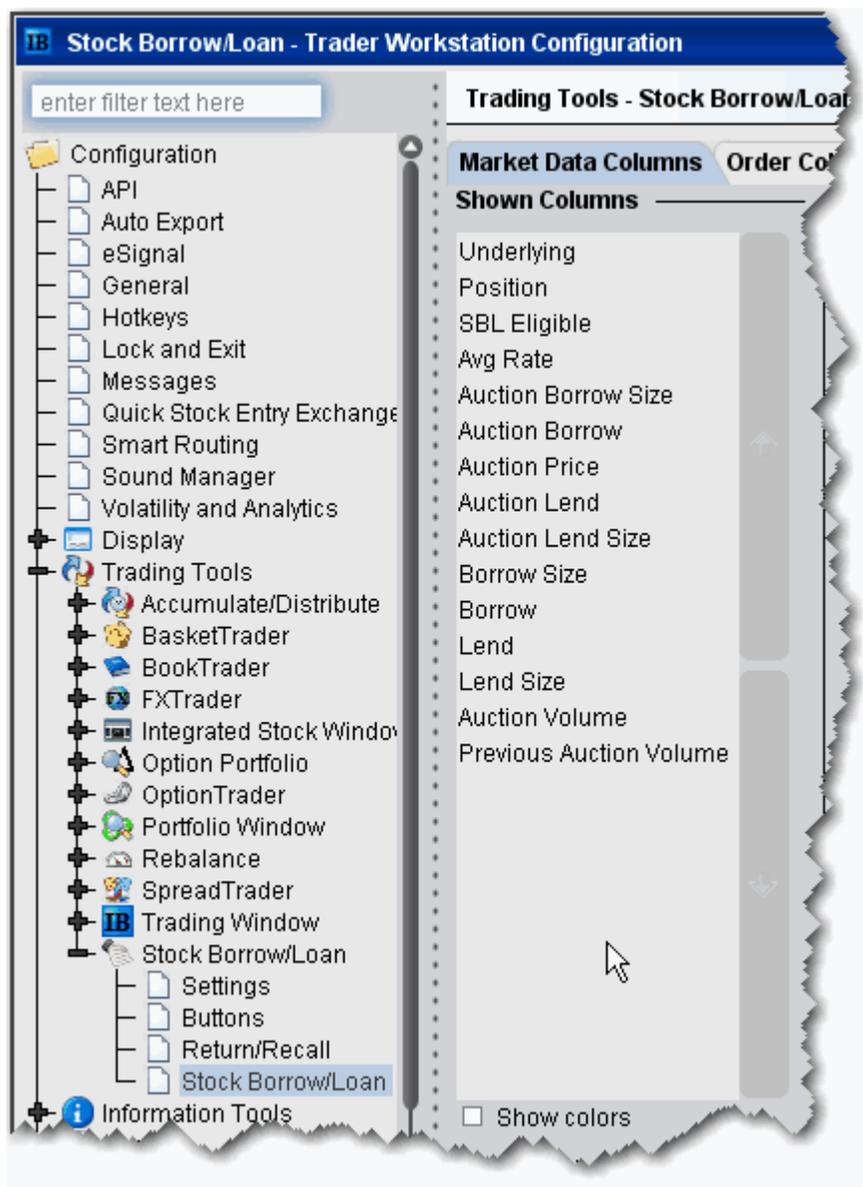
Column	Description
Underlying	The underlying stock symbol of the stock being borrowed or lent.
Position	Your current position. In the LoanBorrowTrader, this represents your current stock position. This field is used for all asset types, it is not unique to the borrow/loan page.
SBL Eligible	Shows the current position in the stock that is eligible for lending.
Avg Rate	The average borrow rate of your current Borrow/Loan positions.

Column	Description
Auction Borrow Size	The volume of shares being bid for at the Auction Borrow rate.
Auction Borrow	This value represents the best rate quoted to lend the underlying shares. Click the Auction Borrow field to create a Lend order.
Auction Lend	This value represents the best rate quoted to borrow the underlying shares. Click the Auction Lend field to create a Borrow order.
Auction Lend Size	The volume of shares available to borrow at the Auction Lend rate.
Auction Price	The indicative rate for the next scheduled auction. Auctions occur every 15 minutes while the Borrow/Loan market is open.
Borrow Size	The volume of shares being bid for at the last auction rate during continuous trading.
Borrow	The last auction rate that was established during continuous trading.
Lend	The last auction rate that was established during continuous trading.
Lend Size	The volume of shares available to borrow at the last auction rate during continuous trading.
Auction Volume	The total number of shares available for the next auction.
Previous Auction Volume	The total number of shares that were available for the previous auction.

Borrow/Loan Transactions

You can borrow and lend shares directly from the data line.

- To borrow, click the **Lend** or **Auction Lend** field.
- To lend, click the **Borrow** or **Auction Borrow** field.
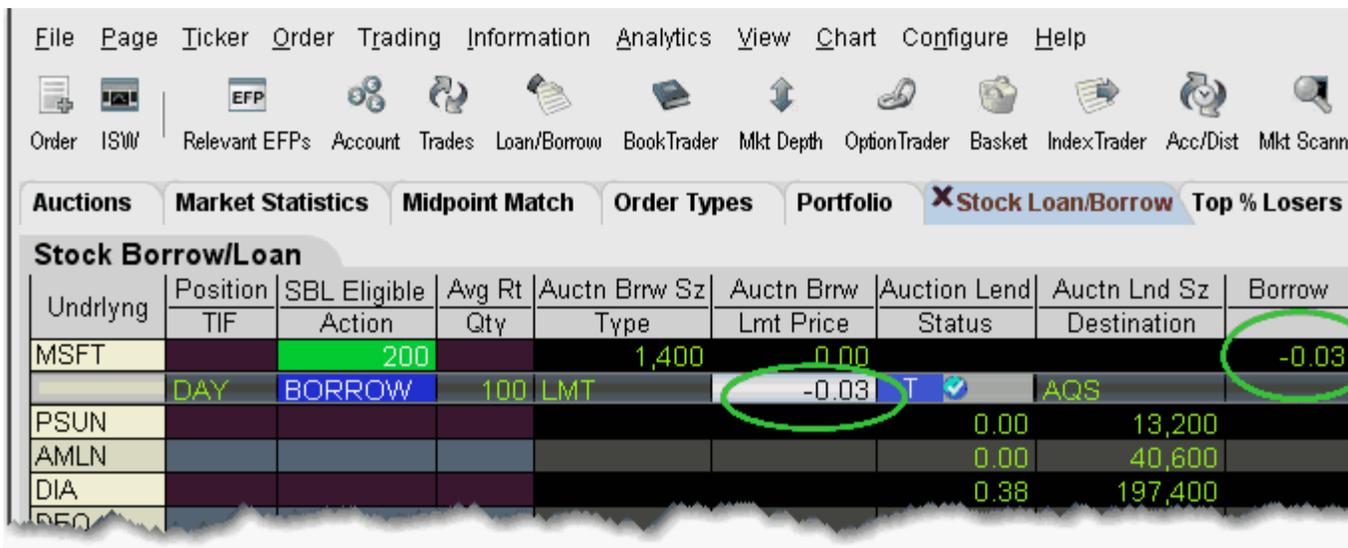
Borrowing Shares

Borrow requests are eligible to fill in either the continuous or auction market, based on price.

- If you initiate a borrow by clicking the **Auction Lend** field, the limit price reflects the current best Lend rate.
- If you initiate a borrow by clicking the **Lend** field, the limit price defaults to the last auction price.
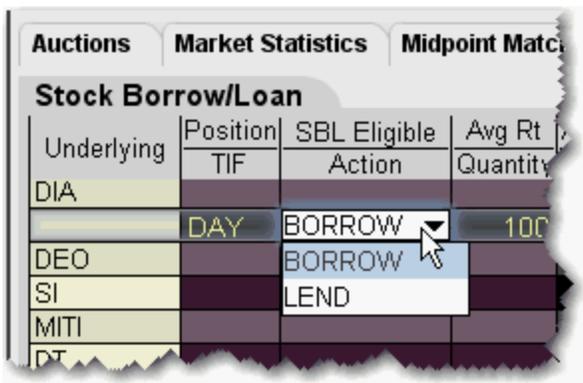
Note: You can modify the transaction type on the order line using the Borrow/Lend dropdown in the Action field.

Continuous trading runs throughout the day, stopping for 5 minutes prior to each 1 minute auction. If your transaction does not fill during continuous trading, it will be held and entered in the next auction.

w Size antity	Borrow Lmt Price	Lend Action	Lend Size Destination	Auctn Vlm Status	Auction R Type
		0.24	58,800		
		0.1	72,300		
			Total Rate is -0.13 (Fed Funds rate is 0.11)		
		0.00	403,800		
		2.50	200		
		0.70	700		
		1.42	291,600		
		1.17	74,000		
		0.00	121,100		

The Borrow Rate and Interest Rate

The borrow rate differs by symbol based on how difficult a stock is to borrow. The harder a stock is to borrow, the higher the borrow rate. The borrow rate includes the interest rate which is the same for all symbols and is equal to the day's opening Fed Funds rate. Shares are considered "easy-to-borrow" if the borrow rate is equal to or less than 0.00.

Note: There is a collateral minimum of 200k to borrow easy-to-borrow shares. This minimum is in effect from the market's open at 6:45 am up until 11:00 am.

The collateral amount is the price per share of the underlying x quantity. The borrow rate is applied to the collateral amount to calculate the daily *IB Carry Charge* that the borrower will pay for the privilege of borrowing the stock. The collateral represents the cash put up by the borrower to cover the borrow transaction, and is the underlying stock price times the quantity of the borrow transaction. The collateral is returned to the borrower when the shares are returned to the lender.

The daily IB Carry Charge is:

```
Quantity x Stock Price x Borrow Fee/360
```

For example, if you are borrowing 500 shares of a $20.00 stock with a borrow fee of 0.38, the daily IB Carry Charge on the transaction is:

```
500 x $20.00 x .0038/360 = 0.18*
```

To see the total rate, which is the interest rate - borrow fee, hold your mouse over a rate field.

*The IB Carry Charge is subject to minimum/maximum amounts as described on the AQS Commissions page on the IB web site.

Preview Orders

Before you transmit the order, right-click and select *Preview Order/Margin*. The Order Description box shows the order parameters, and displays the amount that will settle, calculated as 102% * mark price, rounded up to the nearest $1, with a min of $1.

Borrow Limits

You can borrow up to the amount you would be eligible to short based on the Net Liquidation Value in your account.

Lending Shares

To lend shares, you must own the shares (they cannot be long on margin) and the DTC must be holding them. The quantity of shares available to lend is shown in the **SBL Eligible** field.

- If you initiate a lend order by clicking the **Auction Borrow** field, the value in your order reflects the current best Borrow rate.

- If you create a lend order by clicking the **Borrow** field, the rate defaults to the auction equilibrium rate.

You can manually modify the rate at which you want to lend directly in the order line.

Returns/Recalls/Rerates

The Return/Recall panel displays any return or recall requests when you are logged in, and allows you to send rerate and return requests.

Borrowing

Once you borrow shares, you can return them using the Return order function, or the lender can recall the shares at any time. When borrowed shares are recalled, they are removed from your account, you are notified in the Return/Recall panel of TWS, and the recall will show up in the *Borrow Activity* section of your Activity Statement. If you would like to negotiate a better rate on your borrowed shares, you can initiate a Rerate request order. If the rerate request is rejected, your shares are immediately returned to the lender.

Please note that if you have borrowed to cover a short position, and then purchase the shares and no longer need to maintain the borrow position, the borrowed shares are not automatically returned; you must return the shares.

Lending

As a lender of shares, you can recall your shares at any time using the Recall order function.

The borrow may want to negotiate the borrow rate by submitting a rerate request. You will be notified of a rerate request only if you are logged into TWS. If you receive a rerate request, you must respond within 25 minutes; if you do not, the request is automatically rejected and all shares are returned to you. This time limit applies regardless of whether or not you are logged into TWS.

The borrower may return the shares to you at any time. You will be notified of a customer return in the Return/Recall panel.

In the case where you have lent a quantity of your fully-paid shares and subsequently sell the shares, IB will automatically recall the shares the following day. If IB does not receive the shares from the borrower in time for settlement of the stock sale, the stock sale will be completed but the loan will remain open until the shares are returned.

Rerate and recall requests from the counter party to whom IB has lent your shares will display in the Return/Recall panel.
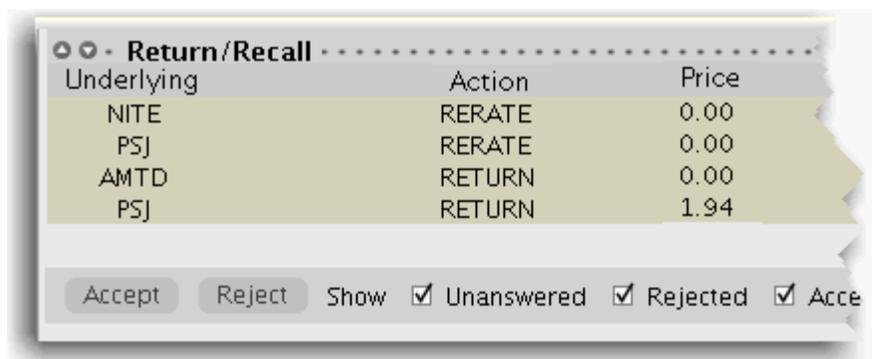
- To view the Return/Recall panel, click the Show Return/Recall Requests icon on the right-hand tab of the trading page.
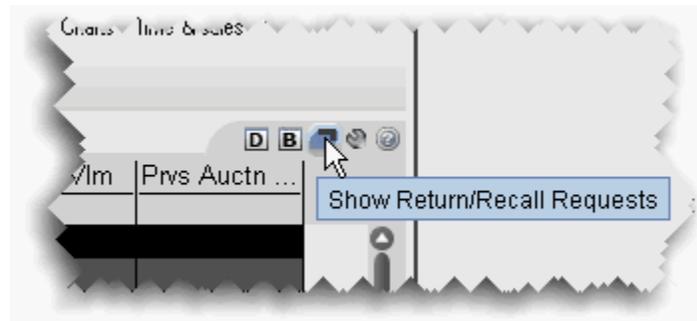
To return borrowed shares

1 Right-click the ticker and select *Trade* then select *Return Shares*.

2 Confirm the order parameters and transmit the order by clicking the 'T' in the Status field.

> **Note:** Returns must be submitted before 11:30 am.

To request a rerate on borrowed shares

1 Right-click the ticker and select *Trade* then select *Rerate*.

1 Enter the rate you would like to receive in the Lmt Price field.

2 Transmit the order by clicking the 'T' in the Status field.

Note: If your rerate request is rejected, the transaction automatically becomes a return and your borrow position is reduced by the size of the request.

Transactions and Positions

As with all TWS transactions, you can view executions in the Trades window, and monitor the Borrow/Loan positions in your portfolio from the Account Information window.

To view transactions

1 From the toolbar, click the **Trades** icon.

2 All transactions are displayed in the Trades tab. The Description field identifies Borrow/Loan transactions, and the borrow rate is shown in the Price field.

	Cash				...ures	
AUD	-20.00	0.00		0.00	0.00	
CAD	-46.52	0.00		0.00	0.00	
EUR	-11.16	0.00		0.00	0.00	
HKD	-266.07	0.00		0.00	0.00	
USD	29,615.13	0.00		0.00	0.00	
Total (in USD)	29,503.44	0.00		0.00	0.00	

○ FX Portfolio

○ Portfolio

☑ Show zero position rows ⊚

Contract Descript... ○	Position	Currency	Market Value	Market Price	Average
DT SLB	100	USD		0.00	
DEO SLB	400	USD		0.00	
AZN SLB	0	USD		0.00	

Last updated at 11:17

To view Portfolio

1   On the toolbar, click the Account icon.

2   The **Portfolio** section at the bottom of the page shows all positions including borrows. The Market Price shows the borrow rate.

Note: Borrow positions will also display on the system-generated **Portfolio** trading page.

TWS Blotter

Introduction

The **Blotter** window is the foundation of the IB OMS in TWS. It allows traders to receive, stage, submit and monitor client orders.

This chapter includes topics on the following:

- How to open the Blotter window from within TWS.

- How to use each panel of the **Blotter** interface which includes the Manual Ticket Entry, Tickets, Orders, Trades and Filters panels.

- How to enter tickets manually from within the Blotter itself.

- How to enable TWS to create orders and tickets on the Blotter from any other TWS window.

- How to receive electronic tickets in the Blotter via FIX.

- How to assign notification sounds to events, such as receiving FIX orders.

- How to link the Blotter to other TWS windows using *Windows Grouping*.

- How to interact with other traders' orders based on the OMS screen sharing mode.

- How to manually report trades executed away, which will be included in the Blotter data.

- How to customize the Blotter panels, including how to show or hide fields in each panel and how to rearrange the order in which the fields are presented.

- How to filter your display for quick reference.

Using the TWS Blotter

The Blotter is part of our suite of specialized order management tools, and is the foundation of the IB OMS. Log into TWS to access the Blotter and other OMS functionality.
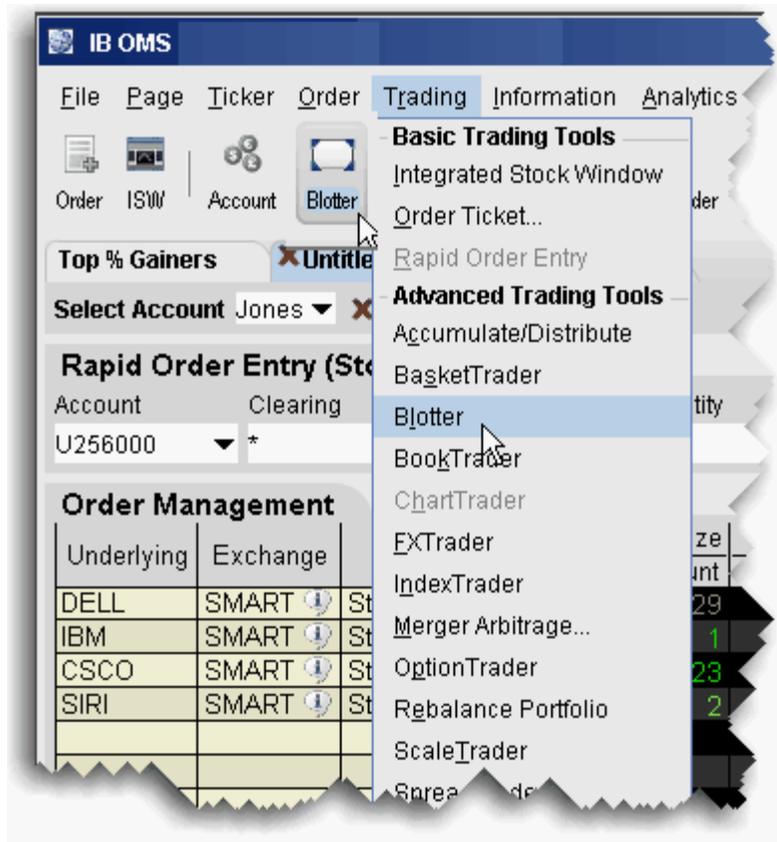
To open the Blotter

1   Log in to TWS.

- From the **Trading** menu, select *Blotter*.
- Or, click the **Blotter** icon on the trading toolbar.

Understand the Blotter Interface

Traders use the Blotter window to receive and create tickets, and to create and manage orders.

The Blotter comprises these main sections:

- The **Manual Ticket Entry/Rapid Ticket Entry** panel, used to manually create new tickets.

- The **Tickets** panel which displays manually created and electronic tickets, and the ongoing order status.

- The **Orders** panel, used to modify and submit client orders.

- The **Trades** panel, which displays summary and drill-down execution reports.

Electronic tickets via FIX are accepted via a pop-up notification box, and other tickets can be entered manually by the trader using the **Manual Ticket Entry** panel. Once an order is accepted or added, you can manage all aspects of your clients' orders from this single Blotter window.

Manual Ticket Entry

You can enter manual tickets from the Blotter by typing an underlying or contract symbol in the Underlying field of the Manual Ticket Entry panel. You can also enable ticket entry from other TWS windows, or add tickets to the Manual Ticket Entry panel from the right-click menu on a market data line.

To enter a manual ticket from the Blotter

1   Enter the underlying symbol in the **Underlying** field, and hit *Enter*.
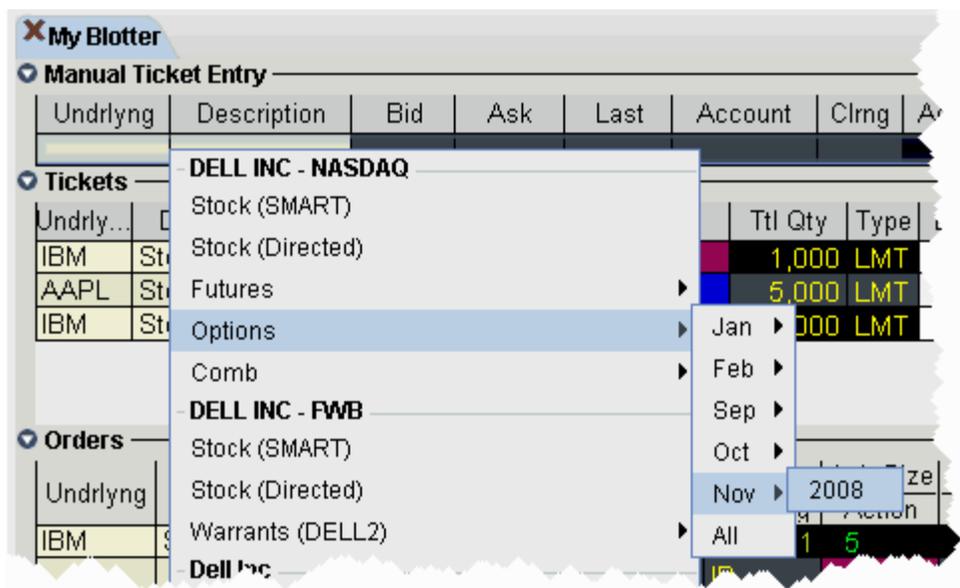
2   Use the Contract Selection list and Contract Selection box to define the contract.

3   In the **Account** field, select the beneficial account for the order. Select the **Action** (BUY or SELL), the **Quantity** and the order **Type** (Limit or Market for the parent order).

4   Click *Add* to put the order into the **Tickets** panel.

If you know the contract symbol you can enter a ticket quickly using symbol shorthand.
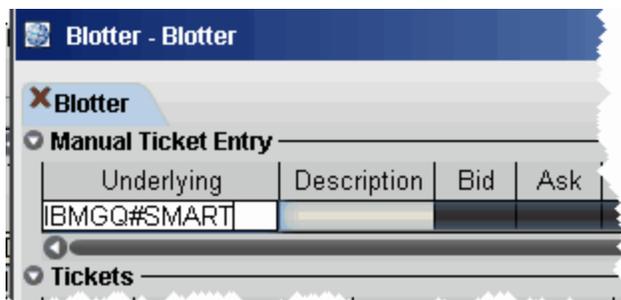
To enter a ticket using symbol entry

- In the *Underlying* field, enter the contract symbol and routing choice as:
  `symbol#routing`
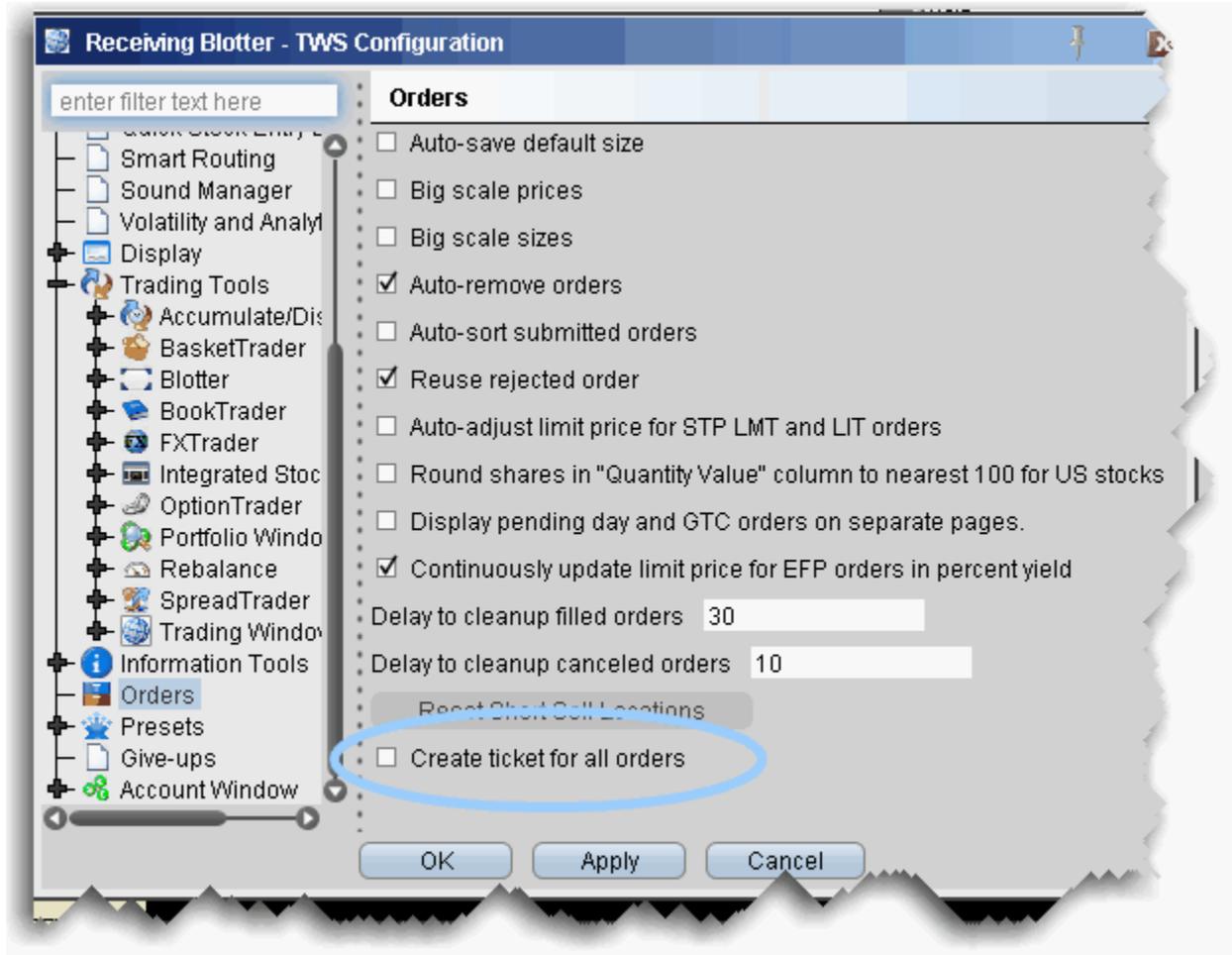
To enable ticket entry from other TWS windows

1 Click the Configure wrench to open the TWS Configuration window.

2 In the left pane, select *Orders*.

3 In the right pane, check *Create ticket for all orders*.

Checking this feature tells TWS to send all of your orders to the Blotter for order management, regardless of the TWS window from which the order originated.
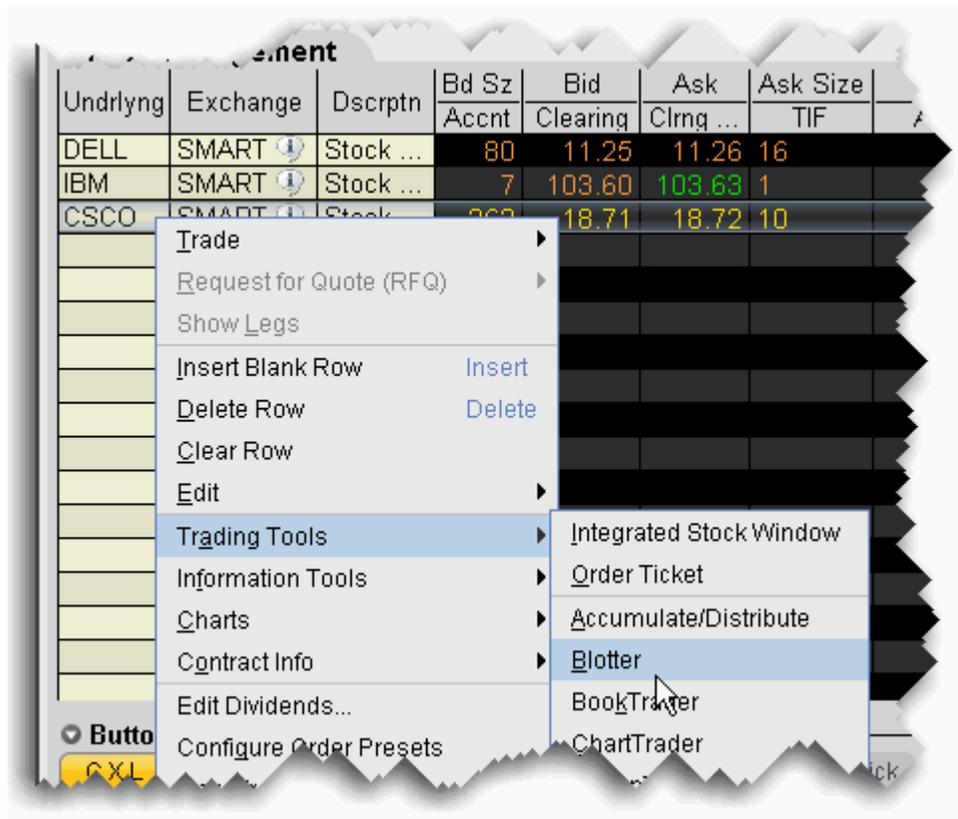
To create a manual ticket entry from the right-click menu in another window

1   Select the market data line for which you want to create a ticket.

2   From the right-click menu, select **Trading Tools** and then select *Blotter*.

The Manual Ticket Entry panel of the Blotter now displays the contract.

Receive Electronic Tickets

You are notified of incoming FIX tickets by a pop-up order notification window.
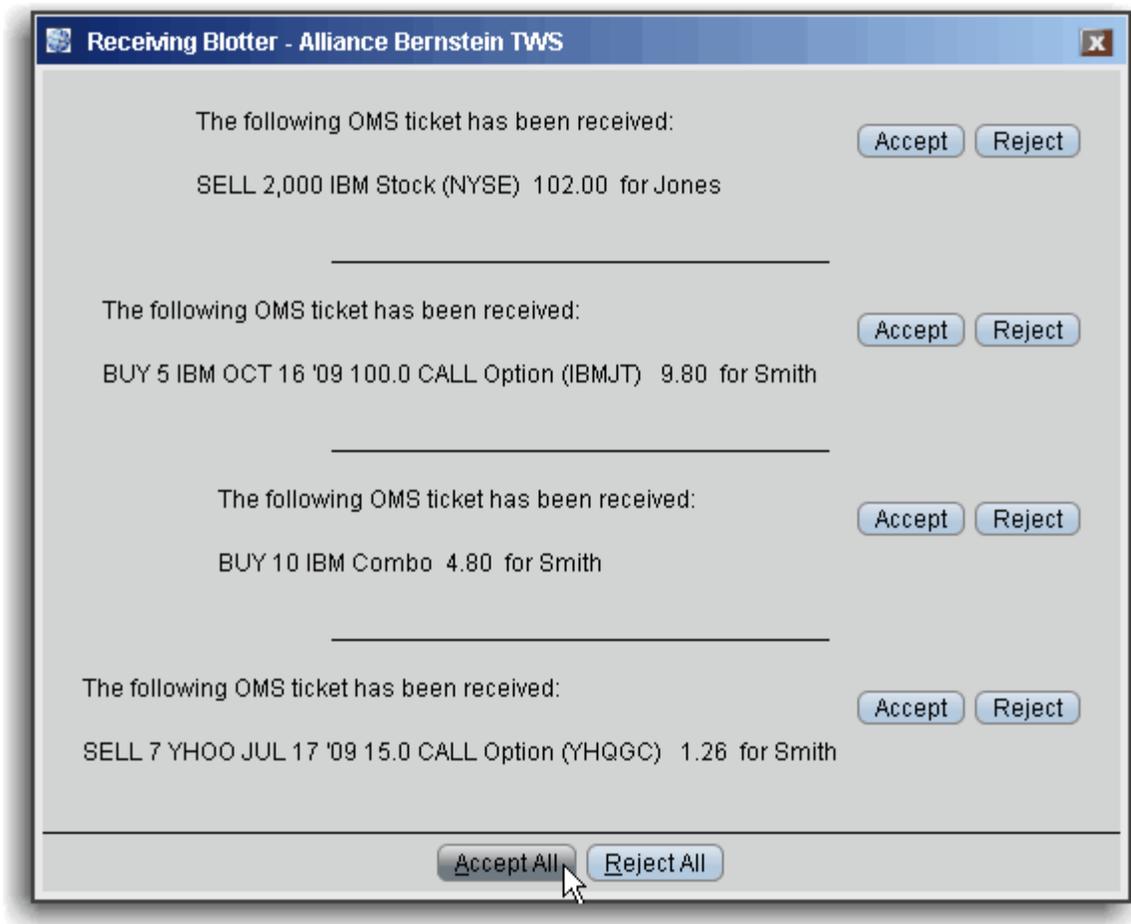
- Click *Accept* for a single order to put a single ticket into the **Tickets** panel.
- Click *Accept All* to put all tickets into the **Tickets** panel.
- Click *Reject* to cancel a single ticket.
- Click *Reject All* to cancel all tickets.

If you are not logged in when a ticket is received, it is sent to the next available trader.

You can assign sounds to specific events to help you recognize receipt of an electronic ticket, modification request of a electronic ticket, and a cancel request for an electronic ticket.
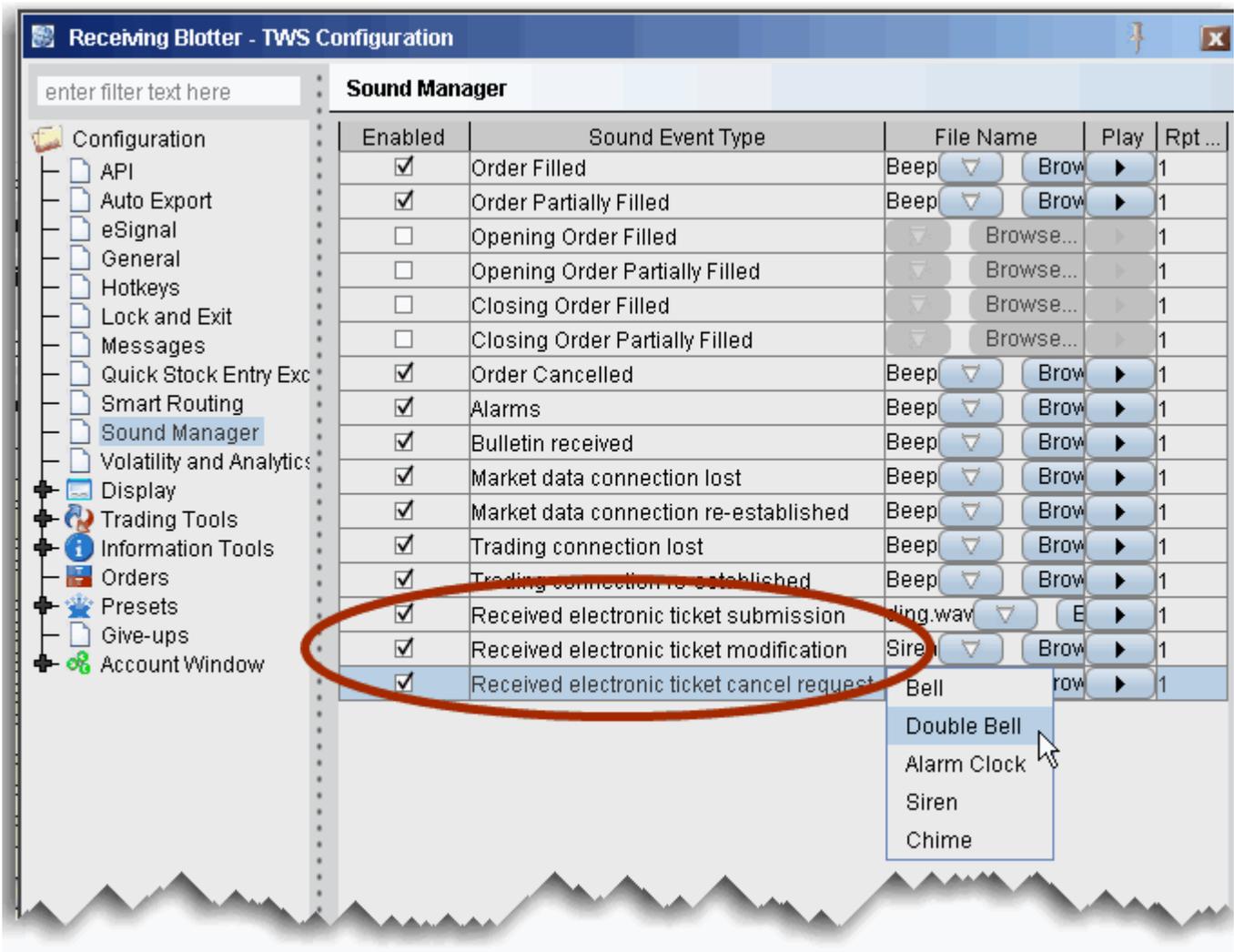
To assign sounds to events

1   On the **Configure** menu select *Global Configuration*.

2   In the left pane select *Sound Manager*, and in the right panel check the events to which you want to assign a notification sound.

3   Use the down arrow to display and select from available system sounds. Use the Browse button to find a sound file to apply.

> **Note:** Click the "Play" arrow to hear the sound you have chosen.

4   In the Repeat Count field, modify the default setting if you want to notification to play more than once.

Use Windows Grouping to Link Blotter

Creating a windows group that includes the Blotter provides a shortcut for creating manual tickets. For example, assume you want to create an options order on IBM. Without grouping, you'd need to create the line in the Manual Ticket Entry of the Blotter, then enter IBM into the OptionTrader to get the option chains. With the windows, grouped, as soon as you enter IBM in the Blotter, the OptionTrader receives this entry and is populated with IBM chains automatically.

Assign windows to a "group" to link order and ticker actions. You assign a window to a group using the colored blocks on the top right of the title bar. All windows with the same color are part of the same group. When you change focus on one of the group's "Source" windows, all destination windows in the group reflect the change.

Any window that can be part of a group will display the blocks. A window can be part of one group at a time. When you close the window, its group affiliation is erased.

The window's designation is displayed in a mouse-over tooltip when you hover over the Group icon. A window can be a:

Source - this is a controlling window and can only SEND instructions. The Blotter window is a source-only window.

Destination - this is a receiving window, and can only RECEIVE instructions from a window with Source privileges.

Source/Destination - this is a multi-tasking window which can both SEND instructions to and RECEIVE instructions from other windows in the group. The OptionTrader window is both a Source and Destination window.

Create a Blotter group

1   From the top corner of the **Blotter** window, display the Group dropdown and select a group.

2   Open a window you want to group, for example the **OptionTrader**, and select the same group number/color.

The OptionTrader and Blotter windows are now grouped. Open the windows side-by-side. In the Blotter, enter an underlying in the Manual Ticket Entry panel, and see how the OptionTrader data automatically changes to reflect the Blotter entry.

Using the Tickets Panel

Accepted electronic orders are staged in the **Tickets** panel. Only limit and market orders can be accepted.

You create orders from the ticket lines in the Tickets panel.
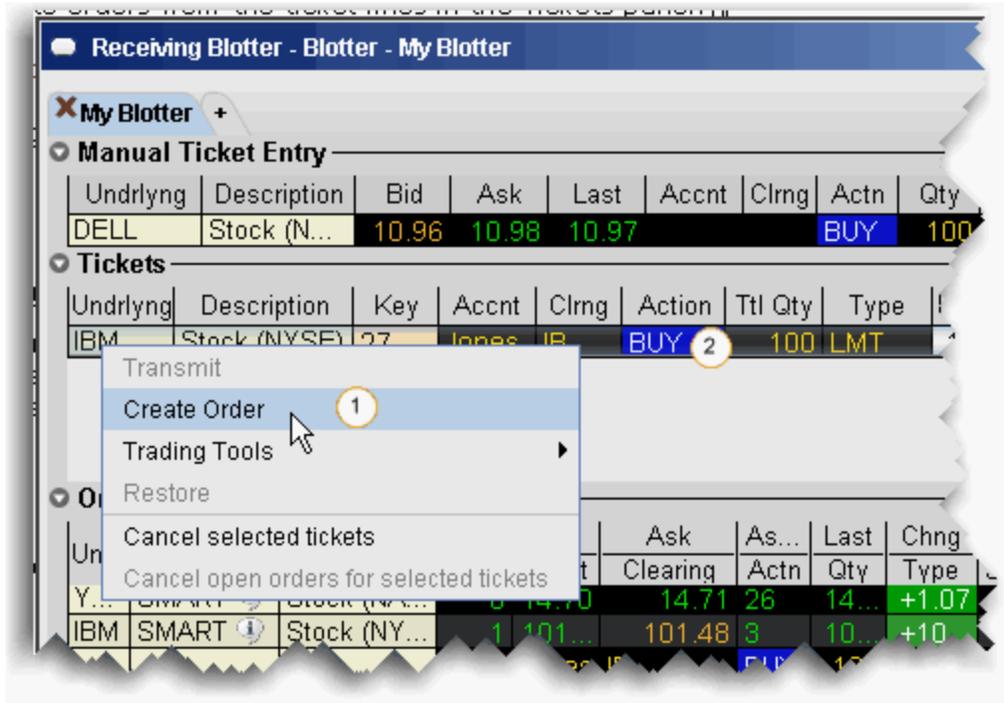
To create an order from a ticket

1   Right-click a ticket and select *Create Order*, or

2   Click the **Action** (Buy or Sell) on the ticket line.

You can open other TWS trading tools from the ticket and modify order parameters within the other tool.

Open other TWS Trading Tools

You can open many TWS trading tools from the right-click menu on a ticket. This action populates the selected tool with the underlying. You can modify the ticket and create orders from the trading tool, and those changes are reflected directly in the **Blotter** window.

To open a trading tool from a ticket

•   Right-click a ticket and select *Trading Tools* and then select the desired tool.

TWS trading tools are discussed in more detail in the tool-specific chapters. See Accumulate/Distribute, BookTrader, ChartTrader, The Integrated Stock Window (ISW), DepthTrader, OptionTrader, ScaleTrader and The Order Ticket.

Managing Orders

Orders are created from the **Tickets** panel and display in the **Orders** panel for modification and transmission. These orders are "child orders" of the original ticket, and must stay within any price, type or Time in Force limitations defined in the parent order.

- Cancel the entire ticket.

- Cancel all child orders associated with the ticket WITHOUT cancelling the ticket.

- Monitor the order status for each ticket.

Orders are displayed in the **Orders** panel (see below) with a default **Quantity**. You can modify the quantity per order, and change the default for specific products using the Order Presets in Global Configuration.

To cancel a ticket

- Right-click the ticket line and select *Cancel this ticket,* or

- Click the yellow "C" in the **Cancel** field and then click *Cancel this ticket*.

> **Note:** Cancelling from the Tickets panel cancels the entire client order and any working components. Clients receive a cancelled order notice. To cancel a single child component of the order, cancel directly from the child order in the **Orders** panel.

To cancel all child orders

- Right-click the ticket line and select *Cancel open orders for this ticket.*

> **Note:** The child orders are cancelled but the original order ticket is not cancelled.

Monitor the Order Status

As you create and submit child orders, the status fields in the **Tickets** panel reflect the order activity.

Total Qty	Routed	Filled	Leaves	Wrkng	Nt Wrkng	Avg. Prc	Filled Value
42,000	6,450	6,450	35,550	0	35,550	29.43	189,823.50
150,000	500	0	150,000	500	149,500	0.00	0
5,000	0	0	5,000	0	5,000	0.00	0
20,000	0	0	20,000	0	20,000	0.00	0
10,000	0	0	10,000	0	10,000	0.00	0

The order status fields

- Dark to light shading in the fields shows at-a-glance order activity. The balance of dark to light moves from the **Leaves** to **Filled** as the order fills.

- Values in the status fields show:

    - Total original ticket quantity (**Total Quantity**)

    - Quantity that has been sent to an exchange (**Routed**)

    - Quantity that has executed (**Filled**)

    - Quantity left available for routing (**Leaves**)
      *The value in the Quantity of a child order on the **Orders** panel cannot exceed the value in this field.*

    - Quantity currently working at an exchange (**Working**)

    - Quantity not currently working (**Not Working**)

    - The average price per filled quantity (**Average Price**)

    - The average price x filled quantity (**Filled Value**)

Using The Orders Panel

The **Orders** panel is where you actively manage orders.

Note: The relationship between parent/child orders is shown via the **Key** field in the Tickets, Orders and Trades panels . Every new child order is numbered sequentially and colored to indicate its relationship to the original order.

You can modify the following parameters for a child order:

- **Order Quantity,** which can be modified to be *equal to* or *less than* the quantity in the **Leaves** status field for the order in the Tickets panel.

- **Limit Price** (with restrictions) - you cannot adjust the price to be more aggressive than the client's original price, i.e. you cannot increase the price for a buy order, or decrease the price for a sell order.

- **Order Type** (with restrictions) including:

  - Limit tickets can only be sent as a limit or relative orders.

  - Market orders can be submitted as: market, limit, stop, stop limit, trailing stop, trailing stop limit and volatility. For more information on IB order types, see the Order Types page on our web site.

- **Time in Force** - use the drop-down menu to choose from Day, GTC, OPG, IOC or GTD.

You must set the TIF for a child order equal to or shorter than that of the parent. Otherwise, the TIF of the parent order will override that of the child order.

- **Destination** - choose a new routing destination for the order, or create a new "Away" destination.

To transmit an order

1   Modify order parameters by clicking in the appropriate field and selecting or entering a new value.

> **Note:**   Use the price or size "wand" to set a parameter by clicking and holding the mouse button in a field.

2   Click the "T" in the red *Status* field to transmit the order.

To cancel an order

•   Transmitted child orders show a "C" in the yellow *Status* field. Click to cancel the order.

Note: To create a new order, right-click the original ticket in the **Tickets** panel.

Understanding the Order Management Display

The convention across TWS trading windows is a double-row display, where the top row shows market data, and the bottom row shows order data. Both the column headings and the data rows conform to this convention.

In the picture above, the top heading row (Bid Size, Bid, Ask, Ask Size etc) corresponds to the market data in the top data row (1, 19.38, 19.39, 94 etc). The bottom heading row (Key, Account, Clearing etc) corresponds to order information in the lower data row (1.1, Jones, IB etc.).

What is an Away Destination?

For order management purposes, the Blotter allows you to manually create "Away" destinations and to manually report trades executed away from IB. This data will be reflected in the order status fields and the Trade reports.
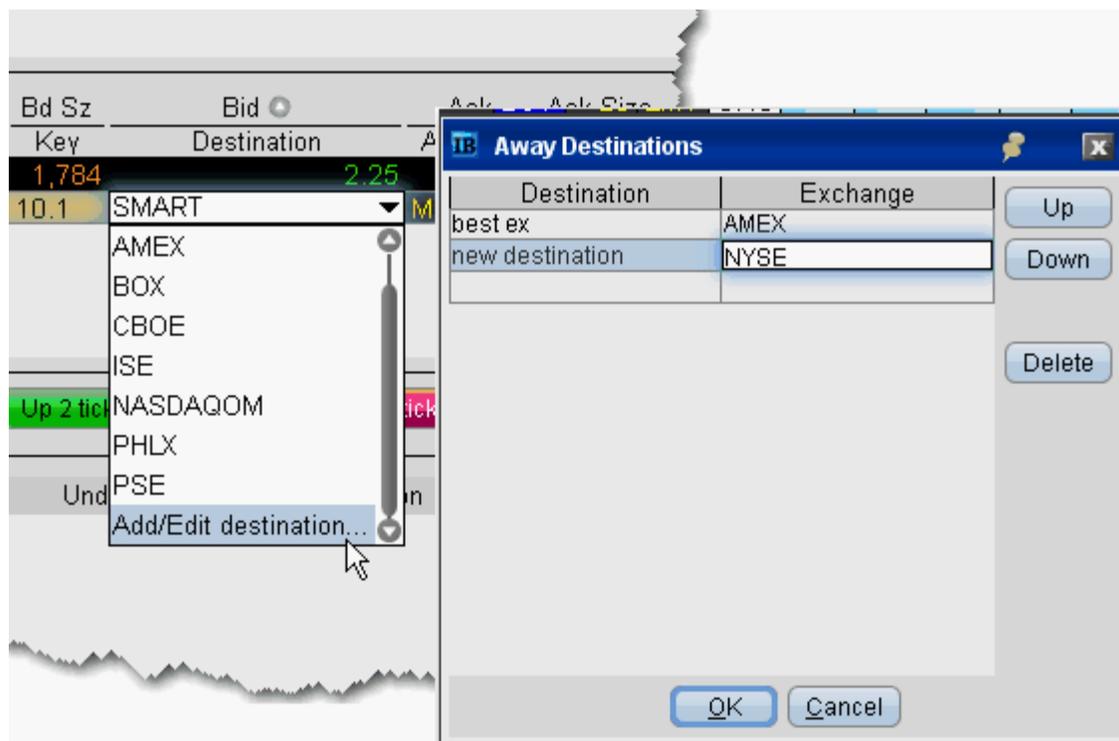
To create an Away destination

1 From an order in the Orders panel, click the *Destination* field dropdown. *See instructions for* adding the Destination column.

2 Choose *Add/Edit destination* at the bottom of the list.

3 In the Away Destinations box, enter the title that will display in the Destination list, and the Exchange/Destination to which the order will be sent.

4 Click OK. The new destination now appears in the dropdown list and is the selected destination for the current order.

The order quantity transmitted to your away exchange is reflected in the order status columns of the Tickets panel. In the example above, a quantity of 12 was routed to the best ex away exchange. The status reflects 12 routed, 25 still left, and 12 working.

NOTE: It is important to note that orders "transmitted" to your away destinations are not handled by IB. An away destination is simply an order-management tool that allows a place-holder within the Blotter for orders you will manage away from IB.

Add "Away Trade" Data to Blotter

To help manage your orders, the Blotter allows you to manually include trade data from orders filled away from IB.
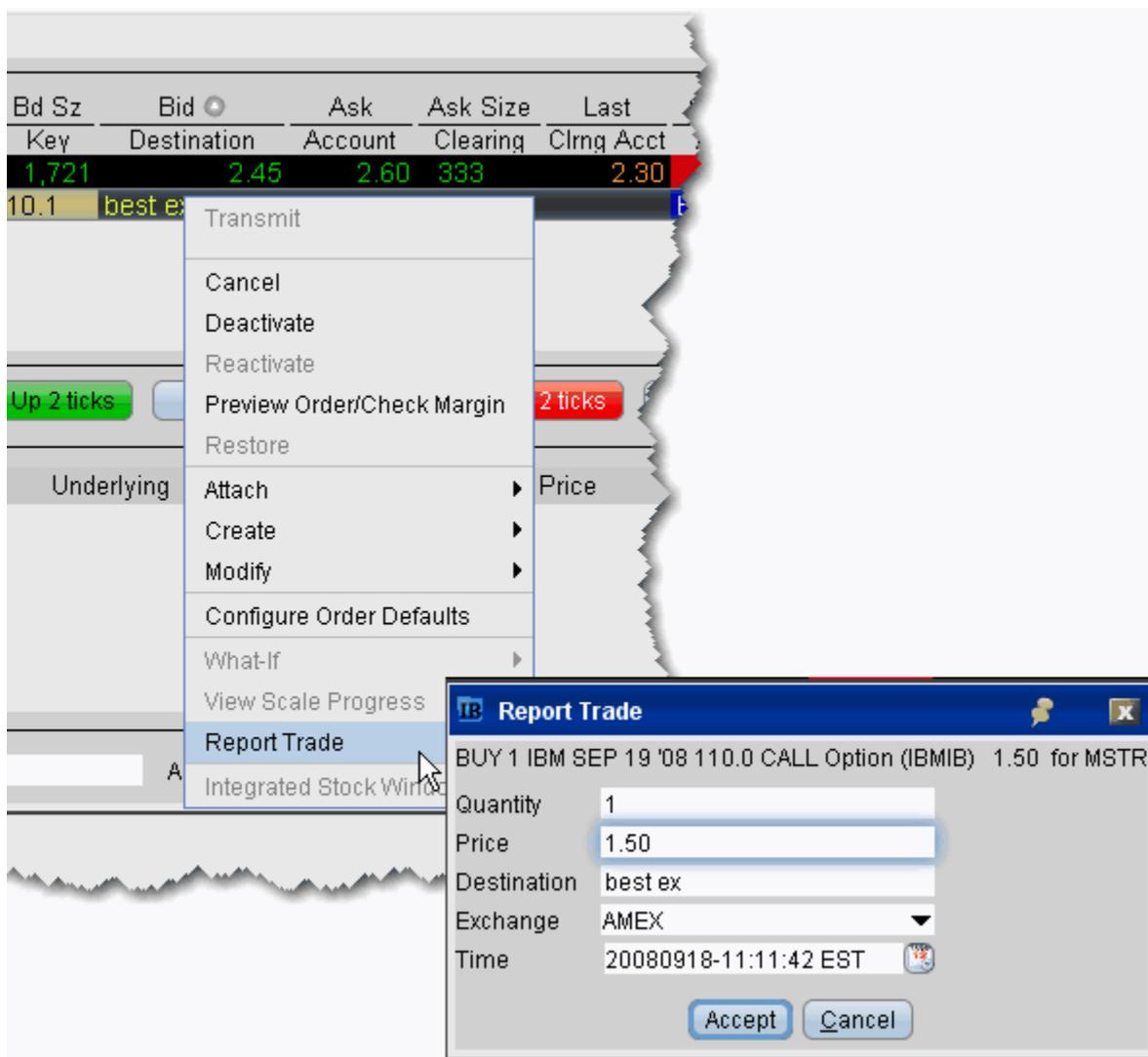
To report away trades

1   Highlight the *Away* trade order line in the **Orders** panel. *Note that you will only see the Report Trade command if you are on an Away trade order line.*

2   From the right-click menu, select *Report Trade*.

3   In the **Report Trade** box, enter the quantity, price, destination, exchange and time of execution. This information will be used by the Blotter to display trade data.

4   Click *Accept*. The information you specified is now incorporated into both the Order Status data in the **Tickets** panel and the execution data in the Trades panel.

Reading the Trades Panel

Filled sub orders are removed from the Orders panel, and the parent order is removed from the Tickets panel once the entire order has filled. The **Trades** panel displays real time trade reports with a drill-down feature to view a breakdown of executions at each price level.

Use the **Filter** panel to view only those orders that meet the filter criteria.

Check *Show filled and canceled orders* to display these orders.

Display Orders by Filter Criteria

Although associated orders are visually linked by color and number **Key**, as shown in the picture below, you may want to have only a single order family on the screen, or you may need to view a specific subset of orders based on other criteria, for example all orders for Client A, or all orders on underlying ABC. The Blotter provides two filtering strategies:

- To filter out all orders except for one order family, the **Key** field for the relevant child order in the **Orders** panel. Click the child key again to clear the filter and show all order families.

- To filter out all orders except those that meet other criteria, use the **Filter** panel to specify display criteria.

Find the **Filter** panel at the bottom of the Blotter window. Use these fields to filter by criteria other than a group of associated orders (the **Key**). Filtering criteria applies across order information in all panels, including the **Tickets**, **Orders** and **Trades** panels.

To use the filter panel

1   Enter the filter criteria, such as a client name, underlying symbol or action, and hit *Enter*.

2 To remove the filter and see all orders, click *Clear Filter.*

Tickets

Undrlyng	Dscrptn	Bid	Ask	Key	Accnt	Action	Lmt Price	Cncl	Total Qty	Rtd
IBM	Stock ...	122.34	122.35	2	Smith	BUY	123.20	C	40,000	0
IBM	Stock ...	122.34	122.35	3	Jones	BUY	123.16	C	20,000	0

Orders

Undrly..	Exch	Dscrptn	Bd Sz / Key	Ask / Account	Bid / Clearing	Ask Size / Action	Last / Quantity	Change / Type	Lmt Price	Statu
IBM	SM...	Stoc...	1	122.36	122.35	9	122.12	-1.06		
			3.1	Jones	IB	BUY	0	LMT	123.16	T
			2.1	Smith	IB	BUY	0	LMT	123.20	T

Order Sharing Modes

Depending on the sharing properties defined for your trading group, you may have permission to view and manage orders received by other traders as well as manage your own orders. You may be enabled for one of three possible modes:

- Full sharing - this mode displays all orders for all traders in the Orders panel of your blotter. Display the *Submitter* field to see who last touched each order.
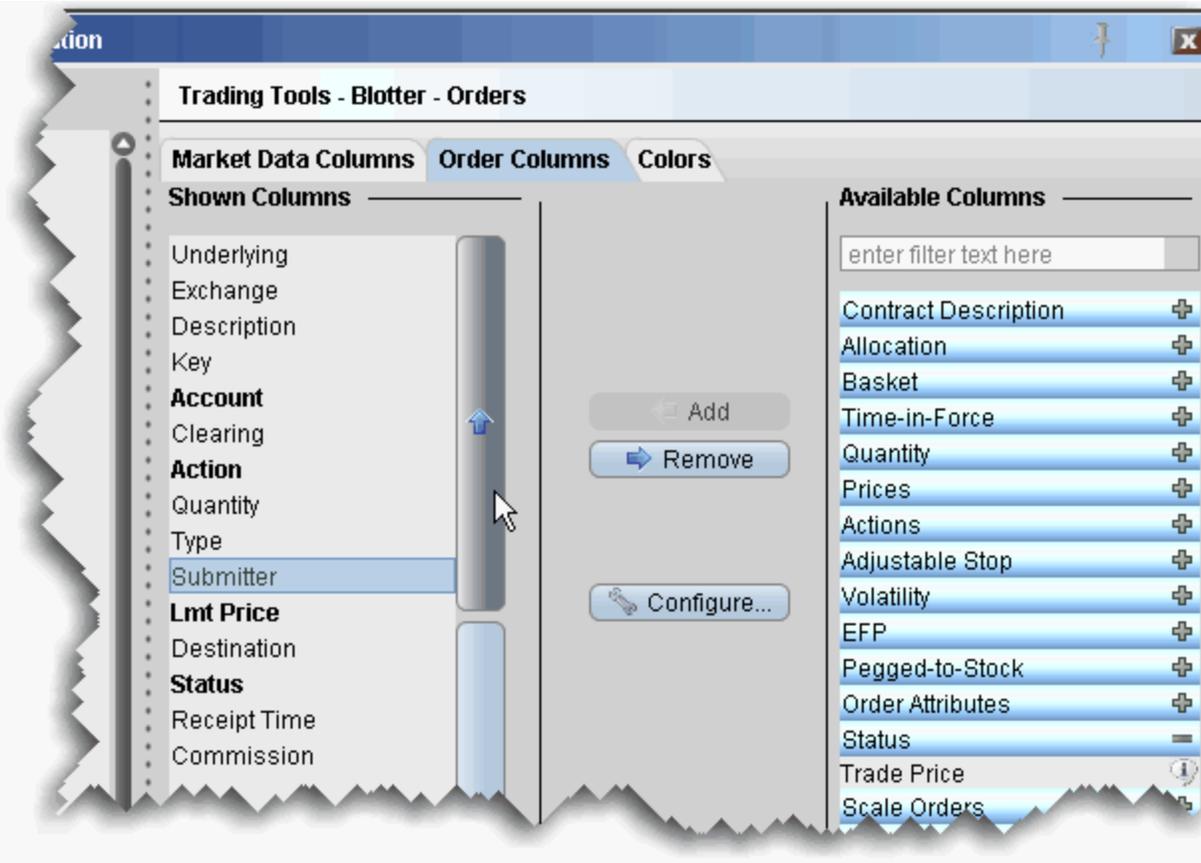
To display the Submitter field

1   In the **Orders** panel, right-click in the column headings and select *Customize Layout*.

2   Click the **Order Columns** tab, and in the *Available Columns* list expand the *Status* category.

3   Select Submitter and use the "Add +" button to move the field to the **Shown Columns** list.

> **Note:** Use the Up and Down arrows to position the location of the field relative to the other order fields.

- Login sharing - this mode requires you to log in to another user's Blotter before you can access their orders. A separate tab is created for each login, and that users orders are displayed only on their tab.

- No sharing - this mode only allows you to view and manage the orders you accepted or created.
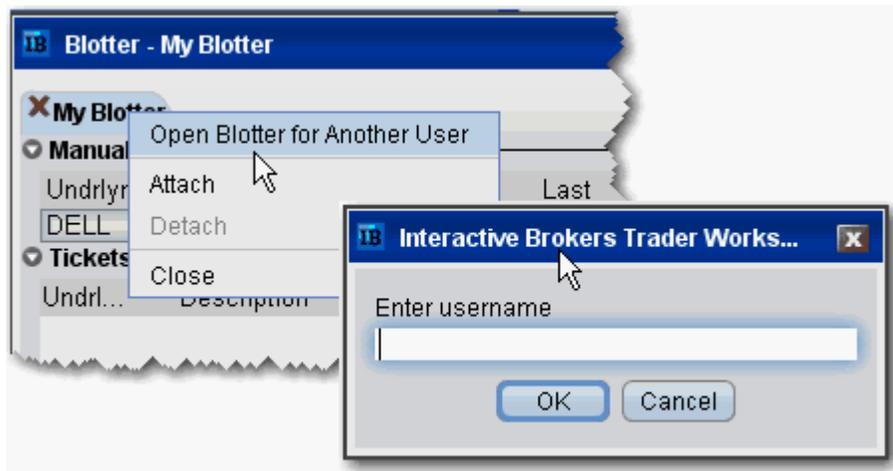
To log into another user's Blotter

1 Right-click the **My Blotter** tab.

2 Select *Open Blotter for Another User*, and enter the user's IB username.

Click OK. The other user's interface opens under a new tab in your Blotter window.

Configure the Blotter Panels

You can hide or display columns in the Blotter panels using the panel-specific layout manager in Global Configuration.

To show or hide Blotter columns

1 From the top left of any panel, click the *Configure* wrench icon.

2 In the right pane, select the tab for the columns you want to modify. You can choose *Market Data Columns* or *Order Columns*.
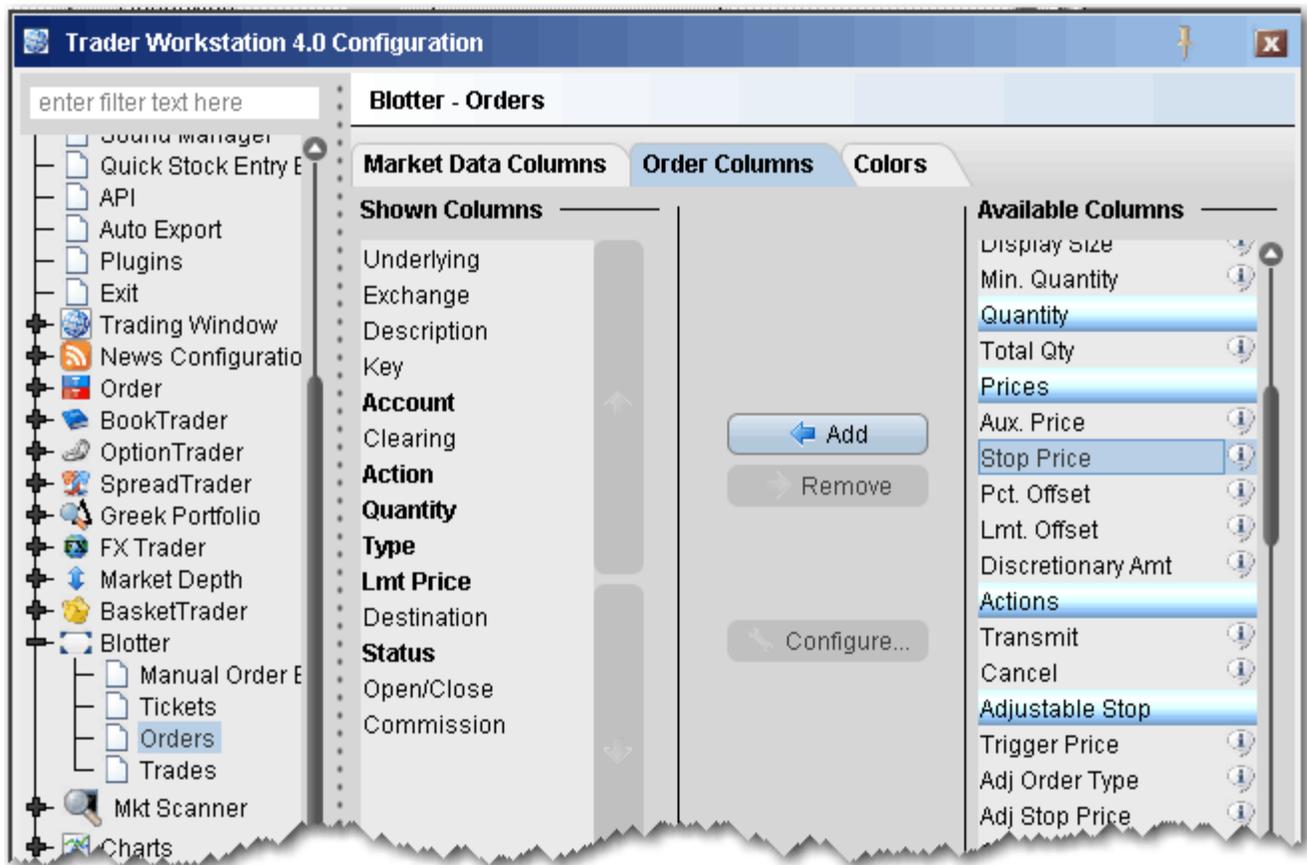
3 Field in the *Shown Columns* list are visible on your trading panel. To display other fields on your trading panel, select from the *Available* list and add to the *Shown* list.

4 To remove columns from the trading panel, select fields from the *Shown* list and remove to the *Available* list.

> **Note:** **Bolded** titles indicate columns that cannot be removed from the panel display.

You can change the order in which the fields are presented on a panel using the vertical up and down arrows in the *Shown Columns* list. In the picture below, I've moved the **Key** field to the right on my Tickets panel so that it displays next to the **Total Quantity** field.
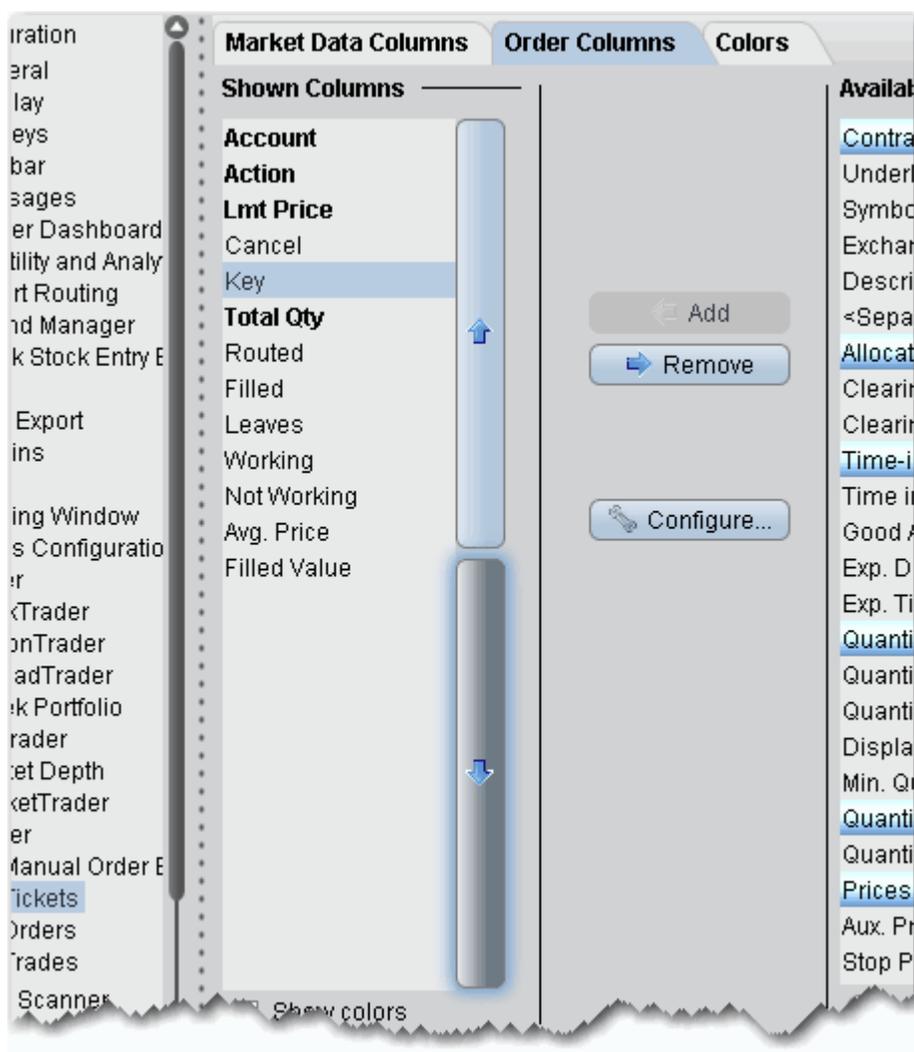
To change the column order

1 In the *Shown Columns* list, click on the field that you want to move.

2 Click the arrows to move the column:

- Moving the field UP in the list moves it to the left on the screen.

- Moving the field DOWN in the list moves it to the right on the screen.

Panels that use the double-row layout can also be moved directly from the screen by dragging and dropping a column to a new location.

Change Order Defaults

To help increase efficiency, TWS and the Blotter use default values where appropriate, so that you don't need to continually enter the same value over and over for each order. Initial defaults are set for every new account, but you can change these values through Global Configuration.
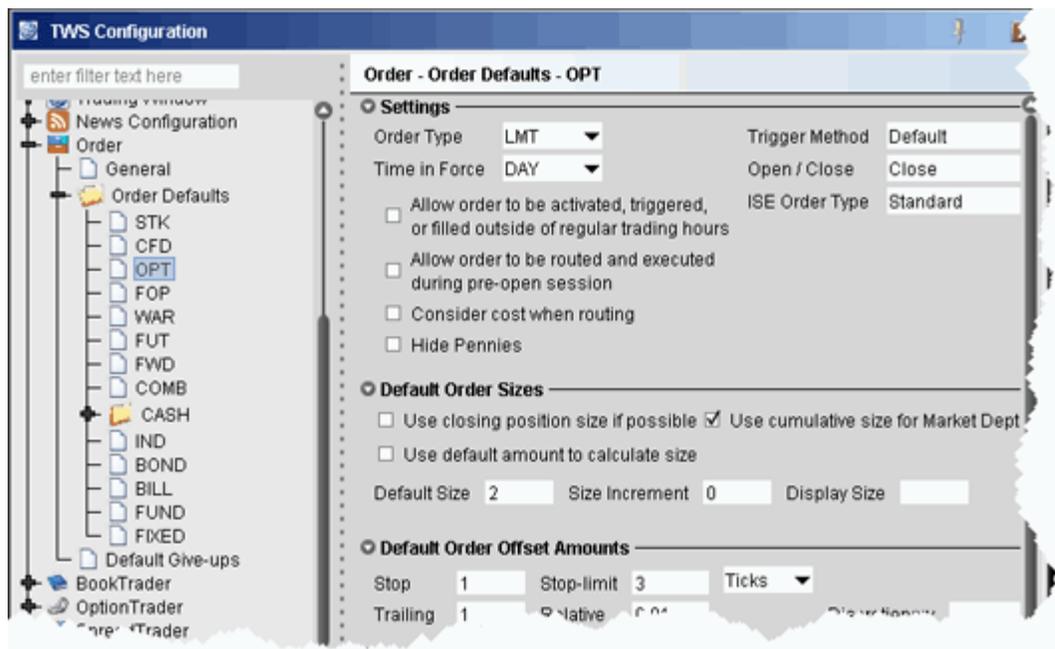
To change order default values

1   From the top right of any Blotter panel, click the **Configure** wrench icon.

2   In the left pane, expand the **Order** and then **Order Defaults**.

3   Select a product.

4   In the right window, modify any product-specific defaults and click OK.

In the image above, the *Option* defaults window is selected, and we have changed the the system-defined Default order size from 1 to 2. When you Create an Order from the *Tickets* panel of the **Blotter**, the Quantity for options orders will now default to "2" instead of "1."

Use Global Configuration to define other OMS configuration settings including:

- *Create ticket for all orders* - this Order setting enables all TWS order-creation actions and order windows for OMS ticket creation.

- Sound Manager - assign sounds to order and ticket actions, such as a partial fill or receipt of an electronic ticket.

Blotter display configuration - modify Blotter settings from the Blotter section of the Trading Tools config page.

For more details on Global Configuration, please see the TWS Users' Guide.

BookTrader

Introduction

Use the BookTrader to instantaneously transmit orders at a selected price with a single click.

- [Open BookTrader](#)
- [Trade with BookTrader](#)
- [BookTrader Order Handling](#)
- [BookTrader Hotkeys](#)
- [BookTrader Buttons](#)
- [BookTrader Colors](#)

Open BookTrader

Transmit orders at any price, including the best bid and ask, with a single click. **BookTrader** displays as a separate window for whichever contract you select. It shows a series of prices above and below the best bid and ask in the price ladder.

To open and arm BookTrader

1   Select a contract on the trading page.

2   Right click and select **Trading Tools**, then select *BookTrader.*

Note: By default, BookTrader opens but is unarmed. To trade with BookTrader, you must first "arm" it. If you prefer to always have BookTrader open in the Armed state, use the **Settings** configuration page check *Remember "Armed state between sessions*.

3   In the upper left corner, check *Armed*.

Note: Read the activation contract which states that you understand that a single click in the bid or ask field transmits an order directly to an exchange, and click *Yes* to arm **BookTrader**.
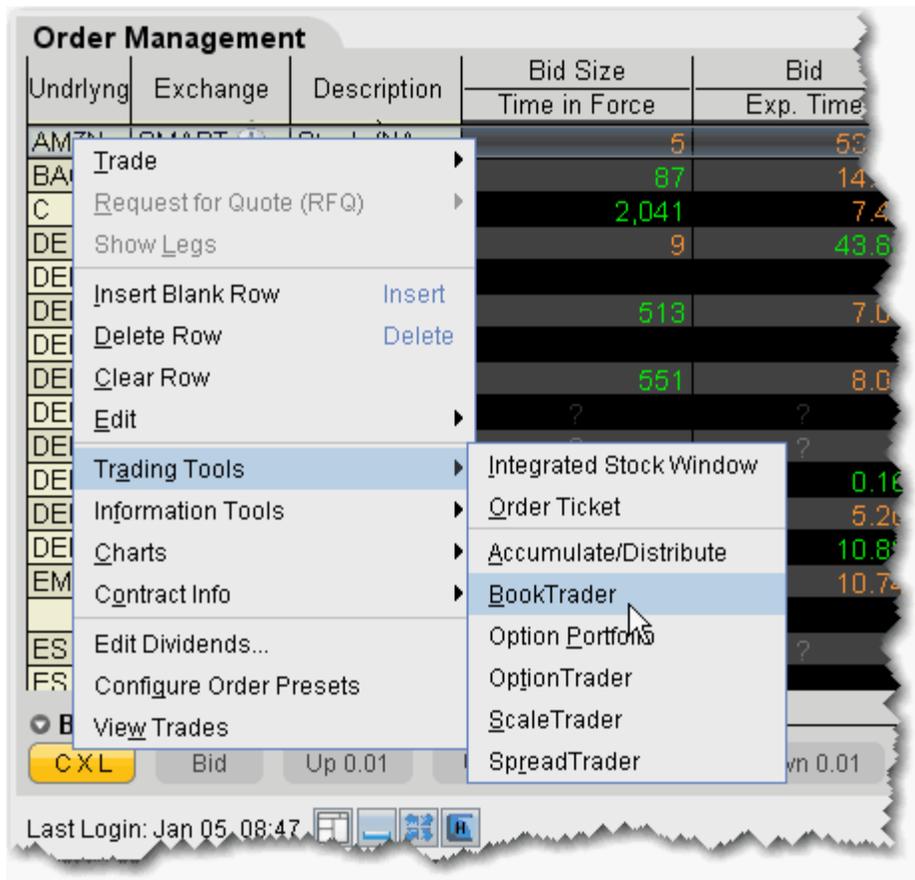
If you leave the Armed option unchecked, you can see prices and sizes but cannot trade. The current best ask shows a **Green** background in the Price field; the current best bid shows a **Yellow** background.

Orders transmitted from BookTrader are displayed on the **Pending** page and in the Orders panel of the BookTrader.

NOTES:

- The number of deep book data windows that you can display at one time (including BookTrader, ISW and Market Depth) is equal to 1 for every 100 allowed lines of market data, with a minimum of three and a maximum of 30. Market data allowance is based on commissions, available equity and other criteria. So a client with the minimumallowance of 100 lines of market data will be able to open 3 deep book windows. A client with an allowance of 500 lines of market data will be able to open 5 unique deep book windows . For details on how market data allowances are calculated, see the Market Data and News overview page on the IB website.

- When subscription deep book data is at its window limit, additional windows will display aggregated top level data, and the Deep Button panel will be hidden.

- By default, BookTrader uses specific [colors](#) to convey information. You can customize these colors by clicking the Configure button on the toolbar, and then selecting BookTrader Colors.

- The current Cumulative Bid and Ask sizes are displayed at the top of the Bid Size and Ask Size columns. To turn this feature off, use the **Configure** > *Settings* page.

- By default, clicking a size initiates an order. If you click another size the current unexecuted order is cancelled and replaced with the new order. You can modify multiple- order handling on the same side from the Settings page in BookTrader configuration.

- You can open a blank BookTrader window by clicking the BookTrader icon on the trading toolbar. Use the Underlying field to initiate contract selection.

Trade with BookTrader

To trade with BookTrader, you click the Bid Size or Ask Size at a certain price level in the price ladder, and an order is transmitted instantaneously. Before you can trade with **BookTrader***,* you must ready the application for instantaneous order transmission by checking the *Armed* checkbox and agreeing to the activation contract. Once armed, **BookTrader** instantly transmits your order with a single click of the mouse. Default mouse actions are described below. You can modify the default settings that control how orders are handled using the *Settings* page in **BookTrader** configuration.

By default, the option to *Use context cursors in armed mode* is activated on the BookTrader Settings configuration page. This feature displays helpful order-related information when you hold your cursor over the Bid Size or Ask Size field in the price ladder.

To create a SELL Limit order in BookTrader

- In the price ladder, click the **Ask Size** at the desired price level.

  Note: A limit order is created and submitted at the selected price level. You can manage the order from the Orders panel at the top of the price ladder.

To create a BUY Limit order in BookTrader

- In the price ladder, click the **Bid Size** at the desired price level.

  Note: A limit order is created and submitted at the selected price level. You can manage the order from the Orders panel at the top of the price ladder.

BookTrader Default Click Actions

Note that the default click actions do not apply IF you have selected one of the BookTrader Order Type Select buttons.

- Click on any **Bid size** to send a **Buy Limit** order at the selected price.
- Click on any **Ask size** to send a **Sell Limit** order at the selected price.
- **Right-click** on any **Bid size** to send a **Buy Stop** order.
- **Right-click** on any **Ask size** to send a **Sell Stop** order.
- Hold the **Alt** key and click on any **Bid** or **Ask** size to create a **Bracket** order.

For details on all system-configured BookTrader shortcuts, open the **BookTrader** *Hotkeys* window in Global Configuration.
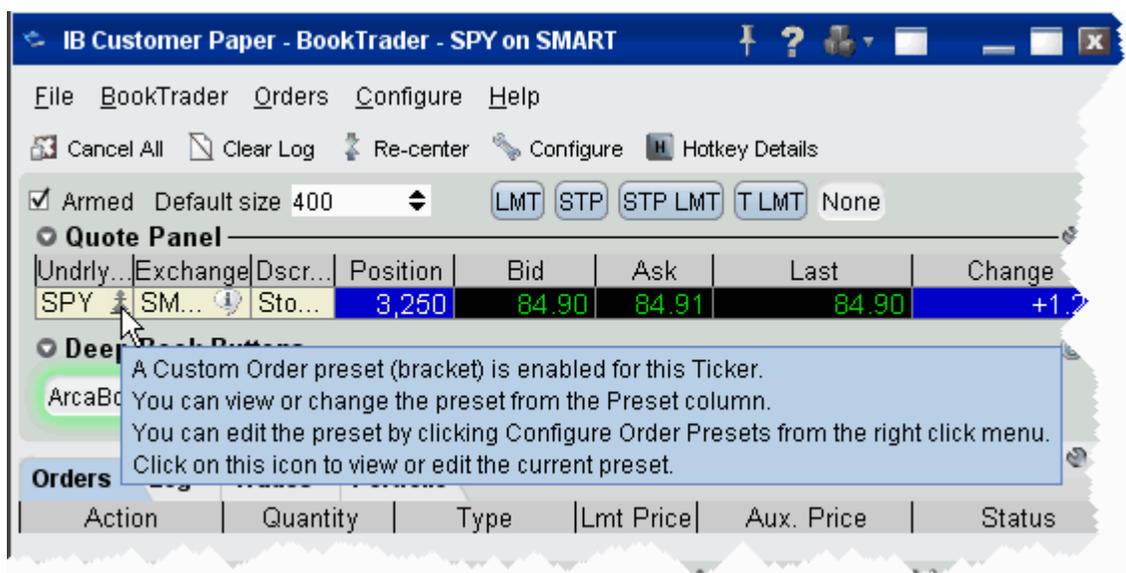
Default order information comes from the active order presets for the contract or instrument. For information on using presets, see the Configure Order Defaults and Presets topic.

BookTrader Order Handling

You can use the **Configure**>*Settings* area in **BookTrader** to change the way orders are handled and how the order status is displayed. For details see the Configure BookTrader topic.

When you select *Show separate status column for each order* in the Status area of the Settings configuration page, BookTrader works in Advanced Mode. This enables two key features:

- First, it allows you to control the BookTrader using only your keyboard. The mouse will still work to navigate, but for users who don't want to take the time to move from the keyboard to the mouse and back again, advanced mode gives you 100% keyboard control.

- Second, when you create an order, a new *Order* column is created in which all parts of the order (parent and child orders) are visible and can be modified. The new *Order* column appears to the right of the price column for SELL orders (which you initiate by clicking in the *Ask Size* field) and to the left of the price column for BUY orders (which you initiate by clicking in the *Bid Size* field).

Note: You can click in the Order column to create child orders that belong to the parent order in the Order column.
For example, if you create a buy Limit order, and then select the Target Limit order type button, when you click at a different price level in the **Order** column (rather than in the Size column) the target limit order is created as a child of the original limit order. If you click the Ask Size or Bid Size column, a new Order column is created with another order.

Each new Order column may contain up to 4 elements:

- The parent order (LMT)
- The stop order (STP)
- The stop limit (SLMT)
- The target limit order (TLMT) - this is the limit order created as part of a bracket order, or a stand-alone opposite-side limit order.

There are three ways to modify the price of an order; via the keyboard, by dragging with the mouse, or by using the mouse click.

To modify order price via the keyboard

1   Tab through the application until you are in the Price Ladder.

2   Use the up/down arrows to highlight the order line in the price ladder.

3   Use the left/right arrow keys to navigate to the order you want to modify.

4   Depress the **Shift** key to grab the order, and use the up/down arrow keys to move the order to a new price level.

5   Release the **Shift** key to transmit the new order.

Note: To move parent and child orders together, for example a bracket or stop limit order, depress and hold the **Alt** key instead of the Shift key.

To modify order price by dragging with the mouse

1 Hold the mouse over the order until it becomes a two-headed arrow.

2 Click the order or suborder and drag it to a new price level.

3 Release the mouse key to submit the order.

Note: To move parent and child orders together, for example a bracket or stop limit order, press and hold the **Alt** key while you click and drag.

To modify order price with a mouse click

1 Click the order and press and hold the **Shift** key.

2 Click in the desired price level and release the **Shift** key to submit the order.

Note: To move parent and child orders together, for example a bracket or stop limit order, press and hold the **Alt** key instead of the Shift key in 1) above.

The size of the order can be modified by clicking in the row header and entering a new quantity as shown above.

Suborders can be canceled by right clicking on them (default) or using a hotkey. The bracket can be can canceled by clicking the **C** on the row header.

BookTrader Hotkeys

This topic discusses the hotkeys that are specific to BookTrader or that have customizable options specific to BookTrader. For information on hotkeys that appear in the BookTrader hotkeys box but are available to all TWS windows, see the general Hotkeys topic.

Hotkey Action	Description
BookTrader	
Cancel Sub Order	This hotkey will cancel an order in the Price Ladder.
Decrease BookTrader Order Size	Set a left or right mouse-click event for a specific field that will decrease the order size of any BookTrader order by whatever number of ticks you define.
Increase BookTrader Order Size	Set a left or right mouse-click event for a specific field that will increase the order size of any BookTrader order by whatever number of ticks you define.
Re-center	Set a hotkey to recenter the focus to either the last traded price, or the midpoint bid/ask price. Set the re-center focus using the *Settings* page in the BookTrader configuration area.
Create Orders	
Add Auto Stop Order	Attaches an opposite-side stop order to the selected order.
Add Trailing Stop Order	Attaches an opposite-side trailing stop order to the selected order.
Attach Bracket Orders	Attaches a pair of orders (a limit and a stop order) to bracket the selected order.
Buy	Creates a buy order for the selected asset.
Buy or Sell Specific Product	Create a hotkey to buy or sell a specific product with it's own default order type, limit price, stop offset, time in force. etc. Use the Customize tab of the Configure Hotkey box to set product-specific details.
	If you select BookTrader Price for any of the price configurations, you will only be able to set a mouse-click shortcut since using the BookTrader Price requires you to click on a price in the price ladder.
Close Position	Creates an opposite-side order to close out the position on the selected contract. By default you need to transmit the order manually, but you can elected to have this hotkey transmit closing orders instantaneously by checking the feature in the *Customize* area of the **Configure Hotkey** box.
Reverse Position	Creates an opposite-side order to reverse the position on the selected contract. By default you need to transmit the order manually, but you can elected to have this hotkey transmit reverse position orders instantaneously by checking the feature in the *Customize* area of the **Configure Hotkey** box.
Sell	Creates a buy order for the selected asset.
Modify/Transmit Orders	

Hotkey Action	Description
Change Order to Market	Changes the order type of the selected order to a market order.
Decrease Price or Size	Decreases the order price or order quantity by a specified value.
Increase Price or Size	Increases the order price or order quantity by a specified value.
Modify Order Type	Displays the **Type** dropdown list to let you select a different order type for the active order.
Modify Time-in-Force	Displays the **Time in Force** dropdown list to let you select a different Time in Force for the active order.
Order Ticket	Opens the Order Ticket. If you've highlighted a ticker, the order ticket will be populated with that product.
Transmit Order	Transmits the selected order.
Update Limit Prices	Updates the limit price of the active, unexecuted order to reflect the price/offset you define on the *Customize* page of the **Configure Hotkey** box.
Cancel Orders	
Cancel All Orders	Cancels all orders on all pages in TWS.
Cancel Contract's Orders	Cancels all orders associated with a specific asset.
Cleanup orders	Removes orders from the page. Use the customize area of the configure Hotkey box to define whether to remove cancelled, filled and/or untransmitted (including deactivated) orders from either the active pages or all pages.
Deactivate	A deactivated order is cancelled but remains on the page ready to be transmitted.
Delete Rows/Cancel Orders	This hotkey can be configured to either delete rows, or delete and cancel orders.
Tools	
Add to Rebalance Window	Used to add a contract to the Rebalance window. This hotkey does not open, close or adjust any positions.
Arbitrage Meter	Opens the Arbitrage Meter for the active index market data line.
Integrated Stock Window	Opens the ISW.
Show FXTrader	Opens the FX Trader module.
Show Market Depth	Opens the Market Depth module.
Show OptionTrader	Opens the OptionTrader.

Hotkey Action	Description
Show Rebalance Window	Opens the portfolio Rebalance window.
Show SpreadTrader	Opens the SpreadTrader.
Realtime Activity Monitoring	
Alarms	Opens the Alarm Settings box for the active contract.
View Alerts	Opens the Alerts window where you can view, edit or create an alert.
Analysis	
Model Navigator	Opens the Model Navigator window.
Show Fundamentals	Opens a Reuters Fundamentals page for the contract.
Show IB Risk Navigator^{SM}	Opens the IB Risk Navigator^{SM}, our real-time price/risk analytics tool.
Show Option Analytics	Opens the Option Analytics with focus on the selected options contract.
Show real-time charts	When you have a contract selected, this opens the New Chart window where you can set parameters for the active contract to create a real-time chart.
Miscellaneous	
Clear Log	Clears the Log panel.
Configure Order Presets	Opens the Presets configuration page for the active strategy.
Help Chat	Opens the customer service Chat area of the Account Management screen.
Minimize all windows	Minimizes all open windows and puts them on the bottom of the status bar.
Msg Center	Opens the customer service message center.
Request Trade Cancellation	Logs you into the Customer Service area of the Account Management screen.
Search TWS	Displays the Search field which you can use to find contract and application information.
Show Description	Displays the Description box for the selected contract.
Show Details	Displays contract details for the selected contract.
Show Earnings Estimate	For the selected contract, displays the Earnings estimate.
Show Positions	For the selected contract, shows the account number and the current position.
View Account	Opens the Account window.

Hotkey Action	Description
View Trades	Opens the Trades window.

BookTrader Buttons

Order Type Select buttons

When you configure the order Status to *Show separate status columns for each order* from the Settings configuration page, the Order type select buttons function becomes available.
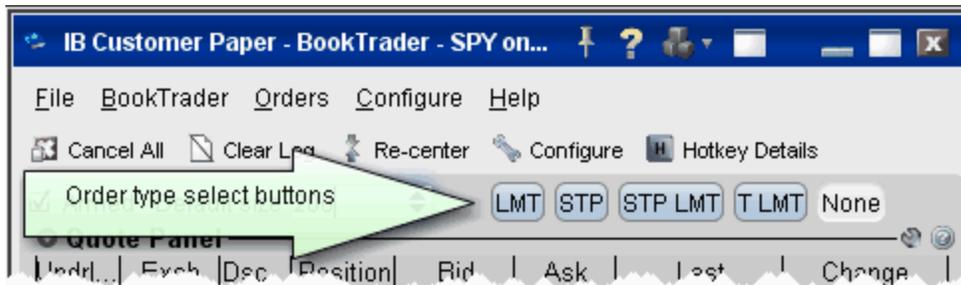
These buttons override the default mouse click functions of BookTrader to create only the order type selected. For example, if you click the LMT order type select button, any mouse click you perform in the price ladder, even a right-click, creates a limit order.

To release the order type function and return to the default click actions, click *None.*

Basic Buttons panel

The BookTrader toolbar also includes the basic buttons panel below. To create custom buttons, use the Button Panel.

- **Cancel All** - cancels all orders on the active BookTrader.
- **Clear Log** - clears all order information from the white log area just above the buttons.
- **Re-center-** click to keep the best bid/ask price or last traded price always visible in the center of the BookTrader screen. Use the Configure menu to elect to have the ladder recenter around the midpoint of the bid/ask, or the last price.
- **Configure-** opens the Configuration dialog box.
- **Hotkey Details** - displays a list of all current hotkeys for BookTrader.
- **Armed** - check to arm BookTrader for instantaneous transmit.

- **Default size** - displays the default order size based on the Preset for the instrument, and allows you to change the default order size for BookTrader orders without re-configuring the Preset.

Deep Book buttons

Use the Deep Book Buttons to filter out market data from the price ladder. De-select a button to filter out that data.

The Others button includes data from exchanges that don't offer deep data; Level I data from deep exchanges you have elected to filter out, and Level I data for exchanges that offer deep data but to which you do not subscribe. Hold your mouse over the button to see the exchange's data included.

BookTrader Colors

BookTrader displays a lot of information in a small space using colors and numbers.

Market Data Colors

The market data colors display after BookTrader is armed but before any order is transmitted.

- The **Bid Size** column is yellow until you create an order. Values in this column represent the size of an order at the specific price, and help show market depth.

- The **Ask Size** column is green until you create an order. When a size appears in an ask size field, this indicates the current best ask.

- The **Status** field remains gray until you submit an order.

Price Field - Background Colors

- The **current best bid** price is shown by a **Yellow** background, with the size next to it in the *Bid Size* field.

- The **current best ask** price is shown by a **Green** background, with the size next to it in the *Ask Size* field

- The **Last** transaction is highlighted by a **Slate Blue** background.

- The **High** price is highlighted by a **Bright Blue** background.

- The **Low** price is highlight by a **Red** background.

- The **Average Cost** (including commissions) is indicated by a highlight across the entire row. You'll only see this if you hold a position in the active contract.

BookTrader Colors		
Column Name	**Possible Color**	**Notes**
Status		Once you transmit an order, the status colors change. See **Order Status Colors** table below.

BookTrader Colors		
Bid Size		Indicates the size of the current best bid.
		Indicates that a limit order has been transmitted (by clicking in the field).
		Indicates a stop order has been transmitted (by right-clicking in the field).
Price	No color	One in a range of prices displayed for the contract.
		The current best bid price.
		The current best ask price.
		The price at which the last order executed, and the size of the order.
		The current high price.
		The current low price.

BookTrader Colors		
Ask Size		Indicates the size of the current best ask.
		Indicates that a limit order has been transmitted (by clicking in the field).
		Indicates a stop order has been transmitted (by right-clicking in the field).

ChartTrader

Introduction

Use the ChartTrader to send orders directly from any real-time chart.

- [Open Chart Trader](#)
- [Create and Transmit Orders](#)

Open ChartTrader

You can trade directly from a real-time chart using ChartTrader, which you display from the ChartTrader menu when you're in a chart. Send instantaneous orders by clicking directly in the chart, or create and modify an order by creating it from the Quote panel.
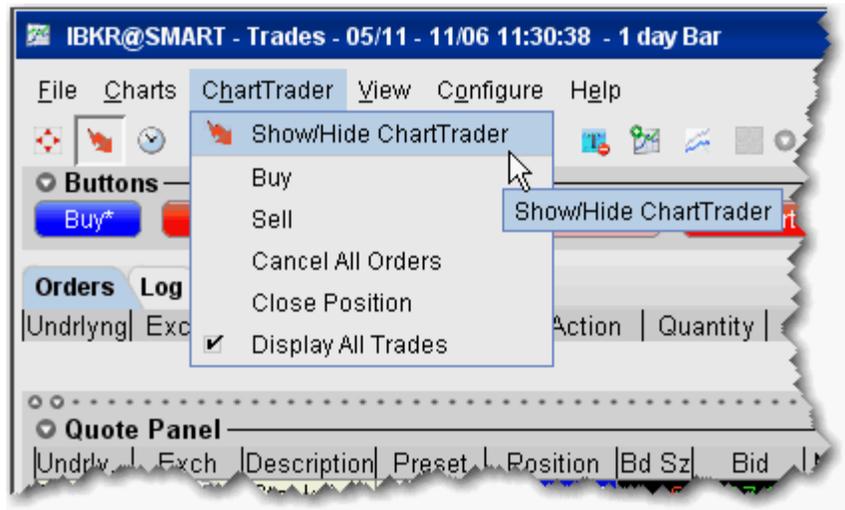
To open ChartTrader

1 First open a real-time chart by selecting a contract on the trading screen and clicking the **Charts** icon on the trading toolbar.

2 On the **ChartTrader** menu, select *Show/Hide ChartTrader*.

3 The ChartTrader opens along the top of the active chart.

Create and Transmit Orders

ChartTrader is designed to instantaneously transmit orders created with a single click within the chart. Order parameters are picked up from the active Order Presets.

Instantly transmit an order

1   Activate the cursor for instantaneous order transmission:

    a   Click the blue **Buy** button to activate for a buy order,

    b   Click the red **Sell** button to activate for a sell order.

2 Move your cursor into the chart and position the broken blue or red line at the order price you want. Note that your exact price position is displayed to the left of the broken line, along the price axis. The last price is in pink, your order price is in blue for a buy, or red for a sell.

3 Click to transmit an order. Your order appears in the Quote panel, and the broken line

Orders that you create using ChartTrader also display on the Trading page that displays the contract data. Trading pages that hold an order display the page title in red.

You can also create an order that does not transmit instantaneously.

Create a Modifiable Order

- From the Quote panel, click Bid (sell) or Ask (buy) to create an order in the Orders panel.

ComboTrader

Introduction

Create combination orders that include options, stock and futures legs (stock legs can be included if the order is routed through SmartRouting).

- [About Combination Orders](#)
- [Create a Combination Order](#)
- [Using the ComboTrader](#)
- [Transmit a Combination Order](#)
- [Notes on Combination Orders](#)

About Combination Orders

Create combination orders that include options, stock and futures legs (stock legs can be included if the order is routed through SmartRouting). Although a combination/spread order is constructed of separate legs, it is executed as a single transaction if it is routed directly to an exchange. For combination orders that are SmartRouted, each leg may be executed separately to ensure best execution. You can also create a futures EFP (Exchange of Futures for Physical) spread.

Combination orders can be transmitted as Market, Limit, or Volatility orders. For details on using the VOL order type for combination orders, see the list of criteria in the Volatility Trading topic.
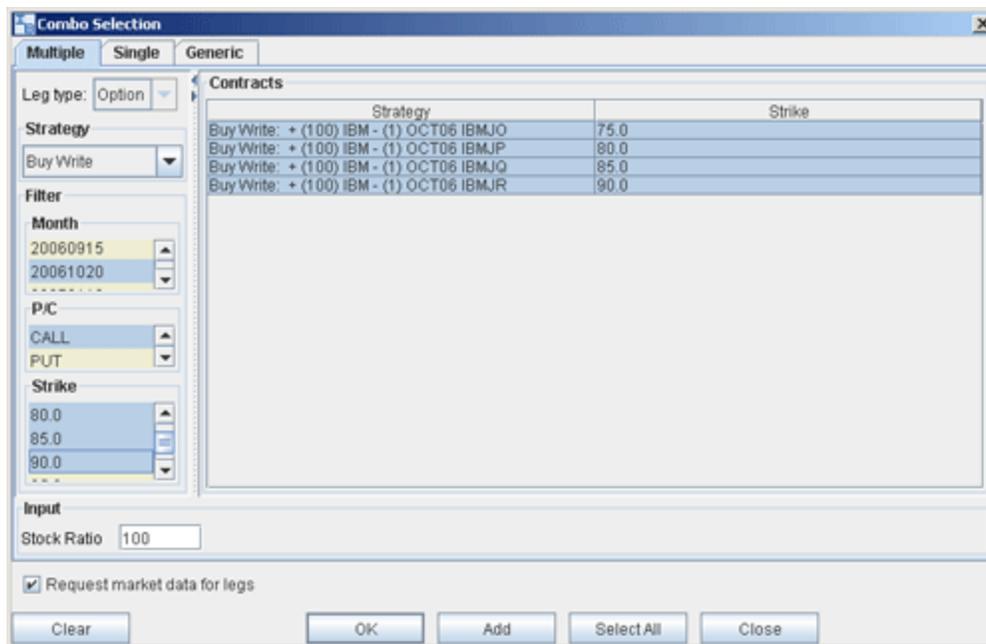
You can create a unique combination by manually defining an order leg by leg on the **Generic** tab, or create an order or group of orders with a named strategy using a template, on either the **Single** or **Multiple** tab. You can find a template to construct the following named combination strategies:

- **Box** - An order to simultaneously purchase and sell two synthetics in identical numbers at different strike prices.
  For example: Buy 1 April02 95 call, Sell 1 April02 95 put, Sell 1 April02 100 call, Buy 1 April02 100 put.

- **Butterfly** - An order to simultaneously purchase an option with one strike price, purchase an option with a second strike price, and sell two options with a third strike price that is midway between the prices of the first two options. The ratio for a butterfly is always 1 x 2 x 1.
  For example: Buy 10 March02 95 calls, Sell 20 March02 100 calls, Buy 10 March02 105 calls.

- **Buy Write** - An order to simultaneously purchase (sell) a stock and sell (purchase) a call option of the same underlying.
  Purchase a Buy Write: Sell 1 XYZ April06 95 call, Buy 100 shares XYZ
  Sell a Buy Write: Buy 1 XYZ April06 95 call, Sell 100 shares XYZ

- **Calendar spread** - An order to simultaneously purchase and sell options with different expiration dates, where both have the same underlying, right (call or put) and strike price. This spread is sometimes referred to as a *time spread*. A calendar spread whose options have different expiration dates and different strike prices is sometimes referred to as a *diagonal* spread.
  For example: Buy 1 June02 100 call, Sell 1 March02 100 call.

- **Conversion** - An order to simultaneously sell (or purchase) a call option and purchase (or sell) a put option in identical numbers where both have the same underlying, expiration date and strike price, and purchase stock of the same underlying.
  Purchase a conversion: Sell 1 XYZ April04 75 call, Buy 1 XYZ April04 75 put, Buy 100 shares XYZ
  Sell a conversion: Buy 1 XYZ April04 75 call, Sell 1 XYZ April04 75 put, Sell 100 shares XYZ

- **Delta Neutral -** An order to simultaneously buy (or sell) options contracts and sell (or buy) a delta amount of the underlying. The quoted price is calculated as follows:
  effectiveOptionPrice = optionPrice + delta x (inputStockPrice - stockPrice).

- **Diagonal spread** - An order to simultaneously purchase and sell options with different expiration dates and different strike prices, where both have the same underlying and right (call or put).
  For example: Buy 1 June03 100 call, Sell 1 Sept03 105 call.

- **Iron Condor** - An order to simultaneously purchase an out-of-the-money put bull spread, and sell an out-of-the-money call bear spread, where all legs have the same expiry.
  Purchase an iron condor: Buy 1 XYX JAN08 25.0 PUT, Sell 1 XYZ JAN08 27.5 PUT, Sell 1 JAN08 30.0 Call, Buy 1 JAN08 32.5 Call.
  Sell an iron condor: Sell 1 XYX JAN08 25.0 PUT, Buy 1 XYZ JAN08 27.5 PUT, Buy 1 JAN08 30.0 Call, Sell 1 JAN08 32.5 Call.

- **Reversal**- An order to simultaneously purchase (or sell) a call option and sell (or purchase) a put option in identical numbers where both have the same underlying, expiration date and strike price, and sell stock of the same underlying.
  Purchase a reversal: Buy 1 XYZ April04 75 call, Sell 1 XYZ April04 75 put, Sell 100 shares XYZ
  Sell a reversal: Sell 1 XYZ April04 75 call, Buy 1 XYZ April04 75 put, Buy 100 shares XYZ

- **Risk Reversal-** An order to simultaneously purchase (or sell) a put option and sell (or purchase) a call option in identical numbers where both have the same underlying and expiration date, but the call generally has a higher strike price.
  Purchase a risk reversal: Buy 1 XYZ April04 75 put, Sell 1 XYZ April04 95 call
  Sell a risk reversal: Sell 1 XYZ April04 75 put, Buy 1 XYZ April04 95 call

- **SSF/OPT** - An order to simultaneously buy (or sell) one contract of a single stock future (SSF) and buy (or sell) a stock option of the same underlying.
  For example: Sell 1 Oct06 60.0 call, Sell 1 Aug06 SSF.

- **Straddle** - An order to simultaneously purchase (or sell) a call and a put in identical numbers, where both have the same underlying, expiration date and strike price.
  For example: Sell 1 Dec02 90 call, Sell 1 Dec02 90 put.

- **Strangle** - An order to simultaneously purchase a call and a put with different strike prices, where both have the same underlying and expiration date. In the case where both the call and the put are out of the money, this order is referred to as an inside strangle.
  For example: Buy 1 June02 95 put, Buy 1 June02 105 call.

- **Stk/Opt** - An order to simultaneously purchase (or sell) one stock contract and purchase (or sell) one options contract.
  For example: Sell 1 Jan07 55.0 put, Sell 100 shares of the underlying.

- **Synthetic** - An order to simultaneously purchase a call and sell a put in identical numbers (or sell a call and purchase a put in identical numbers), where both have the same underlying, expiration date and strike price.
  Purchase a synthetic: Buy 1 April02 100 call, Sell 1 April02 100 put.
  Sell a synthetic: Sell 1 April02 100 call, Buy 1 April02 100 put.

- **Synthetic Put** - An order to simultaneously purchase (or sell) a call option and sell (or purchase) stock where both have the same underlying.
  Purchase a synthetic put: Buy 1 XYZ April03 75 call, Sell 100 shares XYZ
  Sell a synthetic put: Sell 1 XYZ April03 75 call, Buy 100 shares XYZ.

- **Synthetic Call** - An order to simultaneously purchase (or sell) a put option and purchase (or sell) stock where both have the same underlying.
  Purchase a synthetic call: Buy 1 XYZ April03 75 put, Buy 100 shares XYZ
  Sell a synthetic put: Sell 1 XYZ April03 75 put, Sell 100 shares XYZ.

- **Vertical spread -** An order to simultaneously purchase and sell options at different strike prices, where both have the same underlying, right (call or put) and expiration date. This spread is sometimes referred to as a *price spread*.
  Call vertical spread example: Buy 1 June02 100 call, Sell 1 June02 105 call.
  Put vertical spread example: Buy 1 March02 105 put, Sell 1 March02 95 put

For more information on combination orders and margin requirements for combination orders, see U.S. Equity Options Margin Requirements on the IB website.

Create a Combination Order

You can create any kind of combination spread order using the **Combination Composition** box, including futures spreads and EFPs, and inter-market Smart combos.

To create an Inter-market or Smart Combo order

1   Enter an underlying on a blank line and select Comb, or right-click in a blank line (outside the Underlying field) and select *Generic Combo.*

2   In the **Leg Query** section, enter the underlying symbol for the first leg of the order.

3   Use the **Leg Definition** section to define parameters of the leg. When finished click *Add Leg*.

> **Note:** Or simply drag a market data line from the trading screen into the bottom of the Leg Definition area.

4   After you have added all desired legs click OK, and the spread appears as a market data line on your trading screen.

The implied price is calculated based on the underlying price of each leg, and changes with variations in the price of each underlying. Based on the implied price, SmartRouting will route each leg of the order separately to get the best price.

Note: To see individual leg prices for a combination or spread order, open the **Execution** reports window by clicking the Trades icon on the Trading Toolbar. Double-click the desired combination execution report line in the **Execution** window (or right-click on the line and select *Show Legs)* to open the **Execution Window for Legs**.

To create an EFP combo

1   Enter an underlying symbol in the Underlying field and select **Comb** > *SMART.*

2   Click the Single tab at the top of Combo Selection box.

3   Choose *Futures* as the leg type, and *Future EFP* as the strategy.

4   Select the expiry on the futures leg and click OK.

Note: EFP combos created using the template are Smart-routed.

To create a combination strategy

1   Right-click on a blank line and select *Generic Combo,* or create a market data line with the instrument type *Comb*.

2   In the **Leg Query** section, enter the underlying symbol for the first leg of the order.

3   Use the **Combo Template** tab to select a strategy.

4   Select data for all legs of the order and click OK. The combination order strategy appears on your trading screen as a market data line.

Notes on using Futures legs

•   Intermarket combos that contain futures legs are supported for contracts on the following exchanges: Globex, One Chicago, CFE, EurexUS.

•   Only US contracts are supported for Smart combos.

Using the ComboTrader

ComboTrader provides three tabbed interfaces to help you create multi-legged spreads for futures and options.

Multiple combos

Use the **Multiple** tab to create a group of individual combination orders on the same underlying at the same time.

Field Name	Description
Leg Type	The instrument type displayed is based on the underlying and exchange you entered. If both choices are active, select the order type you want to create. If more than one entry is active, you may select an instrument type.
Trading Class	Displays a list of available trading classes used to differentiate between American and European style options if the exchange lists both.
Strategy	Combination strategies are listed based on the **Leg Type** you selected. For descriptions of all combination strategies, see the Combination Orders topic. Use the TWS Help button for strategy descriptions.
Filter	Use the filtering criteria to define your combinations. Filters are context-sensitive based on the strategy you select. For example, for a Calendar Spread, filter criteria include the Front and Back month expiries, the right, the duration and the strike. For a Butterfly spread, filter criteria includes the expiry, the right, and a strike selection for each leg of the order.
	As you define criteria, the contracts in the right pane adjust to meet them. Use your mouse + Ctrl key to select multiple combinations from the list in the right pane.
Input	Use this field if you want to modify the default ratios.
Request market data for all legs	Check to create a market data line for each leg of the order, to be displayed on the trading screen.

Single combo

Use the **Single** tab to select a recognized combination order and define the necessary parameters. Note that for exchanges that list both American and European style options, a *Trading Class* field presents a dropdown list of available classes.

Field Name	Description
Leg Type	The instrument type displayed is based on the underlying and exchange you entered. If both choices are active, select the order type you want to create. If more than one entry is active, you may select an instrument type.
Strategy	Combination strategies are listed based on the **Leg Type** you selected. For descriptions of all combination strategies, see the Combination Orders topic. Use the Help button for strategy descriptions.
Multiplier	Select the contract multiplier.
Trading Class	Displays a list of available trading classes used to differentiate between American and European style options if the exchange lists both.
Worksheet	Select *Sell Combo* or *Buy Combo* in the graph drop-down to see what the combination order looks like. The worksheet categories display drop-down list boxes each time you need to make a selection. Move through the worksheet and select choices as needed.

Field Name	Description
Reset	Click Reset to start over, either by selecting another strategy or editing the legs of the chosen strategy.
Request market data for all legs	Check to create a market data line for each leg of the order, to be displayed on the trading screen.

Generic combo

Use the **Generic** tab to create the combination one leg at a time.

Field Name	Description
Leg Definition	Select values to define a specific leg of the combination order. The values displayed in the selection fields are context-sensitive. To ensure that all information is valid, the value in each field is locked in as you move to the next field. To modify criteria, click **Reset**. *Leg Type* - The instrument type. *Trading Class* - Displays a list of available trading classes used to differentiate between American and European style options if the exchange lists both. *Expiry* - Select the expiry for the current leg. *Right* - Select the right (call or put) for the current leg. *Strike* - Select a strike price for the current leg. *Ratio* - Select the relative number of contracts for the leg you are constructing. *Action* - Select Buy or Sell as the action for the current leg.
Add Leg	Adds the leg you just defined to the combination order. The leg is displayed in the table below the buttons.
Reset	Clears all values from the Leg Definition fields above.
Help	Displays button help.
Delete Leg	Deletes the highlighted leg from the leg table.
Request market data for all legs	Check to create a market data line for each leg of the order, to be displayed on the trading screen.
OK/Cancel	Click **OK** to save the combination order. The current order is highlighted on the trading page, and named if the combination you created was a recognized strategy.

Transmit a Combination Order

To create a combination order

Before you transmit a combination order, you carefully review your order parameters on the order management line, or from the Order Ticket window by clicking **Accept.**

1. From the market data line, click the "Ask" or "Bid" price for the combination order you want to create.

   - Click the **Ask Price** to create a **Buy** order.
   - Click the **Bid Price** to create a **Sell** order.

2. On the Order Management line, modify order parameters, if needed.

Note on Pricing: If you buy a spread and you owe cash (debit spread), enter a positive limit price. If you buy a spread and you receive cash (a credit spread), **you must enter a negative limit price**. Conversely, if you sell a spread and receive cash, enter a positive limit price. If you sell a spread and owe cash, **you must enter a negative limit price**.
For example, an April 20 xyz call shows a BID price of 6.60 and an ASK price of 6.70. An April 30 xyz call shows a BID price of 0.15 and an ASK price of 0.20.

> If you buy a "debit" call vertical spread with the following legs:
> Buy 1 OPT APR02 20.0 CALL (6.70)
> Sell 1 OPT APR02 30.0 CAL L (0.15)
> For this transaction you pay: 6.55 (a debit transaction)

> If you buy a "credit" call vertical spread with the following legs:
> Sell 1 OPT APR02 20.0 CALL (6.60)
> Buy 1 OPT APR02 30.0 CALL (0.20)
> For this transaction you receive 6.40 (a credit transaction; enter a negative limit price).

3. Transmit the order.

Notes on Combination Orders

This page contains notes and tips on creating and transmitting combination orders.

- Use SmartRouting to execute legs separately to ensure you get the best price on all legs of your order.

- Some exchanges that currently support native combination orders (which means they execute the legs together as one transaction) include:

  - ISE

  - ONE

  - DTB (Euro)

- To help determine the ratio for a specific combination order, use our Price/Risk Analytics tools. First, edit the model using the Option Modeler, then view model outputs using Option Analytics.

- **Note on pricing**: If you buy a spread and you owe cash (debit spread), enter a positive limit price. If you buy a spread and you receive cash (a credit spread), **you must enter a negative limit price**. Conversely, if you sell a spread and receive cash, enter a positive limit price. If you sell a spread and owe cash, **you must enter a negative limit price**.

  For example, an April 20.0 xyz call shows a BID price of 6.60 and an ASK price of 6.70. An April 30 xyz call shows a BID price of 0.15 and an ASK price of 0.20.

  If you buy a "debit" call vertical spread with the following legs:
  Buy 1 OPT APR02 20.0 CALL (6.70),
  Sell 1 OPT APR02 30.0 CALL (0.15)
  For this transaction you pay: 6.55 (a debit transaction)

  If you invert the legs and buy a "credit" call vertical spread with the following legs:
  Sell 1 OPT APR02 20.0 CALL (6.60)
  Buy 1 OPT APR02 30.0 CALL (0.20)
  For this transaction you receive 6.40 (a credit transaction, enter a negative price)

- When you create a combination order using the **Order Ticket** window, click **Accept** (rather than Transmit) to verify your order parameters.

- Before you transmit a combination order, carefully review the order parameters from the Order Management line.

DepthTrader

Introduction

View the alternative bids and offers away from the inside quote to help you better gauge market liquidity.

- Aggregated Market Depth Window
- Market Depth Buttons Panel
- Create an Order

Aggregated Market Depth Window

The aggregated Market Depth window displays the alternative bids and offers away from the inside quote to allow you to better gauge market liquidity. Create an order by clicking a price level in the Bid or Ask column. Transmit orders from the Orders panel.

Add or remove Level II data using the Deep Book Buttons. The *Others* buttons displays Level I data from exchanges that don't offer deep data, for which you don't have market data permissions, or for those to which you subscribe but haven't selected.

- The number of deep book data windows that you can display at one time (including BookTrader, ISW and Market Depth) is equal to 1 for every 100 allowed lines of market

data, with a minimum of three and a maximum of 30. Market data allowance is based on commissions, available equity and other criteria. So a client with the minimumallowance of 100 lines of market data will be able to open 3 deep book windows. A client with an allowance of 500 lines of market data will be able to open 5 unique deep book windows . For details on how market data allowances are calculated, see the Market Data and News overview page on the IB website.

- When subscription deep book data is at its window limit, additional windows will display aggregated top level data, and the Deep Button panel will be hidden.

- We cannot guarantee that every price quoted for a particular security/commodity will be displayed in the Market Depth window.

- **Cumulative size** represents the total contract size available at a particular price or better. In the image above, the cumulative size available on the bid at $12.03 is 106.

- **Average Price** is the average execution price received when transacting the cumulative contract size. You receive multiple executions as your order goes through the order book. Executions will appear in the Trades panel.

Market Depth Buttons Panel

The buttons panel provides action buttons that allow you to:

- **Close Position** - select an underlying in the quote panel, and click *Close Position* to have an opposite side closing order automatically created in the Orders panel. Transmit the order or modify any order parameters and then transmit.

- **Reverse Position** - create an opposite side order with sufficient quantity to reverse your position from long to short or short to long.

- **View Account** - opens the <u>Account Information</u> window.

You can set the buttons to transmit the order instantaneously by arming the button panel. Buttons with instantaneous transmit on will display an asterisk in their title.
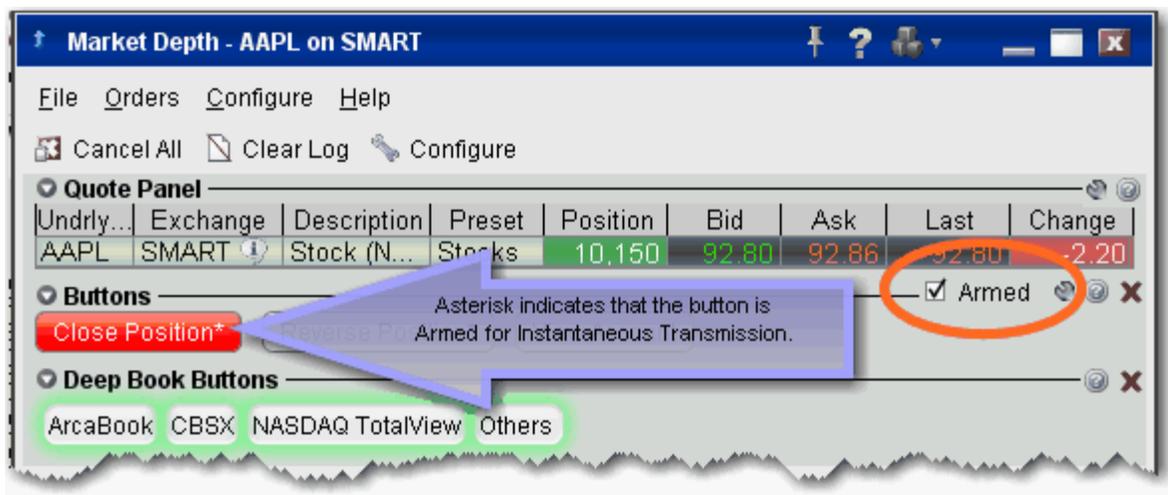
To activate Instantaneous Transmit

1   Check the *Armed* checkbox on the top right corner of the Buttons panel.

2   Read and agree to the disclosure message.

The asterisk in the button title indicates that these action buttons will instantaneously transmit an order when used.

Create an Order

Create orders from the Market Depth window by clicking the bid/ask at a specified price level. Be sure to confirm the order size before transmitting a DepthTrader order.

The order size is based on default settings associated with the contract's Preset. If the preset uses the *Use cumulative size for Market Depth*, the order size equals the cumulative size on that line x default order size. For example, if the default order size is 100 and you click the ISE $12.03 price level (below), the order size will be 10,600. If you click the same price level at the ARCA line, the order size will be 6,300. If the above box is not checked, the order size will be the default order size**.** You can modify the order size before transmitting the order.

To create an order from Market Depth

1   Click on a price level in the Bid column for a Sell order, in the Ask column for a Buy order.

2   The order displays in the Orders panel. Modify parameters if necessary and transmit by clicking the "T" in the status column.

3   To transmit your order, click the "T" in the Status field of the order line.

FXTrader

Introduction

Designed specifically for FX traders, the customizable FXTrader window displays quote pairs with the emphasis on the key price component.

- [The FXTrader Window](#)
- [The FXTrader Trading Cell](#)
- [Using the FXTrader](#)
- [Configure FXTrader](#)

The FXTrader Window

FXTrader displays a 3x3 grid of "trading cells" designed to complement the way an FXTrader operates, with the standard elements of our order management modules (Orders, Log, Execution and Portfolio pages) provided at the top. The page is completely customizable, allowing you to increase or decrease the number of cells in the grid, invert a quote, change colors, and modify the way price and size is shown.

To configure the FX Trader, click the Configure icon in the toolbar or in any trading cell.

For details on the many levels of configuration you can set for the FXTrader, see the FX Trader Configuration topic.

The FXTrader Trading Cell

The trading cell in FXTrader includes many helpful features, including color coding to distinguish between upward and downward price and size movement; a cancel icon to cancel all orders for the currency pair, quick access to the FX Trader configuration windows, quick-click to view inverted quotes, a message line to describe order details, a book icon with mouse-over information that displays when there is a price improvement opportunity for small orders, optional display of position and P&L information, and access to right-click TWS features from the Contract Label area.

FXTrader currency pairs emphasize the part of the price most important to fx traders, color coded to indicate whether the price is on the uptick (green) or downtick (orange).

When displayed, the Book icon indicates that Ideal, the odd-lot small order book for FXTrader, has a better quote than what is displayed. Hold the mouse over the icon to see details about the improved quote.

Click to invert the quote display. Only the display is inverted; orders will still be created on the base currency.

Volume is shown beneath the quote, along with an uptick/downtick indicator that changes color (green/orange) and direction (up/down).

Order summary line.

Orders are displayed in the trading cell below the currency quote, and also in the Orders panel above the FXTrader cells.

Click to transmit an order. Set FXTrader for Instantaneous Transmit using the checkbox at the top of the window.

Elect to display or hide Position, Average Cost and daily P&L using the FXTrader Settings configuration page.

To open the FX Trader

1   Click the FXTrader icon on the Trading toolbar.
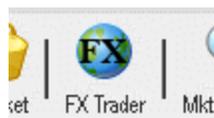
2   FXTrader displays populated with the most common FX pairs.

Using the FXTrader

When you select a trading cell, that currency pair populates the Quote Panel at the top of the window. You can create an order using the traditional TWS method of clicking the Bid or Ask from the Quote Panel. You can also create an order from within the trading cell.

To create an order from the trading cell

1   Clickthe Bid to create an order to sell the base (and buy the quote). Click the Ask to create an order to buy the base (and sell the quote).

The Integrated Stock Window (ISW)

Introduction

- [Quote Panel](#)
- [Book Data Panel](#)
- [ISW Buttons Panel](#)
- [Order Entry Panel (OEP)](#)
- [Auto Orders](#)
- [ISW Order Entry Sub Panels](#)

Quote Panel

The TWS Integrated Stock Window, or ISW, is a centralized single-symbol window that provides comprehensive market data and charts with single-click order entry.

The Quote Panel displays market data for the selected stock symbol. By default, the Quote Panel uses the single-row view used to show all TWS ticker lines.

- To hide the Quote panel, on the **View** menu uncheck *Quote Panel*.

- Use the *Switch View* icon in the top left corner of the panel to toggle between single-row view and FT ticker view.

To add a symbol to the Quote Panel

1 Enter a symbol in the **Underlying** field and hit Enter.

2 Select a stock from the contract list.

Book Data Panel

The Book Data Panel displays both Level I and Level II subscription and non-subscription quotes on either side of a real-time, configurable chart. Click a button to add data from a market center the book data panel.
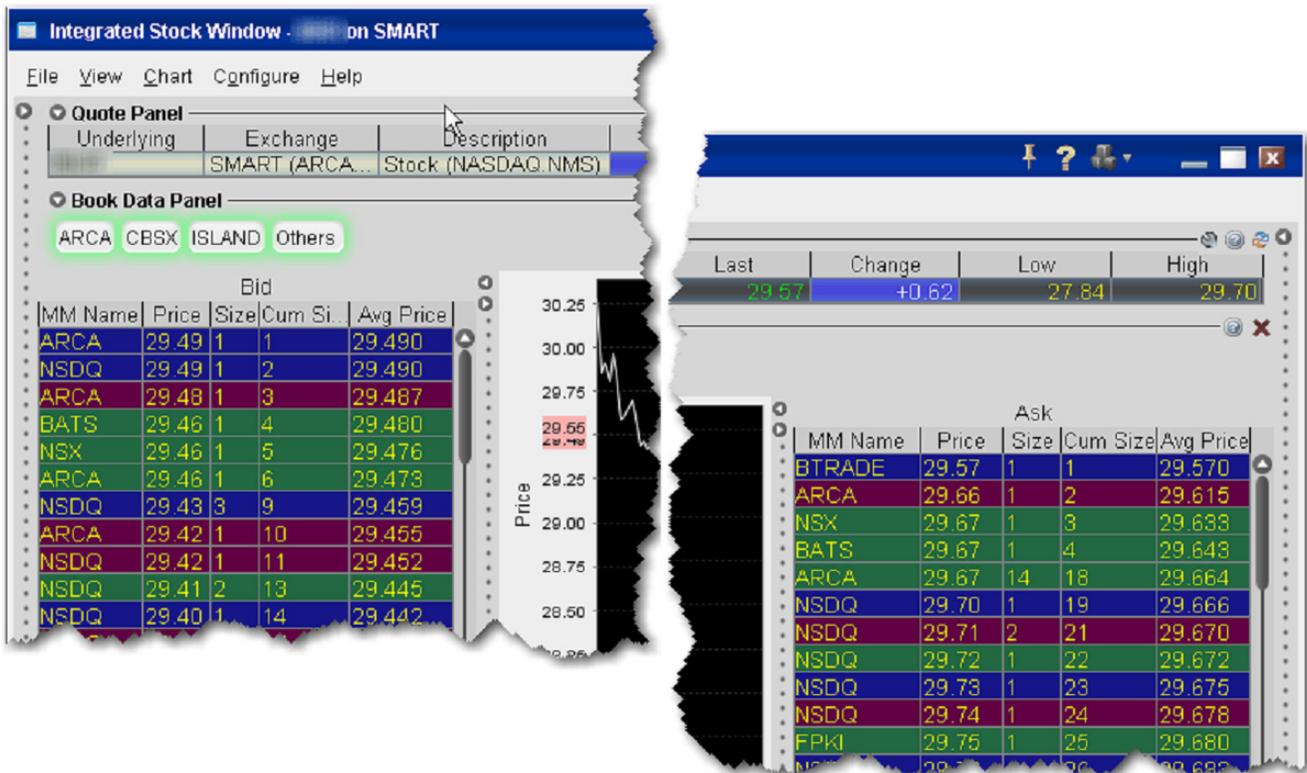
- To add data, click a market center button. *Bids* are displayed to the left of the chart, *asks* to the right.

- See your own order highlighted in the depth by checking *Show pending orders in the book* on the ISW Configuration **Settings** page.
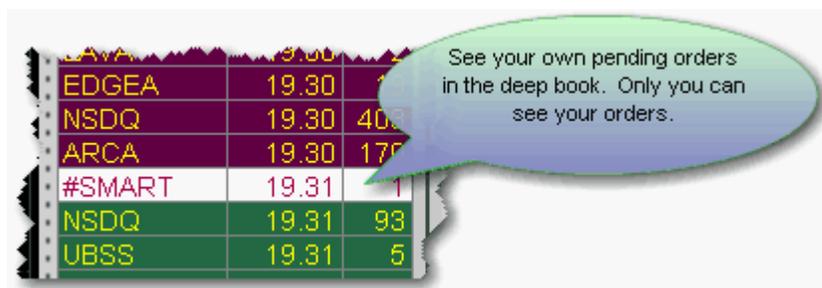
- When you click a bid/ask price from the Book Data components, the price data is reflected in the Order Entry Panel order line, from which you transmit orders.

- Modify the chart parameters using the Chart menu. Select Chart Parameters to change the time period, bar intervals and other data options.

- If you elect to display the Others button, click it to include Level I data from market centers that don't offer Level II data, market centers to which you don't hold Level II subscriptions, and subscribed exchanges whose buttons are not currently selected. Show or hide the "Others" button from the Deep Book Buttons section of the Settings page.

- The number of deep book data windows that you can display at one time (including BookTrader, ISW and Market Depth) is equal to 1 for every 100 allowed lines of market data, with a minimum of three and a maximum of 30. Market data allowance is based on commissions, available equity and other criteria. So a client with the minimumallowance of 100 lines of market data will be able to open 3 deep book windows. A client with an allowance of 500 lines of market data will be able to open 5 unique deep book windows . For details on how market data allowances are calculated, see the Market Data and News overview page on the IB website.

- When subscription deep book data is at its window limit, additional windows will display aggregated top level data, and the Deep Button panel will be hidden.

Order Entry Panel (OEP)

Enter orders by clicking a price level in the Level II panels then using the BUY or SELL buttons to transmit. Use the Order Entry Panel to:

- Create and submit basic orders;

- Modify a working order;

- Apply order attributes such as hidden, discretionary, OCA;

- Create and submit advanced orders such as algo, scale, adjustable and bracket.
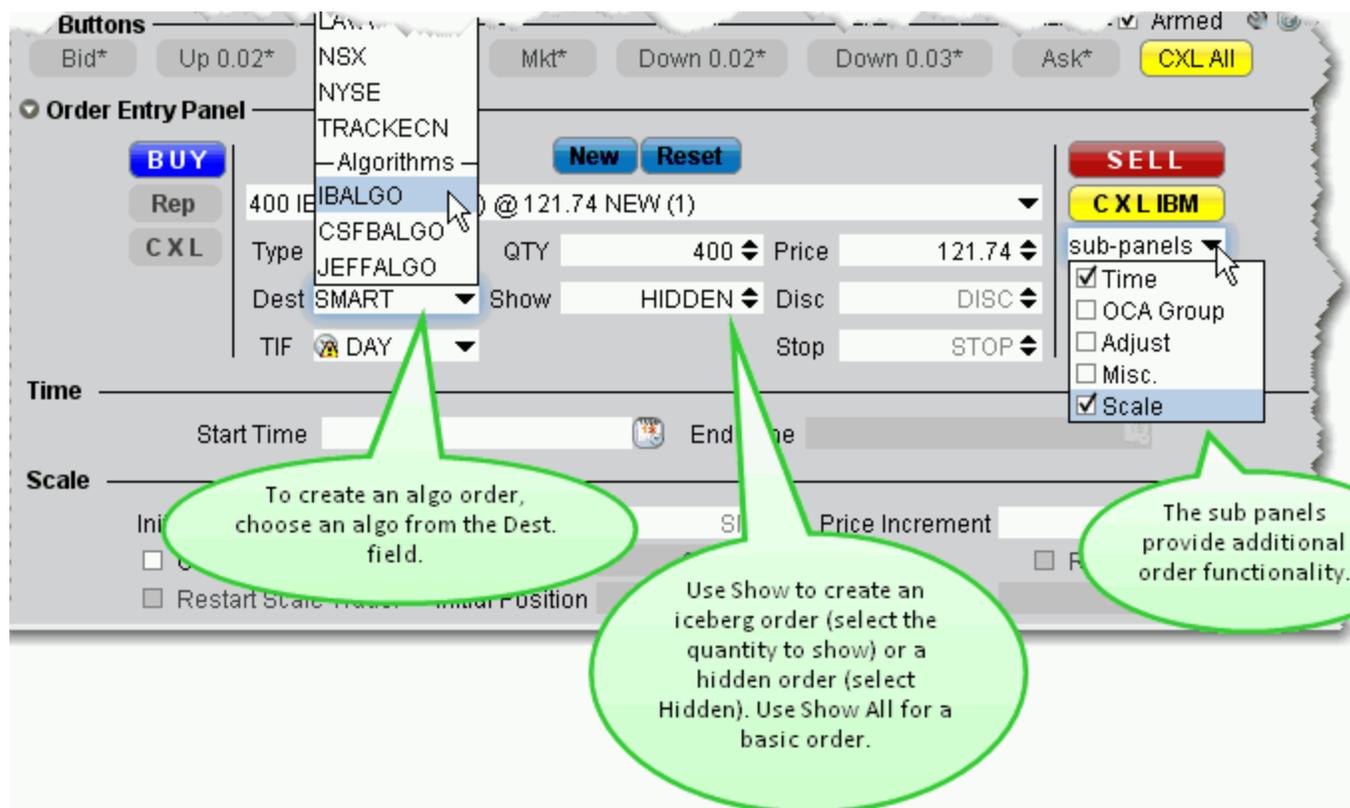
To create an order in ISW

1   Click a price level in one of the Level II components.

2   Edit the order parameters using the dropdown boxes and text entry fields below the order line.

3   Click the BUY or SELL button to transmit the order.

To modify a working order

1   Select the order you want to modify using the dropdown list on the order line.

2   Modify order parameters using the dropdown lists and text entry fields or the bump Buttons.

3   Click **Rep** to cancel and replace the current working order with the modified order.

Auto Orders

Use the Auto order in the Type field to have TWS select the order type based on the price values you enter. This feature is a short-cut to save you the step of having to choose the order type first and then define the price criteria.
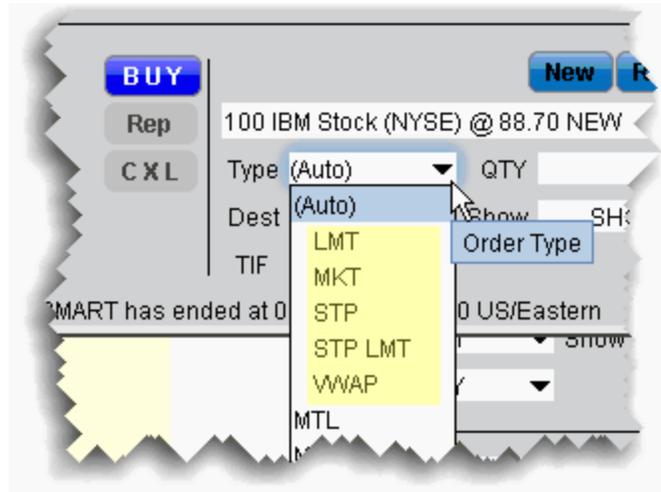
By default, the (Auto) order appears in the Type field. Click to view the current list of supported auto order types from which TWS will choose. The chosen order type will display in the order description line. It is important to note the following:

- Only the order types listed under the (Auto) entry are eligible to be selected as an Auto order. All other order types must be selected manually from the **Type** dropdown list.

- The Auto order appears in the **Type** field only for NEW orders. Working orders will display the actual order type in the **Type** field.

The Auto order type selection is made according to the rules as illustrated in the image below.

ISW Order Entry Sub Panels

Use the sub-panels to create advanced orders and apply order attributes. Use the Destination list to select an algo exchange and define an algo order.

To use the sub-panels

1   Click the sub-panels dropdown to display the list of available attributes and advanced order types.

> **Note:** Note that this menu is context-sensitive, so that only the order types that are valid for the order parameters you have defined will be shown. For example, if your order type is Stop, the Scale sub-panel will not be shown in the dropdown list for that order since the Scale attributes can only be applied to Limit and Relative orders.

2   Check the order attributes you want to apply to open the sub-panel(s) for that order type.

3   Enter values for the selected order type.

Note: Note that values in the sub-panels reflect the same fields in the Order Ticket. For details on using the sub-panels, refer to the appropriate topic in the users' guide.

- Scale Orders via ScaleTrader
- Adjustable Orders
- Miscellaneous

To enter an algo order

1 From the DEST drop-down list, select an algo destination under the Algorithms section.

2 In the new algo-specific panel, enter algo parameters.

See the TWS Users' Guide topics for details on setting up algo orders:

- ScaleTrader
- CSFB Algos
- Jefferies Algos

ISW Buttons Panel

The ISW includes three Button panels which you can hide or display using the **View** menu. The Left panel creates new order in the order line of the OEP, the Right panel provides single-click access to other TWS order tools, and the lower panel is used to modify orders, both new and working, in the order line. All buttons are configurable and can be armed for **Instantaneous Transmit** by clicking the Armed checkbox and agreeing with the warning disclosure.
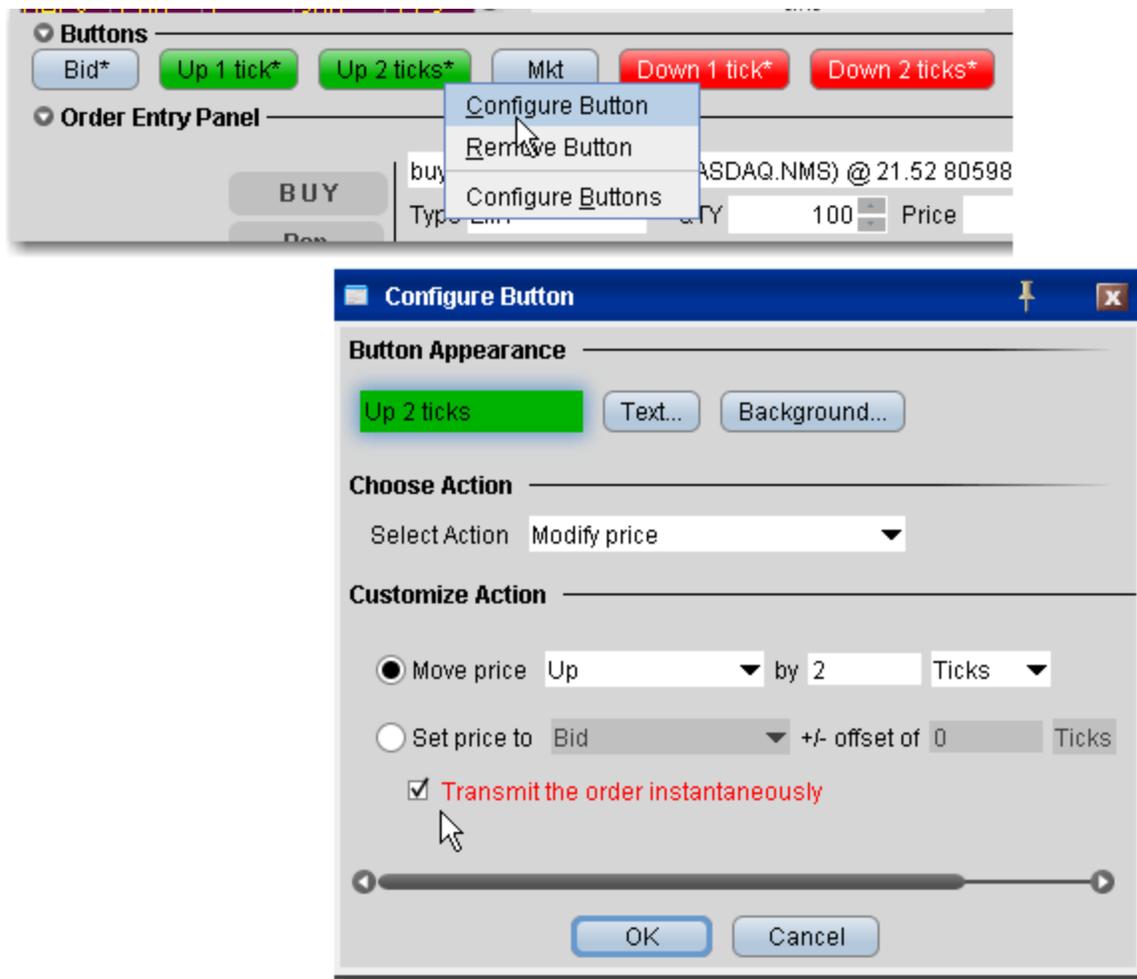
Note: Buttons names include an asterisk (*) when they are set to **Instantaneously Transmit** the order when clicked. To remove this attribute, de-select the *Armed* checkbox in the button panel.

OptionTrader

Introduction

This configurable standalone screen shows market data for the underlying, lets you set up option chains based on the underlying, gives you access to your options orders, executions and portfolio information, drives the data for the Model Navigator and Options Analytics windows, and lets you create combination Spread orders.

- Using the OptionTrader
- Create Option Chains
- Configure OptionTrader
- OptionTrader Statistics
- Create a Button

Using the OptionTrader

OptionTrader is a robust trading tool that lets you view and trade options on an underlying. Display option chains on the underlying based on the criteria you define, including strike, expiry and exchange, and view the Greeks for each option. Use the Model Navigator to modify the values used to calculate option prices and the Greek risk dimensions. For real-time market risk management, use the IB Risk NavigatorSM.

To open OptionTrader

1   Right-click an underlying and select *Trading Tools*, then select *OptionTrader*.

The **OptionTrader** window opens for the selected underlying. The **Quote Panel** shows the underlying asset. The Statistics panel displays option-related statistical data for contracts with a stock underlying. To add multiple contracts, click the "+" sign to add a new tab.
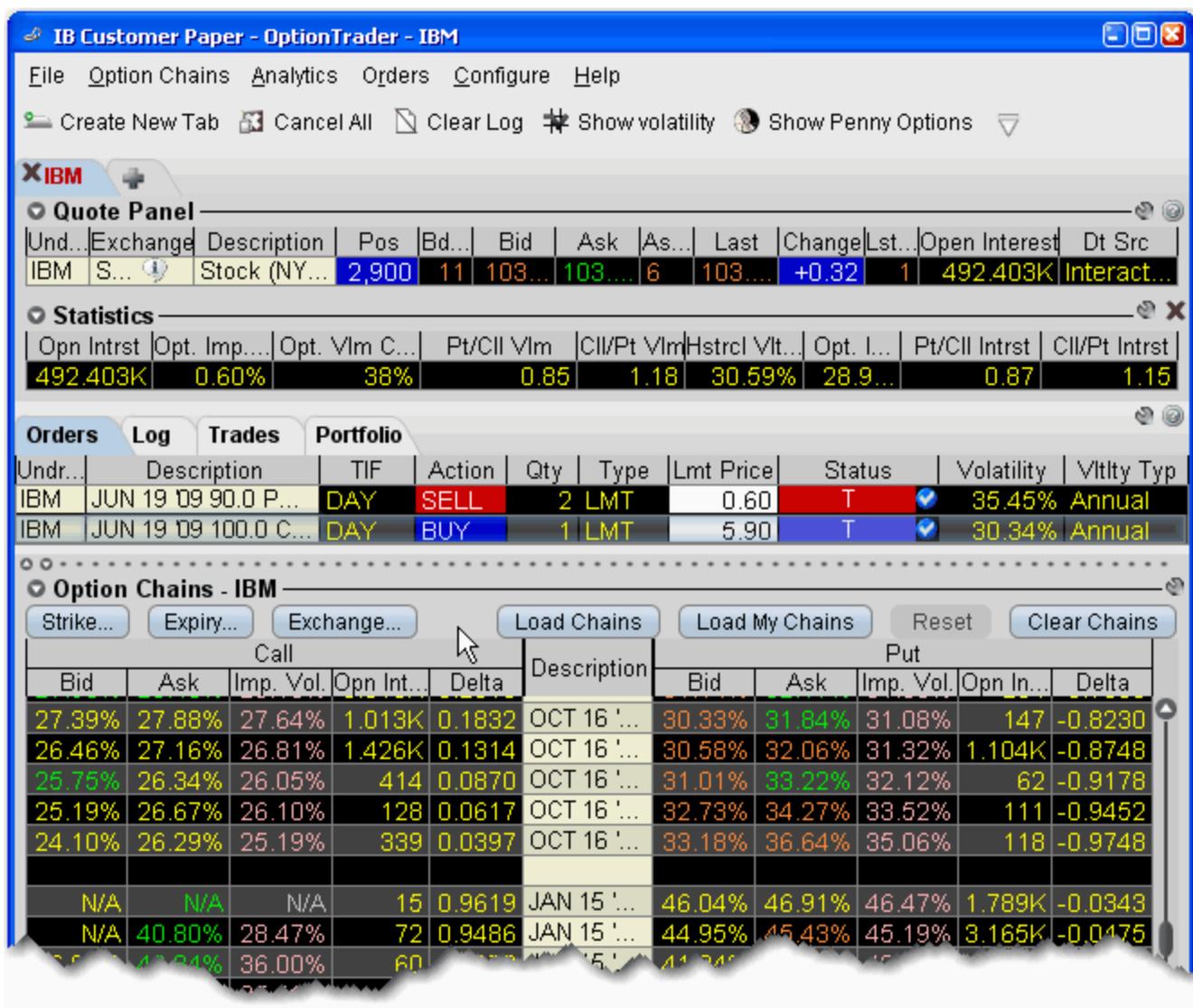
For information on loading option chains and configuring buttons and panels, see the TWS Users' Guide topics.

Loading Option Chains

Use OptionTrader to create and manage option chains. View Open Interest in the option chains by displaying the column from the <u>Configure</u> page.

Load option chains

Click **Load Chains** to load data for all options for an underlying. Click **Load My Chains** to load chains on any option on the underlying in which you hold a positions. Or, define the strike, expiry and exchange criteria and then click **Load Chains** to view a limited the number of option chains.

1   Use **Strike**, **Expiry** and **Exchange** buttons to define the options to include in the option chain.

   If you select a single strike price and expiry, the button labels change to display the information. If you select multiple strike prices or expiration dates, the button labels change to "Multi".

2   Click **Load Chains** to view market data. Use **Clear Chains** to remove data and clear the screen. Click **Reset** to remove the custom button labels.

3   To create an order, click the Bid or Ask price on a market data line.

You can add pages for other contracts by clicking the **New Tab** icon on the toolbar. After you click the **New Tab** button, define an underlying by entering a symbol in the Underlying field on the quote panel. Hit Enter, then select an instrument type and then a specific contract. The new underlying will be reflected in the tab name.

Note: Unlike orders created on the Trading page, option chain orders are displayed above the market data screen in the **Orders** section of the Activity panel.

OptionTrader Statistics

An optional *Statistics* panel displays option-related statistical data for contracts with a stock underlying. You can elect to display the following statistics:

Field Name	Description
Bid Exch	Identifies the exchange(s) that are posting the best bid price on the options contract.
Model	The option model price is calculated using the underlying price, the interest rate, dividends and other data using the Model Navigator.

Field Name	Description
Ask Exch	Identifies the exchange(s) posting the best ask price on the options contract.
Historical Vol	Displays the actual historical volatility on the option.
Opt Implied Vol	A prediction of how volatile an underlying will be in the future. The IB 30-day volatility is the at-market volatility estimated for a maturity thirty calendar days forward of the current trading day, and is based on option prices from two consecutive expiration months.
Opt Open Interest	Charts the total number of options that were not closed.
Opt Volume	The total number of contracts traded over a specified time period.
Vol Change	Change in volatility from the previous day's close.
Opt Volume Change	Change in option volume from the previous day's close.
Put/Call Volume	Put option volume for the day divided by call option volume for the day.
Call/Put Volume	Call option volume for the day divided by put option volume for the day.
Put/Call Open Interest	Put option open interest for the day divided by call option open interest for the day.
Call/Put Open Interest	Call option open interest for the day divided by put option open interest for the day.
Open Interest Change	Change in open interest from the previous day's close.

To display the OptionTrader Statistics panel

1 On the OptionTrader toolbar, click the Configure wrench icon.

2 Check *Display Statistics* and click **OK**.

To configure the OptionTrader Statistics panel

1 On the OptionTrader **Configure** menu, select *Statistics Columns*.

2 Click a column in the right *Available Columns* list, and then click the **Add** button.

3 Click **OK**.
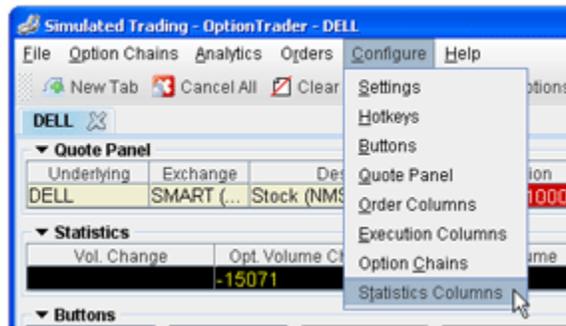
Create/Edit Toolbar Buttons

Use the *Buttons* option on the **Configure** menu to add, edit and remove action buttons that are displayed directly above the *Orders/Log/Executions/Portfolio* tabset.
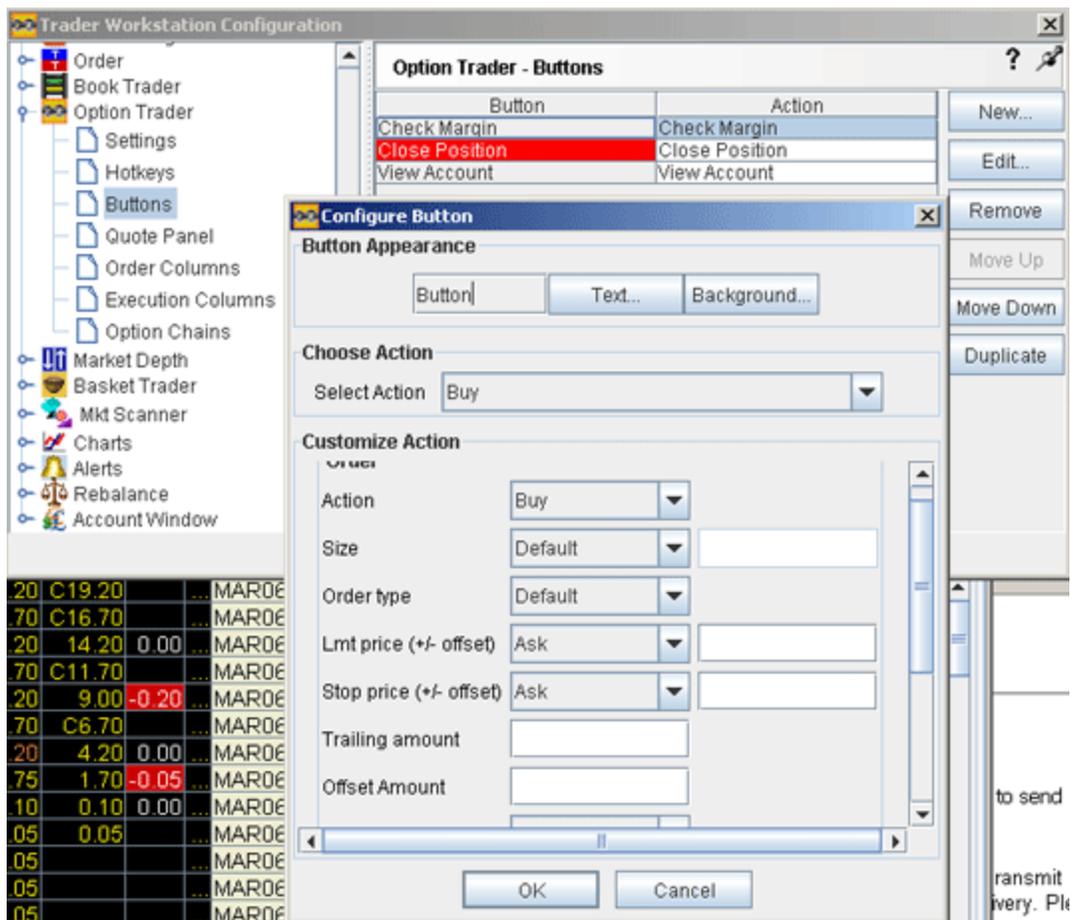
To create or edit a button

1   Click **Configure** and then click *Buttons*.

2   Click *New*, or select a button and click *Edit*. *New* adds a button, *Edit* modifies the selected button.

3   Use the Button Appearance section to change the label, the text color and the background color.

4   Select an action to associate with the button using the Select Action dropdown.

5   Fine-tune the action by entering data in the **Customize Action** area. For example, for the action *Increase price or size*, you can specify the price or size field to which the button applies, and set the interval by which to increase the field value.

Options Penny Pricing

Introduction

- Penny Pricing for US Options
- The Penny-Priced Options Scanner Page

Penny Pricing for US Options

In an effort to help achieve price improvement, we allow customers to trade options in pennies for Smart-routed US options that trade on the BOX or ISE. Penny prices are posted by customers and other liquidity providers, and are displayed on an option's SMART ticker line when they available.

You can post your own penny price to the IB system by submitting a penny-priced discretionary order through the Trading window. If yours is the best price, it will display on the **Penny Options** page.

To trade against a posted penny-price

1   Click the *Ask* price (to create a BUY order) or the *Bid* price (to create a SELL order).

2   Transmit the order.

To submit a price in pennies

1   Create a market data line for an options contract on your trading page.

    The option must trade on BOX or ISE, and you must select **SMART** as the data exchange.

2   Click the *Ask* price (to create a BUY order) or the *Bid* price (to create a SELL order).

3   Modify the *Limit* price to a penny price that is better than the NBBO. You can modify the limit price manually, or use the Price Wand. Note that only best penny price in the IB system at a given time will be posted.

4   Transmit the order. If you have submitted the best penny price, your price will display on the market data line for the contract, will be posted to the IB website penny page, and will appear in the scan for penny-priced US options.

    At the same time, we will round the order to the nearest nickel (or dime) increment (DOWN for a BID, UP for an OFFER) and submit the rounded order to an options exchange, so that your order can trade at a more advantageous price to you if the rounded version becomes marketable.

Example: Assume the NBBO is $2.05 - $2.15. If you enter an order to buy 10 option contracts of XYZ at $2.08 in the IB system, IB will send a BUY order for $2.05 to an options exchange. If $2.08 is the best penny-priced bid in the IB system, your $2.08 bid will be displayed.

If you don't want your penny price broadcast to the IB website and through TWS, you can elect to hide the penny price of your order by checking the *Hide Pennies* attribute on an order line. Note that, even if you hide your penny price, the rounded version of your order (rounded **DOWN** to a nickel or dime increment for a BID, and **UP** for an OFFER) will still be transmitted to an options exchange for display.

To hide the penny price of an order

1   Right-click in the field title area of the trading window and select *Customize Layout*.

2 Click the **Order Columns** tab, and scroll down the Available Columns list to the *Order Attributes* section.

3 Highlight **Hide Pennies,** and click the *Add* button. The *Hide Pennies* column is added to your trading window.

To display penny option orders in the IB system, you must understand and agree that:

- **Your penny price (with size) will be publicly displayed through the IB website and TWS unless you instruct us otherwise.** Display of your penny-priced indication is not limited to other IB customers and is broadly public. You can instruct us not to display your penny price, but that will make it less likely for you to trade.

- **Your interest at the penny price will not be displayed at an options exchange or through the Options Price Reporting Authority.** If you send a penny-priced order, IB will send your order rounded to a nickel or dime (down for a bid and up for an offer) to an option exchange, but your penny price will only be displayed on the IB system.In this respect your penny-priced order is a discretionary order.

- **IB is not an options exchange and the IB penny option pricing system cannot execute option orders, only route them to an exchange for execution.**

- **When IB sends potentially matching orders to an options exchange, an auction process will be used and you may not get to trade.** Other traders will have a chance to come in and join the trade at the same price or offer a better price.

- **The penny prices displayed in the IB system are not "firm" and will not always result in a trade.** Penny prices displayed through IB are non-firm indications of interest and may be cancelled before you can trade against them or circumstances may change such that IB cannot start the required auction at an options exchange.

- **Trading in pennies may result in a better price but a slower fill.** You will have to wait at least three seconds while the option exchange penny auction is conducted.

Please click here for important details concerning the Penny Option Pricing System.

The Penny-Priced Options Scanner Page

The **Penny Options** page allows you to scan for all underlyings for which the IB system has a penny-priced bid or offer that can be displayed. The page shows the total number of contracts available for each underlying.

To use the Penny Options Market Scanner

1   On the **Page** menu, select *Create Market Scanner*, then select *US Options* in the **Instrument** drop-down list. Or, on the **View** menu, select *Penny Options*.

    The left side of the page shows all underlyings for which the IB system has a penny-priced bid or offer that can be displayed, and the number of contracts available for each underlying.

2   To view all penny-priced contracts for an underlying, double-click the symbol (or right-click the symbol and select *Subscribe)*. A tab is created for the underlying, and penny-priced options are displayed on the page.

As with all market scanners, this page updates in real time, is view-only and does not allow you to submit orders. You must create orders from your trading page. If you don't have a market data line on your trading page for a contract that displays penny pricing, you can drag it from a scanner page to your trading page.

To drag a contract to your trading page

1   Right-click on the **Penny Options** page tab, and select *Detach Page* (this makes it easy to drag and drop contracts onto your trading page).

2   Click and hold your mouse in the *Description* field, drag the contract to a blank line on your trading page, and release the mouse to drop the contract.

Please click here for important information and details concerning the Penny Option Pricing System.

The Order Ticket

Introduction

The Order Ticket is available as an alternative form of order entry for users who prefer to set all order attributes from a single tabbed window.

- Basic
- Adjustable Orders
- Scale Orders via ScaleTrader
- Pegged Orders
- Volatility Trading
- Conditional Orders
- Miscellaneous

Basic

The Basic tab includes the basic order and time in force information, all based on the contract shown in the Quote Panel. The fields are context-sensitive, which means that only valid selections will be active. For example, if you select TRAIL LIMIT as the order type, the Stop Price, Trailing amount and Lmt Offset fields become active. In addition, selections you make on this page affect the composition of the tabset. For example, if you select a stop or trailing order type, the *Adjust* tab becomes available; if you choose VOL as the order type, the *Volatility* tab is displayed, etc.

Note: The Scale order attributes will separate from the order ticket when you click the Scale tab.

To remove tabs and view all fields on a single large page, select the *Comprehensive* view.

Field	Description	Notes
Action	Choose Buy or Sell	
Quantity		
Quantity	The number of units in the order.	
Display size	Enter a display size to create an Iceberg order.	
Min. Quantity	Enter the minimum quantity that must be available for the order to execute.	For options routed through Smart.
Order Description		
Order Type	Select an order type. Valid order types are determined by the underlying, exchange and security type selected.	
Limit Price	Enter the limit price if the order type requires it.	
Aux. Price	For Stop and Stop limit orders, this is the Stop election price. For Options relative to stock orders, this is the starting price. For trailing stop orders, this is the trailing amount.	
Trailing amount	The amount used along with the market price to calculate the initial stop price.	
Percent Offset	For Relative orders, sets the offset amount based on a percentage of the bid price for Buy orders or the Ask price for sell orders.	
Discretionary Amount	The amount off the limit price at which the order is still eligible to execute.	Enter an amount to create a Discretionary order.
Destination	Specifies the order destination.	To create CSFB or Jefferies algo, select CSFBALGO or JEFFALGO from this list.
Time in Force		

Field	Description	Notes
Time in Force	The time period during which your order will remain active. Choose from the selections presented, including: • DAY (day order), • GTC (order remains active until it is cancelled) • OPG (market or limit at the open order) • IOC (immediate or cancel) • GTD (order remains working until the date/time specified in the End Time field below.) • DTC (day 'till cancelled, is cancelled at the end of day like a day order, but remains on your trading screen deactivated to let you resubmit easily).	Only valid Times in Force are displayed per order, based on the product, order type and destination.
Start Time	Set the start time (and date) for the order.	
End Time	Set the end time and date for the order.	Only valid for GTD times in force.

Trading Hour Attributes		
The next three settings allow you to specify the hours during which orders are eligible to execute. By default, orders are set to trade during Regular Trading Hours only. **Note: Elections to trade outside regular trading hours may not be available for particular products that are not listed on an exchange. IB customers are solely responsible for ensuring that these parameter are valid for the product(s) involved.**		
Allow this order to be filled outside of regular trading hours.	Check this box if you want to allow orders to trigger or fill outside of regular hours.	You can also set this feature from the TIF dropdown on an order line in the trading window. Valid for US stocks listed on major exchanges. Not available for IOC, OPG (MOO and LOO), FOK, MOC or LOC orders.
Allow order to be routed and executed during pre-open session.	Check to allow orders to participate in the pre-open session from 4:00 - 8:00 am.	Can be applied to orders set for Regular Trading Hours only.

Field	Description	Notes
Ignore opening auction.	Check to ignore the opening auction which takes place at the open.	Can be applied to orders set for Regular Trading Hours only. This attribute cannot be used if you have configured Smart Routing to participate in Pre-open Re-route.
VWAP Time	Modify the VWAP cut-off time if desired by clicking the *Calendar* selection tool. Otherwise, the *Soonest* cut-off time is used.	VWAP orders are automatically routed and accepted immediately after being transmitted. VWAP orders cannot be cancelled.

Adjustable Orders

Use the Adjust tab to define a one-time adjustment to a stop, stop limit, trailing stop or trailing stop limit order. This tab will only become active one of those orders types is selected.

To remove tabs and view all fields on a single large page, select the *Comprehensive* view.

Field	Description	Notes
Adjust to Order Type	When you select an adjusted order type, the stop order you're adjusting will not trigger when the stop price is hit. Instead, it will be changed to this order type, and use the other parameters below. Select one of the stop order types. When your current stop price is penetrated, it will change to this order type and use the instructions you set in the following fields.	The following example continues to unfold for each field. You buy 100 shares of XYZ for $31.00/share, and submit a sell stop order with a trigger price of $30.00. This means that if the price hits $30.00, TWS will send a sell market order to the exchange. Now let's modify this scenario. In addition to the above Stop order, you decide to create an adjustable **Stop Limit** order to help lock in a profit if the stock price begins to rise. Now imagine the price starts going up. When it hits the trigger price (see next field below) TWS will cancel the Stop order and create a new Stop Limit order with the characteristics you set in the following fields.
Trigger Price	This price will trigger the adjusted order you defined in the Adjusted Order Type.	Set the adjustable trigger price to $34.00
Adjusted Stop Price	When the trigger price is hit, the adjusted stop price is implemented for the new order.	Set the adjusted Stop Price to $33.50. When the stock rises above the $34.00 trigger price you set above, you original Stop order is cancelled and replaced with a Stop Limit order with a stop trigger price of $33.50.
Adjusted Stop Limit Price	Used for Stop Limit and Trailing Stop Limit orders. This value will be the limit price of the order if it is triggered and submitted.	Set the Stop Limit to $33.00 to ensure your order will not execute below this price.
Adjusted Trailing Amount	Used for Trailing Stop and Trailing Stop Limit orders. This value will replace the original trailing amount if the adjusted order is triggered.	If you had a trailing stop order with a trailing amount of $1.00, you could set the adjusted trailing amount to $.50. If the adjustment trigger is hit, the trailing amount is modified.

Scale Orders via ScaleTrader

Scale orders are designed to help prevent larger sized trades from being subject to increasingly deteriorating prices by scaling your order into smaller, incrementally priced components based on user-specified price and size instructions. In addition to scaling your order, you can also define a profit offset amount which instructs TWS to automatically submit opposite-side profit taking orders against the individual components of the original order.

Click **Open ScaleTrader** from the Scale tab to set all scale parameters.

Set time inforce parameters for the Scale order. See the Basic page for details.

See the ScaleTrader topic for details on creating a scale order.

See the ScaleTrader topic for more information on creating scale orders.

Pegged Orders

Select from the available fields to create an order. The fields are context-sensitive, which means that only valid selections will be active. For example, if you are creating any kind of order other than a Pegged to Stock options order routed through BOX, this page will be inactive.

Field	Description	Notes
Stock Ref Price	Enter a stock price.	If you do not enter a value, the midpoint of the NBBO at the time of the order is used.
Underlying Range (Lower)	Define the lower portion of the stock range outside of which your order will be cancelled.	

Field	Description	Notes
Underlying Range (Higher)	Define the higher portion of the stock range outside of which your order will be cancelled.	
Delta	Enter a value (which will be used as a percent, ie. ".5" equal 50%) that will be multiplied by the change in the underlying stock price. The product is added to the starting price to determine the option price.	

Volatility Trading

The **VOL** order type lets you create option orders where the limit price is calculated as a function of an option volatility that you can modify. To activate the Volatility tab, select VOL as the order type on the Basic tab. If you have attached a delta hedge order from the trading window, you can view the order parameters on the Hedging tab.

To remove tabs and view all fields on a single large page, select the *Comprehensive* view.

Field	Description
Volatility	Displays the volatility used to calculate a limit price for the option. The value shown in the Imp Vol field is calculated via the [Model Navigator].
Continuously Update Limit Price	When checked, the option price is automatically updated as the underlying stock price moves.
Precautionary Settings	Set these price cap "double-checks" as a precaution to ensure your order price remains within an acceptable distance from the market.
Volatility Type	Elect to view daily or annual volatility.
Hedge Delta	Select a Hedge Order Type. An order will be submitted against the executed option trade to maintain a delta neutral position.
	Use the Hedge Auxiliary Price field to set an auxiliary price for orders that require one, such as the offset for a Relative order.
Reference Price Type	Bid or Ask - If selected, use the NBB (bid) when buying a call or selling a put and the NBO (ask) when selling a call or buying a put.
	Average - uses average of the best Bid and Ask. This price is also used to compute the limit price sent to an exchange (whether or not Continuous Update is selected), and for underlying range price monitoring
Reference Contract	Select a futures contract to use in calculating the index value. The order price is then derived from this index value.
Underlying Price Monitoring	Underlying Range (Low) - enter a low end acceptable stock price relative to the selected option order. If the price of the underlying instrument falls BELOW the lower stock range price, the option order will be cancelled. Merely touching the price does not cancel the order.
	Underlying Range (High) - enter a high end acceptable stock price relative to the selected option order. If the price of the underlying instrument rises ABOVE the upper stock range price, the option order will be cancelled. Merely touching the watermark does not cancel the order.

Hedging Orders

For Volatility orders, you have the option of creating an attached child hedge order. To view the delta hedge order parameters, open the Hedging tab. Note that this tab is read-only. To modify the hedge order, use the Trading window.

Conditional

A conditional order is an order that will automatically be submitted or cancelled ONLY IF specified criteria for one or more defined contracts are met. You can use stocks, options, futures or security indexes to trigger a conditional order.

To create a conditional order

1   Select an order management line.

2   From the right-click menu, select *Modify* and then select *Condition*.

3   From the Conditional tab on the order ticket click **Add Condition**.

4 Enter contract information for the contingent asset in the Conditional Order box.

5 Enter the trigger information for the contingent asset:

    a Select the <u>trigger method</u>.

    b Select whether the price of the contingent asset should be less than or equal to (<=) or greater than or equal to (>=) the trigger price.

    c Enter the trigger price.

        Note: If you select the double bid/ask trigger method, the greater than or equal to operator (>=) will use the BID price and the less than or equal to operator (<=) will use the ASK price.

6 Click **OK**. The condition appears in the Current Conditions list.

To set multiple conditions, use the Add Condition button and click AND or OR in the Current Conditions area.

Field/Button	Description
Add Condition	Invokes the Conditional Order entry box.
Delete	Deletes the selected condition.
Modify	Opens the Conditional Order entry box for the selected condition to allow you to make changes.
Allow condition to be satisfied...	Lets the selected condition activate the order if it is satisfied outside of regular trading hours.
Action to take...	If selected conditional order is satisfied, you can elect to have the primary order submitted OR cancelled.

Miscellaneous

Use the Miscellaneous order fields to apply order attributes and set specific rules for OCA groups.

Note: OCA group names must be unique to ensure proper handling of OCA orders. Once you use a name, you cannot use it again even after the order executes or is canceled.
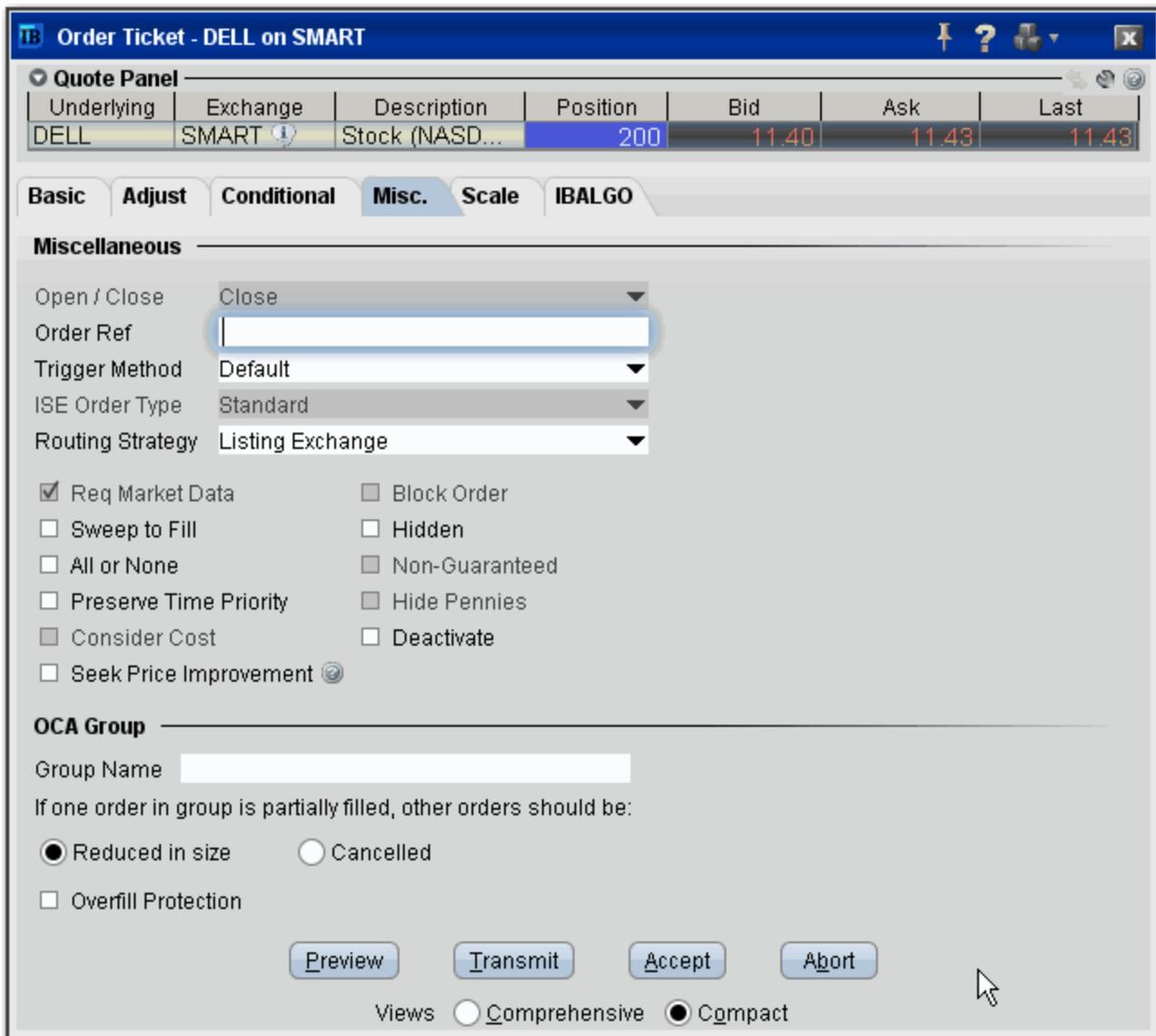
Field	Description
Order Ref	An identifying number you create to track your order.
Large Shareholder	For large shareholders trading Canadian products. Use the dropdown selection list to appropriately mark your order.
Trigger Method	Select a new trigger method for the order. To modify the default trigger method use the **Global Configuration** tool and select *Orders>Order Defaults*.
ISE Midpoint Match	Choose from Standard or SOI for an ISE MPM order.
Req Market Data	Check to request market data for the order.
Block Order	Check to create a block order.
Sweep to Fill	Check to create a sweep-to-fill order.
Hidden	Check to create a hidden order.
All or None	Check to create an All or None order.
Non-Guaranteed	Checking this box indicates that you will take all the risk for partially-executed Smart routed combination orders.
Preserve Time Priority	Check to keep your order in the queue and prohibit from canceling and resubmitting orders intermittently. This feature is used on exchanges that charge a handling fee for orders that remain on the order book for a specified period of time.
Hide Pennies	When checked, hides the penny pricing of your options order.
Consider Cost	Valid only for Smart-routed non-US stocks that trade on SWB/FWB. If checked, Smart routing will consider the total cost of executing the order, including commissions and other fees, when deciding where to route the order. If unchecked, only the exchange price is considered.
Deactivate	Check to deactivate the order, which cancels the order
Seek Price Improvement	If checked, Smart routed orders sweep certain exchanges for hidden liquidity at more favorable prices, then checks the dark pools as usual before routing to an exchange. Note that activating this feature may result in slower executions.
OCA Group	

Field	Description
Group Name	If the order is part of a <u>one-cancels-all order</u>, enter the OCA name in this field. All orders with the same name in the OCA field become part of an OCA order. Once you use a name, you cannot use that name again even after the order executes or is canceled.
Partially filled instructions	Set instructions on how to behave when order is partially filled. The default is to have other orders in the OCA group proportionately reduced in size based on the quantity of the filled portion.
Overfill Protection	Dictates that only one order in the group will be routed to an exchange at a time. This completely removes the possibility of an overfill.

Quantity Calculator

Introduction

- [Determine Order Quantity](#)
- [Calculate Order Quantity](#)

Determine Order Quantity

When you create an order, you can define the order size several different ways. You can set a general default order size that is used for all orders. You can set specific default sizes for instrument types, for example a quantity of 500 for all stock orders. You can even get more specific and set the default order size for a specific contract, for example set the quantity for all stock orders for underlying XYZ to 1000.
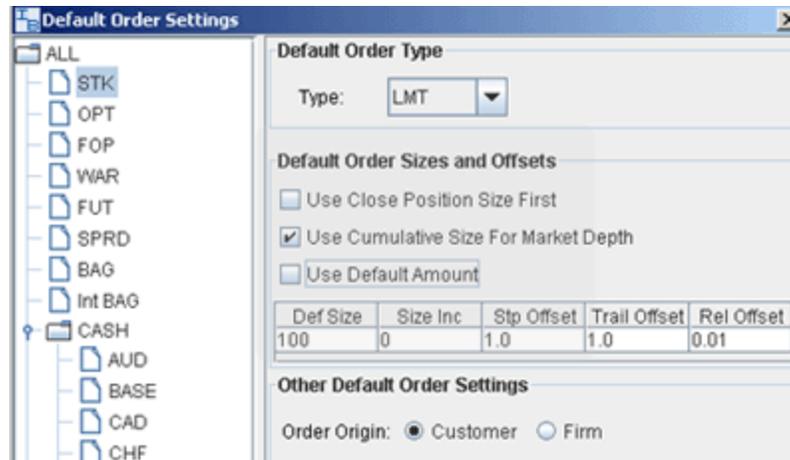
Alternatively, you can set a default currency amount that will be used to calculate the order size. For example, set the default amount for stocks to $5000.00. The order quantity is then calculated based on the stock price, and is rounded to the nearest 100 for U.S. stocks.

You can also have the workstation calculate the order quantity by Deliverable value amount, a percent of your Net Liquidation value, or based on a percentage of your current position.

Calculate Order Quantity

Use the **Quantity Type** and **Quantity Value** fields to calculate your order quantity based on:

- Currency- assumes the base currency

- DLV Amount - Deliverable Value

- % of NLV - percent of Net Liquidation Value

- % Change in Position - percent of the change for your position in the underlying.

For example, say you have a Net Liquidation Value of 40,000. XYZ shows a current ask price of 80.00. If you create a buy order for XYZ, select "% of NLV" as the Quantity Type and enter "20" in the Quantity Value field, you're telling the application to calculate the number of shares you could buy for 20% of $40,000 or $8000.00, based on the Ask price of $80.00. The calculated Order Quantity value of "100" is then displayed in the Quantity field.

To display the Quantity Type and Quantity Value fields

1 Right-click on any column name in the Order Management section of the trading screen, and click *Customize Layout*.

2 Click the Order Columns tab. In the Available Columns list in the Quantity section select *Quantity Type* and *Quantity Value* and Add them to the Shown columns list.

To calculate order quantity by currency

1 Create an order by clicking the bid or ask price.

2 In the **Quantity Type** field, select the currency type. This field assumes the base currency.

3 In the **Quantity Value** field, enter a currency amount. For a buy order, enter the amount you want to spend. For a sell order, enter the amount you want to make. Based on the current bid/ask, your value gets rounded up or down.

The order quantity is calculated and displayed in the **Quantity** field.

To calculate order quantity by Deliverable Value (DLV Amount)

1 Create an order by clicking the bid or ask price.

2 In the **Quantity Type** field, select *DLV Amount*.

For stocks, the deliverable value is the value of the stock converted to the base currency. For options, it is the value of the underlying stock represented in base currency (i.e. stock price * options multiplier).

3 In the **Quantity Value** field, enter the dollar amount of your deliverable value you want to use to calculate the order quantity.

The order quantity is calculated and displayed in the **Quantity** field.

To calculate order quantity as a % of your Net Liquidation Value (% NLV)

1   [Create an order](#) by clicking the bid or ask price.

2   In the **Quantity Type** field, select *% NLV*

The Net Liquidation value is the first value in the upper left *Balance* area of the **Account** window.

3   In the **Quantity Value** field, enter a percent value that will multiplied by your NLV to calculate a dollar amount.

The order quantity is calculated and displayed in the **Quantity** field.

To calculate order quantity as a % of position change

1   [Create an order](#) by clicking the bid or ask price.

2   In the **Quantity Type** field, select *% Change in Position.*

If you do not hold a position in the selected underlying, you will not see this selection.

3   In the **Quantity Value** field, enter a percent value that will multiplied by your position to calculate the order quantity.

> **Note:**   If your position is negative, you must enter a negative percent value to calculate a positive order quantity.

The order quantity is displayed in the **Quantity** field.

Rapid Order Entry

Introduction

Use the Rapid Order Entry panel to quickly transmit an order without having to open an order ticket or click in a market data line.

- Enter Orders Using Rapid Order Entry
- Update Limit Price
- Create "Instantaneous Transmit" Hotkey

Enter Orders using Rapid Order Entry

The **Rapid Order Entry** panel, which is visible by default at the top of each trading page, allows you to quickly transmit an order without having to open an order ticket or click in a market data line. You simply tab through the fields, enter your order parameters, and press **Buy** or **Sell**. You can also enter the local or root underlying symbol, just as you can on the trading screen.

Note: Rapid order entry can be used for EQUITY, EQUITY OPTION and COMBINATION orders for Individual traders and Advisors.

To use the Rapid Order Entry panel

1 If the panel is hidden, right-click in the tabset area. Otherwise right-click in the Rapid Order Entry panel.

2 Select **Rapid Order Entry**.

- In the first section, use *Show* or *Hide* to display or remove the panel.

- In the second section, select the instrument type/order type you want to trade.

  Note: You can use the Rapid Order Entry panel to submit only one type of order at a time. For example, if you are using the panel to submit stock orders, you must toggle to the Combos submenu selection if you want to enter spread orders or combination strategies.

- Select *Configure* to do all of the above, and set defaults, tab order and other parameters for the Rapid Order Entry panel.

Once you have transmitted an order using Rapid Order Entry, the details of the order appear in the Order Management panel of the trading page. Any modifications to your order must be made on this order management line.

Tab Order

The tab order allows you to enter order information by tabbing through the fields without removing your fingers from the keyboard. You can add/remove fields from the tab order using the Rapid Order Entry tab on the Layout Manager. The intelligent tab-order mechanism enhances the speed with which you can enter keyboard orders by moving you through only those fields necessary to complete your order.

Update Orders

You can automatically update the limit price for an order (or all orders) to coincide with the ask, bid, midpoint, closing or last price.

Automatically update the limit price

1   On the **Order** menu select *Update Orders.*

2   Set update parameters:

Which orders - All selections apply only to orders on the active trading page. Specify whether to update attributes for:

- All orders on the page - Including working orders, non-transmitted orders, etc
- Open orders only - This includes all orders working on the current page.

- Selected orders - This includes all orders (working or not) on the active page that you deliberately select.

- Inactive orders - This includes all orders on the active page that are created but have not yet been transmitted.

Set Type and Time in Force

For the subset of orders specified above, instruct TWS to change to the selected order type, and to the selected time in force. Check *Convert Market to Limit* to have all market orders automatically changed to limit orders. Buy limit orders will use the Ask as the default limit price; sell limit orders will use the Bid as the default limit price.

Set Price Parameters

Define the update price parameters for Buy orders and include an offset amount if desired.

Set the update price parameters for Sell orders. If you check *Mirror image of buy orders*, parameters are set reversed from the Buy orders selections. The mirror images of Midpoint, Last and Close would be the negative values for each of these prices.

Validation

If one or more of the orders marked for update cannot be updated, the *Validation* selection checked here will be used.

Create "Instantaneous Transmit" Hot Key

You use hot keys to perform common trading functions, such as creating specific order types. Once you have created an order, you must still select *Transmit* to send the order. You now have the option to enhance the *Buy* and *Sell* hot keys by adding "instantaneous transmit" functionality.

To add instantaneous transmit functionality to a hotkey

1   On the **Configure** menu, select *Hot keys*.

2   In the Shortcuts area select the *Buy* or *Sell* action and press **Configure**.

3   Click the **Customize** tab.

4   At the bottom of the page check *Transmit the order instantaneously* and click OK.
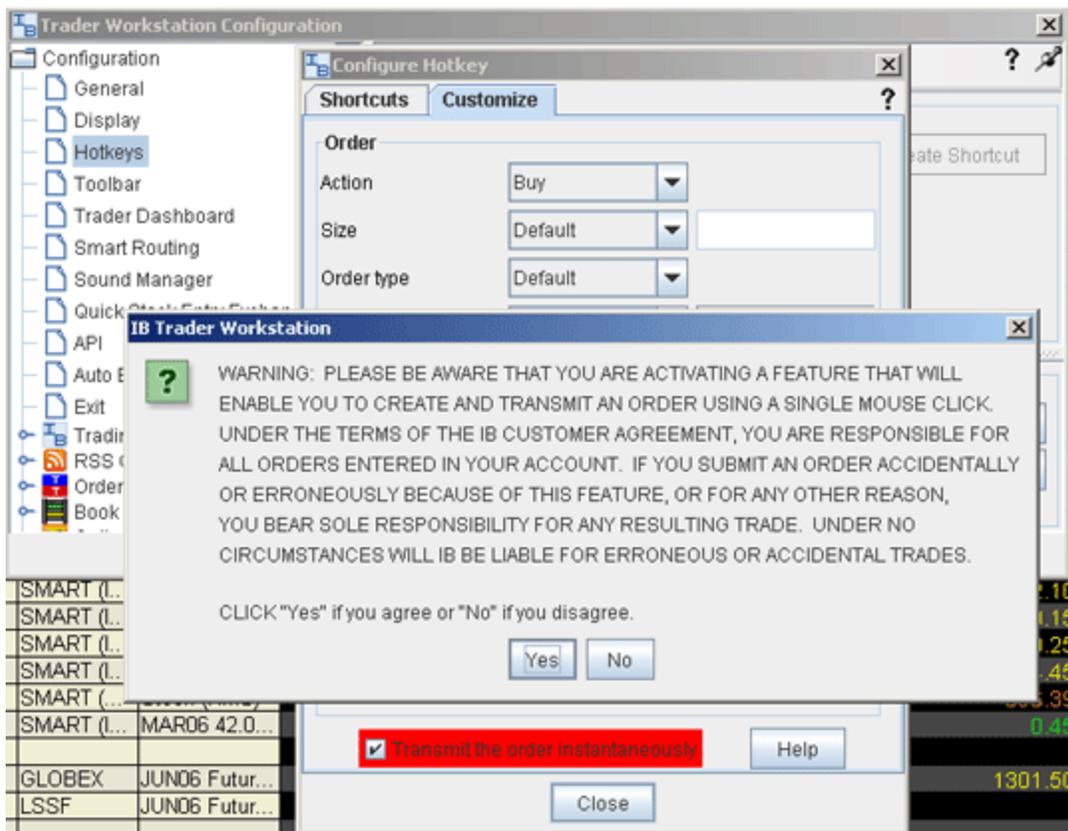
Note: To use this feature, you will be asked to sign an agreement stating that you understand its implications. Under the terms of the Customer agreement, you are responsible for all orders entered in your account. Consider carefully whether setting a hot key to instantaneously transmit orders is the best for the way you trade.

EFPs

Introduction

- [Relevant EFPs](#)
- [EFP Futures Spreads](#)

Relevant EFPs

Introduction

Using an Exchange of Futures for Physical (EFP), which allows the swap of a long or short stock position for a Single Stock Future (SSF) could help to reduce your trading costs. The Relevant EFPs Market Scanner scans the US market and returns all EFPs relevant to you based on the stock and single stock futures positions you currently hold. You can access this tool from the toolbar, or by selecting US EFPs as the Instrument and Relevant EFPs as the Parameter in the Market Scanner page.

For more details on how using EFPs could reduce your trading costs, see the EFPs Product Highlights.

To view Relevant EFPs

1   On the trading toolbar, click the **Relevant EFPs** icon.

The **Relevant EFPs** scanner page opens with all fields populated with the correct EFP selection.

2   Click *Query* if no values have been returned.

Note that this page is for display only. To trade one of these EFPs, click and hold, then drag it onto your trading page, or right-click and select **Edit** then select *Copy*. Open a trading page and use the right-click menu to select **Edit** then select *Paste*.

SpreadTrader

Introduction

- <u>Create Futures Spreads</u>
- <u>EFP Futures Spreads</u>
- <u>Create Option Spreads</u>

SpreadTrader

Create Futures Spreads with SpreadTrader

Use the SpreadTrader to quickly create and trade calendar spreads for futures.

Create a futures spread

1 Open **SpreadTrader** by right-clicking a contract on the trading screen and selecting **Tools** and then *SpreadTrader.*

2 From the dropdown menu in SpreadTrader, select *Futures Spreads for xxx.*

3 In the **SpreadTrader** leg matrix at the bottom of the screen, click a bid or ask price at the intersection of two legs to create the calendar spread.

> **Note:** The SpreadTrader matrix automatically structures the spread to sell the nearby month and buy the distant month.

4 Transmit the order from the Orders panel by clicking "T" in the Status field.

Background Colors in Quote Panel

The colors in the Description field of the **Quote** panel show you how far out from the current year the contract's maturity date is, at a glance. Industry-standard colors are defined below:

Number of Years Out	Background Color
>1	White
2nd	Red
3rd	Green
4th	Blue
5th	Gold
6th	Purple
7th	Orange
8th	Pink
9th	Silver
10th	Copper

EFP Futures Spreads

An EFP (Exchange for Physical) is a combination order to sell/buy stock and buy/sell an SSF (single stock future).

To create an EFP order

1   Enter an underlying and hit **Enter**.

2   Select *EFPs for xxx*. The spread matrix at the bottom of the window is populated with a list of all single stock futures legs on the left, and the stock across the top.

3   Click a bid or ask price at the intersection of two legs to create the EFP spread.

4   To transmit the order, click the "T" in the *Status* field of the Orders panel.

Note: EFPs sent from the SpreadTrader are Smart routed and consequently may be subject to higher unbundled commissions. To receive IBEFP bundled commissions, you must

create your EFP from the main trading window and select IBEFP as the COMB destination. Quotes in magenta indicate an implied price for the combo, calculated using the individual leg prices.

Create Option Spreads in SpreadTrader

Use the option combo facility in SpreadTrader to create a matrix of variations on an option strategy for a single underlying, from which you can create and transmit multiple combination orders with two clicks of the mouse. The Option Wizard helps you to define exactly how you want the combo lines displayed in the matrix by allowing you to assign either a column position, row position or fixed value to each parameter. You can also use filters to help specify exactly which contracts you want to display in the matrix.

To create an Options Spread Matrix

1   Open the **SpreadTrader** by clicking the SpreadTrader icon on the trading toolbar.

   If you don't see the SpreadTrader icon, you may have the feature turned off. To reactivate, go to the Configure menu and select Feature Selector. Under Order Management, select Complex Order Types then Combos/Spreads. Ensure the box is checked and click OK.

2   Enter an underlying symbol in the **Underlying** field and hit *Enter*.

3   With your mouse, select *Options Combos for XXX*, and then select an exchange/currency.

4   In the Option Spreads window, select a combination strategy. Once you do this, every available spread for that underlying is displayed in the right panel.

> **Note:** The number of parameters shown under the Filter section; Some have two (such as a conversion or Buy Write) while others, like the Butterfly, have 5 or more. You can use these filters to limit the number of combinations that appear in the right panel.

5   Hit the *Next* button at the bottom of the window to see the **Configure Table Variables** box.

   Each variable is represented by a section in the box, with *Column Variable*, *Row Variable* or *Fixed Value* choices. A variable means that the combination parameter can use multiple valid values. For example, for a Calendar spread there are two variables for the right: put and call. If you select Call (which filters out the puts) it's no longer a variable, it's a fixed value. In that case, you won't see P/C in the variables list.

6   For each variable, check a radio box to instruct it to display as a row or column, or be used as a fixed value. Checking *Row* will create a row for every possible combination of row variables. Checking *Column* will display a column for every possible combination of column variables. Checking Fixed value will invoke another selection box where you choose a single value for the parameter.

   For example, our Calendar spread has five parameters: **Front** month, **Back** month, **P/C**, **Duration**, and **Strike**. We filter out all but two **Front** months (20061020 and 20061117) and two **Back** months (20061117 and 20070119) and all but six potentially valid strike prices, and leave everything else as is. Since the only valid duration is one month, the **Duration** parameter is no longer considered a variable. That leaves two variables in the **P/C** category (put and call) and multiple strike variables.

Hit *Next* to lay out our matrix using the four variables, and choose *Column Variable* for the **Front** month and the **Strike**, and *Row Variable* for the **Back** month and the right. When you click *Finish* you'll see something like this, where the Back month and the rights comprise the rows, and the Front month and Strikes comprise the columns.

What are you looking at?

Each row is divided into sections of market data for the column variables you picked, in this case for the front month and strike. If you could scroll across in this picture, you'd see the first of two Front months we picked (20061020) occurring in six blocks, once with each different strike price. Then you'd see the second front month, again once with each different strike price.

You see all the rows that are available, since our variables included only two back months and call/put. If you want to make any changes to the layout and combinations displayed, click the Options Wizard button on the toolbar.

Note: If you receive a message saying you have too many combos to subscribe to market data, and you don't go in and filter your results further, the prices will not update, and the matrix title will read "...Snapshot" instead of "...Realtime."

ScaleTrader

Introduction

Use Scale orders to help prevent increasingly deteriorating prices on large sized orders.

- About ScaleTrader
- Combo Orders
- ScaleTrader Profit Orders
- View Scale Progress
- Scale Order Examples

About ScaleTrader

ScaleTrader supports regular single-contract limit or relative orders, and combination limit orders. It is designed to help prevent larger sized trades from being subject to increasingly deteriorating prices by scaling your order into smaller, incrementally priced components based on user-specified price and size instructions.

In addition to scaling your order, you can also define a profit offset amount which instructs TWS to automatically submit opposite-side profit taking orders against the individual components of the original order.

Create a ScaleTrader order
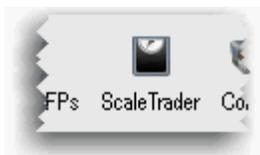
1 Select an underlying and click the ScaleTrader icon on the trading toolbar.

2 Define the order parameters, including the total order size, initial and subsequent component sizes, and the starting price as shown below.

- **Total Order Size** - This is the total quantity that you want to fill.
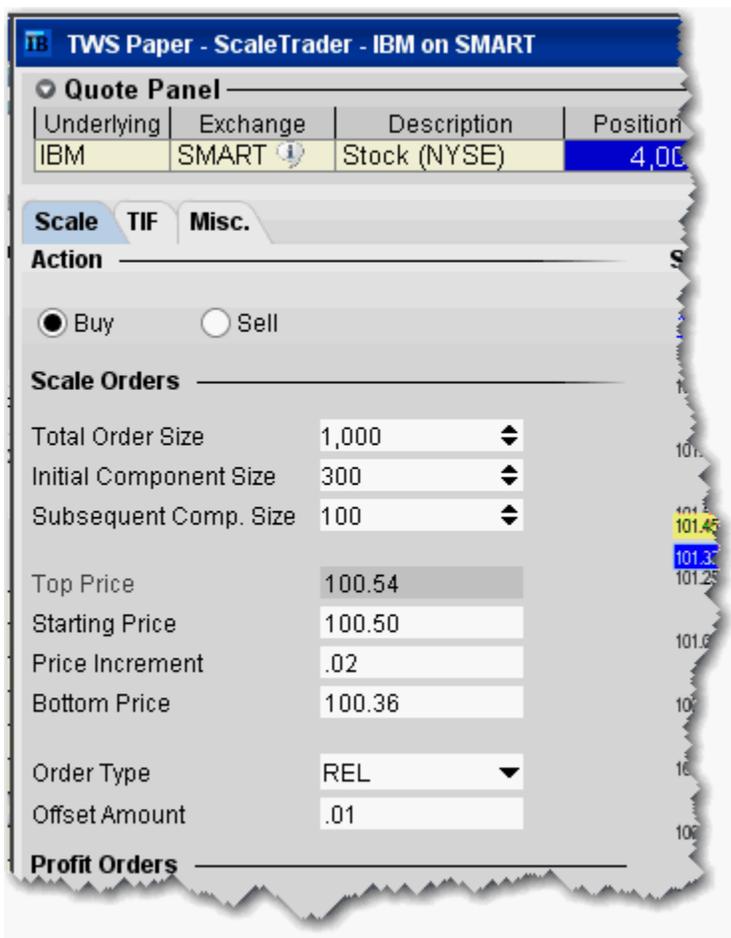
- **Initial Component Size** - This optional value works with the profit taking feature and defines the size of the first, or initial, order component that will be used for profit taking. This component will be submitted at the *Starting Price*, but profit orders against this quantity are submitted AS IF the quantity were submitted in subsequent component-sized increments using the *Price Increment*. For example, if you submit a 1000 share order with an Initial Component size of 300 and Subsequent Component Size of 100, the first order for 300 shares will go in at the starting price, but the profit orders off that Initial Component will be submitted in 100 share components against prices that reflect the Price Increment. After this

initial order, all other orders will be submitted at the size set in the Subsequent Component Size field. Note that if you do not enter a Subsequent Component value, the Initial Component size will be used.

- **Subsequent Component Size** - This field defines the basic order size of the scale order components. If left blank, all order components will be sized based on the Initial Component Size value.

- **Top Price/Bottom Price** - These values work with the Profit taking feature, showing the top price (for a buy order) and the bottom price (for a sell order) at which the profit orders from the Initial Component size will be calculated.

- **Starting Price** - This is the price at which the initial component will be submitted, and the price used along with the Price Increment to calculate the subsequent component price.

- **Price Increment -** This amount is used to calculate the per-unit price of each component in the scale ladder.

- **Order Type** - Choose from Limit or Relative order types.

- **Offset Amount** - For use with the Relative order type.
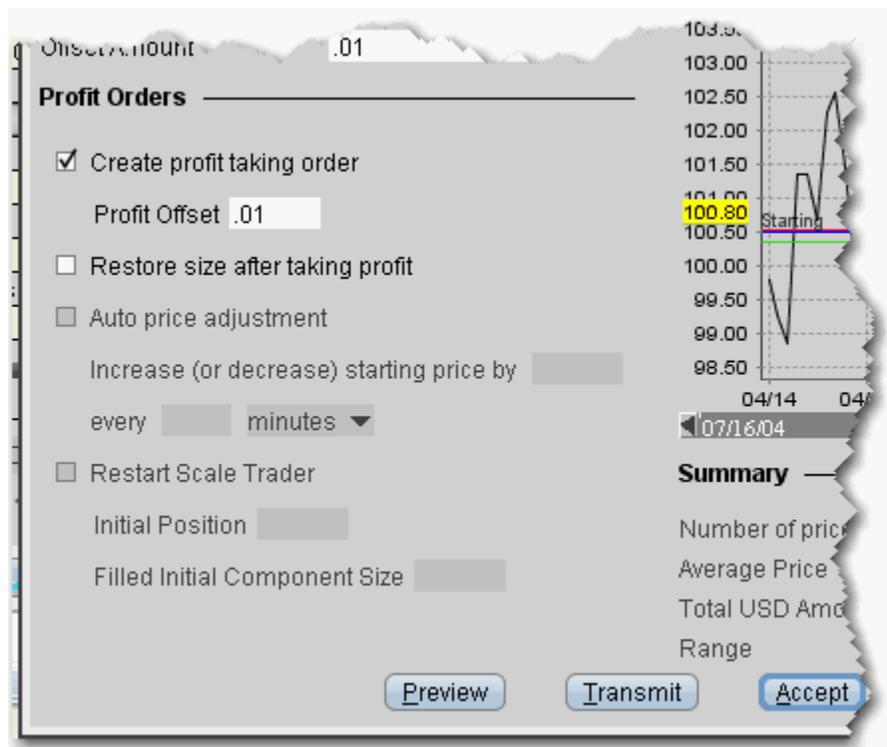
- **Create profit taking order -** Check to have TWS automatically submit opposite-side profit orders using the Profit Offset amount.

- **Profit Offset** - This value defines the minimum amount of profitability you will accept to exit a position. ScaleTrader will submit an opposite-side profit order against the original order, using the limit price of the parent component plus/minus the profit offset. For example, if you submit a 10,000 share BUY limit order at $65.00 with a component size of 1000, and enter $15.00 as the **Scale**

Profit Offset, as soon as the first component executes, TWS will submit a 1000 share SELL limit order at $80.00.

Notes on Profit Orders

- ScaleTrader will not submit a profit order until the original scale component, or a portion of the component, executes.

- Profit orders are always scaled to the Subsequent Component Size (if it is different from Initial Component Size). For example, for a 10,000 lot order with a 2000 initial component size and 1000 subsequent component size, the profit orders submitted in response to the 2000 initial order execution would be 1000 at fill price +/- profit offset, and 1000 at the next price increment +/- profit offset.

- Once transmitted, you cannot modify any part of the profit order.

3 If necessary, modify the **Lmt Price** which is used as the starting price for the series of order components.

4 Transmit the order.

You can monitor the progress of your scale orders by right-clicking on the order line and selecting *View Scale Progress.*

Combo Orders

ScaleTrader supports guaranteed combination orders. When using ScaleTrader for creating generic combination orders, note the following:

- Scale combos can only be sent as Limit orders.

- When you create a STK STK generic combo, the ratios are automatically simplified when you save the combo. This means that the combo you define in the Combo Selection box to Buy 300 XYZ and sell 700 ABC ends up on the ticker line as Buy 3 XYZ and Sell 7 ABC.

- Scale parameters such as *Total Order Size* and *Initial* and *Subsequent Component* sizes are expressed in terms of the total combo. For example, if you buy a generic STK STKcombo defined as *Buy 10 DELL, Sell 1 IBM*, and set the Initial Component Size to 5, the first component order would be: Buy (5 x 10) DELL, Sell (5 x 1) IBM.

- Price fields, including the Starting Price,

Use ScaleTrader for combination orders

Non-guaranteed combos are not supported in ScaleTrader.

1 Create a combination market data line on the trading screen:

    a In a blank line, type an underlying symbol and hit *Enter*.

    b Choose *Combinations*, then select *Option Combos*.

    c Choose a destination, and use the <u>ComboTrader</u> Combo Selection box to define a strategy. Click OK.

2 In the combo line on the trading screen, click the **Ask Price** to create a BUY order; click the **Bid Price** to create a Sell order.

3 In the Type field select LMT. Only Limit orders are supported for Scale combos.

4 Set the time in force to DAY or GTC.

5 Set the scale attributes:

    a **Scale Init**. - (Initial Component Size) This value defines the size of the first, or initial, order component. For combination orders, the size parameters are expressed in terms of the combo, for example, if the spread is defined as buy 2 IBM, sell 3 MSFT, the Initial Component Size of 10 would result in buying 20 IBM (10*2) and selling 30 MSFT (10*3).

    b **Scale Sub** - (Subsequent Component Size) Optional field used in conjunction with the **Scale Init** field, this value defines the order size of the subsequent scale order components. If left blank, all order components will be sized based on the Scale Init value. For combination orders, this value is in terms of the combo, see Scale Init above.

    c **Scale Incr**. - (Price Increment) This amount is used to calculate the per-unit price of each component in the scale ladder. For a combination order, the pre-unit price is the combined price of all legs in the combo, for example, buying IBM at $15.00 and selling MSFT at $6.00 would yield a combined price of (2*$15.00) - (3*$6.00) = $12.00. Note that the price increment cannot be negative.

    d **Scale Profit Offset** - A value in this field instructs TWS to submit profit-taking orders, and defines the minimum amount of profitability you will accept to exit a position. ScaleTrader will submit an opposite-side profit order against the original order, using the limit price of the parent component plus/minus the profit offset. For example, if you submit a 10 contract BUY limit order at $12.00, with a component size of 2 and enter $1.00 as the Scale Profit Offset, as soon as the first component executes, TWS will submit a 2 contract SELL limit order at $13.00. Use the <u>Scale tab</u> on the Order Ticket to set advanced profit order instructions.

6 If necessary, modify the **Lmt Price** which is used as the starting price for the series of order components. Note that for combination orders, the price represents the combined price of all legs in the combo, for example, buying IBM at $15.00 and selling MSFT at $6.00 would yield a combined price of (2*$15.00) - (3*$6.00) = $12.00.

7   Transmit the order.

You can monitor the progress of your scale orders by right-clicking on the order line and selecting *View Scale Progress.*

For more information on scale orders, visit the Order Types information page.

ScaleTrader Profit Orders

Enter a Profit Offset amount on the order line, or check *Create Profit Taking Order* on the ScaleTrader to specify advanced profit order instructions. Follow the instructions below AFTER you have created a scale order on your trading page.

To activate scale profit orders
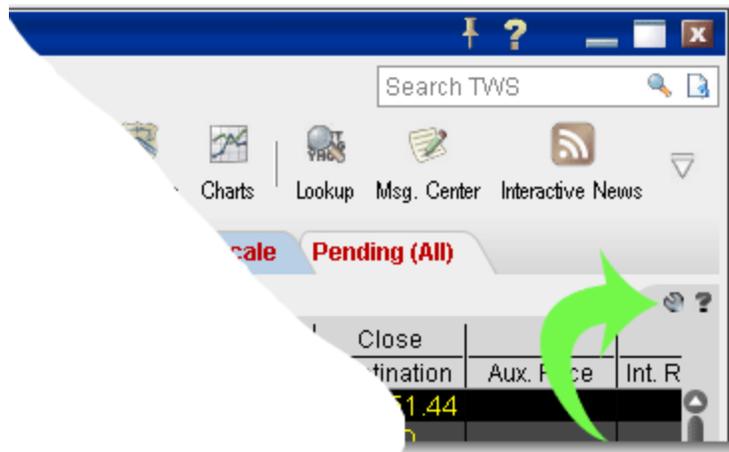
1   From the scale order line, ensure that the *Scale Profit Offse*t field is visible.

   a   Click the Configure wrench icon on the far right side of the trading window to open Trading Window configuration.

   b   Click the Order Columns tab.

   c   In the Available Columns list, scroll down to the Scale Orders section and select Scale Profit Offset.

   d   Click the Add button to move the field into the Shown Columns list. Click OK.

2   Enter a value in the *Scale Profit Offset* field.

This amount is added to (a BUY scale order) or subtracted from (a SELL scale order) per unit price of a component, to create your minimum acceptable profit for exiting a position. For example, assume your Scale Profit Offset is $2.00. If a 500-unit BUY component fills at 28.26, ScaleTrader submits a 500-unit SELL component at a limit price of 30.26.

Notes on Profit Orders

- ScaleTrader will not submit a profit order until the original scale component, or a portion of the component, executes.

- Profit orders are always scaled to the Subsequent Component Size (if it is different from Initial Component Size). For example, for a 10,000 lot order with a 2000 initial component size and 1000 subsequent component size, the profit orders submitted in response to the 2000 initial order execution would be 1000 at fill price +/- profit offset, and 1000 at the next price increment +/- profit offset.

- Profit orders submitted against the Initial Component Size use the Subsequent Component Size value, and act AS IF the initial component was submitted in Sub. Comp. increments using the Price Increment. For example, if the total order size = 1000, Initial Component Size = 300, Subsequent Comp. Size = 100, Starting Price = 25.00, Price Increment = 1.00 and Scale Profit offset = 3.00, the scale with profit orders will work as follows:

  a   Buy order for Initial component size of 300 is submitted at 25.00 and fills.

  b   Profit sell order of 100 (or Sub. Comp. Size) is submitted at 28.00 (fill price + profit offset.

  c   Profit sell order of 100 is submitted at 27.00 (last fill price - price increment + profit offset).

  d   Profit sell order of 100 is submitted at 26.00 (last fill price - price increment + profit offset).

- Once transmitted, you cannot modify any part of the profit order.

Other profit fields include the following:
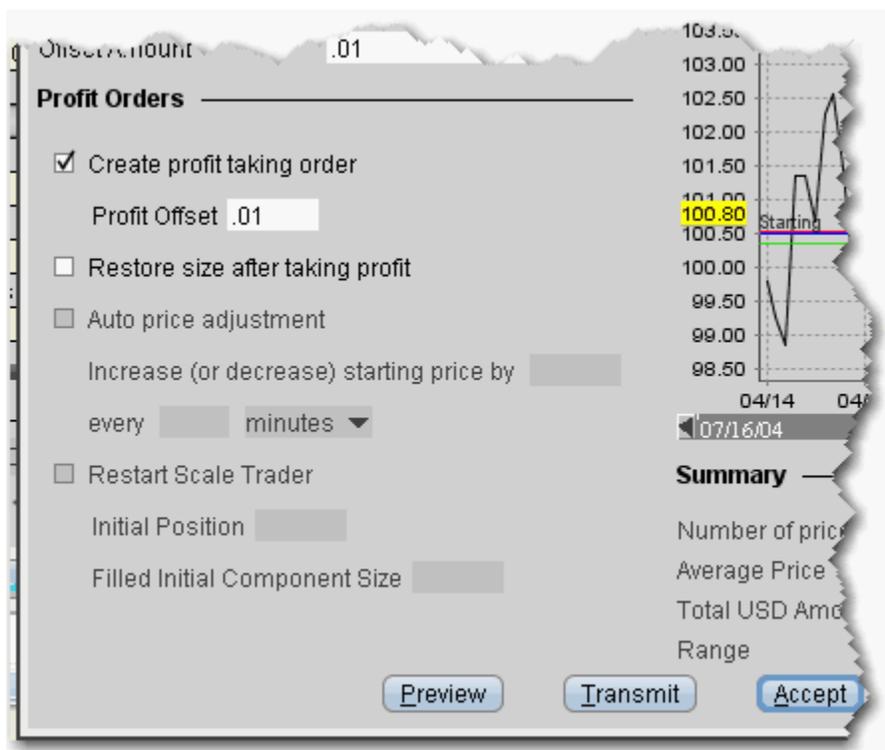
Restore size after taking profit - Check to have ScaleTrader put back the order size after the profit order is filled. See an example of a scale profit with restored size.

Auto price adjustment - Automatically adjusts the order price by the specified increment at the specified time interval.

Restart ScaleTrader - Resumes a cancelled or busted ScaleTrader order, starting from the point at which the scaled sequence left off.

View Scale Progress

You can monitor the progress of your scale orders using the **Scale Progress** box.

To View Scale Progress

- Right-click the scale order line and select *View Scale Progress*.

The Scale Progress Box

The **Scale Progress** box displays the complete scale price ladder, the Open/Filled component list for the parent scale order, and the Open/Filled component list for the child profit orders.

Original scale order description to buy
10000 @ starting price (22.41),
component size (500), scale offset
(0.01) x profit offset (0.02).

Profit taking orders are scaled to the
subsequent component size, in this
example, 500 lot components, and are
submitted using the price +/- the offset
amount, after a component fills.

Initial component at
the starting price

Currently working
component

Currently working
profit component

Scale				Refresh

BUY 10000 DELL @ 22.41 500x-- 0.01x0.02

Price	Buy (Open)		Open	
	Open	Filled		
22.43			500	
22.42			500	
	0	500	500	
	0	500	500	
	0	500	500	
	0	500	500	0
22.37	0	500	500	0
22.36	0	500	500	0
22.35			500	0
22.34			500	0
22.33			500	0
22.32	0	500	500	0
22.31	0	500	500	0
22.30	0	500	500	0
22.29	0	500	500	0
22.28		500	500	0
22.27	0	500		
22.26	0	500		
22.25	500	0		
22.24	500	0		
22.23	500	0		
22.22	500	0		

Scale Order Examples

Using the same order information for all five examples, the scenarios below illustrate the basic behavior of ScaleTrader orders. These examples do not cover all of the potential algorithmic results that would occur on partially filled component levels.

Non-variable Scale order values

NBBO: $10.12 - $10.15

Order Size: 10,000

Action: Buy Limit

Initial Scale Component Size: 2000

Subsequent Component Size: 1000

Price Increment: $0.01

Start Price: $10.15

Time in Force: GTC

Example 1: Basic Scale Order

The order is scaled into 9 components of one at 2000, and then eight at 1000 each. The first 2000-quantity component is submitted at $10.15. After this level fills, the next component (1000) limit order is submitted $10.14. The next component is submitted at $10.13 but price movement renders this order unmarketable. The remainder of the order waits. The order becomes marketable, fills, and the next component is then submitted. This pattern continues until all components have filled, or you cancel the order.

Example 2: Scale order with Profit-Taking Orders

Profit Offset: $1.00
Note that the profit orders are scaled to the Subsequent Component Size regardless of whether or not the Initial Component Size is larger. If the Initial Component Size is greater, the profit order price is calculated using the price increment and the profit offset amount.

The order is scaled into 9 components of one at 2000, and then eight at 1000 each. The first 2000-quantity component is submitted at $10.15. After this level fills, the next 1000 lot component is submitted $10.14, and profit orders of 1000 at $11.15 (fill price + profit offset) and 1000 at $11.16 (fill price + price increment + profit offset) are submitted. The buy limit at $10.14 fills, and the next component is submitted at $10.13, and a 1000 lot SELL limit order is submitted for $11.14. Note that because you have set the time in force to GTC, the sell orders work until your minimum acceptable profit amount for exiting the position is met.

You can set the Profit Offset from the trading window, or use the *Create profit taking order* checkbox on the *Scale* tab of the **Order Ticket**.

Example 3: Scale order with Profit-Taking Orders and Restore Size instruction

Profit Offset: $0.02

Restore Size after taking profit: box checked on Order Ticket *Scale* tab

The order is scaled into 9 components of 2000, 1000, 1000, 1000 etc. The first 2000-quantity component is submitted at $10.15. After this level fills, the next limit order for 1000 is submitted at $10.14, and profit orders of 1000 at $10.17 (fill price + profit offset) and 1000 at $10.16 (fill price + price increment + profit offset) are submitted. The sell order fills at $10.17, taking the profit, and the filled quantity of 1000 is put back into the original order at $10.15 and the $10.14 component is cancelled.

Activate the *Restore size after taking profit* instruction using the checkbox on the *Scale* tab of the **Order Ticket**. This feature is only available if the profit-taking order feature is used.

Example 4: Restart ScaleTrader

The *Restart* feature helps you resume a busted ScaleTrader order from the point of the bust. A bust results in a lost connection between the scale and profit order processes, leaving two independent scaled orders. You can cancel these orders and create a new ScaleTrader *Restart* order.

Profit Offset: $0.02

Restore Size after taking profit: box checked on Order Ticket *Scale* tab

Restart ScaleTrader: box checked on Order Ticket Scale tab

Existing Position value: 3000

The Existing Position value of 3000 tells ScaleTrader that the initial component of 2000 and the first subsequent component of 1000 both filled, at $10.15 and $10.14 respectively. It "restarts" the scale order beginning with the 3rd component. The first buy order is for 1000, and is submitted at $10.13. The profit-taker orders are set up for 1000 at $10.17, 1000 at $10.18, and 1000 at $10.16, which is submitted.

Activate the *Restart ScaleTrader* instruction using the checkbox on the *Scale* tab of the **Order Ticket**. This feature is only available if the profit-taking order and Restore Size instructions are used.

Example 5: Restart ScaleTrader with Filled Initial Component Size

A busted scale order results in a lost connection between the scale and profit order processes, leaving only two independent scaled orders. The *Restart* instruction is designed to help you resume a cancelled or busted ScaleTrader order, starting from the point at which the scaled sequence left off. First, cancel the two separated scale orders. Next, create a new ScaleTrader *Restart* order by identifying your current position and telling ScaleTrader how much of the initial component size filled in the busted order. ScaleTrader will restart the order at the appropriate component and price level.

Note: The *Filled Initial Component Size* field only becomes active if the **Existing Position** value is less than the **Initial Component Size**.

Profit Offset: $0.02

Restore Size after taking profit: box checked on Order Ticket *Scale* tab

Restart ScaleTrader: box checked on Order Ticket *Scale* tab

Existing Position value: 500

Filled Initial Component Size: 1200 (this value must be *greater than* or *equal to* the **Existing Position** value, up to a maximum of the **Initial Component Size**).

The Filled Initial Component Size of 1200 tells ScaleTrader that there is an unfilled quantity of 800 (of the 2000 Initial Component Size). The first buy order for 800 is submitted at $10.15, and profit-taker orders of 1000 and 200 are set at $10.17 and $10.18, respectively.

Activate the *Restart ScaleTrader* instruction using the checkbox on the *Scale* tab of the **Order Ticket**. This feature is only available if the profit-taking order and Restore Size instruction is used, and if the value in the Existing Position field is less than the Initial component size.

Merger Arb

Introduction

- [Merger Arbitrage Window](#)
- [Merger Arb Combination - Example](#)

Merger Arbitrage Window

Create an Arb Combo

Use the Merger Arbitrage window to create a combination order for an anticipated merger between two companies.

Enter the symbol of the company being acquired (a.k.a. the "acquiree").

Enter the symbol of the acquiring company.

Enter the number of shares of the Acquiree that you would like to purchase. TWS will calculate the actual size of the combination order automatically based on the ratios of the two stocks.
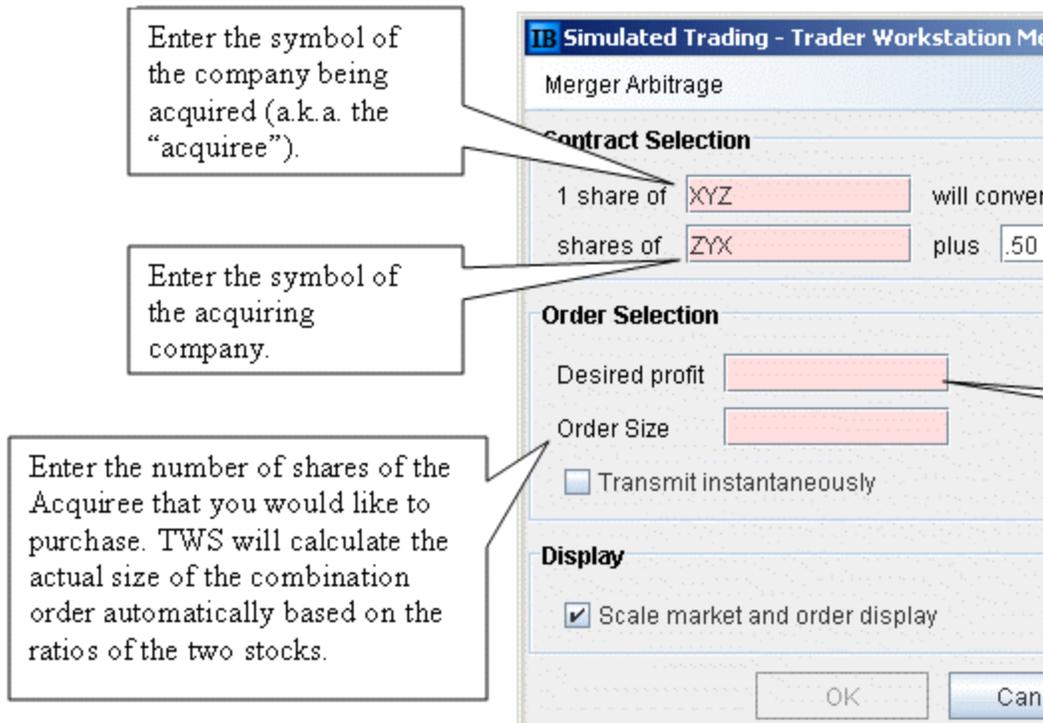
The Scale market and order display feature scales the market data to display the price of the combination per share of acquiree, and the order price will also be entered and displayed in these units. This is checked by default. Note that if the calculated size of the acquiree is one, this checkbox has no effect.

Complete the stock ratio of the conversion. (The share size of the acquiree is always "1.")

Enter the additional cash amount if applicable.

Enter an absolute dollar amount of desired profit, or a percentage of the last price of the acquiree's stock.

Set up a merger arbitrage combination order

1 Right-click in a blank line and select *Merger Arbitrage*.

2 Enter contract conversion information in the **Contract Selection** area.

3 In the **Order Selection** area, enter the desired profit as an absolute amount or a percent of the last price of the stock of the company being acquired (the acquiree).

> **Note:** You must have a value in any pink-colored field before the **OK** button will become active.

4 Click **OK**. TWS will create a combination order line on the trading screen.

Merger Arb Combination - Example

The following is an example of a merger arb combo:

- Target Company (Buy):   LU
- Target Company Qty: 10,000
- Acquirer Company (Sell Short):   ALA
- Acquirer Company NBB: $12.20
- Exchange Ratio: 0.1952
- Cash Component: $0.50

- Spread: $.05

Based on this example, the following short sale would be executed first to make sure the short sell tests are met:

Sell Shrt   1,952   ALA   12.20

We would compute the buy limit price of the target company and next submit the buy order:

$12.20 * 0.1952 = 2.38 + 0.50 = 2.88 − 0.05 = $2.83 (limit price)

Buy   10,000   LU   2.83
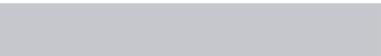
Algos

Introduction

Algo helps to remove market impact with risk to get the best price for large volume orders. Our growing family of algos includes the following:

- Accumulate Distribute
- Option Portfolio
- ScaleTrader
- IBAlgos
- CSFB Algos
- Jefferies Algos

Accumulate Distribute

Introduction

Use the Accumulate/Distribute algo to buy or sell large orders in small increments over time, minimizing market impact. This algo supports multiple asset classes including stocks, options, futures, forex, and combination orders.

Customize the basic algo with conditions to meet your specific views on the market. Multi-account users will see the Account selection list at the top of the algo page.

Note: Orders submitted via Accumulate/Distribute currently are active only while you are logged into TWS and stop when you log out. When you log back into TWS, answer "Yes" when asked if you want to reactivate the algo. If you answer "No" your Accumulate/Distribute algo orders are deleted.

- Get Started
- Define the Algorithm
- Basic Algorithm Example
- Using Templates
- Define Algo Conditions
- Create Multiple Algo Orders
- Transmit and Modify the Algo
- Monitor the Order Progress

Get Started

The Accumulate/Distribute algo works to get the best price for your large volume orders while minimizing market impact. It achieves this by slicing large orders into smaller components, and accumulating or distributing over time based on your pre-defined order parameters.

The algo window is divided into four major sections:

- The **Algorithm** area, where you define the basic parameters of the order.
- The **Conditions** area, where you specify conditions about price, position and market behavior that must remain true for your order to be valid.
- The order **Summary**, which displays continuous real-time order progress.
- The **Control** buttons, which you use to start and stop the algo and apply changes.

It also includes the Orders, Trades and Log panels, and the Quote panel to define the contract.
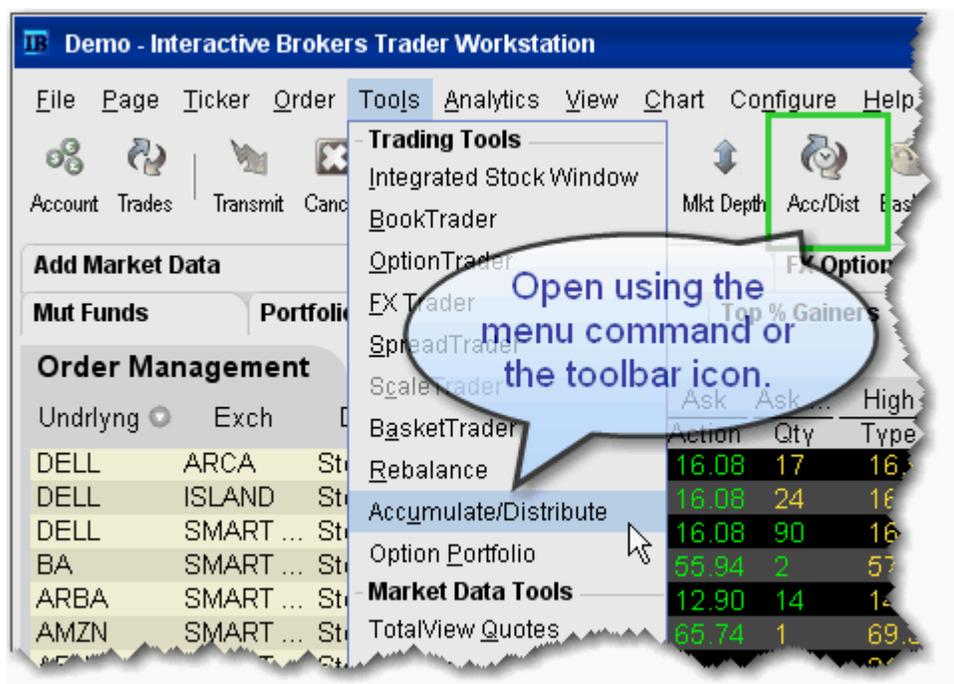
To open the Accumulate/Distribute window

- Highlight the contract you want to trade and from the **Tools** menu select *Accumulate/Distribute,* or
- Click the **Acc/Dist** icon on the toolbar.

Define the Algorithm

The **Algorithm** area is where you set up basic parameters of the algo. Fields shaded pink are required.

Numbered descriptions below correspond to the numbered fields in the image above.

1   Select the action, BUY or SELL.

2   Enter the total order quantity, for example 5000.

3   Define the increment for each component. For example, you may want to trade the 5000 share order in 200-share increments.

4   Specify the timing of order submission for the components, in seconds, minutes, or hours. For example, you may want to accumulate 5000 shares of XYZ in 200 share increments every 2 minutes.

5   Select the order type. The fields to set the price depend on the order type you select. For stock orders, choose from:

- Relative - use a Relative order to add liquidity to the market by placing a bid or offer that is more aggressive than the current best bid or offer. Set an optional offset amount, and specify a cap. The quote adjusts automatically based on your criteria as the market moves.

- Limit - set a limit price with an optional offset amount which must be met or bettered for the order to fill.

- Market - the order will attempt to fill at the current market price.

6 Set order price to ...(for RELATIVE orders) For BUY orders, use the bid plus any amount. For SELL, use the ask minus any amount. To use only the bid/ask with no offset you must enter "0." This field is only visible for REL orders only and works with the following field:

7 ...but not higher than - For RELATIVE orders, this is the price cap, which works in conjunction with the price calculation set in the previous field.
- For LMT orders, the field is "**Set limit price to:**..."
- For MKT this field does not display.
Choose from the following calculations to ensure the limit price will not be set higher than (for a buy) or lower than (for a sell):

- *None* - for REL orders only. There is no cap on the price.

- *Value* - opens a field to set an absolute limit price.

- *Mark Price* - this is a static value shown in parentheses plus or minus an offset. This price will not move with the order.

- *Bid* - bid plus/minus an optional offset amount. Enter a negative value to effect a minus offset.

- *Ask* - ask plus/minus an optional offset amount. Enter a negative value to effect a minus offset.

- *Last* - the last traded price plus/minus an optional offset amount. Enter a negative value to effect a minus offset.

- *VWAP* - the VWAP plus/minus an optional offset amount. Enter a negative value to effect a minus offset.

- *Mov VWAP* - the moving VWAP (of the current contract) over the past [*specified time period*] plus/minus an optional offset amount. Enter a negative value to effect a minus offset.

- *Mov Avg* - the moving average (of the current contract) over the past [*specified time period*] plus/minus an optional offset amount. Enter a negative value to effect a minus offset.

- *Exp Mov Avg* - the exponential moving average (of the current contract) over the past [*specified time period*] plus/minus an optional offset amount. Enter a negative value to effect a minus offset.

- *My Last Trade* - the price of the last trade in the algo, shown as the Last Trade Price in the order Summary block. Note that this value cannot be used for the limit price alone since it would have no price for the first trade.

- *Relative to size traded* - calculates the price cap as: *user-defined base price* minus *user-defined offset value* per *number of shares* relative to the total size traded in the algo, which is reflected in the **Shares bought** field of the algo Summary block. For example, if the values are: $5.50 - .02 per 100 shares, the cap price for the first 100-share order where Size Traded = 0 would be $5.50. Assuming the trade continues to execute in 100-share increments, the price cap would changes as follows: Size Traded = 100 cap = $5.48; Size Traded = 200 cap = $5.46; Size Traded = 300 cap = $5.44.

- *Relative to position* - calculates the price cap the same as *Relative to size traded* except that the calculation is relative to the position as specified in the Account

window and the Position column, while the size traded is relative to what happens only in the Accumulate/Distribute algo.

8   For **Relative** and **Limit** orders, click ***and*** to add more price conditions to the "but not higher than/not lower than" price capping calculation. When you add multiple price-bounding conditions, a new "Greatest of/Least of" selection appears for you to ensure the order price will not be higher(lower) than the greatest of/least of *Condition A* and *Condition B* and *Condition C* etc*.*

9   **Start time** - by default, the start time is set to the current time, or to the next open if the markets are currently closed. Click in the field to set a new start time, but note that the algo will not start until you hit the *Start* button.

10   **End time** - by default, the end time is set to closing time of the current day, or to the next close is the algo is started outside of regular trading hours. Click in the field to set a new end time.

11   **Wait for current order to fill before submitting next order** - if checked, the next component will be held until the current quantity fills. The countdown until the Time of next order stops while the algo waits for the current order to fill. Once it fills, the next order is submitted if the specified time interval has elapsed.

12   **Catch up in time** - if checked and the algo falls behind, the next order will be placed immediately after the current order fills, disregarding the time interval. This process will repeat until the algorithm has caught up. *Missed orders* are tracked in the algo **Summary** block.

Note: After one order fills, there is always a delay of two seconds before the next order is submitted.

13   **Randomize time period by +/- 20%** - if checked, the time interval you specified will be increased or decreased randomly by up to 20% in either direction, to help keep the order from being noticed in the market. For example, if your defined time interval is 40 seconds, randomizing allows the algo to submit orders at intervals of 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47 or 48 seconds.

14   **Randomize size by +/- 55%** - if checked, the increment size you specified will increase or decrease randomly by up to 55% (rounded to the nearest 100) in either direction, to help keep the order from being noticed in the market. For example, if your defined increment is 500 shares, randomizing allows the algo to submit orders in random increments of 200, 300, 400, 500, 600, 700 or 800 shares.

15   **Allow this order to be filled outside of regular trading hours** - if checked order may fill outside regular trading hours.

16   **If the bid/ask is _____ or higher** - for a buy order, if the current offer size is greater than or equal to the size entered here, the algo will take the entire size, or as much as will not exceed the total order quantity. This order is submitted as IOC (Immediate-or-cancel).

Basic Algorithm Example

The populated fields in the image below translate to the following:

Buy 5000 shares of *ABC* in increments of 200 every 25 seconds. Set the price to the current best bid plus 2 cents, but don't price the order any higher than the ask price minus 1 cent. Start the algo now (09:52:04 AM, EST), and end it when the markets close. Wait for the current order to fill before submitting the next order, and if the algo falls behind catch up in time by submitting orders immediately after a fill instead of honoring the time interval. Mix up the time intervals by adding and subtracting 20%, and make the order size less uniform by adding/removing 55% on each order, rounding to ensure no odd lots. Trade only during regular trading hours, and if the ask size is 600 or higher, take the entire offer but don't exceed my original total order quantity.

Algorithm

| BUY ▼ | 5,000 | total units in increments of | 200 | every | 25 | Minutes ▼ |

Order Type REL ▼   Set order price to bid + .02   but not higher than Ask ▼   +/- offset -.0

Start Time 20080926 09:52:04 EST 🕐   End Time 20080926 20:00:00 EST 🕐

☑ Wait for current order to fill before submitting next order   ☑ Randomize time period by +/- 20%

  ☑ Catch up in time ⓘ   ☑ Randomize size by +/- 55%

☑ Allow this order to be filled outside of regular trading hours

If the offer size is   600   or higher, then take entire offer (up to number of shares remaining)

Conditions. The following conditions must be TRUE for the algorithm to ... working.

Using Templates

You can save the basic algorithm settings in a named template to help you save time defining multiple Accumulate/Distribute algo orders. Please note that the template only saves the basic algo settings, not the conditions, since conditions are contract-specific and would not translate across different algo orders.
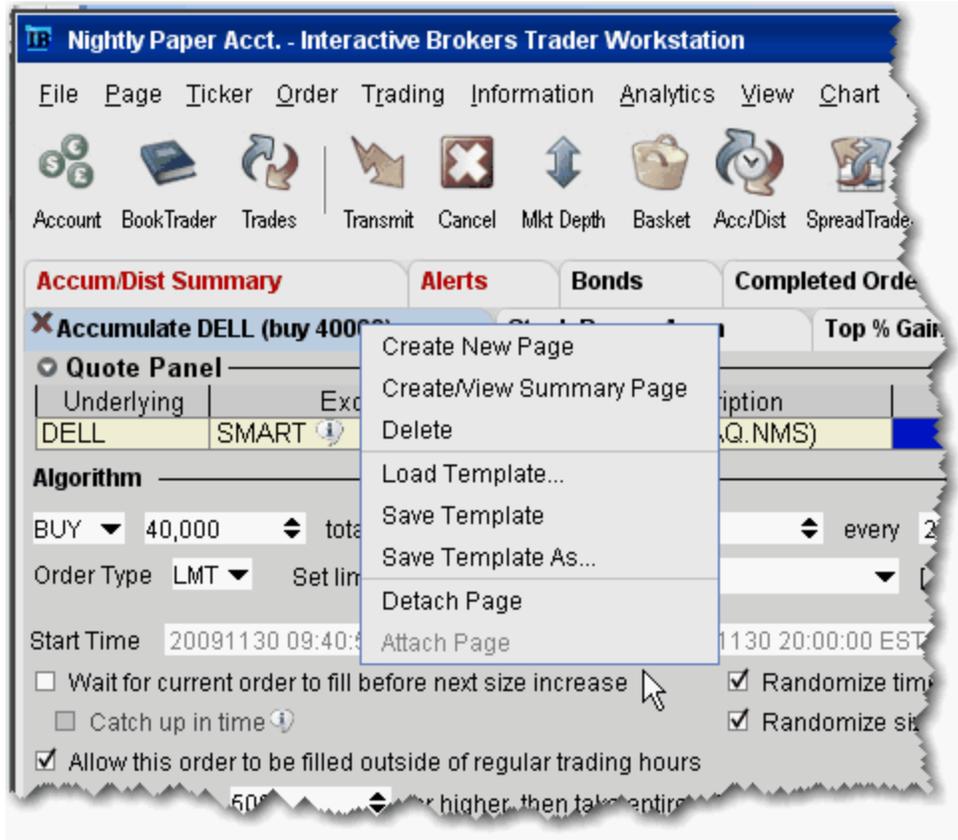
Save Settings as a Template

After you have defined the basic algo settings described in the Define the Algorithm section, you may elect to save these parameters for use with another Accumulate/Distribute algo order.

To save a template

1   Right-click the current algo tab and select *Save Template As*.

2   Enter a descriptive name for the template (for example Buy 20000 or Sell 1,000,000) and click OK.

When you are creating a new Accumulate/Distribute order, use an existing template to save time completing the basic algo parameters.

To use an Accumulate/Distribute template

- Right-click the current algo tab and select *Load Template*.

If you make changes to an existing template after you load it, you have the choice to either *Save Template* which saves your changes to the existing template, or *Save Template As* to create a new template.

Define Algo Conditions

Note that the more conditions to be met, the more difficult it may be for your order to completely fill.

All of the conditions are optional, but if you elect to set a condition, any unfilled fields in the definition become mandatory and are shaded pink.

To clear the values from a condition, click the "x" at the end of the line. The "x" only appears when you have entered data in a field.

Numbered descriptions below correspond to the numbered fields in the image above.

1 Define a range within which the contract price must stay for the order to continue working.

2 Ensure that the price movement will not be affected by news stories by entering a value in minutes. Until there has been no news for your defined time period as the algo will not work. News is monitored by the news suppliers you have set up in TWS, including Google News, Yahoo! Headlines and the Reuters subscription service.

3 Specify that your position, as reflected in the Account window and Position column, must be greater than or less than a specified value. This acts as a floor or ceiling for the position. Not only will TWS **not** place the order if the Position condition is violated, but it will not fill any order that would leave it violated.

4   **Moving averages for this contract** - Define moving average criteria for the current contract. Specify that the current contract's: **moving VWAP**, **moving average**, **exponential moving average** or **last** over the past [*specified time period*] is at least a [*specified percent*] greater than or less than another moving average (for the current contract) over [*specified time period*]. To clear the values, click the 'x' at the end of the line.

5   **Moving averages for** - Compare two moving averages, which could be for the same contract or for different contracts, for the same time period or for different time periods. Specify the underlying, and then set values as in #4 above. To clear the values, click the 'x' at the end of the line.

6   Fields labeled 6, 7 and 8 work together to compare the change in price of two stocks over a specified time period, based on the difference between the stock's price and its moving average. The algo completes the calculation based on your inputs. To clear the values, click the 'x' at the end of the line.

7   Enter a symbol. This lines uses the parameters defined for the first stock in #6 above.

8   Enter a percent value that must be met by the difference between the two stock calculations.

The order will always stop working if any of the conditions you set becomes false. Use these selections to indicate how the algo should behave once it has stopped:

- Give up permanently if one or more conditions become false, or
- Resume order if all conditions become true again.

Create Multiple Algo Orders

You can create and monitor multiple Accumulate/Distribute algos, on multiple tabbed pages, all from the same window. Each new algo has its own tabbed page.

To add another Algo

1 Right-click the tabbed page title and select *Create New Tab*.

2 On the new page, enter a symbol in the **Underlying** field on the Quote panel and select a contract.

3 Define the algo.

The Accumulate/Distribute Summary

Once you create a second algo tab, the **Accum/Dist Summary** is created and displayed as the first tab in the tabset.

Note: Orders submitted via Accumulate/Distribute currently are active only while you are logged into TWS and stop when you log out. When you log back into TWS, answer "Yes" when asked if you want to reactivate the algo. If you answer "No" your Accumulate/Distribute algo orders are deleted.
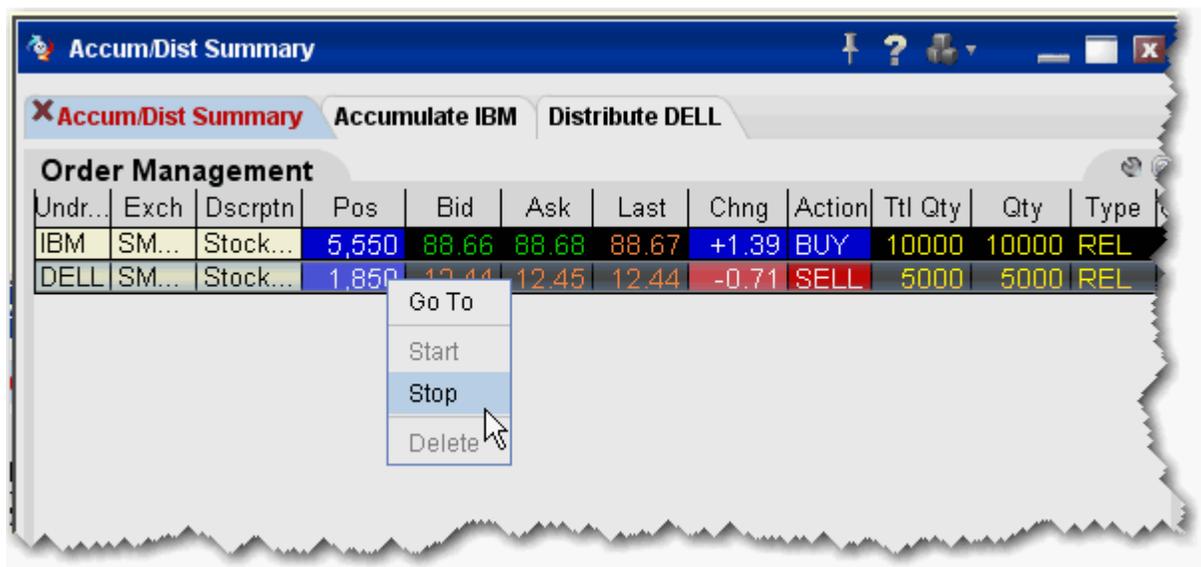
This page aggregates orders for all algo, with one order line for each algo. You can go to a specific algo or start, stop and delete an algo from this **Summary** tab by right-clicking an order line and selecting:

- *Go To* to open the algo tab for the order.
- *Start* to start the algo.
- *Stop* to stop the algo.
- *Delete* to **delete** the algo tab and remove the selected order line.

Transmit and Modify the Algo

Use the buttons along the bottom of the **Conditions** area to control the algo.
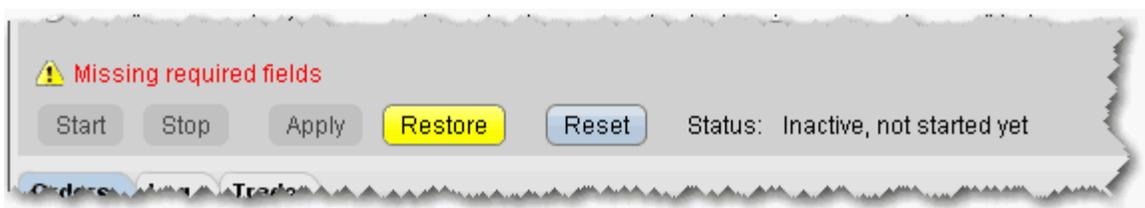
You cannot activate the algo until all required fields are filled. Missing fields are shaded pink.

Once all fields are complete you can activate the algo. Buttons works as described below:

Start - activates the algo. This button is only active once all mandatory fields have been completed, and will become active anytime the algo is stopped. If you stop the algo manually, click **Start** to resume from where it left off.

Stop - stops the algo. This button will become active once the algo is started.

Apply - click to apply changes to the working algo. For example, if you change the share increment from 200 to 500, the change will not be recognized until you click the Apply button.

Restore - click to restore unapplied changes to the original value. For example, if you change the share increment from 200 to 500, you can undo your change by clicking **Restore**. Once you *Apply* the change the **Restore** button is no longer available.

Reset - if the algo is stopped, either because it has finished or because you have manually stopped it, the **Reset** button will discount all algo progress and start the algo from the beginning. If you prefer to resume the algo from where it left off, use the *Start* button.

Status text: this note tells you what is happening on the current algo screen.

Monitor the Order Progress

The order Summary provides real-time data to let you monitor the progress of the Accumulate/Distribute order. This data applies only to the algo on this page. Use the aggregate **Summary** tab to see order management lines for all of your Accumulate/Distribute algos.

Data in the Summary block monitors the order in real time and tells you:

1 **Shares bought** - this is the total number of shares bought or sold to date in the algo. In addition, the sliding shading illustrates the percent of the order complete; in the image above the order for 5000 is less than 50% done as shown by the dark blue shading.

2 **Average price** - this is the average price to date for the completed portion of the order.

3 **Shares remaining** - the outstanding quantity.

4 **Shares working** - the quantity currently working, also shown in the Orders panel at the bottom of the window.

5 **Last order is:** - tells you the filled status of the last order component, either filled or unfilled.

6 **Last Trade Price** - the price at which the last trade in the algo filled.

7 **Time of last order** - tells you the time the last order filled.

8 **Time until next order** - counter counts down the time until the next order will be submitted.

9 **Missed orders** - if the algo cannot place additional orders because the previous order has not filled or because one or more of the conditions is false, and the *Catch up in time* checkbox is checked, this counter tracks the number of missed orders, and continues to track as the algo catches up.

Shares deactivated - if an order is canceled because a condition becomes false or the algo was stopped by the user, the number of shares that had been working is reflected here. An order for this quantity will be placed when the algo is started again and/or the conditions all become true.

Option Portfolio

Introduction

Use the Option Portfolio to select, analyze and trade combinations of options on any US stock or index to achieve the user-specified values of the Greeks, including delta, gamma, vega and theta, or to compare cost/P&L for a contract or combo you would like to acquire with a simulated portfolio.

- Get Started
- Define and Submit the Query
- Constrain the Query Results
- Evaluate the Solution
- View What-if Risk in the IB Risk NavigatorSM

Get Started

The Option Portfolio window runs off a sophisticated back-end algorithm which mathematically optimizes an options portfolio using the defining criteria and constraints you enter via TWS along with relevant economic criteria.

To open the Option Portfolio window

1   Select an underlying US stock or index on a trading page.

2   Use the right-click menu to select **Trading Tools** then *Option Portfolio*.
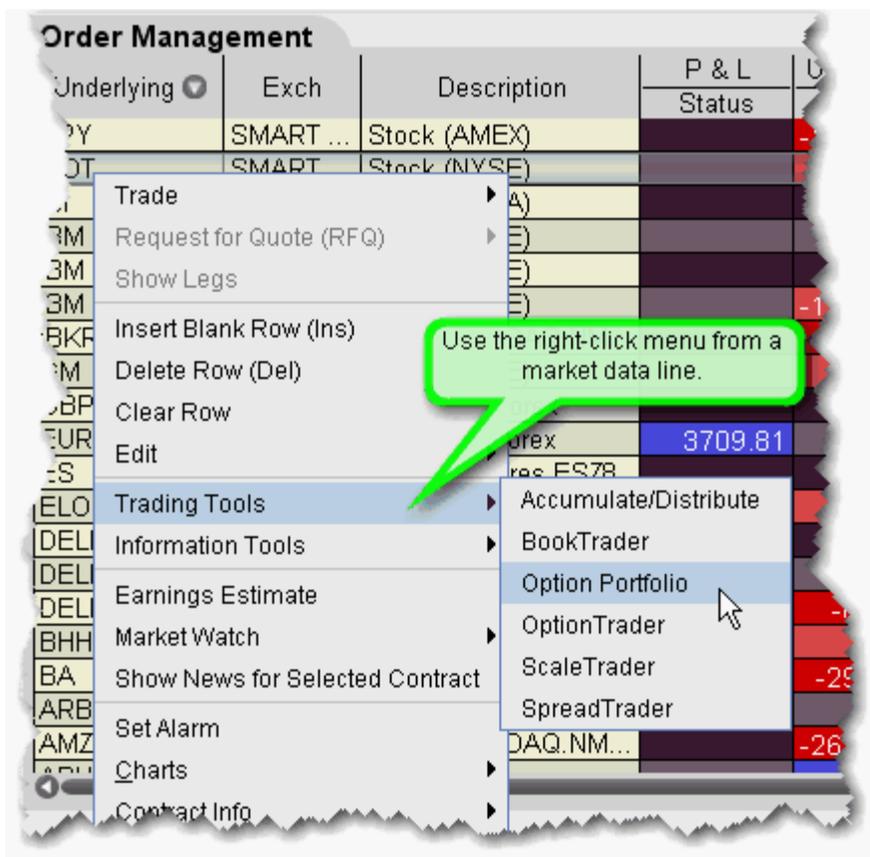
The Option Portfolio window opens and you're ready to define the query. To add a tab with another underlying to the Option Portfolio window, use the **File** menu to select *Create New Tab.*
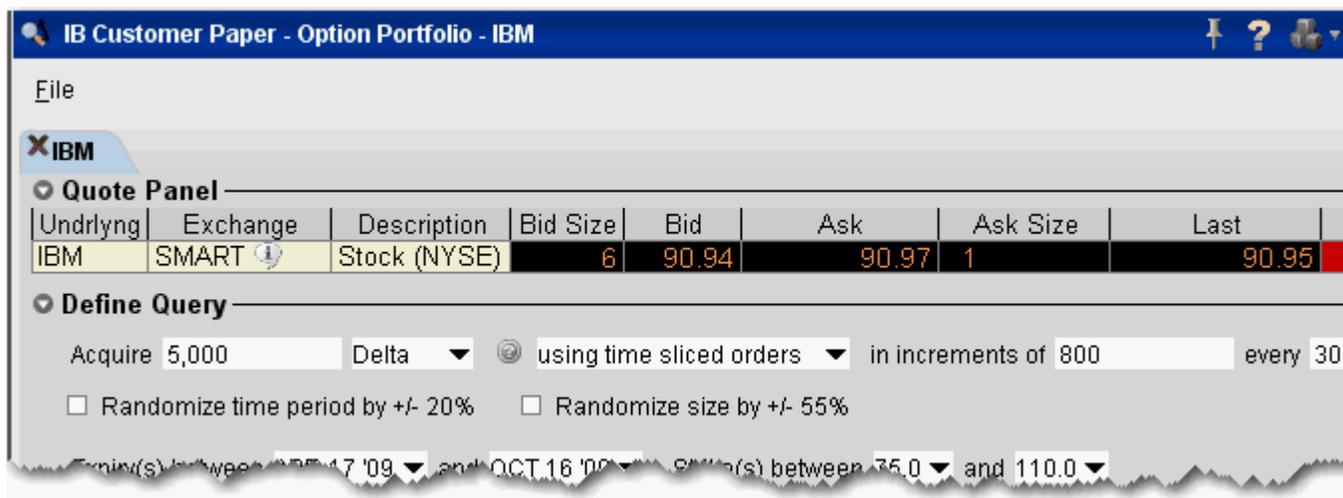
The Option Portfolio algorithm works within the user-defined query constraints, and evaluates the comprehensive options market data (including bid and ask price and size) to **minimize** the sum of the following, and find the lowest cost solution:

- **Cost to execute**, as represented by the bid/ask spread for each option in the Query Results list, specifically:

  ```
  (ask – bid) x (contract multiplier) x quantity
  ```

  summed over all orders in the Query Results list;

- **Commission** charged to fully execute all orders in the Query Results list;

- **Cost to hold the Query Results list for a given period of time**. This term is only relevant when the *Hold until* date is set to a value other then the current date. In this event, the holding cost is calculated as:

  ```
  [(option value on "hold until" date) – (solution order price for the

  option)] x (contract multiplier) x (signed quantity)
  ```

  summed over all orders in the Query Results list.

The algorithm continues to work and reevaluates the solution in the Query Results list every 30 seconds until the user submits the order group for execution, freezes the updates to evaluate the solution in more detail, or changes the query criteria.

Next: Define and Submit the Query

Define and Submit the Query

Define the query by entering the quantity of the risk dimension you wish to acquire, and setting optional specifications such as time slicing and randomization, an expiry and strike range, and an underlying reference price range and *Hold until* date. You can also elect to Create a Reference Portfolio and have the Option Portfolio query an optional portfolio with the same or better P&L.
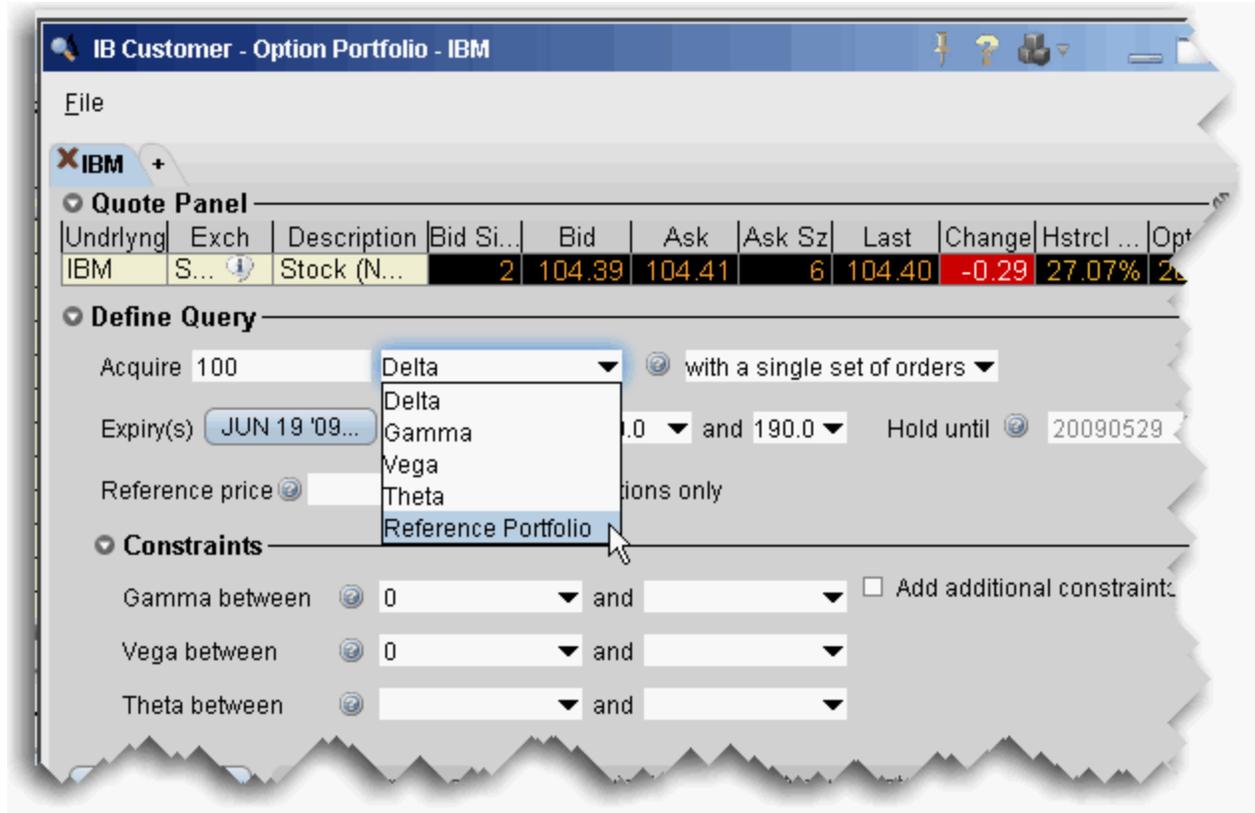
To define a query

1   Select the desired objective

    a   For the greeks, enter the position quantity you'd like to acquire.

The position quantity is equal to:

```
greek value x position x multiplier
```

For example, 20 long call options with a delta of .4989 would show a position Delta of approximately 1000. The position Delta calculation is:

```
.4989 x 20 x 100 = 997.8 OR
```

Compose Portfolio

Expiry	Right	Strike	Multiplier	Ratio	Action
Select ▾	Select ▾	Select ▾	100 ▾	1 ▾	Select ▾

Action	Ratio	Underly...	Type	Expiry	Strike	Right	Multiplier	
Buy	5	IBM	OPT	JUN 19 '09	100.0	CALL	100	
Buy	5	IBM	OPT	JUN 19 '09	110.0	PUT	100	

Submit Query   Freeze Updates   Risk Navigator   Not marketable now

Query   **P&L Charts**   **Trades**   **Portfolio**

Query Results

Quantity	Option/Stock	Net Value	Chng in Nt Vl	Delta	Gamma	Vega
172	JUN09 95.0 P	6,880.00	-1,111.73	-1,637.91	366.13	762
140	JUN09 100.0 C	79,800.00	-1,400.00	10,737.25	628.34	1,093
350	JUN09 105.0 P	94,675.00	-1,902.81	-17,829.18	2,268.84	3,510
358	JUN09 110.0 C	21,480.00	-1,790.00	6,693.71	1,706.93	2,461
138	Cash	138.00	.00	138.00	.00	
	Total	202,835.00	-6,204.54	-1,898.13	4,970.24	7,828

b   For a Reference Portfolio, use the Composer to define the legs of a portfolio.

2 Define any optional query parameters, which are defined below:

Parameter	Description
Time-sliced orders	Select this option to acquire the total objective in smaller increments, with orders being submitted at user-defined time intervals of seconds, hours or minutes.
Randomize time period by +/- 20%	When you check the *Randomize time* checkbox, the Option Portfolio randomly changes the user-defined time interval by any value up to as much as 20% in either direction. For example, an order with a time interval of 30 seconds might randomly be submitted at varying intervals of 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 35, 36 seconds.
Randomize size by +/- 55%	When you check the Randomize size checkbox, the Option Portfolio randomly changes the user-defined size increment by any value up to as much as 55% in either direction. For example, an order using increments of 500 might randomly return orders with an objective anywhere from 275 up to 775.
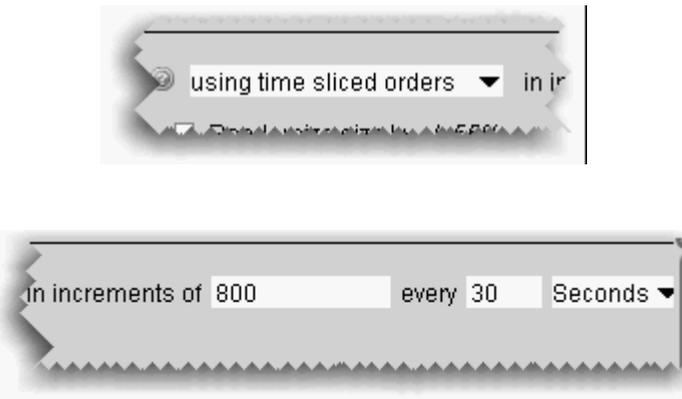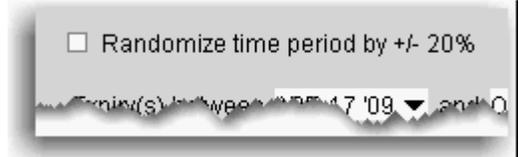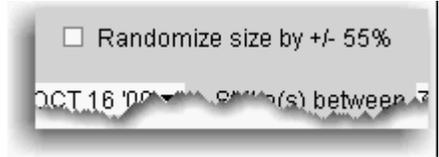
Parameter	Description
Expiry Range	Select an expiry or expirys you are willing to trade.
Strike Range	Select the range of strikes you are willing to trade.
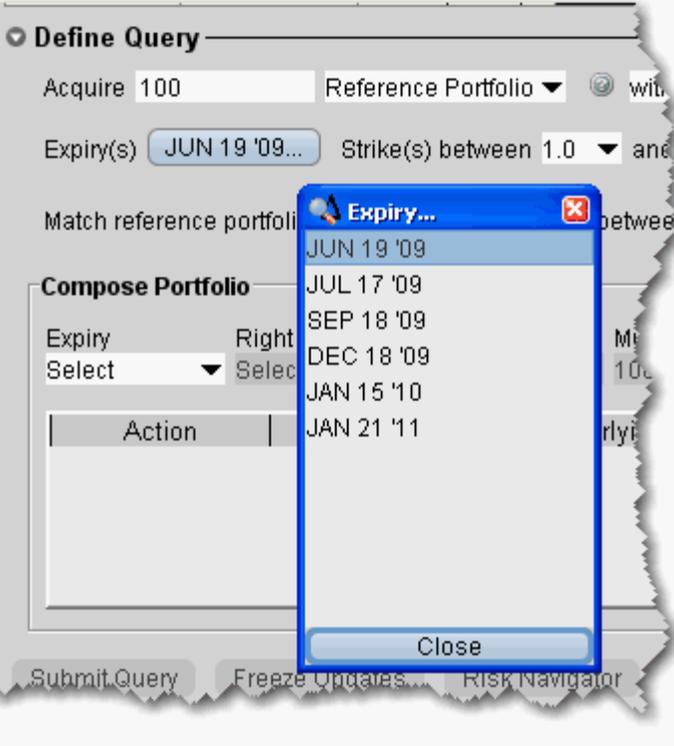
Parameter	Description
Reference Price	By default, the midpoint of the bid/ask of the underlying price is used to calculate the objective. Enter a reference price if you prefer to use a value other than the midpoint of the underlying price. Note that an alternate reference price cannot be used if the *Price between* constraint is used. The Reference Portfolio used the underlying price range as a high/low boundary when calculating P&L.
Hold until	Enter a date if you want to hold the solution in the Query Results list until a specific date.
Long/Short options only	Checked by default. Constrains the solution to only include long or short option trades, as appropriate. For example, when buying or selling Delta, long options would be more appropriate to avoid the risk of being short options. The text will change based on the objective and signed quantity. When requesting short gamma, short vega or long theta, the text will read "short options only."
Allow underlying leg	Check to allow a stock leg in the proposed solution list.
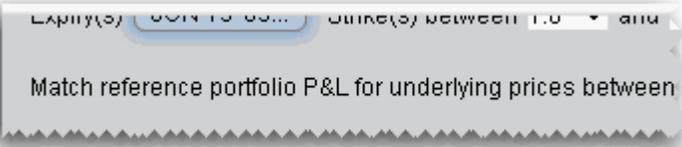
3   Add other constraints if needed (see Constrain the Query Results).

4   Submit the query by clicking the *Submit Query* button.

Create a Reference Portfolio

Constrain the Query Results

Option Portfolio allows you to constrain the query results in the risk dimensions other than the objective dimension. So, if your goal is to achieve a specific Gamma position, you will be able to constrain the resulting Delta, Vega and Theta. The algorithm imposes the following default constraints:

		Delta	Gamma	Vega	Theta
O		**Delta**	**Gamma**	**Vega**	**Theta**
b	Delta		> 0	> 0	
j					
e	Gamma	= 0			
c					
t	Vega	= 0			
i					
v					
e	Theta	= 0			

For example, the default Delta constraint ensures that the Gamma and Vega of the Query Results solution are positive.

To override the system defaults, enter a value in one or multiple input fields and click *Submit Query*.

Evaluate the Solution
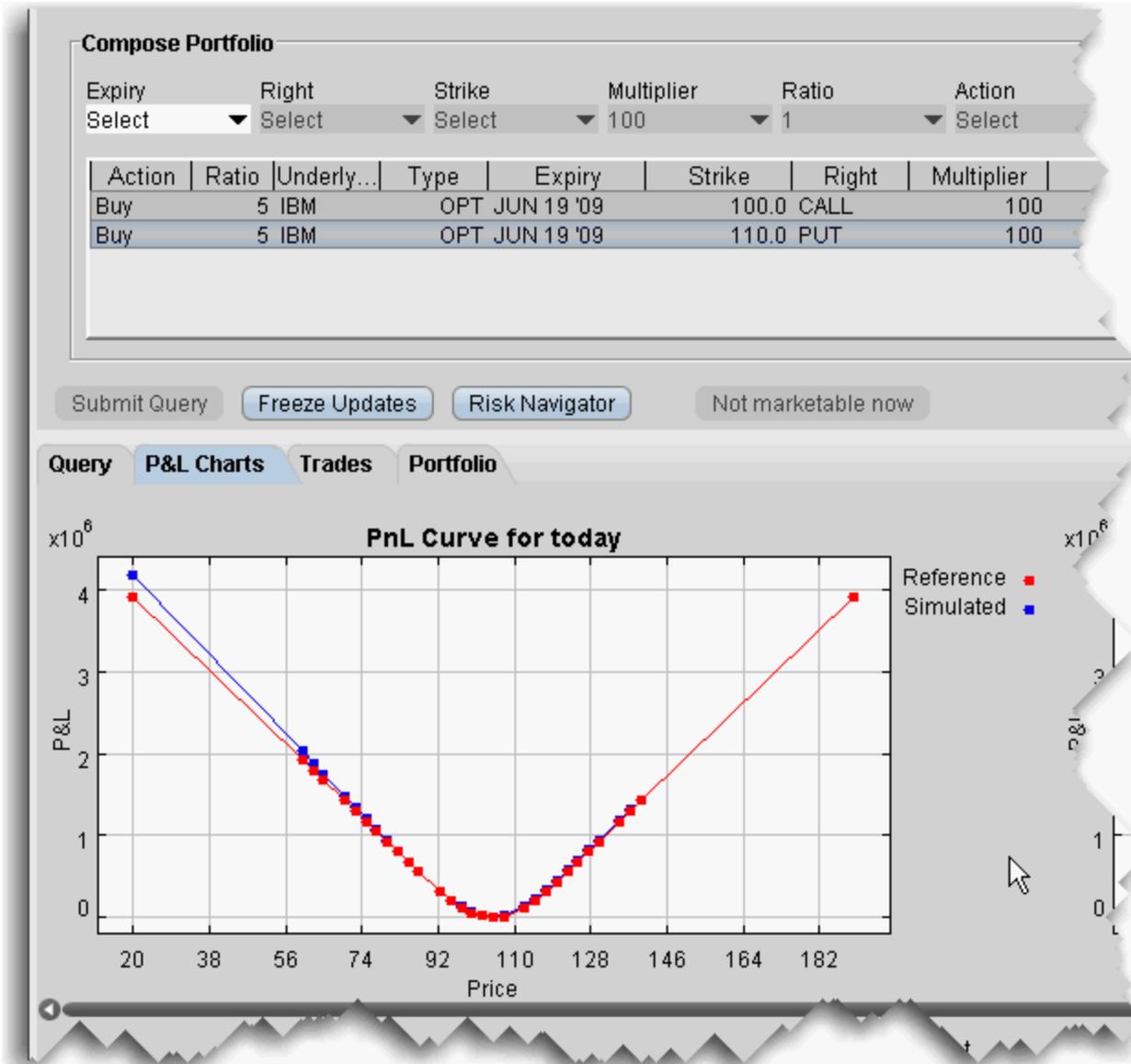
Freeze updates to the query to evaluate the solution, and use the IB Risk Navigator^{SM} to see how implementing the option portfolio will affect your current risk profile. For the Reference Portfolio, click the P&L Charts tab to compare P&L on the query results with that of the reference portfolio.

To stop the algorithm from updating results

1 Click *Freeze Updates* to keep the algorithm from reevaluating and displaying new solutions.

Note that the data will continue to tick but the Query List will remain unchanged.

View What-if Risk in the IB Risk Navigator^{SM}

You can view the risk summary for the proposed Option Portfolio solution list in the IB Risk Navigator, and add your existing portfolio to the What-if to see how acquired Greek risk dimension will affect your existing risk profile.

The above image is querying for a basket of trades to acquire 6,000 delta. We have elected to Freeze updates to the solution list and open the proposed list in the IB Risk Navigator. We click the Risk Navigator button, and within seconds the solution list opens in its own What-if Portfolio window, shown below:

To view the solution list in Risk Navigator

1   Click the **Risk Navigator** button to open a What-if scenario that contains the Query Results list.

The *What-if* is indicated by a red border around the portfolio, and is named "Option Portfolio."

2   Select any Report or Measure to see the isolated risk profile for the list.

You can also view the proposed solution list integrated with your current portfolio risk profile. Simply add your portfolio to the What-if scenario from the Option Portfolio.
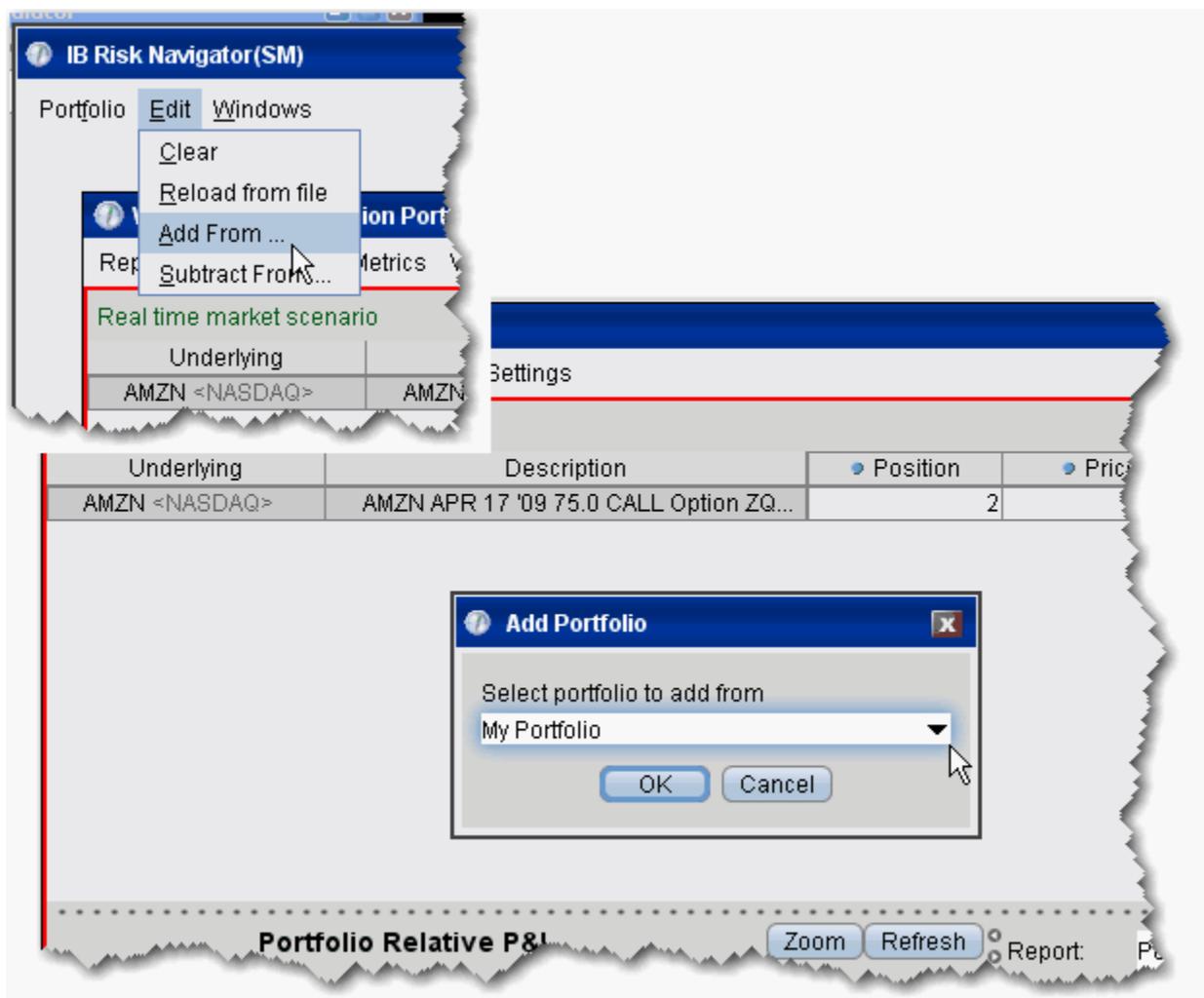
To add your portfolio to the What-if scenario

1   From the Edit menu of the IB Risk Navigator, select *Add From*.

2   Your actual portfolio, named My Portfolio, is the default selection. Click OK.

If you have created other portfolios, you may select another from the list.

3   The positions in your portfolio are added to the What-if scenario from the Option Portfolio solution list.

Below you can see the What-if portfolio outlined in red, and below, your actual portfolio. The highlighted positions are common to both, but distinct at this point.

After you elect to Add your portfolio, the two sets of positions are summed in the new, integrated What-if Portfolio, shown below.

What-If Portfolio: Option Portfolio *

Report   Dimensions   Metrics   View   Settings   **Portfolio**

Real time market scenario

Description	Positi...	Price	Value	Delta (Δ)
AMZN Stock (NASDAQ.NMS)	16,868	71.40	1,204,375	16,868
AMZN APR 17 '09 37.5 CALL Option ...	10	33.92	33,920	969
AMZN APR 17 '09 50.0 CALL Option ...	18	21.85	39,330	1,730
AMZN APR 17 '09 55.0 CALL Option ...	2	17.20	3,440	183
AMZN APR 17 '09 60.0 CALL Option ...	9	12.75	11,475	758
AMZN APR 17 '09 65.0 CALL Option ...	125	8.85	110,625	9,147
AMZN APR 17 '09 70.0 CALL Option ...	100	5.70	57,000	5,840
AMZN APR 17 '09 75.0 CALL Option ...	176	3.25	57,200	7,362
AMZN APR 17 '09 80.0 CALL Option ...	30	1.68	5,040	791
AMZN JUL 17 '09 60.0 CALL Option ...	10	16.95	16,950	748
AMZN JAN 15 '10 75.0 PUT Option W...	-55	17.68	-97,240	2,268
AMZN JAN 15 '10 80.0 CALL Option ...	-21	12.60	-26,460	-1,124
AMZN JAN 15 '10 80.0 PUT Option W...	-16	20.62	-32,992	736
AMZN JAN 15 '10 85.0 CALL Option ...	-50	10.55	-52,750	-2,429
AMZN JAN 15 '10 85.0 PUT Option W...	-83	23.70	-196,710	4,215
AMZN JAN 15 '10 90.0 CALL Option ...	24	9.20	22,080	1,048
AMZN JAN 15 '10 90.0 PUT Option W...	-102	27.15	-276,930	5,646

ScaleTrader

Introduction

The ScaleTrader can help prevent increasingly deteriorating prices on large sized orders.

- About ScaleTrader
- Basic Scale Orders
- Basic Scale with Profit Orders
- Scale Profit Orders with Initial Component
- Scale Profit with Restore Size
- View Scale Progress
- Use the ScaleChart
- Combo Orders
- Scale Order Examples
- ScaleTrader Summary

About ScaleTrader

ScaleTrader is a flexible trading tool that implements a sophisticated trading algorithm, allowing you to scale into a large position without being subject to increasingly deteriorating prices, or to trade continually over a specified price range to capture a user-defined profit offset amount. ScaleTrader supports limit and relative orders stock orders, and combination limit orders.

ScaleTrader Summary and Status

Below the Scale chart, the Summary and Status sections give you more information on the current scale order.

The **Summary** shows the number of price levels in your scale, the average price of the total order, the amount, and the range of the scale between the top and bottom prices.

The **Status** displays the displays the size of your filled position, and shows the latest Buy price and Sell price working for the active scale order.

Use the Start and Stop buttons to start and stop the algo. Use Dismiss to close the ScaleTrader.

Basic Scale Orders

ScaleTrader provides many "add ons" that allow you to customize your order based on your trading strategy. A basic scale order might involve simply scaling into or out of a position, with or without a profit trade.

To create a basic scale order

1   Select the action, Buy or Sell.

2   Enter the total order size.

3   Enter a component size. The component size defines the number of units submitted per order, and is used in determining how many order components and price levels will be created.

> **Note:** Components must be entered in round lots. IF you do not enter a different (and smaller) value in the Subsequent Comp. Size field, this value will be used for both initial and subsequent components.

4   Enter the **Starting Price** at which the first component will be submitted.

Note: The value you enter in the Starting Price field is reflected by the blue line in the ScaleChart, and vice versa.

5   Enter the **Price Increment** that will be subtracted from the last filled price (for a BUY order) or added to the last filled price (for a SELL order) to create the new price for the next component.

Note: The number of components along with the Starting Price and Price Increment are used to calculate the Bottom Price, which is the lowest price at which any of the order components will be submitted. If you change the Bottom Price, the Price Increment is recalculated.

For an example of how a basic scale order like this one will behave, see Example 1: Basic Scale Order.

To view the progress of your scale order, use the View Scale Progress feature.

Basic Scale with Profit Orders

ScaleTrader provides many "add ons" that allow you to customize your order based on your trading strategy. A basic scale order might involve simply scaling into or out of a position, with or without a profit trade. The Profit taking orders are submitted against a filled order component at a specific price level, where the price is calculated using the fill price +/- the defined profit offset.

To create a basic scale with profit orders

1   Select the action, Buy or Sell.

2   Enter the total order size.

3   Enter a component size. The component size defines the number of units submitted per order, and is used in determining how many order components and price levels will be created.

> **Note:** Components must be entered in round lots. IF you do not enter a different (and smaller) value in the Subsequent Comp. Size field, this value will be used for both initial and subsequent components.

4   Enter the **Starting Price** at which the first component will be submitted.

> **Note:** The value you enter in the Starting Price field is reflected by the blue line in the ScaleChart, and vice versa.

5   Enter the **Price Increment** that will be subtracted from the last filled price (for a BUY order) or added to the last filled price (for a SELL order) to create the new price for the next component.

> **Note:** The number of components along with the Starting Price and Price Increment are used to calculate the Bottom Price, which is the lowest price at which any of the order components will be submitted. If you change the Bottom Price, the Price Increment is recalculated.

6   Check *Create profit taking order* and enter a profit offset amount.

For an example of how a basic scale order like this one will behave, see Example 2: Scale order with Profit-Taking Orders.

Scale Profit Orders with Initial Component

ScaleTrader provides many "add ons" that allow you to customize your order based on your trading strategy. A basic scale order might involve simply scaling into or out of a position, with or without a profit trade. The Profit taking orders are submitted against a filled order component at a specific price level, where the price is calculated using the fill price +/- the defined profit offset. If you use a higher Initial Component size, the profit orders are submitted against a component size AS IF the components were submitted at the Starting Price + Price Increment.

To create a scale profit order with Initial Component

1   Select the action, Buy or Sell.

2   Enter the total order size.

3   Enter the Initial Component size.

4   Enter the Subsequent Component size.

Note: In cases where you want to use a one-time initial component size for profit-taking, you must define the subsequent component size, otherwise the order will use the Initial Component Size to submit all orders. The initial component size must always be the larger of the two sizes.

5   Enter the **Starting Price** at which the first component will be submitted.

Note: The value you enter in the Starting Price field is reflected by the blue line in the ScaleChart, and vice versa.

6   Enter the **Price Increment** that will be subtracted from the last filled price (for a BUY order) or added to the last filled price (for a SELL order) to create the new price for the next component.

Note: The number of components along with the Starting Price and Price Increment are used to calculate the Bottom Price, which is the lowest price at which any of the order components will be submitted. If you change the Bottom Price, the Price Increment is recalculated.

7   Check *Create profit taking order* and enter a profit offset amount.

Note: Once you check the Profit taking option, the Top Price value is displayed. This value is calculated by first getting the difference between the number of components in the Initial and Subsequent sizes, or Initial - Subsequent/Subsequent, or 400 - 100/100, or 3. Multiply the price increment x this number and add it to the starting price to get the top price, or .02 x 3 + 23.80, or 23.86. Although the Initial Component is submitted at the Starting Price, or in this case 23.80, the opposite-side profit orders are sent in AS IF the first three 100 share components were submitted at the start price/fill price + price increment, or 23.82, 23.84 and 23.86.

For an example of how a scale profit order with a larger initial component will behave, see Example 3: Scale with Profit and Initial Component size.

Scale Profit with Restore Size

ScaleTrader provides many "add ons" that allow you to customize your order based on your trading strategy. This section discusses how the Restore size after taking profit feature will affect your order.
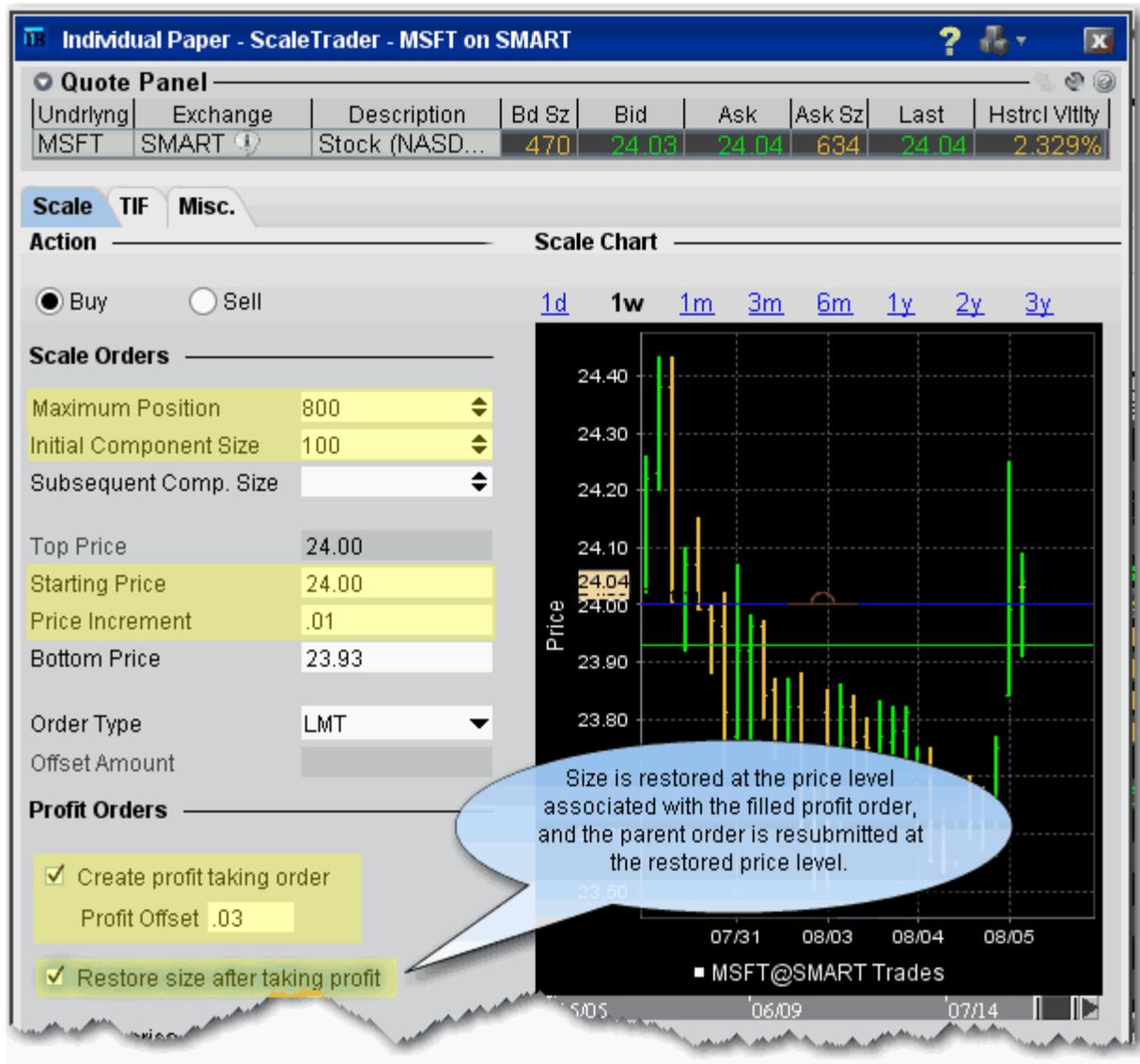
To create a scale profit order with Restore Size

1   Select the action, Buy or Sell.

2   Enter the total order size.

3   Enter the Initial/Subsequent Component size.

4   Enter the **Starting Price** at which the first component will be submitted.

> **Note:** The value you enter in the Starting Price field is reflected by the blue line in the ScaleChart, and vice versa.

5   Enter the **Price Increment** that will be subtracted from the last filled price (for a BUY order) or added to the last filled price (for a SELL order) to create the new price for the next component.

> **Note:** The number of components along with the Starting Price and Price Increment are used to calculate the Bottom Price, which is the lowest price at which any of the order components will be submitted. If you change the Bottom Price, the Price Increment is recalculated.

6   Check *Create profit taking order* and enter a profit offset amount.

7   Check *Restore size after taking profit*.

For an example of how the Restore size scale feature will behave, see Example 4: Scale order with Restore Size.

Use the ScaleChart

The ScaleChart provides a visual method of modify the scale prices. Use the lines and handles in the chart to set the Starting Price and bottom price and have TWS calculate the price increment.

- To move the prices, grab a line in the chart.
- When you move the blue Starting Price line, the other lines move in the same increment.

- When you move the Bottom Price line, the Price Increment is recalculated since the distance between the starting and bottom prices have changed. If the Initial Component is higher than the Subsequent Component size, the Top Price is also recalculated.

- If you move the top price, the Initial Component Size, Price Increment and Bottom Size are all recalculated.

View Scale Progress

You can monitor the progress of your scale orders using the **Scale Progress** box.

To View Scale Progress

- Right-click the scale order line and select *View Scale Progress*.

The Scale Progress Box

The **Scale Progress** box displays the complete scale price ladder, the Open/Filled component list for the parent scale order, and the Open/Filled component list for the child profit orders.

Original scale order description to buy 10000 @ starting price (22.41), component size (500), scale offset (0.01) x profit offset (0.02).

Profit taking orders are scaled to the subsequent component size, in this example, 500 lot components, and are submitted using the price +/- the offset amount, after a component fills.

Initial component at the starting price

Currently working component

Currently working profit component

Scale Order Examples

The data assumptions in the table below are repeated for all examples, with other variables described as needed. These examples do not encompass all of the potential algorithmic results that would occur on partially filled component levels.

Example 1: Basic Scale Order

Example 2: Scale order with Profit-Taking Orders

Example 3: Scale with Profit and Initial Component size

Example 4: Scale order with Restore Size

Example 5: Restart ScaleTrader

Example 6: Restart ScaleTrader with Filled Initial Component Size

Example 1: Basic Scale Order

Data Assumptions:

Label	Value
NBBO	$10.12 - $10.15
Action	Buy
Total Order Size	1000
Initial/Subsequent Component Size	100
Starting Price	$10.10
Price Increment	.02
Order Type	Limit
Time in Force	GTC (this is set on the Basic tab of the order ticket)

This is an order to buy 1000 shares scaled into 10 components of 100 shares each. The first 100 share component is submitted as a buy limit order at the Starting Price of $10.10. When the complete order for fills, the next component of 100 shares is submitted at $10.08 (starting price - price increment). If price movement results in this order becoming unmarketable, the remainder of the order is held. Once the price level fills, the next component for 100 share is submitted at $10.06 (last filled price level - price increment). This pattern continues until all components have filled, or you cancel the order.

Example 2: Scale order with Profit-Taking Orders

Data Assumptions:

Label	Value
NBBO	$10.12 - $10.15
Action	Buy
Total Order Size	1000
Initial/Subsequent Component Size	100
Starting Price	$10.10
Price Increment	.02
Order Type	Limit
Time in Force	GTC (this is set on the Basic tab of the order ticket)
Create profit taking order	Enabled
Profit Offset	.03

Like example 1, this is an order to buy 1000 shares scaled into 10 components of 100 shares each. In addition, we have instructed TWS to submit profit-taking sell orders against each order component, with a .03 profit offset.

The first 100 share component is submitted as a buy limit order at the Starting Price of $10.10. When the component order fills two things happen. The next component of 100 shares is submitted at $10.08 (starting price - price increment), and a sell order is submitted for 100 shares at $10.13 (fill price + profit offset).

When the $10.08 price level fills, a sell order for 100 at $10.11 (fill price + profit offset) is submitted. This pattern continues until all components have filled, or you cancel the order. Note that the order will be held if any parent component becomes unmarketable, but the profit orders can continue to work without holding up the order.

Example 3: Scale with Profit and Initial Component size

Data Assumptions:

Label	Value
NBBO	$10.12 - $10.15
Action	Buy
Total Order Size	1000
Initial Component Size	400
Subsequent Component Size	100
Top Price	$10.16
Starting Price	$10.10
Price Increment	.02
Order Type	Limit
Time in Force	GTC (this is set on the Basic tab of the order ticket)
Create profit taking order	Enabled
Profit Offset	.03

The difference between this order and the order in Example 2 above is that the Initial Component Size is larger than the basic (or subsequent) component size. The feature works in conjunction with the profit taking orders, which we have enabled at an offset of $.03.

To understand the larger initial component, let's first look at the mechanics of using the same component size of 100 with the $.03 profit offset. In this case, a BUY order would be submitted at the starting price of $10.10, and after it fills, the profit SELL order would be submitted at the fill price + profit offset, or $10.13. When this fills, you have bought at $10.10 and sold at $10.13 for a profit of $.03 per share.

Now let's look at the example above with the Initial Component of 400. TWS submits the first component as a BUY order for 400 at the Starting Price, or $10.10. But when this fills, the profit sell orders are submitted in Subsequent Component-sized lots AS IF the 400 shares were sent in as BUY orders at $10.10, $10.12, $10.14 and $10.16 (up to the non-editable Top Price). So the sell orders are submitted for $10.13, $10.15, $10.17 and $10.19. Then the normal 100-share components kick in for the remainder of the 1000-share order.

Example 4: Scale order with Restore Size

Data Assumptions:

Label	Value
NBBO	$10.12 - $10.15
Action	Buy
Total Order Size	1000
Initial Component Size	100
Subsequent Component Size	100
Starting Price	$10.10
Price Increment	.02
Order Type	Limit
Time in Force	GTC (this is set on the Basic tab of the order ticket)
Create profit taking order	Enabled
Profit Offset	.03
Restore size after taking profit	Enabled

The Restore Size feature restores the component size at a specific price level. In this example, the order is scaled into 10 components of 100 shares each. The first 100-share component is submitted at $10.10. After this level fills, the next limit order for 100 is submitted at $10.08, and profit order of 100 at $10.13 (fill price + profit offset) is submitted. Once the sell order fills at $10.13 taking the profit, the filled quantity of 100 is put back into the original order at $10.10 and the $10.08 component is cancelled.

Example 5: Restart ScaleTrader

Data Assumptions:

Label	Value
NBBO	$10.12 - $10.15
Action	Buy
Total Order Size	1000
Initial Component Size	100
Subsequent Component Size	100
Starting Price	$10.10
Price Increment	.02
Order Type	Limit
Time in Force	GTC (this is set on the Basic tab of the order ticket)
Create profit taking order	Enabled
Profit Offset	.03
Restore size after taking profit	Enabled
Restart ScaleTrader	Enabled
Initial Position	200

The *Restart* feature helps you resume a busted ScaleTrader order from the point of the bust. A bust results in a lost connection between the scale and profit order processes, leaving two independent scaled orders. You can cancel these orders and create a new ScaleTrader *Restart* order.

The Existing Position value of 200 tells ScaleTrader that two of the components have filled, at $10.10 and $10.08, respectively. It "restarts" the scale order beginning with the 3rd component. The first buy order is for 100, and is submitted at $10.06. The profit-taker orders are set up for all three components, 100 at $10.13, 100 at $10.11, and 100 at $10.09, which are submitted. When the sell order for 10.13 fills, the size is restored at the 10.10 price level.

Note that this feature is only available if the profit-taking order and Restore Size instructions are used.

Example 6: Restart ScaleTrader with Filled Initial Component Size

A busted scale order results in a lost connection between the scale and profit order processes, leaving only two independent scaled orders. The *Restart* instruction is designed to help you resume a cancelled or busted ScaleTrader order, starting from the point at which the scaled sequence left off. First, cancel the two separated scale orders. Next, create a new ScaleTrader *Restart* order by identifying your current position and telling ScaleTrader how much of the initial component size filled in the busted order. ScaleTrader will restart the order at the appropriate component and price level.

Note: The *Filled Initial Component Size* field only becomes active if the **Existing Position** value is less than the **Initial Component Size**.

Profit Offset: $0.02

Restore Size after taking profit: box checked on Order Ticket *Scale* tab

Restart ScaleTrader: box checked on Order Ticket *Scale* tab

Existing Position value: 500

Filled Initial Component Size: 1200 (this value must be *greater than* or *equal to* the **Existing Position** value, up to a maximum of the **Initial Component Size**).

The Filled Initial Component Size of 1200 tells ScaleTrader that there is an unfilled quantity of 800 (of the 2000 Initial Component Size). The first buy order for 800 is submitted at $10.15, and profit-taker orders of 1000 and 200 are set at $10.17 and $10.18, respectively.

Activate the *Restart ScaleTrader* instruction using the checkbox on the *Scale* tab of the **Order Ticket**. This feature is only available if the profit-taking order and Restore Size instruction is used, and if the value in the Existing Position field is less than the Initial component size.

Combo Orders

ScaleTrader supports guaranteed combination orders. When using ScaleTrader for creating generic combination orders, note the following:

- Scale combos can only be sent as Limit orders.

- When you create a STK STK generic combo, the ratios are automatically simplified when you save the combo. This means that the combo you define in the Combo Selection box to Buy 300 XYZ and sell 700 ABC ends up on the ticker line as Buy 3 XYZ and Sell 7 ABC.

- Scale parameters such as *Total Order Size* and *Initial* and *Subsequent Component* sizes are expressed in terms of the total combo. For example, if you buy a generic STK STK combo defined as *Buy 10 DELL, Sell 1 IBM*, and set the Initial Component Size to 5, the first component order would be: Buy (5 x 10) DELL, Sell (5 x 1) IBM.

- Price fields, including the Starting Price,

Use ScaleTrader for combination orders

Non-guaranteed combos are not supported in ScaleTrader.

1 Create a combination market data line on the trading screen:

    a In a blank line, type an underlying symbol and hit *Enter*.

    b Choose *Combinations*, then select *Option Combos*.

    c Choose a destination, and use the ComboTrader Combo Selection box to define a strategy. Click OK.

2 In the combo line on the trading screen, click the **Ask Price** to create a BUY order; click the **Bid Price** to create a Sell order.

3 In the Type field select LMT. Only Limit orders are supported for Scale combos.

4 Set the time in force to DAY or GTC.

5 Set the scale attributes:

    a **Scale Init**. - (Initial Component Size) This value defines the size of the first, or initial, order component. For combination orders, the size parameters are expressed in terms of the combo, for example, if the spread is defined as buy 2 IBM, sell 3 MSFT, the Initial Component Size of 10 would result in buying 20 IBM (10*2) and selling 30 MSFT (10*3).

    b **Scale Sub** - (Subsequent Component Size) Optional field used in conjunction with the **Scale Init** field, this value defines the order size of the subsequent scale order components. If left blank, all order components will be sized based on the Scale Init value. For combination orders, this value is in terms of the combo, see Scale Init above.

    c **Scale Incr**. - (Price Increment) This amount is used to calculate the per-unit price of each component in the scale ladder. For a combination order, the pre-unit price is the combined price of all legs in the combo, for example, buying IBM at $15.00 and selling MSFT at $6.00 would yield a combined price of (2*$15.00) - (3*$6.00) = $12.00. Note that the price increment cannot be negative.

    d **Scale Profit Offset** - A value in this field instructs TWS to submit profit-taking orders, and defines the minimum amount of profitability you will accept to exit a position. ScaleTrader will submit an opposite-side profit order against the original order, using the limit price of the parent component plus/minus the profit offset. For example, if you submit a 10 contract BUY limit order at $12.00, with a component size of 2 and enter $1.00 as the Scale Profit Offset, as soon as the first component executes, TWS will submit a 2 contract SELL limit order at $13.00.

6 If necessary, modify the **Lmt Price** which is used as the starting price for the series of order components. Note that for combination orders, the price represents the combined price of all legs in the combo, for example, buying IBM at $15.00 and selling MSFT at $6.00 would yield a combined price of (2*$15.00) - (3*$6.00) = $12.00.

7 Transmit the order.

You can monitor the progress of your scale orders by right-clicking on the order line and selecting <u>View Scale Progress</u>.

ScaleTrader Summary

Use the ScaleTrader page to view real-time status of your scale orders, including filled and total quantity, filled, remaining, and total value, and the percent filled for each scale. The ScaleTrader page is a system-generated page with its own layout that you create from the Page menu.

You can right-click an order in the Order Management panel and choose to View Scale

Progress for the selected order.

Algos
: ScaleTrader Summary

IBAlgos

Introduction

Use IBAlgos to implement optimal trading strategies which help balance market impact with risk to achieve the best execution for larger orders.

- Create IBAlgo Orders
- Arrival Price
- Percentage of Volume Strategy
- VWAP
- TWAP
- Minimize Impact (for Options)
- Balance Impact and Risk (for Options)

Create IBAlgo Orders

Use IBAlgos to automatically balance market impact with risk on your large volume orders. Algos are available for US Equities and US Equity Options. You can create algo orders from the trading window or using the Order Ticket.
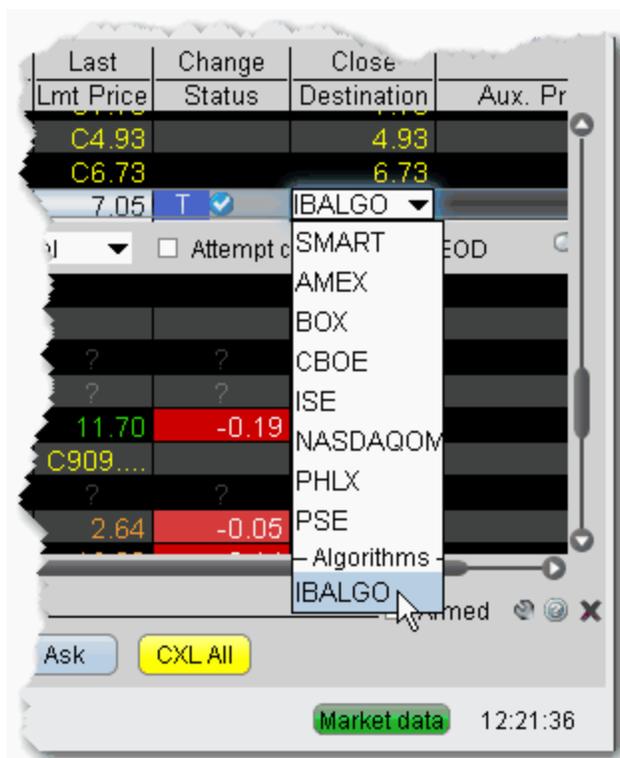
To set up an IBAlgo order

1   On the trading page, create an order by clicking the Ask price for a Buy order or Bid price for a Sell order.

2   Click in the Destination field in the order line, scroll downs to the Algorithms section and select IBALGO.

> **Note:** You must use the order **Destination** field, not the market data **Exchange** field.

3   In the Algo fields, define the algorithm. Only those strategies valid for the instrument type will appear in the strategy selection list. Based on the strategy you select, the necessary parameters will display.

Arrival Price

This strategy is designed to achieve or outperform the bid/ask midpoint price at the time the order is submitted, taking into account the user-assigned level of market risk which defines the pace of the execution, and the user-defined target percent of volume.

- Max Percentage - enter a max percentage of the average daily volume from 1% to 50%.

- Urgency/Risk Aversion - select from the most aggressive *Get Done* to the least aggressive *Passive*. This value determines the pace at which the order will be executed. High urgency may result in greater market impact.

- Start time/End time - change the default times at which the order is submitted and cancelled using the Start/End Time fields. **Note that the algo will stop at the designated end time regardless of whether the entire quantity has filled**.

- Allow trading past endtime - if checked, the algo will attempt completion by the specified end time, but will continue to work past the end time to execute any unfilled portion. Available if you have specified an End Time.

- Attempt completion by EOD - if checked your order will be execute by the end of day if possible. Please note that a portion of your order may be left unexecuted if the risk of the price changing overnight is less than the extra cost of executing the whole order today regardless of whether the EOD box is checked.

For more information on IBAlgos, see the IBAlgos Software Highlights.

Percentage of Volume Strategy

Allows you to participate via volume at a user-defined rate. Order quantity and volume distribution over the day is determined using the target percent of volume you entered along with continuously updated volume forecasts calculated from TWS market data.

- Target Percentage - enter the target percentage of participation in average daily volume.

- Start time/End time - change the default times at which the order is submitted and cancelled using the Start/End Time fields. **Note that the algo will stop at the designated end time regardless of whether the entire quantity has filled**.

- Attempt to never take liquidity - check to ensure the algo order will not hit the bid or lift the offer if possible. This may help to avoid liquidity-taker fees, and could result in liquidity-adding rebates. However, it may also result in greater deviations from the benchmark.

> **Note:** IB will use best efforts not to take liquidity, however, there will be times that it can not be avoided.

For more information on IBAlgos, see the IBAlgos Software Highlights.

VWAP

Designed to achieve or outperform the VWAP price, calculated from the time you submit the order to the close of the market.

- Max Percentage - enter a max percentage of the average daily volume from 1% to 50%.

- Start time/End time - change the default times at which the order is submitted and cancelled using the Start/End Time fields. **Note that the algo will stop at the designated end time regardless of whether the entire quantity has filled**.

- Allow trading past endtime - if checked, the algo will attempt completion by the specified end time, but will continue to work past the end time to execute any unfilled portion. Available if you have specified an End Time.

    Note: If you specify and Start and End time, TWS confirms that acceptability of the time period using yesterday's trading volume. If the time period you define is too short, you will receive a message with recommended time adjustments.

- Attempt to never take liquidity - check to ensure the algo order will not hit the bid or lift the offer if possible. This may help to avoid liquidity-taker fees, and could result in liquidity-adding rebates. However, it may also result in greater deviations from the benchmark.

    Note: IB will use best efforts not to take liquidity, however, there will be times that it can not be avoided.

For more information on IBAlgos, see the IBAlgos Software Highlights.

TWAP

Designed to achieve the time-weighted average price calculated from the time you submit the order to the close of the market.

Trade When - select from:

- Marketable - order trades when marketable based on your limit price.
- Matching Midpoint - order trades when limit price = midpoint
- Matching Same Side - order trades when limit price = bid or ask
- Matching Last - order trades when limit price = last price

- Start time/End time - change the default times at which the order is submitted and cancelled using the Start/End Time fields. **Note that the algo will stop at the designated end time regardless of whether the entire quantity has filled**.

- Allow trading past endtime - if checked, the algo will attempt completion by the specified end time, but will continue to work past the end time to execute any unfilled portion. Available if you have specified an End Time.

For more information on IBAlgos, see the IBAlgos Software Highlights.

Minimize Impact (for Options)

Designed to minimize market impact by slicing the order over time as defined by the Max Percentage value.
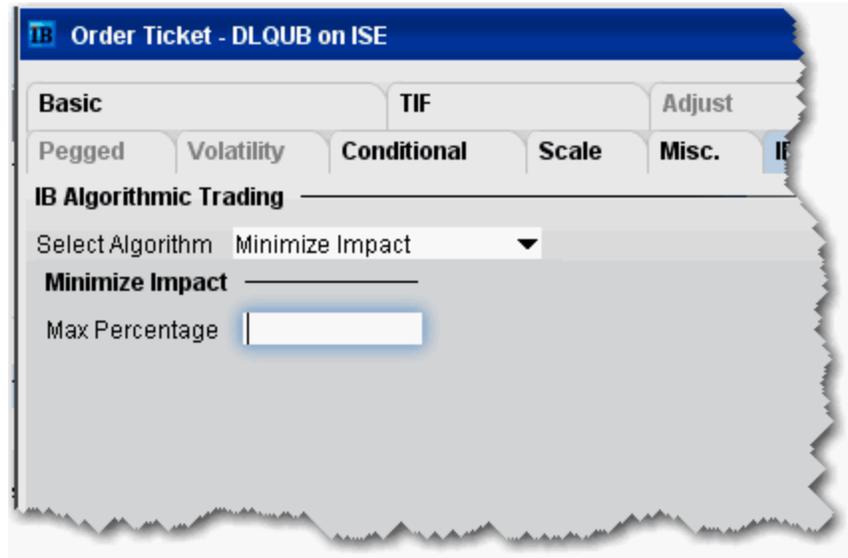
- Max Percentage - enter a max percentage of the average daily volume from 1% to 50%.

For more information on IBAlgos, see the IBAlgos Software Highlights.

Balance Impact and Risk (for Options)

Balances the market impact of trading the option with the risk of price change over the time horizon of the order by taking into account the user-assigned level of market risk which defines the pace of the execution, and the user-defined target percent of volume.

- Max Percentage - enter a max percentage of the average daily volume from 1% to 50%.

- Urgency/Risk Aversion - select from the most aggressive *Get Done* to the least aggressive *Passive*. This value determines the pace at which the order will be executed. High urgency may result in greater market impact.

  This feature is designed to affect large orders that affect a significant percentage of the average daily volume.

- Attempt completion by EOD - if checked your order will be executed by the end of day if possible. If not checked, a portion of your order may be left unexecuted if the risk of the price changing overnight is less than the extra cost of executing the whole order today.

For more information on IBAlgos, see the IBAlgos Software Highlights.

CSFB Algos

Introduction

To use CSFB algos, select CSFBALGO as the routing destination.

- Crossfinder
- Float
- Guerrilla
- Pathfinder
- Reserve
- Strike
- Tex
- TWAP
- VWAP
- Work It
- Work It IW
- 10B 18

Crossfinder

This strategy locates liquidity among a broad list of dark pools, with continuous crossing capabilities. Using dynamic smart routing logic, CrossFinder will spread your order over multiple destinations. This algo will fill at the midpoint or better, and may not execute.
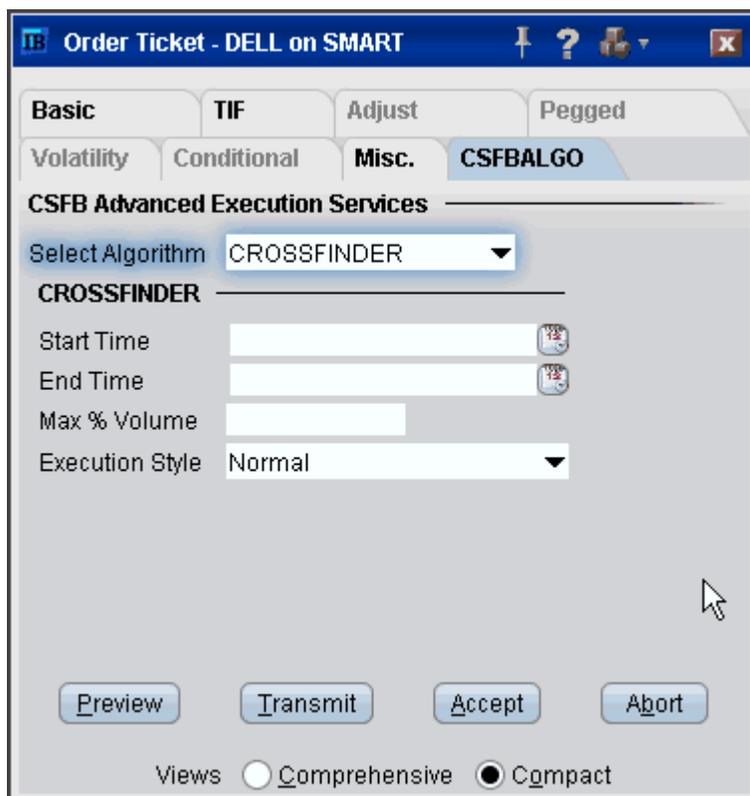
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Float

This tactic displays only the size you want shown and floats on the bid, midpoint, or offer until completion. Enter a display size and choose a patient, normal, or aggressive execution.
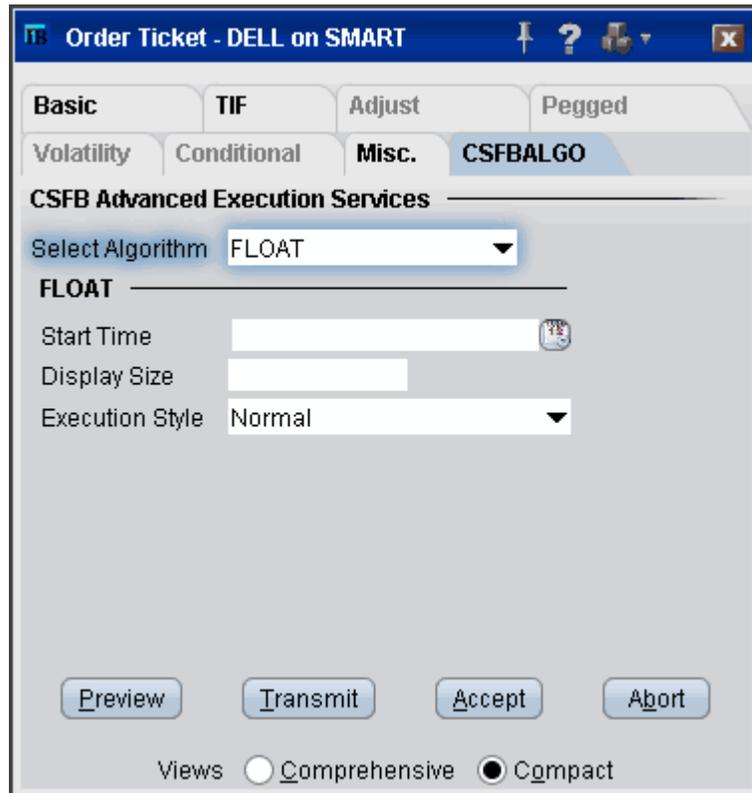
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Guerrilla

The GUERRILLA algo works differently depending on the Execution Style you select.

- Normal and Passive modes: This tactic works orders without displaying bids or offers. When liquidity materializes, it seeks to aggressively participate in the flow. If liquidity is poor, the order may not complete.

- Aggressive mode: This will hit bids/take offers in an intelligent way based on a fair price model. It never posts bids or offers.

To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Pathfinder

This tactic gives you direct market access via Credit Suisse's smart order routing infrastructure. Orders routed through PathFinder are routed immediately to various destinations with the best price and liquidity. Credit Suisse will simultaneously sweep all available liquidity and post the remainder at your limit price. PathFinder will intelligently and dynamically post across multiple destinations.
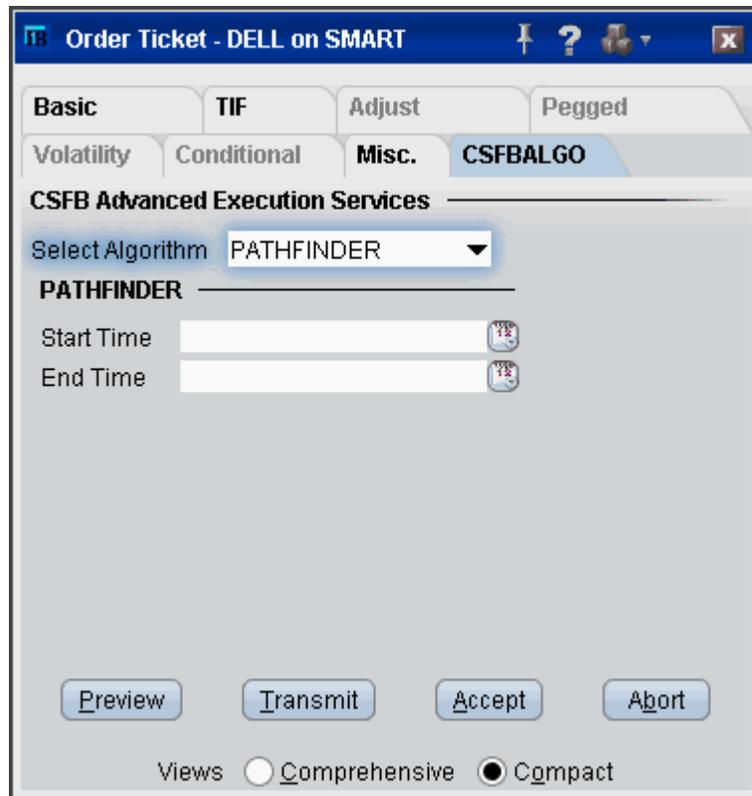
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Reserve

Displays the size you want shown at your price instruction (market or limit). Upon getting filled, it sends out the next piece until completion.
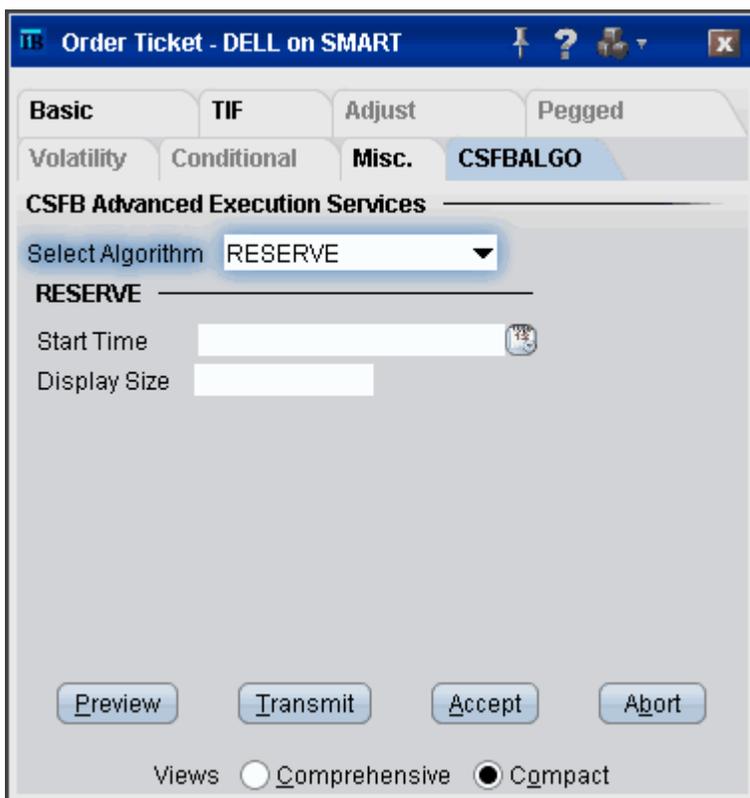
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Strike

This is a very aggressive tactic that will hit bids/take offers that are better than your limit price, but will never post bids or offers. It achieves high participation rates. Note it is not a pure sweep and can sniff out hidden liquidity. As a result, it is often a better choice than placing a limit order directly into the market.
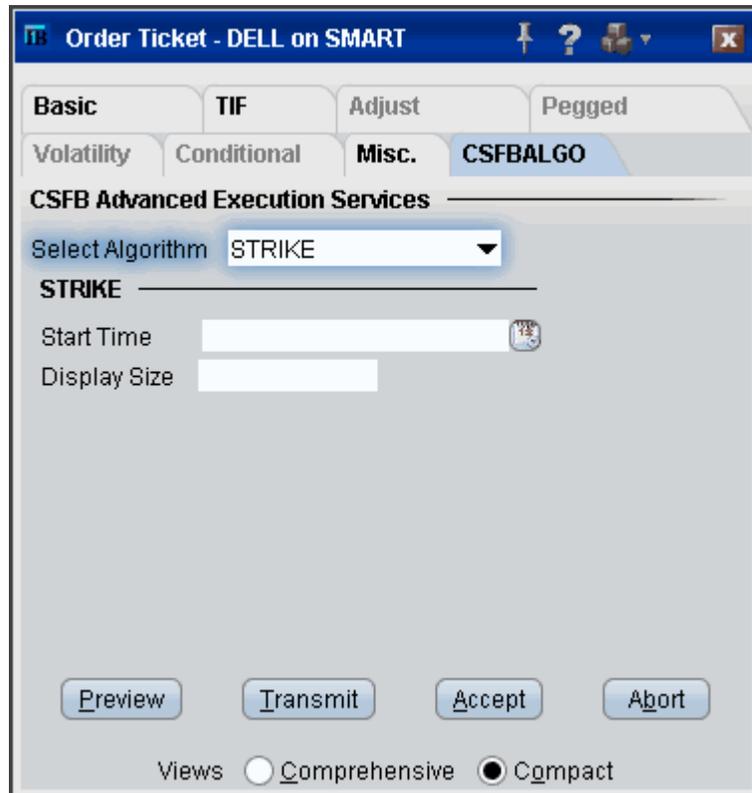
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Tex

Designed to minimize implementation shortfall. The tactic takes into account movements in the total market and in correlated stocks when making pace and price decisions. Timing is based on price and liquidity.
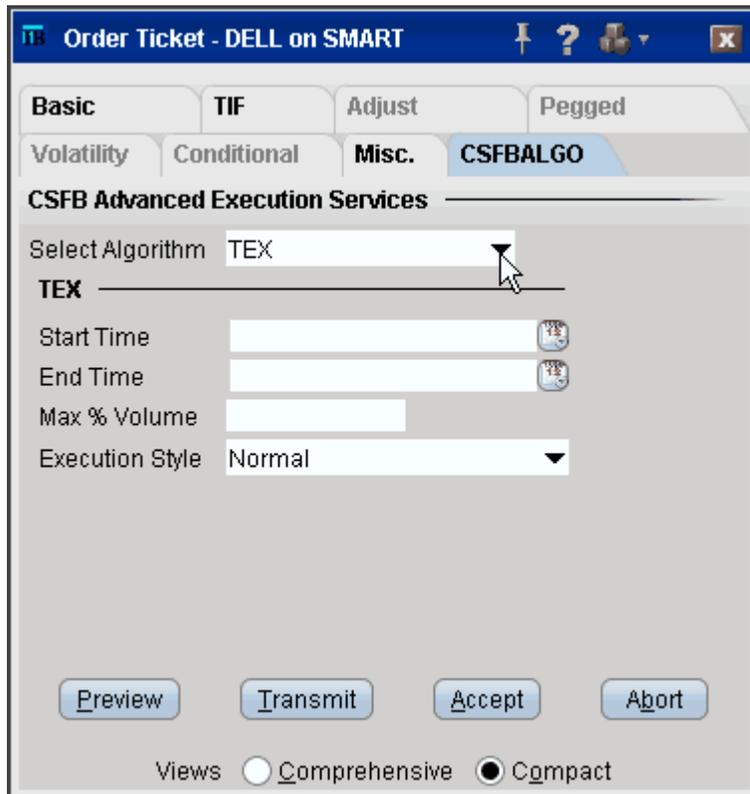
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

TWAP

The system trades based on the clock, i.e., on a 2 hour order the system is 25% done after 30 minutes, 50% done after an hour, etc. Unlike VWAP, TWAP (time weighted average price) does not speed up/slow down based on projected volume or price moves. However, it does use smart limit order placement strategies throughout the order.
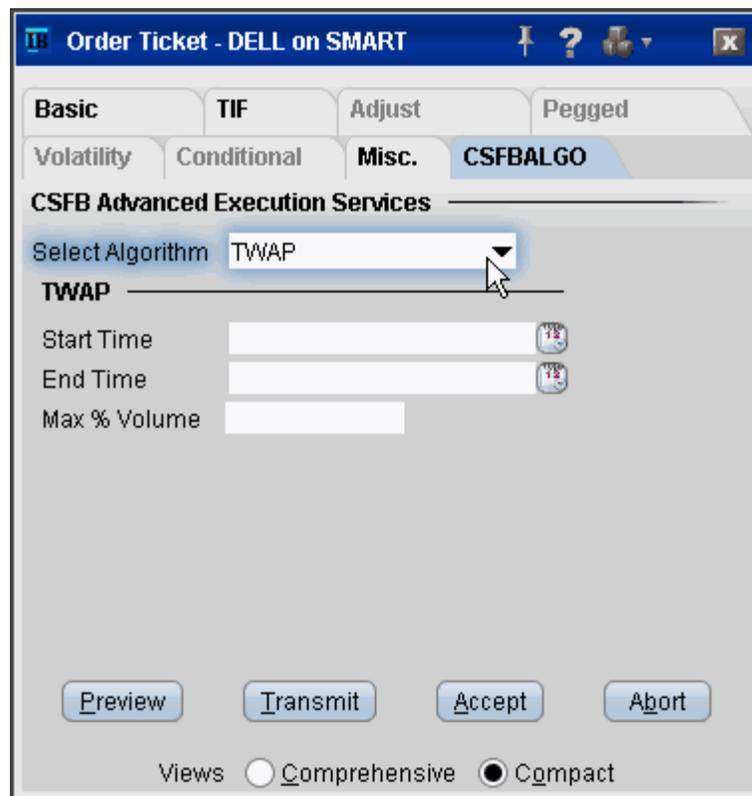
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

VWAP

System attempts to match the VWAP (volume weighted average price) from the start time to the end time. A unique and powerful feature is the ability to accept a maximum percent volume limit ("don't be more than 20% of the volume.") The system trades over your time period, subject to your price and volume constraints.
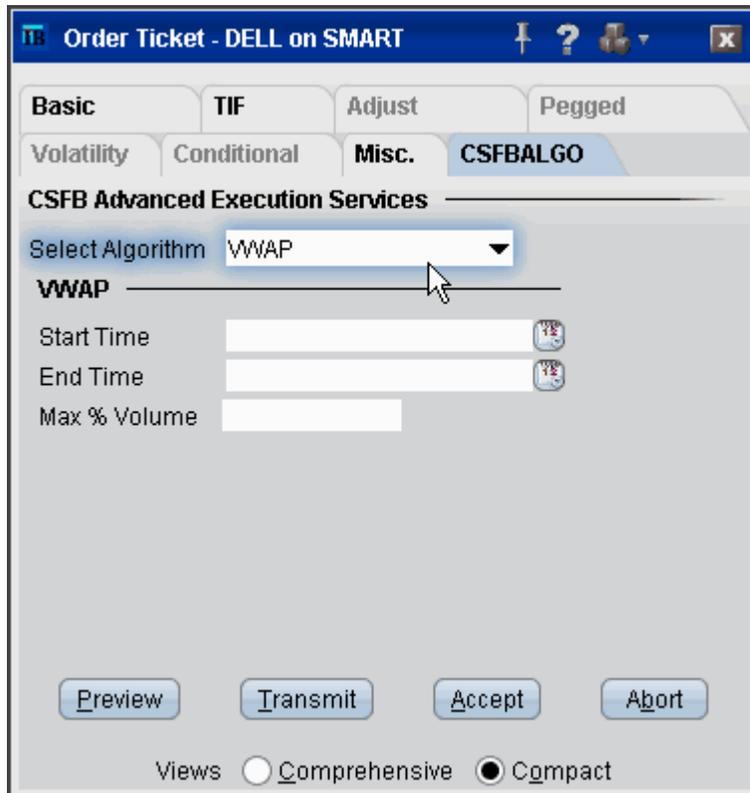
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Work It

The objective is to get the trade done at or better than the arrival price, which is the price at the time the order was entered. Participation rates will vary based on price and other factors. You can control the participation rate using minimum and maximum % volume constraints. The order may finish before your end time if there is sufficient liquidity.
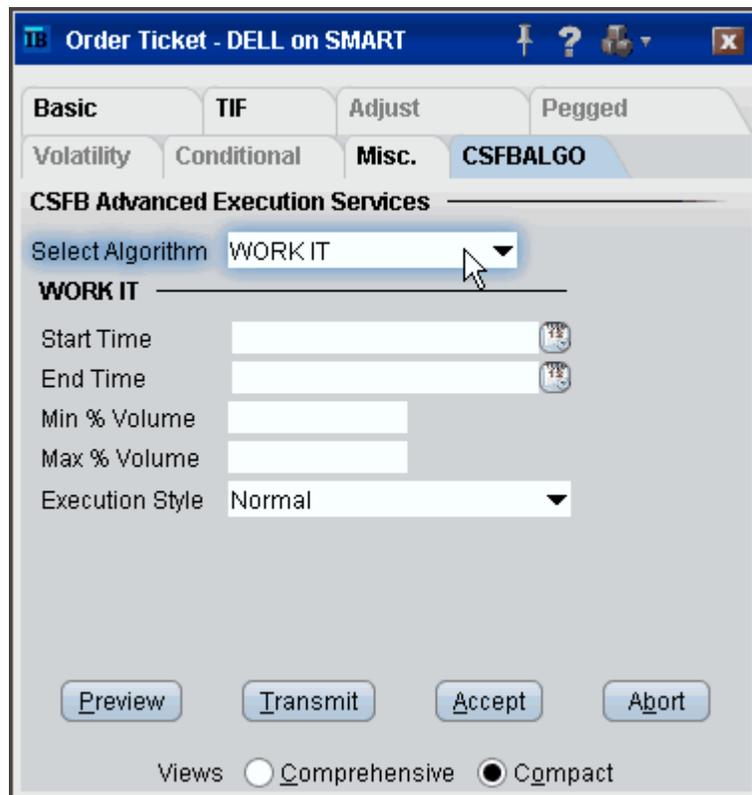
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Work It IW

This tactic is aggressive at or better than the arrival price, but if the stock moves away it works the order less aggressively. However, if the stock moves in your favor, it will act like Strike and quickly get you done. This tactic does not accept maximum or minimum % volume. Use regular Work It if you need to control participation rate.
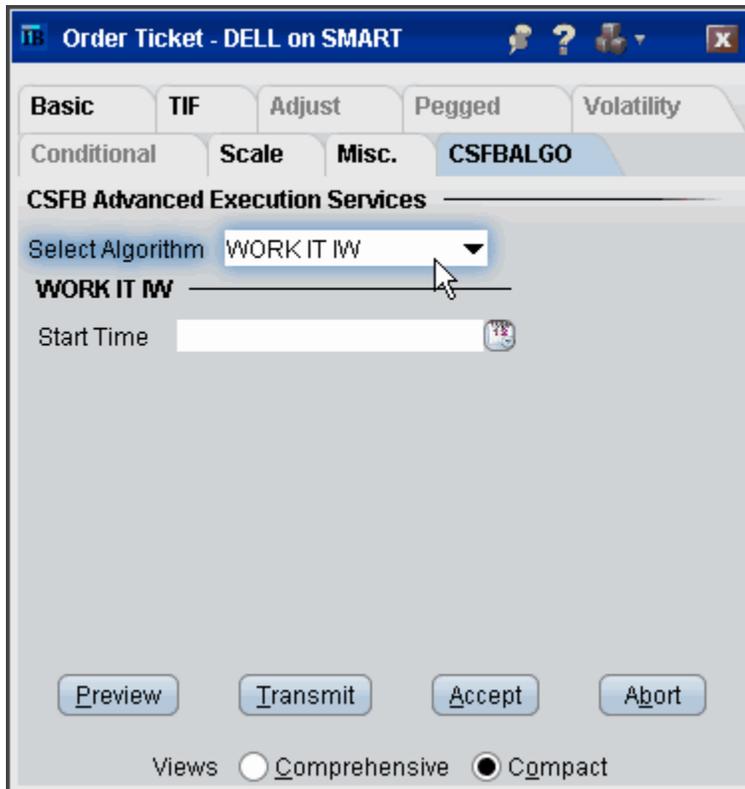
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

10B 18

This Corporate Buy Back tactic will assist the trader in managing the execution of a corporate buy back order by conforming to the price test rules as set forth by SEC Rule 10b-18. The trading benchmark for the Corporate Buy Back tactic is the volume weighted average eligible price from the start of the trade to the end. The Corporate Buy Back tactic does not guarantee it will finish the entire order because of the price tests.
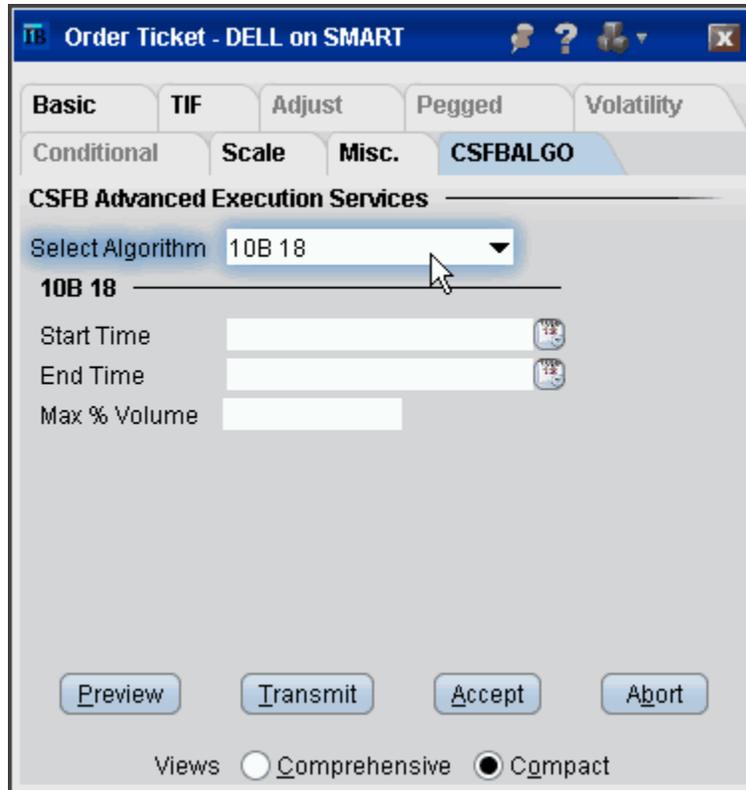
To use CSFB algos, select CSFBALGO as the destination on the Basic tab.

Jefferies Algos

Introduction

To use Jefferies algos, select JEFFALGO as the routing destination.

- Buyback
- Post
- Seek
- Strike
- TWAP
- Volume Participation
- VWAP

Adaptive Arrival Price

This strategy enhances the typical arrival price

Buyback

This strategy provides volume-participation trading to issuers seeking safe harbor (SEC Rule 10b-18) in stock repurchases.

To use Jefferies algos, select JEFFALGO as the routing destination from the *Basic* tab on the Order Ticket. Set up algo parameters from the JEFFALGO tab.

Post

This strategy can limit the impact of large orders by using the *Display Size* to show only a small slice of the order to the markets.
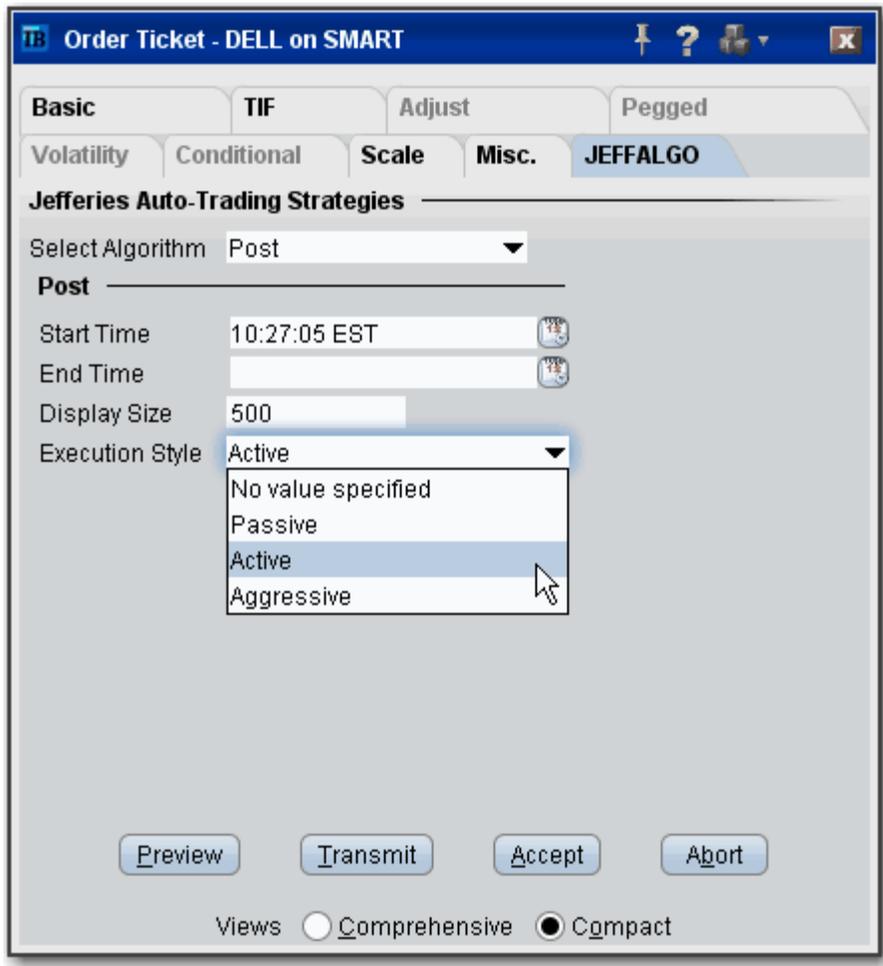
To use Jefferies algos, select JEFFALGO as the routing destination from the *Basic* tab on the Order Ticket. Set up algo parameters from the JEFFALGO tab.

Seek

This strategy pursues best execution for illiquid securities by seeking out hidden liquidity from multiple sources, including hidden and displayed market centers.
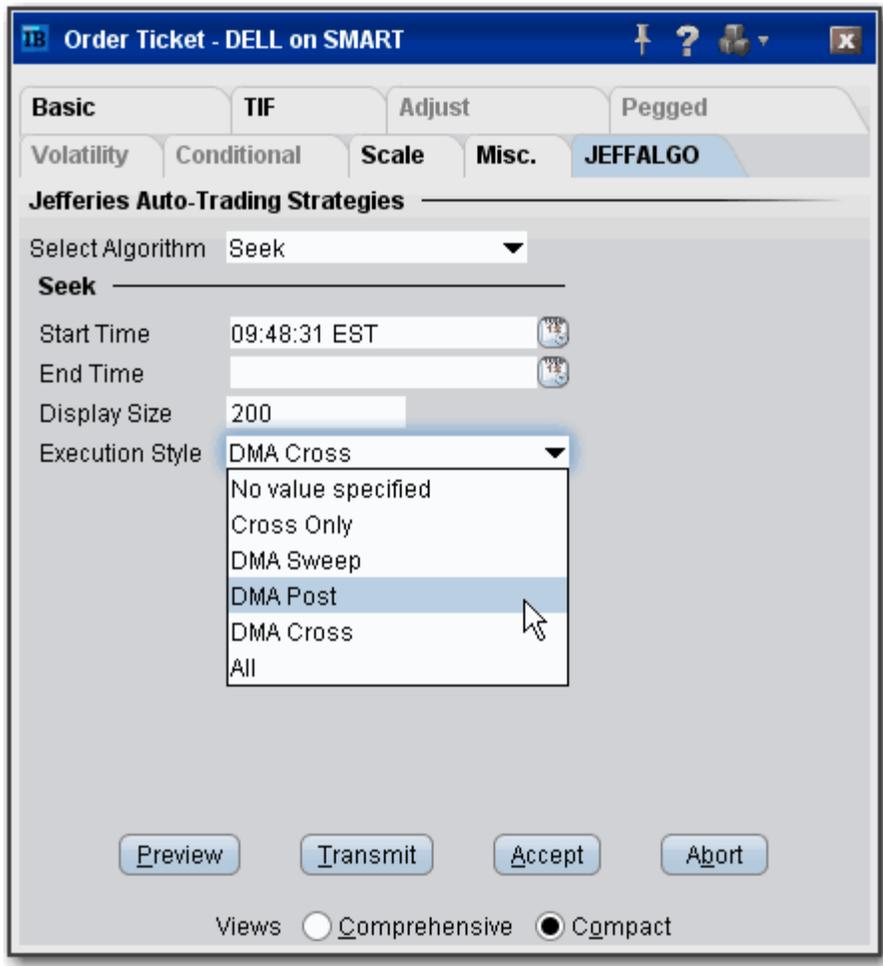
To use Jefferies algos, select JEFFALGO as the routing destination from the *Basic* tab on the Order Ticket. Set up algo parameters from the JEFFALGO tab.

Strike

This strategy seeks best execution in the user-designated time period, while minimizing market impact and volatility cost and tracking the arrival price.
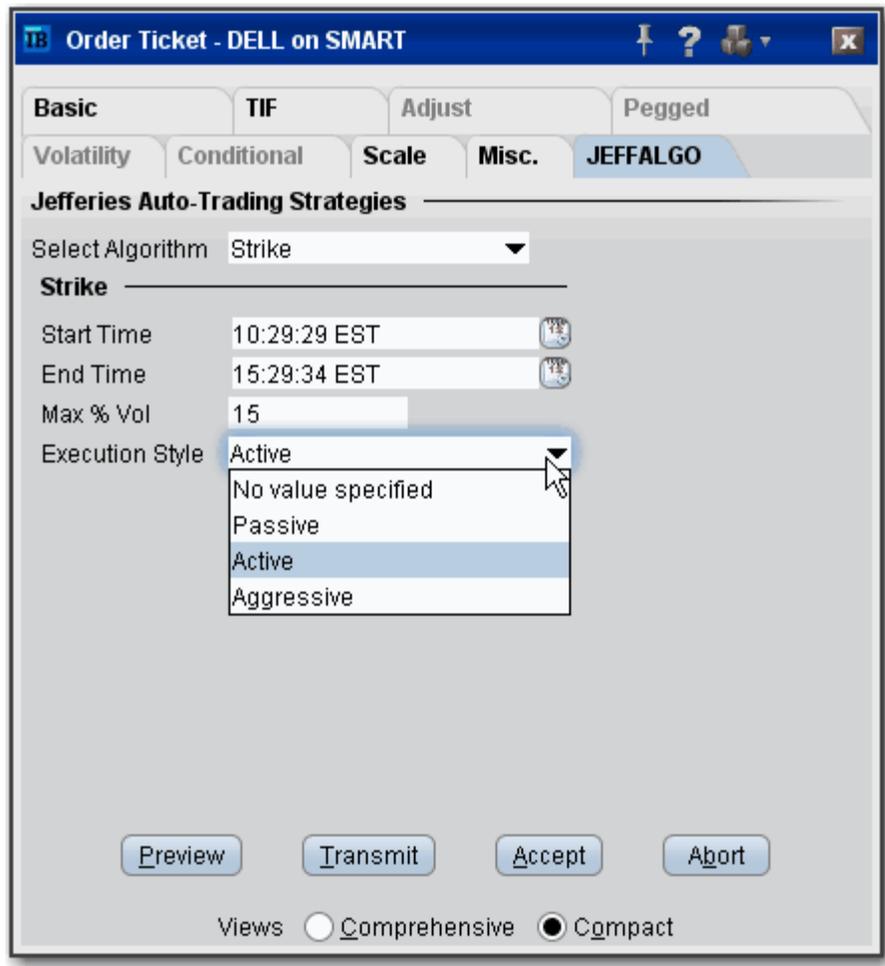
To use Jefferies algos, select JEFFALGO as the routing destination from the *Basic* tab on the Order Ticket. Set up algo parameters from the JEFFALGO tab.

TWAP

This strategy spreads transactions evenly over the designated time period by slicing the total order quantity into smaller orders.
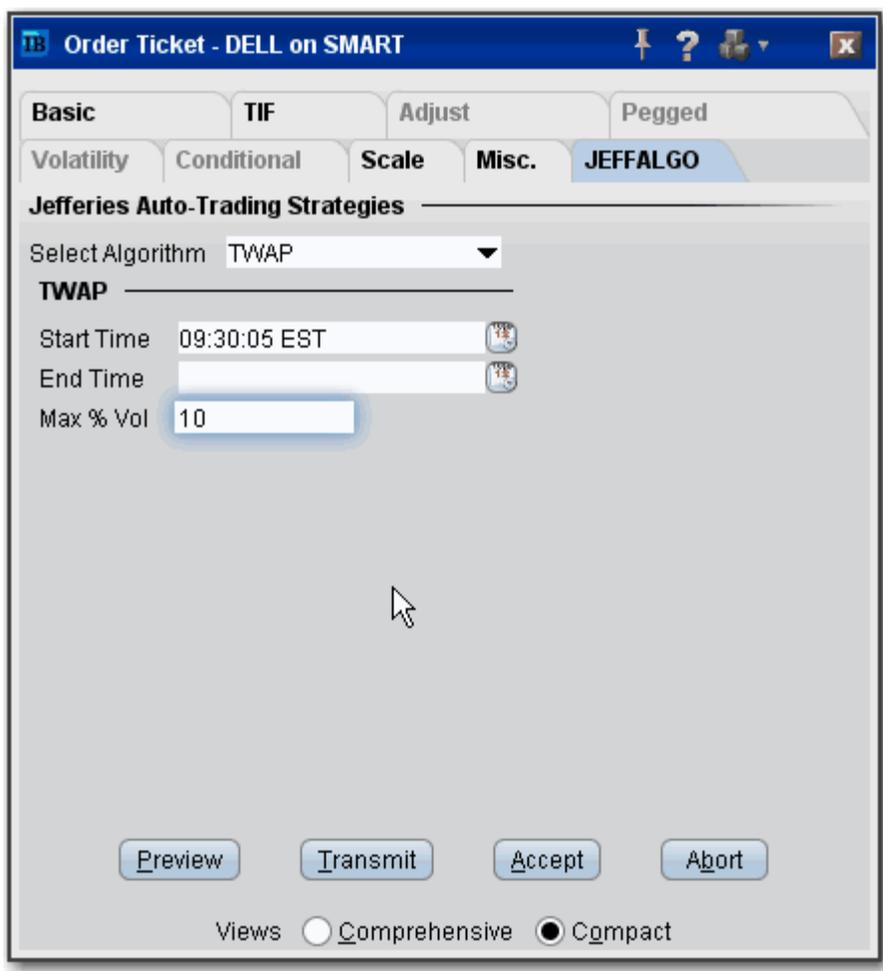
To use Jefferies algos, select JEFFALGO as the routing destination from the *Basic* tab on the Order Ticket. Set up algo parameters from the JEFFALGO tab.

Volume Participation

This strategy allows the user to designate the percentage of stock to be executed during a specified period of time to keep in line with the printed volume. The impact of the trade is directly linked to the volume target you specify.
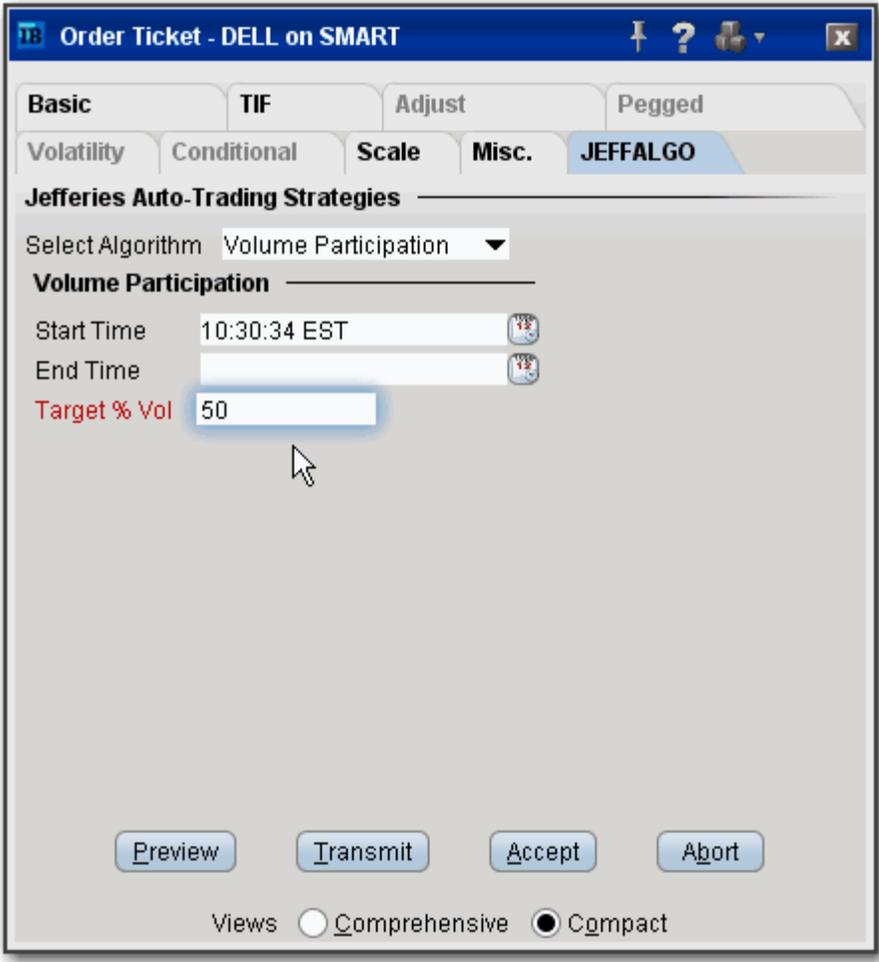
To use Jefferies algos, select JEFFALGO as the routing destination from the *Basic* tab on the Order Ticket. Set up algo parameters from the JEFFALGO tab.

VWAP

This strategy automatically manages transactions to achieve the all-day or intra-day VWAP through a proprietary algorithm.
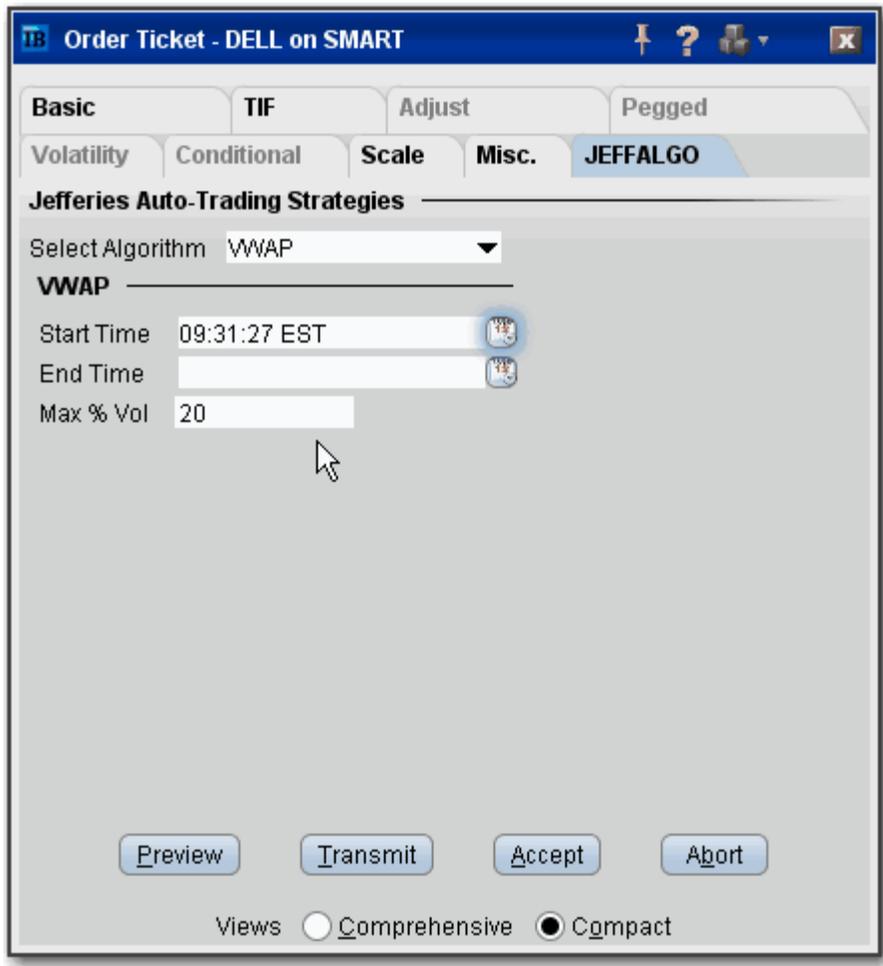
To use Jefferies algos, select JEFFALGO as the routing destination from the *Basic* tab on the Order Ticket. Set up algo parameters from the JEFFALGO tab.

Order Types

TWS offers more than 50 different order types, comprising basic and advanced orders, and algos, attributes and times in force. The information in this section is divided into:

- [Basic Order Types](#)
- [Advanced Order Types](#)
- [Volatility Orders](#)
- [Times in Force](#)
- [Order Attributes](#)

Basic Order Types

- [Limit](#)
- [Market](#)
- [Stop](#)
- [Stop Limit](#)
- [Limit if Touched](#)
- [Market if Touched](#)
- [Trailing Market if Touched](#)
- [Trailing Limit if Touched](#)
- [Limit-On-Close](#)
- [Market-On-Close](#)
- [Market with Protection](#)
- [ISE Stock Exchange Midpoint Match](#)
- [Market-to-Limit](#)
- [Pegged to Stock](#)
- [Pegged-to-Market](#)
- [Pegged to Midpoint](#)
- [Box Top](#)
- [Price Improvement Auction](#)
- [Relative/Pegged-to-Primary](#)
- [Trailing Stop](#)
- [Trailing Stop Limit](#)
- [VWAP](#)

Limit

A limit order is an order to buy or sell a contract ONLY at the specified price or better.

To create a Limit order

1 Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2 In the *Type* field select LMT as the order type.

3 In the *Lmt Price* field, enter the price at which you want the order to execute.

4 To transmit the order, click the "T" in the Status field.

For a more detailed description of limit orders and the products and exchanges on which they're supported, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Market

A market order is an order to buy or sell an asset at the bid or offer price currently available in the marketplace. When you submit a market order, you have no guarantee that the order will execute at any specific price.

To create a Market order

1 Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2 In the *Type* field select MKT as the order type.

3 To transmit the order, click the "T" in the Status field.

For a more detailed description of market orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Stop

A Stop order becomes a market order to buy or sell securities or commodities once the specified stop price is attained or penetrated. A Stop order is not guaranteed a specific execution price.

To create a Stop order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select **STP** as the order type.

3   Enter the Stop Election price in the *Aux. Price* field.

4   To transmit the order, click the "T" in the Status field.

For a more detailed description of stop orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Stop Limit

A Stop Limit order is similar to a stop order in that a stop price will activate the order. However, unlike the stop order, which is submitted as a market order when elected, the **stop limit** order is submitted as a limit order. Use the **Lmt Price** and **Aux. Price** fields on the trading screen to enter orders requiring multiple prices or values.

To enter a Stop Limit order

1 Click in the **Ask Price** field to initiate a BUY order, or the **Bid Price** field to initiate a SELL order.

2 Click in the *Type* field and select **STP LMT** as the order type.

3 Enter the Limit price in the *Lmt Price* field.

4 Enter the Stop Election price in the *Aux. Price* field.

Note: You can enable the system to automatically adjust the limit price if you change the stop price. To activate this feature, on the **Configure** menu select *Order*, then select *Auto-Adjust Stop-Lmt Price*. The limit price will move based on the offset implied when you set the original limit and stop election prices.

For a more detailed description of stop limit orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Limit if Touched

A limit if touched order is designed to buy (or sell) a contract below (or above) the market, at the limit price or better. The Aux. Price value is the trigger to submit the limit order at the specified limit price.

To create a Limit if Touched order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select LIT as the order type.

3   In the *Lmt Price* field, enter the price at which you want the order to execute.

4   In the *Aux. Price* field, enter the "touched" price to trigger the order.

5   To transmit the order, click the "T" in the Status field.
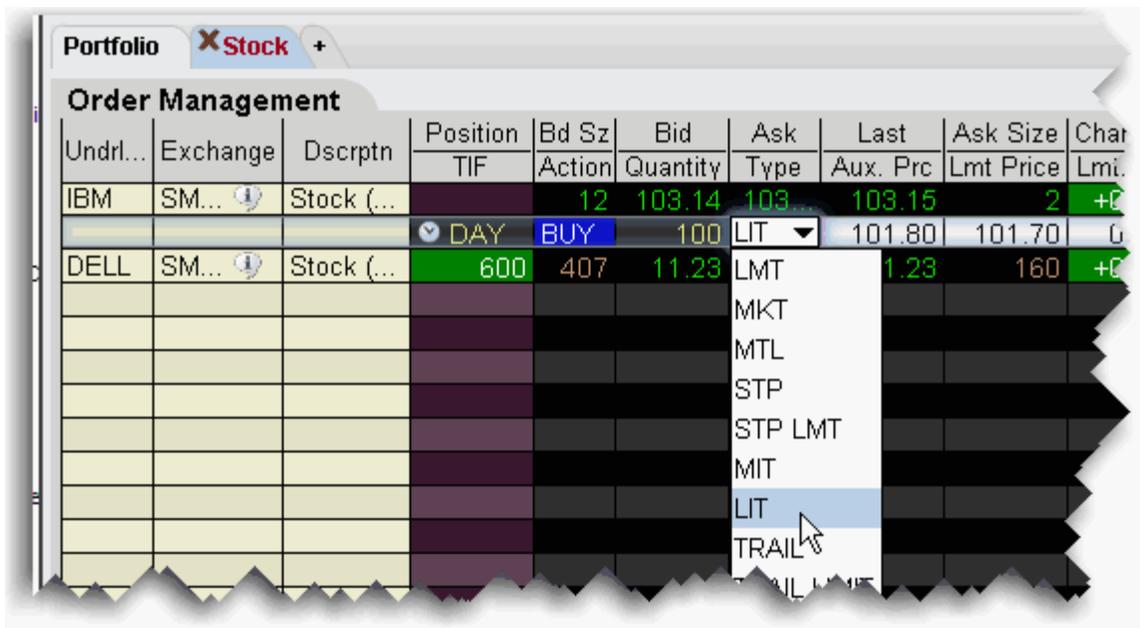
For a more detailed description of Limit if Touched orders and the products and exchanges on which they're supported, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Market if Touched

A market if touched order is designed to buy (or sell) a contract when the market goes below (or above) the current price. The Aux. Price value is the trigger to submit the market order.

To create a Market if Touched order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select MIT as the order type.

3   In the *Aux. Price* field, enter the "touched" price to trigger the order.

4   To transmit the order, click the "T" in the Status field.

For a more detailed description of Market if Touched orders visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Trailing Market if Touched

A trailing market if touched is similar to a trailing stop order, except that the sell order sets the initial stop price at a fixed amount above the market price instead of below. As the market price falls, the stop trigger price falls by the user-defined trailing amount, but if the price rises, the stop price remains the same. When the stop trigger is touched, a market order is submitted. Reverse this for a buy trailing market if touched order.

To create a Trailing Market if Touched order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select TRAIL MIT as the order type.

3   In the *Aux. Price* field, enter the trailing amount.

4   In the Stop Price field, enter the trigger price.

5   To transmit the order, click the "T" in the Status field.
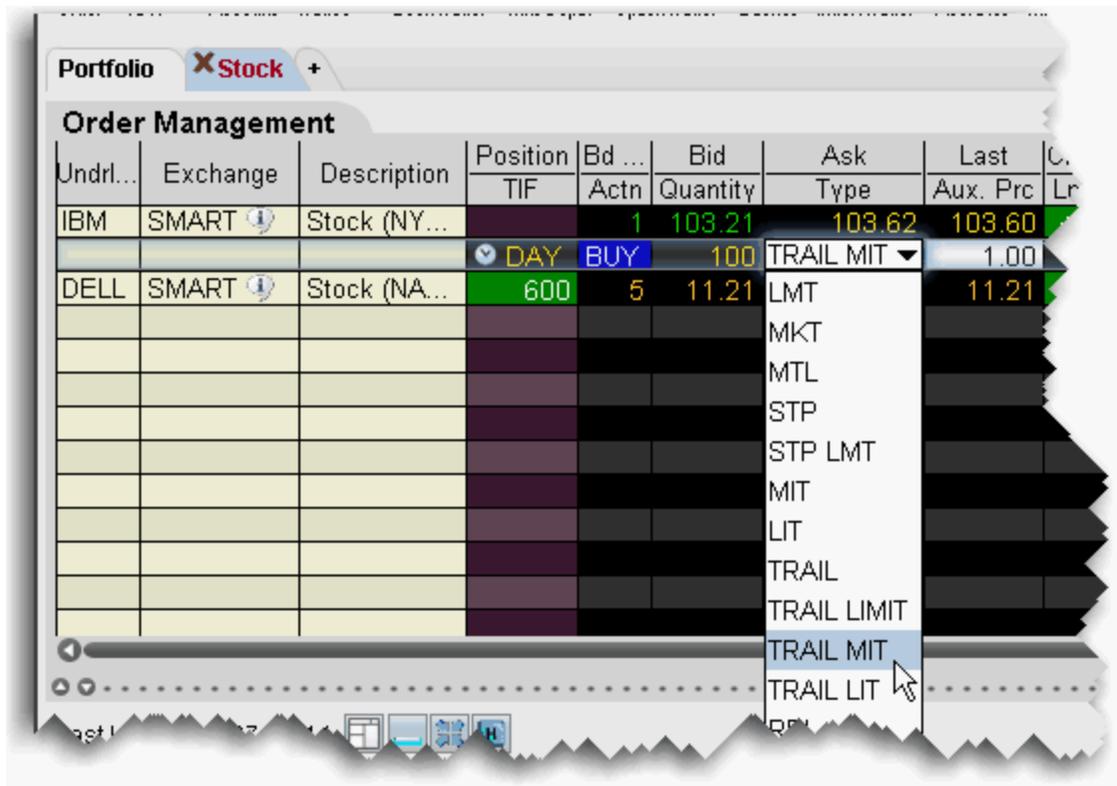
Trailing Limit if Touched

A trailing limit if touched is similar to a trailing stop limit order, except that the sell order sets the initial stop price at a fixed amount above the market price instead of below. As the market price falls, the stop trigger price falls by the user-defined trailing amount, but if the price rises, the stop price remains the same. When the stop trigger is touched, a limit order is submitted. Reverse this for a buy trailing limit if touched order.

To create a Trailing Limit if Touched order

1 Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2 If not already visible, display the **Stop Price** and **Lmt Offset** fields (right-click in the column headers and select *Customize Layout*, then use the Order Columns tab to add fields).

3 Enter values in the following fields:

   a **Aux Price** (Trailing Amt) - This value is added to the bid price to continually recalculate the stop price, if the market price drops. Use the dropdown to choose *Amt* or *%*. The trailing percent is calculated off the current best bid/ask. Note that you can define a default Trailing Amount in the Order Defaults Default Order Offset Amounts area.

   b **Stop Price** - You must enter an initial stop price. Unlike a trailing market if touched order, the initial stop price is not automatically calculated by TWS when you transmit the order, since the stop price is needed to calculate the limit price or limit offset. The stop price is continually recalculated when the market price falls. If the initial stop price is higher than the (market price - trail amount) it will not be modified.

   c **Limit Price OR Limit Offset** - The limit order piece of the trailing stop limit is submitted once the stop price is penetrated. While the market price and stop price continue to fall, the limit price is also recalculated using the limit offset, and moves with the stop price. If you enter a limit offset, the limit price is calculated using (stop price - limit offset).If you enter a limit price, when the order is submitted the limit price is subtracted from the Stop price to calculate the Limit Offset. If the limit price and stop price are equivalent, they will move together with no offset.

4 To transmit the order, click "T" Status field.

Limit-On-Close

An LOC (limit-on-close) order will fill at the closing price if that price is at or better than the submitted limit price. Otherwise, the order will be cancelled.

To create an LOC order

1 Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2 In the *Type* field, select **LOC** as the order type.

3 To transmit the order, click the "T" in the Status field.

Exch	Description	Bid Size	Bid	Ask	Ask Size	Last	Change				St
		TIF	Action	Quantity	Type	Lmt Prc	Aux. Price	Dest	Hidden	
SMART...	Stock (NASD...	14	20.26	20.27	153	20.31	+0.25			
		DAY	BUY	100	LOC ▼	20.27		SMART	■	T
SMART...	JUN 20 '08 85...	24	43.00	43.50	LMT	C42.75				
SMART...	Calendar Spr...	54	-0.30	0.60	MKT					
SMART...	JUL 18 '08 85...	147	43.20	43.60		C42.95				

(header at top left: ...lanagement)

For a more detailed description of LOC orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Market-On-Close

An MOC (market-on-close) order will execute as a market order as close to the closing price as possible.

To create an MOC order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field, select **MOC** as the order type.

3   To transmit the order, click the "T" in the Status field.

For a more detailed description of MOC orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Market with Protection

A Market with Protection order (available for futures on Globex) is sent in as a market order to execute at the current best price. If the entire order does not immediately execute at the market price, the remainder of the order is re-submitted as a limit order, with the limit price set by Globex to a price slightly higher/lower than the current best price.

To create a market with protection order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select **MKT PRT** as the order type.

3   To transmit the order, click the red "T" in the Transmit field.

For a more detailed description of market with protection orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

ISE Stock Exchange Midpoint Match

The ISE Stock Exchange executes stock trades at the midpoint price, between the NBB (National Best Bid) and the NBO (National Best Offer). They offer two types of midpoint match (MPM) order types: *Standard* and Solicitation of Interest (SOI). The Standard MPM order can be of any size, and can be set as either a limit or market order. You can also add the IOC (Immediate or Cancel) time in force to this order type. The Standard order is kept completely hidden from the market.

To create a standard MPM order

1   Create a market data line using ISE as the order destination.

2   Create an order. Click the **Bid** field (for a sell order) or the **Ask** field (for a buy order).

3   In the **Type** field, choose from *Market* or *Limit*.

4   If you select *Limit*, verify or modify the limit price.

5   Click "T" to transmit the order.

For a more detailed description of ISE MPM orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Market-to-Limit

A market-to-limit order is sent in as a market order to execute at the current best price. If the entire order does not immediately execute at the market price, the remainder of the order is re-submitted as a limit order with the limit price set to the price at which the market order portion of the order executed.

To create a market-to-limit order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select **MTL** as the order type.

3   To transmit the order, click the "T" in the Status field.

For a more detailed description of market-to-limit orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Pegged to Stock

Sometimes referred to as *Relative to Stock*, a pegged to stock order specifies that the option price will adjust automatically relative to the stock price, using a calculated value based on data you enter.

Note: A Pegged to Stock order direct-routed to BOX puts you in BOX's Price Improvement auction.

To create a Pegged to Stock order

1. Click the **Ask** price to create a BUY options order, or the **Bid** price to create a SELL options order.

2. Select PEG STK in the **Type** field. *Ensure that the supporting Pegged order fields are visible.*

If you don't see PEG STK in the Type list, check to be sure that your option is routed to SMART (or an exchange that supports this order type). This order type is only valid for US Equity options.

3 In the **Delta** field, enter an absolute value which will be used as a percent, ie. "5" equal 5%.

This percent value is signed positive for calls and negative for puts. This value is multiplied by the change in the underlying stock price, and the product is added to the starting price to determine the option price.

4 The Stock Reference Price used is the midpoint of the NBBO at the time of the order. You can change this value if desired.

5 Define an optional high/low stock range if desired. If the stock price moves outside of the range, your order will be cancelled. Use the *Underlying Range (High)* and *Underlying Range (Low)* fields.

6 The Starting Price for the option order is the midpoint of the option NBBO at the time of the order. You can change this value if desired.

When you created a pegged to stock order using the Order Ticket, use the Basic tab to select the order type and set the Starting price. Use the Pegged tab to set the Stock Ref. price, the high and low underlying range limits, and the Delta value.

For more details and an example of a pegged-to-stock order, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Pegged-to-Market

Submit an aggressive order that is pegged to buy on the best offer and sell on the best bid.

To create a Pegged-to-Market order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the **Dest**. field ensure that the destination is Island.

3   In the **Type** drop-down select PEG MKT.

4   If desired, modify the offset amount in the **Aux. Price** field.

5   To transmit, click the "T" in the Status field.

Available for stock orders direct routed to Island.

For a more detailed description of pegged-to-market orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Pegged to Midpoint

Pegged to Midpoint orders seek to execute at the midpoint of the National Best Bid and Offer (NBBO), with the option of making the order less aggressive by using an offset amount. The offset amount is subtracted from the NBBO midpoint for a buy order, and added to the NBBO midpoint for a sell order. The offset for a pegged to midpoint order makes the order price less aggressive. The order price adjusts automatically to peg the midpoint if the market moves. The price only adjusts to be more aggressive. If the market moves in the opposite direction, the order will execute.

In addition to the offset, the limit price acts as a price cap, and will prevent your order from being executed above or below a specified level.

To create a pegged to midpoint order

1   Click in the **Ask Price** field to initiate a BUY order, or the **Bid Price** field to initiate a SELL order.

2   Click in the **Type** field and select PEG MID as the order type.

3   If desired, enter an offset amount in the **Aux. Price** field.

This order type is only available for US Equity orders direct-routed to Island.

For a more detailed description of pegged to midpoint orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Box Top

A BOX TOP order is sent in as a market order to execute at the current best price. If the entire order does not immediately execute at the market price, the remainder of the order is re-submitted as a limit order with the limit price set to the price at which the market order portion of the order executed.

To create a BOX TOP order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select **BOX TOP** as the order type.

3   To transmit the order, click the "T" in the Status field.

Available for options routed to BOX.

For details on Box Top orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Price Improvement Auction

For options routed through BOX, you may elect to participate in the Price Improvement Auction to better your price.

To submit a Price Improvement Auction order

1   Create an options order routed to BOX.

2   In the *Type* field, select either <u>LMT</u>, <u>REL</u>, or <u>PEG STK</u>.

- For Limit orders, enter the limit price in the *Lmt. Price* field in penny increments.

- For Relative orders, set a relative offset amount (in penny increments) in the *Aux. Price* field.

- For PEG STK orders, you enter the starting price in the *Aux. Price* field, the delta in the *Delta* field, the optional stock reference price in the *Stock Ref.* Price field, the low side of the optional stock range in the *Underlying Range (Low)* field, the high side of the optional stock range in the *Underlying Range (High)* field. Use the Order Ticket, or display these fields from the Order Columns tab in page layout.

3   Transmit the order by clicking the "T" in the Status field.

For a more detailed description of box auction orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Relative/Pegged-to-Primary

The relative order provides a means for traders to seek a more aggressive price than the National Best Bid and Offer (NBBO). By becoming liquidity providers, and placing bids or offers into the book that are more aggressive than what is currently quoted, traders increase their odds of execution. Quotes are automatically adjusted when other market participants become more aggressive. For a buy order, your bid is pegged to the NBB by a more aggressive offset amount*, and if the NBB moves up, your bid will also move up. For sales, your offer is pegged to the NBO by a more aggressive offset, and if the NBO moves down, your offer will also move down. In addition to the offset, you can define an absolute cap, which works like a limit price, and will prevent your order from being executed above or below a specified level.

For relative orders with a "0" offset, the order is submitted as a limit order at the best bid/ask, and will move up and down with the market to continue to match the inside quote.

Note: If you have tooltips enabled, you can hold your mouse over the Limit price of the relative order and see the **current exchange price** for that order.

*The offset is the amount that will be added to the best bid (for a buy order) and subtracted from the best ask (for a sell order) to create the limit price at which the relative order will be submitted.

To enter a Relative order

1   Click in the **Ask Price** field to initiate a BUY order, or the **Bid Price** field to initiate a SELL order.

2   Click in the **Type** field and select REL as the order type.

3   Enter the offset amount in the **Aux. Price** field, or set a percent using the **Pct. Offset** field. If both fields have values the higher of the two will be used as the offset. To display the Pct. Offset field:

     a   On the **Page** menu, click *Layout*.

     b   In the **Columns - Order Row** section on the right side of the page, check Pct. Offset and click OK.

You can modify the offset amount for several relative orders on the same trading page at one time. To do this, select multiple relative orders by holding the **Ctrl** key and clicking on each order. After you have selected all relative orders, right-click on one of the selected orders and select Modify. In the **Relative Order Modification** box, define an offset or percent offset amount and click OK. All selected orders will be changed.

Please note that you can change the name of the *Relative* order to *Pegged-to-Primary* using the Settings page of the *Display* group in **Global Configuration**. For a more detailed description of relative orders visit the Order Types information page. For a more detailed description, visit the Order Types information page.

Trailing Stop

A trailing stop sell order sets the initial stop price at a fixed amount below the market price. As the market price rises, the stop price rises by the trailing amount, but if the stock price falls, the stop price remains the same. When the stop price is hit, a market order is submitted. Reverse this for a buy trailing stop order. This strategy may allow an investor to limit the maximum possible loss without limiting possible gain.

To create a trailing stop order

1   Click in the **Ask Price** to initiate a BUY order, or the **Bid Price** to initiate a SELL order.

2   Click in the **Type** field and select TRAIL from the dropdown list of order types.

3   Enter a value in the **Trailing Amt** field. This is the amount is used to calculate the initial Stop Price, by which you want the limit price to trail the stop price. To change the absolute value to a percent of the best bid/ask, click in the field to initiate a dropdown arrow, and then choose *Amt* or *%*.

    a   **Stop Price - This field is optional.** By default, the initial Stop Price is calculated as: *market price - trailing amount.* You can modify the stop price, but if it is lower than the calculated value, it will be discarded when the order is submitted. Note that the value you enter may display in the Stop Price field even if it is not used.

    b   **Limit Price** - this value defaults to the current best bid/ask. The limit price will move with the trailing stop price based on the delta between the two prices (initial stop price - initial limit price = limit delta). If the limit price and stop price are equivalent, they will move together with a zero delta.

4   To transmit the order, click the "T" in the Status field.

For a more detailed description of Trailing Stop orders visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Trailing Stop Limit

A trailing stop limit order lets you create a trailing stop order that works in conjunction with a dynamically-updating limit order. When the stop order triggers, a limit order is submitted at the last calculated price (instead of a market order which would be submitted with a regular trailing stop order).

The Trailing Stop Limit order uses four components: Stop price, Trail amount, Limit price, and Limit Offset.

To enter a trailing stop limit SELL order

1. Click in the **Bid Price** to initiate a SELL order.

2. Click in the **Type** field and select TRAIL LIMIT.

3. If not already visible, display the **Stop Price** and **Lmt Offset** fields (right-click in the column headers and select *Customize Layout*, then use the Order Columns tab to add fields).

4. Enter values in the following fields:

   a. **Aux Price** (Trailing Amt) - This value is subtracted from the bid price to continually recalculate the stop price, if the market price rises. Use the dropdown to choose *Amt* or *%*. The trailing percent is calculated off the current best bid/ask. Note that you can define a default Trailing Amount in the Order Defaults Default Order Offset Amounts area.

   b. **Stop Price** - You must enter an initial stop price. Unlike a trailing stop order, the initial stop price is not automatically calculated by TWS when you transmit the order, since the stop price is needed to calculate the limit price or limit offset. The stop price is continually recalculated when the market price rises. If the initial stop price is higher than the (market price - trail amount) it will not be modified.

   c. **Limit Price OR Limit Offset** - The limit order piece of the trailing stop limit is submitted once the stop price is penetrated. While the market price and stop price continue to rise, the limit price is also recalculated (with an optional offset) and moves with the stop price. If you want to specify a limit offset amount, enter it in the Lmt Offset field. when the order is submitted, this value is subtracted from the stop price to calculate the limit price. If you want to enter a limit price,

when the order is submitted the limit price is subtracted from the Stop price to calculate the Limit Offset. If the limit price and stop price are equivalent, they will move together with no offset.

5 To transmit the order, click "T" Status field.

For a more detailed description and example of Trailing Stop Limit orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

VWAP

VWAP (Volume-Weighted Average Price) orders are supported for large cap securities only. You can also use the non-guaranteed VWAP Algo.

To create a VWAP order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field select **VWAP** as the order type.

3   If desired, change the VWAP cut-off time using the TIF field.

By default, the VWAP is computed from the soonest cut-off time to the market close. To change, click the Time Entry calendar icon to select a new VWAP cut-off, or start, time. If none is selected, the soonest cut-off is used. In addition, you can modify the end time of the calculation using the *Expiry Time* field. To display the Expiry Time field, use the Order Columns tab on the Page configuration.

4   To transmit the order, click the "T" in the Status field.

Note: A transmitted VWAP order is accepted immediately and CANNOT BE CANCELLED.

VWAP orders are automatically routed.

For a more detailed description of VWAP orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Advanced Order Types

Introduction

- Auto Trailing Stop
- Bracket
- Conditional
- Minimum Quantity

Auto Trailing Stop

You can attach a trailing stop order to a limit order. The attached trailing stop order is automatically activated when the limit order is filled.
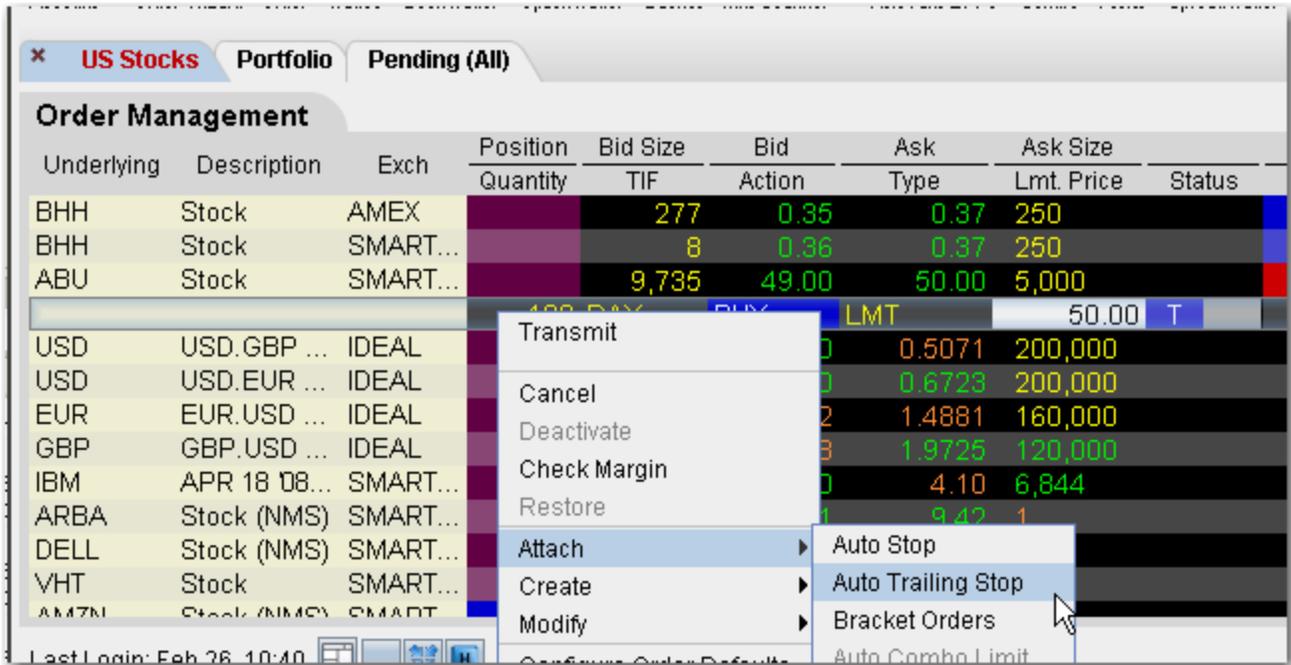
To attach an auto trailing stop

1   Right-click on a limit order and select **Attach**, then select *Auto Trailing Stop*.

- To modify the trailing amount, change the value in the **Aux. Price** field.

To change the default trailing amount used to calculate the stop election price, use the Order > Order Defaults page of Global Configuration.

2   When the limit order executes, the trailing stop order is submitted. The stop election price will be calculated using the (*parent order limit price + trailing amount)* for **Buy** orders, and the (*parent order limit price - trailing amount)* for **Sell** orders.

The relationship between the parent and attached order can be seen in the Trailing Key field. Related orders are assigned the same trailing key.

Bracket

Bracket orders are designed to limit your loss and lock in a profit by "bracketing" an order with two opposite-side orders. A BUY order is bracketed by a high-side sell limit order and a low-side sell stop (or stop-limit) order. A SELL order is bracketed by a high-side buy stop (or stop-limit) order and a low side buy limit order.

The order quantity for the bracketing orders is the same as that of the original order. By default, the amount off the current price to which a bracket order is set is 1.0. This offset amount can be manually changed on the order management line for a specific order, or you can modify the default offset amount using the Order Preset in **Global Configuration**.

In addition, if you display the **OCA Group** field on your order line, you will see that the two child bracket orders are automatically put into an OCA group. This means that when one of the orders executes, the other will automatically be cancelled.

When including bracket orders in a basket, display the Key field in the BasketTrader to see the parent/child relationship between orders.

Note: If you attach a bracket to a working order, you will need to transmit the child orders manually. However, the system does recognize that the parent and child orders are designed to work as a bundled group, which you can see by the matching values in the Trailing Key field if you display this field on your order line. If you attach a bracket to a working order and modify the parent, when you re-transmit the parent order the children are then transmitted automatically.

To create a Bracket order

1 Click the "Ask" or "Bid" price of an asset to create an Order Management line.

- Click the **Ask Price** to create a **Buy** order.

- Click the **Bid Price** to create a **Sell** order.
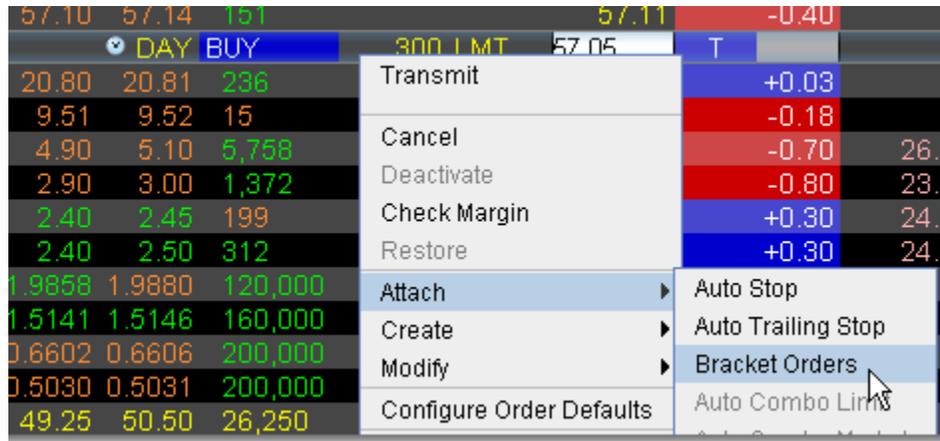
2 On the **right-click** menu, select Attach and then select *Bracket Orders*.

3 Verify that the order parameters are correct.

4 Transmit the order.

For more information on Bracket orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Volatility Orders

Introduction

- Volatility Trading
- Attach a Hedge Order
- Volatility Trading via the Order Ticket

Volatility Trading

The VOL order type allows you to trade volatility, and gives you ways to [dynamically manage](#) your options orders.

To trade Volatility

1   From the **Page** menu, select *Create Volatility Page*. The fields used to define and dynamically manage volatility orders are on the new page.

2   [Create market data](#) lines. Note that Bid and Ask price fields display in volatility rather than as a dollar amount. Market data for stock tickers will still display the bid and ask price.

3   Select *Annual* or *Daily* volatility using the **Volatility Type** dropdown list.

4   Create an order by clicking the **Ask** volatility for a Buy order, or the **Bid** volatility for a Sell order. The order type defaults to VOL.

Note: You can use the VOL order type for options, index options and combination orders. Hold your cursor over the option's volatility to see the option price, based on that volatility.

Please note the following requirements for transmitting a VOL combination order:

- Combo VOL orders must be Smart-routed.

- All legs must be on the same underlying, and each leg must independently be eligible to use the VOL order type. For example, a BuyWrite order could not be sent as a VOL order since its stock leg would not allow this order type.

- All VOL orders must be DAY orders.

- You can elect to price a Smart-routed Index Option order using reverse futures premium calculations by selecting a futures contract fromthe <u>Reference Contract</u> field.

5 To have the workstation calculate a limit price for the option or combination order based on your volatility input, enter a value in the **Order Volatility** field. The value shown in the Imp Vol field is calculated via the <u>Option Modeler</u>.

6 To transmit the order, click the "T" in the **Transmit** field, or the *Transmit* icon on the trading toolbar.

Field	Description
Volatility	If desired, enter a volatility to use in calculating a limit price for the option. If blank, the calculation will use the volatility derived via <u>Option Analytics</u>.
Volatility Type	Select from Daily or Annual volatility.
Hedge Order Type	Select an order type. The application will send an order against the executed option trade to maintain a delta neutral position. Use the Hedge Aux. Price field to set a price for orders that require one. Notes that for index options, you will need to select a futures contract for use in a hedge delta trade. Alternately, you can use the right-click menu to attach a Delta Hedge order and set the hedging attributes from the new order line.
Hedge Aux. Price	Used in conjunction with the Hedge Order Type field. If you have selected an order type that requires you to define a price, for example a relative order, use this field to set the price.
Continuous Update	Check this selection to continuously update the price of the order if the price of the underlying instrument changes significantly. **Note that you can only check Continuous Update for three active orders at a time.** You will be subject to cancellation fees for order modifications that are made by the system when you have the Continuous Update mode enabled.
Reference Price Type	Elect to use the NBB (bid) when buying a call or selling a put and the NBO (ask) when selling a call or buying a put, or the average of the best Bid and Ask. This price is also used to compute the limit price sent to an exchange (whether or not Continuous Update is selected), and for stock range price monitoring.

Field	Description
Stock Price Monitoring	**Undrl. Range (Low)** - enter a low end acceptable stock price relative to the selected option order. If the price of the underlying instrument falls BELOW the lower stock range price, the option order will be cancelled. Merely touching the price does not cancel the order. **Undrl. Range (High)** - enter a high end acceptable stock price relative to the selected option order. If the price of the underlying instrument rises ABOVE the upper stock range price, the option order will be cancelled. Merely touching the watermark does not cancel the order.
Reference Contract	Used for smart-routed Index Option volatility orders. This field allows you to select the futures contract to use for calculating the order price. To activate this feature, use the *Volatility and Analytics* page in **Global Configuration** and select P*rice index options relative to futures contract*.

Attach a Hedge Order

As an alternative to setting hedge order attributes in the original Volatility order line, you can elect to attach a delta hedge order and set the order parameters in the hedge order line.

To attach a Delta Hedge order

1   From the right-click menu on a VOL order management line, select *Attach* and then select *Delta Hedge*.

A new linked delta hedge order line displays. The link between the parent and child orders is illustrated in the **Key** field.

2 Select an order type for the hedging order (Limit, Market or Relative).

Times in Force

Introduction

- [Time in Force for Orders](#)
- [Good After Time](#)
- [Fill or Kill](#)
- [Auction](#)
- [Market-on-Open](#)
- [Limit-On-Open](#)

Time in Force for Orders

The time in force for an order defines the length of time over which an order will continue working before it is canceled. We support many time in force selections including those described below.

Note: The selections available for any order are valid based on the combined order type, exchange and product. Not all TIFs are available for all orders.

- DAY - A **Day** order is canceled if it does not execute by the close of the trading day. Unless otherwise specified, every order is a **Day** order.

- GTC - A **Good-Til-Canceled** order will continue to work within the system and in the marketplace until it executes or is canceled. GTC orders will be automatically be cancelled under the following conditions:

    - If a corporate action on a security results in an exchange or distribution of shares.

    - If you do not log in to your IB account for 90 days.

    Orders submitted to IB that remain in force for more than one day will not be reduced for dividends. To allow adjustment to your order price on ex-dividend date, consider using a Good-Til-Date/Time (GTD) or Good-after-Time/Date (GAT) order type, or a combination of the two.

Note: For market centers that do not accept "native" GTC orders, the order type is simulated by resubmitting the relevant order each business day upon opening of the market center.

    - OPG - Use OPG to send a market-on-open (MOO) or limit-on-open (LOO) order.

    - IOC - Any portion of an **Immediate-or-Cancel** order that is not filled as soon as it becomes available in the market is canceled.

    - GTD - A **Good-Til-Date** order will remain working within the system and in the marketplace until it executes or until the close of the market on the date

specified. When you select GTD as the time in force, both an *Exp. Date* and *Exp. Time* field is displayed on the order management line. Enter the date up until which you want the order to continue to work in the format *YYYYMMDD*. To set a time, enter the time in the format *HH:MM(:SS)*. If desired, enter a time zone using an accepted three-letter acronym. Note that if you do not enter a specific time zone, the time zone to which your computer is set will be used.

- FOK - If the entire **Fill-or-Kill** order does not execute as soon as it becomes available, the entire order is canceled.

- DTC - A **Day 'Til Cancelled** order is similar to a day order, but instead of being cancelled and removed from the trading screen at the end of the day, the order is deactivated. This means that the order is cancelled AT THE EXCHANGE but remains on your trading screen to be re-transmitted whenever you click the *Transmit* button.

Fill/trigger outside RTH - When displayed, checking this option allows orders the flexibility to fill (and/or trigger in the case of stop and other trigger orders) both during regular hours and outside of regular trading hours.

Note: This option may not be available for particular products that are not listed on an exchange. IB customers are solely responsible for ensuring that this parameter is available for the product involved.

Regular Trading Hours

You can trade many exchange-listed products outside of regular trading hours. To allow trading outside regular hours for all eligible products, ensure that the setting is enabled in all order presets.

To enable outside trading hours in Order Presets

1   Display the Presets column if it is not displayed.

  a   Right-click in the field headings and select *Customize Layout*.

  b   In the **Available Columns** section of the Market Data columns tab, expand the *Order Presets* category and double-click *Presets* to add it to the Shown Columns section. Click OK.

2   Click in the Presets field on a ticker line and select *Configure* at the bottom of the dropdown list. The Preset for the current contract is displayed.

3   In the **Settings** area at the top of the Presets page, check *Allow order to be activated, triggered or filled outside of regular trading hours*.

When the Preset is active for the contract, the order will be eligible to trade outside of regular trading hours IF it is exchange-traded and eligible on the exchange.

Good After Time

A "good after time" order is held in the system and sent to the exchange on the date and time you enter.

To create a "good after time" order

1   Display the **Start Time** field on an order management line:

    a   On the **Page** menu, click *Layout.*

    b   Click the **Order Columns** tab, and on the right side of the page, select *Good After Time* from the **Time in Force** category, and Add it to the Shown Columns.

2   On the trading screen, create an order (click in the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order).
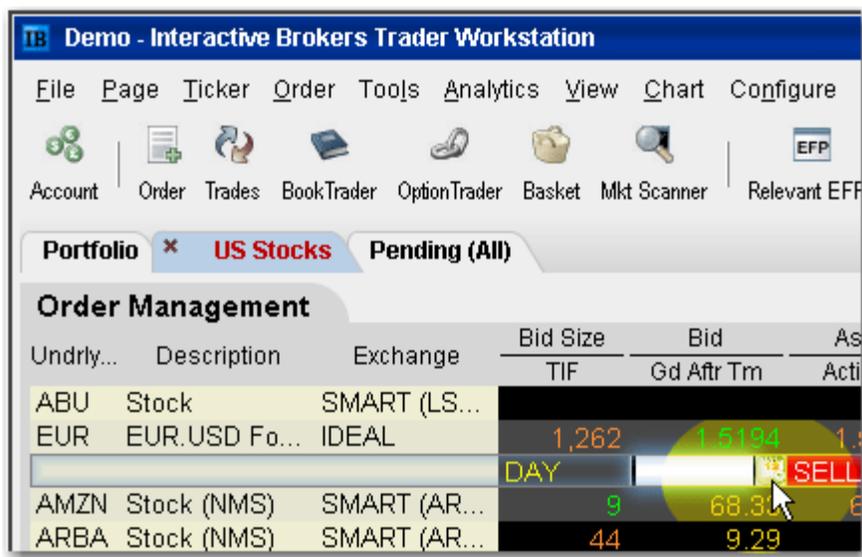
3   In the *Good After Time* field, click the Calendar icon to open the date/time setter.

4   Choose a month, year and day from the Date area, and a time and time zone from the Time area. Click OK.

Note that the time uses a 24-hour clock instead of "AM" and "PM."

5 Transmit the order. The order is held in the IB system until the time and date you set.

For a more detailed description of GAT orders and the products and exchanges supported, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Fill or Kill

A time in force for options orders, specifying that the order must execute immediately and in its entirety, or be canceled.

To apply the FOK time in force to order

1   Create an options order (click the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order).

2   In the TIF field, select FOK.

> **Note:** If FOK is not displayed in the dropdown list, it is not applicable to the order your are creating.

3 Transmit the order by clicking the "T" in the status field.

For more information about Fill or Kill orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Auction

An auction order is submitted at the Calculated Opening Price (COP). If the order doesn't execute, it is resubmitted as a limit order at the COP or best bid/ask.

To create an auction order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order. This action will open the **Order Ticket** window.

2   Select an order type in the Type field.

3   In the *Time in Force* field, select AUC (auction).

4   Transmit the order by clicking "T" in the Status field.

Available for limited products and exchanges, including futures on HKFE and stock on LSE, IBIS, and VSE.

For a more detailed description of auction and other order types, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Market-on-Open

MOO (market-on-open) is a market order executed at the market's open at the market price.

To create a MOO order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field, select **MKT** as the order type.

3   In the *TIF* field, select **OPG** as the time in force.

4   To transmit the order, click the "T" in the Status field.

For a more detailed description of MOO orders visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Limit-On-Open

A LOO (limit-on-open) order is a limit order executed at the market's open if the opening price is equal to or better than the limit price.

To create a LOO order

1   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

2   In the *Type* field, select **LMT** as the order type.

3   In the *TIF* field, select **OPG** as the time in force.

4   To transmit the order, click the "T" in the Status field.

For a more detailed description of LOO orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Order Attributes

Introduction

Order attributes are applied to the TWS order types via the Order Ticket or by displaying the appropriate attribute field on the trading window.

- Hidden
- Discretionary
- Iceberg/Reserve
- All or None (AON)
- Minimum Quantity
- Block
- Sweep-to-Fill
- One-Cancels-All (OCA)

Hidden

A Hidden order (generally a large volume order) shows no evidence of its existence in either the market data or the deep book.

To create a Hidden order

1   Display the **Hidden** field for stocks, and/or the **Hide Pennies** field for penny-priced equity options, on an order management line:

> **a**   On the **Page** menu, click *Layout*.

> **b**   In the **Columns - Order Row** section on the right side of the page, check *Hidden* and/or *Hide Pennies*, and click **OK**.

2   On the trading screen, create an order (click in the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order).

3   Check the *Hidden* or *Hide Pennies* (for equity options) field.

Order Management											
Undrlyng	Exch	Dscrptn	Bid Size / TIF	Bid / Action	Ask Quantity	Ask ... Type	Last Lmt Prc	Change Dest	Hidden	Status	Op
IBM	SM...	Calendar ...	13	-0.40	0.70	24					
			DAY	BUY		1 LMT	0.70	SMART	☑	T	
IBM	SM...	JUL 18 'D...	99	41.50	42.00	173	C42.00				
DELL	SM...	Stock (N...	27	20.01	20.02	23	19.99	-0.01			

4   To transmit the order, click the "T" in the Status field.

For a more detailed description of hidden orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Discretionary

A Discretionary Order attribute can be applied to a smart-routed limit order. You define a discretionary amount, which is added to or subtracted from the limit price, that increases the price range over which the order is eligible to execute. Only the original limit price is displayed to the market.

To create a Discretionary order

1   Display the **Discretionary** field on an order management line:

    a   On the **Page** menu, click *Layout*.

    b   Click the **Order Columns** tab, and on the right side of the page, select *Discretionary Amt* and *Add* it to the Shown Columns.

2   Click the **Ask** price to create a BUY order, or the **Bid** price to create a SELL order.

3   In the *Type* field, select **LMT** as the order type.

4   Enter a discretionary amount in the *Discretionary Amt* field of the order line.

5   To transmit the order, click the "T" in the Status field.

For more information on discretionary orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Iceberg/Reserve

An Iceberg/Reserve order allows you to submit an order (generally a large volume order) while publicly disclosing only a portion of the submitted order.

To create an Iceberg/Reserve order

1   Show the **Display Size** field on an order management line:

    a   Right click in the column headings and select *Customize Layout*.

    b   Click the Order Columns tab.

    c   In the *Available Columns* list, open the Quantity category and select **Display Size.**

    d   Click **Add** to move the column to the *Shown Columns* list.

2   On the trading screen, create an order (click the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order).

3   In the **Display Size** field, enter the quantity that you want publicly disclosed.

For a more detailed description of iceberg/reserve orders visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

All or None (AON)

Mark an order as "all or none" to specify that the order not execute unless the entire order quantity is available and it can be filled in its entirety. This attribute can be applied to all order types.

To mark an order as All or None

1   Display the **All or None** field on your trading window:

   a   On the **Page** menu, click *Layout*.

   b   Open the **Order Columns** tab and scroll down to the Attributes section in the *Available Columns* list.

   c   Highlight **All or None** and click the *Add* button.

2   Create an order (click the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order).

3   Check the **All or None** checkbox to tag the order.

Note: You can also apply order attributes from the *Miscellaneous* tab on the Order Ticket.

For an example of using an **All or None** order, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Minimum Quantity

Use the Minimum Quantity order attribute to ensure at least a minimum specified number of units is filled for your order.

To create a Minimum Quantity order

1   Show the **Min Quantity** field on an order management line:

   a   Right click in the column headings and select *Customize Layout*.

   b   Click the Order Columns tab.

   c   In the *Available Columns* list, open the Quantity category and select **Min Quantity.**

   d   Click **Add** to move the column to the *Shown Columns* list.

2   On the trading screen, create an order (click the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order).

3   In the Min. Quantity field enter the minimum number of contracts that must be available for any part of the order to execute.

Available for Smart-routed options orders.

Block

A block order is a high volume order that consists of a minimum of 50 contracts at a specific limit price.

To submit a block order

1   Select the option for which you want to submit a block order.

2   On the **Order** menu select *Ticket*.

3   In the *Exchange* field, select ISE.

4   In the *Price* field enter a limit price.

5   Go to the *Misc* tab.

6   Check **Block Order**.

7   Choose **Transmit** to send, or Accept to display the order on the trading screen before you transmit.

For a more detailed description of block orders and the products and exchanges on which they're supported, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

Sweep-to-Fill

A sweep-to-fill order identifies the best price and the exact quantity offered/available at the price, and transmits the corresponding portion of your order for immediate execution. Simultaneously it is identifying the next best price and quantity offered/available, and submits the matching quantity of your order for immediate execution.

To create a sweep-to-fill order

1. Display the **Sweeps to Fill** field for an order management line:

   a Right click in the column headings and select *Customize Layout*.

   b Click the Order Columns tab.

   c In the *Available Columns* list, open the *Order Attributes* category and select **Sweep to Fill.**

   d Click **Add** to move the column to the *Shown Columns* list.

2. On the trading screen, click the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order.

3. Check the *Sweep to Fill* field.

4. To transmit the order, click the "T" in the Status field.

For a more detailed description of sweep-to-fill orders, visit the Order Types information page.

For a more detailed description, visit the Order Types information page.

One-Cancels-All (OCA)

A One-Cancels-All (OCA) order is a combination of separate orders that are worked in conjunction with one another in the marketplace. A customer enters orders as part of an OCA group, and when an order is executed, the remaining orders in the group are canceled. If an order is partially executed, the remaining orders in the group are reduced proportionately to the amount that was executed. If an order is canceled before execution, the remaining orders in the group are canceled.

To create an OCA order

1   Display the **OCA Group** field on an order management line:

   a   Right click in the column headings and select *Customize Layout*.

   b   Click the Order Columns tab.

   c   In the *Available Columns* list, open the Order Attributes category and select **OCA Group.**

   d   Click **Add** to move the column to the *Shown Columns* list.

2   On the trading screen, create an order (click in the **Ask Price** to create a BUY order, or the **Bid Price** to create a Sell order).

3   Identify the order as part of an OCA group by entering a group name in the **OCA Group** field (you can use any descriptive name that you want).

4   Continue to create orders, and identify each as part of the group by entering the same name in the **OCA Group** field for each order you create.

5   After you have created all orders for a group, transmit the OCA order by clicking *Transmit Page* on the **Order** menu.

Note: Because the OCA procedure is an automated process, there is no guarantee that requested cancellations and modifications will reach the specific exchange before an order has been executed.

For a more detailed description of OCA orders visit the Order Types information page.

For a more detailed description, visit the Order Types information page.
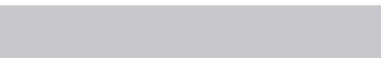
The Trading Window

- [Add a Trading Page](#)
- [Edit a Trading Page](#)
- [Restore and Save Page Settings](#)
- [Organize Data on a Page](#)
- [Use the Feature Search](#)
- [Create TWS Window Groups](#)
- [Enable Quick Stock Entry](#)
- [Edit Dividends Schedule](#)
- [The Price and Size Wands](#)
- [Check Risk Pre-Order](#)
- [View Futures Prices Term Structure](#)
- [Receive Delayed Market Data](#)

Add a Trading Page

There is no limit to the number of trading pages you can create in TWS. You can enter as many lines of market data as you want, but at any one time you will only be able to see 40 active market data lines at a time. Use the trading pages to sort your assets by instrument type, exchange, or your own trading system categories. You can navigate through the tabbed pages without the mouse by using the *Ctrl* key along with the *Page Up* and *Page Down* keys.

- To detach a page, simply click the tab and drag the page away from the tabset.
- To create a new page, click the "+" sign, or right click to create a new page with specific template.
- To delete a page, click the X.
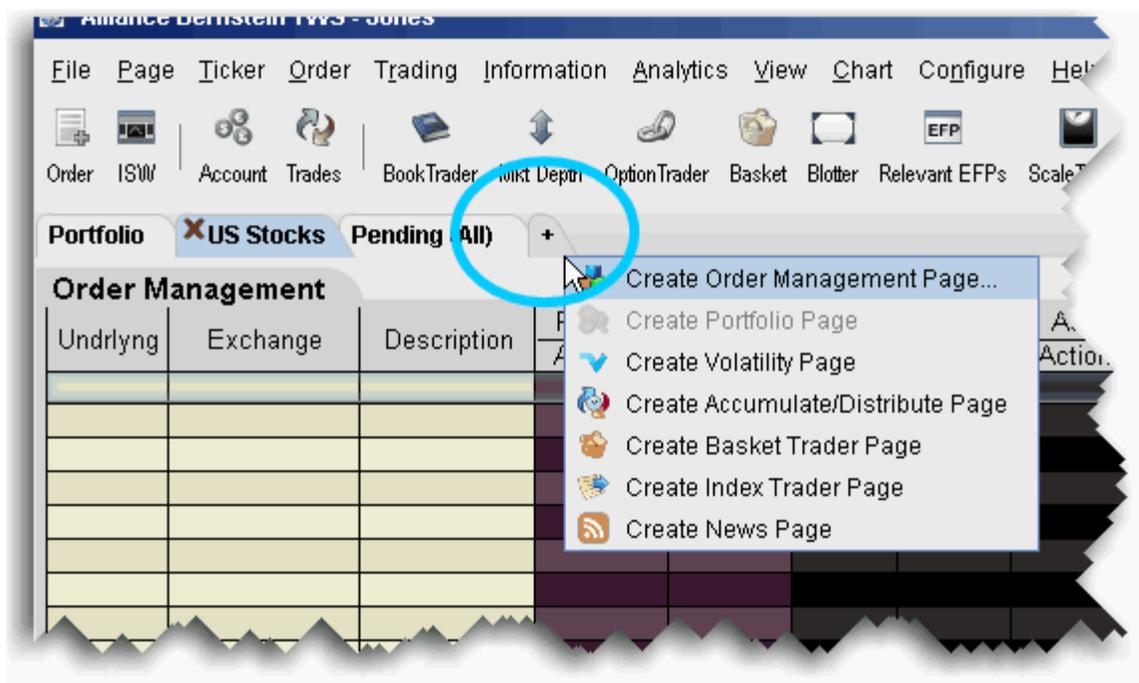
You can also use a page-level feature called Quick Stock Entry, which will automatically complete a market data line for a stock using the set of order destinations you set up.

To add a Portfolio Page

You can create the Portfolio page using the right-click menu from the "+" sign. The portfolio page can only be created once. Note in the image above the selection is inactive since the page was already created.

This creates a page with one market data line for each position you hold. These positions are displayed in the Portfolio section of the Account window. Each time you take a position, the Portfolio page is automatically updated to include market data for the new position. When you zero out a position, the market data line remains on your Portfolio page. You can remove zero position tickers from this and other pages using the right-click menu on a page and selecting *Clear Zero Positions*.

Edit a Trading Page

Modify the page name and other settings, add or remove market data and order fields, and insert a market data line or a blank line in your trading page using the right-click menu or the **Request Ticker** dialog box.
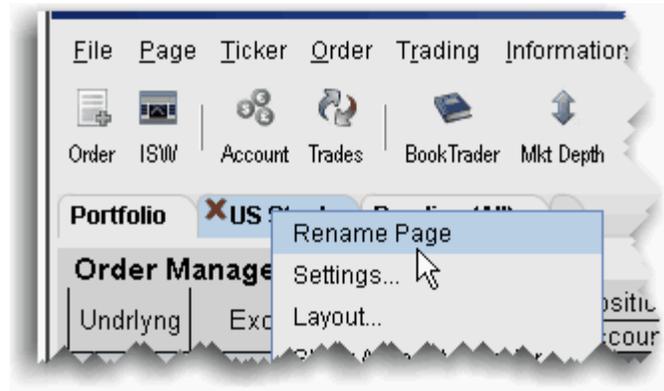
To edit a page name and other settings

1   Right-click the page tab and select *Rename Page*.

2   Modify the page name or assigned layout and click **OK**.

Note: The Pending page is a system page that displays all of your working orders. You cannot delete or rename the Pending page, but you can edit order parameters.

To copy tickers to a new page

1   On a populated trading page, highlight the first ticker row you want to copy.

2   Press and hold the shift key and highlight the last row you want to copy. This will select all rows including the first and last highlighted ticker rows.

3   Use the right-click menu to select *Copy*.

4   In the tabset of pages, click the "+" tab to create a new page.

5   Enter a page name and click OK.

6   Right-click in the top blank row of the new page and select *Paste*.

To edit a page layout

1   Right-click the page tab and select select *Layout*.

2   Modify the desired characteristics and click **OK**.

Note: Before you modify the page layout be aware that you are not simply changing the look of the active page, you are modifying an applied layout which may also be associated with other pages.

To insert a Market Data line between two existing lines

Note: When you add a line, it is inserted ABOVE the selected line.

1 Click in a market data line. The new line will be inserted ABOVE this line.

2 Do one of the following to add a new market data line:

- Right click and select Insert Ticker or,
- From the Ticker menu select Add Symbol.

To insert a blank line between two existing Market Data lines

1 Click in a market data line. The blank row will be inserted ABOVE this line.

2 Right click and select Insert Row.

To move, drag, and drop a Market Data line up or down on a page

1 Select the market data line you want to move by clicking in the line.

2 Click and hold the mouse in the selected line.

3 Drag the selected line up or down on the page.

4 Release the mouse to drop the line in its new position.

To Delete Lines on a Trading Page

You can delete lines from your Trading page using the right-click menu.

Note: The delete command does not distinguish between deleting blank lines and deleting market data lines, and does not give you a warning before it deletes your data. Be certain you have only selected the lines you want to delete. Selected lines appear highlighted in dark grey across the Trading screen.

To delete a row

- Right click in the line you want to delete and select Delete Row.

To delete multiple rows

1 Select the line(s) you want to delete:

2 Right click and select Delete Rows.

To select contiguous rows

- Click in the first line to delete, hold down the Shift key, and click in the last line.

To select non-contiguous rows

- Hold the Ctrl key and click each row.

To clear data from a row and leave an empty line

- Right click in the line you want to delete and select *Clear Row*.

To add a blank row (above the selected row)

- Right click in a line and select *Insert Row*.

To move the Trading toolbar

- Click and drag the textured drag handle on the left side of the toolbar.

Note: To re-dock the toolbar at the top of the page, use the drag handle to position the toolbar under the menu bar, or click the "x" in the upper right corner of the toolbar.

Restore and Save Page Settings

To restore trading pages and tickers you had set up on a previous day, you can elect to restore the entire settings file, which includes all trading pages and their tickers.

Note: Restoring a page file completely replaces all of your current trading pages with those from a previous day.

To restore settings

1   On the **File** menu, select *Restore Settings*.

2   In the Open dialog box, click on the day's file you want to use to replace the current set of pages and tickers.

 To view the actual dates the files were saved, click the *Details* icon on the top right of the box.

3   Click *Open*. Your current trading pages and tickers are replaced with those in the file you selected.

Save Settings to the IB Server

Once you have logged in, you can set the *Store settings on server* feature from the TWS **File** menu. This setting serves two purposes: it GETS the saved settings from the IB server when you log in, and it SAVES any session changes to the IB server when you log out.

If you log into or out of TWS without having checked this feature, any changes or additions to your workstation environment will not be saved globally.

To save your settings on the IB server

After you've logged in, go to the **File** menu and check *Store settings on server*. Please note that this feature must be activated manually, it is not checked by default.

To use global settings that have been saved on the IB server

In the TWS Login box, check the *Store settings on server* box. This instructs TWS to go to the global server and use any settings you saved previously.

Organize Data on a Page

You can sort a page of market data lines alphabetically by underlying ticker symbol. Once you have sorted the lines, you cannot return to your original market data line order. Use drag-and-drop to rearrange the order of your trading pages within the tabset.

To alphabetically sort page tabs

1   Open the page you want to sort by ticker.

2   On the **Page** menu click *Sort Tickers*.

To move a Trading page within the pages tabset

1   Click on a page tab to select the page.

2   Click and hold the mouse, and drag the page left or right within the tabset.

3   Release the mouse to drop the page in its new location.

Note: You cannot move the **Pending** page tab.

Customize Data Display

Use the *Display Settings* area on the **Order Defaults** screen to specify rounding of prices, change the number of decimal places displayed, show prices in italics and make other price display changes.

To modify price display on the Trading window

1   On the **Configure** menu, select *Global Configuration*.

2   In the left pane, select *Order* and then select *Order Defaults*.

3   Select an instrument type.

4   In the Display Settings area at the bottom of the right pane, modify any/all of the following:

   • **Multiplier** - multiplies the price by this value.

- **Offset** - you can use this to offset a displayed price for instance for a specific futures contract. Say ES bid/ask is 1314.75/1315.00. First, select *Futures* in the middle pane, then click the **Add** button at the bottom of the column and enter ES. Enter an offset of 1300. To see how this will display, in the *Test* box enter 1314.75 and click the **Test** button. The example displays as 14.75.

- **Rounding** - change the default of None to Round, Nearest Valid Price or Truncate. Use the Test entry field to enter a value, can click Test to see the result.

- **Decimals** - overrides the default 2 decimal-place price display.

- **Show using italics** - displays price data italicized.

- **Show Reciprocal** - checking this box inverts the price display to be equal to *1/price*. For Asian quotes, this feature will convert the price display to the more familiar local price display. For example, the reciprocal of the value 0.0456683 is 21.90. For Forex products, the reciprocal applies only to the denominator, or settlement, currency.

After you have modified the display date, enter a price in the Test field and then click the *Test* button to see the display results of your change. An asterisk is shown after the Display Setting title to indicate that *Show Reciprocal* is enabled.

Create a Header Row in the Trading Window

Create a title row in your trading page to separate tickers by rows.

To insert a header row

1 Right-click in an empty market data line and select *Create Header Row*.

2 Enter a descriptive line of text or a title to appear in the row, and click OK.

Note: If you want to insert a header between a list of existing tickers, right-click on the ticker ABOVE WHICH you want to create the header row and select *Insert Row*. Then use the blank row to insert the header row.

Use the Feature Search

The comprehensive **Search** feature returns a categorized list of application-related results with links that will open a window, add a column or display a feature. helps you add contracts to your trading page based on search criteria.
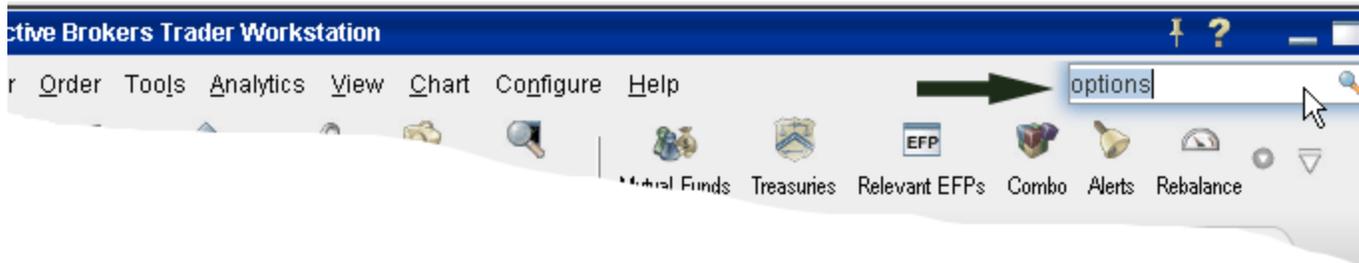
To use the Search field

1   In the top right corner of a main trading window, enter a word or phrase in the Search field and hit *Enter*.

2   On the **Search Results** page, check *Application* to view all TWS-related occurrences of the search topic, and check *Contracts* to see all contracts with the search topic in the title.
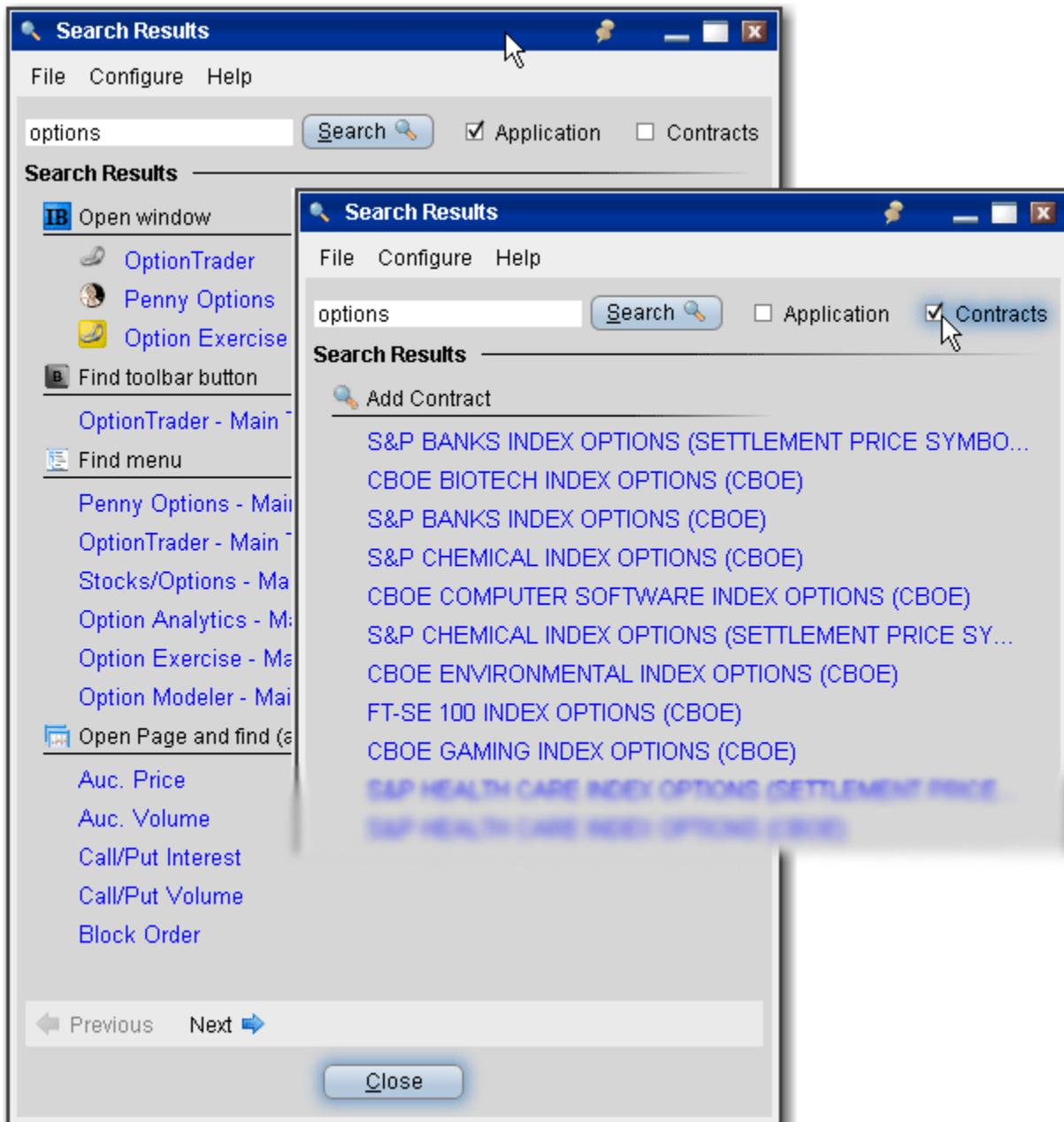
Using the Search results

- For application-related results, clicking a link will perform the search related action based on the results category. For example, if you clicked *OptionTrader* from the **Open Window** category, TWS would open the OptionTrader window, or bring you to that window if it's already open.

- For *Add Contract* results, clicking a link will open a ticker line on the last active trading page with the search item as the contract in focus. From this point you can either add the contract, or click the *Find* button to broaden your search by company name.

Create TWS Window Groups

Assign windows to a "group" to link order and ticker actions. You assign a window to a group using the colored blocks on the top right of the title bar. All windows with the same color are part of the same group. When you change focus on one of the group's "Source" windows, all destination windows in the group reflect the change.
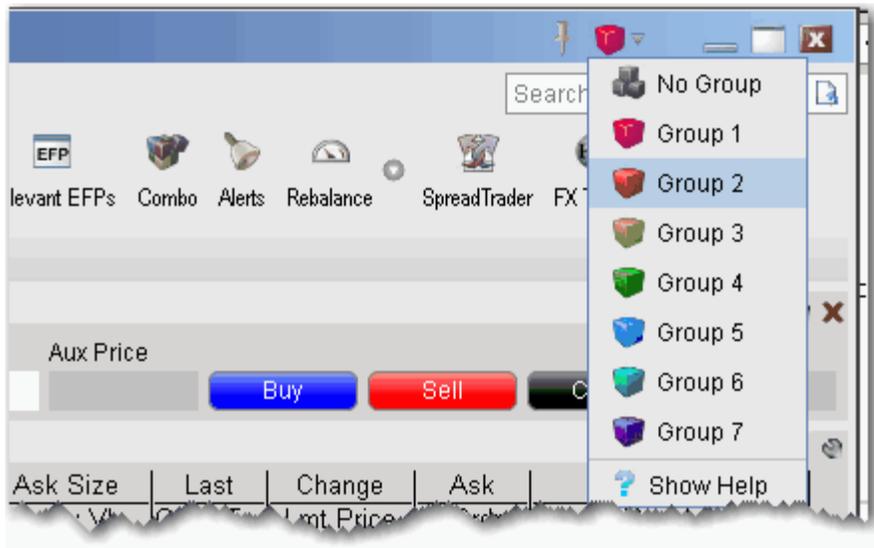
Any window that can be part of a group will display the blocks. A window can be part of one group at a time. When you close the window, its group affiliation is erased.

The window's designation is displayed in a mouse-over tooltip when you hover over the Group icon. A window can be a:

> **Source** - this is a controlling window and can only SEND instructions.

> **Destination** - this is a receiving window, and can only RECEIVE instructions from a window with Source privileges.

> **Source/Destination** - this is a multi-tasking window which can both SEND instructions to and RECEIVE instructions from other windows in the group.

Create a windows group

1   Select a Group number from the dropdown list of group boxes.

2   Open other desired windows and select the same group number/color from the Group list.

Example

1   Create a group which includes the main trading window, real-time Charts with ChartTrader displayed, and the Order Ticket.

2   In the main trading window, select a ticker line, for example *Dell*.

    a   Note that in the two other windows, the contract description changes to *Dell.*

3   Now in the main trading window, click the **Ask** price to create a Buy order on a different ticker, for example *IBM*.

    a   Note that in the chart, the data will change to IBM, however no order will be created in ChartTrader. This is because real-time charts are designated as Destination/Source for **tickers** only.

    b   On the Order Ticket, which is a Destination window for both tickers and orders, the IBM order is reflected.

Enable Quick Stock Entry

Quick Stock Entry is a page-level feature which automatically completes a market data line for a stock based on the underlying symbol you enter. When enabled, you simply enter the stock symbol, and TWS completes the ticker line.

If you enable multiple exchanges, you will get a ticker line for all exchanges on which the symbol trades. For example, I activate NYSE, SMART/NYSE, ISLAND, and TSE. When I enter the ticker "MMM" I get four ticker lines, where MMM represents 3M on all but TSE, where it represents Minco Gold Corp.

Before you can use the Quick Stock Entry feature, you must:

- Enable a trading page for Quick Stock Entry
- Create a list of quick stock order destinations
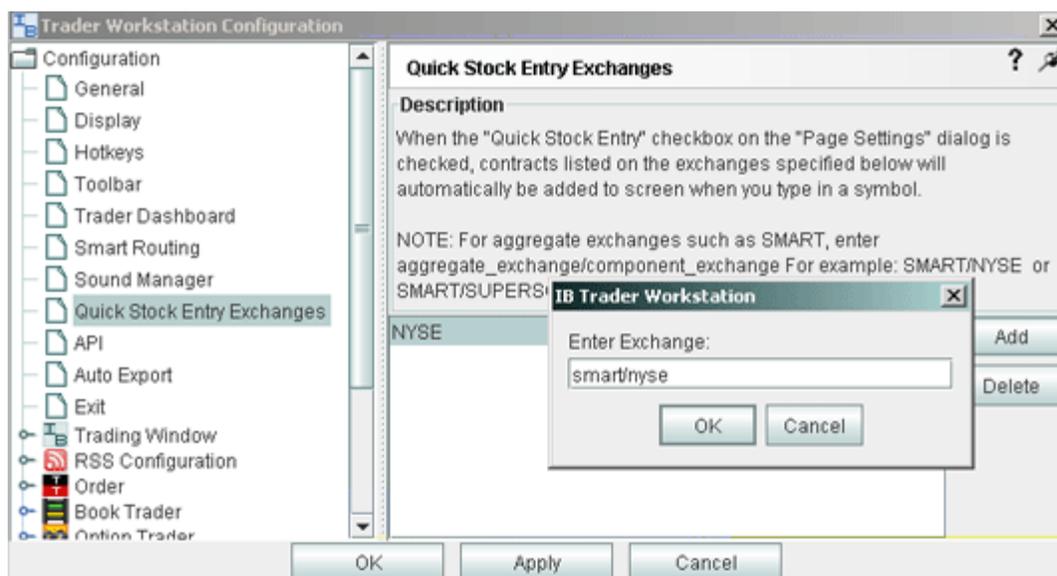
To enable Quick Stock Entry

When you enable Quick Stock Entry for a page, the system assumes that you want to enter ONLY stock tickers on this page, and automatically completes a market data line with the appropriate order destination.

1   Open the page you want to enable for Quick Stock Entry.

Note: We recommend that you identify the page as being enabled for Quick Stock Entry by naming it appropriately.

2   On the **Page** menu, select *Settings*.

3   In the **Page Settings** dialog box, select *Quick Stock Entry*.

4   Click the Quick Stock Entry Exchanges button to add recognized exchanges for quick stock entry support.

To add Quick Stock Entry Exchanges

1   On the **Configure** menu, select *Global Configuration*.

2   In the left pane, select *Quick Stock Entry Exchanges*.

3   Click **Add.**

4   Enter a destination, for example ISLAND, and click OK.

5   Add as many order destinations as you would like to have available. You can add more destinations at any time.

Note: To add SMART, you must also define the primary exchange, for example NYSE, or ISLAND (for NASDAQ stocks).

You can also use symbol|exchange to enter a stock ticker.

Edit Dividends Schedule

Use the Dividends Editor to manually create your own dividend schedule. IB provides an automatic "best guess" dividend payment schedule based on historical data for that asset.
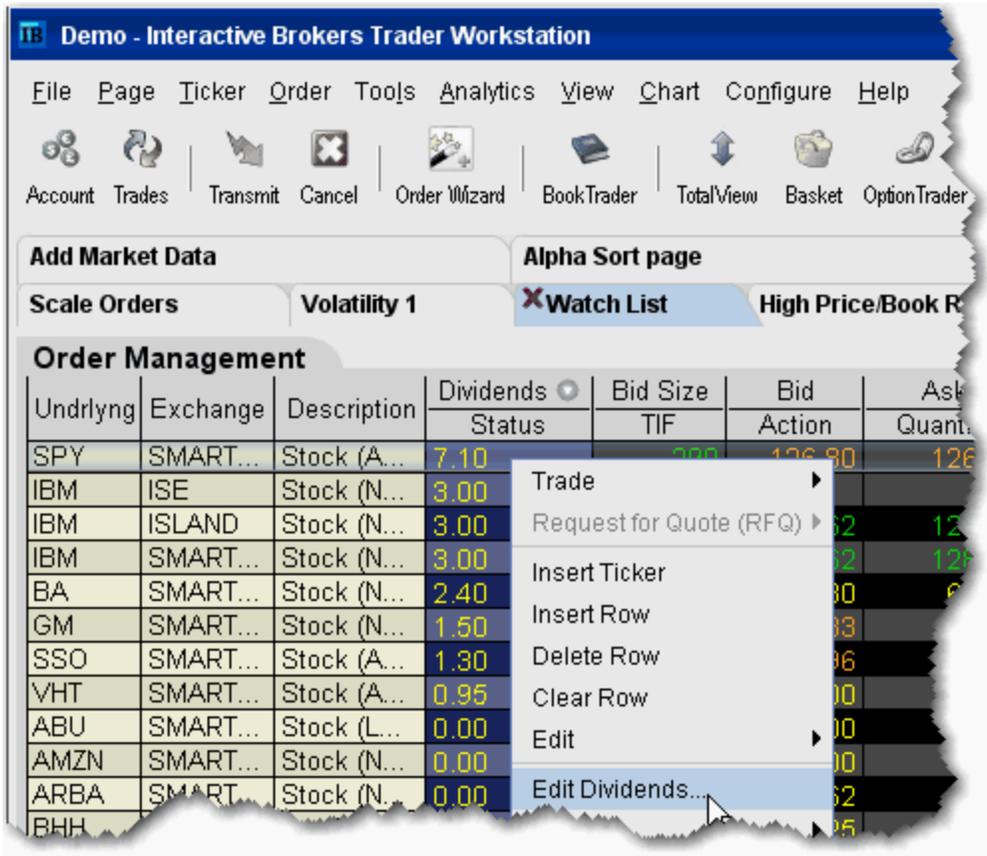
To open the dividend editor

1   Right-click the ticker whose dividends schedule you want to edit.

2   Select *Edit Dividends*.
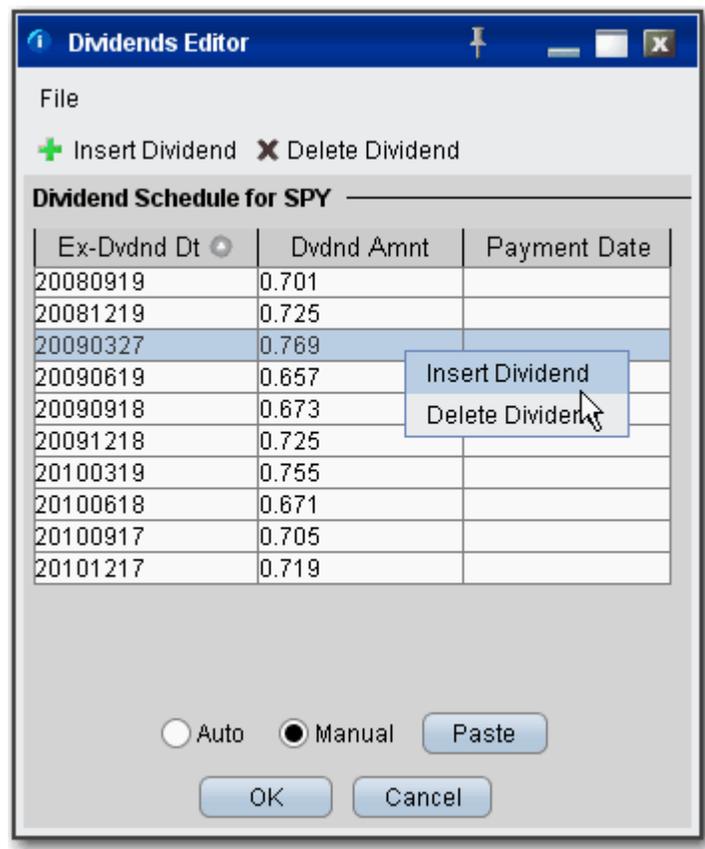
To manually create a dividend schedule

1   Click the *Manual* radio button. The Auto information remains as a starting point, but you can delete or change any of the information.

2   To insert or delete a line, right click in the line and select *Insert Dividend* or *Delete Dividend*.

3   Modify the Ex-Dividend date, Payment Date or Dividend Amount on any line.

> **Note:** The Dividend Amount is a cash value.

4   Click **OK** to apply your dividend schedule to the selected asset.

To paste dividends from a Word or Excel table

1   Create a two-column table in MS Word or MS Excel.

2   Enter data in the format of the existing table, with the Ex-Dividend Date in the first column and Dividend Amount in the second column of your table.

3   Select and copy the table.

4 In the dividend editor, click the Paste button. The data from your external dividends table will replace the current dividends data.

5 Click OK to save your data to the manual display of the Dividends Editor.

The Price and Size Wands

The Price Wand and Size Wand help you to modify the order price and order quantity using just your mouse. Wands become active when you click and hold the mouse in the **Lmt Price** or **Quantity** field on an order line.

To use the price wand

1   Create a Limit order. The **Lmt Price** field populates with the best bid or ask price.

2   Click and hold your mouse in the Lmt Price field to invoke the price wand.

3   Select a new limit price and release the mouse.

Note: The top of the wand ladder includes MARKET; the bottom is VWAP. These selections change your order type to a MARKET or VWAP order to use the market or vwap price.

The prices in the wand ladder are created using the market price plus/minus the price increment.

To modify increments in a wand
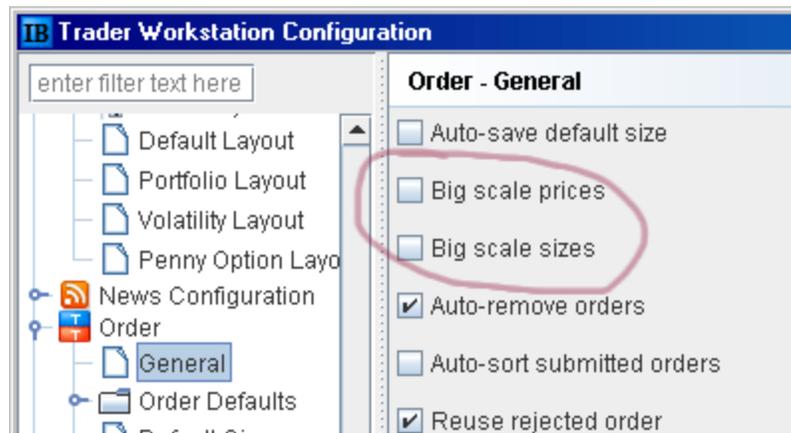
1. On the **Configure** menu, select *Global Configuration*.

2. Expand the **Order** category in the left pane, and select *General*.

3. In the right panel, check *Big scale prices* or *Big scale sizes* to increase the price/size increment used in the wand.

To allow penny increments for US Options in Price wand
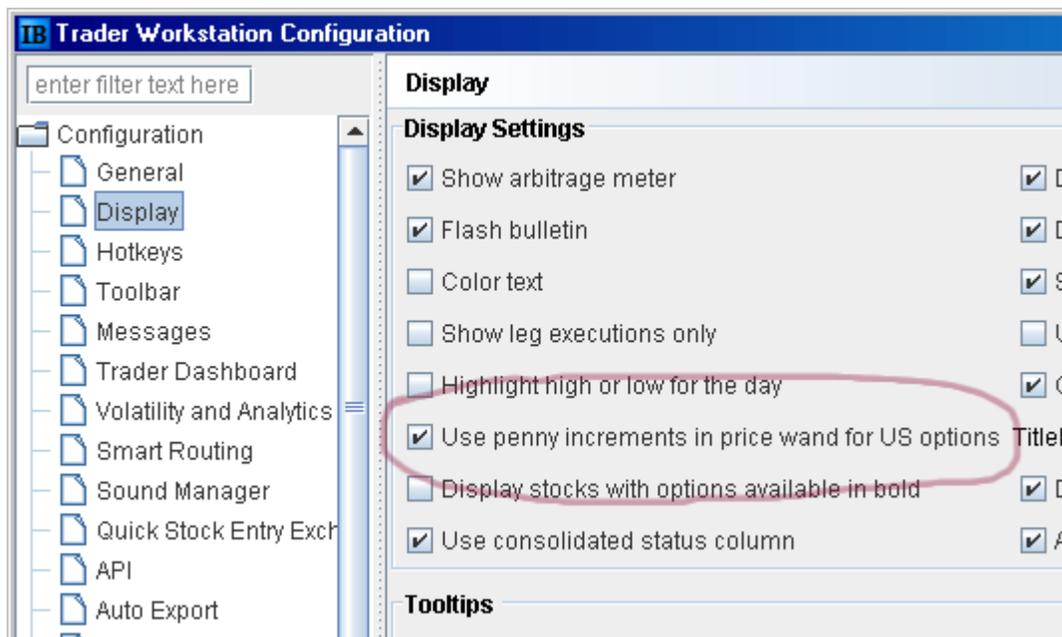
1. On the **Configure** menu, select *Global Configuration*.

2. In the Configuration category in the left pane, select *Display*.

3   Check the option to *Use penny increments in price wand for US options*.

Check Risk Pre-Order

Before you transmit an order, use the *Check Risk* feature to get a quick idea of how transmitting the order might affect your portfolio-relative P&L.
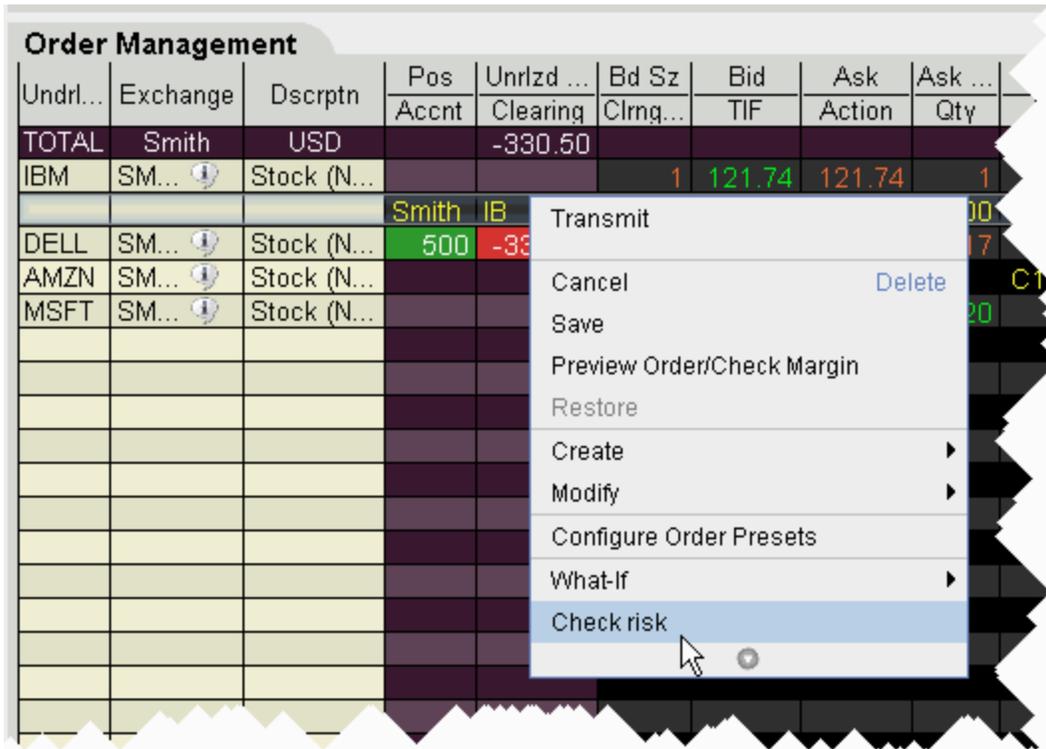
To check risk on an order

- From an order line, right-click and select *Check Risk*.

The IB Risk Navigator[SM] Portfolio Relative P&L chart displays both the current and potential P&L for your portfolio. You can also create and check risk on multiple orders.

To check risk on multiple orders

1 Hold down the Ctrl key and click on each non-submitted order you want to include in the Check Risk P&L.

2 From the **Order** menu, select *Check Risk*.

The IB Risk Navigator's Portfolio Relative P&L displays two lines: the red solid line shows your current portfolio relative P&L for all positions, and the blue dashed line shows the 'what-if' Portfolio Relative P&L including the order(s) you are considering.

If you check the risk on a potential order for a contract in which you hold no current position, the number of 'what-if' positions will increase. If you check the risk on an order for a contract in which you currently hold a position, the 'what-if' position will not change, but the risk will increase or decrease the current position and still be reflected in the blue dashed line.
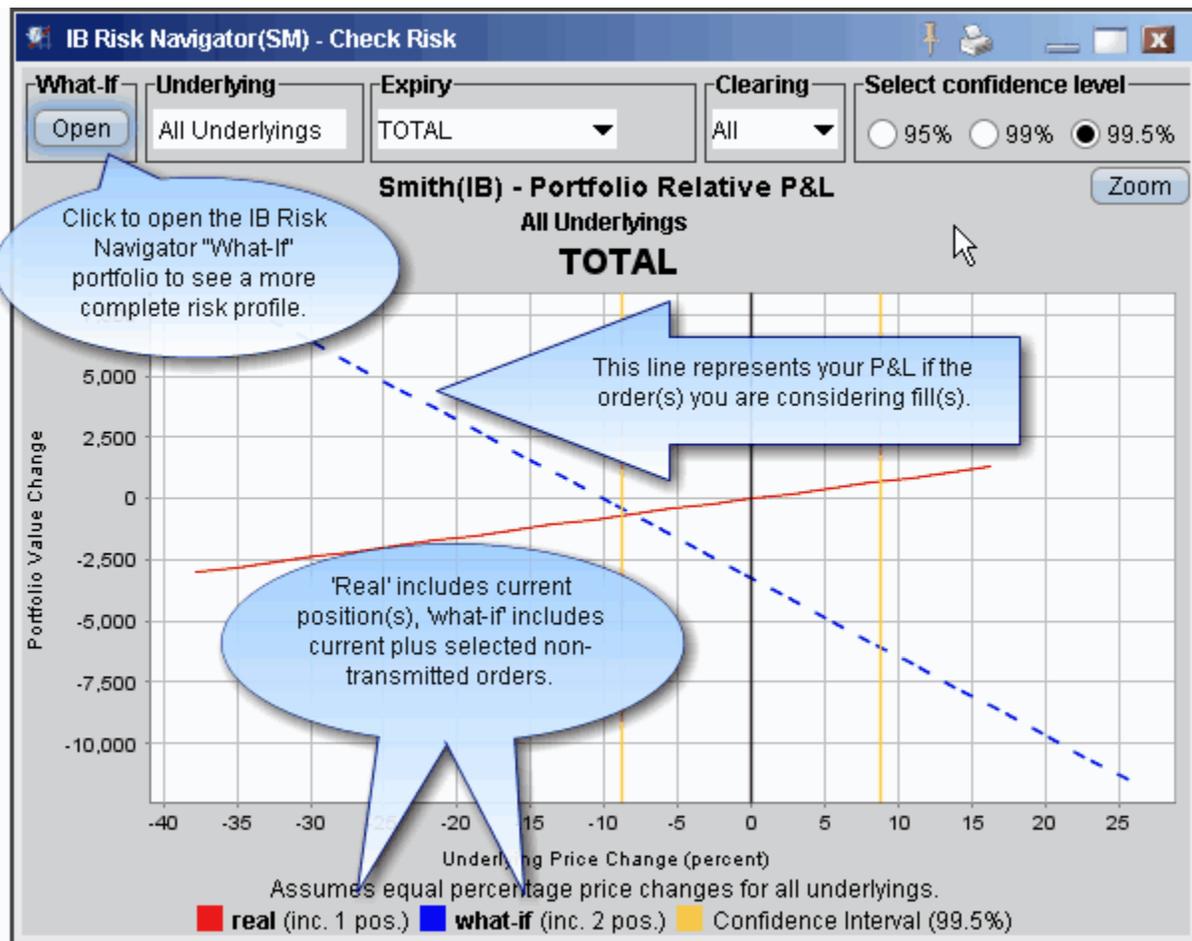
To view a complete What-If scenario in Risk Navigator comprised of all current positions plus whatever trades you are considering, click the *Open* button in the top right corner.

View Futures Prices Term Structure

Chart the term structure of futures prices over a period of two years.

To view futures term structure

1 On the trading window, select a futures contract.

2 From the right-click menu, select *Charts*, then *Term Structure*.

3 In the second set of price terms, select a year, month and day whose closing price you want to compare to the default previous day's close.

> **Note:** Use the calendar chooser to avoid inadvertently choosing a weekend or holiday.

The chart adjust to display the price comparison. Add multiple terms to the same chart. The settlement price difference is charted below the term structure.

Receive Delayed Market Data

Customers now have the option to receive delayed market data on exchanges and instruments for which they do not current hold market data subscriptions. You can elect to receive delayed data for a single ticker, or for all tickers for which you do not have a data subscription.

The Market Data Request Error window, which displays when the user attempts to add a ticker without having subscribed to market data, now includes two checkboxes at the bottom of the window.
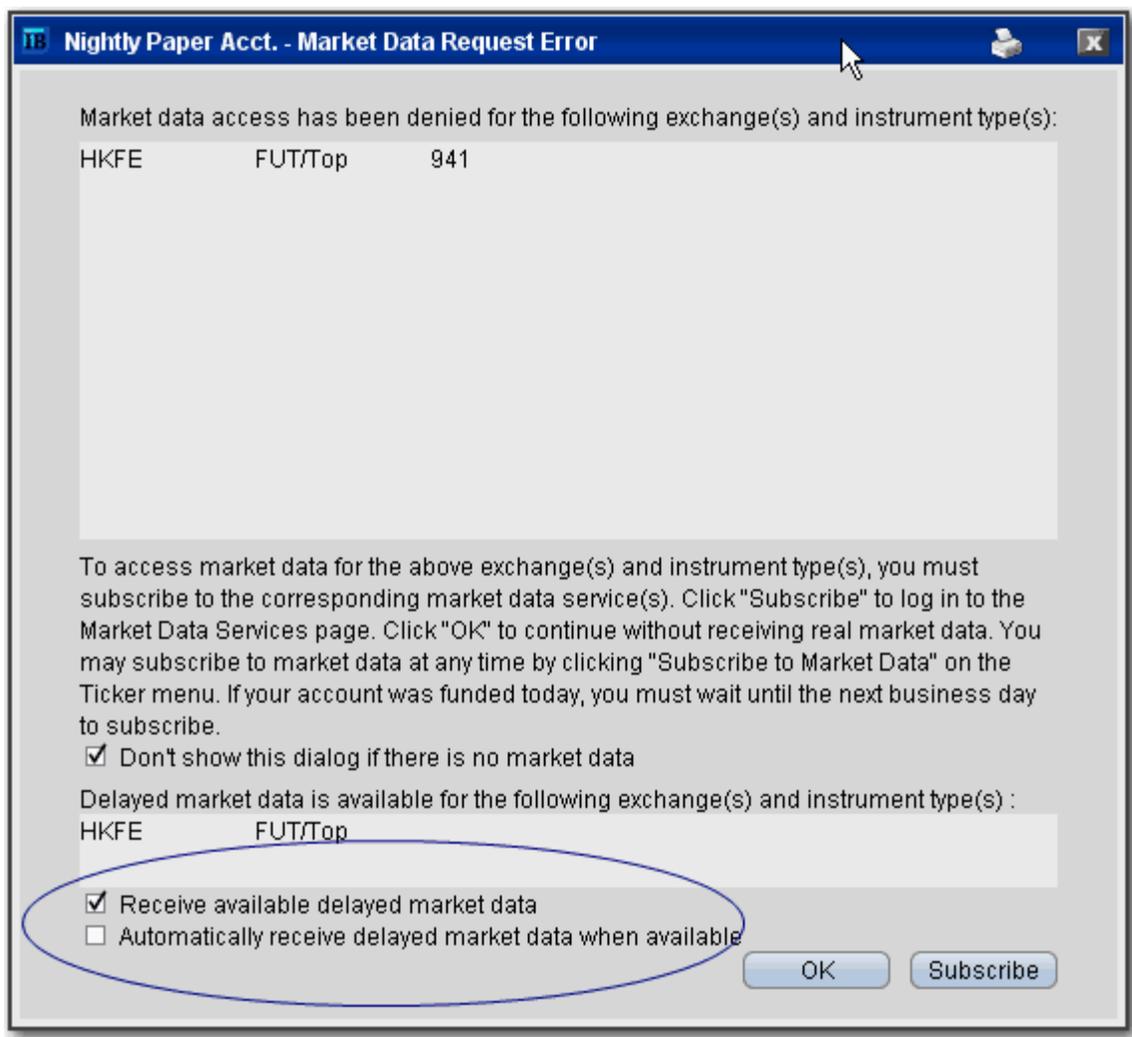
To receive delayed market data for a ticker

- In the **Market Data Request Error** window, check *Receive available delayed market data* and click OK. The ticker line in TWS receives data and is shaded yellow to indicate delayed data.

To receive delayed data for all non-subscribed tickers

- In the **Market Data Request Error** window, check *Automatically receive delayed market data when available* and click OK. Any non-subscribed ticker lines in TWS that can access delayed data will now show data in shaded yellow to indicate delayed data.

To modify delayed data settings, in **Global Configuration** select *Display* then select *Ticker Row*. Click the *Reset Delayed Market Data Subscription* button and check or uncheck the above options to reflect your delayed data preferences.

Real-Time Activity Monitoring

- [The Account Window](#)

- [The Trades Window](#)

- [Other Tools](#)

- [Understanding System Colors](#)

- [Alerts and Notifications](#)

The Account Window

The Account window lets you monitor every aspect of your account activity. We present "key" account values as the default when your first open the Account window (this default view is shown in the illustration below). The account window conveys in real-time values the funds you have available for additional trades and the amount of cushion available before your account is liquidated.

The Account screen is divided into the following sections:

- *Balances*, which shows your account balances for securities, commodities and in total. These balances don't include margin requirements.

- *Margin Requirements*, which show your initial and maintenance margin requirements based on your current portfolio.

- *Available for Trading*, which tells you what you have for additional trades and cushion before liquidation, based on your balance information and margin requirements.

- *Market Value*, shows the total value of all positions, sorted by currency.

- *FX Portfolio*, which shows activity for currency pair trades only. The value in the Position field only reflects trades executed in the FX market. Please note that these do not reflect real-time FX positions, since the non-base currency conversions are not included.

- *Portfolio*, which lists all current positions sorted by underlying, and displays the total current market value for each position.

To open the Account window

- On the main trading Toolbar, click the **Account** icon, or select *Account* from the **View** menu.

Balances

Parameter	Total	Securities	Commodities
Net Liquidation Value	11,552,234.21 USD	11,525,649.22 USD	26,584.99 USD
Equity With Loan Value	11,607,163.65 USD	11,605,778.66 USD	1,384.99 USD
Cash	-7,531,165.96 USD	-7,557,750.96 USD	26,584.99 USD

Margin Requirements

Parameter	Total	Securities	Commodities
Current Initial Margin	5,583,016.36 USD	5,551,516.36 USD	31,500.00 USD
Current Maintenance Margin	5,570,889.66 USD	5,545,689.66 USD	25,200.00 USD

Available for Trading

Parameter	Total	Securities	Commodities
Current Available Funds	6,049,347.29 USD	6,054,262.30 USD	-4,915.01 USD
Current Excess Liquidity	6,061,473.99 USD	6,060,089.00 USD	1,384.99 USD
Buying Power	24,222,589.16 USD		

Market Value

Currency	Cash	Stock	Options	Futures	FOPs	Rlzd P&L	Unrealized P...	Nt Lqdtn
CAD	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0
USD	-7,531,1...	19,178,42...	-80,129.44	-2,372.51	0.00	0.00	1,309,840....	11,550,8
Total (in ...	-7,531,1...	19,180,03...	-80,129.44	-2,372.51	0.00	0.00	1,317,540....	11,552,2

FX Portfolio

Cntrct Dscrptn	Pos	Crrncy	Mkt Val	Market Price	Average Pri...	Unrlzd P&L	Realized P&L	Liquidate L
USD.CHF	13	CHF	13.56	1.04285	1.0331	0.13	0.00	No
USD.EUR	-1,49...	EUR	-965,66...	0.64445	0.64799	5,304.42	0.00	No
USD.GBP	-4,200	GBP	-2,141.58	0.5099	0.50359	-26.50	0.00	No
JPY.USD	100,6...	USD	948.72	0.00943	0.00967	-25.10	0.00	No
GBP.USD	-15,3...	USD	-30,170...	1.96105	1.97497	214.17	0.00	No
EUR.GBP	-18,0...	GBP	-14,243...	0.7913	0.7846	-120.60	0.00	No
EUR.USD	18,057	USD	28,019....	1.5517	1.57251	-375.73	0.00	No
CAD.USD	1,340	USD	1,346.37	1.00475	0.9884	21.91	0.00	No

Portfolio

☐ Show zero position rows

Cntrct Dscrptn	Pos	Crrncy	Mkt Val	Market Price	Avrg Prc	Unrlzd P&L	Realized P&L	Liquidate
	4,000	USD	102,82...	66.66	72.46	66,766.61	0.00	No
BBY	2,500	USD	116,75...	46.70	43.27	8,575.00	0.00	No
BC	4,900	USD	67,130...	13.70	17.92	-20,678.00	0.00	No
BCO	4,000	USD	289,92...	72.48	66.80	22,720.01	0.00	No
BHH	-100	USD	-60.00	0.60	0.37	-23.00	0.00	No

Advisors and other multi-client account holders will see a drop-down selection on the *Account* and *Summary* tabs to select either an individual account or an account group.
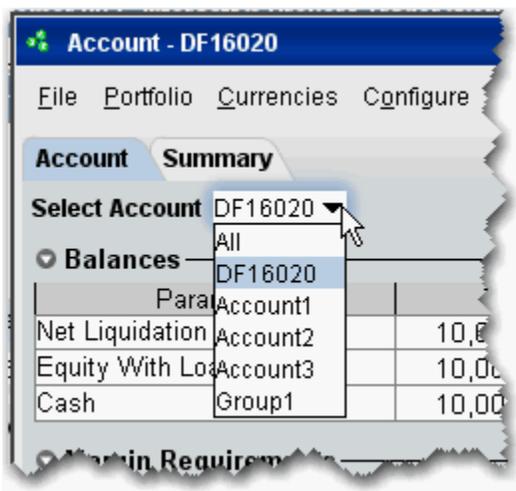
On the Account page, elect to display account information for All accounts, any individual account including the Master, or a user-defined Account Group, which includes a subset of accounts (in the image above, **Group 1** is a user-defined account groups).
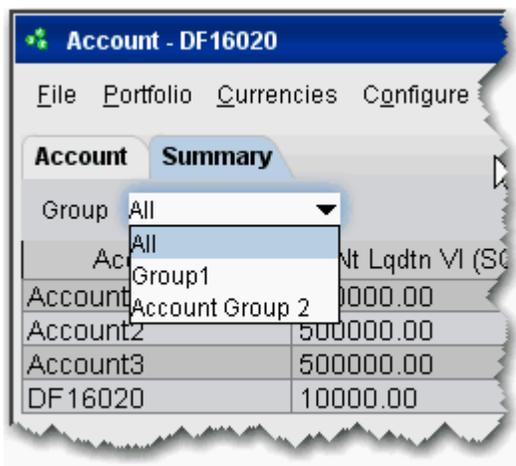
On the Summary page, choose to view the account summary for All accounts, or for any Account Group.

Advisors can also print the summary page by selecting *Print Summary* from the **File** menu.

View Account Balances

The Balances section shows your account balances for securities, commodities and in total. These balances don't include margin requirements.

To view all *Balances* values, expand the section using the green plus (+) sign. To customize this view to show only the values you want to see, put a check next to these parameters and click the green minus (-) sign to contract the section.

The following table defines the fields available in the Balances section.

Parameter	Securities	Commodities
Net Liquidation Value.	Total cash value + stock value + securities options value + bond value + fund value.	Total cash value + commodities options value.
Equity with Loan Value	**Cash Account:** Settled Cash. **Margin Account:** Total cash value + stock value + bond value + fund value + European & Asian options value.	**Cash Account:** Total cash value + commodities option value - futures maintenance margin requirement + minimum (0, futures P&L). **Margin Account:** Total cash value + commodities option value - futures maintenance margin requirement.
Previous Day Equity with Loan Value	Marginable Equity with Loan Value as of 16:00 ET the previous day.	Not applicable.
Reg T Equity with Loan Value	**Cash Account:** Settled Cash. **Margin Account:** Total cash value + stock value + bond value + fund value + non-U.S. & Canadian securities options value + accrued interest + accrued dividend.	**Cash Account:** Total cash value + commodities option value - futures maintenance margin requirement + minimum (0, futures P&L). **Margin Account:** Total cash value - futures maintenance margin requirement.

Parameter	Securities	Commodities
Special Memorandum Account If this values falls below zero at the end of the trading day, positions will be liquidated.	A special account associated with a Reg T Margin account that is maintained for the purpose of applying Federal Regulation T initial margin requirements at the end of the trading day. Max ((EWL - US initial margin requirements)*, (Prior Day SMA +/- change in day's cash +/- US initial margin requirements** for trades made during the day.)) *calculated end of day under US Stock rules, regardless of country of trading. **at the time of the trade	Not applicable.
Securities Gross Position Value (GPV)	Long Stock Value + Short Stock Value + Long Option Value + Short Option Value + Fund Value	
Cash	Settled cash + sales at the time of trade + futures P&L	Settled cash + sales at the time of trade + futures P&L
Settled Cash	Cash recognized at the time of settlement - purchases at the time of trade - commissions - taxes - fees. Stock Settlement: Trade date + 3 days Options Settlement: Trade date + 1 day	Same as for Securities. Futures Settlement: Trade date + 1 day
Accrued Interest	Interest that has accumulated but has not been paid or charged.	Same as for Securities.
Dividend Payables	*Dividends in Lieu* that must be paid by the holder of a short position.	

Real-time Margin Monitoring

Use real-time margin monitoring to see your current margin requirements at a glance, and to understand the margin implications of any transaction before you transmit an order.

To view real-time margin requirements

1   On the **View** menu, select *Account*.

2   The Account Information window shows your account details, including the current market value and portfolio.

3   Use the *Margin Requirements and Trading Limits* section to monitor your margin.

You can also see the margin impact for a single order using the right-click *Preview Order* command from an order line on the trading window.

To preview margin impact

1 Use the right-click menu from an order line to select *Order Preview/Check Margin*.

2 View the order details before you transmit, including commissions, margin impact and the order description.

3 Click *Transmit* to send the order from the Preview window, or *Close* to modify before sending.

Monitor Margin Requirements

Margin is calculated at three periods during the day: the market's open, the market's close, and overnight. The *Margin Requirements* section shows your current margin, projected margin for the next period of margin calculation (Look Ahead) and the Overnight calculation (valid for futures only).

- The *Current* margin is your real-time requirement right now. If you happen to be viewing this screen at 1:00 AM, your current and overnight margin values for your futures positions will be identical. If you're viewing this screen during trading hours,

your current margin requirements for futures will be less than or equal to the overnight requirement.

- The *Look Ahead* projects what your margin requirements will be at the **next** margin calculation, based on what you have in your portfolio now. If you're viewing this screen at 2:00 PM, the **next** calculation will be at the close. If you're viewing this screen at 1:00 AM, the **next** calculation will be at the open.

- *Overnight* is the requirement after regular market hours.

To view all *Margin Requirements* values, expand the section using the green plus (+) sign. To customize this view to show only the values you want to see, put a check next to these parameters and click the green minus (-) sign to contract the section.

Try PM

Click to see how your margin requirements would be different if you had a portfolio margin account instead of a RegT margin account.

Soft Edge Margining

To help you stay on top of your margin requirements, we now provide pop-up messages and color-coded account information to notify you that you are approaching a serious margin deficiency. TWS will highlight the row whose value is in the distress state. The colors on your account screen tell you the following:

Yellow - You have only a 5% cushion above the margin requirement

Orange - Your margin cushion is depleted and you have a short time to enter into margin-reducing trades before your positions are liquidated. At this point you will not be able to enter into any trades that might decrease your margin.

Red - Your positions will shortly start to be liquidated as necessary to bring your account back within the margin limits.

The following table defines the fields available in the Margin Requirements section.

Parameter	Securities Account	Commodities Account
Reg T Margin	**Initial margin requirements calculated under** US Regulation T rules.	**Initial margin requirements calculated under** US Regulation T rules.
Current Initial Margin	Initial margin requirement in the base currency of the account. The initial margin requirement is what is required to open a new position.	Initial margin requirement in the base currency of the account. The initial margin requirement is what is required to open a new position.
Current Maintenance Margin	Maintenance margin requirement in the base currency of the account. This is the value required to maintain your current positions.	Maintenance margin requirement in the base currency of the account. This is the value required to maintain your current positions.
Look Ahead Initial Margin	Initial margin requirement as of next period's margin change in the base currency of the account.	Initial margin requirement as of next period's margin change in the base currency of the account. This value depends on when you are viewing your margin requirements. If it is 3:00 pm ET, the next calculation you're looking ahead to is after the close, or the Overnight Initial Margin. If it's 3:00 am ET, the next calculation will be at the market's open.
Look Ahead Maintenance Margin	Maintenance margin requirement as of next period's margin change in the base currency of the account.	Maintenance margin requirement as of next period's margin change in the base currency of the account. This value depends on when you are viewing your margin requirements. If it is 3:00 pm ET, the next calculation you're looking ahead to is after the close, or the Overnight Initial Margin. If it's 3:00 am ET, the next calculation will be at the market's open.
Overnight Initial Margin	Overnight initial margin requirement in the base currency of the account.	Overnight initial margin requirement in the base currency of the account.
Overnight Maintenance Margin	Overnight maintenance margin requirement in the base currency of the account.	Overnight maintenance margin requirement in the base currency of the account.

Please see the Margin Overview page on the IB website for details on margin calculations.

View Available for Trading Values

If you look at nothing else on the Account Screen, the Available for Trading values show you the state of your account at a glance. Your Available Funds tells you if you can put on a trade. Your Excess Liquidity tells you whether you have sufficient cushion to maintain your current positions, your Buying Power tells you how much you have at your disposal including your equity and IB's margin.

To view all *Available for Trading* values, expand the section using the green plus (+) sign. To customize this view to show only the values you want to see, put a check next to these parameters and click the green minus (-) sign to contract the section.

▼ Available for Trading				
Parameter	Total	Securities	Commodities	
Current Available Funds	10,034,835.65 USD	10,035,004.42 USD	-168.77 USD	☑
Current Excess Liquidity	10,035,185.45 USD	10,035,179.22 USD	6.23 USD	☑
Look Ahead Available Funds	10,034,835.65 USD	10,035,004.42 USD	-168.77 USD	☐
Look Ahead Excess Liquidity	10,035,185.45 USD	10,035,179.22 USD	6.23 USD	☐
Overnight Available Funds	10,034,835.65 USD	10,035,004.42 USD	-168.77 USD	☐
Overnight Excess Liquidity	10,035,185.45 USD	10,035,179.22 USD	6.23 USD	☐
Buying Power	40,121,631.93 USD			☑
Leverage		0.02		☐
Look Ahead Next Change	@ 14:45:00			☐
Day Trades Left (T,...,T+4)	Unlimited			☐

The following table defines the fields available in the *Available for Trading* section.

Parameter	Securities Account	Commodities Account
Current Available Funds	This value tells what you have available for trading. Equity with Loan Value - Initial margin.	Same.
Current Excess Liquidity	This value shows your margin cushion, before liquidation. Equity with Loan Value - Maintenance margin.	Net Liquidation value - Maintenance margin.
Look Ahead Available Funds	This value reflects your available funds at the next margin change. The next change is displayed in the *Look Ahead Next Change* field. Equity with loan value - look ahead initial margin.	Net Liquidation value - Look ahead Initial margin.
Look Ahead Excess Liquidity	Equity with loan value - look ahead maintenance margin.	Net Liquidation value - look ahead maintenance margin.
Overnight Available Funds	Same as during regular trading hours.	Net Liquidation value - Overnight Maintenance margin

Parameter	Securities Account	Commodities Account
Overnight Excess Liquidity	Same as during regular trading hours.	Net Liquidation value - Overnight Maintenance margin.
Buying Power	**Cash Account**: (Minimum (Equity with Loan Value, Previous Day Equity with Loan Value)-Initial Margin) **Standard Margin Account**: Available Funds*4.	Not applicable for futures.
Leverage	Gross Position Value/Net Liquidation.	Same.
Look Ahead Next Change	Shows you when the next margin period will begin.	Same.
Day Trades Left	Number of day trades still available for 4-day pattern day trader period.	Not applicable for futures.

View Market Value

The Market Value section shows you total value for all assets sorted by currency. Accounts with the ability to make transfers between brokers will also have an *In Transit* tab to monitor DVPs and other position transfers.

The following table defines the fields in the Market Value section.

Parameter	Description
Currency	Open positions are grouped by currency.
Cash	Cash recognized at the time of trade + futures P&L. This value reflects real-time current FX positions, including: • Trades executed directly through the FX market • Trades executed as a result of automatic IB conversions, which occur when you trade a product in a non-base currency, • Trades deliberately executed to close non-base currency positions.
Accrued Interest	Reflects the current month's accrued debit and credit interest to date, updated daily.
Stock	Real-time mark-to-market value of stock.
Options	Real-time mark-to-market value of securities options.
Futures	Real-time change in futures value since last settlement.
FOPs	Real-time mark-to-market value of futures options.
Funds	Current funds balance.
Exchange Rate	The currency exchange rate to the base currency.
Net Liquidation Value	Total cash value + stock value + options value + bond value.
Unrealized P&L	The difference between the current market value of your open positions and the average cost, or **Value - Average Cost**.
Realized P&L	Shows your profit on closed positions, which is the difference between your entry execution cost and exit execution cost, or **(execution price + commissions to open the position) - (execution price + commissions to close the position)**.

View FX Portfolio Values

This section shows activity only for currency pair trades. The "Position" value reflects the sum of trades executed in the FX market only, and consequently does not reflect a real-time FX position. Check the value in the *Cash* field of the Market Value section for real-time FX position information.

When the FX Portfolio panel is displayed, currency positions will also be displayed in the trading window. To remove currency positions from display, condense the FX Portfolio panel by click the arrow to the left of the panel title.

Cntrct Dscrptn	Position	Currency	Market Value	Market Price	Average Price	Unrlzd P&L	Realized P&L	Liquidate Last
JPY.USD	100,655	USD	948.77	0.00943	0.00967	-25.05	0.00	No
EUR.USD	18,057	USD	28,010.92	1.55125	1.57251	-383.86	0.00	No
CAD.USD	1,340	USD	1,345.29	1.00395	0.9884	20.84	0.00	No
USD.CHF	13	CHF	13.56	1.04315	1.0331	0.13	0.00	No
USD.GBP	-4,200	GBP	-2,141.79	0.50995	0.50359	-26.71	0.00	No
GBP.USD	-15,385	USD	-30,170.75	1.96105	1.97497	214.17	0.00	No
EUR.GBP	-18,000	GBP	-14,238.45	0.79102	0.7846	-115.65	0.00	No
USD.EUR	-1,498,427	EUR	-965,960.94	0.64465	0.64799	5,004.77	0.00	No

The following table defines the fields available for display in the **FX Portfolio** section.

Parameter	Description
Contract description	Symbol and description.
Exchange	An exchange on which the pair trades. This may not be the executing exchange for the trade.
Position	The sum of trades executed in the FX market for the selected currency pair.
Unsettled Position	Unsettled currency trades.
Currency	Currency used to buy/sell the FX pair.
Market Value	(Position) x (market price).
Market Price	Real-time price of the position.
Average Price	Average price per contract.

Parameter	Description
Unrealized P&L	The difference between the trade price and the market price times position, including commission. *Example*: BUY 20,000 EUR.USD @ 1.54390 Trade Price = 1.54390 Market Price (current price) = 1.54385 1.54390 – 1.54385 = .00005 .00005 X 20,000 = 1 + 2.5 commission = -3.50 Unrealized P&L
Realized P&L	Realized profit & loss for the pair.
Liquidate Last	Last liquidation "Yes" or "No" tag. If set to "Yes" this position will be put at the end of the queue to liquidate last in the case of margin requirements. To set, use the right-click menu on the desired position. **Note:** While IB provides customers the opportunity to pre-request the order of liquidation in the event of a margin deficiency in their account, such requests are not binding on IB. In the event of a margin deficiency in customer's IB account, IB retains the right, in its sole discretion, to determine the assets to be liquidated, the amount of assets liquidated, as well as the order and manner of liquidation. Customers are encouraged to consult the IB Customer Agreement and the IB Disclosure of Risks of Margin Trading for further information.

View Portfolio Values

The Portfolio section shows the current value of each position and allows you to mark any position to be liquidated last in the event of a margin call. Accounts with the ability to make transfers between brokers will also have an *In Transit* tab to monitor DVPs and other position transfers.

Please note that TWS displays all FA customer positions in the Account window on a net/aggregate basis.

The following table defines the fields in the Portfolio section.

Parameter	Description
Show Zero Position Rows - displays a line for all traded contracts even if the position was closed out.	
Contract description	Symbol and description.
Position	Quantity of long/short shares or contracts.
Currency	Currency of the contract.
Market Value	(Position) x (market price).
Market Price	Real-time price of the position.
Average Price	Average cost of stock and securities options opening positions, including commissions. **Note:** Right click and select *Show all values in base currency* to have TWS convert all non-base currency position values for display in your base currency. Converted values are displayed in *italics* for easy identification.
Unrealized P&L	(Market value of positions) - (average cost).

Parameter	Description
Realized P&L	(Market value of positions since close of period*) - (average cost for these positions). *Cut-off times for determining realized P&L for transactions are as follows: • 20:30 ET for securities • Two periods for futures: 17:30 ET and 7:10 ET
Liquidate Last	Last liquidation "Yes" or "No" tag. If set to "Yes" this position will be put at the end of the queue to liquidate last in the case of margin requirements. To set, use the right-click menu on the desired position. **Note:** While IB provides customers the opportunity to pre-request the order of liquidation in the event of a margin deficiency in their account, such requests are not binding on IB. In the event of a margin deficiency in customer's IB account, IB retains the right, in its sole discretion, to determine the assets to be liquidated, the amount of assets liquidated, as well as the order and manner of liquidation. Customers are encouraged to consult the IB Customer Agreement and the IB Disclosure of Risks of Margin Trading for further information.

The Right-click Portfolio Menu

If you select an asset in the Portfolio section and click your right mouse button, you will have access to the following menu items.
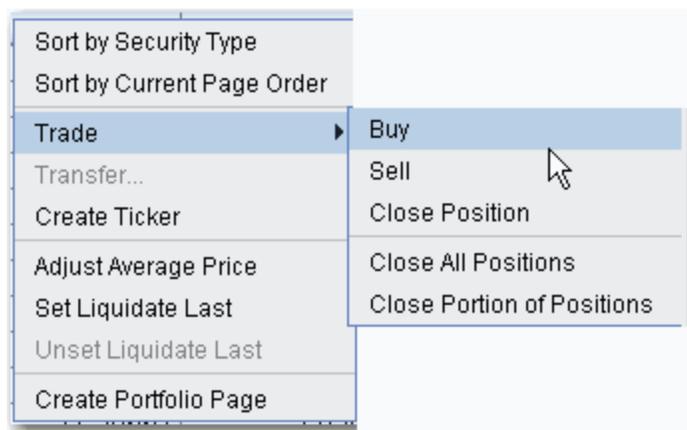
Parameter	Description
Sort by Security Type	Sort positions alphabetically by security type.
Sort by Current Page Order	Sort positions based on their location on a trading page.

Parameter	Description
Trade	• Buy - Creates a buy order on the trading page for the selected contract.
	• Sell - Creates a sell order on the trading page for the selected contract.
	• Close Position - Transmits an appropriately sized opposite-side order to close our the position.
	• Close All Positions - Transmits multiple opposite-side orders to close out all positions in your portfolio.
	• Close Portion of Positions - In the text entry box that pops up, enter the percentage which will be used to calculate the size of each position's opposite-side order transmitted.
Transfer	For transfer-capable accounts - initiates a DVP/RVP, CMTA or other transfer.
Create Ticker	Creates a market data line for the contract on the main trading screen.
Adjust Position or Average Price	Only active for Forex positions. Use this feature to enter a hypothetical "new" position and "new" average cost. This feature does not modify your forex positions but lets you create a "what-if" to see total P&L including positions you may hold elsewhere.
Adjust Average Price	Displayed for all products except cash. Select a position and choose Adjust Average Price. Use the dialog box to enter a new position or change the average price to include transfers and corporate actions.

Parameter	Description
Set Liquidate Last	Last liquidation "Yes" or "No" tag. If set to "Yes" this position will be put at the end of the queue to liquidate last in the case of margin requirements. To set, use the right-click menu on the desired position. **Note:** While IB provides customers the opportunity to pre-request the order of liquidation in the event of a margin deficiency in their account, such requests are not binding on IB. In the event of a margin deficiency in customer's IB account, IB retains the right, in its sole discretion, to determine the assets to be liquidated, the amount of assets liquidated, as well as the order and manner of liquidation. Customers are encouraged to consult the IB Customer Agreement and the IB Disclosure of Risks of Margin Trading for further information.
Unset Liquidate Last	Removes the "Liquidate Last" designation for a position.
Create Portfolio Page	Creates a trading page called *Portfolio* that includes market data lines for all tickers in your Portfolio.

The Trades Window

Introduction

The Trades window displays reports for daily executions including those completed during after-hours trading. To view executions, click the **Trades** icon on the trading toolbar.

Menus

Menu Name	Description
File menu	• <u>Export Today's Reports</u> - click to save your execution reports to an outside file for use in another application such as MS Excel. • Export Previous Day's Reports - click to save execution reports from a previous day to an outside file for use in another application such as MS Excel. • Print - prints the current page. • Close - closes the Trades window.
Trades menu	• Sort - opens the Sort dialog box where you can elect to sort reports by field. • Show Avg Price - select two or more execution reports. The average price and total number of shares for the selected reports is calculated. • Expand/Collapse - if applicable, the selected rows are expanded/retracted. • Show Legs - this will expand any spread and combination executions to also display the individual legs. • Expand All/Collapse All - expands or retracts all valid rows.
View menu	• Trade History - brings you to the Trade Confirmations page of the Report Management section of Account Management.

Menu Name	Description
Settings menu	• Layout - opens the **Table Column Settings** window where you can choose to display or hide columns (by checking/un-checking the column titles), and change their position relative to other columns. • Avg. Price Precision - allows you to determine the decimal point precision for the average price calculation by entering the decimal point placement. • Font Size - change the font style and font size for the Executions window data. • Highlight Trades - opens the Highlight Trades dialog box. Enter the number of seconds for new execution reports to remain highlighted (for easy viewing). Check *Auto expand after partial fill* to have execution reports for partially filled orders automatically expand to display other portions of the order as it is filled. • Show Leg Executions Only - if checked, spreads and combination executions will be shown in individual legs. If unchecked, the entire combination will be displayed, and you can click to expand the line and show the individual leg executions. • Symbol Mode - displays the contract description in symbol mode. • Group executions by price - if checked, partial fills for an order are grouped by price under the order. The aggregate fills for a price level can be further expanded to see the individual fills by clicking the "+" sign. Price levels with only a single fill at that price are not expandable. • Blink always on new trade - if checked, the **Trades** icon on the trading toolbar will blink to notify you that an order has executed. • Blink if Trade window is closed - if checked, the **Trades** icon on the trading toolbar will blink to notify you that an order has executed ONLY if the Trades window is closed. • Never blink - if checked, you will not receive any blinking notifications of executed orders.
Help menu	• Click *Show Help* to open the TWS Users Guide.

Trades Tab

The Trades window has two tabs: *Trades* and *Summary*. Advisors and other multi-client account holders have the option to see trade activity for *All* accounts, an individual account (including the Master) or any user-defined *Account Group*. The account group "Global Fund" is selected in the image above.

To add or remove columns from the Trades tab

1 Right-click in any column heading and select *Layout*.

2 Check the columns you want to include; uncheck columns you want to hide.

Column Name	Description
Action	The action, either Bot or Sold
Quantity	The number of units in the trade.
Underlying	The underlying symbol.
Comb	If checked, identifies the trade as a combo trade. Use the "+" sign to expand the combo and view individual legs.
Description	The contract description.
Price	The current market price per unit.
Currency	The currency in which the position is held.

Column Name	Description
Exchange	The exchange that executed the order.
Date	The execution date.
Time	The execution time.
Order ID	The order ID
Order Ref	The order reference number as defined by the user on the Order Ticket. For basket orders, this field contains the name of the basket to which the order belongs.
Commissions	Commission charged on the trade.
VWAP Time	For VWAP orders, the time at which the order executed.
Comment	Displays comments relative to the order.
Account	Identifies the beneficial account number.
Confirm	Valid only for Linkage customers.
Submitter	Identifies the order submitter.
Yield	The yield-to-worst. This is the lower of yield to maturity and yields to all calls. The yield is only shown if it is offered on the exchange.
The text along the bottom of the window describes the sort order of fields on the **Trades** tab.	

Export Trade Reports

You can export today's and previous day's execution reports to a file which you can then view using MS Excel or another outside application.

To export trade reports

1   Click the Trades icon on the Trading toolbar to open the Trades window.

2   On the **File** menu, select *Export Today's* (or *Previous Day's*) *Reports*.

3   If applicable, select the day's report and click OK.

In the **Filename** field, enter the location and filename you want to assign to the report. Note that the report will be saved as a text (.txt) file.
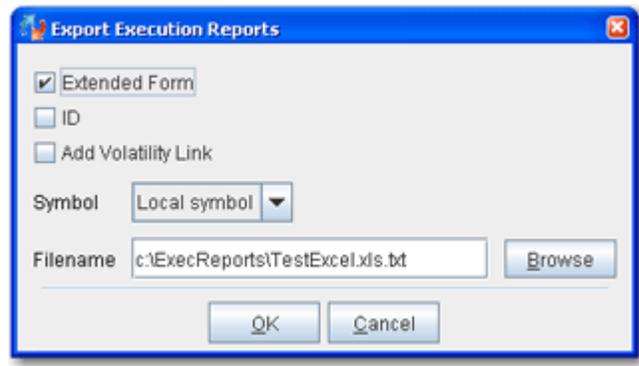
- • Check *Extended Form* to include the type, expiry, strike, right and premium currency fields on the exported report.

- • Check *ID* to include the ID field on the report

- • Check *Add Volatility Link* to include the volatility calculation (for Volatility orders).

4 In the Symbol dropdown choose Underlying, Local Symbol or both.

5 Click OK to save the report to an outside directory.

You can open your exported report in a spreadsheet such as MS Excel, by performing a few simple steps.

To open your trade report in Excel

1 Open MS Excel and click **File** > *Open*.

2 In the **Files of type** dropdown, select *All Files (*.*)*.

3 Find the location of the .txt executions file you want to open.

4 In the Text Import Wizard, use **Delimited** as the file type and click *Next*.

5 Select **Semicolon** as the delimiter and click *Next*.

6 Leave the column data format as **General** and click *Finish*.
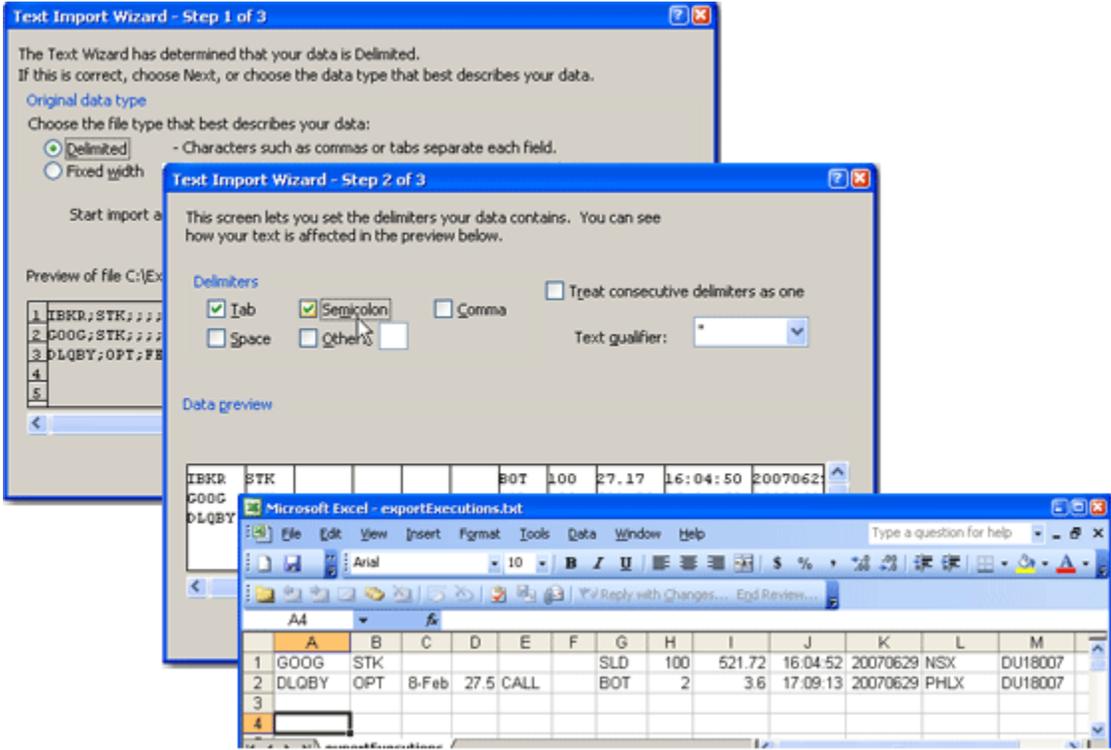
Trades Summary

The Summary tab displays execution information by contract. To view executions, click the **Trades** icon on the trading toolbar.
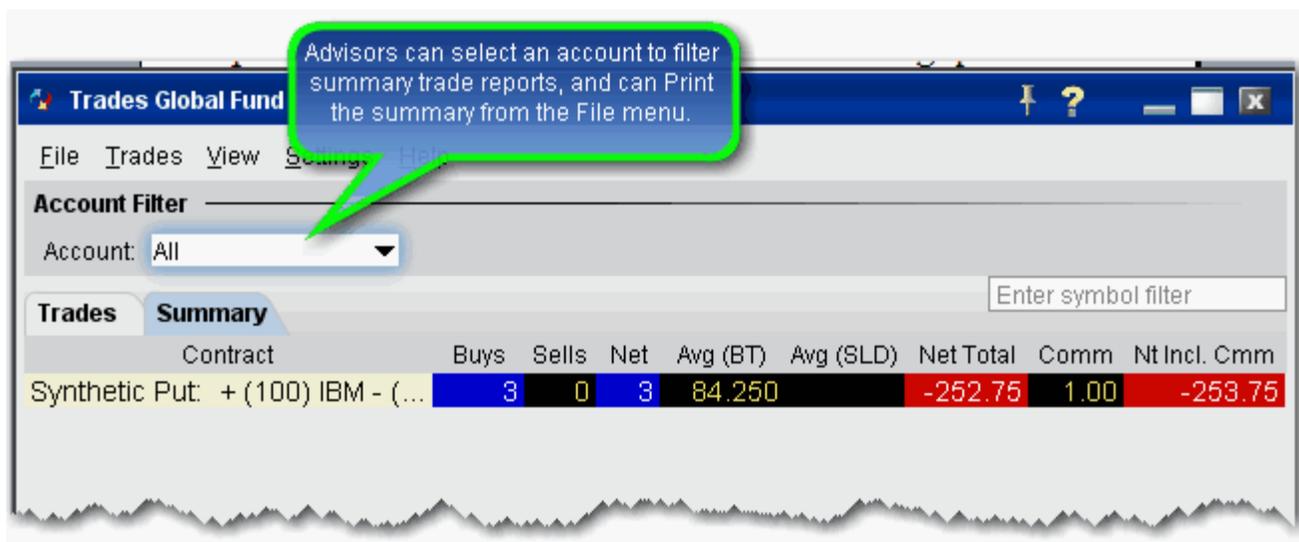
To add/remove columns

1 Right-click on any column heading and select *Customize Layout*.

2 In the **Available Columns** list, select a column and click **Add** to move it into the **Shown Columns** list.

Other Tools

Introduction

Profit and Loss

You can see P&L on the trading screen and in the Account window. Use the Layout manager to add these fields to your trading screen.

- **Position -** shows your position in the instrument.

- **Market Value -** equal to the position * market price.

- **Avg Price** - the average price is calculated by dividing your cost (execution price + commission) by the quantity of your position. This value is then used to determine your unrealized P&L.

  Position and P&L - shows your profit and loss for the current day. You can elect to show New Position P&L which is only for transactions executed today, or Daily P&L, which includes all open positions plus the New Position P&L.

To set the P&L calculation, right-click the field name and *select Configure Position and P&L Column*.

- To display New Position P&L, **uncheck** the box to *Include today's opening position in P&L calculation.* The field heading will display **P&L (N)** to indicate it's for new positions only.

  New Position P&L calculation:
  (current price - purchase price) x (number of outstanding shares purchased today).

- To display Daily P&L, check the box to *Include today's opening position in P&L calculation*. The field label will read **Position and P&L**.

Daily P&L calculation: (current price - prior day's closing price) x (total number of outstanding shares) + (New Position calculation for all new positions).

- **Unrealized P&L** - the difference between the current market value and the average price of your position.

- **Realized P&L -** shows your profit or loss on closed positions, which is the difference between your entry execution cost (execution price + commissions to open the position) and exit execution cost (execution price + commissions to close the position).

- **Cost Basis** - (the current position x average price).

Pending Orders Page

You can view working orders on the **Pending** page, as well as on any trading page that displays the instrument. Once an order has been executed, it is removed from the Pending page and the execution report is displayed in the Executions window. If you have orders pending when you log in, the Pending page is automatically displayed for your review.

You can view positions on the Pending page by displaying the Positions column using the Page Layout.

To view pending orders

- On the Trading screen, click the Pending tab. When orders are working, the Pending tab title, along with the title of the page on which the asset is displayed, is red.

You can also elect to display GTC orders on a separate Pending page from other orders.

To separate Pending order pages for GTCs

1 On the **Configure** menu select *Global Configuration*.

2 In the left pane, select **Order**, then select *General*.

3 In the right panel, check *Display pending day and GTC orders on separate pages*.
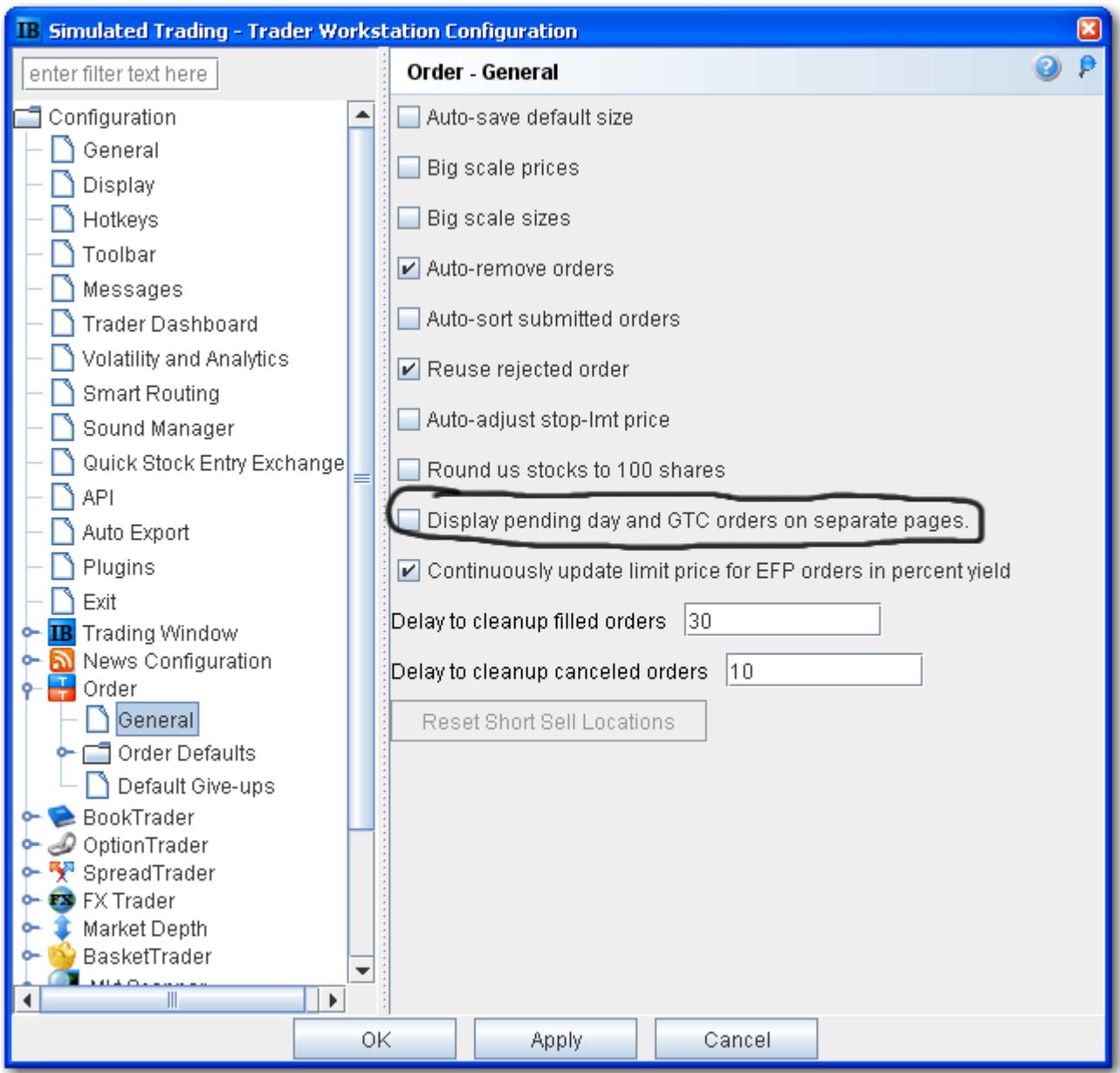
Note: You can manage working orders from the Pending page, but you cannot create an order or add a new market data line. You can also modify conditions for a conditional order from the **Pending** page.

Pending Orders - Filter and Sort

You can elect to view orders on the Pending page based on user-defined search criteria, and to sort pending orders by order fields in *Compressed* view, which displays only order rows with no market data and no blank rows.

To filter pending orders

1 On the **Pending** page, enter search criteria in the *Enter search string* box, which appears to the right of the page tabs whenever you have working orders.

> **Note:** All orders that meet your criteria are displayed in **Compressed View**, which means the order lines only are displayed, with no blank rows or market data rows included. The number of orders that did not meet your criteria is noted below the search string box.

To return to normal **Pending** page layout, click the ❌ to close CompressedView.

To sort by order field in Compressed view

1 Enable order sorting by compressed view from the Display page in **Global Configuration**.

2 On the **Pending** page, click the order field heading you want to use to sort orders, for example Lmt Price.

> **Note:** All pending orders are sorted by the order field you clicked and are displayed in **Compressed View**, which means the order lines only are displayed, with no blank rows or market data rows included.

3 To return to normal **Pending** page layout, click the "x" to close Compressed View.

The Rebalance Window

Use the **Rebalance** window to redistribute percentages of positions in your portfolio that make up your current (signed) net liquidation value. The application automatically opens and closes positions to rebalance your portfolio based on the new percentages you enter. You can add contracts and create orders just as you would from the main trading screen.

To rebalance your portfolio

1   From the **Trading** menu, select *Rebalance Portfolio.*

2   The **Rebalance Portfolio** window shows three columns that are different from those on your trading screen:

- *Deliverable Value* - this is the deliverable value of the position. For stocks, this is the value of the stock, which is the same as the Market Value for the position shown in the *Portfolio* section of the **Account** window. For options, futures, and single stock futures (SSFs) it is the underlying stock or index value.

- *Current %* - this is the current signed percent of the position to your <u>net liquidation value</u> shown in the *Balance* section of the **Account** window. This figure is calculated by dividing the DLV by the NLV (Net Liq. Value).

  - *Rebalanace %* - use this field to enter a new percentage of the NLV that you want the position to have.

3 In the Rebal % field for one or multiple positions, enter the percent of the Net Liquidation Value that you want the position to have.

4 Click the **Create Orders** button to instruct the application to automatically create the orders to achieve the percent change.

5 Use the **Transmit All** button to send all orders, or click "T" on an order line to transmit a single order.

Note: For options, the rebalance % is based on the value of the underlying stock prices.

To open positions from the Rebalance window

1 Click Add Line from the buttons panel, and enter an underlying symbol into the blank row and hit *Enter*. Define the contract.

2 Enter a value in the *Rebal %* column and click the **Create Orders** button.

3 Transmit the order.

Import and Export Positions

Customers who prefer to work in Excel can export the Rebalance file and modify the current percentage to reflect the percent of net liquidation you want to the positions to have, then import the modified file back into Rebalance Portfolio.

Advisors can also use this feature to import a modified file to a new account to easily bring this account to the new percentages.
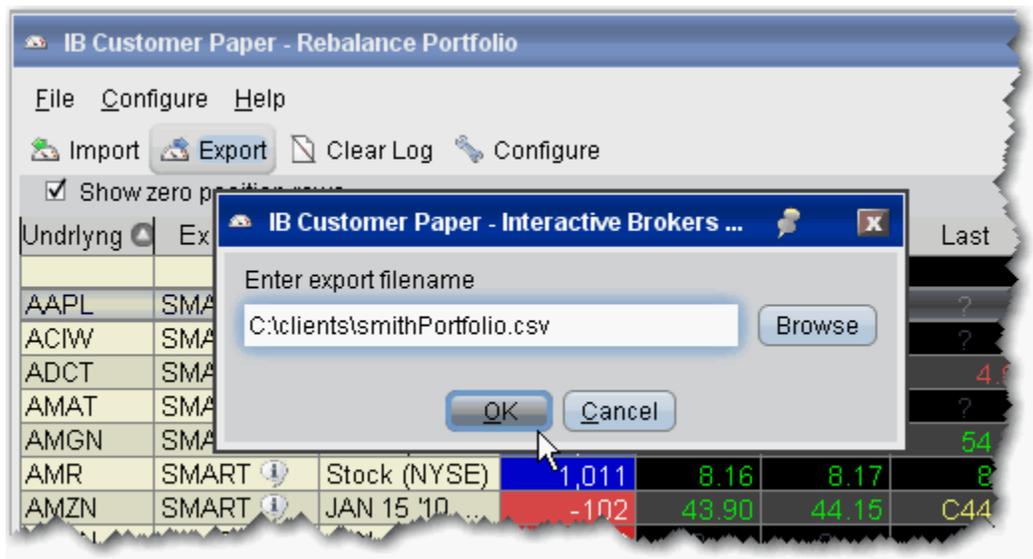
To export a portfolio

1 Click the *Export* icon at the top of the **Rebalance Portfolio** window.

2 Modify the location and file name if desired (leaving the .csv extension), and click OK. You may want to modify the generic file name to help identify it.

For example, you could change the default C:\jts\rebalance.csv to C:\clients\smithPortfolio.csv.

3 Click OK from the file export confirmation message.

> **Note:** The directory path must exist for the Export functionality to work. You cannot create a new folder while exporting.

To rebalance the position's percent of NLV from Excel

1 Open the exported .csv file in MS Excel.

> **Note:** Note that each line of the spreadsheet represents a position. The last column represents the current percent of Net Liquidation Value that the position holds. This exported value is equivalent to the value in the **Current %** field of the Rebalance Portfolio window.

2 Change the current % of NLV to the new percent you want. Do this for as many lines as needed and click *Save*.

For example, if you want to rebalance your portfolio so that AAPL STK holds 5% of NLV instead of 16.20478 as shown above in line 2, you would change 16.20478 to 5.0. This modified value is imported in the Rebalance Portfolio as the new Rebal % value.
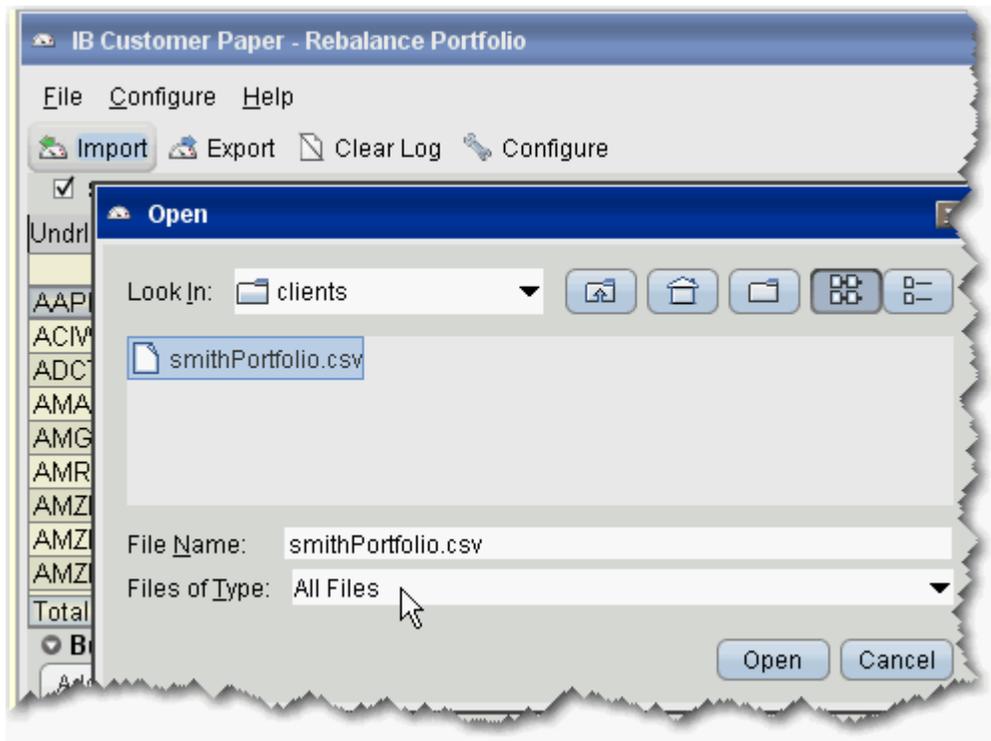
To import a rebalance portfolio

1   Click the Import icon at the top of the **Rebalance Portfolio** window.

2   Navigate to the modified .csv file you want to import and click *Open*. You will see the new Rebal % values in the modified position lines.
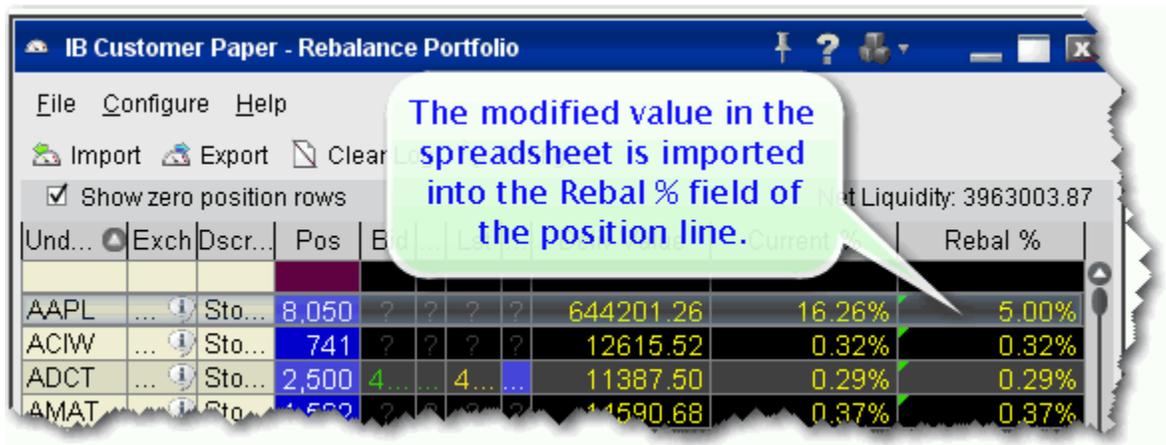
Note: To complete the rebalance, create and transmit the orders.

Trader Dashboard

The real-time Trader Dashboard is an optional tool that can be displayed at the top of the pages tabset. This customizable panel allows you to monitor data fields from your Account Information window, keep abreast of the most recent activity for specific contracts, and view current real-time news headlines for products in your portfolio and for any tickers you are watching.

To configure the Trader Dashboard

1 On the **Configure** menu, select *Global Configuration*.

2 In the left pane, click *Trader Dashboard*.

3 Use checkboxes in the right pane to set the following:

- Check *Show news* to display news headlines for any products in your portfolio and to alert you to recent news on any tickers you elect to display.

- To see only portfolio-relevant news, check *Display News for products in portfolio* only*.*

- To only see indicators of recent news next to individual tickers that you are watching, check *Display recent news indicator* only.

- Check *Show price change in percentage* to view the last price and price change values as percentages in ticker lines.

- Check Show price change in value to view the last price change as an absolute value.

4   Click the **Add Account Data** button, and scroll down the list. Double-click each Account field that you want to add to the dashboard. Each field you double-click is added to the *Display Item* list on the configuration pane. Click OK to close the *Add* box.

The descriptions for Account Information fields are in the Account Information topic.

5   To add a last price/price change field for a contract, enter the underlying in the *Symbol* field and click **Add Ticker,** then define the contract parameters just as you do when you add market data to the trading page. The last price/price change displays in red to indicate downward movement and blue to indicate upward movement.

6   Click **OK**. The **Trader Dashboard** is displayed at the top of your trading window, just above the pages tabset.

You can change the display name for selected dashboard fields using the Change Label feature.

Rename Dashboard Field Labels

You can modify the names of the fields on the dashboard to make them shorter or more informative to you. For example, you might want to shorten Net Liquidation Value to Net Liq, or Special Memorandum Account to SMA.

To customize an attribute label

1 Highlight the label you want to modify from the Display Item table.

2 Click the Change Label button to the right of the table.

3 In the Custom Label box, uncheck the *Use Default Label* selection.

4 Enter a new name for your attribute in the Label field and click OK.

The new labels are listed in the Label column of the Display Item table.

Bulletins and System Status

Notices concerning exchange issues, system problems and other trading information are announced through bulletins and system status reports. Bulletins are announced by a flashing red "Bulletin" notification along the top of the Menu bar.
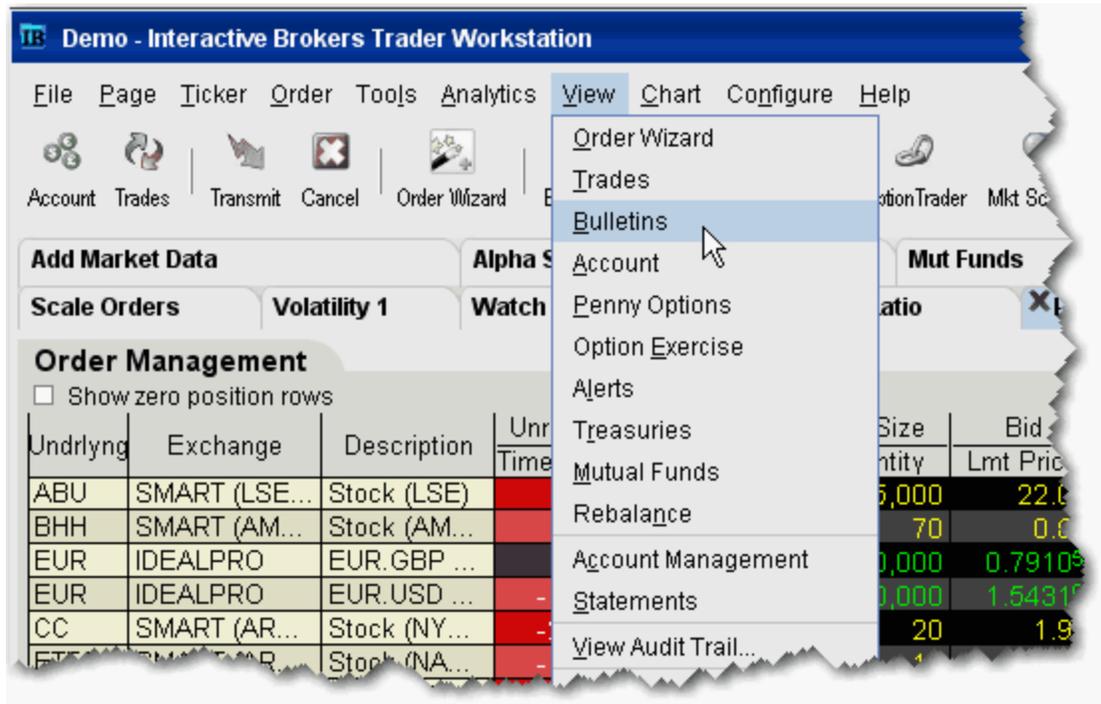
To read the current bulletin

- Click the flashing red "Bulletin" notification.

To review bulletins

- Click the Bulletin icon on the toolbar, or

- From the **View** menu, select *Bulletins*.

Note: You can move and resize the **Bulletins** window (which opens when you perform any of the above actions) so that it doesn't block out the critical information on your trading screen. The system saves your settings and will always open the window to the size and location you specify.

To see all of today's bulletins and the system status from the website

- On the Help menu, select System Status.

Audit Trails

This feature creates a file of daily trading activity that you can view from your browser. An audit file is created each day, and is named using the day of the week. Each week, the existing daily files are overwritten by the new files using the same name. You can rename these daily files if you want to save them. You must enable the Audit Trail feature before you can view audit trails.
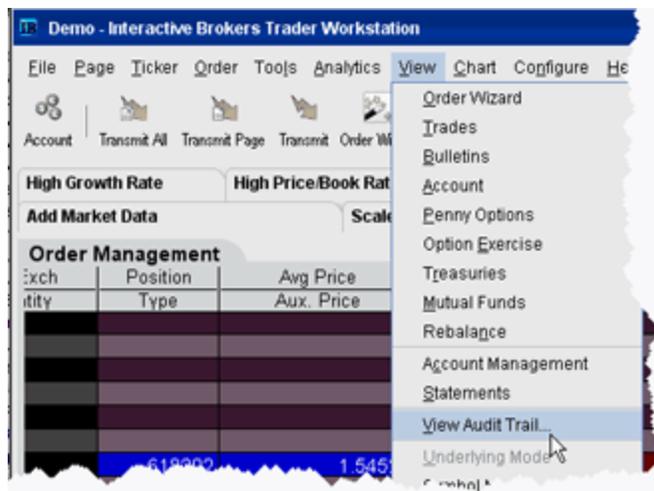
To view an Audit Trail

1   On the **View** menu, select View *Audit Trail.*

2   Select a day up to 5 days back.

3   Choose *Condensed* or *Expanded* form, and click OK.
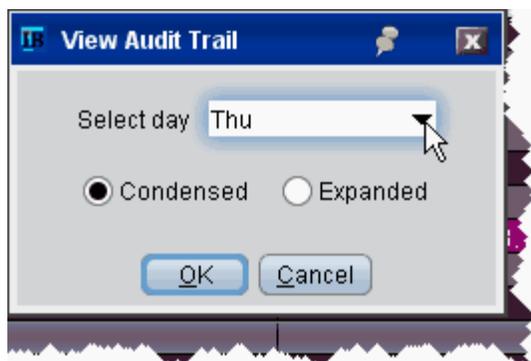
Best Price for Options using SmartRouting℠

Option traders who use SmartRouting can see which exchange(s) are offering the best bid and ask price. This information is displayed in the Bid Exch and Ask Exch fields on the Market Data line. Each exchange is represented by a single alpha character as defined in the table below. If multiple exchanges show an identical "Best" price offering, then multiple alpha characters are displayed. For example, if "ACP" is displayed in the Bid Exch column of a market data line, it means that AMEX, CBOE, and PSE are all offering the identical highest bid price (shown in the Bid Price column) for the option. Valid exchange abbreviations are:

Abbreviation	Exchange
A	AMEX
B	BOX
C	CBOE
I	ISE
P	PSE
X	PHLX

Exchange abbreviations are always displayed in yellow. The **Bid Price** and **Ask Price**, **Bid Size** and **Ask Size** colors convey the following information:

Color	Description
YELLOW	YELLOW indicates no change in price or size.
GREEN	GREEN indicates an upward movement in price or size.
ORANGE	ORANGE (or red) indicates a downward movement in price or size.
PURPLE	PURPLE indicates that the best price is not executing automatically at any of the exchanges displayed.

SmartRouting does not guarantee that your order will execute at the best displayed price. We display prices in purple to illustrate that some exchanges are not automatically executing at the best price, and that your order might execute at a different price. However, the availability of automatic execution updates with every tick.

Note: ISE always executes automatically, but may not always be offering the best price and may slow down their execution times in a fast market.

For more details on order routing and Smart Order routing, see the Customer Agreement on the IB website.

Understanding System Colors

Introduction

The application uses colored text and backgrounds to convey information about market movement, order destination, and order status. Colors are used on all screens that send and receive data, including the Trading screen, the Market Depth window and the Arbitrage Meter. The meaning of the text colors is consistent throughout the screens. Information on system colors is sorted into the following sections:

- Text Colors
- Background colors on a Market Data line
- Background colors on an Order Management line
- Order Status colors

Text Colors

Colored text on the screen's black background is used to represent up and down movement of price and quantity, and order destination information.

Color	Description
YELLOW	YELLOW indicates no change in size or price.
GREEN	GREEN indicates an upward movement in size or price.
ORANGE	ORANGE (or red) indicates a downward movement in size or price.
PURPLE	For options, the price displayed in PURPLE indicates that the best price is not executing automatically at one or more of the exchanges displayed.
MAGENTA	MAGENTA - For inter-market spread orders, indicates the implied price of the order.
BLUE	LIGHT BLUE indicates that this was the last price at which the contract traded.

The page tab text changes color from black to RED to indicate that the page displays an asset for which an order has been transmitted.

Background colors on a Market Data Line

Color	Description
	DARK GRAY across the entire Market Data line indicates that the line is selected.

The Change field line uses a background color to represent up and down market movement.

Color	Description
	The Change column identifies the degree and direction of change in the asset's current price from the prior day's closing price. A RED background in the Change field indicates that the change for the day is negative.
	A BLUE background in the Change field indicates that the change for the day is positive.

Note: Change for the day figures are based on 4 P.M. Eastern Time (ET) prior day closing prices.

Background colors on an Order Management Line

Color	Description
	A BLUE background in the Action field indicates a BUY action.
	A RED background in the Action field indicates a SELL action.
	LIGHT BROWN across the entire Order Management line indicates that you have modified a working order but have not yet re-transmitted the order.

Order Status Colors

The color in the Status field of an order management line indicates the status of your order.

Color	Description
	LIGHT GRAY indicates that you are in the process of creating an order and you have not yet transmitted it.
	LIGHT BLUE indicates that you have transmitted your order, but have not yet received confirmation that it has been accepted by the order destination.
	PURPLE indicates that an order has been accepted by the system (simulated orders) or an exchange (native orders) but that currently the order is not working, due to system, exchange or other issues. When the order becomes active, the order status color will change appropriately.
	DARK BLUE indicates that an order has been accepted by the system (simulated orders) or an exchange (native orders) and that this order has yet to be elected. The order status remains DARK BLUE until the election criteria are met. At that time the order is triggered, the order status color will change appropriately.
	GREEN indicates that your order has been accepted and is working at the destination. When you display the *Shortable* market data column, this color indicates that at least 1000 shares are available to sell short.
	DARK GREEN is used in the *Shortable* column and indicates that this contract can be sold short but that at the moment there are no shares available for short sale, and that the system is searching for shares.
	LIGHT GREEN is used by the Blotter to indicate that a ticket has been accepted by the trader.
	PINK indicates that you have sent a request to cancel the order but have not yet received cancel confirmation from the order destination. At this point, your order is not confirmed canceled. You may still receive an execution while your cancellation request is pending.
	ORANGE indicates that a cancellation request has been accepted by the system but that currently the request is not being recognized, due to system, exchange or other issues. At this point, your order is not confirmed canceled. You may still receive an execution while your cancellation request is pending.

Color	Description
	RED indicates that the balance of your order has been confirmed canceled by the system. This could occur unexpectedly when the destination has rejected your order. In the *Shortable* column, RED indicates that no shares are available for short sale. Once the order is confirmed canceled, the Order Management line will disappear from your trading screen after 30 seconds. Please see the Customer Agreement for further information on order confirmation and order cancellation.
	MAROON indicates that an attached simulated order type has been accepted by the system and has yet to be elected. The order is held in the IB system (and the status remains MAROON) until the election criteria are met. At that time the order is transmitted to the order destination specified and the order status color will change appropriately.

Alerts and Notifications

Introduction

- Set Time Alerts
- Set Price Alerts
- Set Margin Alerts
- Set Volume Alerts
- Set Execution-based Alerts
- Assign Actions to Alerts
- Set Price Movement Alarms
- Set Volume Change-activated Alarm
- Change Notification Sound for Events

Set Time Alerts

The **Alerts** window is composed of two sections. The first is the *Conditions* area, where you define the conditions which must be met to activate the alert. The second is the *Actions* area, where you define the action that will occur when the conditions are met. Create alerts based on price movement, time and date, trading volume or the state of your margin cushion. Alert actions include sending a notification such as a pop-up message on your trading screen, an email or a text message, or initiating an order, specifically a buy or sell order.
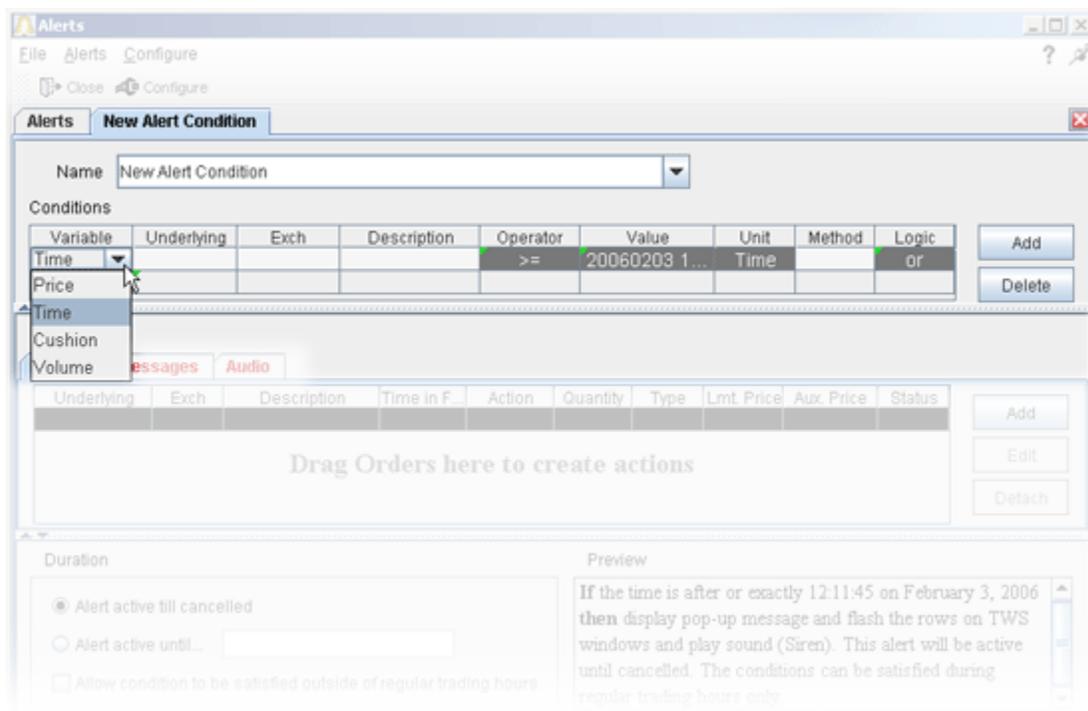
To set a time alert

1   On the **View** menu select *Alerts*.

- If you're already in the Alerts box, click the **Alerts** tab to gain access to the *New* button. Continue with Step 2 below.

2   Click the *New* button, and enter a descriptive title in the *Name* box. The <unnamed> tab takes the name you enter.

3   Define an asset in the *Conditions* area by clicking the *Add* button.

4   Begin to set the alert conditions by selecting *Time* in the *Choose Condition* section of the **Create Condition** box, then click *Next*.

5   On the *Configure Time Condition* page use the Operator field to choose from "greater than or equal to" or "less than or equal to."

6 In the **Time** field, set the time and date. Use the calendar date/time chooser for easy selection and to ensure the format is correct.

7 To define multiple conditions, select *And* or *Or* from the Logic drop-down list, and add another contract on the next line following the above steps 3 - 6 above.

Your alert conditions are described in the **Preview** box at the bottom right of the window.

Now specify the action(s) that the alert will trigger. You can select from email, SMS, pop-up message and audio alerts, and elect to have an order triggered.

Alerts Duration

By default, the alert will remain active until you cancel it. You can elect to have the alert remain active through a specific date and time by selecting Alert active until... and setting a date in the format YYYYMMDD hh:mm:ss.

If you want the condition(s) to be able to trigger outside regular trading hours, check the "**Allow condition to be satisfied...**" box.

Set Price Alerts

The **Alerts** window is composed of two sections. The first is the *Conditions* area, where you define the conditions which must be met to activate the alert. The second is the *Actions* area, where you define the action that will occur when the conditions are met. Create alerts based on price movement, time and date, trading volume or the state of your margin cushion. Alert actions include sending a notification such as a pop-up message on your trading screen, an email or a text message, or initiating an order, specifically a buy or sell order.
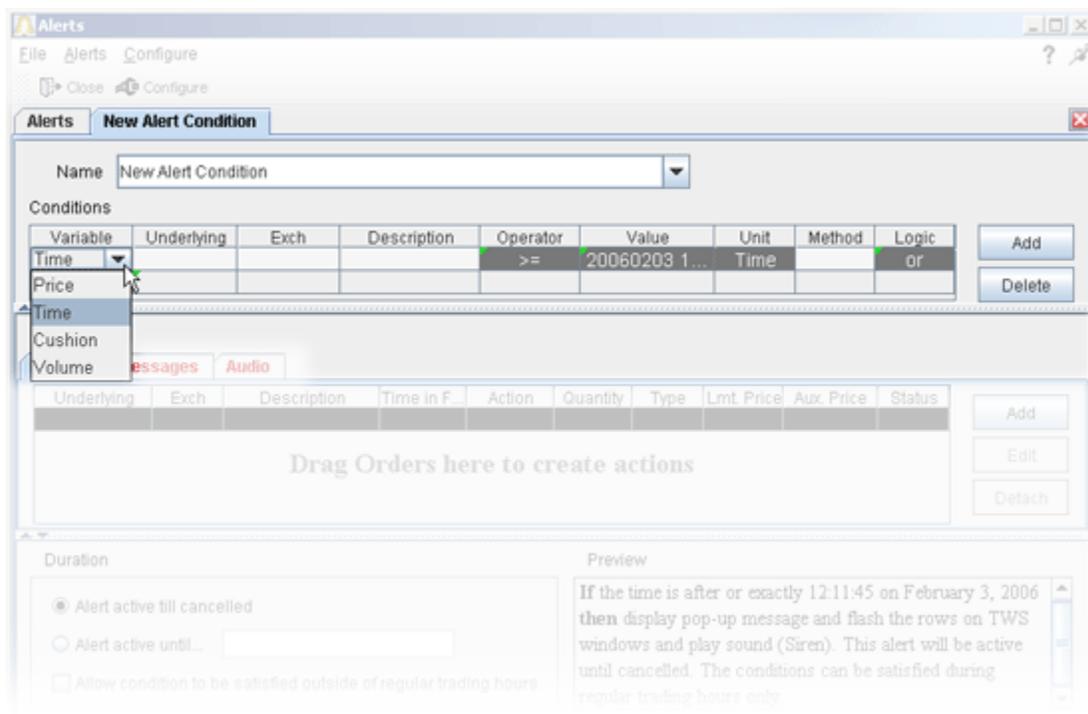
To set a price alert

1 On the **View** menu select *Alerts*.

   • If you're already in the Alerts box, click the **Alerts** tab to gain access to the *New* button. Continue with Step 2 below.

2 Click the *New* button, and enter a descriptive title in the *Name* box. The <unnamed> tab takes the name you enter.

3 Define an asset in the *Conditions* area by dragging and dropping one from your trading screen, or click the *Add* button.

4 Begin to set the alert conditions by selecting *Price* in the *Choose Condition* section of the **Create Condition** box, then click *Next*.

5   On the *Configure Price Condition* page, enter an underlying if you have a blank field and select the rest of the instrument description parameters including instrument type and exchange.

6   Select a trigger method from the **Method** dropdown list.

7   In the **Operator** field, choose from "greater than or equal to" or "less than or equal to."

8   In the **Price** field, enter the price that will be acted on by the operator defined above, and click the *Finish* button.

9   To define multiple conditions, select *And* or *Or* from the Logic drop-down list, and add another contract on the next line following the above steps 3 - 8.

Your alert conditions are described in the **Preview** box at the bottom right of the window.

Now specify the action(s) that the alert will trigger. You can select from email, SMS, pop-up message and audio alerts, and elect to have an order triggered.

Alerts Duration

By default, the alert will remain active until you cancel it. You can elect to have the alert remain active through a specific date and time by selecting Alert active until... and setting a date in the format YYYYMMDD hh:mm:ss.

If you want the condition(s) to be able to trigger outside regular trading hours, check the "**Allow condition to be satisfied outside of regular trading hours**" box.

Set Margin Alerts

The **Alerts** window is composed of two sections. The first is the *Conditions* area, where you define the conditions which must be met to activate the alert. The second is the *Actions* area, where you define the action that will occur when the conditions are met. Create alerts based on price movement, time and date, trading volume or the state of your margin cushion. Alert actions include sending a notification such as a pop-up message on your trading screen, an email or a text message, or initiating an order, specifically a buy or sell order.

Margin Alerts

Margin alerts are based on the status of an IB-calculated "margin cushion" derived using current values from your account. You can find these values on the Account screen. The margin cushion is calculated as follows:

(Equity with Loan Value - Maintenance Margin)/Net Liquidation Value
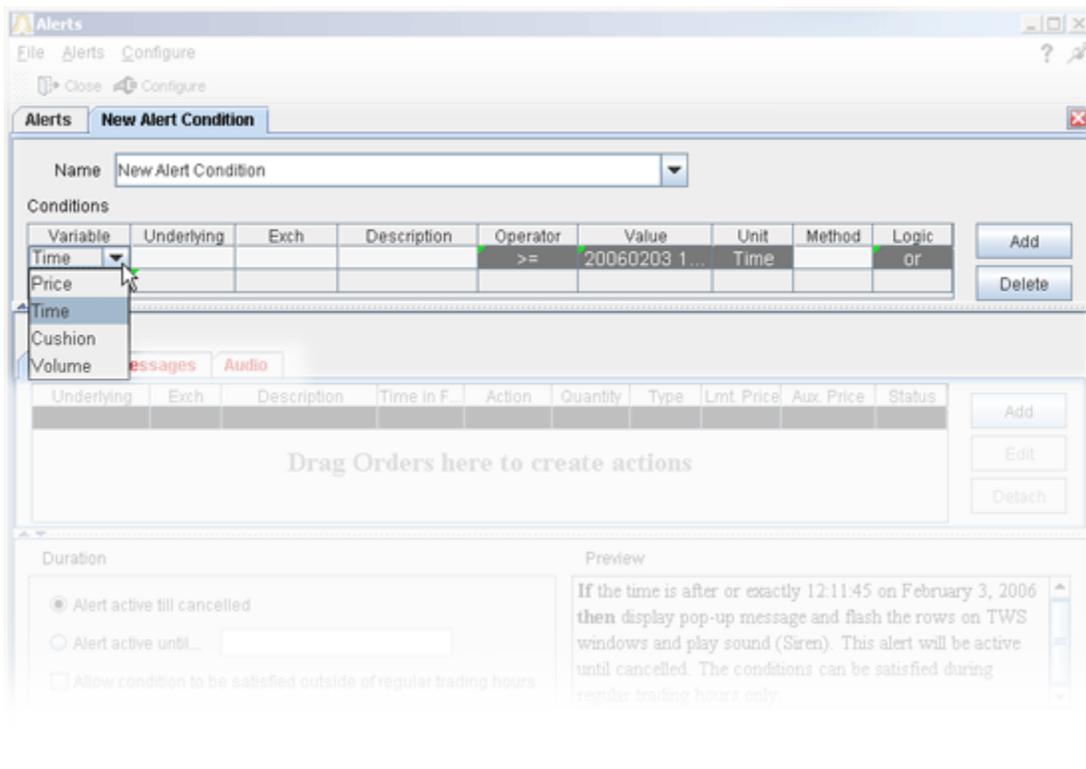
To create a margin cushion alert

1 On the **View** menu select *Alerts*.

   - If you're already in the Alerts box, click the **Alerts** tab to gain access to the *New* button. Continue with Step 2 below.

2 Click the *New* button, and enter a descriptive title in the *Name* box. The <unnamed> tab takes the name you enter.

3 Define an asset in the *Conditions* area by dragging and dropping one from your trading screen, or click the *Add* button.

4 Begin to set the alert conditions by selecting *Cushion* in the *Choose Condition* section of the **Create Condition** box, then click *Next*.

5 In the **Operator** field, choose from "greater than or equal to" or "less than or equal to."

6 In the **Cushion(%)** field, enter a percent value that will be acted on by the operator defined above, and click the *Finish* button.

7 To define multiple conditions, select *And* or *Or* from the Logic drop-down list, and add another contract on the next line following the above steps 3 - 6.

You can now assign an action to an alert in the form of a message, order action, or audio notification.

Alerts Duration

By default, the alert will remain active until you cancel it. You can elect to have the alert remain active through a specific date and time by selecting Alert active until... and setting a date in the format YYYYMMDD hh:mm:ss.

If you want the condition(s) to be able to trigger outside regular trading hours, check the "**Allow condition to be satisfied...**" box.

Set Volume Alerts

The **Alerts** window is composed of two sections. The first is the *Conditions* area, where you define the conditions which must be met to activate the alert. The second is the *Actions* area, where you define the action that will occur when the conditions are met. Create alerts based on price movement, time and date, trading volume or the state of your margin cushion. Alert actions include sending a notification such as a pop-up message on your trading screen, an email or a text message, or initiating an order, specifically a buy or sell order.
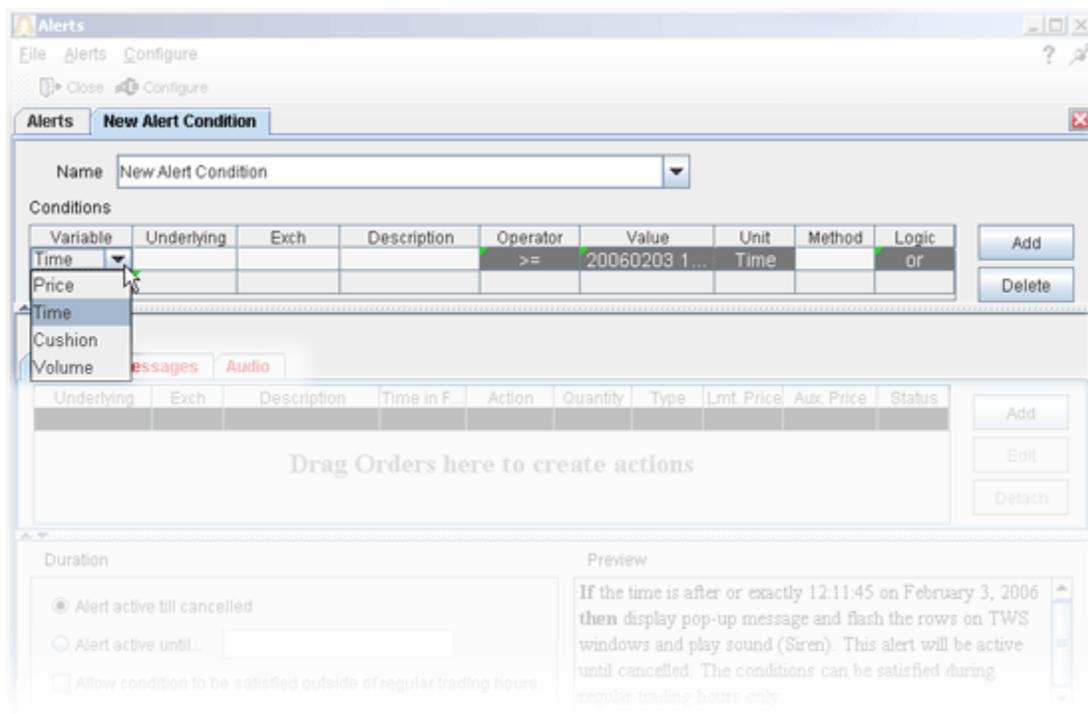
To set a volume alert

1   On the **View** menu select *Alerts*.

   • If you're already in the Alerts box, click the **Alerts** tab to gain access to the *New* button. Continue with Step 2 below.

2   Click the *New* button, and enter a descriptive title in the *Name* box. The <unnamed> tab takes the name you enter.

3   Define an asset in the *Conditions* area by dragging and dropping one from your trading screen, or click the *Add* button.

4   Begin to set the alert conditions by selecting *Volume* in the *Choose Condition* section of the **Create Condition** box, then click *Next*.

5   On the *Configure Volume Condition* page, enter an underlying if you have a blank field and select the rest of the instrument description parameters including instrument type and exchange.

6   In the **Operator** field, choose from "greater than or equal to" or "less than or equal to."

7   In the **Volume** field, enter the volume value that will be acted on by the operator defined above, and click the *Finish* button.

8   To define multiple conditions, select *And* or *Or* from the Logic drop-down list, and add another contract on the next line following the above steps 3 - 7.

Your alert conditions are described in the **Preview** box at the bottom right of the window.

Now specify the action(s) that the alert will trigger.

Alerts Duration

By default, the alert will remain active until you cancel it. You can elect to have the alert remain active through a specific date and time by selecting Alert active until... and setting a date in the format YYYYMMDD hh:mm:ss.

If you want the condition(s) to be able to trigger outside regular trading hours, check the "**Allow condition to be satisfied...**" box.

Set Execution-based Alerts

The **Alerts** window is composed of two sections. The first is the *Conditions* area, where you define the conditions which must be met to activate the alert. The second is the *Actions* area, where you define the action that will occur when the conditions are met. The Execution-based alert will trigger a user-defined action when an execution for the defined contract occurs. Alert actions include sending a notification such as a pop-up message on your trading screen, an email or a text message, or initiating an order, specifically a buy or sell order.
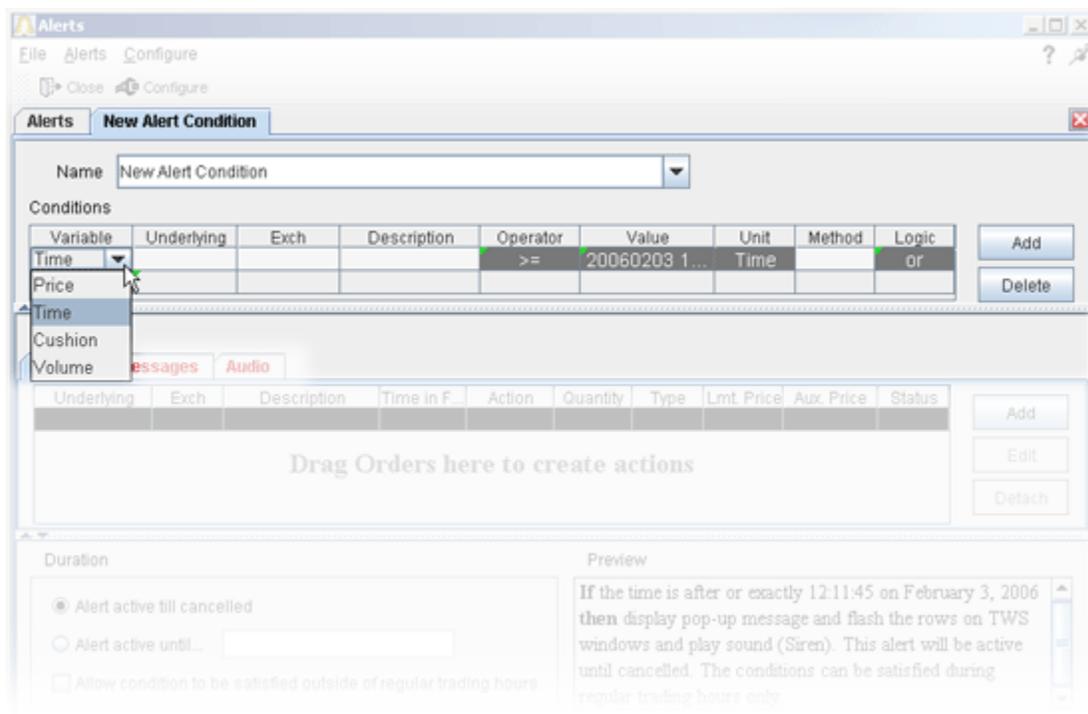
To set an execution-based alert

1   On the **View** menu select *Alerts*.

- If you're already in the Alerts box, click the **Alerts** tab to gain access to the *New* button. Continue with Step 2 below.

2   Click the *New* button, and enter a descriptive title in the *Name* box. The <unnamed> tab takes the name you enter.

3   Start defining the alert by clicking the *Add* button.

4   Begin to set the alert conditions by selecting *Trade* in the *Choose Condition* section of the **Create Condition** box, then click *Next*.

5   On the *Configure Trade Condition* page, enter an underlying IF you only want the alert to trigger at the execution of a specific underlying. Otherwise leave ANY.

6 In the **Exchange** field, select an exchange from the dropdown list IF you only want the alert to trigger for an execution at a specific destination. Otherwise, leave ANY.

7 In the **Type** field, choose an instrument type IF you only want the alert to trigger at the execution of a specific instrument type. Otherwise leave ANY. Click the *Finish* button.

8 To define multiple conditions, select *And* or *Or* from the Logic drop-down list, and add another contract on the next line following the above steps 3 - 7.

Your alert conditions are described in the **Preview** box at the bottom right of the window.

Now specify the action(s) that the alert will trigger.

Alerts Duration

By default, the alert will remain active until you cancel it. You can elect to have the alert remain active through a specific date and time by selecting Alert active until... and setting a date in the format YYYYMMDD hh:mm:ss.

If you want the condition(s) to be able to trigger outside regular trading hours, check the "**Allow condition to be satisfied...**" box.

To keep the alert active for multiple executions on the same underlying, check the *Repeatable* box.

Assign Actions to Alerts

- Assign Message Action to Alerts

- Assign Order Action to Alerts

- Assign Audio Action to Alerts

- Assign Sounds to Events

Assign Message Action to Alerts

Use the Actions to define what should happen when your alert triggers. The **Messages** tab allows you to create email and SMS messages, display a pop-up message (that you compose!) on your trading window, and instruct market data rows to flash.
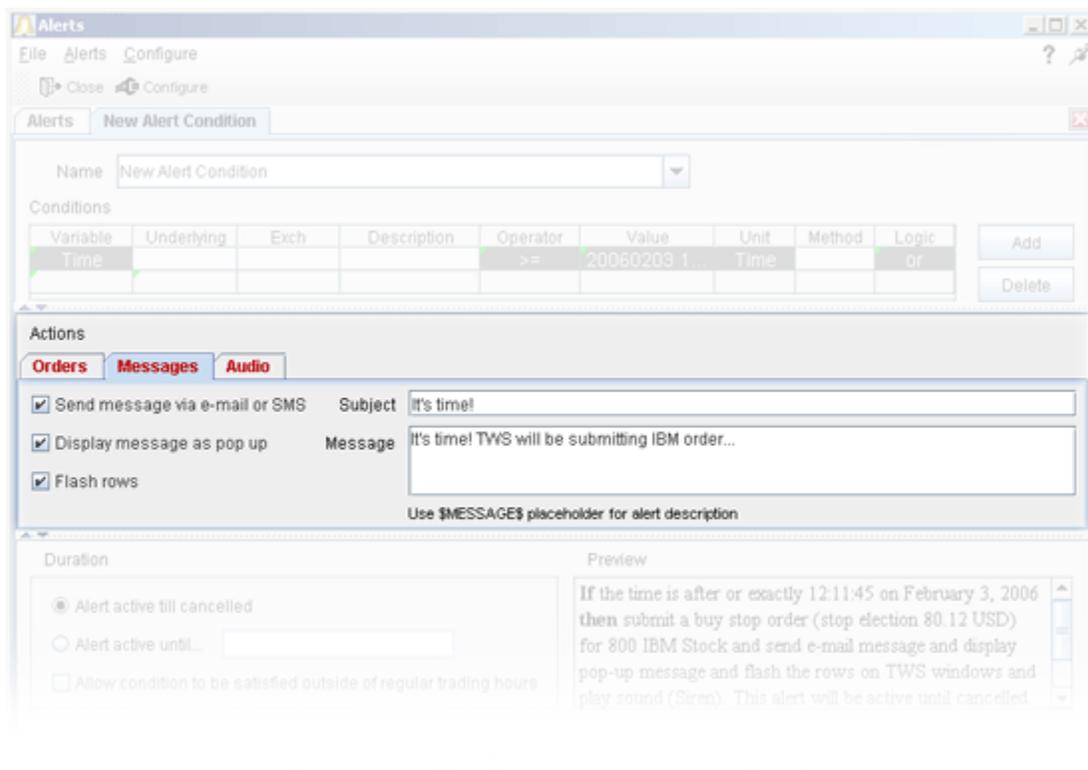
To assign an email action to an alert

1   In the *Actions* section click the **Messages** tab and check *Send message as e-mail*. Type your note title in the *Subject* field and your email in the *Message* box.

- The email address you specified when you created your account is the one that will be used.

2   Review your alert in the *Preview* box, then click **Activate** to load the alert.

To assign a text message (SMS) action to an alert

1 Register your SMS address through Account Management on the IB Website.

    a Use the **Login** menu to access *Account Management*.

    b Log in to Account Management using your IB username and password.

    c Under **Trading Access**, select *Alert Notification*.

    d In *Alert Preferences*, select **SMS Address** to instruct the alerts email function to send your alert via text message to your mobile phone or PDA.

2 In the *Actions* section click the **Messages** tab and check *Send message as e-mail*. Type your note in the *Subject* and *Message* boxes.

3 Review your alert in the *Preview* box, then click **Activate** to load the alert.

To assign a pop-up message action to an alert

1 In the *Actions* section, click the **Messages** tab and check *Display message as pop up*.

2 Type your note in the *Message* box.

3 Review your alert in the *Preview* box, then click **Activate** to load the alert.

- When the alert triggers, a pop-up box with your message will open on top of the trading window.

To flash rows as an alert action

1 In the *Actions* section, click the **Messages** tab and check *Flash Rows*.

2 Review your alert in the *Preview* box, then click **Activate** to load the alert.

- When the alert triggers, the relevant rows of market data on the trading window will flash to notify you.

- You can also instruct your alerts to submit an order, or play a sound.

Assign Order Action to Alerts

Use the *Actions* to define what should happen when your alert triggers. The **Orders** tab allows you to drag orders in from your trading screen, which will be submitted when the associated Alert triggers.

To assign an order action to an alert

1 In the *Actions* section, click the **Orders** tab.

2 Drag an order into the Orders panel from the trading screen.

- You can also create an order by typing the symbol in the Underlying field and identifying the contract using the Contract Selection box. A Buy order is

automatically created for the contract. Use the Action dropdown field to change to a sell order.

3 Modify an order parameters. The order will be transmitted when the Alert criteria are met.
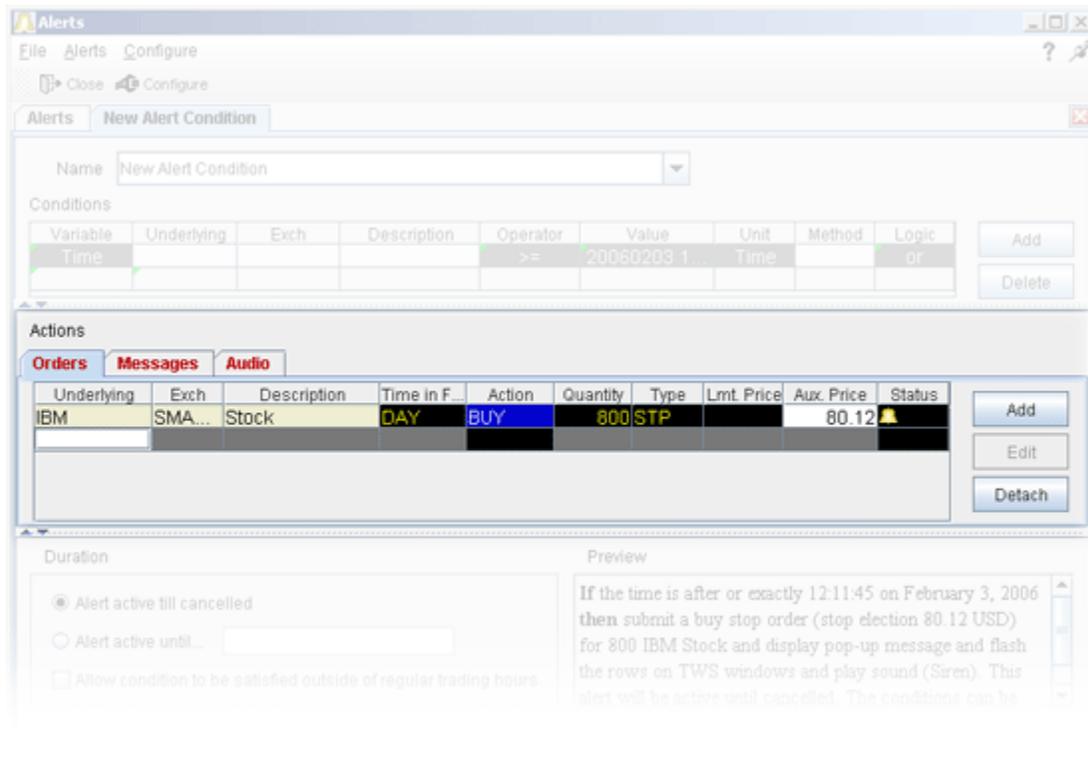
- You can also instruct your alerts to send a message or play a sound.

Assign Audio Action to Alerts

Use the *Actions* to define what should happen when your alert triggers. The **Audio** tab allows you to assign a sound to an alert.

To assign a sound to an alert

1 In the Actions section, click the Audio tab.

2 Select a radio button:

    a Select **Standard** and use the dropdown list to assign a system sound.

    b Select **Custom** to assign your own .wav file sound.

    c Select **None** to turn off any audio alerts.
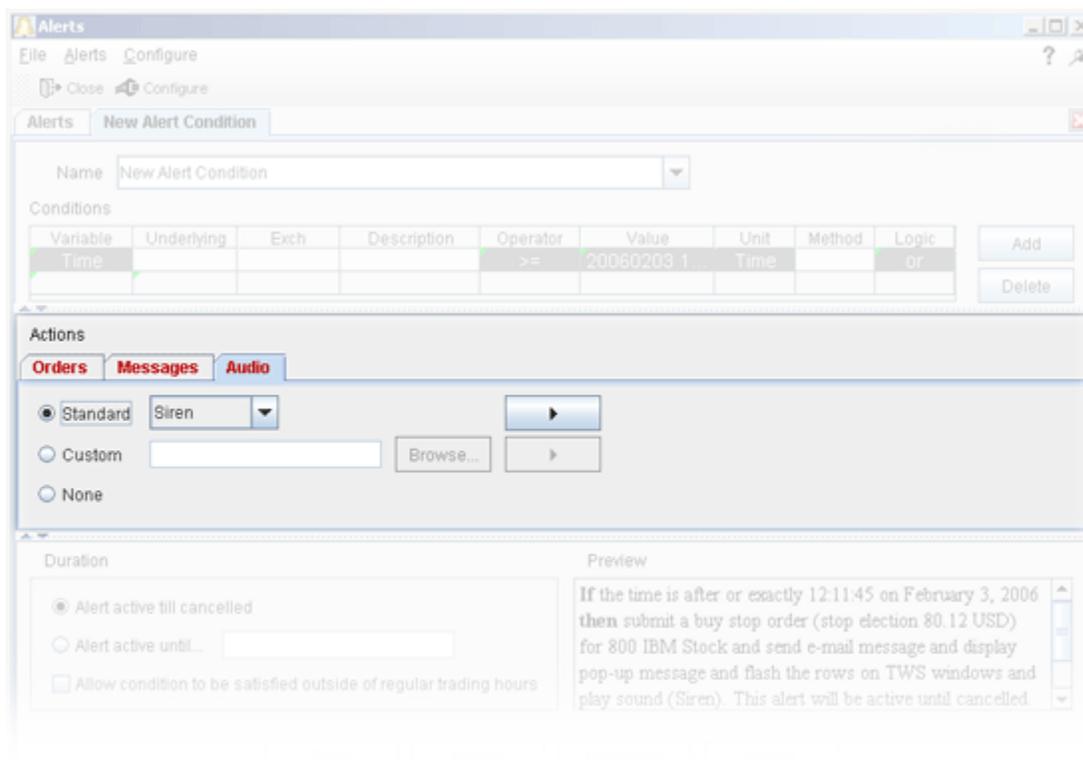
Alerts Duration

By default, the alert will remain active until you cancel it. You can elect to have the alert remain active through a specific date and time by selecting Alert active until... and setting a date in the format YYYYMMDD hh:mm:ss.

If you want the condition(s) to be able to trigger outside regular trading hours, check the "**Allow condition to be satisfied...**" box.

You can also set alert actions to submit an order or send a message.

Assign Sounds to Events

Use the **Sound Manager** to modify sounds assigned to trading events.

Note: To hear sounds other than a beep on your computer, you must have a sound card installed.

To configure the Sound Manager

1   On the **Configure** menu select *Global Configuration.*
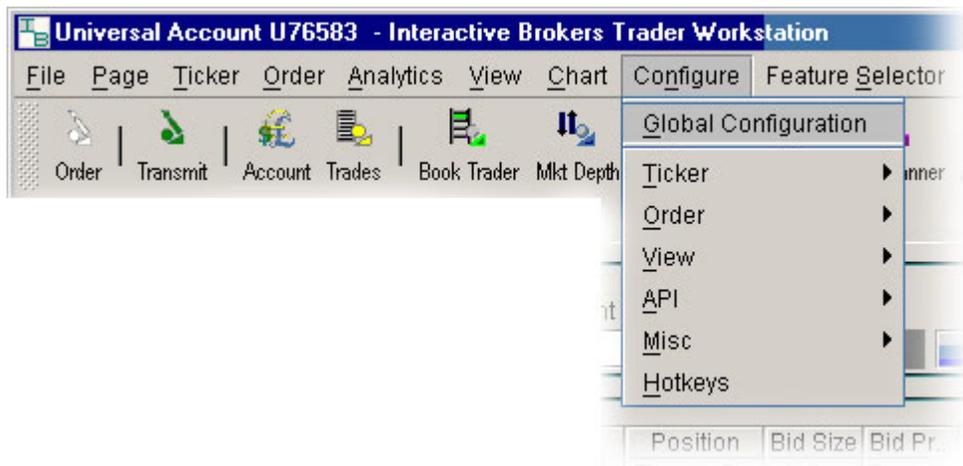
2 Click *Sound Manager* in the left pane.

3 In the **Event** drop-down list, select the event for which you want to change a sound.

4 De-select **Use Default Sound**.

5 In the **Sound Samples Path** field, enter a path to a .wav sound file, or use the browse button to define a path to a .wav sound file.

Select the number of times you want the sound to repeat when it is invoked.

Change Notification Sound for Events

You can use the **Sound Manager** to select a new sound file and change the default beep used for specific order events, including price change alarms and "fill" notifications.

To change the default sound for events

1 On the **Configure** menu select *Global Configuration.*

2 Click *Sound Manager* in the left pane.

3 In the **Event** drop-down, select the event whose default sound you want to change.

4 De-select **Use Default Sound**.

5 In the **Sound Samples Path** field, enter a path to the .wav sound file you want to use, or click the browse button to define the path to the .wav sound file you want to use.

Set Price Movement Alarms

For any asset, you can set a price-triggered alarm that goes off when the selected price hits the trigger value. You can use values in the **Bid**, **Ask** and/or **Last** price fields as the triggers. The price field and page title turn red and start to blink when your price has been reached. You can also set an audio alarm that notifies you by beeping.

Note: Each line of market data with an attached price-activated alarm will always take up one live market data line whether the page is open (active) or closed. You can only receive market data for a limited number of live market data lines (usually 40).

When you log off, any alarms you have set will be shut off unless you choose to preserve them between sessions. To do this, select *Preserve the alarm between sessions* when you set the alarm.

To set a price movement alarm

1   Select the asset for which you want to set an alarm.

2   Right click and select *Tools*, then select *Set Alarm* (or use the **Ticker** menu and select *Set Alarm*).

3   In the **Alarm Settings** window, enter a "less than" and/or "greater than" price in any or all of the bid, ask and last price entry fields.

4   To set a volume activated alarm, enter a trigger amount in the **Alarm if volume is greater than** field.

5   To add a beeping sound to the visual alarm, select **Play warning sound**.

Example: If you enter a price of $40.15 in the second field on the top row, **Alarm if bid is greater than**, your alarm will trigger when the bid price for the selected asset is greater than or equal to $40.15. Put a price of $40.00 in the first field (Alarm is bid is less than) and the alarm will trigger is the bid is equal to or falls below that price.

The default background color for all fields that have an alarm set is murky green. You can modify the background color by using the Layout editor.

To shut off an activated price movement alarm

• Click in the market data line of the asset that has the alarm.
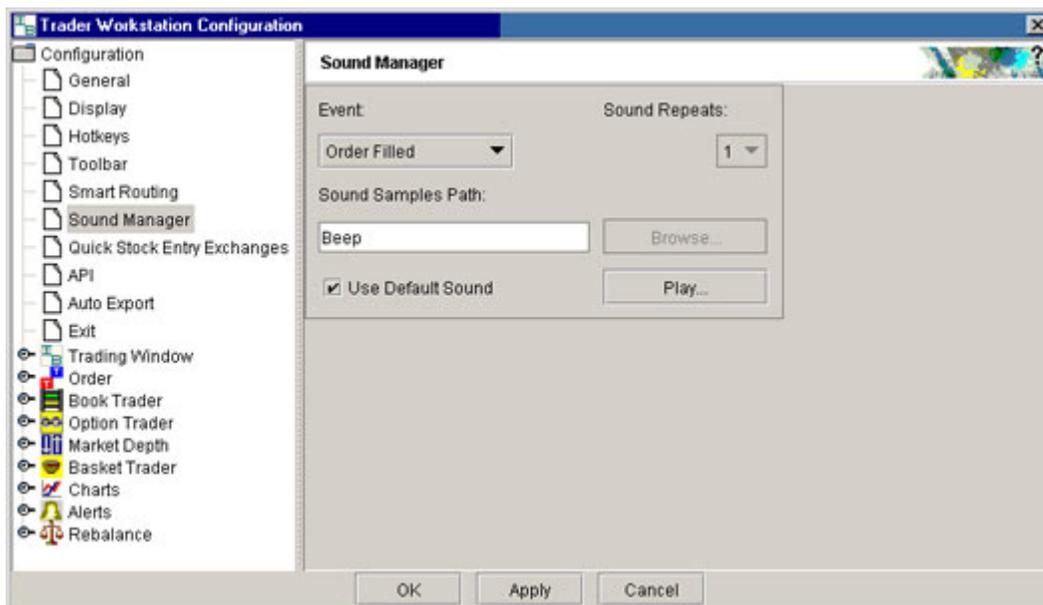
Set Volume Change-activated Alarm

For any asset, you can set a volume change-triggered alarm that goes off when the volume for the selected asset rises by the amount you define. The **Volume** field and page title turn red and start to blink when the volume has increased by your set amount. You can also set an audio alarm that notifies you by beeping.

Note: Each line of market data with an attached alarm will always take up one live market data line whether the page is open (active) or closed. You can only receive market data for a limited number of live market data lines (usually 40).
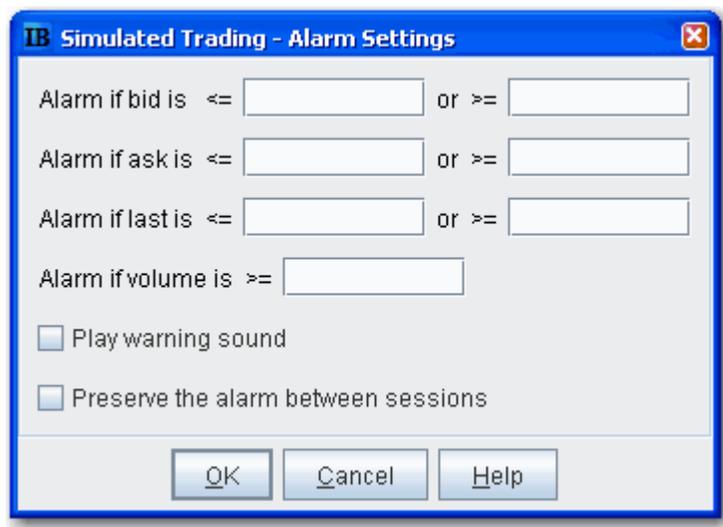
When you log off,. any alarms you have set will be shut off unless you choose to preserve them between sessions. To do this, select *Preserve the alarm between sessions* when you set the alarm.

To set a volume change alarm

1   Select the asset for which you want to set an alarm.

2   Right-click and select *Tools*, then select *Set Alarm* (or use the **Ticker** menu and select *Set Alarm).*

3   In the **Alarm Settings** window, enter a trigger amount in the **Alarm if volume is greater than** field.

4   To add a beeping sound to the visual alarm, check **Play warning sound**.

If you have the Volume field displayed on your trading screen, you will see the default background color on market data lines that have alarms set is murky green. You can modify the background color by using the Layout editor.

To shut off an activated volume increase alarm

•   Click in the market data line of the asset that has the alarm.
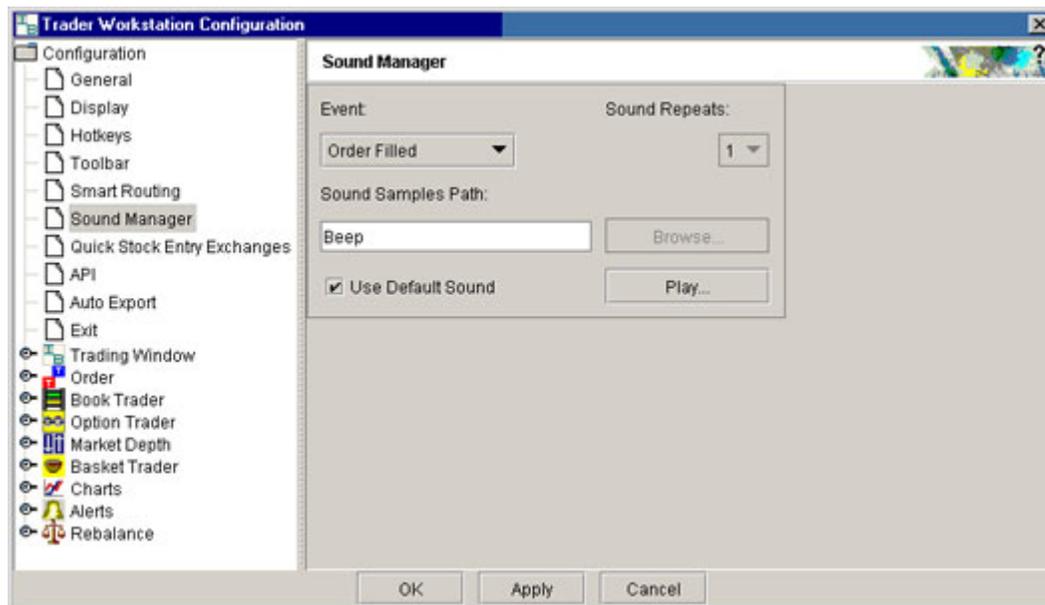
Note: To hear sounds other than a beep on your computer, you must have a sound card installed.

Price/Risk Analytics

IB Risk Navigator^{SM}

Introduction

Open the IB Risk Navigator

The IB Risk Navigator^{SM} shows your portfolio risk across multiple asset classes, and allows you to view and assess specific risk slices of your portfolio, such as risk by position, risk by underlying, and risk by industry; view the greek position risk dimensions for each report; see Value at Risk and Portfolio Statistics; measure your portfolio P&L (from close-to-close) by Price Change/Volatility Change, and measure exposure and the greek position dimensions by Underlying/Maturity.

IB Risk Navigator report data refreshes automatically every 10 seconds, and immediately whenever an order executes, for all reports except the *Measure by Price Change and Volatility Change* report. This report uses prices from the close of the previous business day and calculates market outcome risk by advancing the time parameter to the close of the next business day.

To open IB Risk Navigator

1   On the **Analytics** menu, select *IB Risk Navigator^{SM}*.

You can also access the IB Risk Navigator from the OptionTrader.

For details on using specific sections of the IB Risk Navigator, click a link below:

- Report Viewer
- Report Selector
- Risk Summary Graph

Use the Report Viewer

The **Report Viewer** displays the report you defined in the **Report Selector**. The Report Viewer:

- Lets you view portfolio risk metrics across multiple asset classes on a single screen. Metrics include P&L, Exposure, VAR and the Greeks.

- Has drill-down access to let you control the depth of detail you see for each underlying.

- Allows you to customize the view by adding, removing and configuring columns.

- Lets you sort by column in ascending or descending order by clicking the column header. The primary sort column displays a red arrow, downward pointing for descending, upward pointing for ascending.

Exposure is calculated using:

```
position x delta x multiplier x
underlying price.
```

The exposure for each asset class is converted to a share-equivalent value to allow easy comparison between underlyings.

Underlying	● Position	● Price	● P&L	● Exposure	● VAR	● Delta (Δ)	● Gamma (Γ)	● Ve
– All Underlyings			-311,308	8,012,980				
– AA <NYSE>			-417	11,830	-1,227	337	-104	
– 2008-01-18			-160	4,786		136	-68	
AA JAN 18 '...	-20	0.15	-160	4,786		136	-68	
– 2008-04-18			-257	7,044		201	-36	
AA APR 18 ...	-10	1.05	-257	7,044		201	-36	
– AAPL <NAS...			2,286	-96,238	-10,356	-513	-7	–
– 2009-01-16			2,286	-96,238		-513	-7	–
AAPL JAN ...	-20	11.40	2,286	-96,238		-513	-7	–
+ ABT <NYSE>			-7	2,327	-123	41	-16	

P&L is the unrealized Average Cost P&L. It is calculated for each position, each underlying, and for all positions.

VAR, or Value at Risk, is a measure of market exposure. By default, VAR shows the greatest expected loss over a one-day period, with 99.5% confidence.

You can add or remove metrics columns in a report using the Metrics menu selections.

Use the Report Selector

The **Report Selector** is your starting point for navigating your risk summary. Select from the **Report**, **Underlying**, and **Measure** dropdown lists to construct custom reports that slice and display various angles of your exposure and other risk metrics, for your entire portfolio or for a subset of your portfolio which includes all positions in an underlying and its derivatives.

Note: The IB Risk Navigator resolves your current position data when it opens, which it then uses in both the P&L graph and report calculations. Any positions that cannot be resolved (for any reason) are shown in the *Position(s) not included* list in the Report Selector area. If the position is highlighted in yellow, its data is not included in the calculations for the P&L graph; if the position is highlighted in peach, its data is not included in the report calculations; if it's pink, its data is excluded from both the graph and the report calculations. This box will not appear if ALL positions resolve unless you elect to display it manually, using the checkbox on the **View** menu.

To define your report
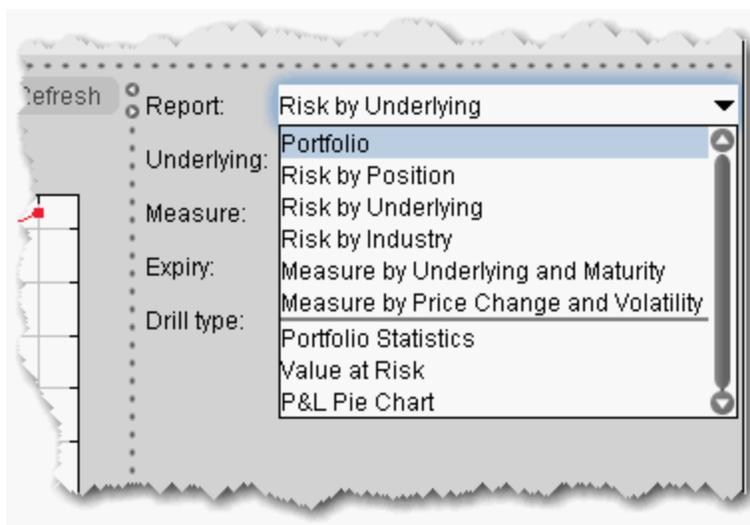
1   Use the **Report** dropdown list to choose a perspective from which to assess your risk. Each report is briefly described in the table below.
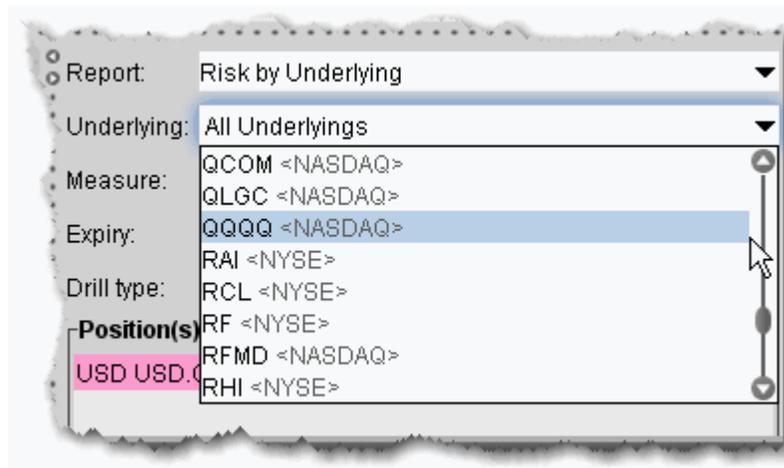
2   In the **Underlying** list, choose whether to display report data for all underlyings or only for a specific underlying and its derivatives.
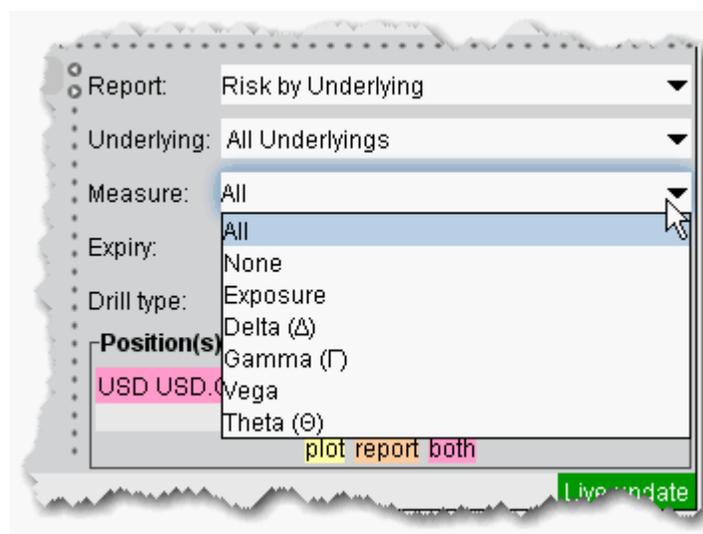
3   In the **Measure** dropdown, select *All* to view all available risk measure calculations for your report, *None* to view no additional measures other than those that appear in the report by design, or a named value to show a single measure.

To display multiple (but not all) measures, for example only *Exposure and Delta,* use the **Greeks Columns** submenu on the Metrics menu.
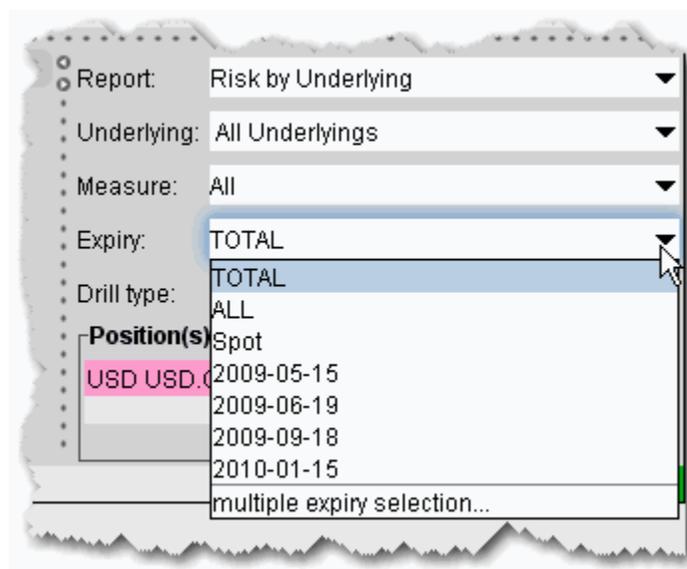
4   In the **Expiry** list, choose TOTAL to display the Total row in the matrix, and show the P&L plot using the total of all positions. Choose ALL to expand the matrix to show each row, and to show individual P&L lines for each expiry in the P&L plot. The color key on the right side of the chart identifies the line for each month. Choose Spot to filter out the options. Select a single expiry to chart the P&L for all options with the expiration date. Choose *multiple expiry selection* to create multiple P&L charts with one expiry plotted in each chart.

Click a report name to view the report topic.

Reports	
Portfolio Report - This report presents risk and exposure for your entire portfolio across multiple asset classes. The Portfolio view does not display any totals, unlike the Risk by Underlying report.	Measure by Underlying and Maturity - This report displays risk measures across all asset classes for all underlyings, grouped by expiry.
Risk by Position Report - This report displays risk metrics across all asset classes, for each position.	Risk by Underlying Report - The default report. This report displays portfolio metrics across all asset classes and provides drill-down depth control for each underlying.
Risk by Industry Report - This report displays your portfolio risk and exposure across multiple asset classes, sorted by industry sector. Drill-down detail lets you go two levels deep into the industry sub-categories, and into the underlying and its derivatives for each industry category and subcategory.	Measure by Price Change and Volatility Change - This report measures the market outcome for the contract price, delta, gamma, vega, and theta - using underlying and derivative prices on the close of any business day - at multiple positive, negative, and zero percent change scenarios in the underlying price, volatility and interest rate.

Reports	
Value at Risk Report - This report shows the greatest loss that a portfolio will sustain over a one-day period, with 99.5% confidence. VAR is calculated using three different methods, each with different assumptions about correlations of the underlying assets in the portfolio.	Portfolio Statistics Report - The Portfolio Statistics report shows two summary tables: one for all Stock and Futures positions, and one for all Options positions.
P&L Pie Chart - The P&L Pie Chart shows the position Delta and P&L for all positions in your portfolio relative to the total portfolio.	

Portfolio Relative P&L Graph

The **Portfolio Relative P&L** graph illustrates how the total value of your portfolio (or a subset of your portfolio) will change, based on a percent change in the price(s) of the underlying(s).

Figure A
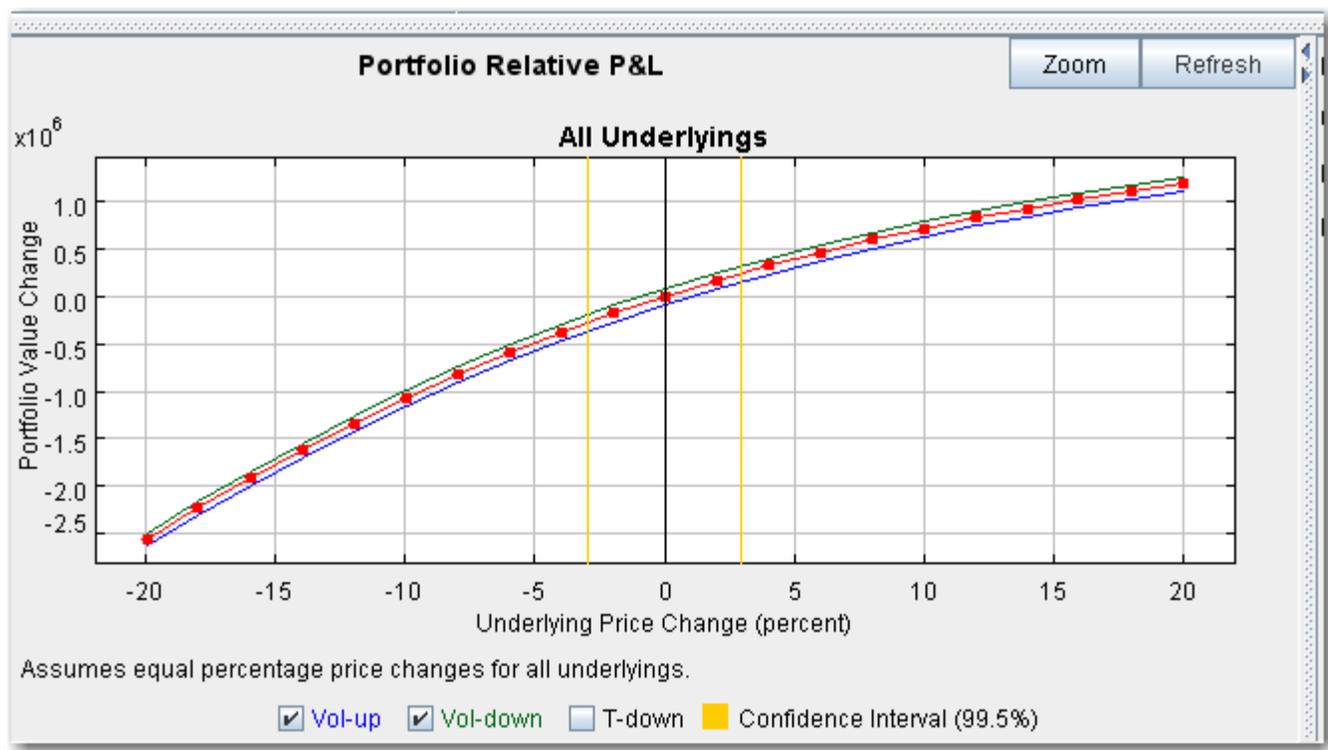
Figure A shows the portfolio-relative P&L for your entire portfolio, based on the value **All Underlyings** selected from the *Underlying* list in the **Report Selector**.

Figure B
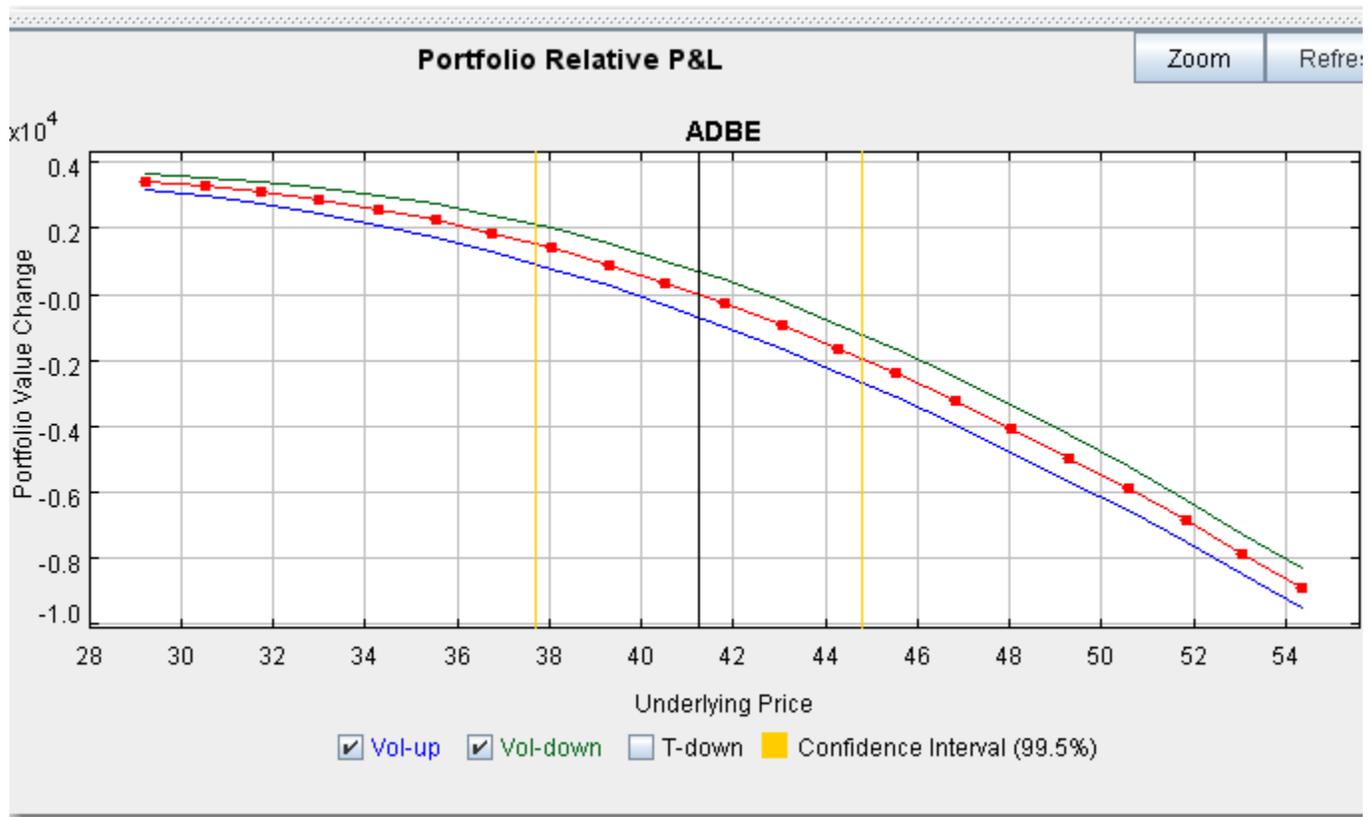
Figure B displays your portfolio-relevant P&L for a subset of your portfolio, including all of your positions in an underlying and its derivatives, based on the underlying selected in the **Report Selector** *Underlying* list.

The **Confidence Interval**, shown within the yellow vertical lines, illustrates the worst-case loss over a one-day period with a default 99.5% confidence level. Use the *Confidence* subcommand on the **Settings** menu to toggle between 95%, 99% and 99.5% confidence levels.

Use the *Vol-up*, *Vol-down* and *T-down* checkboxes below the graph to view the plot under different scenarios to help you visualize the volatility and time risk in your option positions. *Vol-up* raises the implied volatility by 15% in relative change*; *Vol-down* reduces the implied volatility by 15% in relative change*, and *T-down* reduces the time to expiry by one calendar day.

*Relative percent change is calculated by multiplying the current implied volatility by 15%, and adding/subtracting this value to/from the current implied volatility. For example, if the current implied volatility of an option is 10%, a 15% relative increase would result in an implied volatility of 11.5%, calculated as follows: 10 + (10 * 0.15) = 11.5% . If the current implied volatility of an option is 42.45%, a 15% relative decrease would result in an implied volatility of 36.082%, calculated as follows: 42.45 - (42.45 * 0.15) = 36.082%.

Figure C
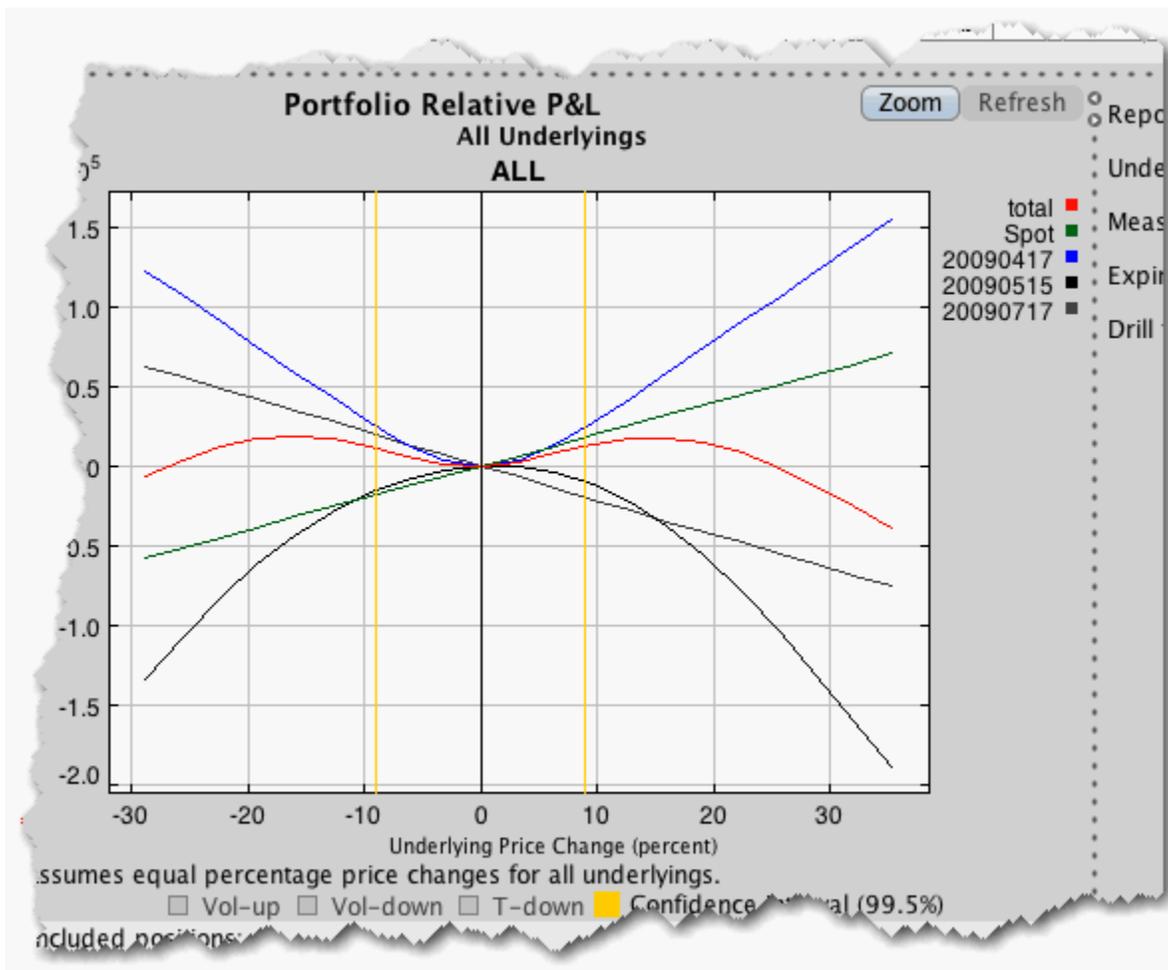
Figure C displays your portfolio-relevant P&L for the ALL Expiry selection. The color key to the right identifies each line in the plot.

Create a What-If Portfolio

The *What-if* portfolio feature lets you create an editable, hypothetical portfolio based on your actual portfolio. This allows you to see how your risk profile would change based on changes you make to your portfolio, such as adding, closing, reducing or increasing positions. Or build a new hypothetical portfolio, position-by-position to see how the risk profile changes as positions are added and modified. The *What-if* feature lets you drag new underlyings into the portfolio from your trading window to "take" a new position, and edit the position quantity for existing positions. You can also elect to open positions for some or all of the "what-if" contracts in your hypothetical portfolio. What-if portfolios are outlined in red for easy identification, and display the **What-if** title at the top of the window.

To create a "what-if" scenario based on your current portfolio

1   Open the IB Risk Navigator window and on the **Portfolio** menu, select *New*. A new, blank what-if window opens.

2   On the **Edit** menu, select *Add From*. Your current portfolio is the default list value, named *My Portfolio*.

3   Click **OK** to add your current portfolio to the What-if window.

> **Note:** This creates a **copy** of your portfolio. You can now drag in new contracts from your trading screen, and see the results of modifying your positions without actually making any changes.

To save a "what-if" portfolio

1   On the **Portfolio** menu select *Save As*.

2   Enter a file name and click *Save*.

To reload the last saved version

Use this command to reset all values in the active portfolio to the last **saved** version. This command only works on an unsaved file. An unsaved portfolio will display an asterisk "*" at the end of the title.

1   On the **Edit** menu select *Reload from file*.

2   Confirm that you want to reload the file and lose all of your unsaved changes by clicking *Yes*.

To add/subtract positions from other portfolio files

1   From the active portfolio, on the **Edit** menu select *Add From* or *Subtract From*.

2   Select a portfolio to add/subtract. The add/subtract selection list only displays names of portfolios that are currently open.

3   Click **OK** to add or subtract positions from the active portfolio.

- The add/subtract feature nets out positions common to both portfolios, and creates a contract line for each new contract (even if the position is "0").

- You can add/subtract the same portfolio multiple times. Current positions are netted out each time.

To open positions from a "what-if" scenario

1   Select one or multiple positions.

2   Using the right-click menu, select *Add Position* to open positions on the selected contracts, or *Add Portfolio* to open positions for all contracts in your what-if portfolio.

Upload a Portfolio

You can upload a portfolio of US stock and/or option positions into the IB Risk Navigator from a .csv Excel spreadsheet. You can import to a what-if portfolio, or add positions to your actual portfolio by uploading them.
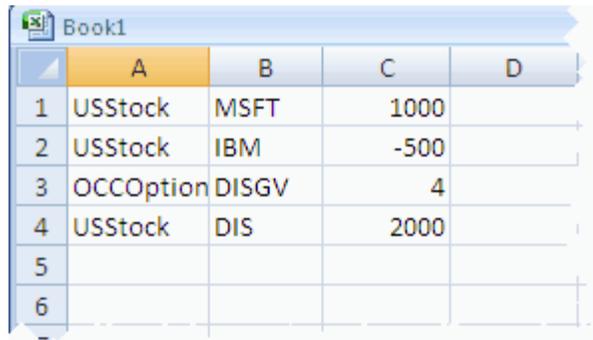
1   Create an Excel spreadsheet with three columns:

    a   Col A identifies the product, either USStock or OCCOption.

    b   Col B identifies the underlying using the stock underlying symbol or the OCC 5-character OPRA option symbol.

Note: .

    Note: The symbols in Col B must be entered in uppercase

    c   Col C identifies the position.

2   Save the spreadsheet with a .csv extension, making note of where you save it.

3   From within the IB Risk Navigator, from the **Portfolio** menu select *Import*.

4   Navigate to the .csv file or enter the file name in the *File Name* field and click **Open**.

5   In the Save dialog box, enter a file name and click **Save**.

6   In the *Add Portfolio* box, elect to import the new positions to a new what-if portfolio, or to add them to your existing actual portfolio (My Portfolio).

    Note: If you elect to add the positions to your actual portfolio, TWS will create actual orders to achieve the positions, but will not transmit the orders.

7   Click OK.

IB Risk Navigator Reports

Introduction

Portfolio Report

Use the **Portfolio** report to view risk and exposure for all positions in your portfolio. You can view totals for specific risk measures (where applicable) in the Risk by Underlying report.

Underlying	Description	●Po...	●Price	●Value	●P&L	●Exp...	●Delta...	●Gamma...	●Vega
ADBE...	ADBE JAN 16 '09 45.0 ...	-10	3.40	-3,400	743	-18,346	-456	-34	-162
AA	AA JAN 18 '08 30.0 PU...	-20	0.10	-200	-160	4,928	141	-73	-20
<NYSE>	AA APR 18 '08 30.0 PU...	-10	1.05	-1,050	-307	7,306	210	-37	-54
AAPL...	AAPL JAN 16 '09 300.0 ...	-20	11.80	-23,600	1,136	-99,978	-529	-7	-1,274
ABT ...	ABT FEB 15 '08 47.5 P...	-10	0.10	-100	-32	2,733	49	-17	-21
ACIW...	ACIW Stock (NMS)	1,500	16.62	24,930	-1,995	24,930	1,500		
ADCT	ADCT JAN 18 '08 15.0 ...	-25	0.85	-2,125	-1,080	20,925	1,437	-585	-28
<NASDAQ	ADCT JAN 18 '08 17.5 ...	-25	3.00	-7,500	-2,018	31,014	2,130	-250	-17
ADI <...	ADI JAN 18 '08 30.0 PU...	-15	0.95	-1,425	-648	27,219	925	-355	-34
AEIS	AEIS JAN 18 '08 17.5 P...		5.50		-2,029				
<NASDAQ	AEIS JAN 18 '08 20.0 P...		8.00		-2,028				
	AEIS Stock (NMS)		11.56		-1,243				
AIG	AIG JAN 18 '08 60.0 PU...	-10	4.50	-4,500	-1,007	46,137	825	-67	-29
<NYSE>	AIG JAN 18 '08 65.0 PU...	-5	9.10	-4,550	-679	27,206	487	-10	-4
ALL <...	ALL JAN 18 '08 55.0 PU...	-20	3.80	-7,600	-514	97,858	1,918	-117	-19

To view the Portfolio report

1   On the **Analytics** menu, select *IB Risk Navigator*.

2   In the **Report Viewer**, select *Portfolio* in the **Report** dropdown.

3   Use the Underlying and Measure dropdown lists to define your report criteria.

The table below describes the available metrics and measures for the **Portfolio** report.

Metrics	Description
Position Size	Your (signed) position in the contract. A short position is indicated by the "-" (minus) sign.
Price	The current market price of one unit of the contract.
Value	The (price) x (position).
P&L	The "unrealized" Average Cost P&L is shown in total, per underlying, and for each position.
Exposure	The exposure is calculated using the formula: position x delta x multiplier x underlying price. **Note:** The exposure for each asset class is converted to a share-equivalent value to make the comparisons and summations valid.
VAR	Value at Risk (VAR) is a measure of market exposure. It shows the greatest expected loss over a one-day period, with 99.5% confidence. **Note:** In cases where the VAR cannot be calculated, the notation "N/A" is displayed on a violet background.
Delta	Delta captures both the direction and the magnitude of the portfolio's sensitivity to an underlier by representing the degree and direction of change in the option price, based on a change in the price of the underlier. We use a capital "D" to differentiate the IB Risk Navigator "position Delta" calculated as (delta * position) from the greek delta calculation.
Gamma	Gamma helps you assess directional risk by defining the speed at which the option's directional changes will occur, i.e. the rate of change of delta. We use a capital "G" to differentiate the IB Risk Navigator "position Gamma" calculated as (gamma * position) from the greek gamma calculation.
Vega	Vega represents the portfolio's sensitivity to changes in implied volatility of the underliers, and reflects the change in the price of an option relative to a change in the implied volatility of the underlier. Generally long option positions benefit from rising (and suffer from declining) implied volatilities, while short option positions experience the opposite - they benefit from declining (and suffer from rising) implied volatilities. We use a capital "V" to differentiate the IB Risk Navigator "position Vega" calculated as (vega * position) from the greek vega calculation.

Metrics	Description
Theta	Theta represents the portfolio's sensitivity to the passage of time by indicating the rate at which the market value of your portfolio will change with time. This metric calculation is based on the assumption that all other variables remain unchanged, including the underlying price, implied volatility and interest rate. We use a capital "T" to differentiate the IB Risk Navigator "position Theta" calculated as (theta * position) from the greek theta calculation.

Risk by Position Report

The **Risk by Position** report displays risk measures calculated for each position, by underlying.

To view the Risk by Position report

1   On the **Analytics** menu, select *IB Risk Navigator*.

2   In the **Report Viewer**, select *Risk by Position* in the Report dropdown.

3   Use the [Underlying](#) and Measure lists to define your report criteria.

If you elect to view metrics for only a single underlying, the report will not display the *Underlying* column as shown above.

The table below describes the available metrics and measures for the **Risk by Position** report.

Metrics	Description
Position	Your (signed) position in the contract. A short position is indicated by the "-" (minus) sign.

Metrics	Description
Price	The current market price of one unit of the contract.
Exposure	The exposure is calculated using the formula: position x delta x multiplier x underlying price. **Note:** The exposure for each asset class is converted to a share-equivalent value for easy comparisons between classes.
Delta	Delta captures both the direction and the magnitude of the portfolio's sensitivity to an underlier by representing the degree and direction of change in the option price, based on a change in the price of the underlier. We use a capital "D" to differentiate the IB Risk Navigator "position Delta" calculated as (delta * position) from the greek delta calculation.
Gamma	Gamma helps you assess directional risk by defining the speed at which the option's directional changes will occur, i.e. the rate of change of delta. We use a capital "G" to differentiate the IB Risk Navigator "position Gamma" calculated as (gamma * position) from the greek gamma calculation.
Vega	Vega represents the portfolio's sensitivity to changes in implied volatility of the underliers, and reflects the change in the price of an option relative to a change in the implied volatility of the underlier. Generally long option positions benefit from rising (and suffer from declining) implied volatilities, while short option positions experience the opposite - they benefit from declining (and suffer from rising) implied volatilities. We use a capital "V" to differentiate the IB Risk Navigator "position Vega" calculated as (vega * position) from the greek vega calculation.
Theta	Theta represents the portfolio's sensitivity to the passage of time by indicating the rate at which the market value of your portfolio will change with time. This metric calculation is based on the assumption that all other variables remain unchanged, including the underlying price, implied volatility and interest rate. We use a capital "T" to differentiate the IB Risk Navigator "position Theta" calculated as (theta * position) from the greek theta calculation.

Risk by Underlying Report

The **Risk by Underlying** report is designed to open by default when you open the IB Risk Navigator[SM]. This report displays portfolio metrics across all asset classes and provides drill-down depth control for each underlying.

To view the Risk by Underlying report

1   On the **Analytics** menu, select *IB Risk Navigator*.

2   In the **Report Viewer**, select *Risk by Underlying* in the Report dropdown.

3   Use the Underlying and Measure lists to define your report criteria.

The table below shows all available metrics and measures for the **Risk by Underlying** report.

Metrics	Description
Position	Your (signed) position in the contract. A short position is indicated by the "-" (minus) sign.
Price	The current market price of one unit of the contract.
Value	The (price) x (position).
P&L	The "unrealized" Average Cost P&L is shown in total, per underlying, and for each position.

Metrics	Description
Exposure	The exposure is calculated using the formula: position x delta x multiplier x underlying price. **Note:** The exposure for each asset class is converted to a share-equivalent value for easy comparisons between classes.
VAR	Value at Risk (VAR) is a measure of market exposure. It shows the greatest expected loss over a one-day period, with 99.5% confidence. **Note:** In cases where the VAR cannot be calculated, the notation "N/A" is displayed on a violet background.
Delta	Delta captures both the direction and the magnitude of the portfolio's sensitivity to an underlier by representing the degree and direction of change in the option price, based on a change in the price of the underlier. We use a capital "D" to differentiate the IB Risk Navigator "position Delta" calculated as (delta * position) from the greek delta calculation.
Gamma	Gamma helps you assess directional risk by defining the speed at which the option's directional changes will occur, i.e. the rate of change of delta. We use a capital "G" to differentiate the IB Risk Navigator "position Gamma" calculated as (gamma * position) from the greek gamma calculation.
Vega	Vega represents the portfolio's sensitivity to changes in implied volatility of the underliers, and reflects the change in the price of an option relative to a change in the implied volatility of the underlier. Generally long option positions benefit from rising (and suffer from declining) implied volatilities, while short option positions experience the opposite - they benefit from declining (and suffer from rising) implied volatilities. We use a capital "V" to differentiate the IB Risk Navigator "position Vega" calculated as (vega * position) from the greek vega calculation.
Theta	Theta represents the portfolio's sensitivity to the passage of time by indicating the rate at which the market value of your portfolio will change with time. This metric calculation is based on the assumption that all other variables remain unchanged, including the underlying price, implied volatility and interest rate. We use a capital "T" to differentiate the IB Risk Navigator "position Theta" calculated as (theta * position) from the greek theta calculation.
Hedge	Adds a new column with checkbox, which allows you to select multiple subportfolios (which includes all of your positions in an underlying and its derivatives) by underlying and create a basket of hedge orders to offset the deltas of each subportfolio.

Risk by Industry Report

The **Risk by Industry** report sorts your portfolio by industry. This report displays values on all levels of detail, from individual positions to totals per industry sector.

To view the Risk by Industry report

1   On the **Analytics** menu, select *IB Risk Navigator*.

2   In the **Report Viewer**, select *Risk by Industry* in the Report dropdown.

You can drill down several levels within an **Industry** category, and then drill down in the *Underlying* field for that category to see all underlyings in the industry, and then all derivatives of the underlying. To drill down to a deeper level of detail, click the plus "+" sign. A minus "-" sign indicates that you have drilled down to the deepest level of detail. Click the "-" sign to go up a level.

The table below describes the available metrics and measures for the **Risk by Industry** report.

Metrics	Description
Position	Your (signed) position in the contract. A short position is indicated by the "-" (minus) sign.
Price	The current market price of one unit of the contract.

Metrics	Description
Value	The (price) x (position).
P&L	The "unrealized" Average Cost P&L is shown in total, per underlying, and for each position.
Exposure	The exposure is calculated using the formula: position x delta x multiplier x underlying price. **Note:** The exposure for each asset class is converted to a share-equivalent value to make the comparisons and summations valid.
VAR	Value at Risk (VAR) is a measure of market exposure. It shows the greatest expected loss over a one-day period, with 99.5% confidence. **Note:** In cases where the VAR cannot be calculated, the notation "N/A" is displayed on a violet background.
Delta	Delta captures both the direction and the magnitude of the portfolio's sensitivity to an underlier by representing the degree and direction of change in the option price, based on a change in the price of the underlier. We use a capital "D" to differentiate the IB Risk Navigator "position Delta" calculated as (delta * position) from the greek delta calculation.
Gamma	Gamma helps you assess directional risk by defining the speed at which the option's directional changes will occur, i.e. the rate of change of delta. We use a capital "G" to differentiate the IB Risk Navigator "position Gamma" calculated as (gamma * position) from the greek gamma calculation.
Vega	Vega represents the portfolio's sensitivity to changes in implied volatility of the underliers, and reflects the change in the price of an option relative to a change in the implied volatility of the underlier. Generally long option positions benefit from rising (and suffer from declining) implied volatilities, while short option positions experience the opposite - they benefit from declining (and suffer from rising) implied volatilities. We use a capital "V" to differentiate the IB Risk Navigator "position Vega" calculated as (vega * position) from the greek vega calculation.
Theta	Theta represents the portfolio's sensitivity to the passage of time by indicating the rate at which the market value of your portfolio will change with time. This metric calculation is based on the assumption that all other variables remain unchanged, including the underlying price, implied volatility and interest rate. We use a capital "T" to differentiate the IB Risk Navigator "position Theta" calculated as (theta * position) from the greek theta calculation.
Hedge	Adds a new column with checkbox, which allows you to select multiple subportfolios (which includes all of your positions in an underlying and its derivatives) by underlying and create a basket of hedge orders to offset the deltas of each subportfolio.

Use the Industry Editor

You can modify the default industry groups shown in the Risk by Industry report using the Industry Editor. The editor allows you to assign an underlying to a different group, assign the underlying to multiple industry groups, and create new industry sectors, groups and sub-groups.

To use the Industry Editor

1   In the Risk by Industry report, from the Risk Navigator **Edit** menu select *Edit industry groups*. The Sector, Group and Subgroup fields become editable when you click in them.

> **Note:** An asterisk appears next to any underlying whose sector, group or subgroup have been edited.

To assign an underlying to a different sector, group or subgroup

1 Click the appropriate field in the underlying row and select a different entry.

To add the underlying to multiple groups

1 Use the Industry Editor **Edit** menu to select *New Entry for Underlying*. A second line is created for the underlying.

2 Click the appropriate field to display the dropdown list and select a different entry. You now have two lines for the underlying with two different industry selections.

To add a new industry

1 Select an underlying, and use the Industry Editor **Edit** menu to select *New Entry for Underlying*.

2 Enter the name of the new industry in the blank field. You now have two different lines for the underlying with two different industry selections.

3 To remove the original, right-click the row and select *Remove Row*.

> **Note:** You must also enter anew **Group** and **Subgroup** for the new industry. This new entry will now be available in the selection list for all underlyings.

Measure by Underlying and Maturity

The **Measure by Underlying and Maturity** matrix displays risk by measure for all underlyings, sorted by expiry. The measure, which you selected in the *Measure* dropdown of the **Report Selector**, is displayed along the top of the matrix. The expiry fields display the sum of all positions (*measures)* for the given underlying/expiry.

	- All Expiry	Stock	20071220	20071221	20071231	20080118	20080215	20080320	20080418	200
AA <NYS...	636					401			235	
AAPL <N...	-494									
ABT <NY...	103					67	36			
ACIW <N...	1,500	1,500								
ADBE <N...	-483	0				43				
ADCT <N...	2,154					2,154				
ADI <NY...	602			159		443				
ADSK <N...	7					7				
AEIS <N...	5,636	2,000				3,636				
AIG <NY...	1,135					1,135				
ALL <NY...	1,871					1,871				
ALU <NY...	7,869	6,000				1,869				
AMAT <N...	2,485					1,815				
AMD <N...	6,652					6,652				
AMGN <...	2,761	2,000				467			294	
AMR <N...	1,639					1,639				
AMTD <N...	37					37				
AMZN <N...	457	2,000				-1,543				
ANN <NY...	1,905			1,905						
ARRS <N...	5,921	4,000				1,921				
ATML <N...	20,000	20,000								
ATVI <N...	40					40				
AVP <NY...	1,615	3,000				-1,385				
	5,010					5,010				

To view the Measure by Underlying and Maturity report

1 On the **Analytics** menu, select *IB Risk Navigator*.

2 In the **Report Viewer**, select *Measure by Underlying and Maturity* in the Report dropdown.

3 Use the Underlying and Measure selection lists to specify report criteria.

Metrics	Description
Exposure	The exposure is calculated using the formula: position x delta x multiplier x underlying price.
	Note: The exposure for each asset class is converted to a share-equivalent value to make the comparisons and summations valid.

Metrics	Description
Delta	Delta captures both the direction and the magnitude of the portfolio's sensitivity to an underlier by representing the degree and direction of change in the option price, based on a change in the price of the underlier.
	We use a capital "D" to differentiate the IB Risk Navigator "position Delta" calculated as (delta * position) from the greek delta calculation.
Gamma	Gamma helps you assess directional risk by defining the speed at which the option's directional changes will occur, i.e. the rate of change of delta.
	We use a capital "G" to differentiate the IB Risk Navigator "position Gamma" calculated as (gamma * position) from the greek gamma calculation.
Vega	Vega represents the portfolio's sensitivity to changes in implied volatility of the underliers, and reflects the change in the price of an option relative to a change in the implied volatility of the underlier. Generally long option positions benefit from rising (and suffer from declining) implied volatilities, while short option positions experience the opposite - they benefit from declining (and suffer from rising) implied volatilities.
	We use a capital "V" to differentiate the IB Risk Navigator "position Vega" calculated as (vega * position) from the greek vega calculation.
Theta	Theta represents the portfolio's sensitivity to the passage of time by indicating the rate at which the market value of your portfolio will change with time. This metric calculation is based on the assumption that all other variables remain unchanged, including the underlying price, implied volatility and interest rate.
	We use a capital "T" to differentiate the IB Risk Navigator "position Theta" calculated as (theta * position) from the greek theta calculation.

Measure by Price Change and Volatility Change

This report uses the Risk Factory[SM] system to calculate the theoretical price and a set of risk measures for each position in your portfolio in each of the market outcome scenarios noted in the bulleted list below, and measures the market outcome for the relative portfolio Delta, Gamma, Vega, and Theta. All other reports in the Risk Navigator use real-time data in their calculations, but these values are calculated using the underlying and derivative prices on the *close of the previous business day,* at multiple positive, negative, and zero percent change scenarios in the underlying price, volatility and interest rate.

Scenarios for each value are:

- Underlying price scenarios: -30%, -20%, -10%, unchanged, +10%, +20%, +30%
- Volatility scenarios: -30%, -15%, unchanged, +15%, +30%
- Interest rate scenarios: -100 bp, -50 bp, unchanged, +50 bp, +100 bp

The scenarios advance the time parameter to the close of the next business day, and the values in the table reflect the scenarios applied to the measure you picked in the Report Selector. Although 175 market outcome scenarios (7x5x5) are calculated for each contract, you can only view a flat slice of these values at one time, due to the limitations imposed by our 2-dimensional display capabilities.

Underlying	Price Change	Volatility Change				
		−30 %	−15 %	0 %	15 %	
+ All Underlyings	−30 %	−4,730,957	−4,773,076	−4,824,439	−4,884,713	
	−20 %	−2,585,188	−2,659,792	−2,745,050	−2,839,113	
	−10 %	−916,083	−1,008,120	−1,111,525	−1,224,808	
	0 %	217,837	128,566	24,714	−91,065	
	10 %	841,684	761,808	668,438	563,650	
	20 %	1,121,760	1,054,148	975,035	885,565	
	30 %	1,194,136	1,139,635	1,074,885	1,000,621	

To view the Measure by Price Change and Volatility Change report

1. On the **Analytics** menu, select *IB Risk Navigator*.

2. In the **Report Viewer**, select *Measure by Price Change and Volatility Change* in the Report dropdown.

3. Use the **Dimensions**>*Scenario Risk Matrix* menu to change the row and column values to view different scenarios.

You can apply market scenarios to other IB Risk Navigator reports using the drill through feature.

Market Scenario Drill Through

You can apply a market outcome scenario (calculated in the Measure by Price Change and Volatility Change report) to any of the other risk reports using the drill through command on the right-click menu.

To apply market outcome scenarios to other reports

1   Select a market outcome scenario by clicking in a cell at the intersection of the x-axis and y-axis scenarios.

2   Use the right-click menu to select **Drill Through**, and then select a report.

3 The chosen report is displayed with the applied market outcome scenario you selected described at the top of the report.

> **Note:** When you are viewing the market outcome scenarios via the drill-through feature, all of the values on the report reflect this hypothetical scenario, and therefore do not reflect actual, real-time risk. To reset the report to real-time, click the **Reset Scenario** button on the top right.

Custom Scenarios

You can elect to modify the variables that affect your risk profile using the *Custom scenario* command on the **View** menu.

The Custom Scenario section is populated with the same data as the realtime market scenario until you modify the variables.

To create a Custom Scenario

1 In the Scenario Editor, filter the underlyings you want to include in the custom view.

   a Select *All Underlyings* to affect the entire portfolio from a single editing line.

   b Select *Any Underlyings* to edit individual underlyings line by line.

   c Choose a single underlying to show the subportfolio (the underlying and its derivatives). Additionally, use Ctrl + click to select multiple underlyings.

2 Modify the **Date** to view your risk profile at a future date. By default the date is set to today.

3 In the **Underlying Price** section, define the value of the price change and the type.

   a ExpV - the Custom Scenario price will be changed to exactly reflect the explicit value in the Price field, either positive or negative depending on the sign. For example, if the price for ABC is currently $60.25 and you enter 55.00 ExpV, the Custom Scenario price for ABC will be $55.00.

   b Chg - Adds or subtracts the value in the Price field, depending on the sign. For example, if the price for ABC is currently $60.25 and you enter -4.25 Chg, the Custom Scenario price for ABC will be $56.00.

   c Chg% - Adds or subtracts the percent of the value in the price field, depending on the sign. For example, if the price for ABC is currently $60.25 and you enter 10 %Chg, the Custom Scenario price for ABC will be $54.23.

   Note: The values in the Custom Scenario are always compared to values in the realtime Market Scenario. For example, if you modify the Price parameter to show a 10% change in the underlying price and get a Custom Scenario price of $54.23, then you modify this price again to see a -10% change, the new calculation will be based on -10% of the market price of $60.25, not the existing custom scenario price of $54.23.

4 Use the Volatility section to modify volatility using the same types (ExpV, Chg and %Chg as described above in the Price section.

5 Hit *Apply* at the top left of the Scenario Editor to see the impact of your changes in the Custom Scenario section.

Custom Scenario Examples

You can create complex custom scenarios by editing the price, date and volatility variables. The examples below are only a few of the possible custom views available, and are meant to help you become familiar with the tool.

Custom Scenario Example 1: You want to view the impact on your portfolio of a 10% change in the underlying price of AMZN.

real time market scenario

Description	Portfolio									
	Market Scenario (live update)					Custom Scenario (live update)				
	Posit...	Price	Value	Delt...	Th...	Pos...	Pri...	Value	Delt...	Th...
AMZN Stock (NAS...	46,468	124.49	5,784,801	46,468		46,468	136.94	6,363,281	46,468	
AMZN JAN 15 '10 ...	-55	0.40	-2,200	139	72	-55	0.17	-911	60	38
AMZN JAN 15 '10 ...	-21	45.05	-94,605	-2,091	15	-21	57.37	-120,474	-2,099	12
AMZN JAN 15 '10 ...	-16	0.51	-816	55	25	-16	0.21	-338	23	13
AMZN JAN 15 '10 ...	-50	40.05	-200,250	-4,898	68	-50	52.45	-262,244	-4,971	44
AMZN JAN 15 '10 ...	-83	0.74	-6,142	404	168	-83	0.30	-2,456	171	91
AMZN JAN 15 '10 ...	24	35.35	84,840	2,299	-49	24	47.57	114,163	2,367	-30
AMZN JAN 15 '10 ...	-102	1.04	-10,608	698	250	-102	0.42	-4,253	298	139
AMZN JAN 15 '10 ...	-6	1.46	-876	57	18	-6	0.61	-368	26	11
AOC Stock (NYSE)	100	40.77	4,077	100						
APA Stock (NYSE)	100	95.48	9,548	100						

The effects of this change can be seen in the **Custom Scenario**, and can be compared with the realtime market data that appears in the adjoining **Market Scenario**. The underlying price change shows in the underlying stock line, and the trickle-down affect of this change can be seen in the Price, Value, Delta and Theta fields.

Custom Scenario Example 2: You want to see the impact of expired options at different exercise prices.

1) Filter the underlying by selecting AMZN.

2) Modify the current date to be later than the expiry on the option.

3) Modify the exercise price (ExPrice) to reflect your "what if" price.

4) Click Apply to see the results in the Custom Scenario table.

Real time market scenario

Underl	Description	Portfolio							
		Market Scenario (live update)				**Custom Scenario** (live update)			
		Pos...	Price	Value	Del...	Po...	Pri...	Value	Del...
...	AMT Stock (NYSE)	100	38.24	3,824	100				
AMZ	AMZN Stock (NASDA...	46,468	121.81	5,660,267	46,468	41,768	21.81	5,087,760	41,768
<NA	AMZN JAN 15 '10 75...	-55	0.39	-2,145	148				
	AMZN JAN 15 '10 80...	-21	42.99	-90,279	-2,009				
	AMZN JAN 15 '10 80...	-16	0.56	-896	62				
	AMZN JAN 15 '10 85...	-50	38.21	-191,050	-4,714				
	AMZN JAN 15 '10 85...	-83	0.78	-6,474	450				
	AMZN JAN 15 '10 90...	24	33.54	80,496	2,212				
	AMZN JAN 15 '10 90...	-102	1.11	-11,322	781				
	AMZN JAN 15 '10 95...	-6	1.53	-918	63				
	AOC St... (NYSE				108				

The effects of this change can be seen in the **Custom Scenario**, and can be compared with the realtime market data that appears in the adjoining **Market Scenario**. Your custom scenario is answering the question: "What if the options have expired and the current stock price is $124.00. How would this affect my AMZN subportfolio?" The trickle-down affect of this change can be seen in the *Position* field, since a portion of the expired options would have been in the money and exercised, affecting your position, as well as the *Value* and *Delta* of the underlying. You will not see any data in the options fields on the **Custom Scenario** side, since the options have expired.

Note: Modified data in the editor appears in red, indicating that you have not yet applied the changes. When you click Apply, the red color is removed.

Portfolio Statistics Report

The **Portfolio Statistics** report shows two summary tables: one for all Stock and Futures positions, and one for all Options positions.

The **Stock/Future** summary shows all long positions, all short positions, the net and gross units, and their corresponding total value.

The **Options** summary shows all long calls, long puts, the sum of both calls and puts, and the total value; all short calls, short puts, the sum of both calls and puts, and the total value; the net units for calls, puts, the sum of both and the total net value; and gross units for calls, puts the sum of both, and the corresponding net value.

Stock/Future

	Shares	Value
Long	244,500	4,805,719.00
Short	33,355	1,671,962.50
Net	211,145	−3,133,756.50
Gross	277,855	6,477,681.50

Options

	Calls	Puts	Both	Value
Long	25	60	85	11,500.00
Short	790	6,818	7,608	1,397,204.52
Net	−765	−6,758	−7,523	1,385,704.52
Gross	815	6,878	7,693	1,408,704.52

To view the Portfolio Statistics report

1 On the **Analytics** menu, select *IB Risk Navigator*.

2 In the **Report Viewer**, select *Portfolio Statistics* in the Report dropdown.

Value at Risk Report

The **Value at Risk** report shows the greatest loss that a portfolio will sustain over a one-day period, with 99.5% confidence. VAR is calculated using three different methods, each with different assumptions about correlations of the underlying assets in the portfolio.

Method	Value at Risk	Scenario
Worst Case		See table below
Perfect Correlation	-300,520	All prices -2.9%
Index Correlated Price Estimate		SPX@CBOE

Worst Case Scenario

Underlying	Price	Price Change	Price Change (Percent)
AA	33.07	-0.74	-2.2%
AAPL	203.18	18.26	9.9%
ABT	54.58	-2.1	-3.7%
ACIW	21.62	2.18	11.2%
ADBE	44.44	3.51	8.6%
ADCT	16	-1.74	-9.8%
ADI	28.22	-3.17	-10.1%
ADSK	45.27	-3.42	-7.0%
AEIS	10.87	-2.13	-16.4%
AIG	52.04	-3.29	-5.9%
ALL	48.62	-2.86	-5.5%
ALU	6.78	-0.55	-7.4%
AMAT	16.48	-1.05	-6.0%
AMD	7.01	-1.01	-12.6%
AMGN	44.33	-2.59	-5.5%
AMR	14.72	-1.42	-8.8%
AMTD	17.49	-1.81	-9.4%
AMZN	66.62	-18.6	-21.8%

- **Worst Case** - Displays the sum of the greatest loss of each underlying in your portfolio assuming each product moves independently to the worst loss within a 3 standard deviation range of each underlying.

- **Perfect Correlation** - Assumes each product is perfectly correlated to a reference index. It then looks for the worst loss within a 4.5 standard deviation range of the reference index.

- **Index Correlated Price Estimate** - Assigns a correlation (Beta) to each underlying in your portfolio to a reference index, and then looks for the worst loss within a 4.5 standard deviation range of that index.

To view the VAR report

1 On the **Analytics** menu, select *IB Risk Navigator*.

2 In the **Report Selector**, select *Value at Risk* from the *Report* dropdown.
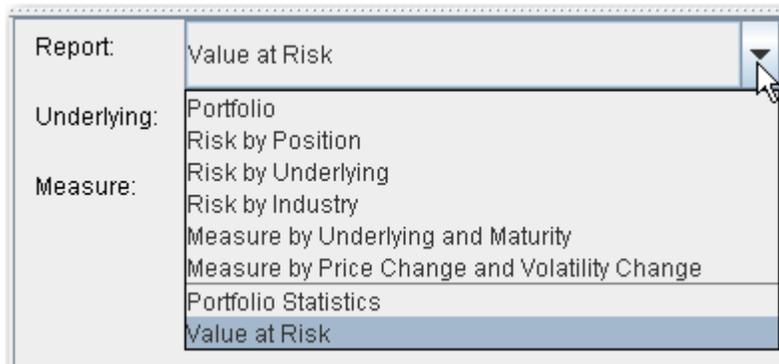
P&L Pie Chart

The P&L Pie Chart shows the position Delta and P&L for all positions in your portfolio relative to the total portfolio. Use default color coding to see losing positions in red, profiting positions in green and neutral positions in blue, or change the coloring to display each position using a different color.
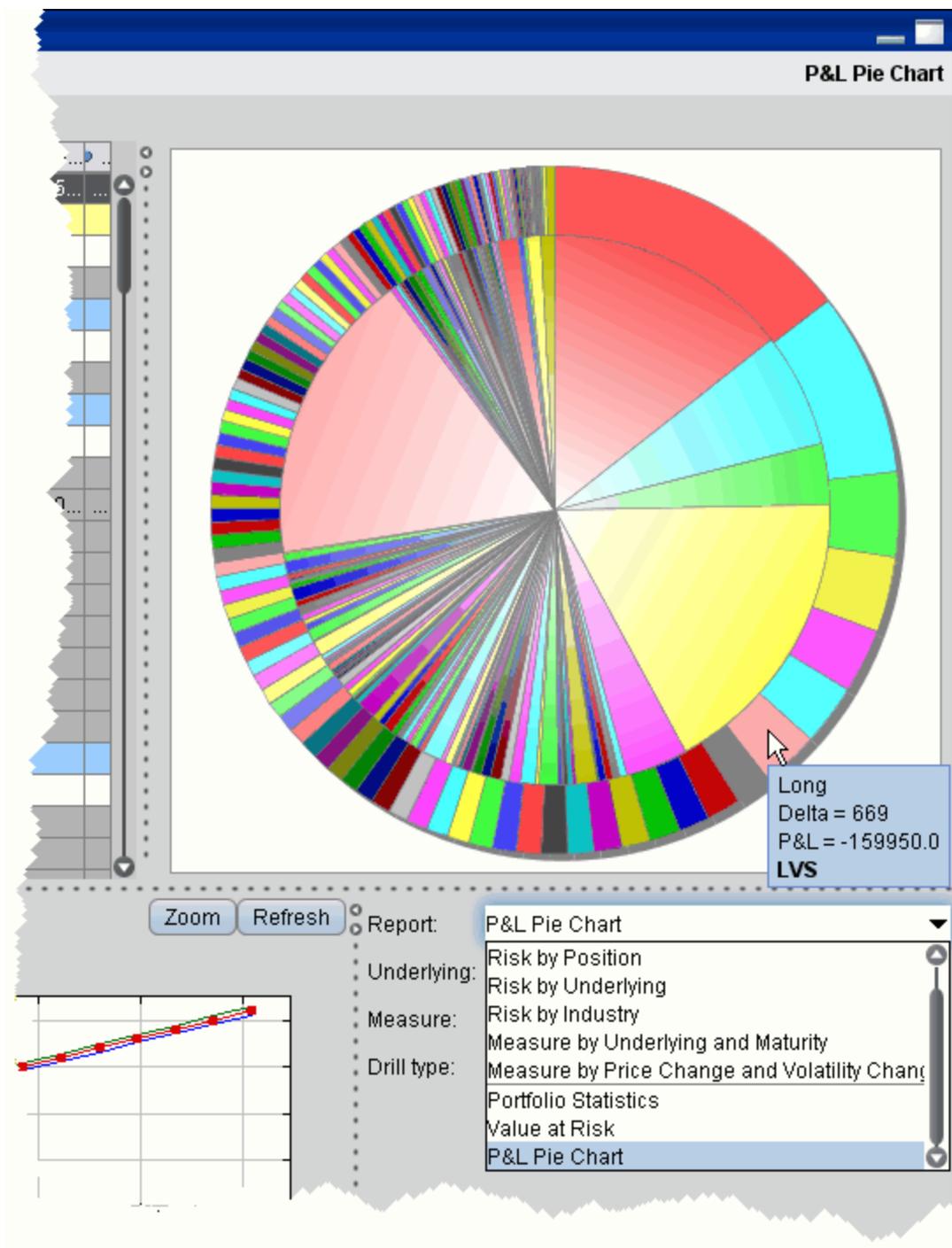
To view the P&L Pie Chart

1   From the TWS **Analytics** menu, select *IB Risk Navigator*.

2   In the **Report Selector**, select *P&L Pie Chart* from the *Report* dropdown.

Reading and Configuring the Pie Chart

Use the right-click menu to modify the display settings. Hold your mouse over any slice of the pie to see position, Delta and P&L details.

Selected contract is highlighted in yellow, and represented by the broken line in the pie chart. The inner ring represents the position Delta of the contract; the outer ring represents P&L. Mouse over the slice for position details, including Delta and P&L.
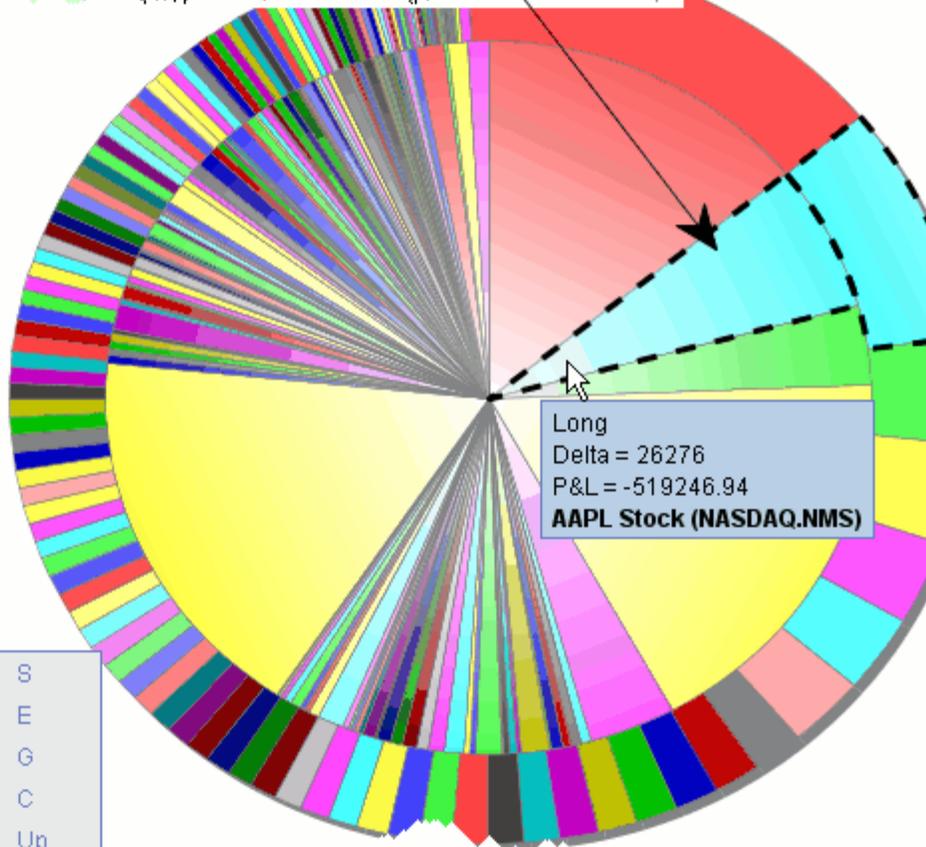
Use the right-click menu to modify pie chart settings.

Aggregated Greeks in Reports

The aggregate calculations for the Delta, Gamma and Vega position Greeks can be changed from the **Settings** menu by choosing *Greek aggregations*.
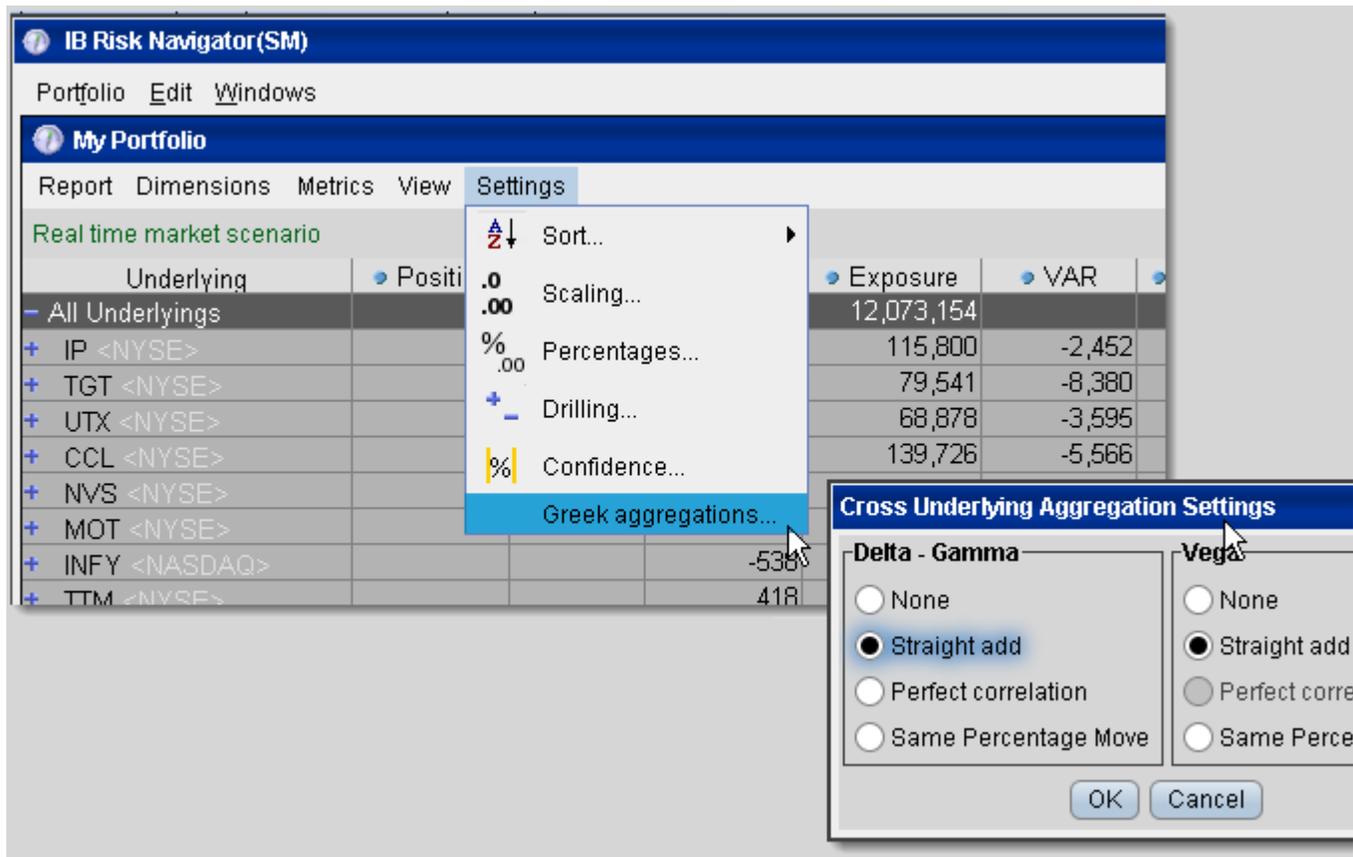
Change Greek aggregation calculations

1   From the **Settings** menu, select *Greek aggregations*.

2   Use the radio button to choose a calculation.

Calculations use the following variables:

S_i = underlying price.

sigma_i = historical volatility of the underlying.

Delta_i = total delta denominated to the base currency.

Gamma_i = total gamma denominated to the base currency.

Vega_i = total vega denominated to the base currency.

Straight add:

Aggregated Delta = sum over i (Delta_i)
Aggregated Gamma = sum over i (Gamma_i)
Aggregated Vega = sum over i (Vega_i)

Perfect Correlation:

Aggregated Delta = sum over i (Delta_i * S_i * sigma_i)
Aggregated Gamma = 0.5 * sum over i (Gamma_i * (S_i * sigma_i)^2)

Same Percentage Move:

Aggregated Delta = sum over i (Delta_i * S_i * 0.01)
Aggregated Gamma = 0.5 * sum over i (Gamma_i * (S_i * 0.01)^2)
Aggregated Vega = sum over i (Vega_i * S_i * 0.01)

Report Metrics

The **Metrics** menu at the top of the IB Risk Navigator is context-sensitive, and allows you to select applicable metrics for each report. Available metrics include:
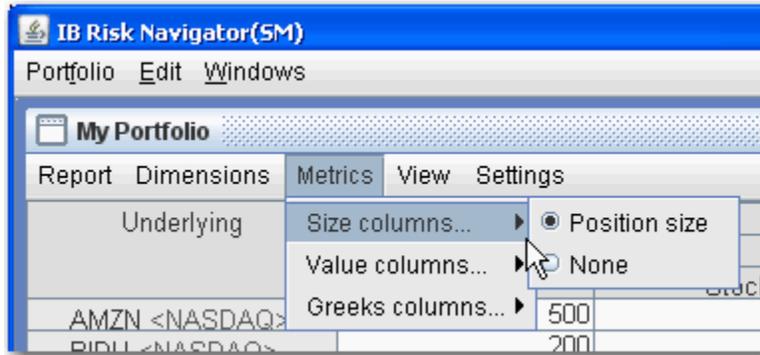
Metrics	Description
Size columns...	
Position size	Select *Position size* to display your (signed) position in the contract. A short position is depicted by a "-" minus sign. Choose "None" to remove the Position field from your report.
Value columns...	
VAR	Value at Risk (VAR) is a measure of market exposure. It shows the greatest expected loss over a one-day period, with 99.5% confidence. **Note:** In cases where the VAR cannot be calculated, the notation "N/A" is displayed on a violet background.
P&L	The "unrealized" Average Cost P&L is shown in total, per underlying, and for each position.
Price	The current market price of one unit of the contract.
Value	The (price) x (position).
Conversion Rate	Displays the rate used to convert non-base positions into the base currency.
Greeks columns...	

Metrics	Description
Exposure	The exposure is calculated using the formula: position x delta x multiplier x underlying price. **Note:** The exposure for each asset class is converted to a share-equivalent value for easy comparison between classes.
Delta	This position delta captures both the direction and the magnitude of the portfolio's sensitivity to an underlying by representing the degree and direction of change in the option price, based on a change in the price of the underlying. We use a capital "D" to differentiate the IB Risk Navigator" position Delta" calculated as (delta * position) from the greek delta calculation.
Gamma	Gamma helps you assess directional risk by defining the speed at which the option's directional changes will occur, i.e. the rate of change of delta. We use a capital "G" to differentiate the IB Risk Navigator "position Gamma" calculated as (gamma * position) from the greek gamma calculation.
Vega	Vega represents the portfolio's sensitivity to changes in implied volatility of the underlyings, and shows the change in the price of an option relative to a change in the implied volatility of the underlying. Generally long option positions benefit from rising (and suffer from declining) implied volatilities, while short option positions experience the opposite - they benefit from declining (and suffer from rising) implied volatilities. We use a capital "V" to differentiate the IB Risk Navigator "position Vega" calculated as (vega * position) from the greek vega calculation.
Theta	Theta represents the portfolio's sensitivity to the passage of time by indicating the rate at which the market value of your portfolio will change with time. This metric calculation is based on the assumption that all other variables remain unchanged, including the underlying price, implied volatility and interest rate. We use a capital "T" to differentiate the IB Risk Navigator "position Theta" calculated as (theta * position) from the greek theta calculation.
Hedge	Adds a new column with checkbox, which allows you to select multiple subportfolios by underlying (a subportfolio includes all of your positions in an underlying and its derivatives) and create a basket of hedge orders to offset the deltas of each subportfolio.

Create a Basket Hedge Order

Display the Hedge metric on the Risk by Underlying and Risk by Industry reports to create a basket of delta hedge orders.
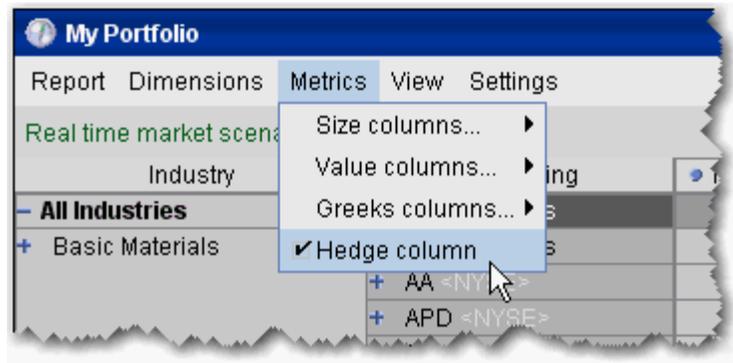
To create a basket hedge

1   Display the *Hedge column* from the **Metrics** menu in the Risk by Underlying or Risk by Industry report.

2   Enable the checkbox in the Hedge column of an underlying for all subportfolios whose deltas you want to hedge.

> **Note:** To select all subportfolios, use the checkbox in the *All Underlyings* top row.

3   When all contracts are selected, click the **Hedge** button in top right corner of the report.

4   Define the hedge order attributes and click OK:

a   Pick the order type (Limit, Market or Relative).

b   If you selected the Relative order type, define the relative offset amount.

c   If you selected the Relative order type, choose an alternate order type to use if the Relative order is not valid.

5   The BasketTrader opens, and the legs of the order reflect the subportfolios you selected in the Risk Navigator.

The Total Quantity for each leg is identical to the delta for the subportfolio, with the Action set to the opposite side; if the delta is positive, the leg becomes a SELL order. If the delta is negative, the leg becomes a BUY order.
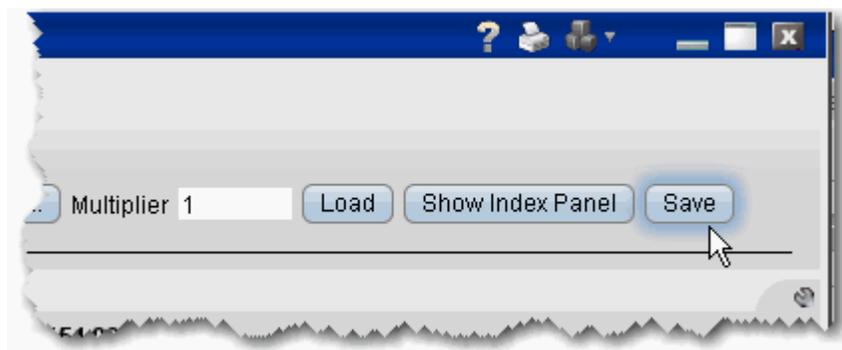
You can save the basket for later use by clicking the **Save** button at the top right of the basket.

For more information on using basket orders, see the BasketTrader topic.

Option Analytics

Introduction

- [Option Analytics Window](#)
- [Intro to Model Navigator](#)
- [Volatility Trading](#)

Option Analytics Window

The **Option Analytics** window displays values that reflect the rate of change of an option's price with respect to a unit change in each of a number of risk dimensions.

The contract price plots display the static set of contract prices determined during the price scan. Each point associates an underlying price on the horizontal axis with the corresponding contract price on the vertical axis. Note that the contract price is expressed as the price per underlying unit (just as it is represented on an order line or in the execution window). The top plot displays calls, the bottom plot displays puts, for whichever option your have highlighted in the list.

Use the *Vol-up*, *Vol-down* and *T-down* checkboxes to view the plot under different scenarios to help you visualize the volatility and time risk in your option positions. *Vol-up* raises the implied volatility by 15% in relative change*; *Vol-down* reduces the implied volatility by 15% in relative change*, and *T-down* reduces the time to expiry by one calendar day.

To view the Option Analytics window

- From the OptionTrader, select a contract and on the OptionTrader toolbar click **Analytics**, and then select *Option Analytics*.

- From the trading window, select an options contract, and use the **Analytics** menu command to select *Option Analytics*.

Option Analytics Fields	
Contract	Lists options on the active trading page, sorted by underlying, expiration date and strike price.
delta	The rate of change in the value of a call option with respect to a change in the price of the underlying asset. Since call values increase with an increase in the price of the underlying asset, delta-call is always a positive number. A call option with a delta of 1.0 will move at 100% of the rate of change of the underlying, an option with a delta of 0.50 will move at 50% of the rate of change of the underlying, etc.
gamma	The rate at which the delta of an option changes with respect to a change in the price of the underlying asset.
vega	The rate of change in the value of an option with respect to a change in the volatility.
theta	The amount that an option value will change with the passage of one day. This is not the derivative, but rather it is a difference. Theta is also known as the time value decay, or premium decay.

Note: These values are updated with the underlying last price, and when you apply changes to an option class. These risk dimension values can also be displayed on the Option Trader screen.

*For an example of a relative percent change, if the current implied volatility of an option is 10%, a 15% relative change would result in an implied volatility of 11.5%, calculated as follows:

10% * (1 + 0.15) = 11.5%.

Model Navigator

Use the Model Navigator

Use the **Model Navigator** to modify option pricing assumptions, including the volatility, interest rates and dividends, and have the Model Navigator use these values in its option model price calculations.

- Using the Model Navigator
- Contract Description Pane
- Volatility Model Pane
- Edit the Volatility Profile
- Edit Interest Rates
- Edit Dividends
- Model Price Color Key
- Modify Chart Display Settings

Using the Model Navigator

IB's Price/Risk Analytics uses current market data along with interest and dividend values to calculate implied volatilities and option model prices. Use the **Model Navigator** to modify pricing assumptions and recalculate the model price.
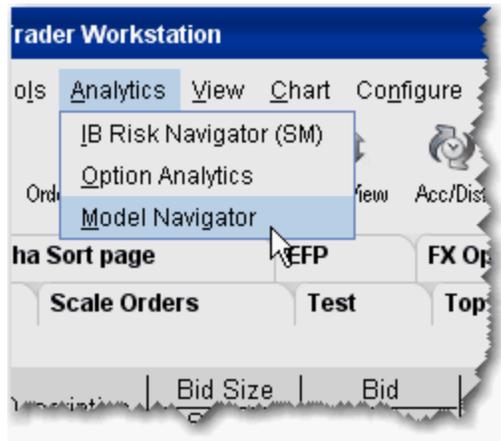
To open the Model Navigator

1   On the **Analytics** menu, select *Model Navigator*.
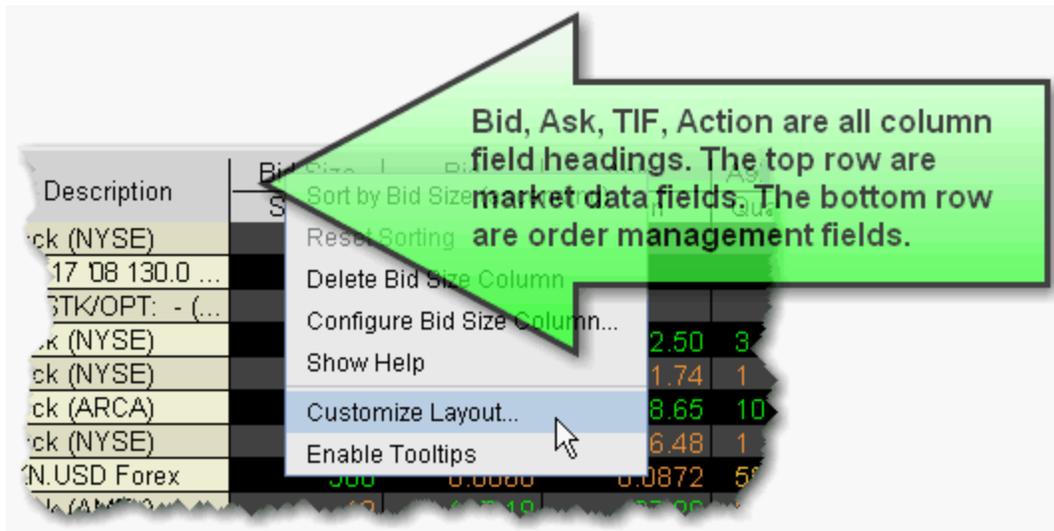
- If you open the **Model Navigator** from the OptionTrader, it is automatically populated with all loaded option chains.

- If you open the **Model Navigator** from the IB Risk Navigator[SM], it is populated with all options.

- If you open the **Model Navigator** from a trading page, it will show options on all pages that have the *Model* or *Imp Vol* fields displayed, which require the model price calculation.

To display Model or Imp Vol fields on a trading page

1 Right-click in the column headings area of a trading page and select *Customize Layout*.

2 From the Layout manager, expand the *Options* category in the **Available Columns** list.
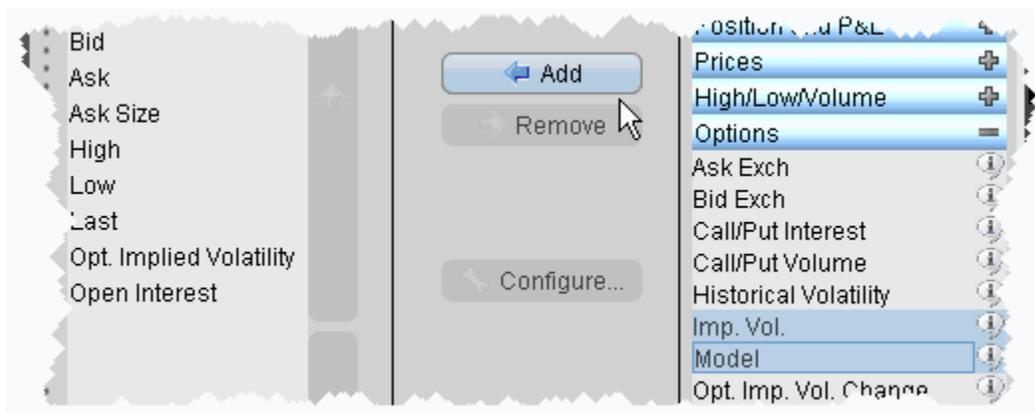
3 Select the *Imp. Vol* and/or *Model* fields and click *Add* to move them to the **Shown Columns** list.

4 Click OK.

The **Imp Vol** and **Model** fields display on the trading page, and all options contracts on the page now require a model calculation and will appear in the **Model Navigator** Contract Description pane. The implied volatility calculation is non-linear and may not converge for low vega options. In such cases, the Model Navigator will not provide an implied volatility estimate.

The Model Navigator window comprises three main sections: the Contract Description Pane which shows all available options in an expandable tree, the Volatility Model Pane which displays the volatility curve plots, and the Volatility Curve Table table which lists associated strike prices and implied volatilities.

Contract Description Pane

The left pane shows all available options grouped by ultimate underlying, which can be sorted alphabetically or based on option count order using the *Sorting* command on the **Settings** menu. Select the checkbox next to an expiration date to create a volatility model. All volatility models on an underlying appear in the same sub-pane. Each underlying has a unique pane of volatility model(s).
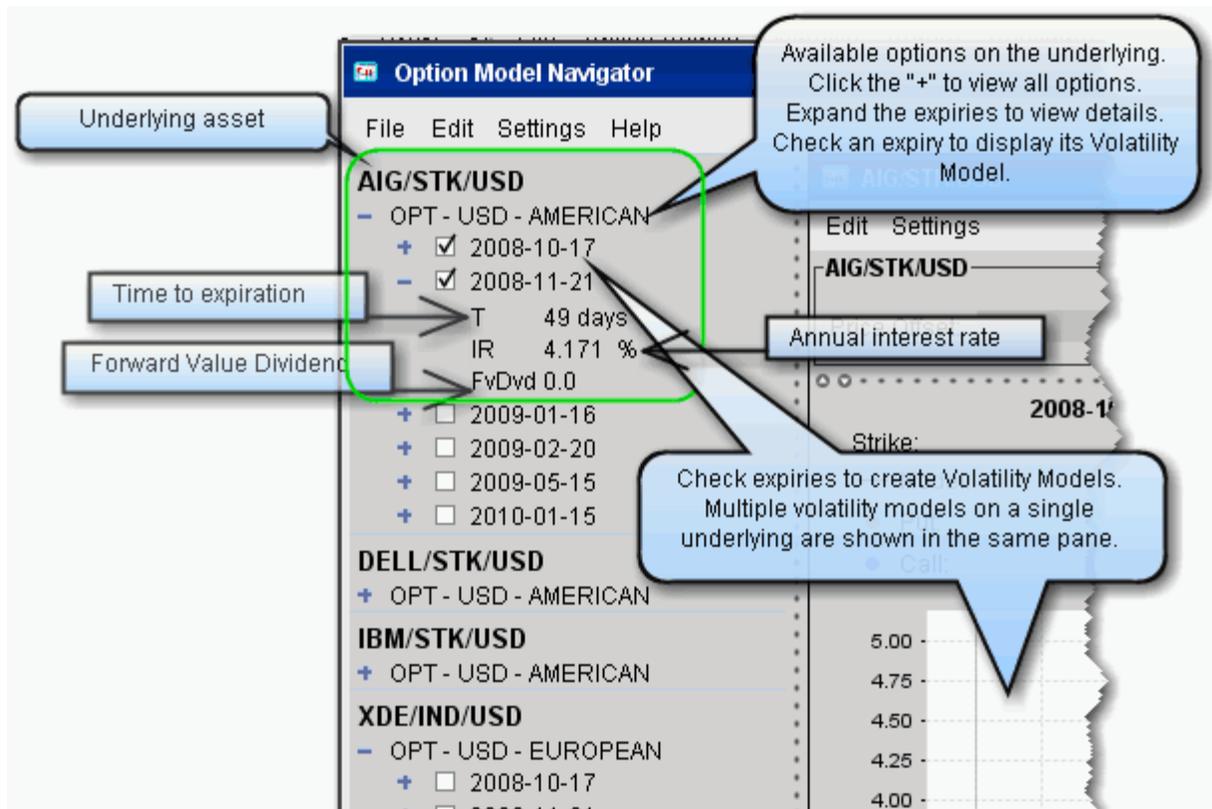
Use the **Settings** menu to elect not to merge the FUT subtree with the option, and see the whole FOP structure.

To include contracts in the **Model Navigator**, you must either: use the OptionTrader and download a set of option chains, open the IB Risk Navigator[SM], or add the contracts to your trading page with the Imp Vol. and/or Model fields displayed.

Volatility Model Pane

Volatility Models are displayed for all checked contracts in the center pane of the Model Navigator. The Volatility Model pane includes:

- Price Offset - optional. Offset the price of the underlying for selected options, by an absolute value or a percent of the current price.

- Volatility Curve Plot - Shows the volatility profile as a function of the strike price. You can manually edit a plot by right-clicking and choosing *Edit*.
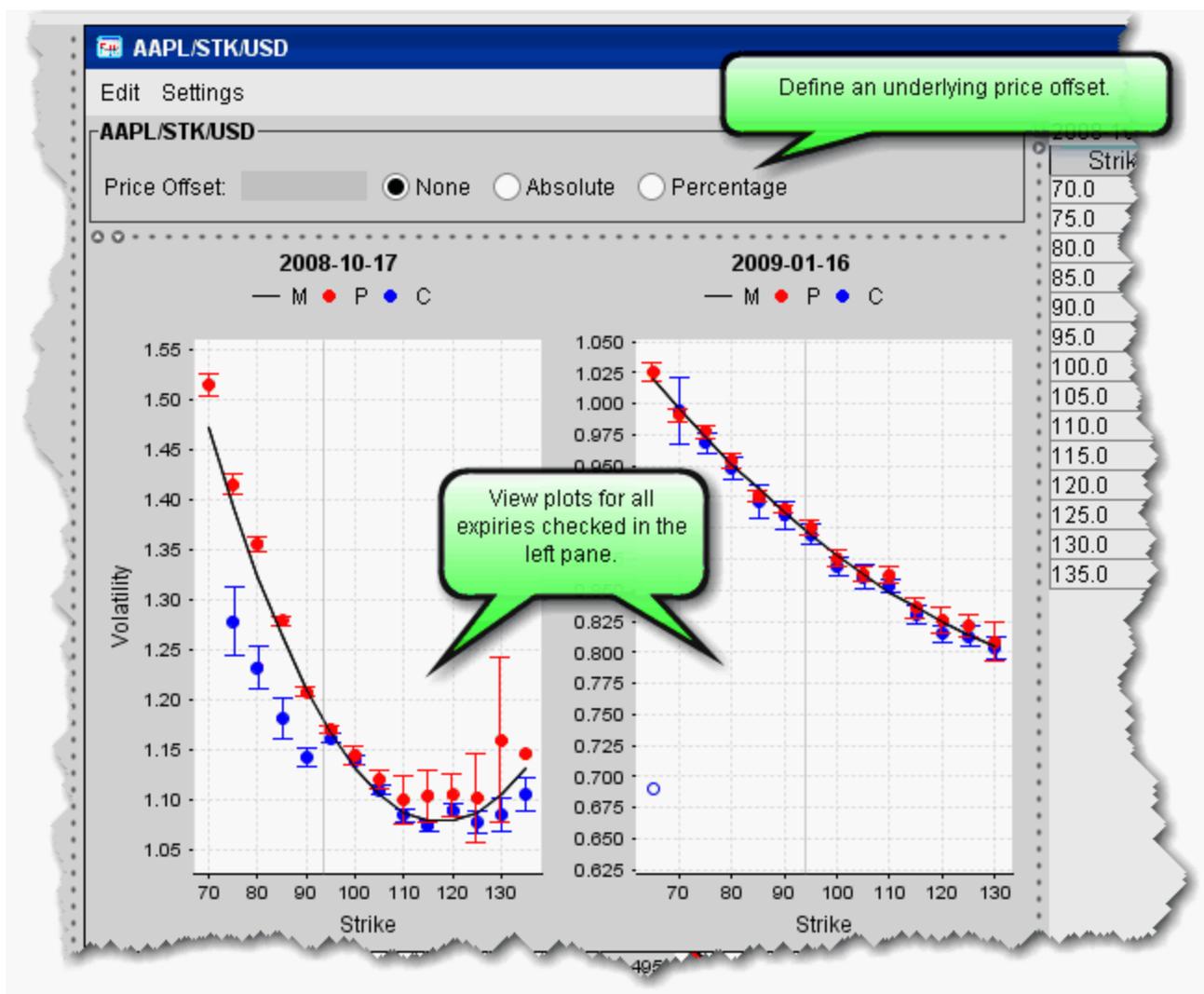
- The horizontal axis is the strike price, the vertical axis is the volatility.

- The blue and red dots show implied volatility derived from the market data for calls and puts, respectively. Dark blue/dark red indicates a half quote call/put (either just the bid or just the ask).

- Volatility knots calculated from the option bid/ask include a representational "error bar" to indicate the error range of the calculation. This range is specified numerically in the

mouse-over help, for example "+/- 0.008." If the volatility is not calculated using bid/ask (for example, a half quote call/put) the error range is not displayed.

- Open circles indicate that the volatility is calculated from the closing price.

- To see details for a given implied volatility point, hold your mouse cursor over the point. The system will display the option right, strike price implied volatility and error range.

Edit the Volatility Profile

Edit mode allows you to create a new volatility curve plot for an expiry using a new set of volatility knots. You can use this edited plot to calculate model prices and implied volatilities in TWS, and save your model to use in comparison to Model Navigator-calculated plots.

By default, the Model Navigator's sophisticated option model calculation engine uses the values in the plot along with the calculated interest rate, dividends, underlying price and other parameters, to calculate the *Model* price. **If you prefer to calculate the model price using the pricing assumptions reflected in an edited plot, you must apply the changes to your plot and leave it in *Edit* mode.** Any expiry that has a volatility curve plot in Edit mode will use this profile in the calculation of the Model price and Implied Volatility.
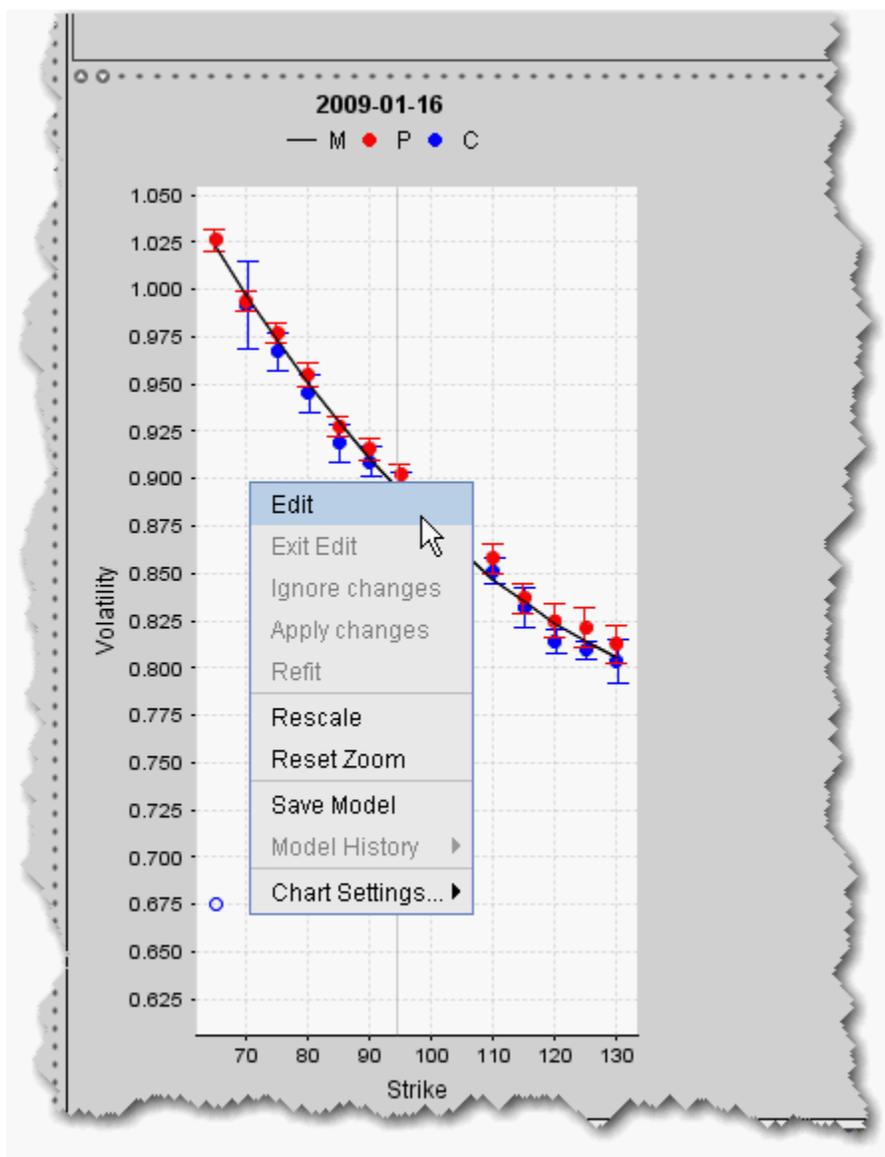
To edit a volatility curve plot

1   Right-click a volatility curve plot and select *Edit*.

Edit mode displays a series of brown volatility knots along the bottom of the plot. Grab and move these knots up and down to create a volatility profile that you think more accurately represents the implied volatility data. Applied changes to the plot are reflected in the *Manual* column of the expiry's Volatility Curve table.

- To see the values for the manual volatility curve reflected in the Volatility Curve table, be sure that you have selected the expiry whose plot you are editing from the expiry dropdown list at the top of the table.

- The table and plot work in both directions. You can modify the implied volatility of a knot in the plot by changing the corresponding value in the table.

- You can add and delete brown volatility knots in edit mode. To add a knot, point to where you would like to add it and double-click. To delete a knot, select it and double-click.

- Click *Refit* from the right-click menu to refit the manual volatility knots to the calculated volatility curve.

Compare volatility changes by saving and viewing historical profiles from using the Model History command.
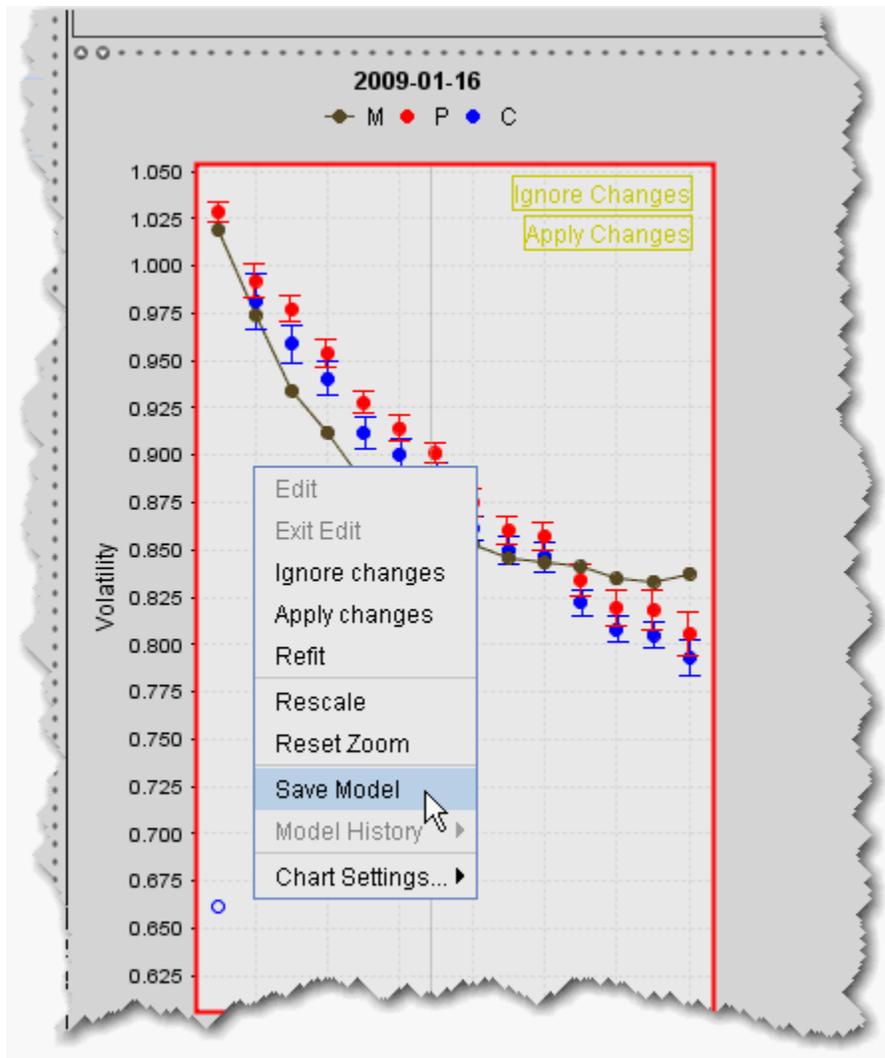
To save a model

1. From the right-click menu, select *Save Model*.

2. Click *Exit Edit* in the top right corner of the plot to close editing mode.

The model is saved using the current date and time.
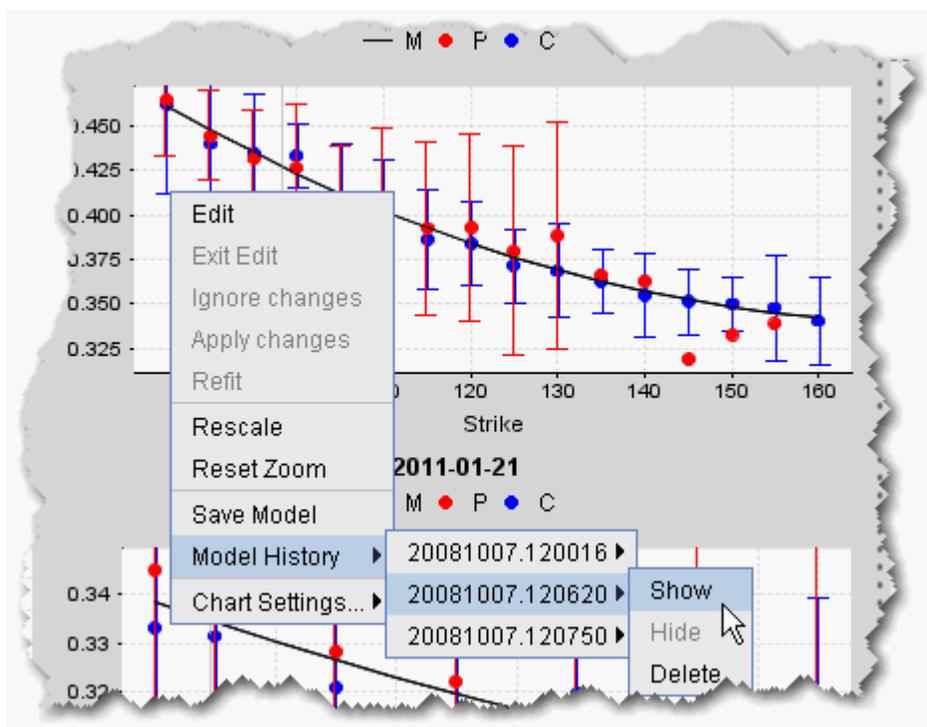
To display a model

1 From the right-click menu within a plot, select *Model History*.

2 Choose the historical model based on the date/time name.

3 Select *Show*.
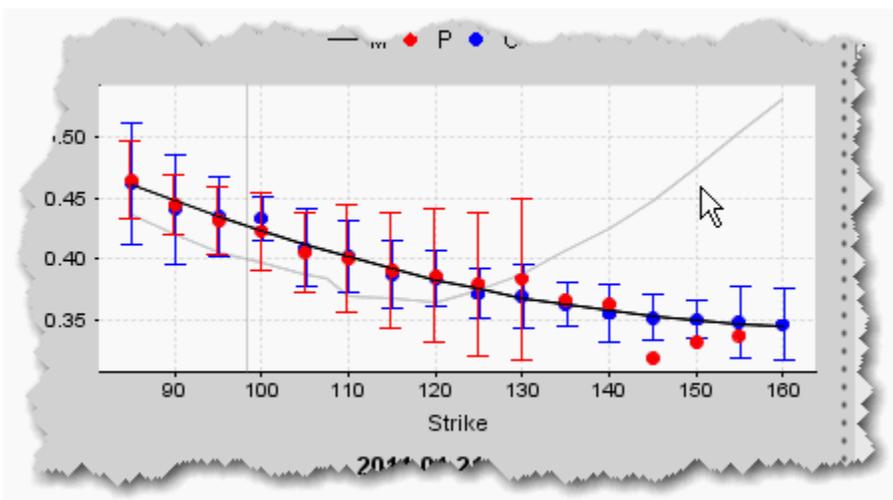
The saved model displays as a grey curve inside the real-time colored plot. You can also displayed saved models under the Expiry in the left Contract Description pane.

Modify Chart Display Settings

You can modify the pacing to control CPU usage, via the **Pacing Control** box. Also, you can make changes to certain display settings for the Volatility Curve plot, including using the same horizontal/vertical axis for two charts, defining the number of charts across a row, etc., using the Chart Settings box.

If you have selected a large number of expiries for Volatility Curve display, the model calculations may use up a large portion of CPU resources. You can slow down the rate at which values update (and reduce the load on CPU resources) using the Pacing Control box. You can modify pacing for the overall model calculation (Global), and for the Volatility Curve and Implied Vol data.

To modify pacing

1   From the **Settings** menu, select *Pacing*.

2   Modify default values to increase (lower values) or decrease (higher values) the refresh rate.

To modify chart settings

1   From the **Settings** menu, select *Chart settings*.

> **NOTE:** If you use the top-level Settings menu, the settings will be applied globally. If you use the Settings menu from a Volatility Curve Pane and check **Underlying specific settings**, the settings will apply only to expiries on the underlying.
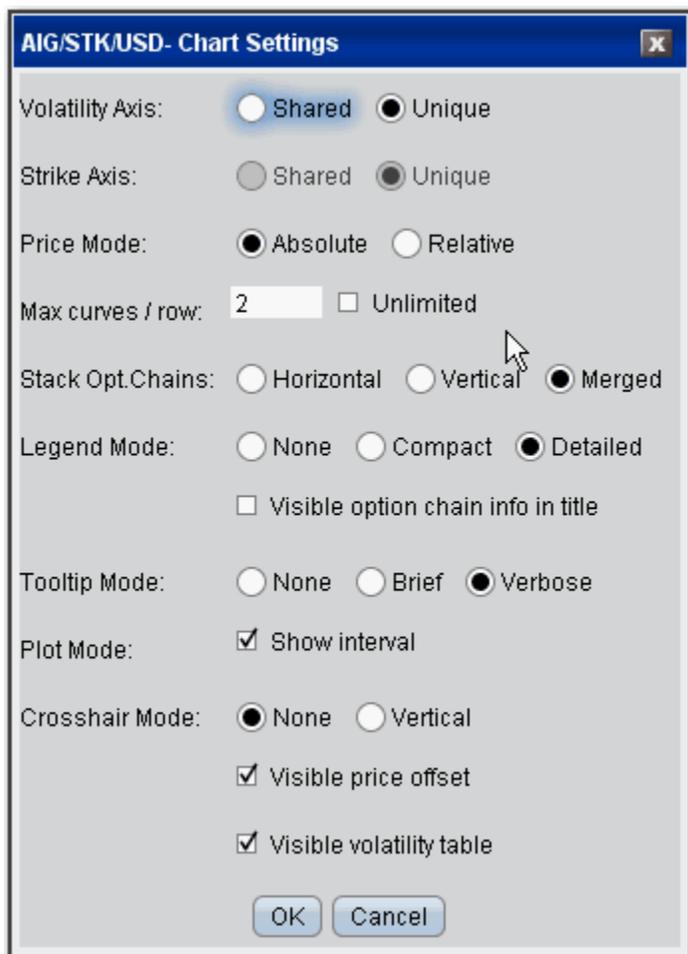
Volatility Curve Table

The volatility curve table reflects the data in the plot. To add IV (Manual) entries, use the Edit menu to select the profile to edit, or right-click in a plot and select *Edit*. Both the volatility plot and table become editable. In the Manual column, double-click the implied volatility at a strike price and enter a new value.
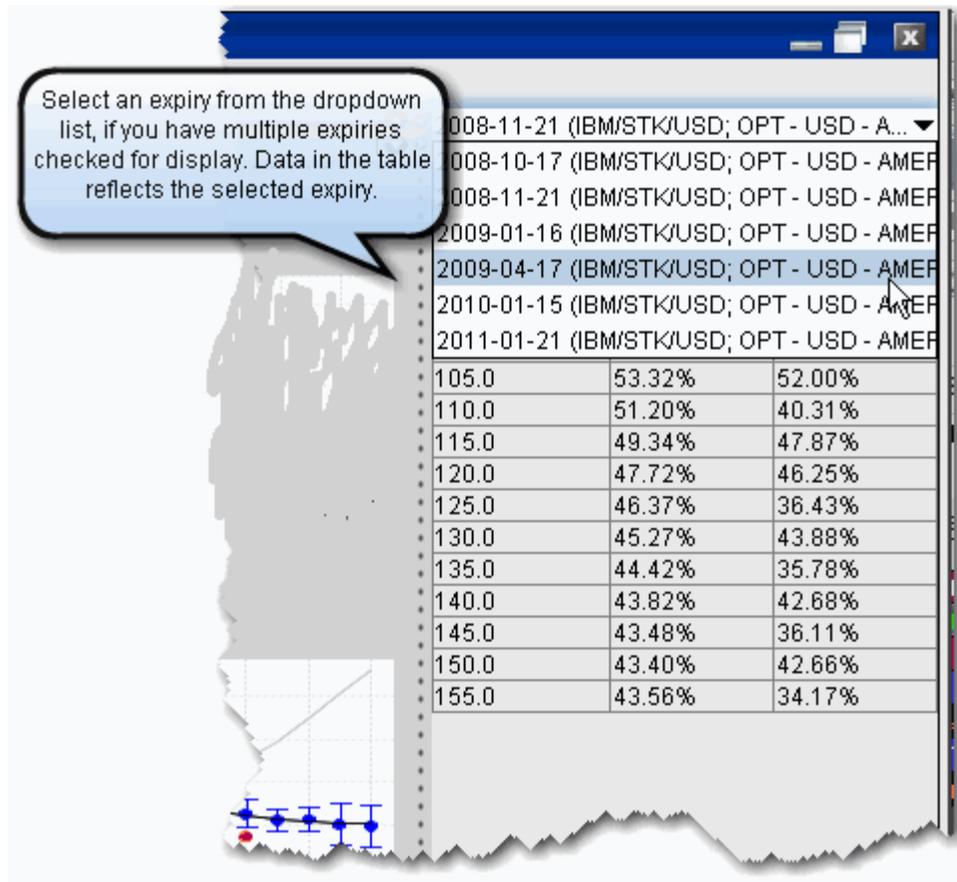
By default, the Model Navigator's sophisticated option model calculation engine uses the values in the plot along with the calculated interest rate, dividends, underlying price and other parameters, to calculate the *Model* price. **If you prefer to calculate the model price using the pricing assumptions reflected in an edited plot, you must apply the changes to your plot and leave it in *Edit* mode.** Any expiry that has a volatility curve plot in Edit mode will use this profile in the calculation of the Model price and Implied Volatility.

You can also modify the Interest Rates and Dividend Schedule, and specify that these modified pricing assumptions be used in the Model Price calculations.

Edit Interest Rates

You can modify the interest rate by entering values in the Manual column of the Interest Rate Navigator.

To open the Interest Rate Navigator

1   From the top-level **Edit** menu, select *Interest Rate*.
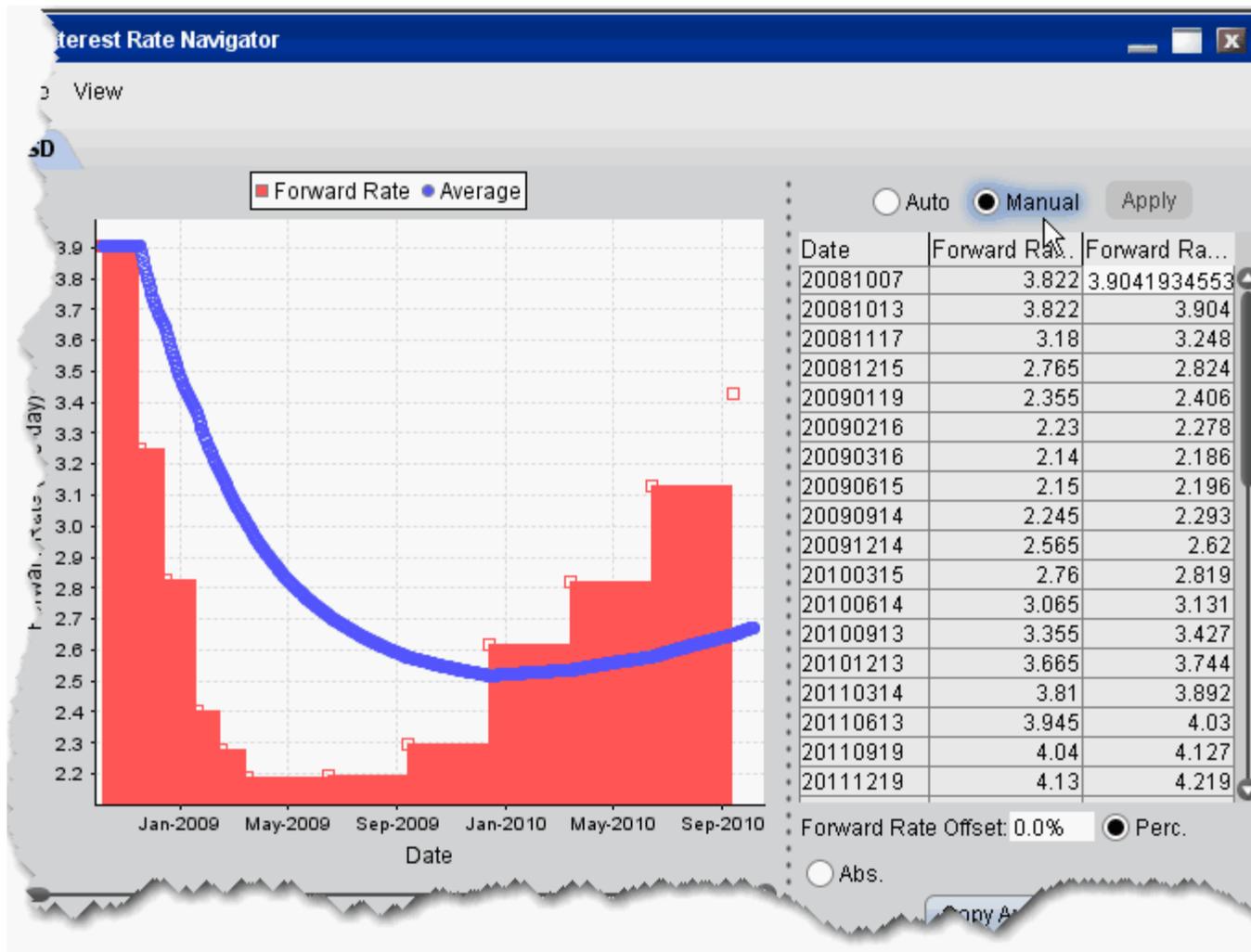
There are two interest rate columns, *Forward Rate (Auto)* and *Forward Rate (Manual)*. The Auto column displays the U.S. default rate. The Manual column initially displays the U.S. rate (rather than an empty field), but the value is editable.

To edit interest rates

1   Select the Manual radio button to make the column of manual rates editable.

2   Double-click a rate in the **Manual** column and enter a new rate.

3 Click Apply to save your changes.

To have the model calculations use your manual value, ensure that the Manual radio button is selected.

- To change the number of dates/rates displayed, right-click in the table and select *Add new* to create a blank editable row at the top of the table, or *Remove Selected* to delete the selected row.

- To globally apply an offset value or percent to all manual entries, enter an offset amount in the Interest Rate Offset field, and select the *Percent* or *Absolut*e value radio button.

- The option model is calculated using the interest rate you define by selecting the **Auto** or **Manual** radio buttons.

- The annual percentage rate is a simple time deposit rate using the bank year calendar (360 days/year).

- The system converts the interest rate table to a set of exponential interest rates that apply on a spot-to-date basis for each expiry in a class. This is displayed as the IR value in the Contract Description pane when you expand an expiry.

- The interest rate table applies across all option classes. When you change the interest rate in one option class, the change is applied to all option classes.

Edit Dividends

In addition to letting you manually set the dividend schedule, the Dividend Schedule Navigator also provides an automatic "best guess" dividend payment schedule based on historical data for that asset.

To open the Dividend Schedule Navigator

1 From the top-level **Edit** menu, select *Dividend Schedule*.
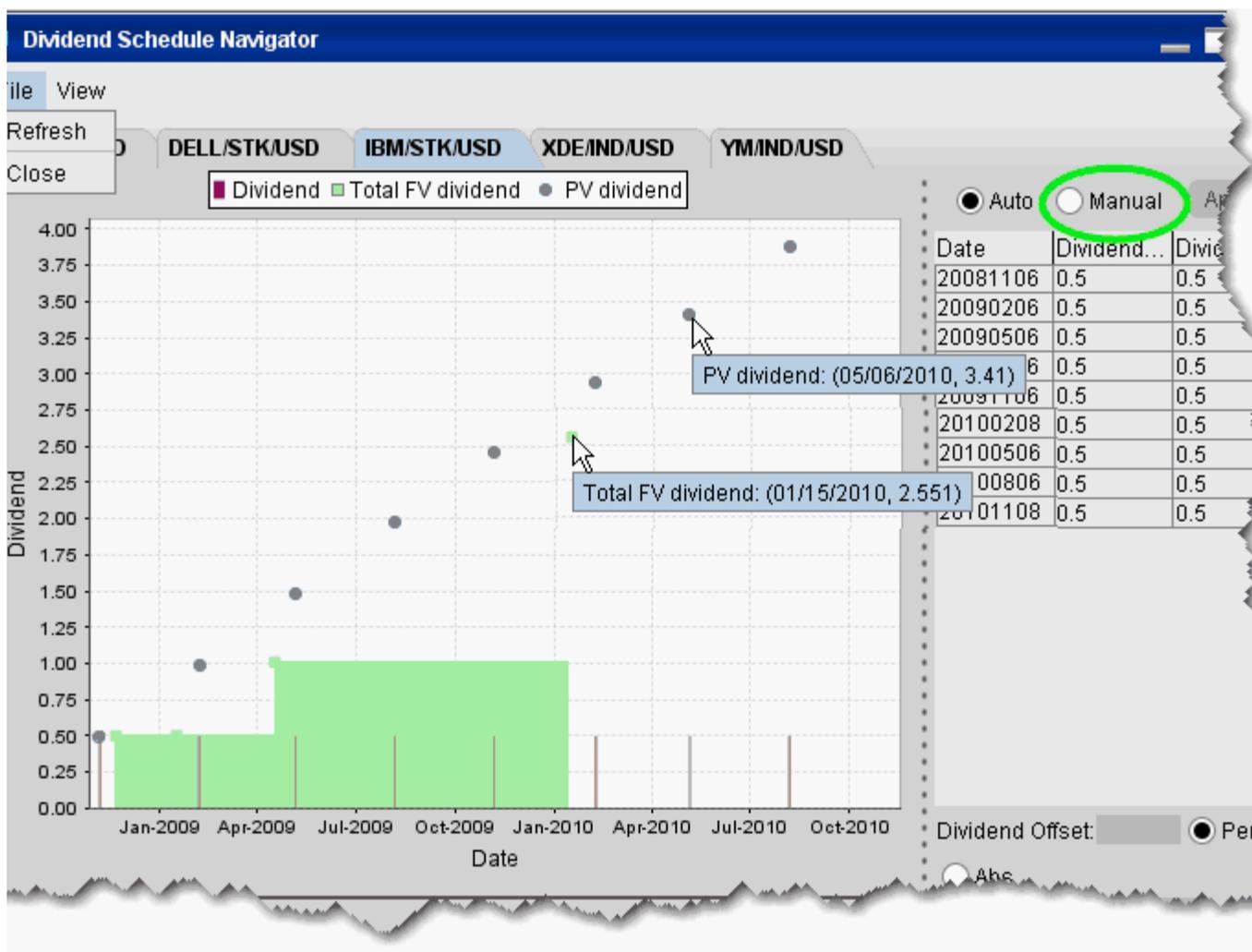
There are two dividend, *Dividend (Auto)* and *Dividend (Manual)*. The Auto column displays the "best guess" dividend payment schedule based on historical data. The Manual column shows the same values (rather than an empty column), but the value is editable.

To edit dividends

1 Select the **Manual** radio button to make the manual column editable.

2   Double-click a dividend in the **Manual** column and enter a new value.

Click Apply to save your changes.

- To change the number of dividends displayed, right-click in the table and select *Add new* to create a blank editable row at the top of the table, or *Remove Selected* to delete the selected row.

- To globally apply an offset value or percent to all manual entries, enter an offset amount in the Dividend Offset field, and select the *Percent* or *Absolut*e value radio button.

- The option model is calculated using the dividend schedule you specify by selecting the **Auto** or **Manual** radio buttons.

Model Price Color Key

Model prices are displayed in color on the trading screen to help you see at a glance where they fall in relation to the bid and ask prices. The color bar below shows the range within which model prices may fall. Model price colors update with the underlying last price.

You must have the Model field displayed on your trading page to see the model price.

equal to the ask price

less than or equal to the
bid price minus 5 ticks

halfway between the bid
and ask prices

greater than or equal to
the ask price plus 5 ticks

equal to the bid price
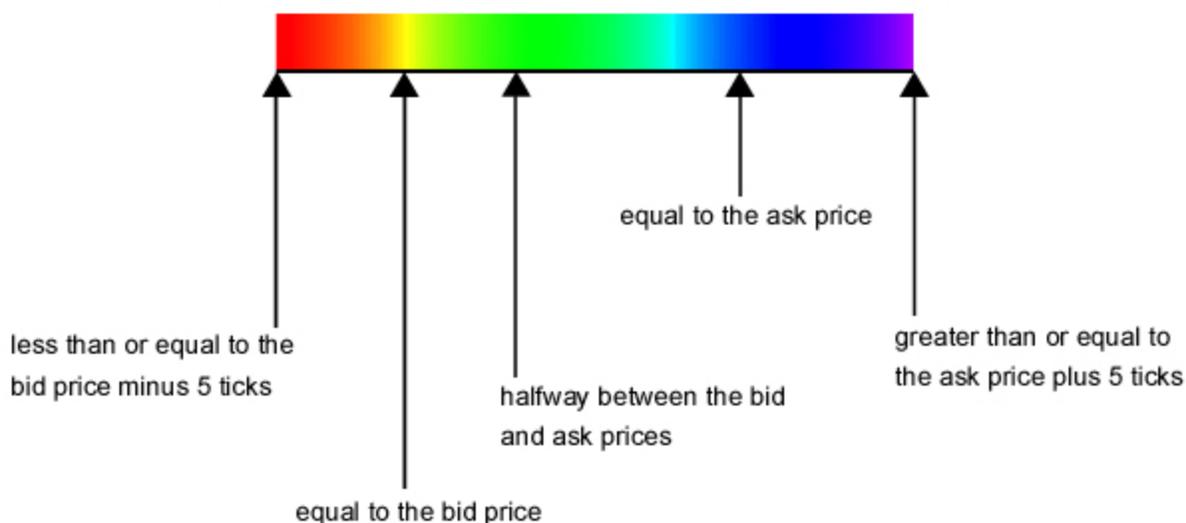
> **Note:** Implied volatilities (in the **Imp. Vol** column) are always displayed in either pink or white. If either the **Model** or **Imp Vol(%)** values are displayed in white, it means the model hasn't calculated any prices or implied volatilities.

Index Arbitrage Meter

Introduction

The Index Arbitrage Meter illustrates the extent of the premium (or discount) of the lead month futures price above (or below) its fair future value with respect to the index price. A green bar indicates that the lead month futures price is at a premium to (i.e. greater than) its fair future value. A red bar indicates that the lead month futures price is at a discount to its fair future value. This tool is available for Index instrument types.
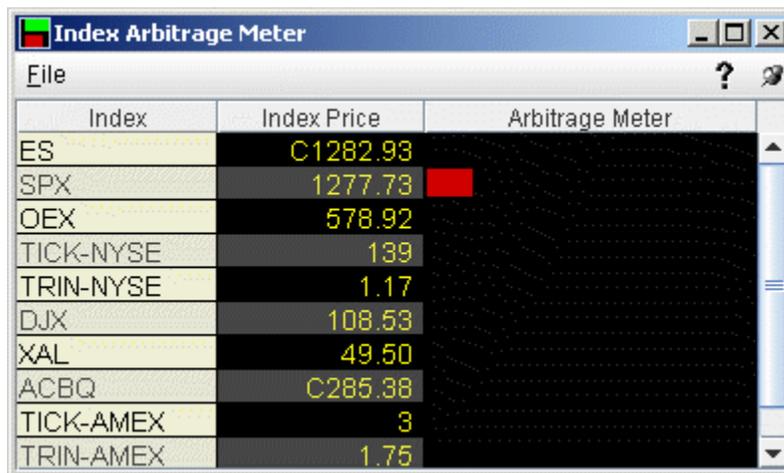
To show or hide the Arbitrage Meter on Login

When you log in, the Arbitrage Meter is displayed by default for all index instruments. To hide the arbitrage meter on login:

1 On the **Configure** menu, select *Global Configure*, then select *Display* in the left pane.

2 Check or uncheck *Show Arbitrage Meter*.

To display the Arbitrage Meter for an index

1 Click on the desired market data line to select the index.

2 Right click and select **Tools** and then select *Arbitrage Meter.*

Fundamental Analytics

- [Reuters Fundamentals](#)
- [MarketWatch Fundamentals](#)
- [Streaming News Feeds](#)
- [The News Topic Chooser](#)

Reuters Fundamentals

Once you have subscribed to this service, you can view Reuters Worldwide fundamental data in several places throughout TWS, including:

- In the Contract Description box (shown below)
- Through a set of contract-specific reports
- By adding market data fields directly to your trading window
- Via fundamentals Market Scanner parameters

Note: You must subscribe to Reuters Fundamentals market data from the **Trading Access > *Market Data Subscriptions*** page in Account Management. Use the Account Management selection on the TWS **View** menu to go directly to account management.

Reuters Data in the Contract Description

To view Reuters Fundamentals in the contract description box

1   Right click a ticker line on your trading page.

2   From the right-click menu select **Contract Info**, then select *Description.*

Fundamentals are displayed in the right pane of the Description box. Hold your mouse over the question mark icon for a definition of its associated value.

Reuters Fundamentals Page

View Reuters Worldwide Fundamentals through a set of contract-specific reports. The **Fundamentals** self-contained module also provides complete market data, order management and trade monitoring via the Quote, Orders, Log, Trade, and Portfolio panels.
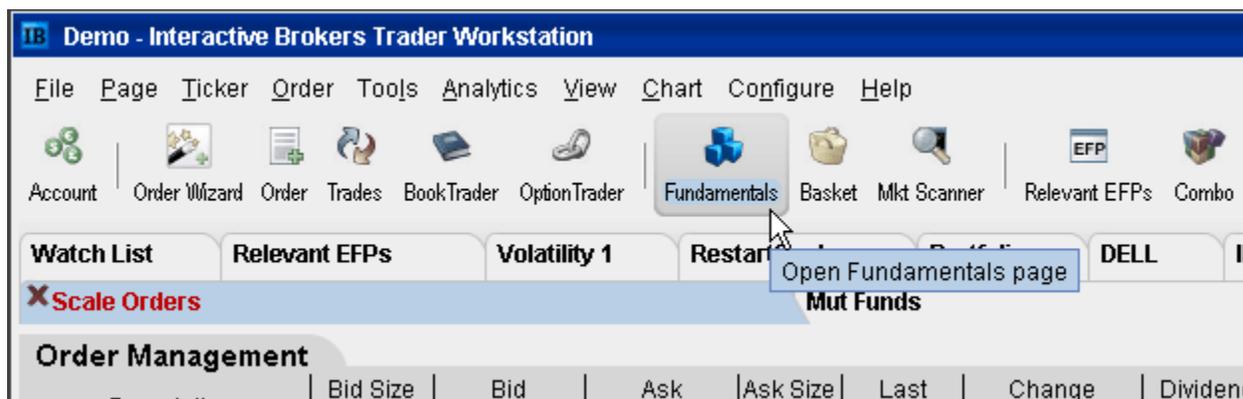
To open the Fundamentals page

- From the Trading toolbar, click the **Fundamentals** icon. Or, from the **Ticker** menu, select *Fundamentals*.

The Fundamentals Reports

Click a report title to open the report. Note that several of the reports include sub-reports listed across the top of the report page.

To see the definition and calculation for a field, hold your mouse over the "information" icon next to the calculation.

Ratios					Estimates	
Market Cap	38,599.31M	EPS Growth	10.32		Consensus Recommendation	**Outperform**
P/E	14.41	Return on Equity	71.29		Target Price	26.25
Revenue/share	27.22	Quick ratio	1.01		Long Term Growth Rate	11.99
Price/Book	10.17	Dividends (TTM)	0.00		Price to EPS	12.72
More...						

This is the Current Price divided by the latest interim period Book Value Per Share.

Interval: most recent quarter

Details

NAICS: Electronic Shopping and Mail Order Houses, Computer and Software Stores, Sales Financing

Adding Reuters Fields to the Trading Window

To display/remove market data columns on a page

1 Right click any column heading on a trading page, and select Customize Layout.

2 Click the Market Data Columns tab to view columns.

The columns already displayed on your trading window appear in the Shown Columns list on the left side of the page. The remaining columns are grouped by category in the Available Columns list to the right.

3 Expand the Fundamentals category in the right pane and Add or Remove fields from the trading window.

I

Column Name	Description
Fundamentals	
Dividends (TTM)	This is the sum of the Cash Dividends per share paid to common stockholders during the last trailing twelve month period.
EPS Growth	This growth rate is the compound annual growth rate of *Earnings Per Share* over the last 5 years, excluding *Extraordinary Items* and *Discontinued Operations*. NOTE: If the value for either the most recent year or the year furthest out is zero or negative, the growth rate cannot be calculated and 'NA' (Not Available) will display.
Market Cap	The market cap value is calculated as follows: Current Price x Current Number of Shares Outstanding
P/E	This ratio is calculated by dividing the current Price by the sum of the Diluted Earnings Per Share from continuing operations BEFORE Extraordinary Items and Accounting Changes, over the last four interim periods.
Price/Book	This is the Current Price divided by the latest interim period Book Value Per Share.
Quick Ratio	Also known as the Acid Test Ratio, this value is defined as Cash plus Short Term Investments plus Accounts Receivable for the most recent interim period divided by the Total Current Liabilities for the same period. NOTE: This item is Not Available (NA) for banks, insurance companies and other companies that do not distinguish between current and long term assets and liabilities.
Return on Equity	This value is the Income Available to Common Stockholders for the trailing twelve months divided by the Average Common Equity, and is expressed as a percentage. Average Common Equity is calculated by adding the Common Equity for the 5 most recent quarters and dividing by 5.

MarketWatch Fundamentals

Introduction

- Analyst Information
- Historical Charts
- Company Profile
- Financials
- Insider Trading Information
- News and Research
- SEC Filings

Company Profile

The Company Profile displays basic data such as industry, contact information, product/services offerings and per share and profitability data and valuation ratios for the selected asset.

To view company profile

1   Highlight a market data line on the main trading screen.

2   Use the right-click menu to select *Information Tools*, then *MarketWatch*, then *Company Profile*.
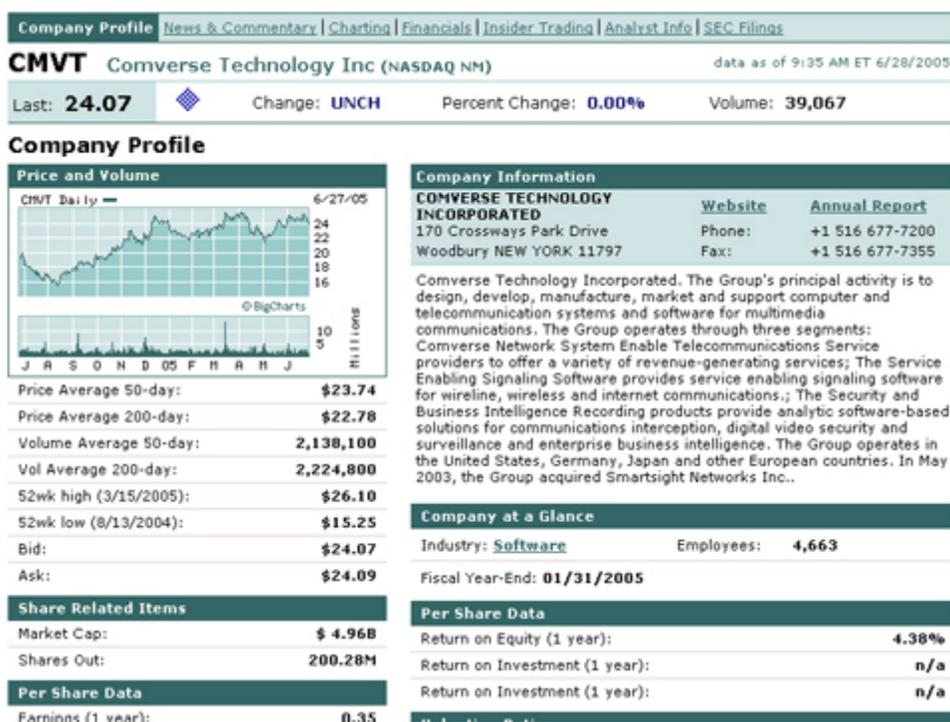
News and Research

The News and Research selection displays industry and contract-specific headlines and press releases.

To view news and research

1   Highlight a market data line on the main trading screen.

2   Use the right-click menu to select *Information Tools*, then *MarketWatch*, then *News and Research*.

Historical Charts

Charting lets you set chart parameters to create historical charts ranging over time periods of 1 day to ten years.

To create charts

1   Highlight a market data line on the main trading screen.

2   Use the right-click menu to select *Information Tools*, then *MarketWatch*, then *Charts*.
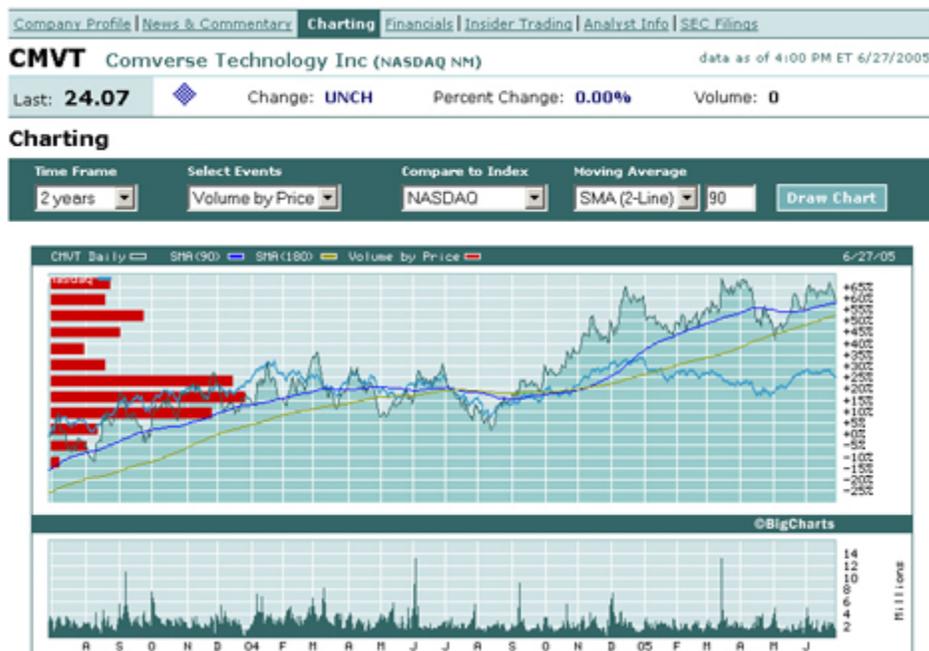
Financials

See financial data for the past fiscal year for the selected company, including the balance sheet and cash flow statement.

To view company-specific financials

1   Highlight a market data line on the main trading screen.

2   Use the right-click menu to select *Information Tools*, then *MarketWatch*, then *Financials*.

Insider Trading Information

View trading activity by the major insider shareholders for the selected company.

To view insider trading information

1   Highlight a market data line on the main trading screen.

2   Use the right-click menu to select *Information Tools*, then *MarketWatch*, then *Insider Trading*.
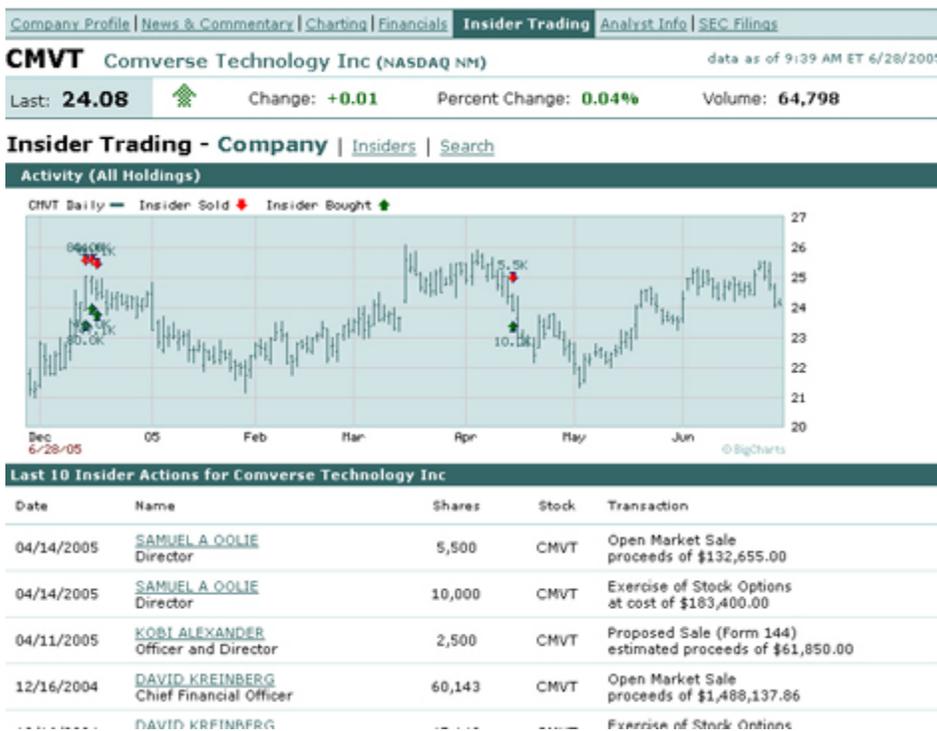
Analyst Information

See the most recent analyst recommendations for the selected contract.

To view analyst information

1   Highlight a market data line on the main trading screen.

2   Use the right-click menu to select *Information Tools*, then *MarketWatch*, then *Analyst Information*.

SEC Filings

View all SEC filings for the selected company for the past year.

To view SEC filings

1 Highlight a market data line on the main trading screen.

2 Use the right-click menu to select *Information Tools*, then *MarketWatch*, then *SEC Filings*.

Streaming News Feeds

Real-time News

You can now elect to view real-time news stories from sources like CNET News, Google News, MSNBC and Reuters using the News features.

To enable news feeds

1   On the **Configure** menu, choose *Feature Selector.*

2   Expand the **Fundamental Analysis** category by clicking the horizontal Key icon.

3   Check *News*, and then click **OK**.

To display News fields

1   Right-click in the row of field headings at the top of the trading window, and click *Customize Layout*.

2   In the Available Columns list on the Market Data Columns tab, scroll to the News category and select News Time and News Title. Click the Add button to move them to the Shown Columns list.

On your trading page, the columns *News Time* and *New Title* appear in the list of fields. Note that you can drag and drop them to another position if desired.

In addition, the rows are displayed in colors. Stories with the lightest color are the most recent.

3   Click a news title to open the News browser directly below the Trading window. Headlines display in the left pane, and the headline and news leader display in the right pane. Click the story line in the right pane to view the whole story in another browser.

> **Note:**   You can also double-click the storyline in the trading window to open the story in another browser.

These rows also show color gradations. The lightest color indicates the most recent stories.

The News Topic Chooser

You can filter the news topics that display in the trading window using the topic chooser. The selected topics display on the trading window.

Use the News Topic Chooser

1 Right-click in a blank line on the trading window and select *News Topic Chooser*. (*Tip: The news topics use one line per topic, and will start in the blank line you first select. Choose a starting point that won't interrupt your market data*.)

The right pane displays all available topics for the selected source, by description, underlying, type and category.
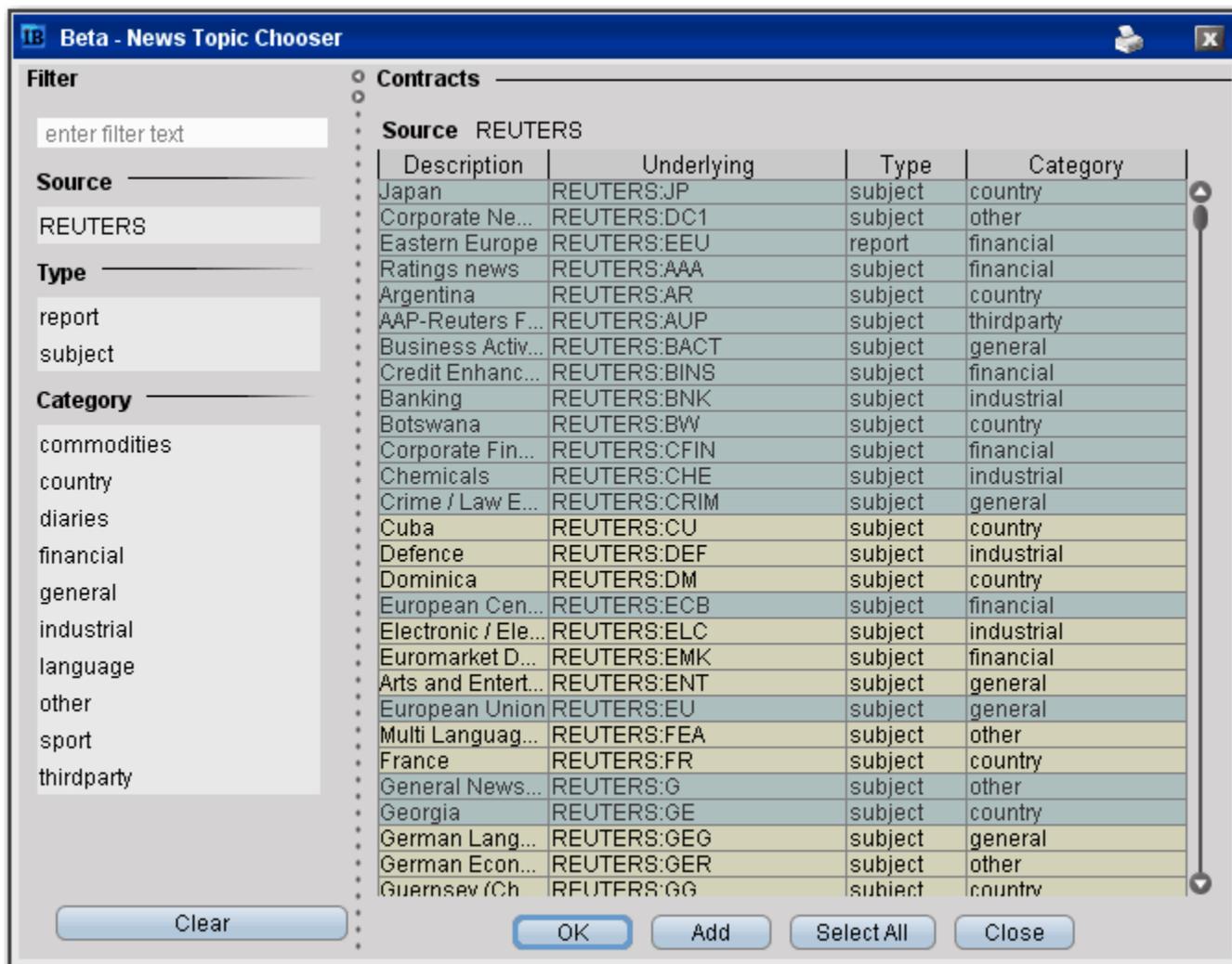
2 In the right pane, select the news topics you would like to display, or use the criteria in the left pane to filter the selections.
(*Tip: By default, all entries in the right pane are selected as shown by the blue highlight. If you click one topic, all are deselected. You can select multiple, non-contiguous rows by depressing the* Ctrl *key while you click the rows.*)

3 Click OK to load the news topics into the trading window and close the box. Click Add to add selected topics and keep the box open.
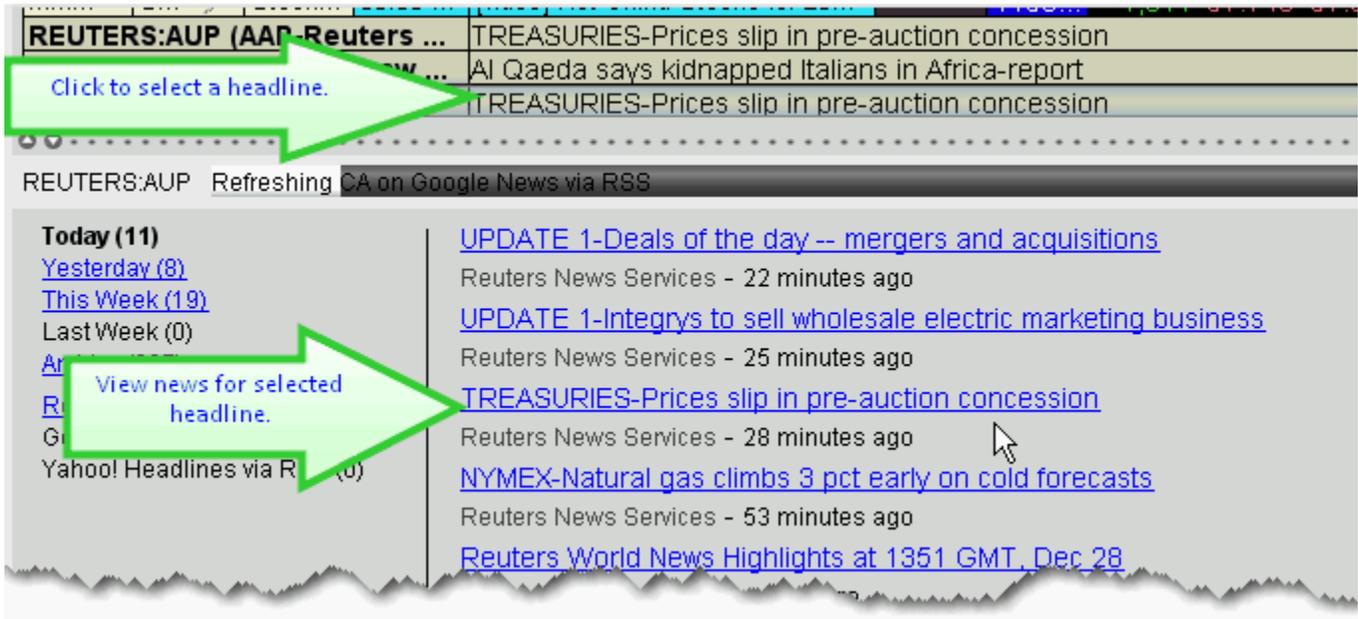
In the trading window, when you click a topic headline, all relevant news stories display in the news panel which opens at the bottom of the screen.
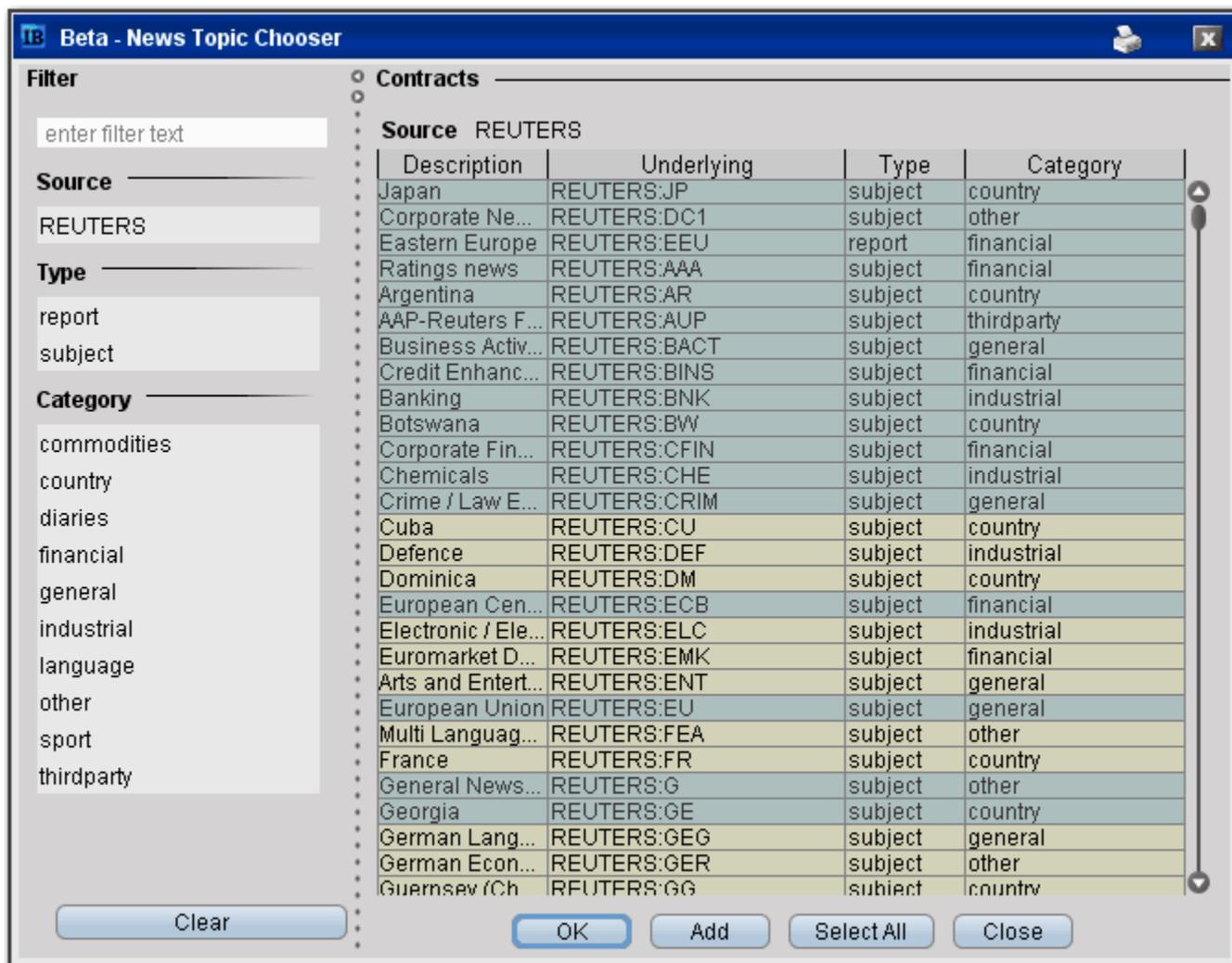
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Technical Analytics

Charts

- [Create a Real-time Chart](#)
- [Chart Multiple Assets](#)
- [Add New Chart to Existing Chart Window](#)
- [Save a Chart Layout as a Template](#)
- [Add Alerts in Charts](#)
- [Charting Expired Contracts](#)
- [Charts Toolbar](#)
- [Editing Charts](#)
- [Chart Display](#)
- [ChartTrader](#)

Create a Real-time Chart

You can define parameters to display a real-time line or bar chart for any contract on your trading page, including currencies that trade on IDEAL. For details on how to trade directly from your chart, see the ChartTrader topic in the Users' Guide.

To create a chart

1   Select the contract for which you want to create a chart.

2   From the right-click menu, select **Charts** and then select *New Chart*.

3   Set Chart Parameters to define the chart.
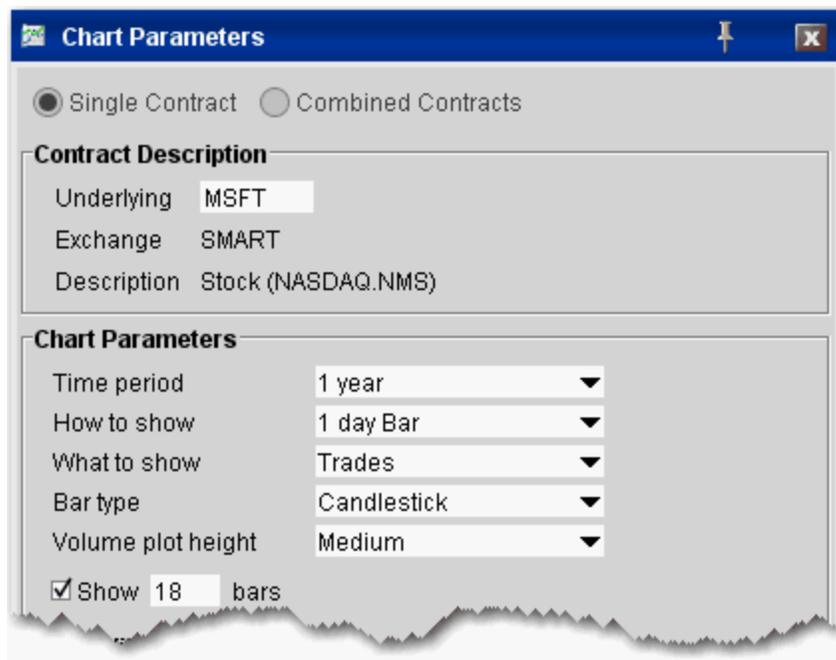
Field	Description
Time Period	Choose a time period for the chart ranging from 1 minute through 5 years, or enter a custom time period for any interval. Custom entries will be available in the pick list the next time you open a chart, and if you have elected to save settings, they will remain in the list even after you log out and log back in.
How to show	Chart the underlying as a Line Chart or 1 day Bar chart.

Field	Description
What to show:	Choose the primary display: Trades, Midpoint, Bid/Ask, Option Volume, Historical Volatility, Option Implied Volatility, Option Open Interest.
Bar Type	If *How to show* is 1 day Bar, and *What to show* is **Trades** or **Midpoint**, you can define the Bar Type as either *High Low Bar* or *Candlestick*.
Volume Plot Height	If you check *Show Volume* in the **Additional Data to Display** section, you can set the Volume plot height to Small, Medium or Large.
Show # bars	Enter the number of bars to display on the chart, and check to enforce this attribute. When checked, the number of bars remains consistent regardless of changes to the Time period or other variables.

Additional Data to Display

Field	Description	Field	Description
Show MidPoint	Plot the midpoint.	*Show Bid/Ask*	Plot the Bid/Ask.
Show Volume	Plot trade volume in a sub-chart. Set the Volume Plot Height above if desired.	*Show price histogram*	Shows the daily trading volumes at each price point in a separate area of the chart.
Show daily P&L	Displays the daily P&L for the contract.	*Show total call and put value*	For option settings such as open interest and volume, check to display the total value for calls and puts.
Show option volume	Charts call and put volume in the Option Volume sub-chart.	*Show historical volatility*	Displays actual historical volatility for an option.
Show option implied volatility	Charts implied volatility in a Volatility sub-chart.	*Show option open interest*	Chart put and call open interest on the Open Interest sub-chart.
Show put-call ratio	Shows the put-call ratio in a sub-chart. Note that you must display *Option Volume* or *Option Open Interest* to enable the put-call ratio.		

Chart Time Options

Field	Description
Keep chart up-to-date	Check to have chart update in real-time.
Update line chart every 1 second	If checked, the last segment of a line chart updates every 1 second.
Show data outside of regular trading hours	If checked, displays charts for exchanges that trade extended hours, like Globex.
Show data in user time zone	If checked, uses the time zone from your computer. Otherwise, uses the time zone from the contract's listed market.
Set ignored daily time interval	Define a time interval that will be ignored when charting the underlying.
Bypass this dialog when opening a new chart	If checked, these settings are applied to the next chart you open without displaying this dialog box. You can modify settings by selecting *Chart Parameters* from the **Chart** menu.

Chart Multiple Assets

You can chart two or more assets on the same chart for comparison.

To chart multiple assets

1   On the **Charts** menu of an existing chart, select *Add Contract*.

2   Enter the underlying symbol and select the contract.

3   Select **What to Show**:

    a   *Trades* shows the prices at which orders executed.

    b   *Midpoint* plots the midpoint of the current best bid/ask price.

        c   *Bid/Ask* shows the best bid and best ask.

4   Click OK. All contracts are charted in different colors, defined by a key along the bottom of the chart.

Add New Chart to Existing Chart Window

You can elect to include multiple charts within a single window, use auto display features to arrange the charts, and share trendlines among charts with the same underlying.

To add a new chart to an existing chart window

1 From the **Charts** menu, select *Add New Chart*.

2 If you want the chart to use the same security as the existing chart, check *Sub-chart uses current security*. Checking this feature pre-populates the contract description in the **Chart Parameters** box. If you're adding a chart for a different security, uncheck this selection.

Note: If you have charted multiple contracts in the same chart, the Current Security refers to the symbol used to create the original chart.

3   Define the new chart in the **Chart Parameters** box and click OK. Both charts appear in the charts frame.

To arrange multiple charts within a window

- On the chart's **View** menu, click on a tiling design: Tile Charts (Grid), Tile Charts (Vertical), or Tile Charts (Horizontal). All charts in the window conform to the selected tiling design.

To share trendlines among charts

1   Click the Configure wrench from the chart window.

2   In the **Settings** page, check *Share trendline among charts*.

With this feature checked, when you add or edit a trendline for a single chart in a multiple chart window, the trendline action will be applied to all other charts within that window for the same contract.

Save a Chart Layout as a Template

You can reuse the layout of a favorite chart, including the time period, what to show and how to show parameters, by saving the chart as a template and then reapplying the template to other contracts.
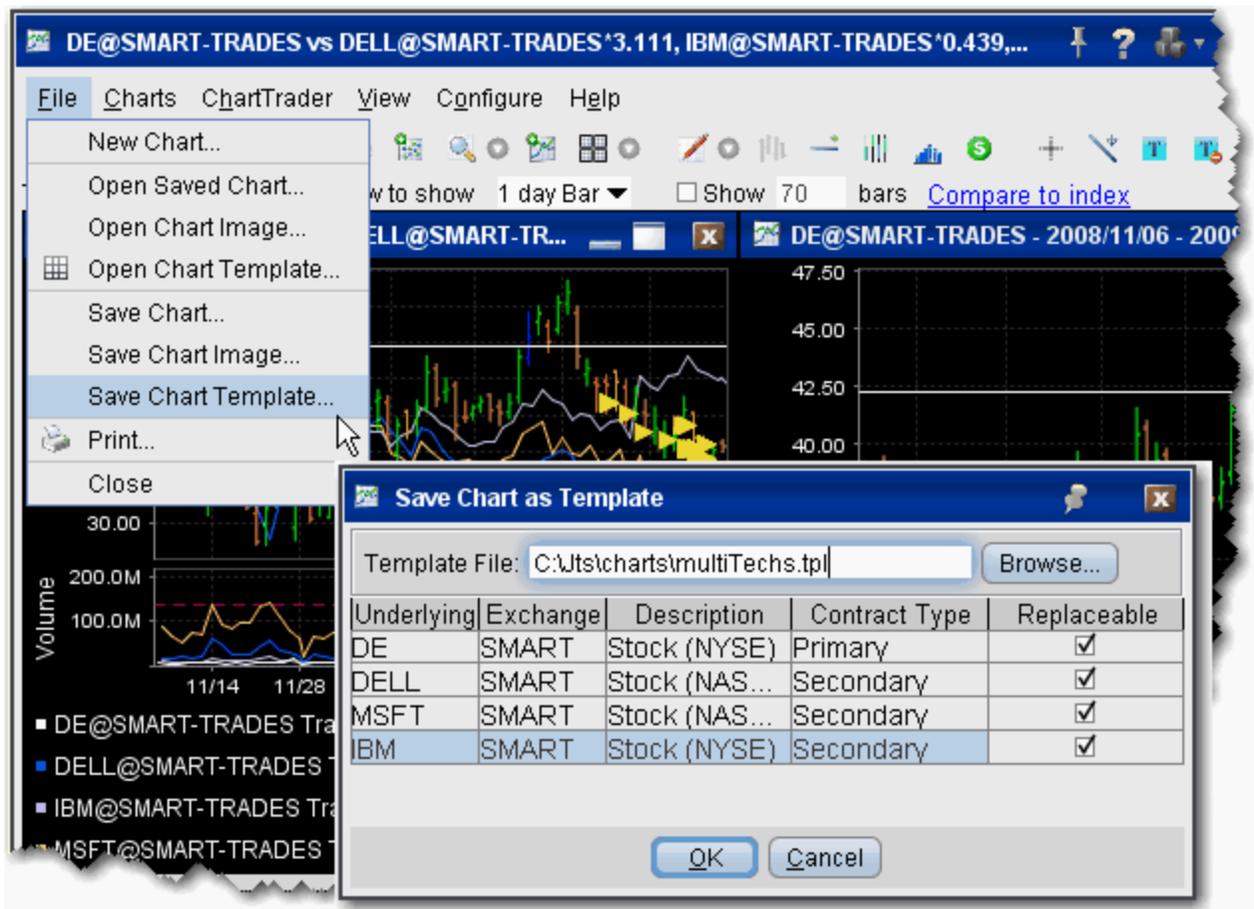
To create a chart template

1   Create a real-time chart or group of charts with all parameters defined.

2   On the chart's **File** menu, select *Save Chart Template*.

3   Give the template a descriptive name by replacing "untitled" in the **Template File** field with a chart name.

4   Check Replaceable if you want any of the secondary charts to be replaceable when you open the template. You must have at least on chart labeled "Replaceable."

5   Click **OK** to save the template.

To use a template to create a new chart

1　On the chart's **File** menu, select *Open Chart Template*.

2　Select the chart template you want to open from the Template File list, or use the Browse button to find the template you want to use.

3　Enter new contracts by entering the underlying symbol in the Underlying field

4　Click OK to see the new chart based on your saved template.

Charting Expired Contracts

You can chart data for expired futures contracts on the real-time IB charts. In addition, if you want to chart an expired contract that is not currently on your trading screen, you can add the contract.
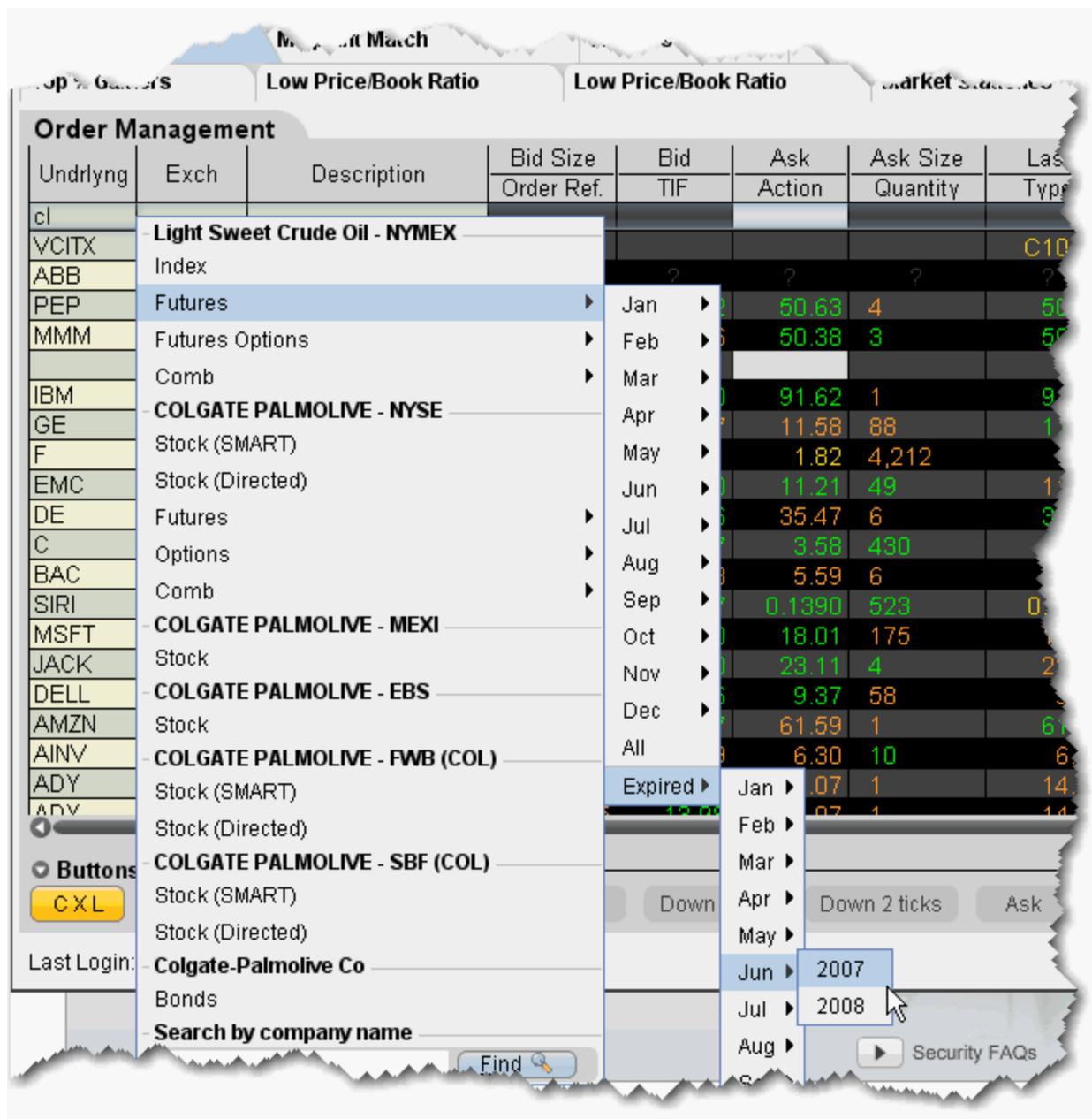
To add an expired futures contract to the trading window

1   Enter the underlying symbol and hit enter, then choose Futures from the instrument type list.

2   At the bottom of the expiry list, select Expired, and then choose the expired contract you want to chart by selecting the expiry month and year.

3   If you would like market data for the underlying as well, click *Yes* at the message asking if you want to add the underlying.

To chart an expired contract

1   Select the expired contract and from the right-click menu select **Charts**, then select *New Chart*.

2   Set your chart criteria for the contract.

Charts Toolbar

Use the icons on the toolbar to initiate an action. For instructions on how to add or remove buttons from the toolbar, use the charts Configuration topic.

Icon	Action	Description
	Chart Parameters	Opens the Chart Parameters dialog box where you set or modify criteria for the chart display.
	Show/Hide ChartTrader	Opens (or hides) the ChartTrader tool, which lets you submit trades directly from a chart.
	Show/Hide Time Parameters panel	Allows you to change the time period and interval for the active chart.
	Open Chart Template	Allows you to open a saved template create from one or multiple charts.
	Print	Prints the selected chart.
	Shift Time Period...	Set a new date and time for the chart data.
	Shift Time Period to Present	Resets the time period to the current data/time. The icon that reflects the type of time period in use will be greyed out.
	Add Contract	Define chart parameters for a new asset which is added to the current chart.
	Add Study	Click the dropdown arrow next to the icon to select a chart study.

Icon	Action	Description
	Add New Chart	This button allows you to quickly add another chart to the open chart window. To start with the same contract information, check *Sub-chart uses current security* in the pop-up box.
	Add Commentary	Opens the **Add Commentary** dialog box. Enter text that will be displayed on the chart in a commentary box.
	Remove All Commentaries	Deletes all commentary boxes from the chart.
	Compare to Index	Charts the selected index on the active chart.
	Tile Charts	Automatically resizes and arranges multiple charts into the pattern you specify using the dropdown arrow. Choose from grid, horizontal, vertical, or custom.
	Modify or Remove	Click the dropdown arrow next to the icon to modify or remove the selected asset or study from a chart. This feature works for single charts with multiple assets or studies. It will not include multiple charts within a single chart frame.
	Show bars	For a candlestick chart, click to change to bars.
	Show candlesticks	For a bar chart, click to change to candlestick display. The icon that reflects the current chart type is greyed out.
	Show/Hide Volume	Displays or hides the Volume panel on the bottom of the chart.
	Time & Sales	Click to change the cursor to the Time & Sales line. Click on a time, and the Time & Sales data page opens for that time. To change the cursor back, click the **Switch to Crosshair** icon.
	Toggle Crosshair	Changes the cursor to a crosshair. Note that if you don't have the Show horizontal crosshair line enabled in Global Configuration, you will only see a vertical line when you are in this mode.

Icon	Action	Description
	Edit Chart	A selected trendline will now display a white square at either end. When you click and pull an end, you can rotate the trendline 360 degrees, and shorten or lengthen the line. Clicking in the line area still allows you to move the trendline while maintaining the same length and angle to the chart. Right-clicking the trendline allows you to change the color of the line, the thickness of the line, or remove the line.
	Undo	Click to undo the last action.
	Redo	Click to reapply the last undone action.
	Add Horizontal Trendline	Turns the cursor to a horizontal trendline. Click in the chart to set the trendline. To change the cursor back, click the **Switch to Crosshair** icon.
	Add Vertical Trendline	Turns the cursor to a vertical trendline. Click in the chart to set the trendline. To change the cursor back, click the **Switch to Crosshair** icon.
	Add Fibonacci Line	Inserts a [Fibonacci trendline](#) to the chart.
	Remove Selected Trendline	Removes the selected trendline. To change the cursor back, click the **Switch to Crosshair** icon.
	Remove all Trendlines	Removes all trendlines from the active chart.
	Zoom in	Zooms in to an area on the chart. You can scroll to a new area in the zoom in box.
	Zoom out	Zooms out to give you a bigger view of the chart area.

Icon	Action	Description
	Switch to smaller bars	This icon becomes active after you have zoomed in and the How to Show parameters
	Enter visible range	Opens the Visible Range dialog where you enter the price range that will be visible in the chart.
	Clear range entered	Clears the previously set Visible (price) Range.
	Add Horizontal Space to Chart	Creates a "zoom out" effect by condensing the current view and adding more time intervals to the right side of the chart.
	Remove Horizontal Space from Chart	Removes time intervals to create a "zoom in" effect.
	Add Vertical Space to Chart	Creates a vertical "zoom out" effect by condensing the current view and adding more price intervals to the top of the price axis.
	Remove Vertical Space from Chart	Removes price intervals from the top of the chart to create a "zoom in" effect.
	Increase Bar Width	Increase the width of bars in the bar chart by 1 pixel per click of the icon.
	Decrease Bar Width	Decreases the width of bars in the bar chart by 1 pixel per click of the icon.
	Configure Chart Colors	Opens the Global Configuration window with Chart Colors selected. Change the colors displayed on different chart parameters.
	Refresh	Refreshes chart data.

Icon	Action	Description
	Configure	Opens the Global Configuration window for Chart configuration.

Editing Charts

The right-click Edit menu for trendlines, indicators, bars and other chart display items lets you hide, remove, and change the data, color, and thickness of items to customize your chart and make it easier to read.
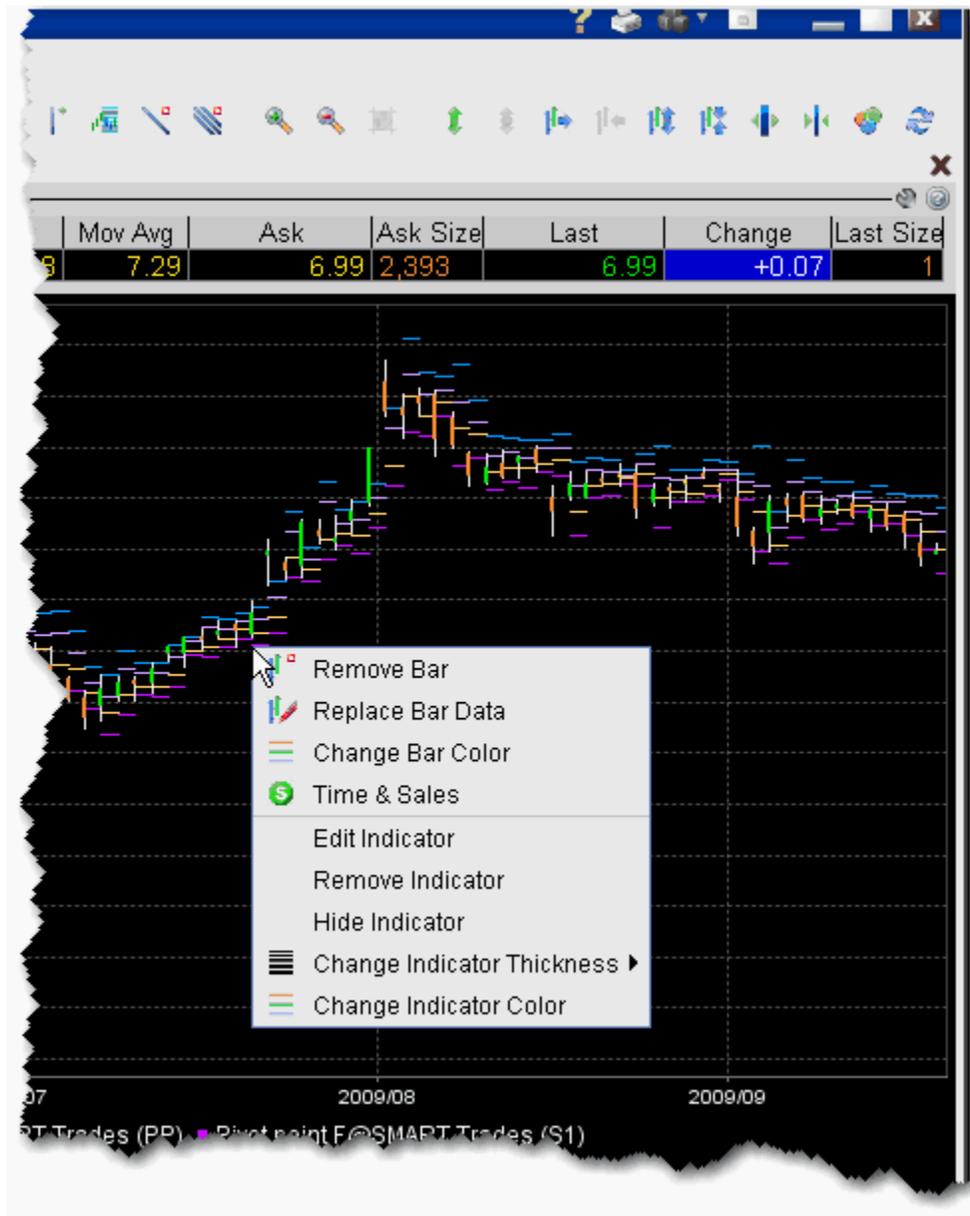
To use the charts editing feature

1   Select a display feature for editing by holding your mouse over the chart item. An item is "selected" when it changes color.

2   Right-click and apply the desired edit to your display.

The right-click menu is context sensitive to display only applicable editing choices based on the item you selected. For example, if you select a bar in a bar chart, the right-click menu choices include *Remove Bar*, *Replace Bar Data* and *Change Bar Color*. If you select a plotted line from an indicator, the right-click menu choices include *Hide Indicator*, *Change Indicator Thickness* and *Change Indicator Color*.

To undo an edit

- Use the *Undo* or *Redo* icons on the chart toolbar to remove or reapply the last editing function you performed.

To hide and show indicator lines

1 Select an indicator line by holding your mouse over the line. It changes color to indicate that it has been selected.

2 Right-click and choose "Hide Indicator." The line disappears, and the color key block turns grey.

3 To show a hidden line, slowly move your mouse up the chart until the hidden line displays in grey.

4 Right-click and choose "Show Indicator." The line reappears, and the color key block returns to its original color to match the line.
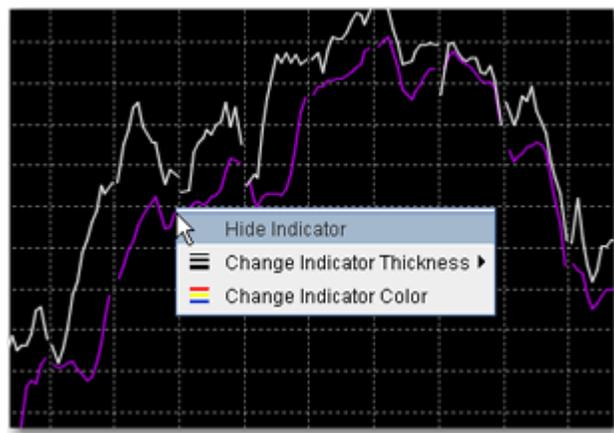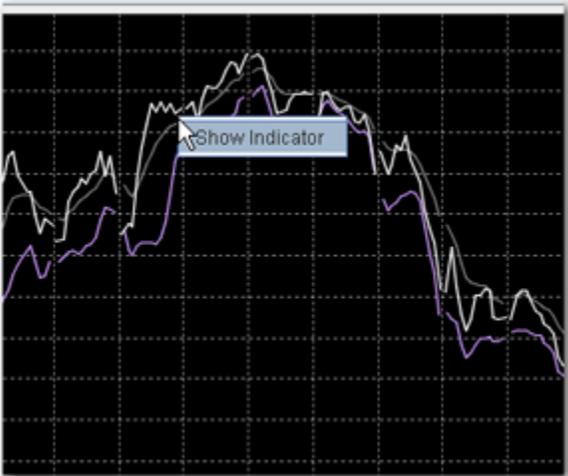
Chart Display

TWS displays upcoming splits and dividends directly on your chart. When this feature is enabled, events will be visible on the chart when you open it, with splits in magenta and dividends in yellow. When you hold your mouse over the event, a pop-up box displays details.

To enable viewing of splits and dividends

1 In the Global Configuration panel, select **Charts** and then *Settings* in the left pane.

2 Check *Show Splits and Dividends* in the right pane.

Move the Right Margin

A movable right margin allows you to move the chart data to the left while still allowing studies and trendlines to continue into the future.

To move the right margin

1   Hover your mouse along the right margin until the cursor changes to a double-sided blue arrow and the margin line turns purple.

2   Click and drag the margin to the left.

3   Release to reposition the margin at a new point.

To reset the margin

•   Right-click on the margin line and select *Reset Margin*.

Show or Hide the Volume Chart

When you create a chart, you have the option to display the Volume by checking *Show Volume* in the **Additional Data to Display** area. You can also show and hide the volume chart directly in an opened chart window.

To view the volume chart

- On the bottom left of the chart, click the blue arrow to open the Volume chart display.
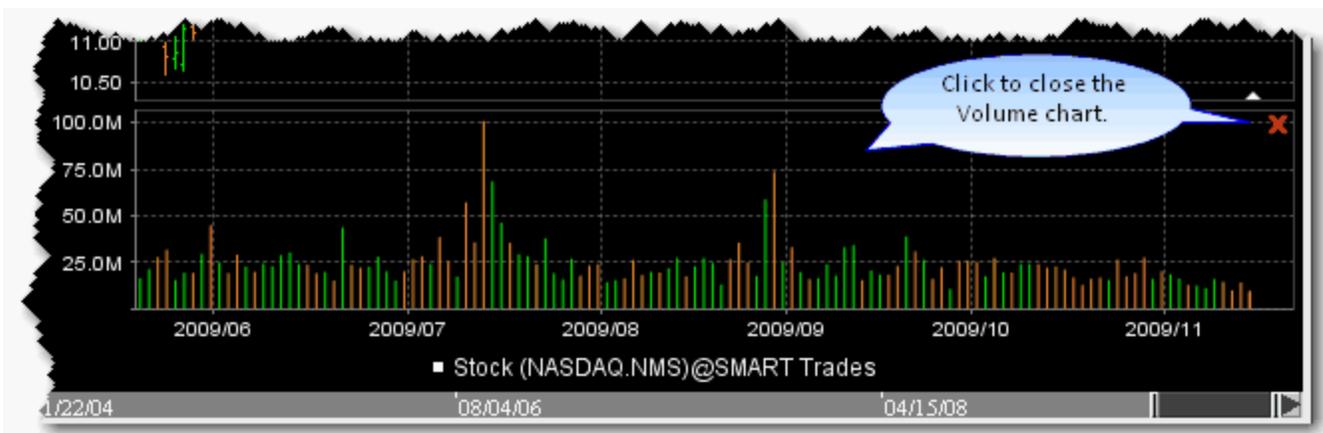
To hide the volume chart

- Click the red "x" on the right side of the Volume chart to close the chart.

Add Alerts in Charts

You can set price alerts from within a chart using the right-click menu.

To create an alert from within a chart

1   Right-click in a chart and select *Add Alert*. The cursor changes to a red dashed line.

2   Using the red dashed line, click at the price level you want to use for the Price-based alert.

3   In the Create Condition dialog box, verify or change the trigger method, Operator and Price Trigger.

> **Note:** *For details on setting Alerts, see the* Alerts and Notifications *topic.*

The alert is defined on the chart using a red labeled line.

Chart Types & Tools

- [Chart Arithmetic](#)
- [Autofit Combined Charts](#)
- [ChartTrader](#)
- [Bar Charts](#)
- [Line Charts](#)
- [Candlestick Charts](#)
- [Time & Sales Data](#)
- [Historical Charts](#)
- [Fibonacci Trend Lines](#)

Chart Arithmetic

You can add or subtract the bid/ask average prices for two or more contracts, and chart the sum as a single value.

To chart combined contracts

1 From the trading window click the **Charts** icon.

2 Select the *Combined Contracts* radio button at the top of the New Chart window.

3 In the contracts table, define multiple contracts.

4 To subtract a value, use the Ratio field to enter a minus sign in front of the ratio, or check *Show difference* at the top of the window.

5 If desired, enter an offset amount.

6 Choose the Time Period and How to Show values.

7 Click OK.

A combined chart looks like this:

Autofit Combined Charts

The chart arithmetic feature includes the ability to mathematically calculate the ratios for one or more contracts to approximate as closely as possible the chart for a single contract or index. You can elect to show both the primary and the autofitted charts, or just see the

difference by checking *Show Difference*. The ratios and offsets for the autofits are calculated using the algorithm for fitting least squares regression problems under non-negativity constraints. Details are described by Lawson & Hanson in "Solving Least Squares Problems."

To use the Autofit Chart feature

1   Check the *Autofit* checkbox at the top of the window.

   Use the *Show difference* checkbox to see a single autofitted chart equal to the difference between the primary chart and the autofit.

2   In the contracts table, define multiple contracts. The first instrument you list will be the primary, and those that follow will be autofitted to the primary.

   You must either check the Autofit box before you list the instruments you want to chart, or select all underlyings you want to include in the autofit before you check the box.

A chart using just Autofit looks like this:
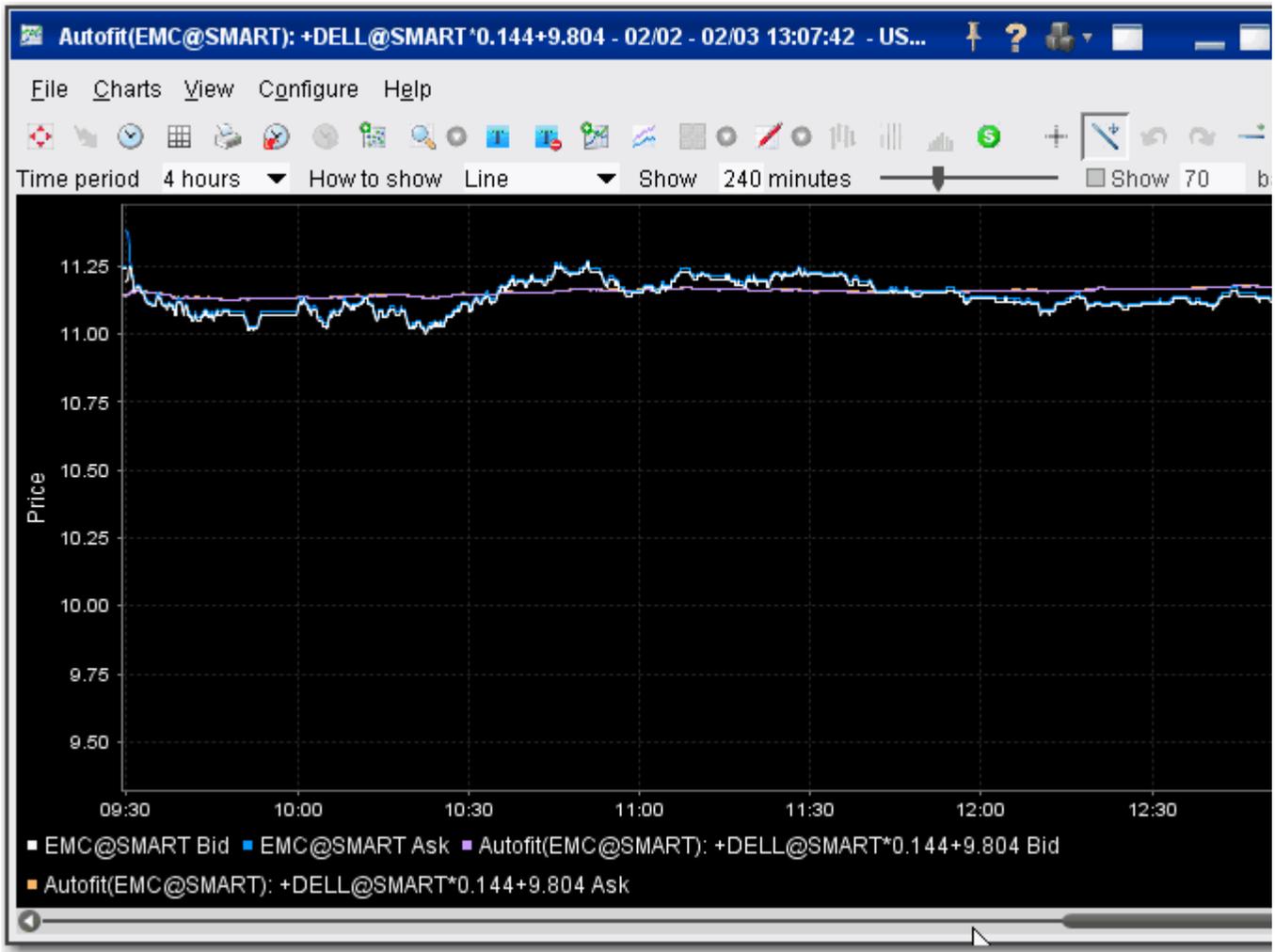
A chart using both Autofit and Show difference looks like this:

ChartTrader

You can trade directly from a real-time chart using ChartTrader, which you display from the Charts menu. Once you create an order, you can transmit it, cancel it or modify it directly on the chart, or using the order management line on the **Orders** tab.

To open ChartTrader

1   Open an interactive chart by selecting a contract on the trading screen and clicking the Charts icon on the trading toolbar.

2   On the Charts menu, select **ChartTrader** and then select *Show/Hide ChartTrader*.

3   The ChartTrader tool displays directly below the Quote line of the chart.

To create an order in ChartTrader

1   Click the blue **Buy** button to create a buy order, or the Red sell button to create a sell order.

2   Move your cursor into the chart and position the broken blue line at the order price you want. Note that your exact price position is displayed in blue to the left of the broken line, along the price axis.

3   Click to create an order. The order management line appears below the Quote line, in the Orders section of the ChartTrader, and the broken line becomes a solid line. The order parameter defaults are the same as those you set for your trading window using the Order Defaults window.

4 Click the "T" in the Transmit field to submit the order. You can also submit an order directly from the chart.

Transmit an order from the chart

1 To transmit directly from the chart, click the green Transmit button, and position the IB cursor over the order you want to send. You can tell that an order is properly selected as the solid order line becomes broken.

2 Click on the order to transmit.

Note: You can modify order parameters in the Order Management line before you transmit the order from the chart.

Modify order price from the chart

1 You can modify the order price directly from the chart by clicking the Modify button, and positioning the modify cursor over the selected order until the solid order line becomes broken.

2 Click the order and drag it up or down to the desired price.

Orders that you create using ChartTrader also display on the Trading page that displays the contract data. Trading pages that hold an order display the page title in red.

Create a Bar Chart

To create a bar chart

1 Select the contract for which you want to create a chart.

2 From the right-click menu, select **Analysis** and then select *Real-time Charts*.

3 Set Chart Parameters to define the chart, including:

a **How to Show:** select Bar with a specified interval.

b **Bar Type** - Select *High Low Bar*.
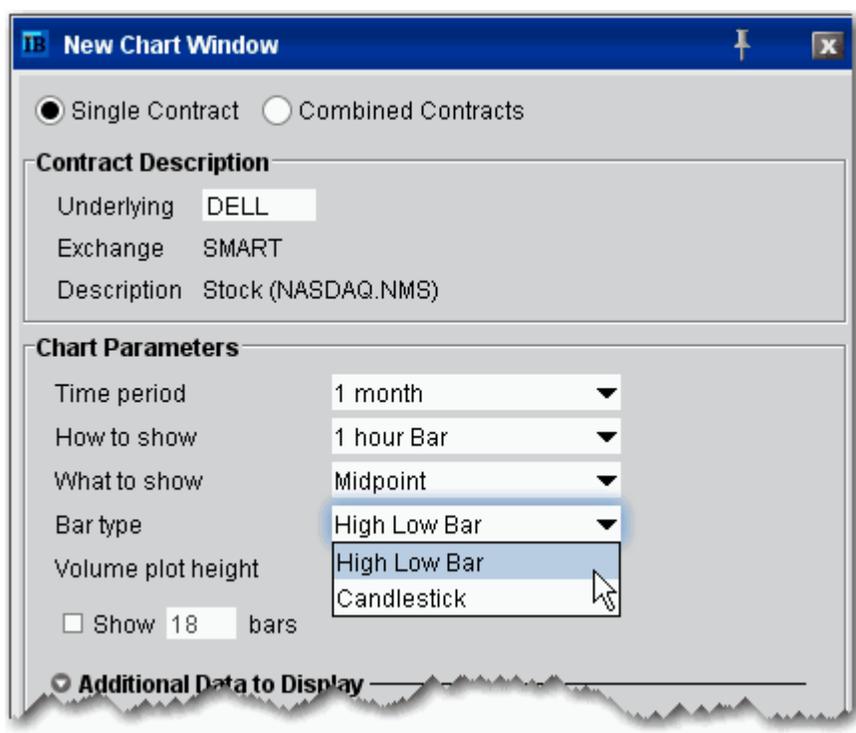
4 Click OK to display your chart.

Create a Line Chart

To create a line chart

1   Select the contract for which you want to create a chart.

2   From the right-click menu, select **Analysis** and then select *Real-time Charts*.

3   Set Chart Parameters to define the chart, including:

• **How to Show:** Select *Line*.

4   Click OK to view the chart. For details on all of the setting you can use, see the [Charts](#) overview topic.
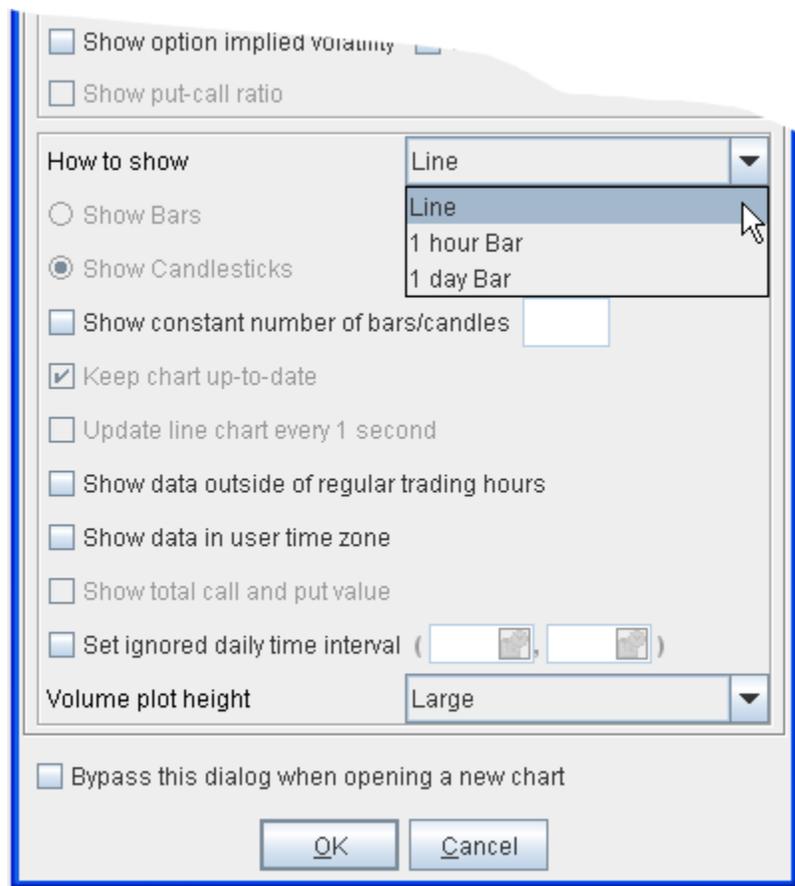
Create a Candlestick Chart

To create a candlestick chart

1   Select the contract for which you want to create a chart.

2   From the right-click menu, select **Analysis** and then select *Real-time Charts*.

3 Set Chart Parameters to define the chart, including:

  a **How to Show:** select Bar with a specified interval.

  b **Bar Type** - Select *Candlestick*.
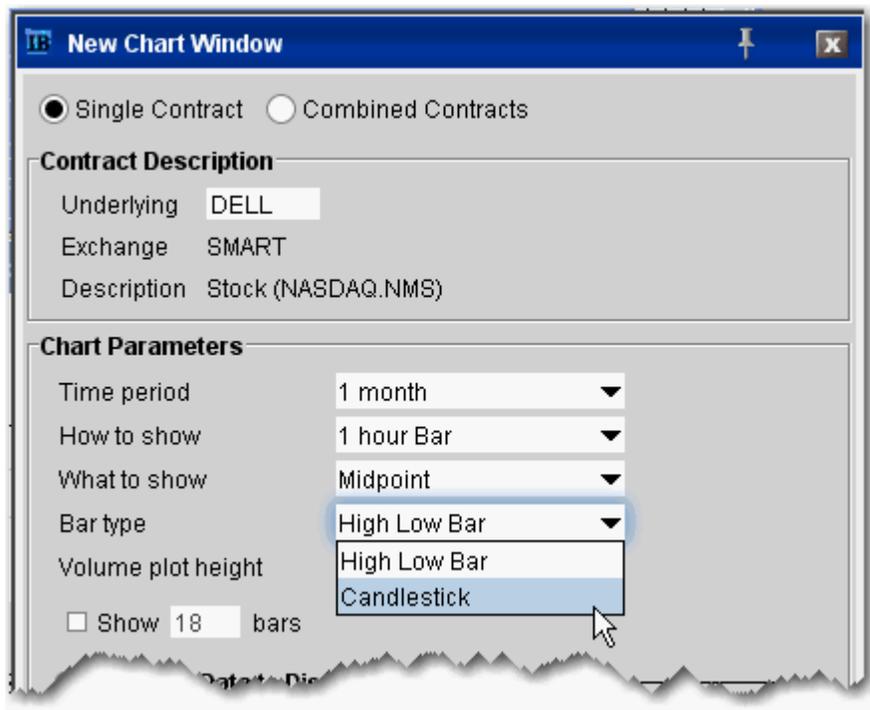
Time and Sales Data

You can elect to view the Time & Sales for any underlying from the trading screen or from within a chart.

To view Time & Sales from the Trading Window

1 Select a symbol and click the *Time & Sales* icon on the trading toolbar.

2 Time & Sales data opens in a separate window. Entries are listed in ascending order based on time.

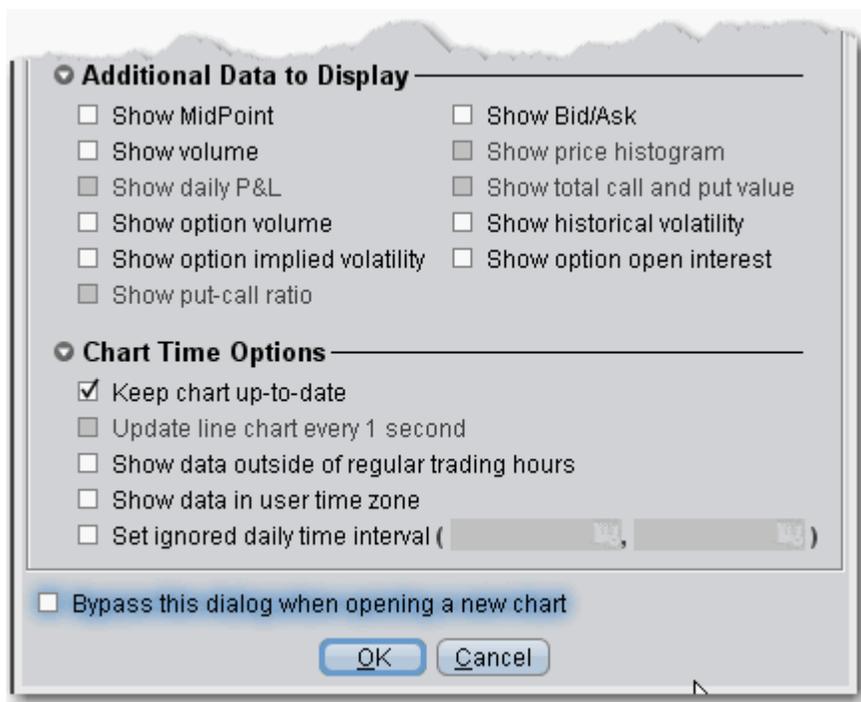The time & sales data is shown in sixty-second increments. There is a new line each time any of the data changes.

3 To see the next or previous 60-second increment, click the **Previous** or **Next** buttons.

To view Time & Sales in a chart

1 Create a chart by selecting an underlying symbol on the trading window and clicking the *Charts* icon on the trading toolbar.

2 On the chart, use the **Chart** toolbar to click the *Time & Sales* icon. This changes the cursor to the Time & Sales cursor, indicator by the clock.

3 Position the cursor in the chart to the time you want to view, and click.

4 The Time and Sales data appears in a separate window. It's listed in ascending order based on time.

The time & sales data is shown in sixty-second increments. There is a new line each time any of the data changes.

5 To see the next or previous 60-second increment, click the **Previous** or **Next** buttons.

View Historical Charts

Define a historical chart using a time period from 1 day to one decade. You can also create interactive charts that update in real-time.

To view historical charts

1   On the trading screen, highlight a contract and use the right-click menu to select *Analysis*, then select *Historical Charts*.

2   Define chart parameters such as time frame, events, index comparison and moving average, then click **Draw Chart**.
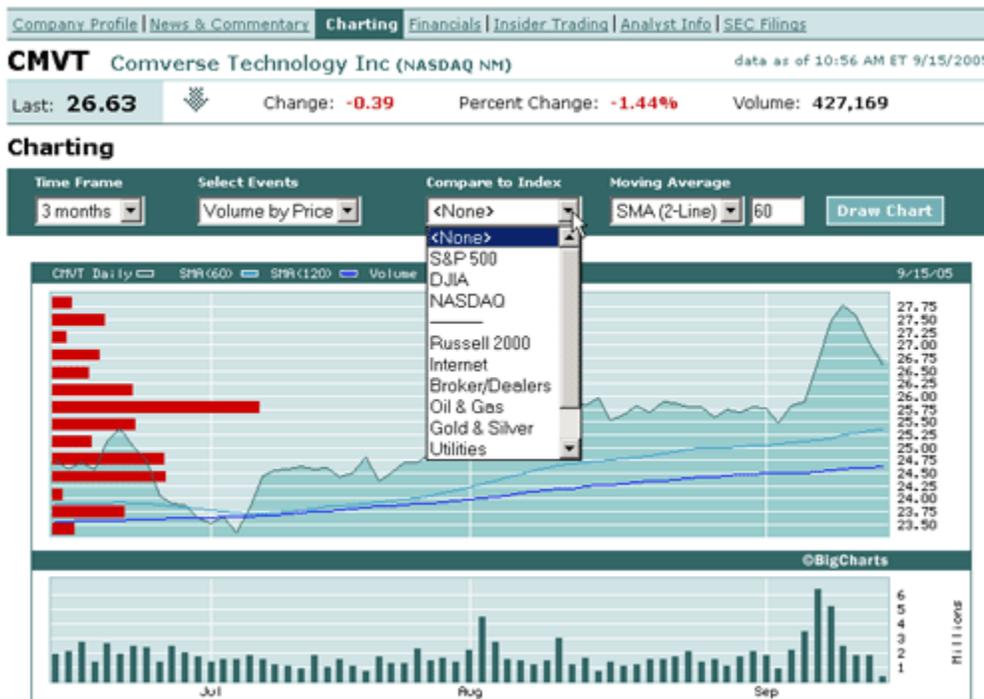
Any time you modify chart parameters, you must click **Draw Chart** to update.

Apply Fibonacci Trend Lines

The Fibonacci trendlines may be used to help determine price support/resistance at or near certain levels. The TWS Fibonacci lines occur at 0.0%, 23.6%, 38.2%, 50.0%, 61.8%, 76.4% and 100.0%. Retracements occurring at these points within a trend could be used to help determine entry and exit points for a contract.

To add Fibonacci lines to a chart

1   [Create a realtime interactive chart](#).

2   In the trendlines section of the Charts toolbar, click the *Add Fibonacci Line* icon.
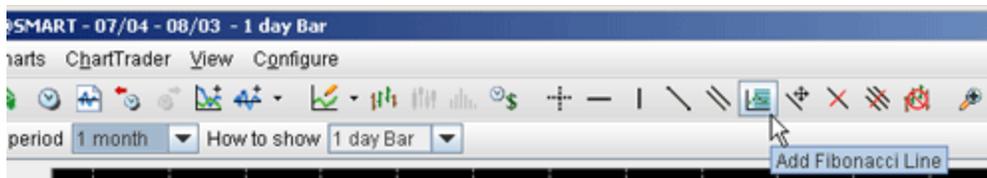
3   Click your mouse at a peak or low point in the chart and pull to down/up and to the right across the chart.

4   TWS draws a series of 7 colored trendlines at 0.0%, 23.6%, 38.2%, 50.0%, 61.8%, 76.4% and 100.0%.

To delete a Fibonacci series of trendlines

- Click the Remove *All Trendlines* icon, located three icons to the right from the *Add Fibonacci* Line icon.

Chart Indicators

Apply these studies to your chart:

- ADX/DMI Indicator
- Accumulation/Distribution Line
- Average True Range Indicator
- Chaikin Money Flow Oscillator
- Commodity Channel Indicator
- Keltner Channel Indicator
- Momentum Indicator
- Money Flow Index Study
- MACD Indicator
- On Balance Volume Indicator
- Rate of Change Indicator
- Relative Strength Indicator
- Stochastic Oscillator Indicator
- Ultimate Oscillator Indicator
- Williams Oscillator Indicator
- Bollinger Band Indicator
- Envelope Indicator
- Exponential Moving Average Indicator
- Parabolic SAR Indicator
- Pivot Points
- Simple Moving Average Indicator
- Weighted Moving Average Indicator

Apply ADX/DMI Indicator

The ADX/DMI is represented by three lines +DM, -DM and ADX.

The Directional movement

If today's High is higher than yesterday's High then:

> +DM = today's High - yesterday's High

If today's Low is lower than yesterday's Low then:

> -DM = yesterday's Low - today's Low

If +DM is greater than -DM then: -DM = 0

If +DM is less than -DM then: +DM = 0

The true range

True range is the largest of:

- |today's High - today's Low|
- |today's High - yesterday's Close|
- |yesterday's Close - today's Low|

Moving average of +DM, -DM and True Range

- +DMMA = exponential moving average of +DM
- -DMMA = exponential moving average of -DM
- TRMA = exponential moving average of True Range

The Directional Indicators

- +DI = +DMMA / TRMA
- -DI = -DMMA / TRMA

Directional Index

- DX = |(+DI - (-DI))| / (+DI + (-DI))

The Average Directional Movement Index

- ADX = the exponential moving average of DX
- ADX = SUM[(+DI-(-DI))/(+DI+(-DI)), N]/N

Where:

N — the number of periods used in the calculation.

To apply an ADX/DMI Indicator

1   On the Charts menu select *Add Study*.

2 From the list of study indicators, select *ADX/DMI*.
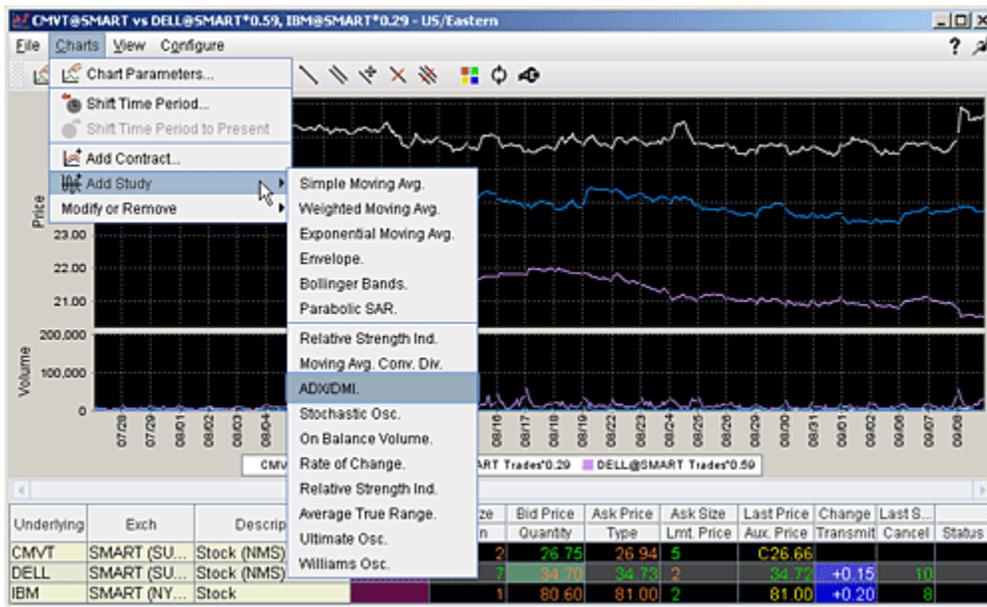
Apply an Accumulation/Distribution Line

This indicator attempts to quantify the flow of money into and out of a given stock. In theory, knowing this money/volume flow may help you to recognize an upcoming move in the stock price.

To apply an Accumulation/Distribution line

1   On the Charts menu select *Add Study*.

2   From the list of study indicators, select *Accumulation/Distribution Line*.

3   Select a contract (if your chart includes multiple contracts) and define the source, then click OK.
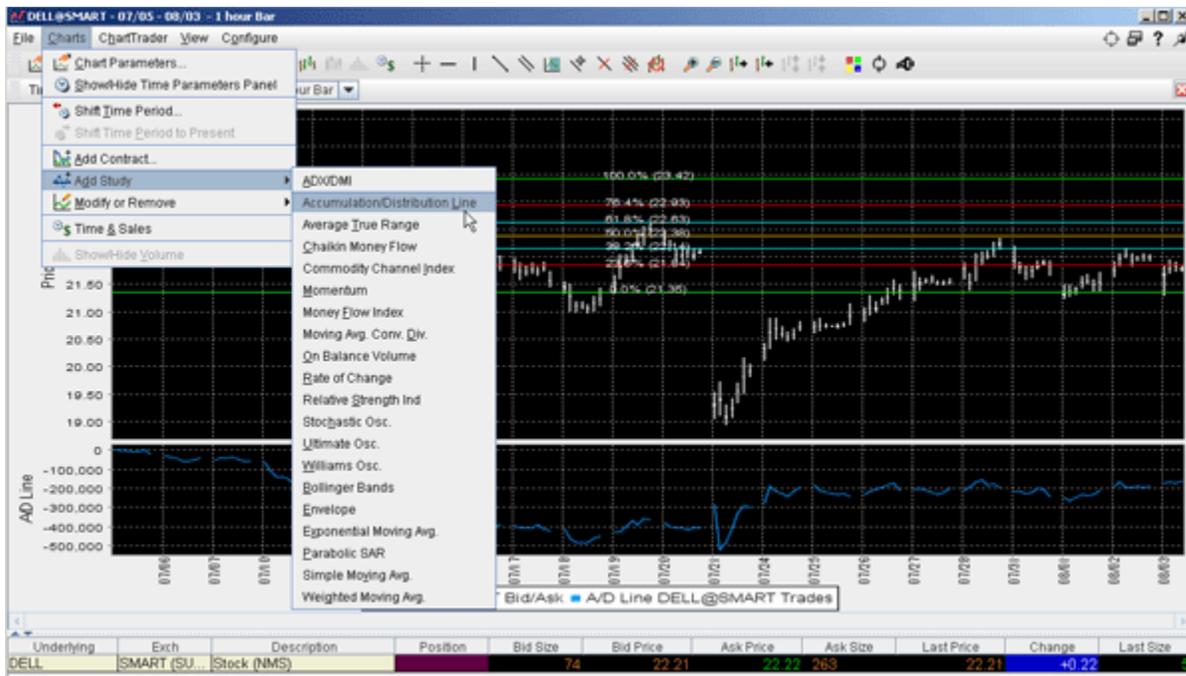
Apply an Average True Range Indicator

The Average True Range indicator is used to determine the volatility of the market. The idea is to replace the high-low interval for the given period, as the high-low does not take into consideration gaps and limit moves. You set the period when you create the study.

The True Range is the largest of:

- difference between the current maximum and minimum (high - low)
- difference between the previous closing price and the current maximum
- difference between the previous closing price and the current minimum

The **Average True Range** is a simple moving average of the true range values.

To apply an Average True Range

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Average True Range*.
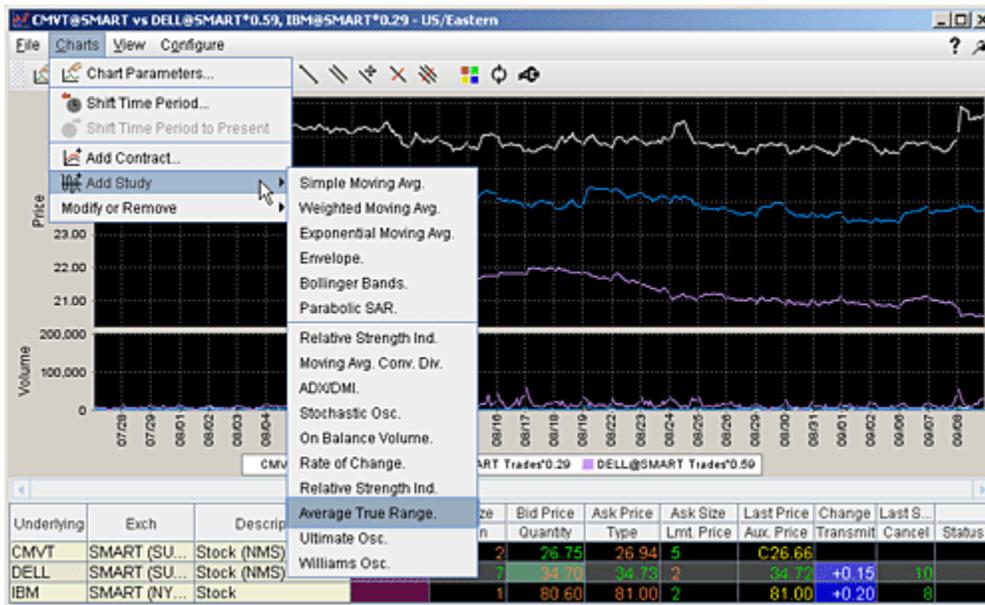
Apply Chaikin Money Flow Oscillator

The Chaikin Money Flow Oscillator is calculated using the Accumulation/Distribution Line. It takes the cumulative total of the Accumulation/Distribution values for 21 periods (or *X* number of periods if you elect to change this value) divided by the cumulative total of volume for 21 (or X) periods.

To apply a Chaikin Money Flow Indicator

1   On the Charts menu select *Add Study*.

2   From the list of study indicators, select *Chaikin Money Flow*.

3   Select a contract (if your chart includes multiple contracts), define the source, modify the time period if desired, and click OK.
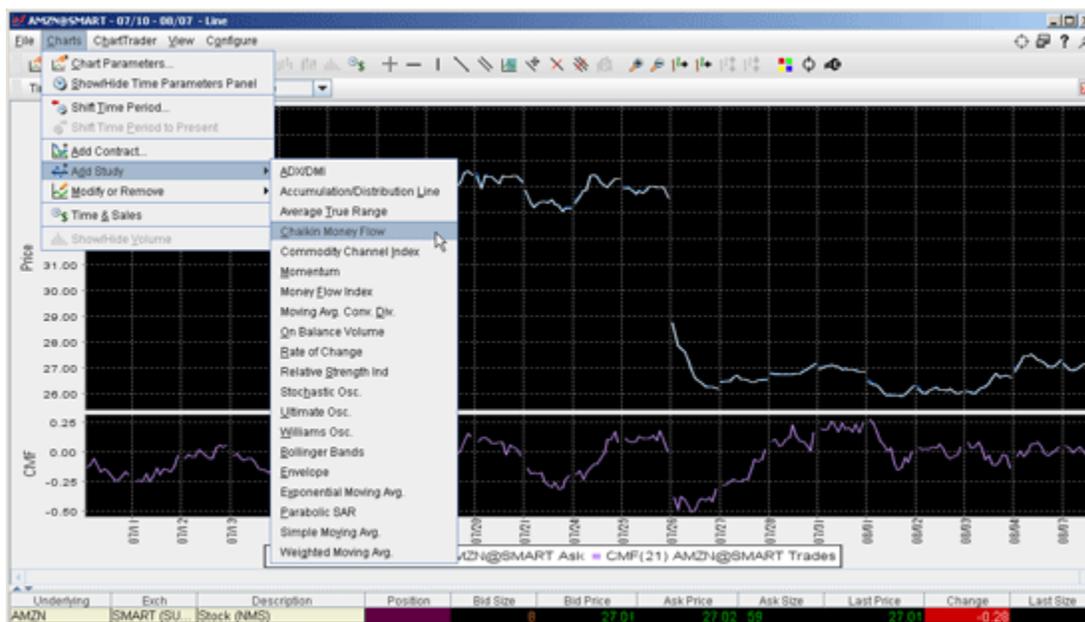
Apply a Commodity Channel Indicator (CCI)

The CCI price momentum indicator is designed to identify cyclical turns in commodities pricing, and represents the position of the current price relative to the average of the price over a specified period.

To apply a CCI

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *CCI*.
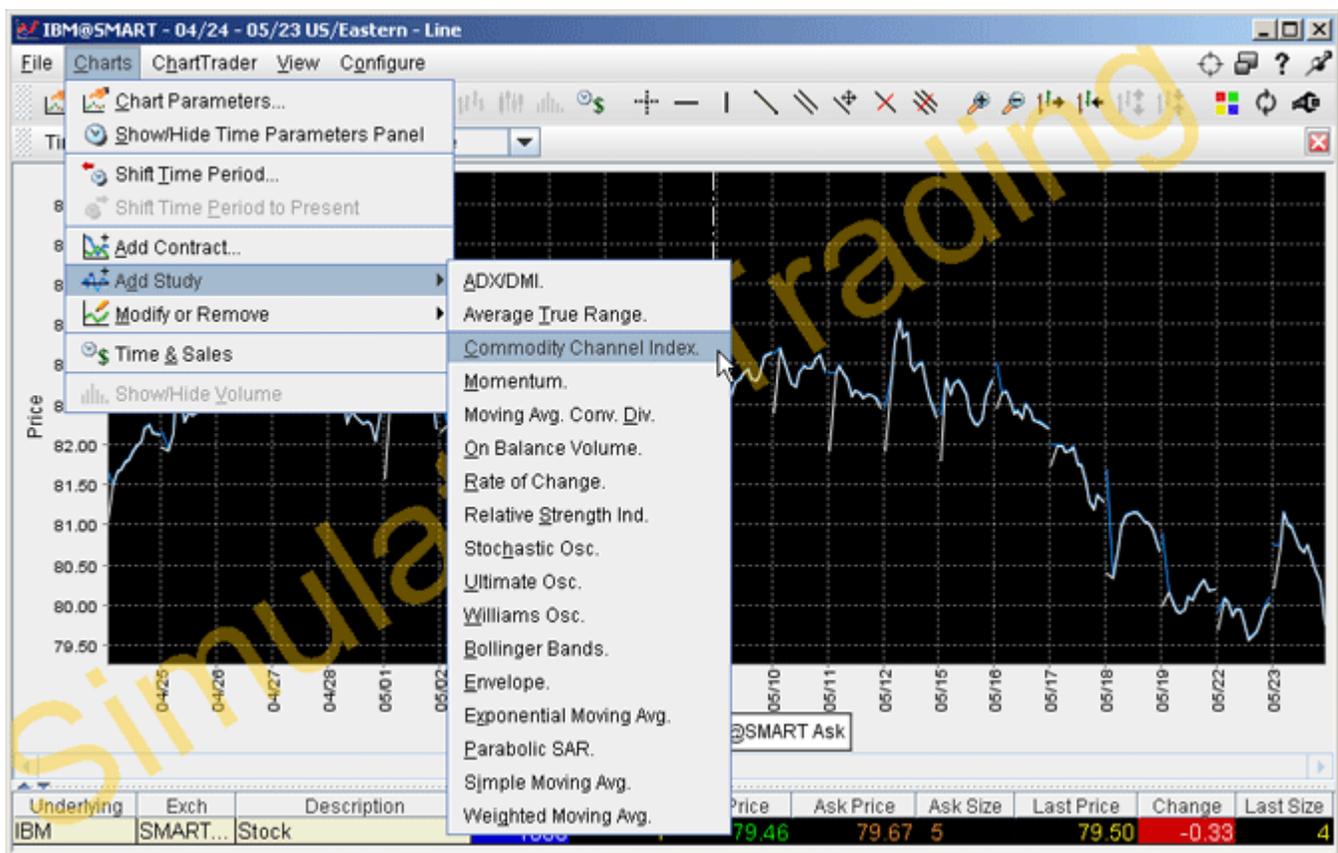
Apply a Keltner Channel Indicator

The Keltner Channel indicator is sensitive to volatility, and plots an "envelope" of two bands above and below the middle line, which represents a 20-period Exponential Moving Average (EMA). The upper and lower bands define the area inside of which the price should generally fall. The price crossing or floating towards these lines could indicate a trading opportunity.

The Keltner Channel bands are calculated as follows:

Middle Line = EMA(TP)

Top Line = EMA(TP + Dev x TR)

Bottom Line = EMA(TP - Dev x TR)

Where:

EMA - exponential moving average

TP = typical price

TR - true range

Dev — the deviation factor.

To overlay a Keltner Channel Indicator
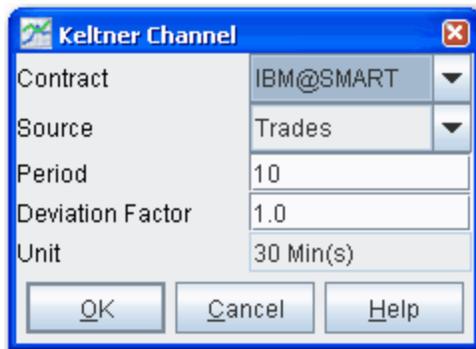
1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select Keltner Channel.

3   Modify any preferences and click OK.

Note that you can increase the thickness and color of the indicator lines by right-clicking a line and using the edit menu to select *Change Indicator Thickness* or *Change Indicator Color*. A thickness of "1" is the thinnest; 4 is the thickest.
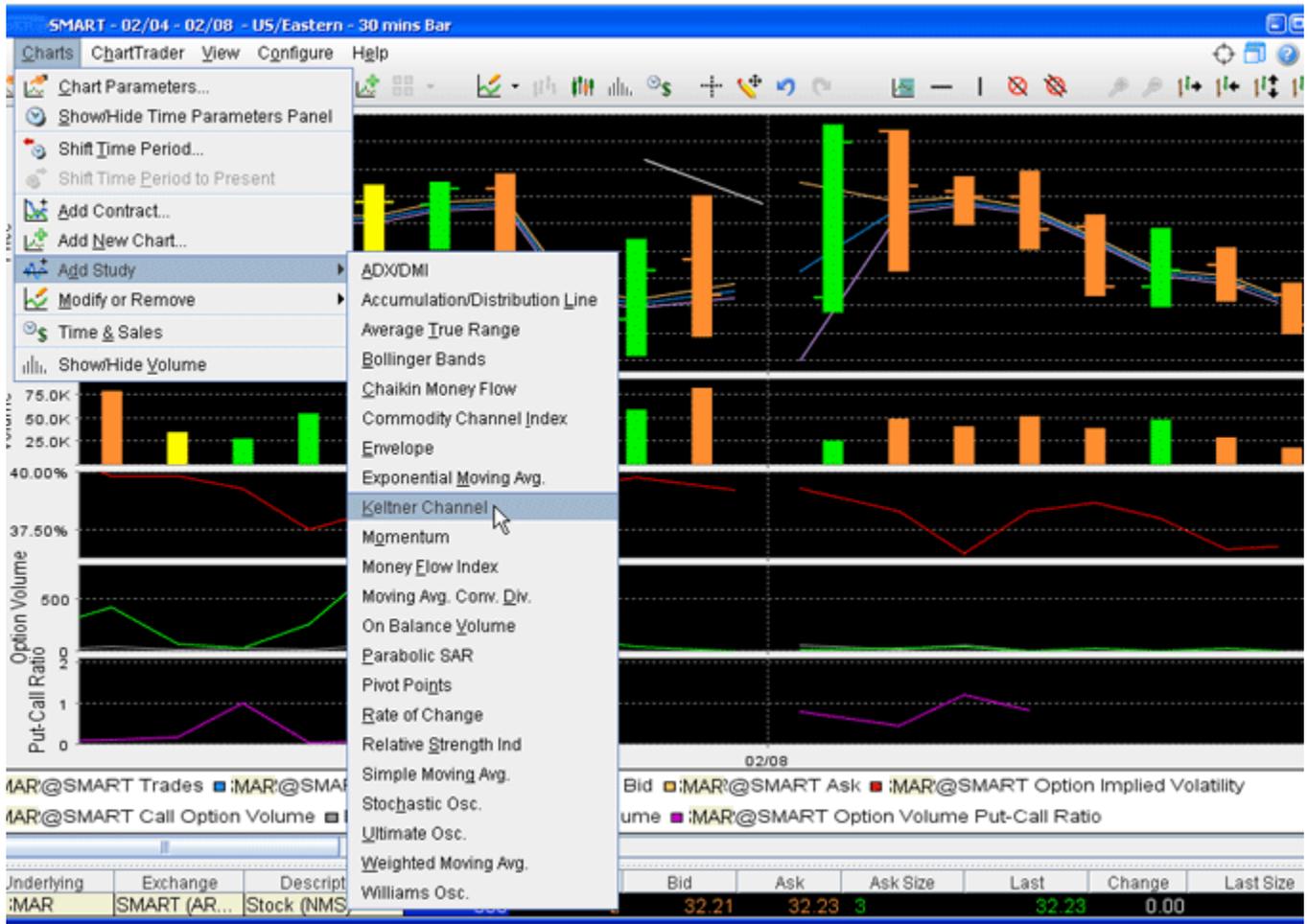
Apply a Momentum Indicator

The Momentum is the difference between the current point (price or something else) and the point N periods ago. Momentum is calculated as a ratio of today's price to the price several (N) periods ago.

Momentum = CLOSE(i)-CLOSE(i-N)

Where:

CLOSE(i) — is the closing price of the current bar.

CLOSE(i-N) — is the closing bar price N periods ago

To apply a Momentum Indicator

1 On the **Charts** menu select *Add Study*.

2 From the list of study indicators, select *Momentum*.
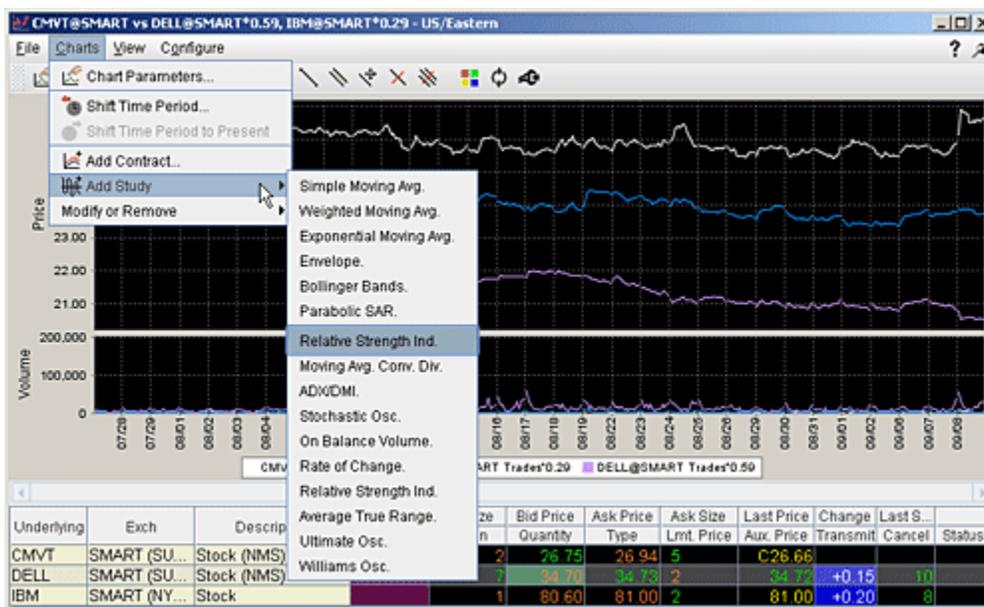
Apply a Money Flow Index Study

The MFI Index is similar to the Relative Strength Index (RSI) indicator, measure on a 0 -100 scale generally over a 14-day period, except that it is volume weighted. This makes it a good measure of the strength of money flowing in and out of a security, and is used to help identify the strength or weakness of a trend.

To apply a Money Flow Index study

1 On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Money Flow Index*.

3   Select a contract (if your chart includes multiple contracts) and define the source, modify the default 14-day period if desired, and click OK.
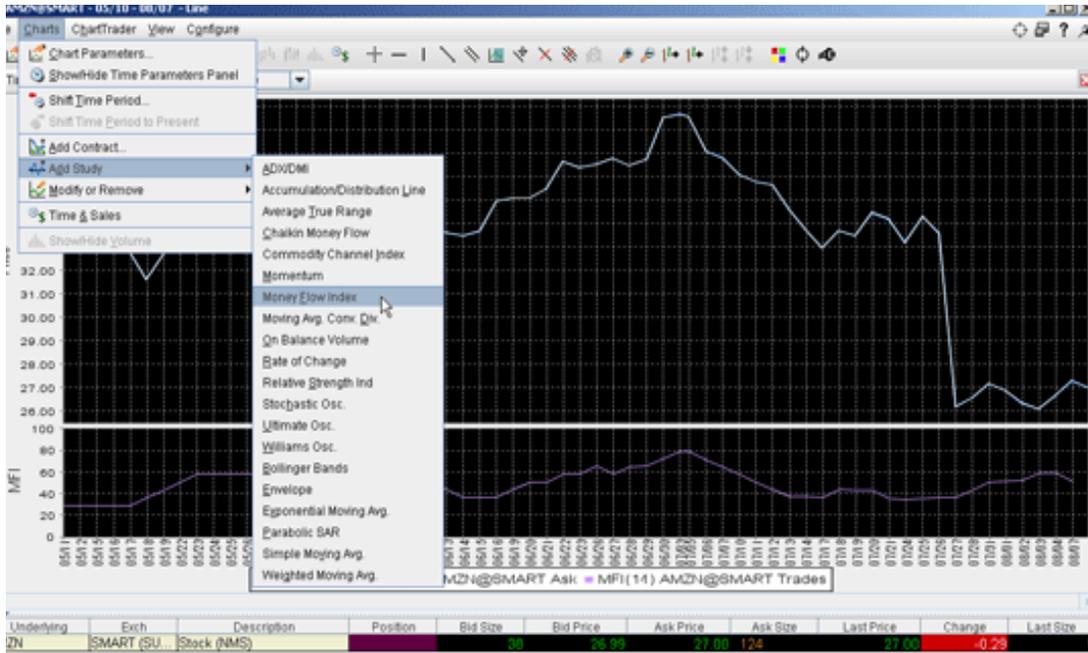
Apply MACD Indicator

This is a trend-following dynamic indicator that shows the correlation between two moving averages, generally a 26-period and 12-period SMA or WMA or EMA. You can modify the period length when you create the study. To help illustrate opportunity, a 9-period EMA "signal line" is plotted on top of the MACD.

The MACD and signal line are plotted using the following calculations:

MACD = MA(CLOSE, 12)-MA(CLOSE, 26)

SIGNAL = EMA(MACD, 9)

MACD Histogram/OSMA = MACD - SIGNAL

Where:

MA — Simple or Weighted or Exponential Moving Average;

SIGNAL — the signal line of the indicator.

To apply a Moving Average Convergence/Divergence Indicator

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Moving Avg Conv. Div.*
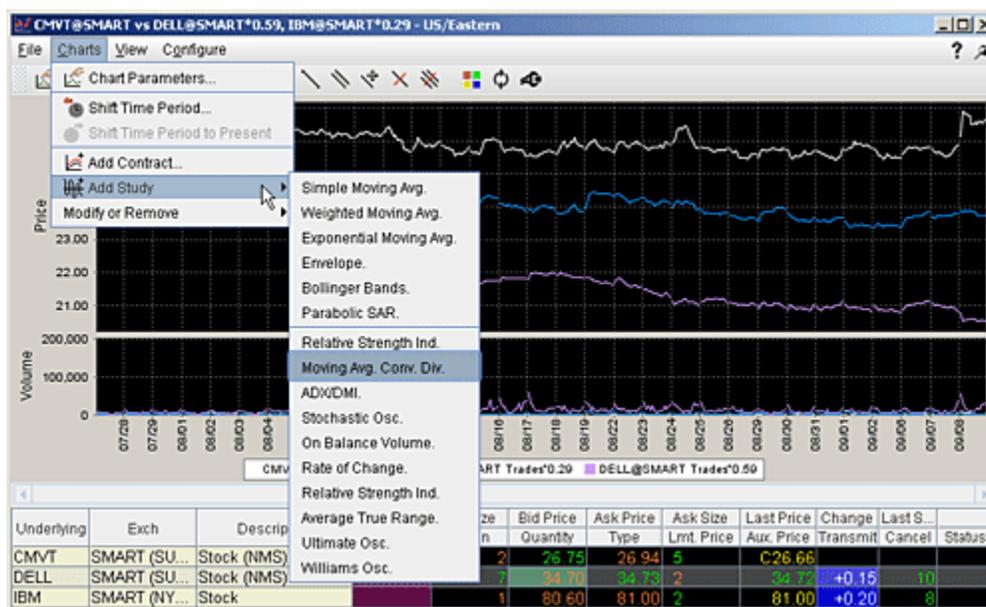
Apply an On Balance Volume Indicator

The concept behind the OBV indicator is: volume precedes price. OBV is a simple indicator that adds a period's volume when the close is up and subtracts the period's volume when the close is down. A cumulative total of the volume additions and subtractions forms the OBV line.

If today's close is greater than yesterday's close then:

OBV(i) = OBV(i-1)+VOLUME(i)

If today's close is less than yesterday's close then:

OBV(i) = OBV(i-1)-VOLUME(i)

If today's close is equal to yesterday's close then:

OBV(i) = OBV(i-1)

Where:

OBV(i) — is the indicator value of the current period.

OBV(i-1) — is the indicator value of the previous period.

VOLUME(i) — is the volume of the current bar.

To apply a On Balance Volume indicator

1   On the Charts menu select *Add Study*.

2   From the list of study indicators, select *On Balance Volume*.
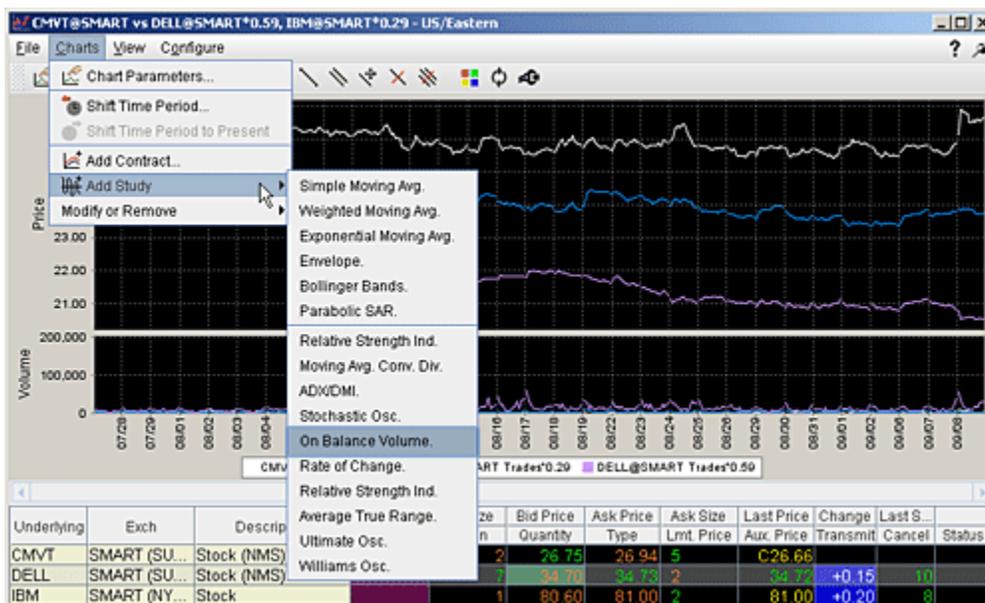
Apply Rate of Change Indicator

ROC is a refined version of **Momentum.** The readings fluctuate as percentages around the zero line. You set the number of periods when you create the study.

Rate of change =100(V/Vx)

where:

V - the latest closing price.

Vx - the closing price of x bars ago.

To apply a Rate of Change indicator

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Rate of Change*.
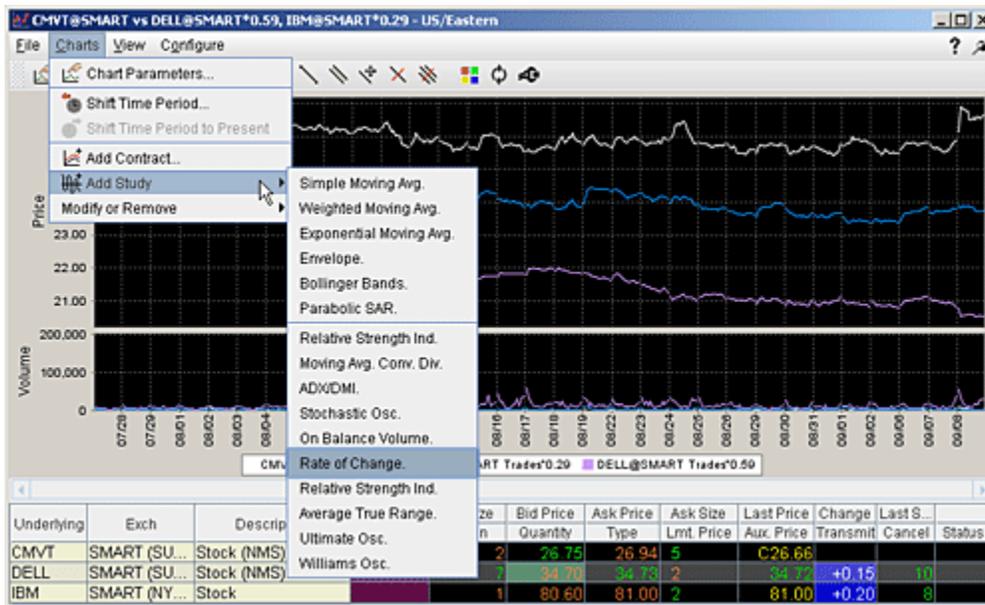
Apply a Relative Strength Indicator

The RSI indicator is for overbought/oversold conditions. It goes up when the market is strong, and down when the market is weak, and oscillates between 0 -100. The RSI calculation is:

RSI = 100-(100/1+RS)

Where:

RS - Average of X bars Up Closes/Average X bars Down Closes (X=number of bars set by user)

To apply a Relative Strength Indicator

1 On the Charts menu select *Add Study*.

2 From the list of study indicators, select *Relative Strength Ind*.
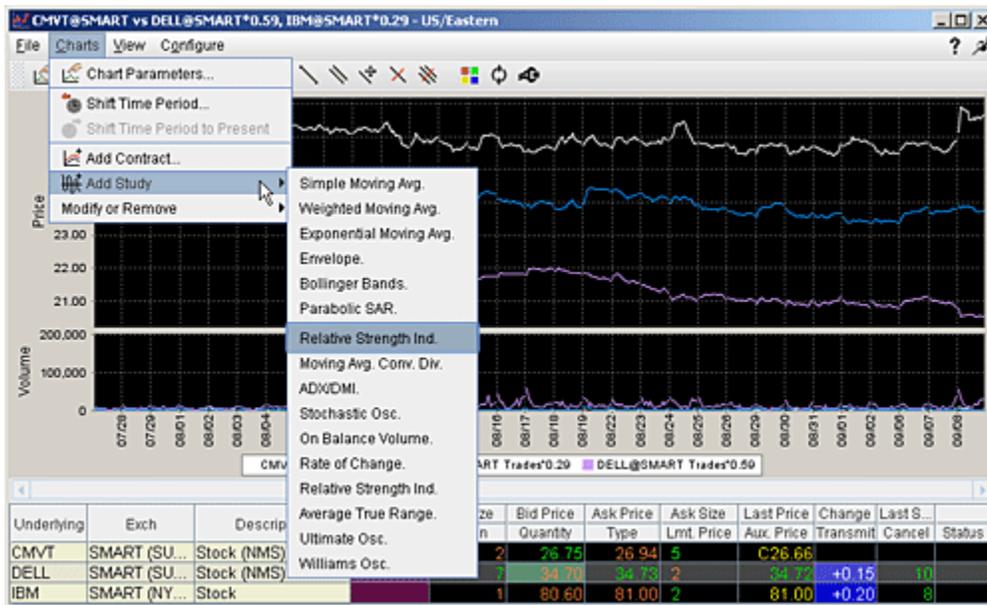
Apply a Stochastic Oscillator Indicator

The stochastic oscillator provides information about the location of a current close in relation to the period's high and low. It ranges between 0% and 100%. A reading of 0% indicates that the close was the lowest price at which the security traded during the preceding *x* number of time periods. A reading of 100% indicates that the close was the highest price at which the security traded during the preceding *x* number of time periods.

Note: You can specify the method (SMA, WMA or EMA), observation period, period of slow average and period of fast average when you create the study.

To apply a Stochastic Oscillator

1 On the **Charts** menu select *Add Study*.

2 From the list of study indicators, select *Stochastic Osc*.
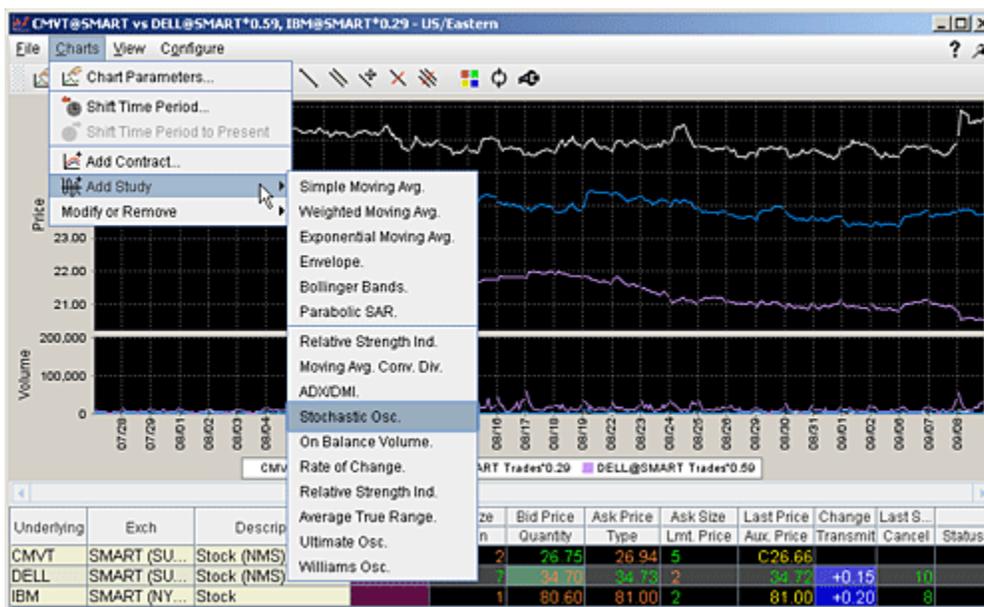
Apply an Ultimate Oscillator Indicator

The Ultimate Oscillator combines the price action for three different time frames. You set the observations periods 1, 2, and 3 when you create the study.

Time Frames:

- true low = min(low or prev close)

- buying pressure = close - true low

- true range = max(high - low, high - prev close, prev close - low)

Buying pressure sum 1, buying pressure sum 2 and buying pressure sum 3 are calculated by adding up buying pressures for 3 different time frames.

The same applies to the true range sum 1, 2 and 3.

raw ultimate oscillator = 4 * (buying pressure sum 1 / true range sum 1)

+ 2 * (buying_pressure_sum_2 / true_range_sum_2) + (buying_pressure_sum_3 / true_range_sum_3)

ultimate oscillator = raw ultimate oscillator / (4 + 2 + 1)) * 100

To apply a Ultimate Oscillator indicator

1 On the **Charts** menu select *Add Study*.

2 From the list of study indicators, select *Ultimate Osc*.
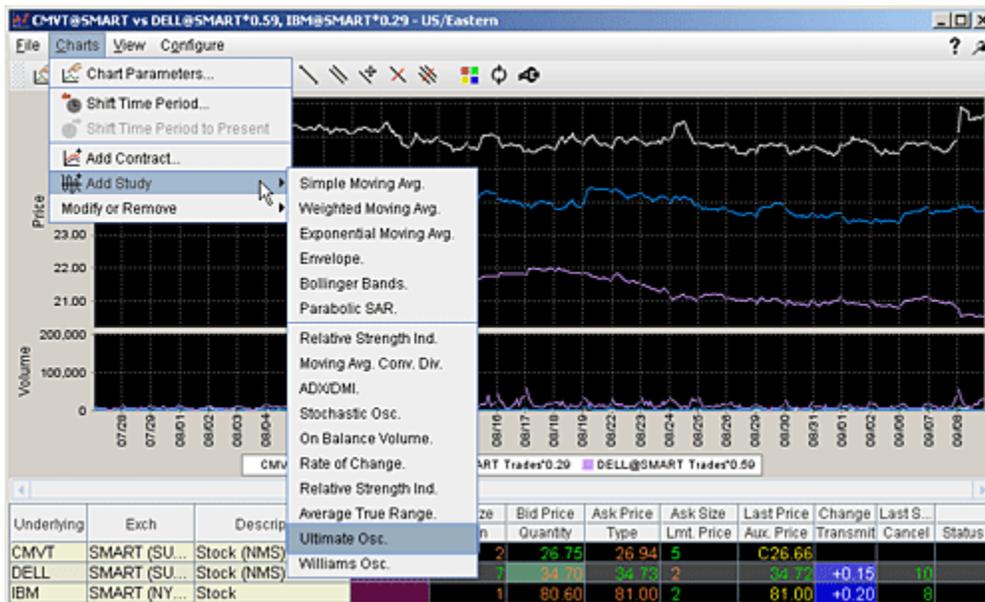
Apply a Williams Oscillator Indicator

The Williams Percent Range (%R) indicator identifies the overbought/oversold levels. The scale extends from 0 to -100.

$$\%R = (HIGH(i\text{-}n)\text{-}CLOSE)/(HIGH(i\text{-}n)\text{-}LOW(i\text{-}n))\text{-}100$$

Where:

- CLOSE — is today's closing price.
- HIGH(i-n) — is the highest high over a number (n) of previous periods.
- LOW(i-n) — is the lowest low over a number (n) of previous periods.

To apply a Williams Oscillator indicator

1 On the Charts menu select *Add Study*.

2 From the list of study indicators, select *Williams Osc.*
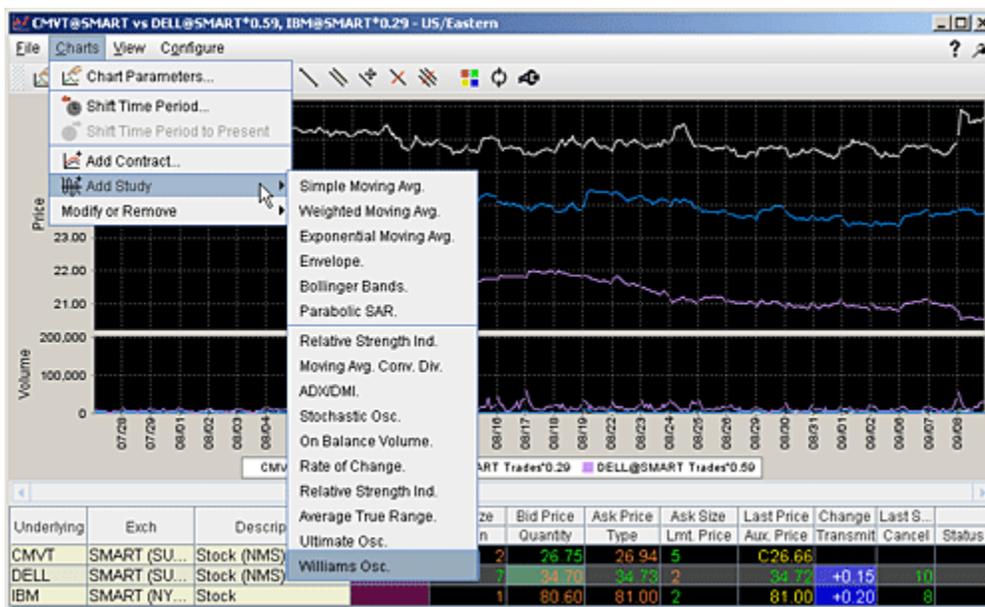
Apply Bollinger Band Indicator

Bollinger Bands measure volatility by plotting a series of three bands. The middle band represents the moving average (SMA or WMA or EMA). The upper band is a set number of standard deviations higher than the middle band (generally 2), and the lower band is a set number of standard deviations (generally 2) lower than the middle band. You set the distance of standard deviation when you create the study.

Bollinger Bands are calculated like this:

ML = Avg. (N)

TL = ML + (D*StdDev)

BL = ML — (D*StdDev)

Where:

ML - middle line

Avg(N) - SMA or WMA or EMA

TL - top line

BL - bottom line

N — is the number of periods used in calculation;

StdDev — the Standard Deviation.

StdDev = SQRT(SUM[(CLOSE — SMA(CLOSE, N))^2, N]/N)

To apply a Bollinger Band Indicator

1 On the **Charts** menu select *Add Study*.

2 From the list of study indicators, select Bollinger Bands.
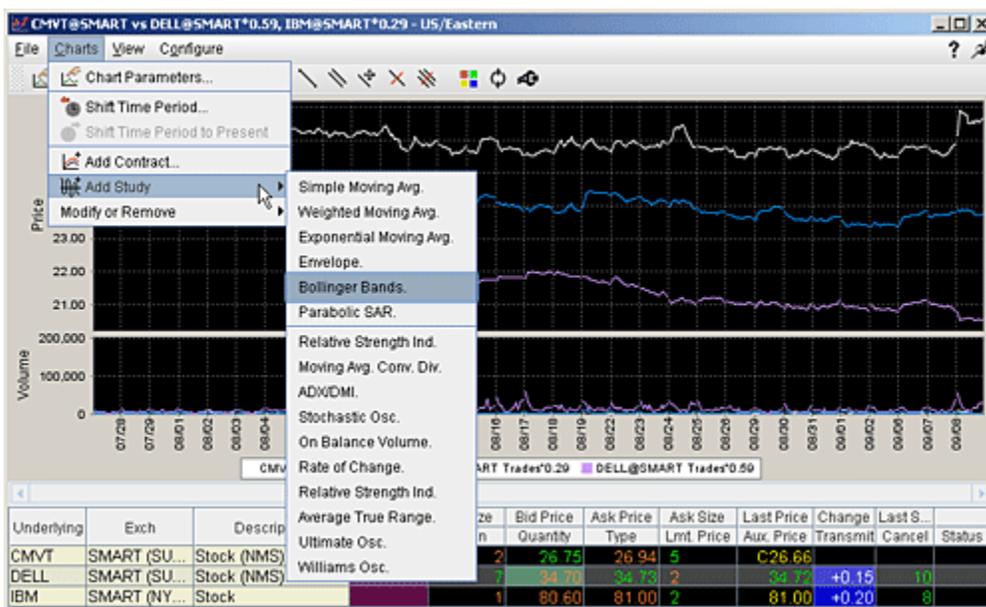
Apply Envelope Indicator

SMA/WMA/EMA Envelopes plot a band composed of two moving averages, one which is shifting upwards, the other shifting downwards, to help define a stock's upper and lower boundaries. The bands of an envelope are calculated as follows:

Upper Band = MA(CLOSE, N)*[1+K/100]

Lower Band = MA(CLOSE, N)*[1-K/100]

Where:

MA — Simple (or Weighted or Exponential) Moving Average;

N — averaging period;

K/100 — the value of shifting from the average (measured in basis points).

To apply an Envelope indicator

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Envelope*.
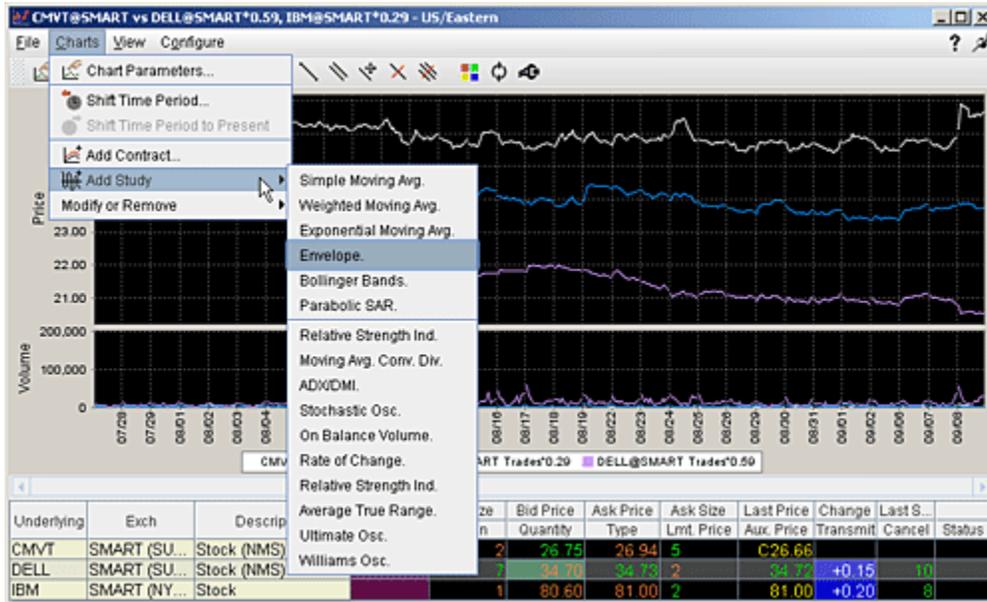
Apply Exponential Moving Average Indicator

The **exponential moving average** gives more weight to the latest prices and includes all of the price data in the life of the instrument. It is defined by taking:

(previous period's exponential moving average)/(N+1) and adding (current price)*2/(N+1). For the first period we take the simple average as above.

To apply a Exponential Moving Average

1 On the **Charts** menu select *Add Study*.

2 From the list of study indicators, select *Exponential Moving Average*.
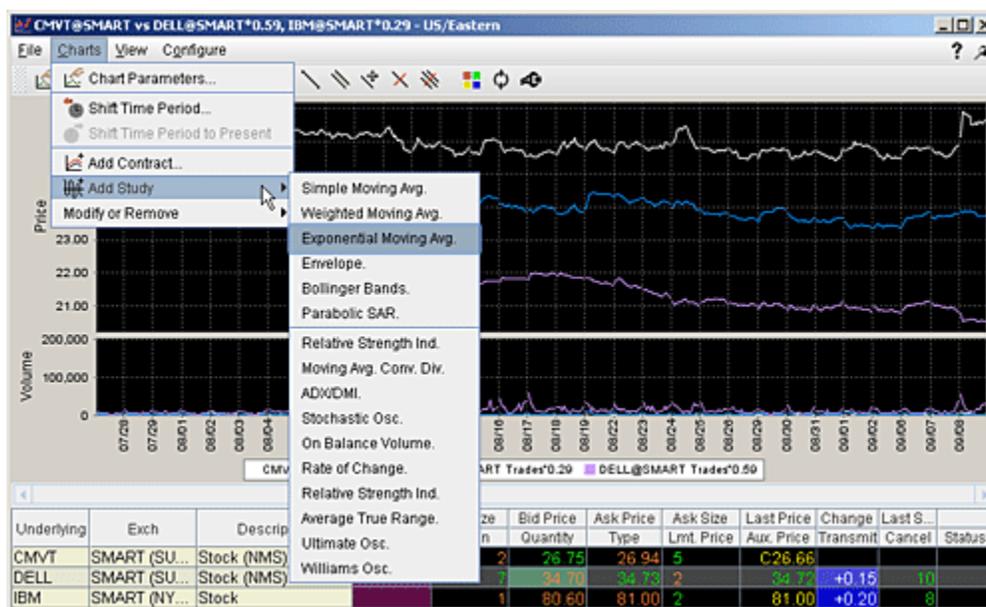
Apply Parabolic SAR Indicator

For use in trending markets, parabolic SAR uses a trailing stop and reverse method to help determine good exit and entry points. The Parabolic SAR calculation is:

$$SAR_{t+1} = SAR_t + AF \times (EP_{trade} \times SAR_t)$$

Where:

SAR_{t+1} — next period's SAR

SAR_t - current SAR

AF - acceleration factor, begins at .02 and increases by .02 to a maximum of 20.

Note: You can reset the initial, increments and maximum acceleration factor when you create the study.

EP_{trade} — the extreme price (HIGH for long positions and LOW for short positions).

To apply a Parabolic SAR indicator

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Parabolic SAR*.
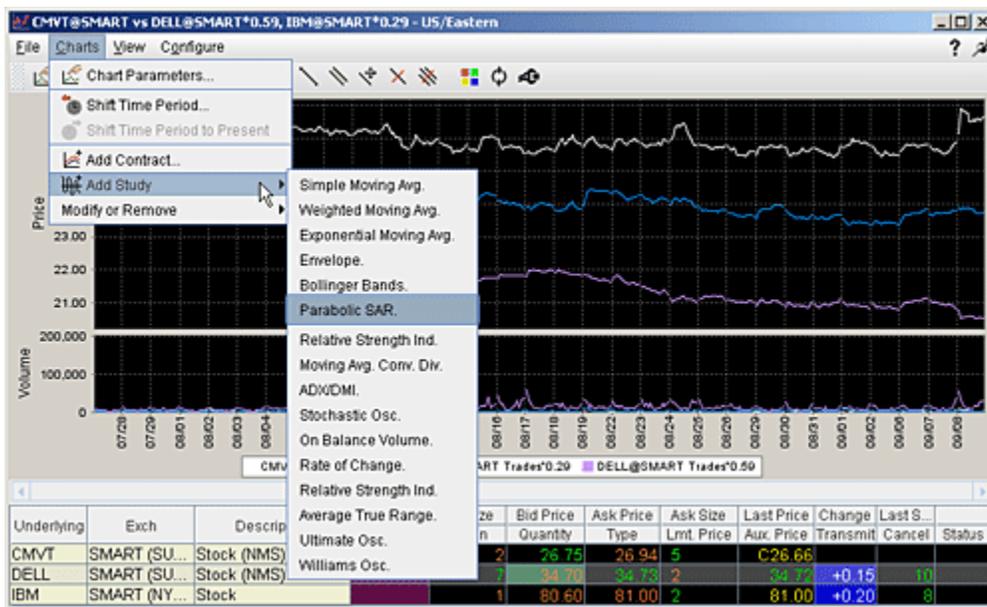
Pivot Points

The Pivot Point indicator calculates the numerical average of a stock's high, low and closing prices, and is used to help identify resistance and support levels. We calculate pivot points using the five-point system, which uses the previous day's high, low and close to get the pivot point, and then calculates two resistance levels and two support levels, as follows:

R2=P + (H-L) = P + (R1-S1)
R1 = (P x 2) - L
P = (H + L + C) /3
S1 = (P x 2) - H
S2 = P - (H - L) = P - (R1 - S1)

where "S" is the support levels, "R" is the resistance levels, "P" is the pivot point, H, L, C are high, low and close, respectively.

To add a Pivot Point indicator

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Pivot Points*.
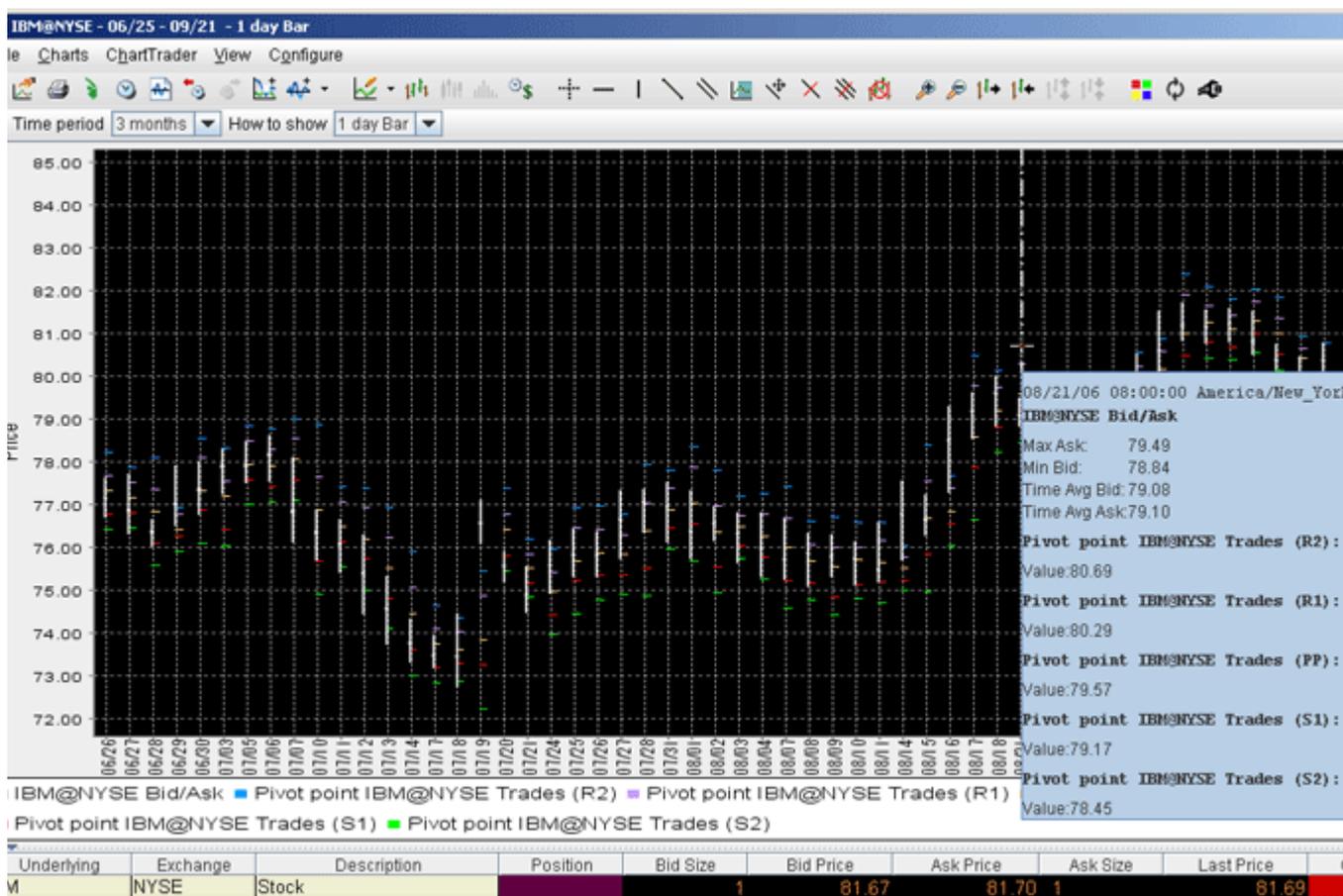
Apply Simple Moving Average Indicator

The **simple moving average** sums the prices (you can choose from the closing price, the VWAP time-weighted price or the high/low/close average price) for a specific number of data points and divides by that number. The calculation for a 3-bar simple moving average is:

(price_1) + (price_2) + (price_3) divided by 3

To apply a Simple Moving Average

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Simple Moving Average*.
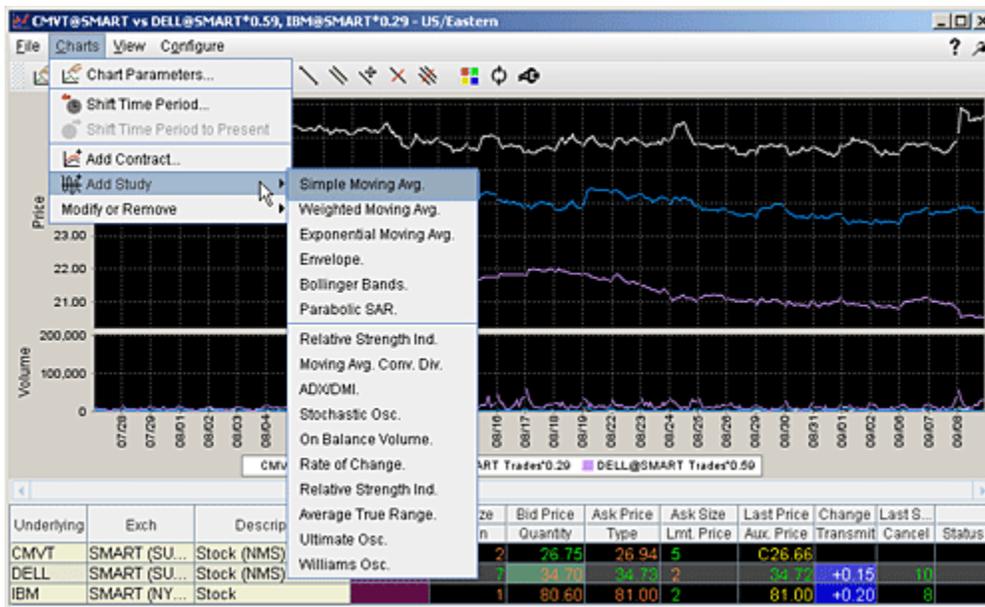
Apply Weighted Moving Average Indicator

The **weighted moving average** gives each data point a weight proportionate to its number in the sequence and divides by the sum of its weights. The calculation for a 3-bar weighted moving average is:

(1 x price_1) + (2 x price_2) + (3 x price_3) divided by 6, where 6 is the sum of the weights (1 + 2 + 3).

To apply a Weighted Moving Average

1   On the **Charts** menu select *Add Study*.

2   From the list of study indicators, select *Weighted Moving Average*.
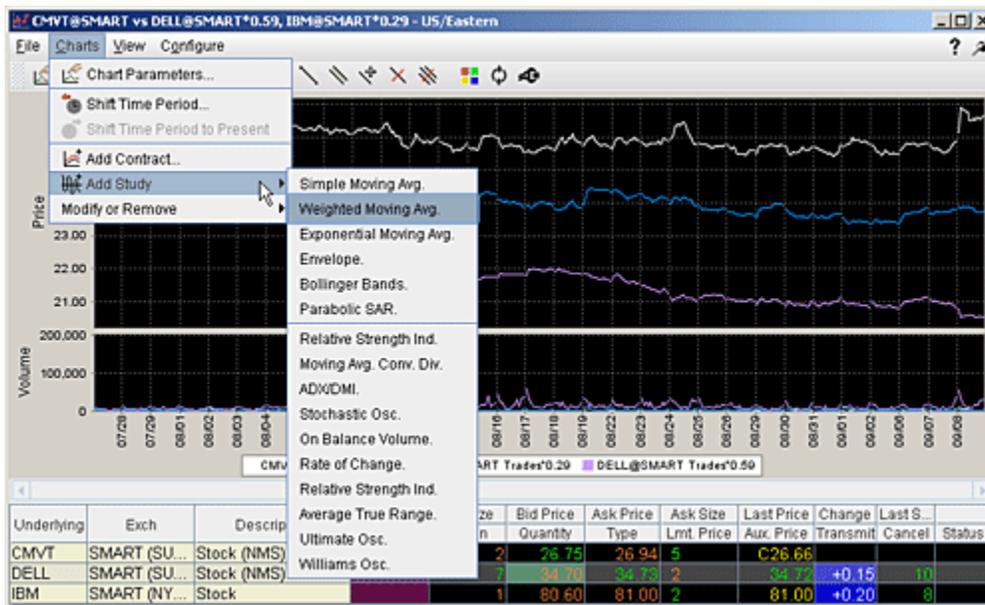
Market Scanners

- Create a Market Scanner
- All Market Scanner Types

Create a Market Scanner

The Market Scanners provide a quick scan of relevant markets and return the top contracts based on the instrument, parameter and filtering criteria you define.
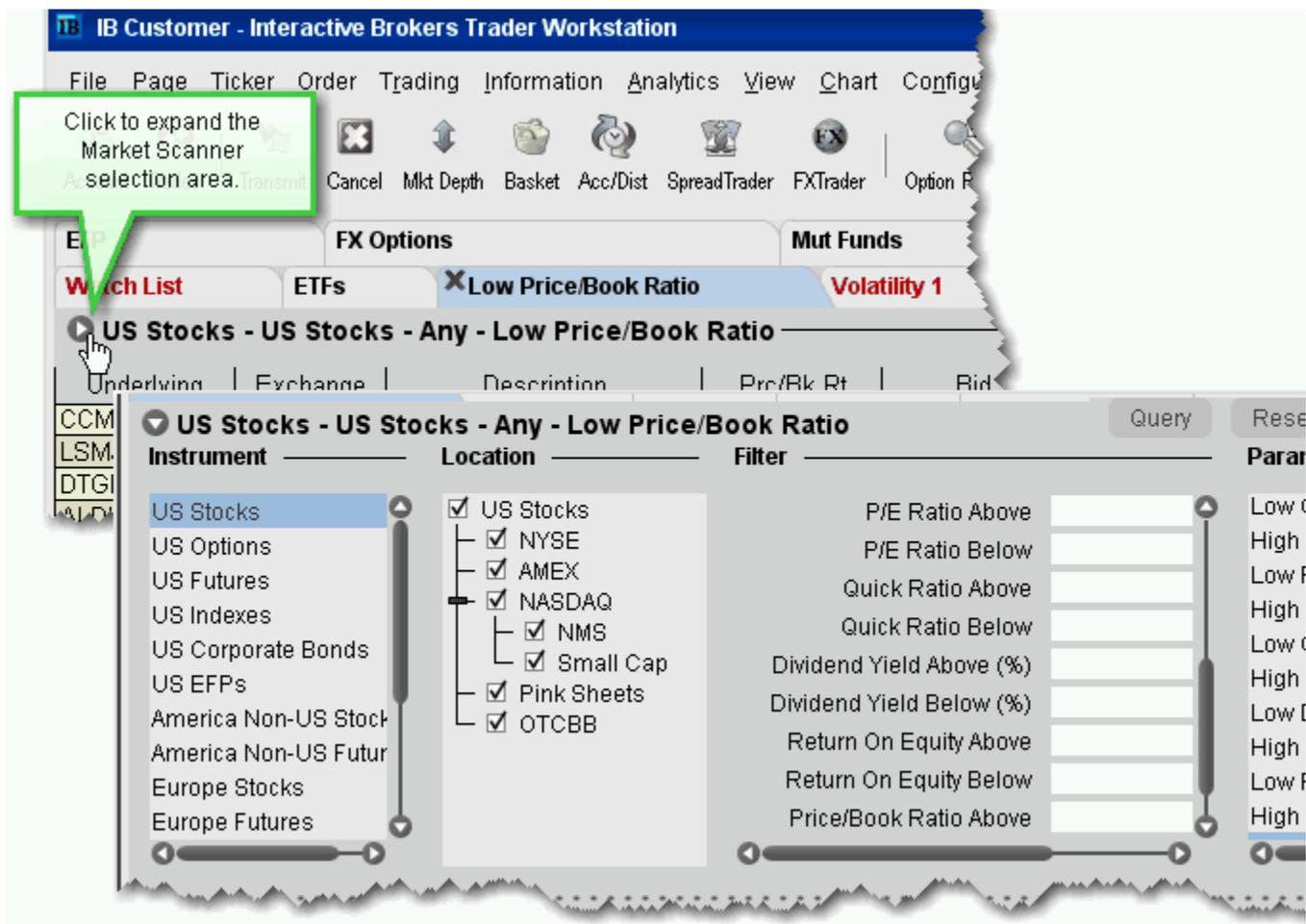
To create a Market Scanner page

1   On the **Page** menu select *Create Market Scanner*.

A new Market Scanner page is created, with the default scan for US Stocks, Low Price/Book Ratio.

2   Click the expand arrow in the top left corner next to *US Stocks* to display the criteria selection panel.

To define scan criteria

1   Select an instrument type from the **Instrument** list. Note that the scan title changes with each selection to reflect the criterion you select.

> **Note:** *Instruments are defined by region. "Global" scanners can scan an instrument across global markets.*

2   Choose the location/exchange whose data will be included in the market scan. The valid locations change in response to the instrument you selected in Step 1.

3   Use the **Filter** fields to narrow the contracts that will be returned in your query by characteristic. For example, you may only want to see the Top% US Stock Gainers within a certain P/E range, or with a capitalization above 2,000,000.

4   Choose a <u>Scanner parameter</u>, such as *Top% Gainers*, *Hot Contracts by Price* or *Top Option Implied Volatility* in the **Parameter** field.

5   Click *Query* to return the top contracts that meet your search criteria. Data is updated every 60 seconds. Most scans return the top 50 contracts; the High Dividend Yield scan for US Stocks returns the top 750 contracts.

> **Note:** *The Time in Scan field shows how long the asset has been included in the scan. It refreshes each minute when the data query updates.*

Note: You cannot modify the page layout or initiate an order from a *Market Scanner* page, but you can drag and drop a ticker onto another of your trading pages. You can create multiple Market Scanner pages and detach Market Scanner pages, but these are counted as trading pages, and the market data displayed is counted as active market data.

IB's daily <u>Options and Futures Intelligence Report</u> uses the TWS Market Scanner data as the basis for its commentary.

Market Scanner Types

Available market scans change based on the Instrument/Location criteria you select.
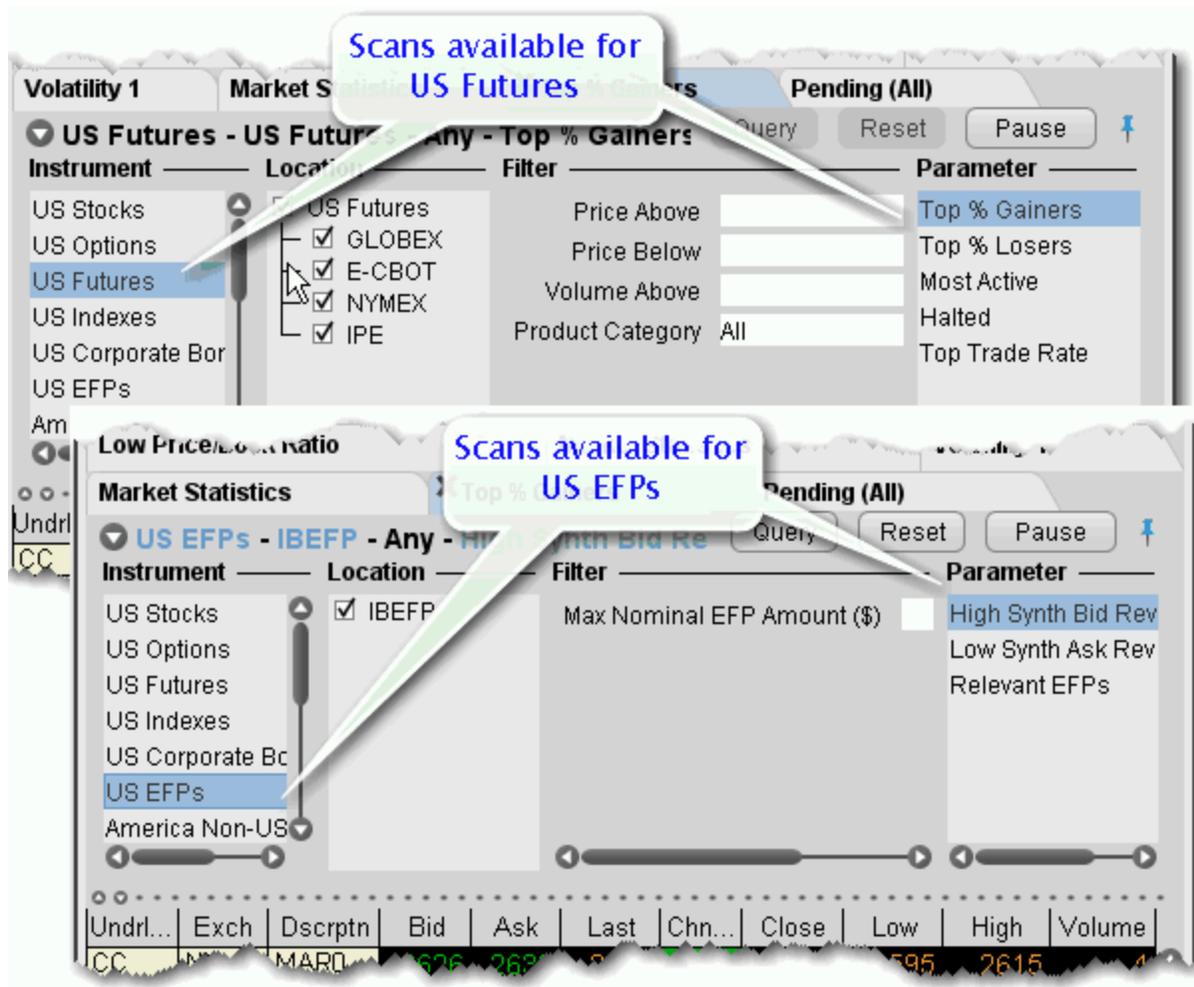
Market Scanner Parameters	
Parameter	**Description**
Top% Gainers	Contracts whose last trade price shows the highest percent increase from the previous night's closing price.
Top% Losers	Contracts whose last trade price shows the lowest percent increase from the previous night's closing price.
Most Active	Contracts with the highest trading volume today, based on units used (lots for US stocks; contract for derivatives and non-US stocks).

Market Scanner Parameters	
Not Open	Contracts that have not traded today.
Halted	Contracts for which trading has been halted.
Hot Contracts by Price	Contracts where: (lastTradePrice-prevClose)/avgDailyChange is highest in absolute value (positive or negative). The avgDailyChange is defined as an exponential moving average of the contract's (dailyClose-dailyOpen)
Hot Contracts by Volume	Contracts where: today'sVolume/avgDailyVolume is highest. avgDailyVolume is a 30-day exponential moving average of the contract's daily volume.
Top Trade Count	The top trade count during the day.
High Dividend Yield	Returns the top 750 US stocks with the *highest* dividend per share yield*.*
Top Trade Rate	Contracts with the highest number of trades in the past 60 seconds (regardless of the sizes of those trades). Displays the trades/minute field.
Top Price Range	The largest difference between today's high and low, or yesterday's close if outside of today's range.
Hot by Price Range	The largest price range (from Top Price Range calculation) over the volatility.
Top Volume Rate	The top volume rate per minute.
Top % Gainers Since Open	Shows contracts with the highest percent price INCREASE between the last trade and opening prices.
Top % Losers Since Open	Shows contracts with the highest percent price DECREASE between the last trade and opening prices.
Top Close-to-Open % Gainers	Shows contracts with the highest percent price INCREASE between the previous close and today's opening prices.
Top Close-to-Open % Losers	Shows contracts with the highest percent price DECREASE between the previous close and today's opening prices.
Highest Option Imp Vol*	Shows the top underlying contracts (stocks or indices) with the highest vega-weighted implied volatility of near-the-money options with an expiration date in the next two months.
Lowest Option Imp Vol*	Shows the top underlying contracts (stocks or indices) with the lowest vega-weighted implied volatility of near-the-money options with an expiration date in the next two months.
Top Option Imp Vol % Gainers*	Shows the top underlying contracts (stocks or indices) with the largest percent gain between current implied volatility and yesterday's closing value of the 15 minute average of implied volatility.

Market Scanner Parameters	
Top Option Imp Vol % Losers*	Shows the top underlying contracts (stocks or indices) with the largest percent loss between current implied volatility and yesterday's closing value of the 15 minute average of implied volatility.
High Option Imp Vol Over Historical*	Shows the top underlying contracts (stocks or indices) with the largest divergence between implied and historical volatilities.
Low Option Imp Vol Over Historical*	Shows the top underlying contracts (stocks or indices) with the smallest divergence between implied and historical volatilities.
Most Active by Opt Volume	Displays the most active contracts sorted descending by options volume.
Most Active by Opt Open Interest	Returns the top 50 underlying contracts with the (highest number of outstanding call contracts) + (highest number of outstanding put contracts)
High Opt Volume P/C Ratio	Put option volumes are divided by call option volumes and the top underlying symbols with the highest ratios are displayed.
Low Opt Volume P/C Ratio	Put option volumes are divided by call option volumes and the top underlying symbols with the lowest ratios are displayed.
High Option Open Interest P/C Ratio	Returns the top 50 contracts with the **highest** put/call ratio of outstanding option contracts.
Low Option Open Interest P/C Ratio	Returns the top 50 contracts with the **lowest** put/call ratio of outstanding option contracts.
Hot by Option Volume	Shows the top underlying contracts for highest options volume over a 10-day average.
13-Week High	The highest price for the past 13 weeks.
13-Week Low	The lowest price for the past 13 weeks.
26-Week High	The highest price for the past 26 weeks.
26-Week Low	The lowest price for the past 26 weeks.
52-Week High	The highest price for the past 52 weeks.
52-Week Low	The lowest price for the past 52 weeks.
High Growth Rate (Reuters)	Returns the top 50 contracts with the *highest* Earnings Per Share growth rate. Note that a new field, **Growth Rate**, is inserted after the Description field to display the EPS per contract.
Low Growth Rate (Reuters)	Returns the top 50 contracts with the *lowest* Earnings Per Share growth rate. Note that a new field, **Growth Rate**, is inserted after the Description field to display the EPS per contract.
High P/E Ratio (Reuters)	Returns the top 50 contracts with the *highest* Price to Earnings ratio. Note that a new field, **P/E Ratio**, is inserted after the Description field to display the P/E ratio per contract.

Market Scanner Parameters	
Low P/E Ratio (Reuters)	Returns the top 50 contracts with the *lowest* Price to Earnings ratio. Note that a new field, **P/E Ratio**, is inserted after the Description field to display the P/E ratio per contract.
High Quick Ratio (Reuters)	Returns the top 50 contracts with the *highest* "Quick" ratio. Note that a new field, **Quick Ratio**, is inserted after the Description field to display the Quick Ratio per contract.
Low Quick Ratio (Reuters)	Returns the top 50 contracts with the *lowest* "Quick" ratio. Note that a new field, **Quick Ratio**, is inserted after the Description field to display the Quick Ratio per contract.
High Dividend Yield (Reuters)	Returns the top 50 contracts with the *highest* dividend per share yield. Note that a new field, **Div Per Share**, is inserted after the Description field to display the per share dividend yield per contract.
Low Dividend Yield (Reuters)	Returns the top 50 contracts with the *lowest* dividend per share yield. Note that a new field, **Div Per Share**, is inserted after the Description field to display the per share dividend yield per contract.
High Return on Equity (Reuters)	Returns the top 50 contracts with the *highest* return on equity. Note that a new field, **Return on Equity**, is inserted after the Description field to display the return on equity per contract.
Low Return on Equity (Reuters)	Returns the top 50 contracts with the *lowest* return on equity. Note that a new field, **Return on Equity**, is inserted after the Description field to display the return on equity per contract.
High Price/Book Ratio (Reuters)	Returns the top 50 contracts with the *highest* price to book value per share ratio. Note that a new field, **Price/Book Ratio**, is inserted after the Description field to display the return on equity per contract.
Low Price/Book Ratio (Reuters)	Returns the top 50 contracts with the *lowest* price to book value per share ratio. Note that a new field, **Price/Book Ratio**, is inserted after the Description field to display the return on equity per contract.
Market Statistics	Let's you see exchange-specific statistics for: • Advancing, declining and unchanged issues • Up, down, unchanged and total volumes • TRIN and TICK indicators To use, select *Market Statistics* from the **Instruments** list, then select an exchange from the **Location** dropdown.
Penny Options	Opens the Penny Options page.
High Synth Bid Rev Yield	Highlights the highest synthetic EFP interest rates available. These rates are computed by taking the price differential between the SSF and the underlying stock and netting dividends to calculate an annualized synthetic implied interest rate over the period of the SSF. The High rates may present an investment opportunity.

Market Scanner Parameters	
Low Synth Bid Rev Yield	Highlights the lowest synthetic EFP interest rates available. These rates are computed by taking the price differential between the SSF and the underlying stock and netting dividends to calculate an annualized synthetic implied interest rate over the period of the SSF. The Low rates may present a borrowing opportunity.
Relevant EFPs	This tool scans the US market and returns all Exchange for Physicals relevant to your portfolio, based on the stock and SSF positions you currently hold. For more information on using EFPs to reduce your trading cost, see the Relevant EFPs user guide topic.

*30-day (V30) Implied Volatilities:

Implied volatility is calculated using a 100-step binary tree for American style options, and a Black-Scholes model for European style options. Interest rates are calculated using the settlement prices from the day's Eurodollar futures contracts, and dividends are based on historical payouts.

The IB 30-day volatility is the at-market volatility estimated for a maturity thirty calendar days forward of the current trading day. It is based on option prices from two consecutive expiration months. The first expiration month is that which has at least eight calendar days to run. The implied volatility is estimated for the eight options on the four closest to market strikes in each expiry. The implied volatilities are fit to a parabola as a function of the strike price for each expiry. The at-the-market implied volatility for an expiry is then taken to be the value of the fit parabola at the expected future price for the expiry. A linear interpolation (or extrapolation, as required) of the 30-day variance based on the squares of the at-market volatilities is performed. V30 is then the square root of the estimated variance. If there is no first expiration month with less than sixty calendar days to run, we do not calculate a V30.

TICK & TRIN Market Indicators

Use market indicators to help spot trends. The Tick Index indicator shows the number of stocks trading on an uptick minus the number of stocks trading on a downtick. The TRIN (Trader's Index) indicator is a technical analysis indicator calculated by dividing the advances-to-declines spread by the volume of advances to declines.

To see tick and trin indicators

   1   use the Search feature to enter "tick" or "trin" and select the index you want to view.

The date lines appear on your trading window, and the Index Arb meter opens with the Index Price. Note that you can not trade these indexes.

10

Configure TWS

TWS is completely customizable. Global Configuration settings let you change details on all TWS windows. The Page Layout feature provides control over your trading pages, and the Feature Selector allows you to hide or display features according to your needs.

- Global Configuration
- Display Configuration
- Trading Tools
- Information Tools
- Configure Order Defaults and Presets
- Page Layout
- Trading Page Field Descriptions
- Feature Selector
- Workspaces and Panels

Global Configuration

Introduction

Every TWS page or tool has configuration settings to allow you to customize. Global Configuration is the starting point to configuring any and all TWS components.

- Using Global Configuration
- Enable API Connections
- Configure Auto Export
- eSignal Market Data
- Configure Lock and Exit Parameters
- General Configuration
- Assign HotKeys
- Display TWS Messages
- Quick Stock Entry Exchange Configuration
- Configure SmartRouting Directives
- Assign Sounds to Events
- Configure Volatility and Analytics Settings
- Display Configuration
- Configure Style Settings
- Ticker Row Settings
- Toolbar Configuration

Using Global Configuration

The global Configuration window is your starting point for defining system-wide default configuration settings.

To access Global Configuration

1 On the **Configure** menu, select *Global Configuration*, or click the configuration wrench icon from any screen.
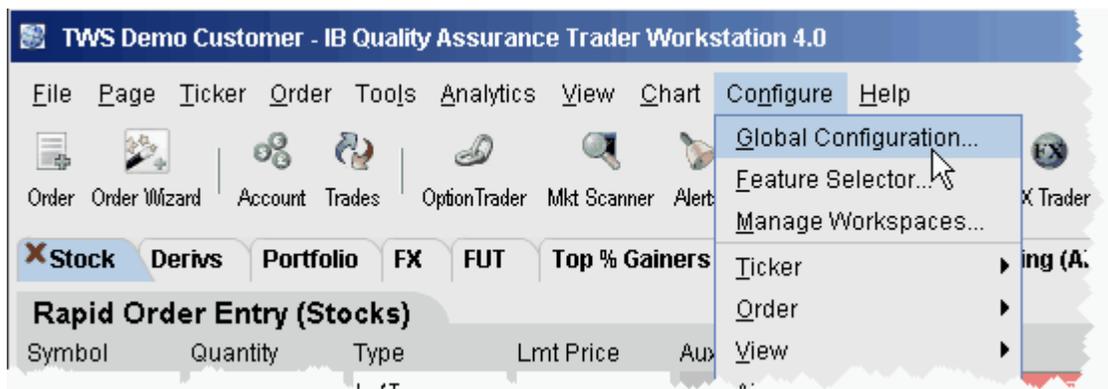
2 Scroll down the left pane to select an item and open it in the right pane.
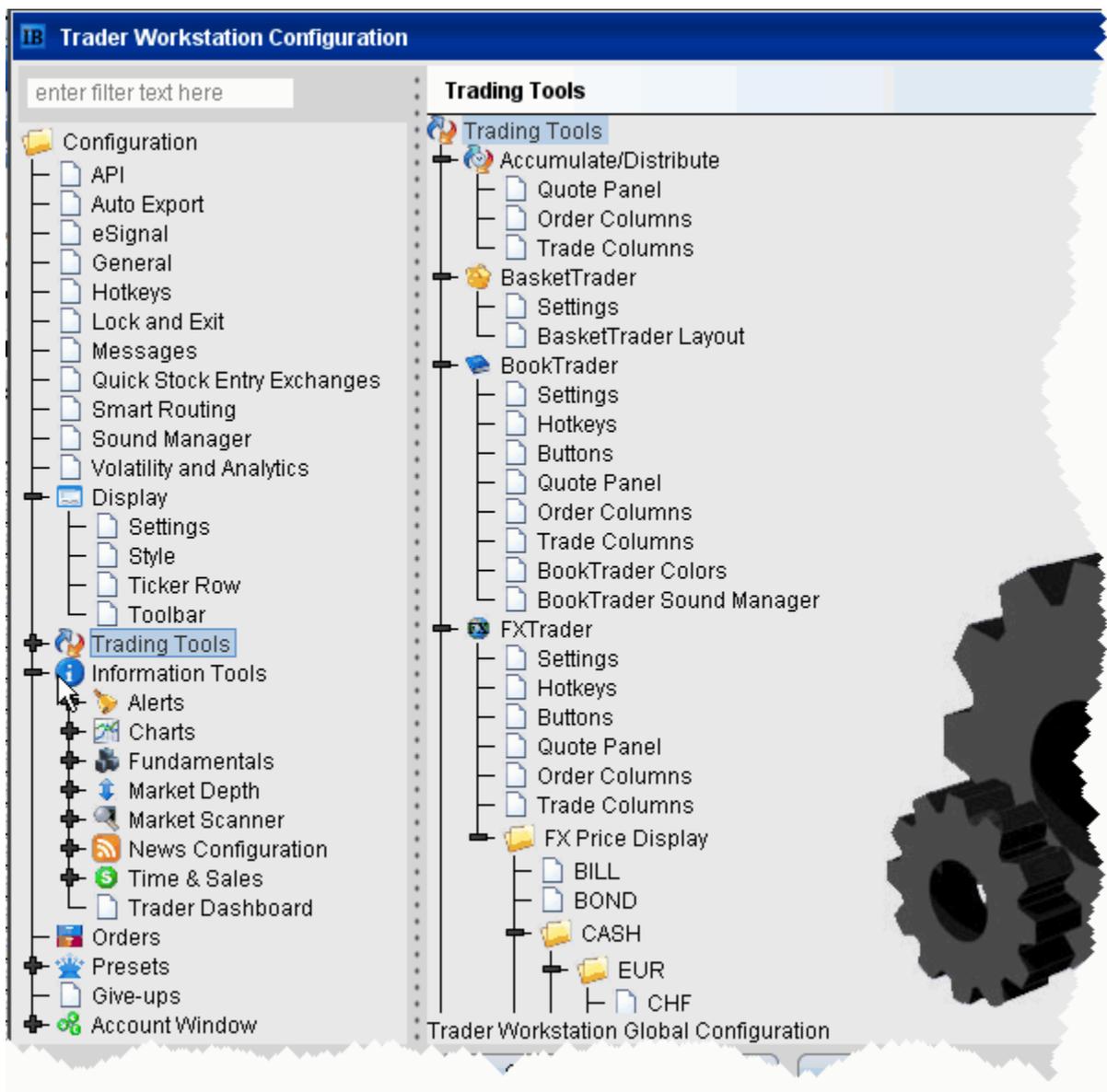
You can also use the text search box at the top of the window to find the page you want to configure. The list is filtered to show only those pages which include the text you've entered in their title. To view all categories again, click the Pages icon to the right of the **Search** box.

General Configuration

Use the General configuration page to set miscellaneous defaults such as automatic future rollover notification, audit trails and language settings.

To define general configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *General* in the left pane.

3   Use the right pane to set these parameters:

General

- **Keep application on top** - check to keep the main trading screen on top of all other active windows.
- **Auto future rollover** - when checked, you will be notified via a pop-up message just prior to expiration, and you will have the option to roll over your futures.
- **Create audit trail** - when checked, you can elect to view a condensed or extended version of your audit trail, which includes all trade activity for your account.
- **Show tip of the day** - when checked, the Tip of the Day displays on startup.

Browser

- **Enter complete path to browser** - for standalone users, modify the browser location if necessary.

Language

- **Current Language** - displays the current TWS language. Click Select to choose another language. Click OK, then log out of TWS to activate the language change.

Table Editing

- **Enable keyboard entry on order lines** - when checked, you can tab through an order line and modify field values without using your mouse. Each field becomes editable when you land in it, and the Enter key works like the left mouse click.

Order Wizard

- Use the radio buttons to have TWS open the wizard automatically, or to manually control the display of the wizard using the toggle icon on the trading toolbar.

Assign HotKeys

Assigning actions to specific keys and key combinations helps you rapidly create and transmit orders to the marketplace. You can assign any keystroke, or a combination of the "Ctrl" and "Shift" keys with one of the 26 keyboard letters, to map specific order creation and order transmission commands, such as buy, sell, transmit and cancel.
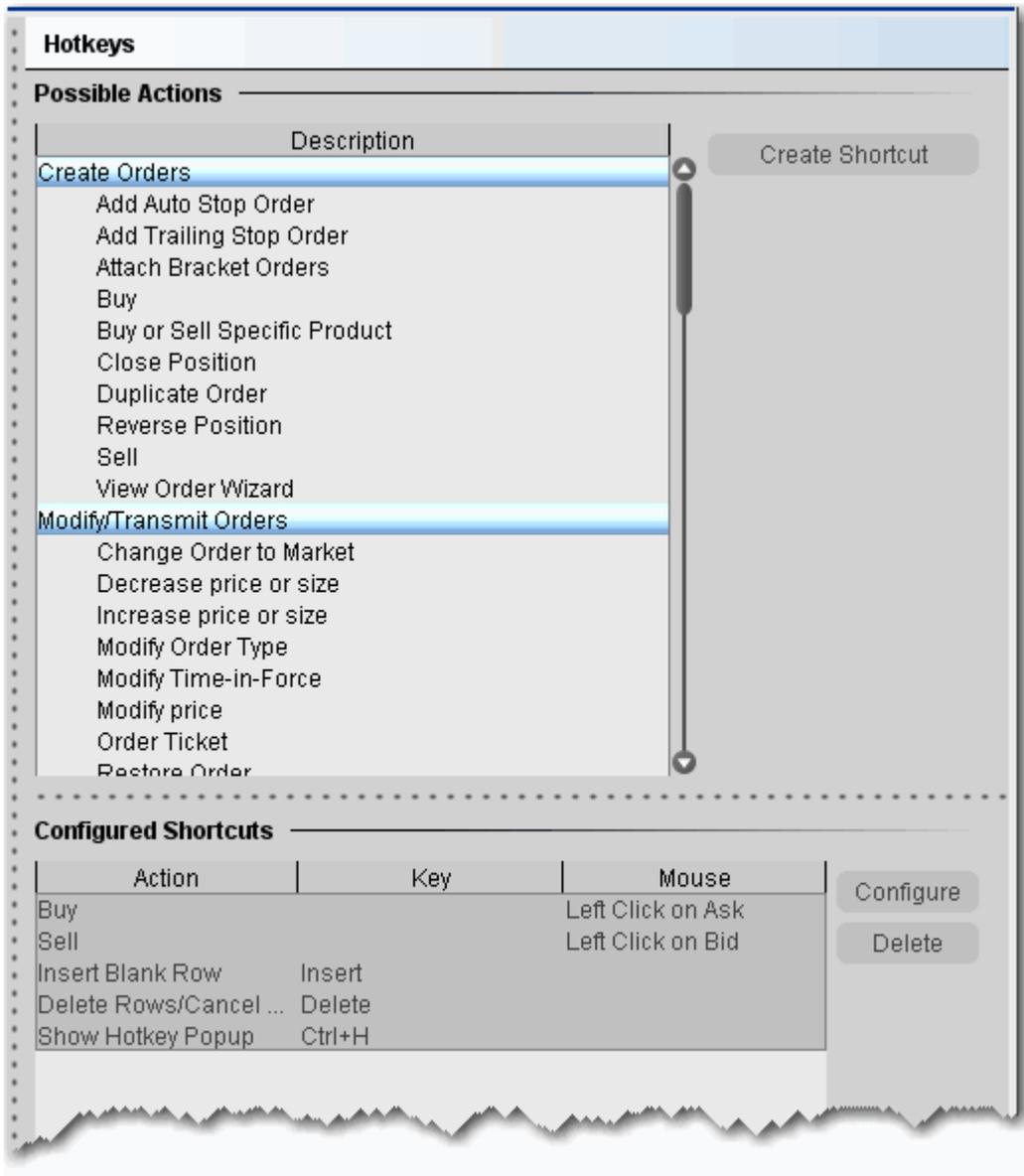
To record hot keys

1   On the **Configure** menu, select *Global Configuration*, then select *Hot Keys* from the left pane.

2 In the *Possible Actions* area, choose an action to which you want to assign a hot key and click **Create Shortcut**.

3 In the Keyboard area, click **Record**. If you already have a hot key recorded for the selected action, it is displayed in the *Current Key Shortcut* field.

4 Press the actual keystroke or keystroke combination you will use to complete this action. The system records your keystroke and displays it in the *Current Key Shortcut* field.

Note: If the *Customize* tab is visible, you can customize your hot key to be more specific. For example, after you record a Buy hot key, customize it to create a bracket or trailing stop limit order.

After you record the desired hot keys and click **Close**, the mapped keys are displayed on the status line at the bottom of the screen. To re-record a hot key assignment, follow steps 1-4 above. To remove a hot key assignment from an action, click **Clear**.

Specific Hot Key Procedures and Information

- **Create a Buy/Sell hot key for a specific order type** (i.e. Buy Limit Order, Sell Stop Order)

    a On the **Configure** menu click *Hot Keys*

    b Select *Buy* or *Sell* as the Action and click **Create Shortcut**.

    c Click the *Customize* tab.

    d In the **Order Type** drop-down select the order type for which you want to create a hot key.

    e Populate any necessary order type-related fields.

    f Click the *Shortcuts* tab.

    g Click **Record** and press the keystroke combination that will represent the order type hot key.

    h Verify that the hot key has been properly recorded in the *Shortcuts* section.

- **Create a Buy/Sell hot key for a specific contract** (i.e. Buy Limit Order for XYZ)

    a On the **Configure** menu click *Hot Keys*

    b Select *Buy* or *Sell Specific Product* as the Action and click **Create Shortcut**.

    c Click the *Customize* tab.

    d In the **Underlying** field, enter an underlying symbol.

    e Populate the **Order** related fields.

    f Click the *Shortcuts* tab.

g   Click **Record** and press the keystroke combination that will represent the order type hot key.

h   Verify that the hot key has been properly recorded in the *Shortcuts* section.

• **Instantaneous transmission**

When you create a buy or sell hot key for any order type, you can elect to "Transmit the order instantaneously" by checking this feature at the bottom of the *Customize* page. When you activate instantaneous transmission, using the hot key combination creates and transmits the order without giving you time to review and modify order parameters.

Leave this feature unchecked to have the hot key combination create an order and leave it on the trading screen for you to manually transmit.

● **Attach bracket orders**

a   On the **Configure** menu, select *Hot Keys*

b   Select *Buy* or *Sell* as the Action and click **Create Shortcut**.

c   Click the *Customize* tab.

d   In the **Attached Orders** area, check *Add Simple Bracket*.

e   In the **Bracket Orders** area:

• In the **Lmt Price (+/- offset)** field select *Bid*, *Ask*, *Last* or *None* as the basis for the Limit Price portion of the bracket order, and enter an offset amount if desired.

• Select a **Stop Type.**
• Set the Stop price and offset for the stop trigger price.
• For **Stop Limit** orders, set the Stop Limit price and offset.

f   On the **Shortcuts** page record the hot key combination, and click OK.

● **Create Increase (Decrease) Order Size hot key**

a   On the **Configure** menu select *Hot Keys*.

b   Select *Increase (Decrease) price or size* and click **Create Shortcut**.

c   On the **Customize** tab select *Size* in the **Field** drop-down.

d   Set the **Num Ticks** value to represent the increment by which to increase (decrease) the default order size.

e   On the **Shortcuts** page, click **Record** and press the hot key combination to represent *Increase (Decrease) order size*.

f   Close the dialog box.

● **Create Increase (Decrease) Limit (Aux.) Price hot key**

a   On the **Configure** menu select *Hot Keys*.

b   Select *Increase (Decrease) price or size* and click **Create Shortcut**.

c   On the **Customize** tab select *Limit Price* (*Aux. Price*) in the **Field** drop-down.

d   Enter the *Num Ticks* increment by which you want the hot key to increase (decrease) the price value.

e   On the **Shortcuts** page, click **Record** and press the hot key combination to represent *Increase (Decrease) Limit (Aux.) Price*.

f   Close the dialog box.

●   **Use All Available for Buy/Sell Order Quantity**

a   On the **Configure** menu click *Hot Keys*

b   Select *Buy* or *Sell* as the Action and click **Create Shortcut**.

c   Click the *Customize* tab.

d   In the **Size** field, select *Available,* then click OK.

Now when you use the Buy or Sell hotkey, the order quantity will be determined by the number of available contracts as shown in the Ask Size or Bid Size field.

•   **Change order type/time in force**

a   On the **Configure** menu select *Hot Keys*.

b   In the **Modify/Transmit Order** section, select *Modify Order Type* or *Modify Time in Force* and click **Create Shortcut**.

c   On the **Shortcuts** page, click **Record** and press the hot key combination.

d   Close the dialog box.

•   **Open the Alerts box to view/set alerts**

a   On the **Configure** menu select *Hot Keys*.

b   In the **Real-time Activity Monitoring** section, select *View Alerts* and click the **Create Shortcut** button**.**

c   On the **Shortcuts** page, click **Record** and press the hot key combination, for example Ctrl + A.

d   Close the dialog box.

e   Click **OK.**

When you use Ctrl + A from the TWS, the Alerts box opens displaying your current alerts. To create an alert, click the **New** button.

●   **Set Auto Stop**

a   On the **Configure** menu select *Hot Keys*.

> **b** In the **Real-time Activity Monitoring** section, select *Add Auto Stop Order.*
>
> **c** Click **Record** and press the hot key combination, for example Ctrl + A.
>
> **d** Close the dialog box.
>
> **e** Click **OK.**

Now when you use Ctrl + A from the TWS, you will attach a Stop order to the selected order.

> ● **Set Auto Trailing Stop**
>
> > **a** On the **Configure** menu select *Hot Keys*.
> >
> > **b** In the **Real-time Activity Monitoring** section, select *Add Auto Trailing Stop Order.*
> >
> > **c** Click **Record** and press the hot key combination, for example Ctrl + T.
> >
> > **d** Close the dialog box.
> >
> > **e** Click **OK.**

Now when you use Ctrl + T from the TWS, you will attach a Trailing Stop order to the selected order. The trailing amount used is the value defined in the order defaults.

Several keyboard keys cannot be used as hot keys, including: *Alt*, *Page Up*, *Page Down*, *Print Screen*, *Home*, *Backspace*, and the *Windows* key. We reserve the right to activate these keys or to remove hot key functionality from a key at any time without notice. Attempted use of invalid keys invokes the message "The hot key you selected is not valid. Please select another hot key combination."

Note: The standard hot keys do not function within the Rapid Order Entry panel. When you record a hot key for one of the rapid order entry actions, you must use "Ctrl" plus a character key, or the Escape key.

Assign Mouse Shortcuts

You can record mouse-click shortcuts to specific order creation and transmission commands, such as buy, sell, transmit and cancel and many others.

To assign a mouse shortcut

1 On the **Configure** menu, select Global Configuration, then select *Hot Keys*.

2 In the *Possible Actions* list, choose an action to which you want to assign a mouse shortcut and click **Create Shortcut**.

3 In the **Mouse** area, use the *Market Data Field* drop-down to choose the field you click in to activate the shortcut.
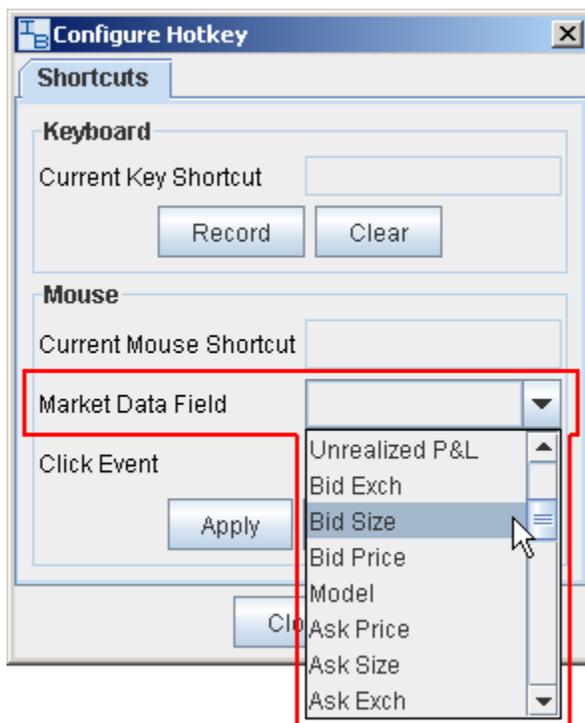
4   In the *Click Event* drop-down, choose the click method you will use in the selected field to initiate the shortcut.
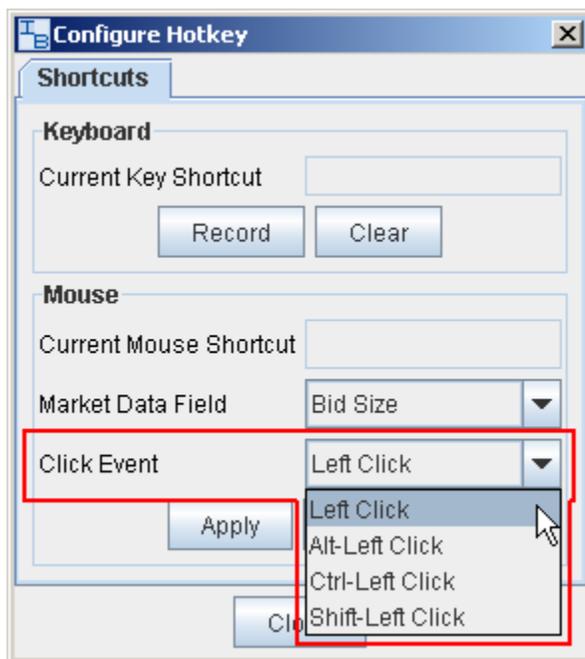
5   Click **Apply,** then click **Close.**

Example: If you choose **Cancel Order** in *Possible Actions*, **Bid Size** in *Market Data Field,* and **Left Click** as the Click Event*,* when you use your mouse to click (Left Click) in the **Bid Size**

column, you will cancel the order. Note that you must have the appropriate field displayed to use this mouse shortcut! To hide and display fields, use the Layout Manager.

Note: Mouse shortcuts will override default mouse actions. To return to default mouse action, you must re-set the action as a shortcut in the Hot Keys and Mouse Shortcuts box.

Customize Hotkeys

After you map a hot key, use options on the *Customize* tab to make your hot key action more specific.

To customize a hot key

1 On the **Configure** menu, click *Hot Keys*.

2 In the **Shortcuts** area, choose an action to whose hot key you want to customize and click **Configure**.

3 Click the *Customize* tab and set parameters to support the customized hot key.

The customized mapped keys are displayed on the status line at the bottom of the application.

Display TWS Messages

Each time you receive an information or confirmation message in TWS, we include a checkbox in the bottom left corner with the text "Don't display this message again." If you elect to hide a message, you can enable it again at any time using the **Messages** section of the Global Configuration tool.

To enable a TWS message

1   On the **Configure** menu select *Global Configuration.*

2   Click *Messages* in the left pane.

3   Use the right panel to check any messages you want to enable.

Note: This page can only be used to enable messages that you have turned off, not to disable messages. We want to ensure you have read each message at least one time before you elect to disable it.

Messages

Message Name ⊙	Dflt Actn	Enbld
Confirm order submission	Yes	☐
Confirm overwrite existing order ticket	Yes	☐
Market data request rejected	Hidden	☐
Maximum number of tickers has been exceeded	Hidden	☐

Configure Volatility and Analytics Settings

Use the Volatility and Analytics configuration page to define default settings for both volatility orders and Interactive Analytics.
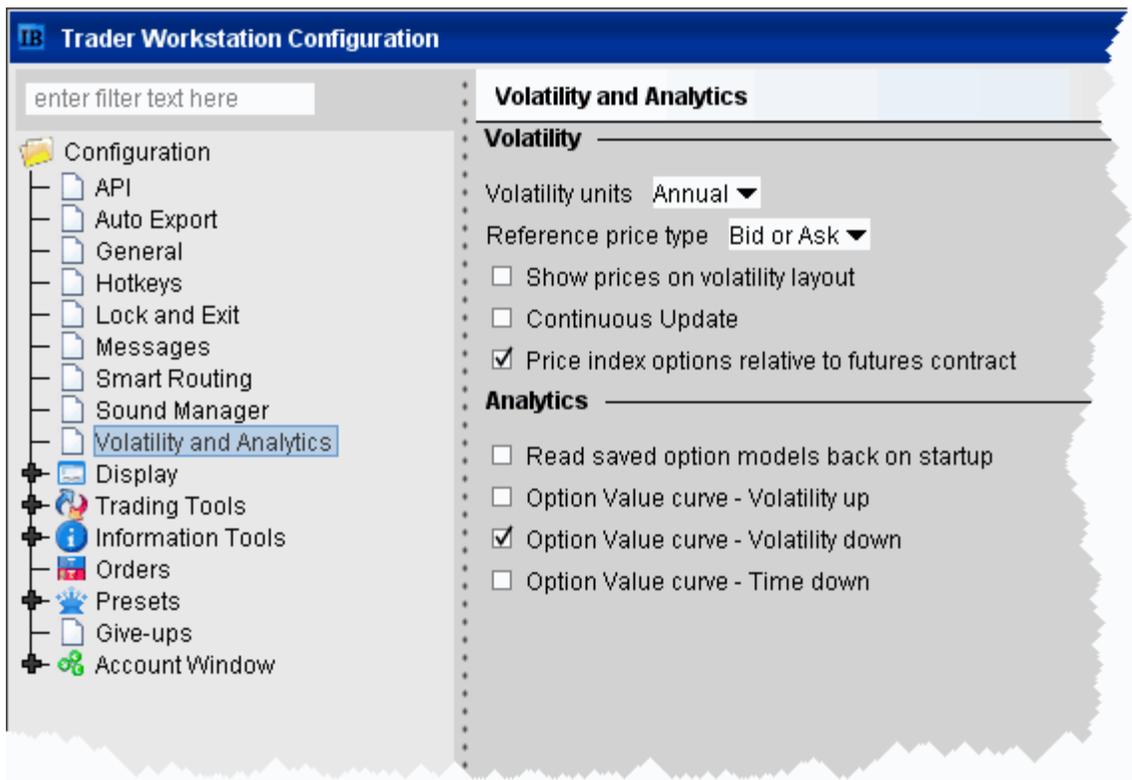
To define default Volatility configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *Volatility and Analytics* in the left pane.

3   Use the Volatility section in the right panel to set these parameters:

- *Volatility units* - choose Annual or Daily display.

- *Reference price type* - Choose **Bid or Ask** use the NBB (bid) when buying a call or selling a put and the NBO (ask) when selling a call or buying a put. Choose **Average** to use the average of the best Bid and Ask. This price is also used to compute the limit price sent to an exchange (whether or not Continuous Update is selected), and for stock range price monitoring.

- *Show prices on volatility layout* - when checked, the volatility page displays prices the same as on other pages with volatility in parentheses. If unchecked (which is the default) values in the Price columns will be the volatility.

- *Continuous Update* - when checked, the checkbox in the Continuous Update field is automatically checked and enabled. You can de-select Continuous Update on a per order basis.The Continuous Update feature monitors the underlying price and will update the price of the order if the price of the underlying instrument changes significantly. **Note that you can only use Continuous Update for three active orders at a time.**

- *Price index options relative to futures contract* - when checked, you can price smart-routed Volatility index option orders off a selected futures price from the **Reference Contract** field on the order line.

To define default Analytics configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *Volatility and Analytics* in the left pane.

3   Use the Analytics section in the right panel to set these parameters:

- *Read saved option models back on startup -*
- *Option Value curve Volatility up* - shows a different scenario on the Option Analytics plot. Uses a blue line to show a raise in the implied volatility by 15% in relative change* using a blue line.
- *Option Value curve Volatility down* - shows a different scenario on the Option Analytics plot. Uses a red line to show a reduction in the implied volatility by 15% in relative change*.
- *Option Value curve Time down* - decreases the time to expiry by one calendar day.

*For an example of a relative percent change, if the current implied volatility of an option is 10%, a 15% relative change would result in an implied volatility of 11.5%, calculated as follows:

10% * (1 + 0.15) = 11.5%.

Configure SmartRouting Directives

You can define event-specific directives for contracts routed through IB SmartRouting, specifically excluding exchanges and setting a price cap by defining the acceptable distance from the NBBO.
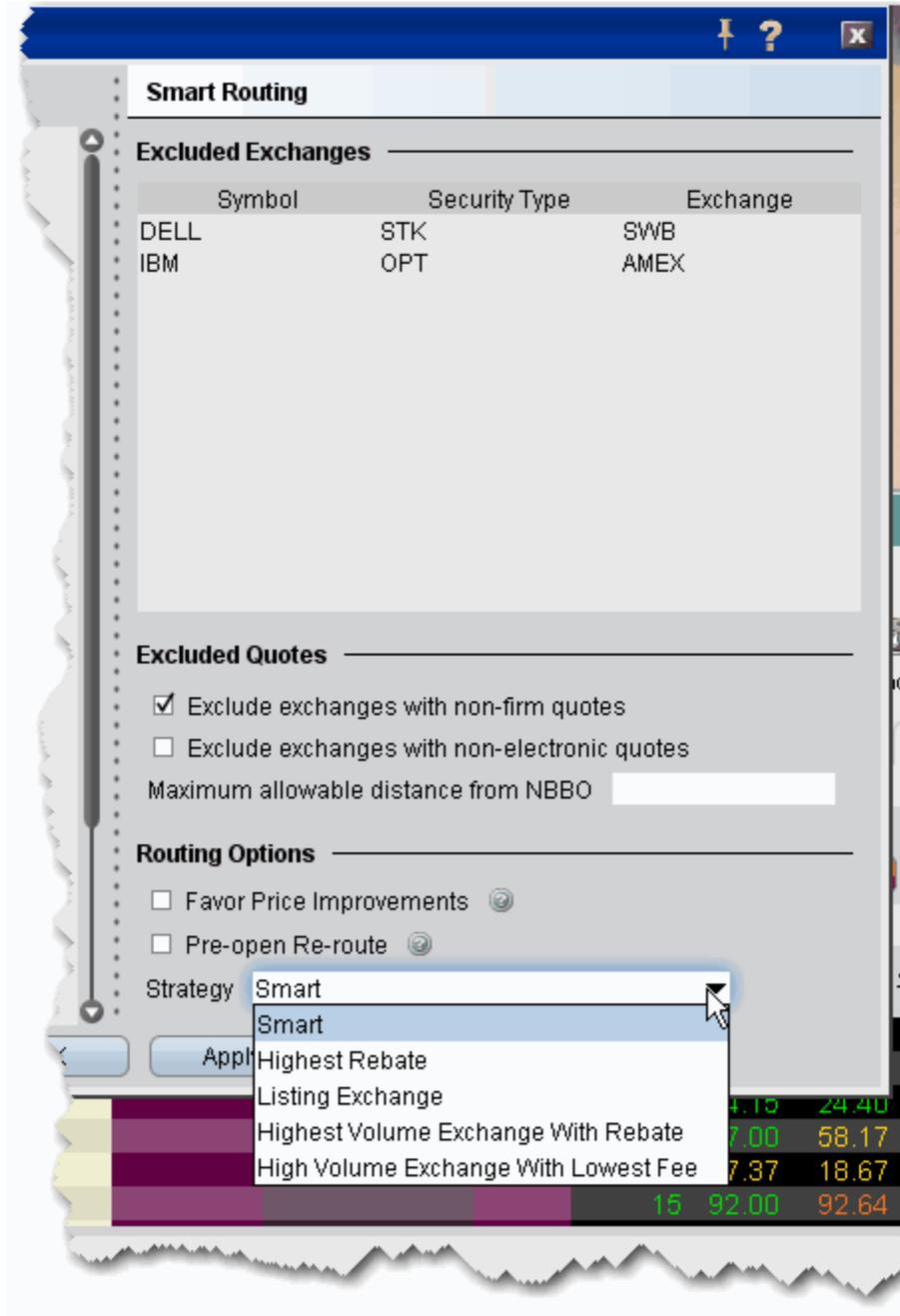
To modify SmartRouting functionality

1   On the **Configure** menu select *Global Configuration.*

2   Click *Smart Routing* in the left pane.

3   Use the right panel to set these parameters:

Excluded Exchanges

Use this area to direct SmartRouting NOT to route to a specific exchange for a specific contract. Enter the underlying and select the security type. Valid exchanges that may be excluded are available in the Exchange drop down list.

Excluded Quotes

- Exclude exchanges with non-firm quotes.

- Exclude exchanges whose quotes are not automatically executable. If this option is selected, IB will use its best efforts to determine which exchanges' quotes are immediately automatically executable, and which exchanges' quotes would require manual (human) handling, and IB will route only to those exchanges offering automatic execution. Please note that while IB will use its best efforts, it is not always possible to determine whether a quote is automatically executable.

- Define the NBBO price cap by entering the "maximum allowable distance from NBBO." Note that NBBO price capping supersedes the exclusion of non-firm quotes, i.e. your order will be routed to a non-firm quote within the price cap over a firm quote outside the price cap.

IMPORTANT NOTE: If you choose to: 1) exclude quotes from certain exchanges; 2) exclude non-firm quotes; or 3) exclude exchanges whose quotes are not automatically executable, your order may not be executed at the best posted price nationally (the "NBBO"). This is because one of the exchanges that you chose to exclude might have the best posted price but that exchange will be bypassed by the IB SmartRouting system on your instruction.

In addition, if you exclude certain exchanges from the eligible SmartRouting destinations and your order is routed to another exchange with an inferior posted price, your order may not be executed by the exchange to which it is sent because that exchange or ECN may not be willing to execute at an inferior price, or your order may not be marketable at that exchange. You should carefully evaluate all of these factors before deciding whether to exclude certain exchanges from the eligible IB SmartRouting destinations.

Routing Options

Seek Price Improvements

If checked, Smart routing will sweep certain exchanges for hidden liquidity at more favorable prices. This may result in slower executions.

Pre-Open Re-route

This allows you to route orders to major exchanges three minutes before the open. For orders submitted before the open, checking this box ensures your orders are routed prior to the

open. This directive only applies to stocks listed on a major exchange, and cannot be used if the *Ignore Opening Auction* order attribute is set.

Strategy

Unbundled customers have the ability to choose from a list of Smart routing strategies for non-marketable stock orders to complement your trading strategy. Set a default strategy from here, and when necessary you can also modify the strategy on a per-order basis from the Order Ticket, using the Miscellaneous tab.

Available strategies include:

- Smart - allows the Smart router to choose the best destination to maximize the rebate. This is the default strategy if no other is selected.
- Highest Rebate - Routes to the exchange with the highest rebate
- Listing exchange - this is the current Smart process and routes to the listing exchange for the contract.
- Highest volume exchange with rebate
- Highest volume exchange with lowest taker fee

To change your pricing structure from bundled to unbundled and take advantage of this feature, log in to Account Management, and select **Account Administration** and then *Pricing Structure* from the left contents pane.

Assign Sounds to Events

Use the **Sound Manager** to modify sounds assigned to trading events.

Note: To hear sounds other than a beep on your computer, you must have a sound card installed.
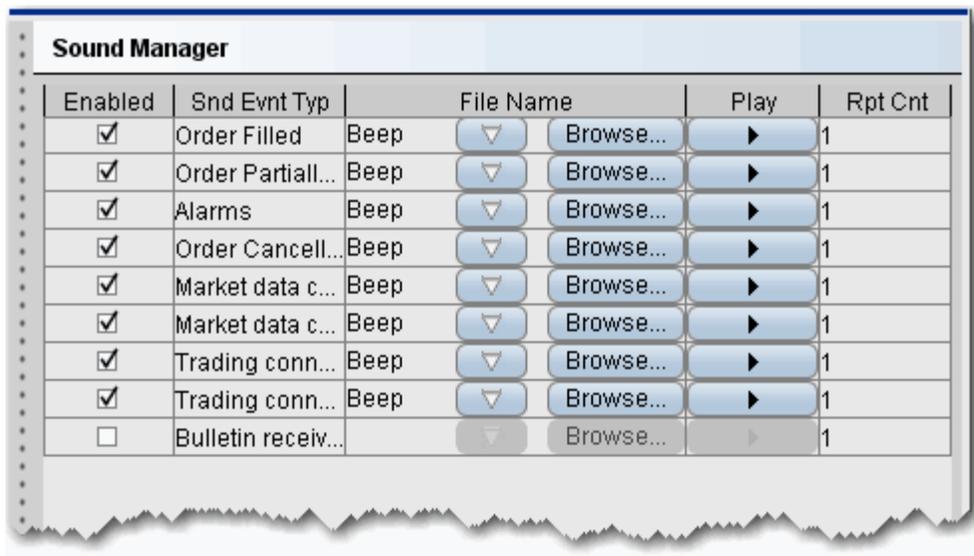
To configure the Sound Manager

1 On the **Configure** menu select *Global Configuration.*

2 Click *Sound Manager* in the left pane.

3 Check to enable a sound. Uncheck to disable a sound.

4 To modify the default beep, use the dropdown arrow and choose a beep type.

5 To use a new sound file, click the Browse button and navigate to the .wav sound file. Use the Play arrow to hear the sound you have chosen.

6 Enter the number of times you want the sound to repeat when it is invoked.
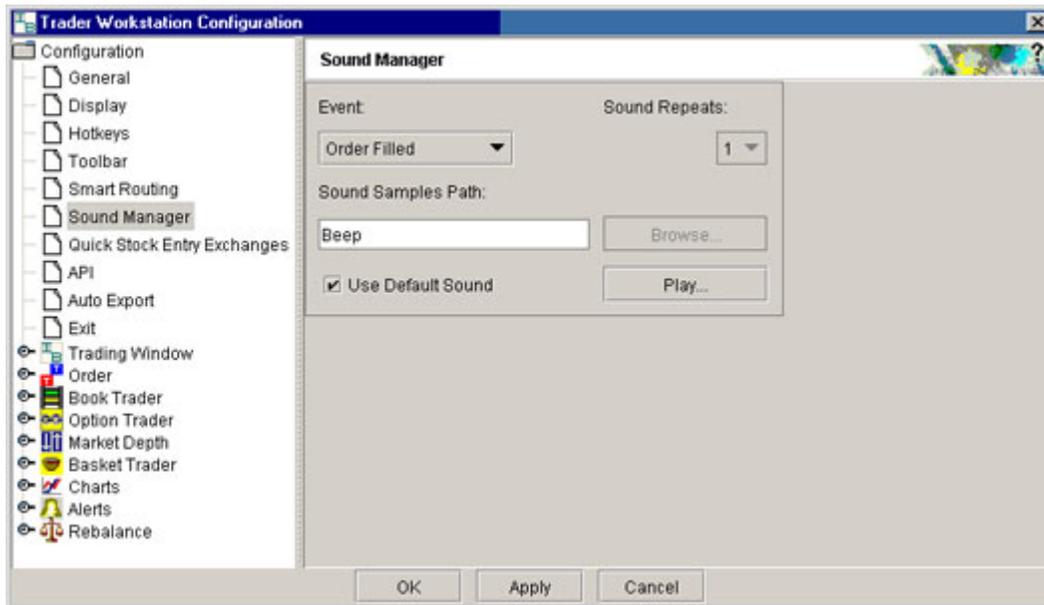
Quick Stock Entry Exchange Configuration

Quick Stock Entry is a page-level feature which automatically completes a market data line for a stock based on the underlying symbol you enter. To use Quick Stock Entry, you must:

- Create a list of order destinations.
- Enable a trading page for Quick Stock Entry.

To configure Quick Stock Entry destinations

1 On the **Configure** menu select *Global Configuration.*

2 Click *Quick Stock Entry Exchanges* in the left pane.

3 In the right pane, click **Add**, enter a destination and click OK.

4 Add as many order destinations as you would like to have available. You can add more destinations at any time.

> **Note:** *Add Smart to the list to be able to route Quick Stocks via Smart order routing.*

Clarify aggregate exchanges such as Smart by specifying the primary exchange also. For example, Smart/NYSE.

Enable API Connections

You must have your system running to use any of the API components.Note that more than one API application can simultaneously access a single instance. Except for DDE, the API application does not need to be running on the same computer on which the application is running.

To define API configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *API* in the left pane.

3   Use the right panel to set these parameters:
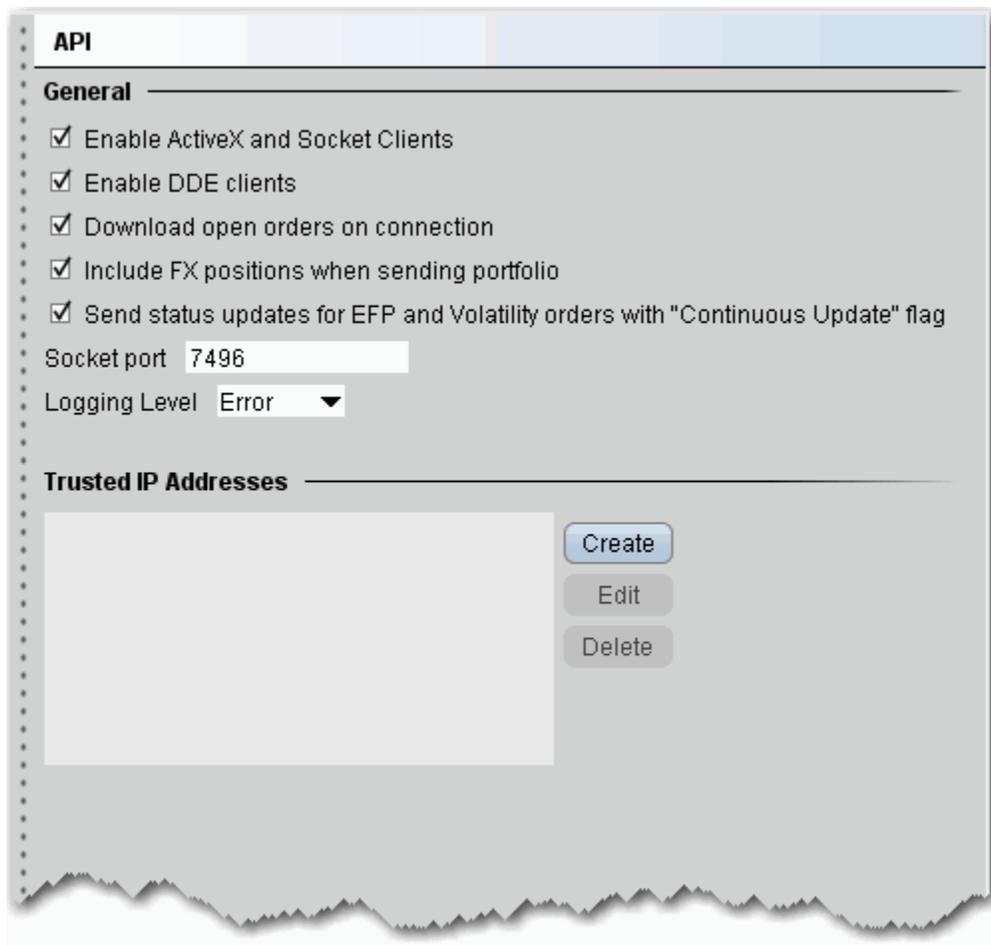
General

- **Enable Active X and Socket Clients** - Check to enable integration with TWS using ActiveX or socket clients including Java and C++. Download sample programs from the Software page on the IB website.

- **Enable DDE clients** - Check to enable integration with TWS through DDE. Download sample files from the TWS Software page on the website.

- **Download open orders on connection** - uncheck if you do not want to download all open orders when you connect to your API.

- **Include FX positions when sending portfolio** - If you have the Include FX Positions feature activated, all FX positions will be included when portfolio updates are sent the to API client. Uncheck this box if you don't want FX positions sent to the API client when the portfolio updates are sent.

- **Send status updates for EFP and Volatility orders with "Continuous Update" flag** - If you have Continuous Update activated for EFP or Volatility orders, all updates are sent to the API client by default. Uncheck if you don't want these updates sent from TWS to the API client.

- **Socket port** - Enter a socket port number which allows you to sync up multiple versions of TWS in your ActiveX spreadsheet.

- **Logging Level** - Set the level of log detail for the API text log. *System* gives the most general level of logging; *Detail* gives the most detailed level.

Trusted IP Addresses

If you connect to the API through a trusted IP address, the connection is not questioned. Otherwise, you will get a verification message asking if you are sure you want to make the connection.

- Click **Create** to add a new trusted IP address to the list.
- Click **Edit** to modify the selected address.
- Click **Delete** to remove the selected address.

Configure Auto Export

Use the Auto Export configuration page to define settings for automatically exporting execution reports.

To define auto export configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *Auto Export* in the left pane.

3   Use the right panel to set these parameters:

- **Start time** - set the time at which you want to start exporting reports, using the format HH:MM.

- **Stop time** - set the time at which you want to stop exporting reports, using the format HH:MM.

- **Export filename** - enter the directory path and filename where you want exported files saved.

- **Interval** - set the interval (in minutes) to be used for exporting reports.

- **Extended mode** - along with primary fields (symbol, action, shares, price, time, date, exchange, account #, order reference ID, exec ID and give-up), extended mode also exports the type, expiry, strike, right and premium currency fields.

- **ID** - check this box to include the ID field on exported execution reports.

- Add Volatility Link - links the delta hedge order to the VOL option order.

- Write trade times using local timezone - If checked, shows the local time for executed trades regardless of the time zone in which the order filled.

- Symbol - choose the display type for the symbol

eSignal Market Data

Use the eSignal page to configure and use eSignal market data. Please note that to connect to eSignal data, you must subscribe to eSignal, and download and install the eSignal application www.esignal.com.
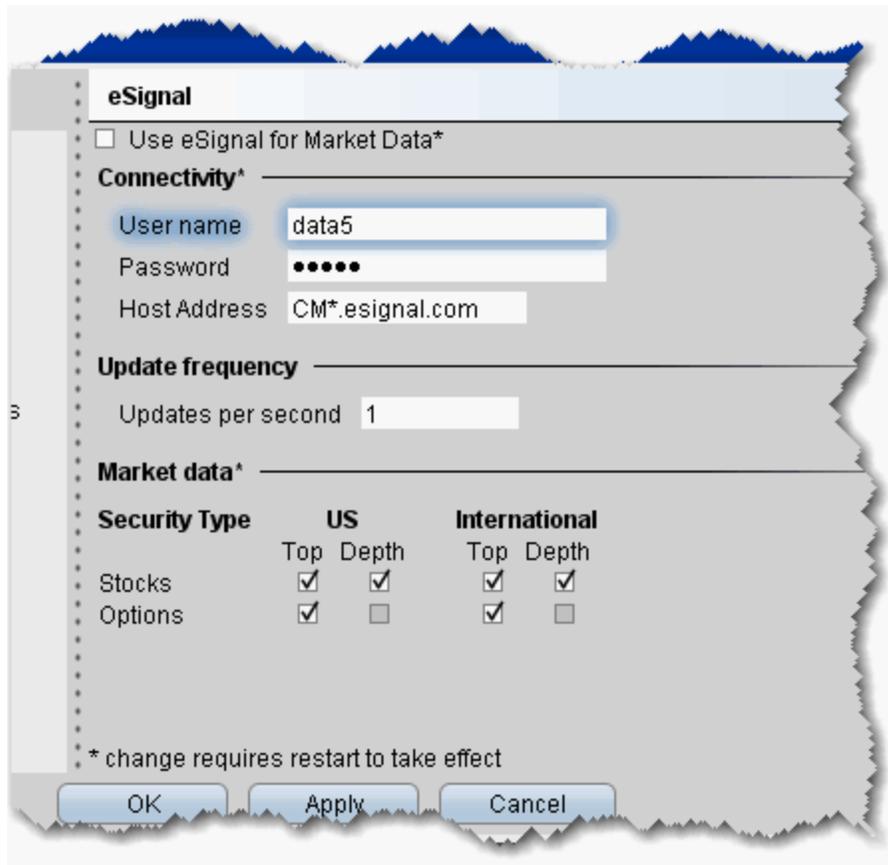
To define eSignal settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *eSignal* in the left pane.

3   Use the right panel to set these parameters:

- **Use eSignal for Market Data** - check to use your eSignal subscription to receive market data in TWS. If checked, enter eSignal username, password and host address.

Connectivity

- Enter username, password and Host Address for eSignal connection.

Note: You must restart your system for changes to take effect.

- Change the update frequency if desired.

Market Data

For available security types, check appropriate boxes to receive top level and/or deep data.

Configure Lock and Exit Parameters

Use the Exit configuration page to define exit options such as whether or not you want a confirmation message before the application closes.
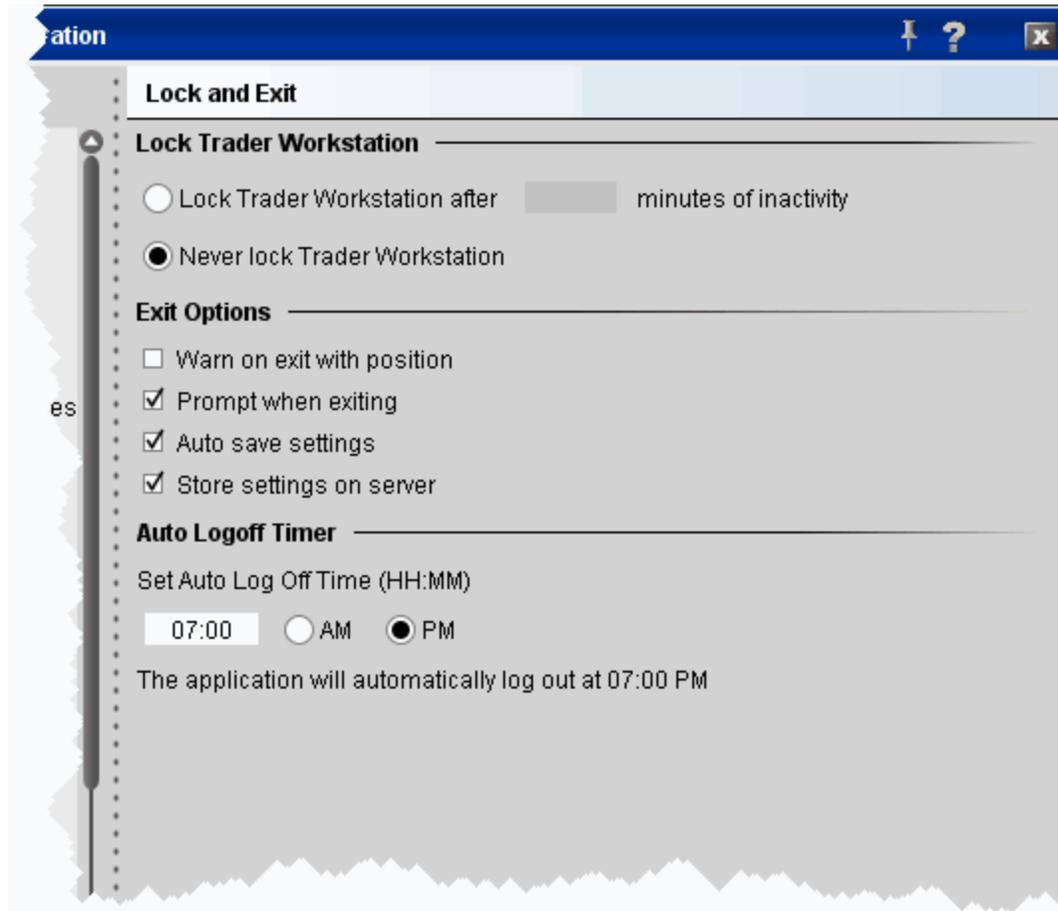
To define exit configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *Lock and Exit* in the left pane.

3   Use the right panel to set these parameters:

Lock Trader Workstation

- **Lock Trader Workstation after ____ minutes of inactivity** - locks your workstation if no activity has occurred for a defined number of minutes. Once locked, you must unlock the application using your TWS password.

- **Never lock Trader Workstation** - check to remove auto-locking mechanism. Note that you can manually lock the workstation at any time by selecting *Lock Application* from the **File** menu.

Exit Options

- **Warn on exit with position** - check to display a warning message when you exit that lets you know you are holding positions, and verifies that you still want to exit.

- **Display server time** - check to display the current time in the bottom right corner of the status line.

Display Configuration

Introduction

Use the Display configuration page to define display settings such as hiding or showing the index arbitrage meter, enabling column tooltips and applying colors to options based on in-the-money status.

- Display Settings
- Configure Style Settings
- Ticker Row Settings
- Toolbar Configuration

Display Settings

To define display configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   In the left pane, click **Display** and then *Settings*.

3   Use the right panel to set these parameters:
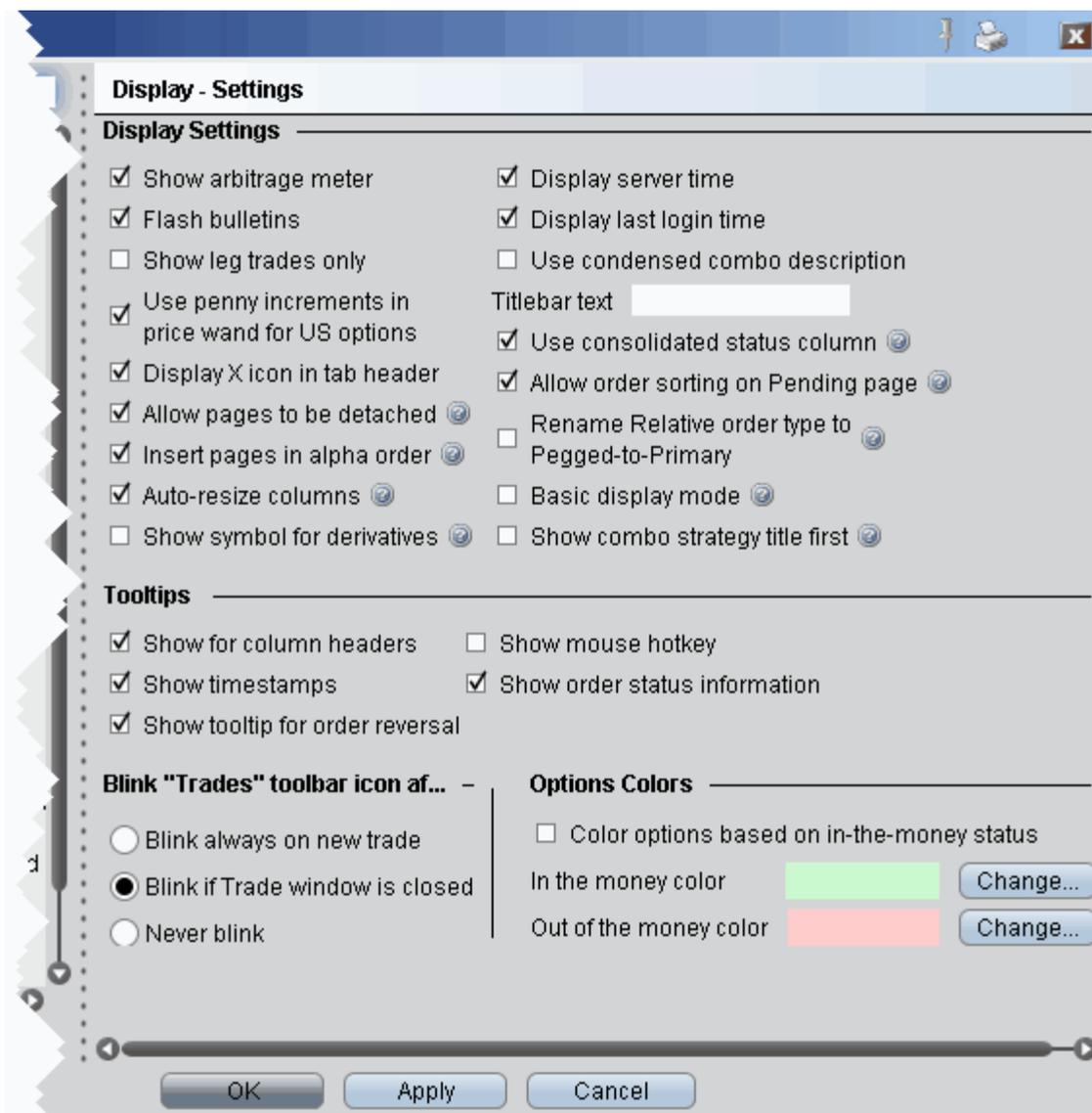
Display Settings

- **Show arbitrage meter** - check to automatically show the index arb meter if you have an index instruments listed in your market data.

- **Flash bulletins** - Check to have trading notifications flash in red at the top of the screen.

- **Show leg trades only** - When checked, spreads and combination executions will be shown in individual legs. If unchecked, the entire combination will be displayed, and you can click to expand the line and show the individual leg executions.

- **Use penny increments in price wand for US options** - When checked, the price wand that is activated when you click and hold the mouse in an order price field will display increments of 1 penny when used with US options.

- **Display X icon in tab header** - When checked, the X icon to delete a trading page will appear on the active page, next to the trading page title.

- **Allow pages to be detached** - When checked, you can detach trading pages from the main trading window.

- **Insert pages in alpha order** - When checked, newly added pages are automatically inserted alphabetically into your existing tabset of page names.

- **Auto-resize columns** - When checked, tables such as the trading window etc. will automatically resize table columns when a field has been added or removed.

- **Show symbol for derivatives** - When checked, the local symbol will be shown as part of the contract description.

- **Display server time** - Check to display the current time in the bottom right corner of the status line.

- **Display last login time** - When checked, the last time you logged in is displayed at the far left of the status bar.

- **Use condensed combo description** - When checked, only the local symbols are displayed in the Description field for combination and spread orders.

- **Titlebar Text** - Text entered here will be used in place of your account number in the TWS titlebar.

- **Use consolidated status column** - When checked, the Status column will split and show both the Transmit/Cancel buttons and the status color. You must manually remove the Transmit field to activate this feature.

- **Allow order sorting on Pending page** - When checked, the pending page will go into compressed view when you click an order field header to sort orders. Compressed view displays only orders, no market data lines and no blank lines.

- **Rename Relative order type to Pegged-to-Primary -** If checked, "relative" orders will display as "Pegged-to-Primary" orders wherever the title occurs. This only changes the name. The relative functionality remains the same.

- **Basic display mode -** When checked, the display mode remains basic to potential improve system performance. Check to turn off animation and other aesthetic actions.

- **Show combo strategy title first -** When checked, the strategy title of a combo will display first in the description, as in *Calendar Spread + Feb 19 '10, - JAN 15 '10 14 Call*. Uncheck to display the title last, as in *+ Feb 19 '10, - JAN 15 '10 14 Call Calendar Spread.*

Tooltips

- **Show for column headers** - When checked, you will see descriptive text when you hold your cursor over any of the main Trading screen column names.

- **Show timestamps** - If checked, when you mouse over the last price you will also see the time of the trade.

- **Show tooltip for order reversal** - If checked, you will see a tooltip when you elect to reverse an order from the trading window.

- **Show mouse hotkey** - when checked, you will see a description of the hotkey when you mouse over any fields for which you have created a mouse-click shortcut.

- **Show order status information** - If checked, when you mouse over the Status field for an order the status of the order, such as Submitted, Pending, Filled, is shown.

Blink "Trades" toolbar icon after execution

- Blink always on new trade - if selected, the Trades icon on the trading toolbar will blink each time an order executes.

- Blink if Trade window is closed - if selected, the Trades icon on the trading toolbar will only blink on new executions if you have the Executions window closed.

- Never blink - if selected, the Trades icon on the trading toolbar will never blink.

Options Colors

- **Color options based on in-the-money status** - check this box to use color-coding to identify an option's in-the-money status at a glance.

- Use the *Change* button to modify the default in-the-money or out-of-the-money background colors.

Configure Style Settings

Use the Style configuration page to define style settings such hiding or showing gridlines, changing fonts and modifying the color palette.
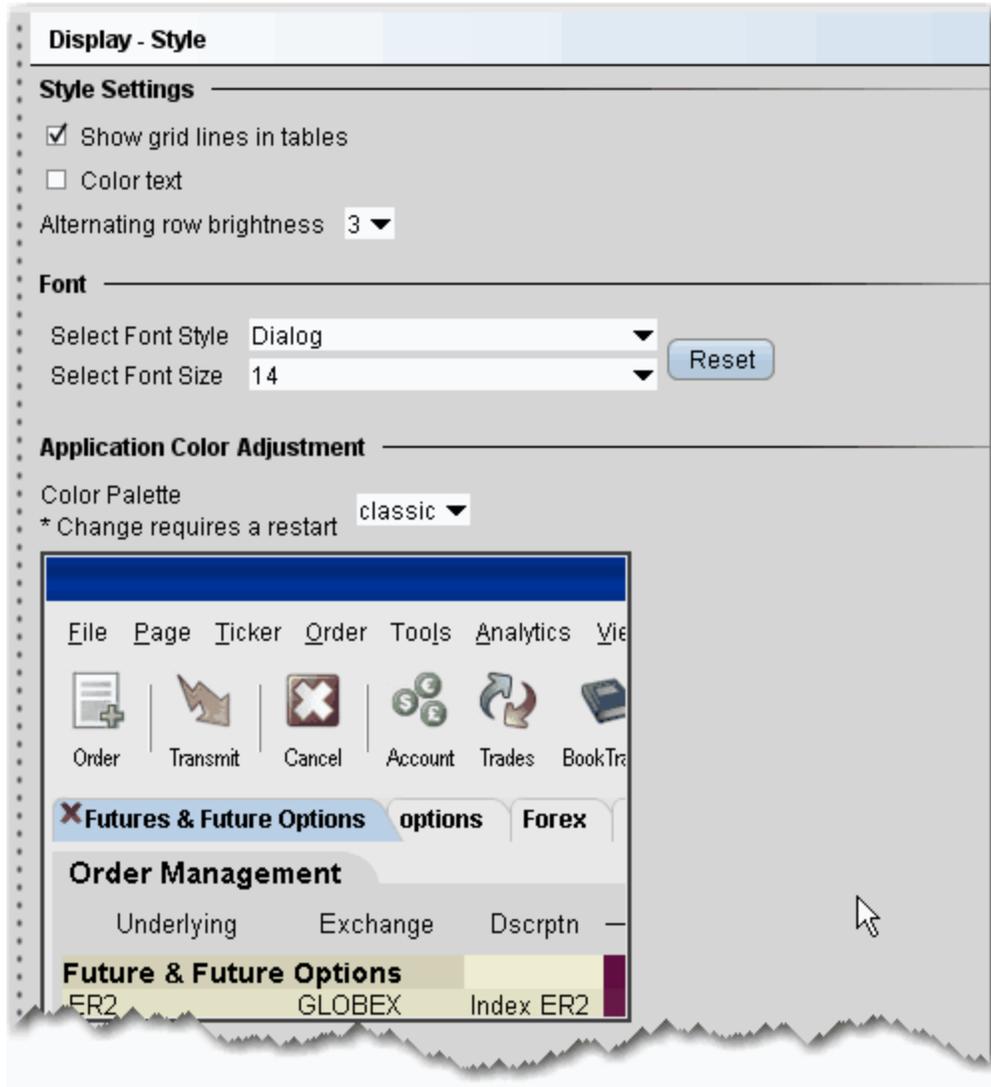
To define style configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   In the left pane, click **Display** and then *Style*.

3   Use the right panel to set these parameters:

Style Settings

- **Show grid lines in tables**- check to display solid gridlines on your trading pages.

- **Color Text**- check to display a text description of status colors on top of the colored field. For example, the status field turns red when you transmit an order. With this feature checked, the colored area will display the word "red" as well as displaying the color.

- **Alternating row brightness** - this setting provides a contrast level for better row by row readability on trading pages. A setting of "4" provides the brightest contrast between alternating rows, "0" provide the least contrast.

Font

- **Select Font Style** - choose a new font.

- **Select Font Size** - choose a new font size.

- **Reset**- click to reset font style and size to the default values.

Application Color Adjustment

- Select a palette to apply a color scheme across the application. Please note that the new setting will not be applied until the next time you log in. A sample view of your selection is shown using the TWS image.

Ticker Row Settings

Use the Ticker Row configuration settings to specify the look of tickers on your trading pages.
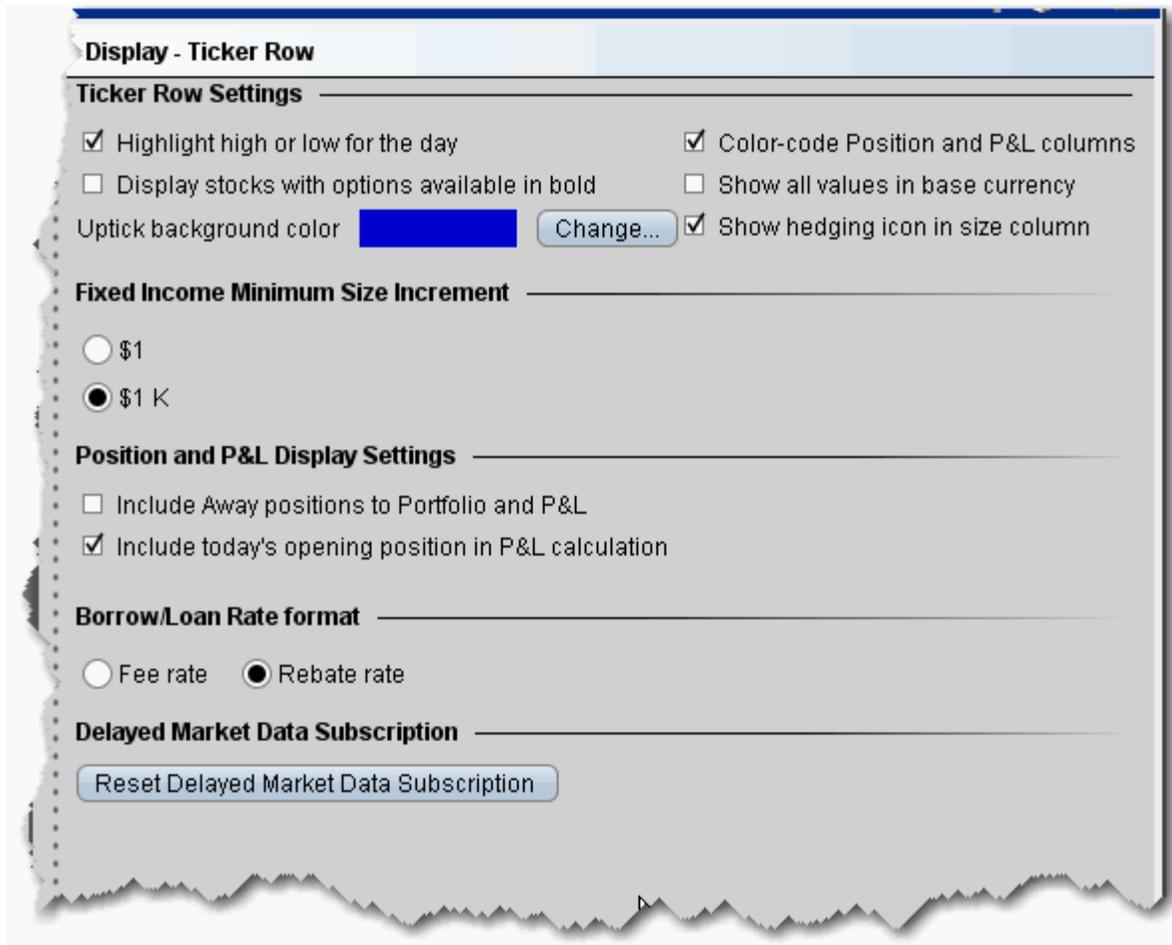
To define Ticker Row configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   In the left pane, click **Display** and then *Ticker Row*.

3   Use the right panel to set these parameters:

Ticker Row Settings

- **Highlight high or low for the day** - when checked, the **Last** price will display in RED if it is also the day's low, and will display in BLUE if it is also the day's high.

- **Display stocks with options available in bold** - when checked, stocks that have options will display in bold font on the trading screen.

- **Color code position and P&L columns** - when checked, PNL and Position columns will use color-coding.

- **Show all values in base currency** - If checked, all position and P&L values are recalculated to display in your base currency, and are shown in italics to identify them as having been converted from the local currency to your base currency.

- **Uptick background color** - change the default blue color used to note an uptick.

- **Show hedging icon in size column** - check to have the delta hedge icon shown in the Quantity field for volatility orders with an attached delta hedge.

Fixed Income Minimum Size Increment

Customize the quantity display for fixed income products.

- Select $1 to size in face value.

- Select $1 K to size in multiples of 1000.

Position and P&L Display Settings

- **Include Away positions to Portfolio and P&L** - check to show away positions on a new tab in the Positions section of the **Account** window, in the Positions field displayed on any TWS trading page, and on the **Portfolio** page.

Note: For display purposes, position values are aggregated to include both IB-held positions and "away" positions on the same contract. However, for trading purposes, for example if you elect to "close" a position, only the portion held at IB will be traded.

- **Include today's opening position in P&L calculation** - check to include existing positions in the calculation for the P&L column only.

Borrow/Loan Rate Format

- The default Fee Rate format shows the borrow/lend rate from the perspective of a fee owed..

- The Rebate Rate mode shows the borrow/lend rate from the perspective of a rebate received. When in rebate mode, data is italicized.

Delayed Market Data Subscription

Click *Reset Delayed Market Data Subscription* to modify settings for delayed market data.

Toolbar Configuration

Use the Toolbar configuration page to define settings for the main Trading toolbar.
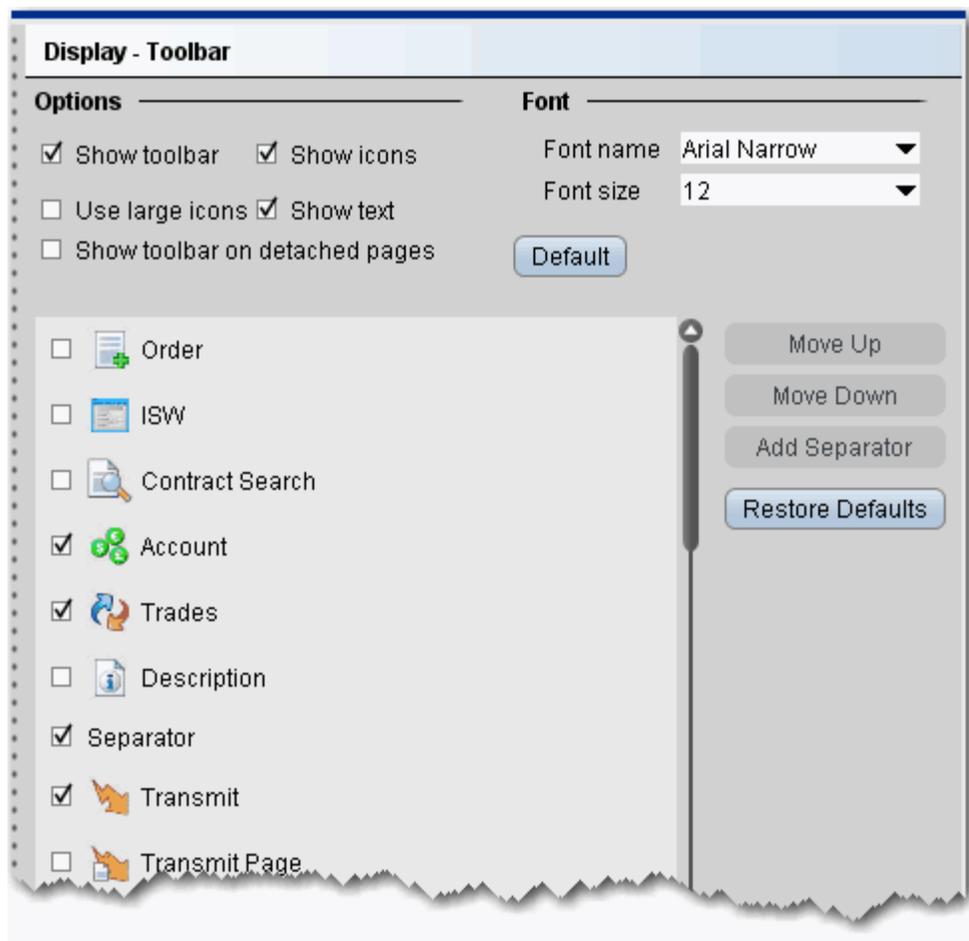
To define toolbar configuration settings

1 On the **Configure** menu select *Global Configuration.*

2 In the left pane, click **Display** and then *Toolbar*.

3 Use the right panel to set these parameters:

Options

- **Show toolbar** - check to display the main Trading toolbar.
- **Show icons** - check to display icons on the main Trading toolbar.
- **Use large icons** - check to increase the size of the icons on the main Trading toolbar.

- **Show text** - check to display text descriptions of buttons on the toolbar. Use this feature in conjunction with the Show icons selection to see both the icon and the text name of the toolbar buttons.

- **Show toolbar on detached pages** - if you elect to detach some trading pages, the toolbar will remain visible.

Font

- **Font name** - choose a new font.

- **Font Size** - choose a new font size.

- **Default** - click to reset font style and size to the default values.

Toolbar Items

The items in the screen can be added to/removed from the trading toolbar. Change the order of the buttons and separators using the Move Up and Move Down buttons on the right. Use the Remove button to remove a feature from the toolbar. Use the Add Separator button to add a line separator above the selected toolbar feature. Click Reset to put back all removed features and separator lines. Click Default to configure the toolbar based on the default layout.

Trading Tools

Introduction

- Accumulate/Distribute
- Configure BasketTrader
- Configure BookTrader
- Configure FXTrader
- Configure ISW
- Configure Option Portfolio
- Configure OptionTrader
- Configure the Portfolio Window
- Configure the Rebalance Window
- Configure SpreadTrader
- Configure the Trading Window

Accumulate/Distribute

Configure the Quote Panel, the Orders tab and the Trades tab.
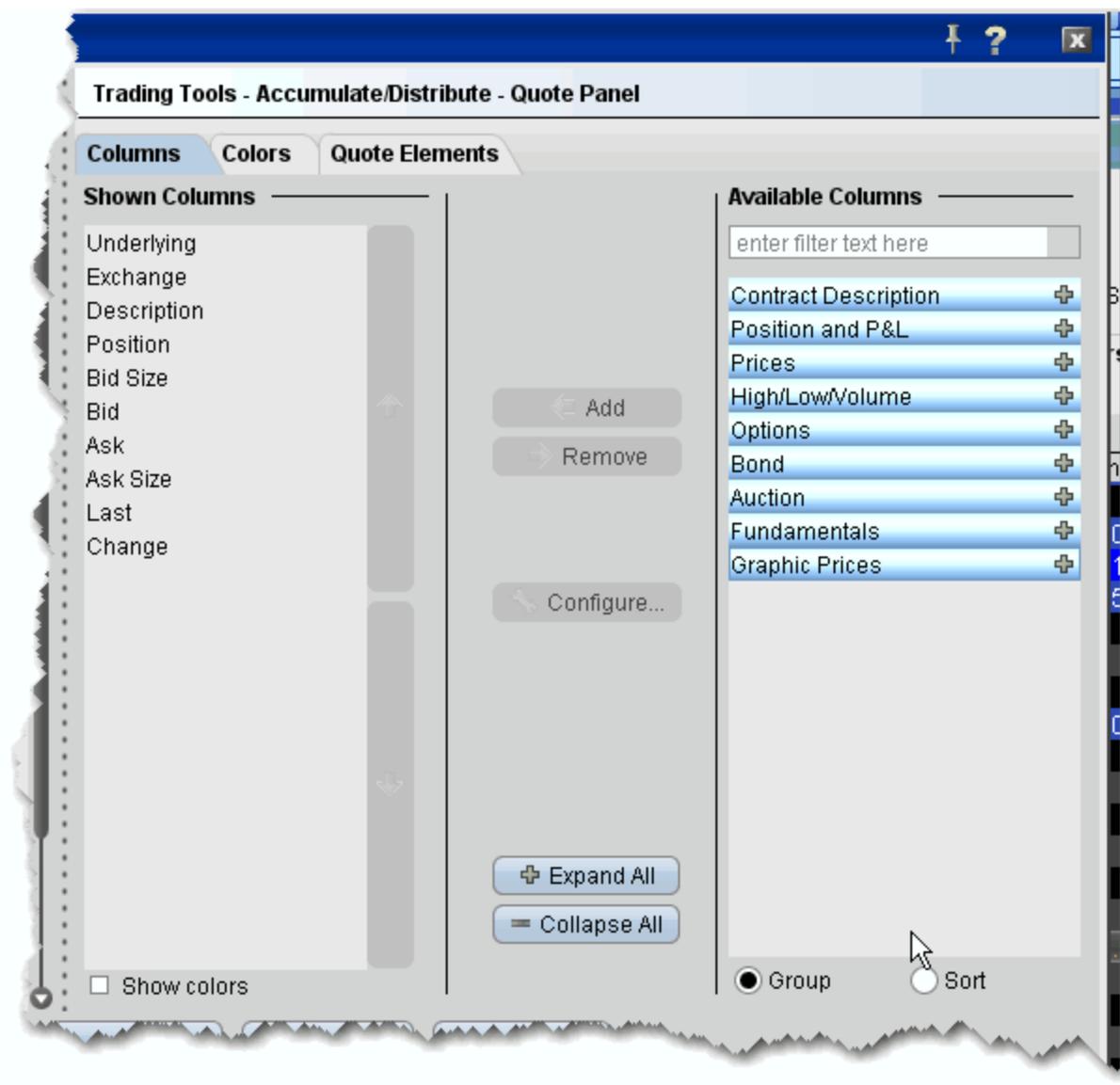
To configure Accumulate/Distribute

1   Click the *Configure* wrench icon from Accumulate/Distribute, or from the Configure menu select Global Configuration.

2   In the left pane under Trading Tools, click **Accumulate/Distribute**, and then choose *Quote Panel, Order Columns* or *Trade Columns*.

3   Use the right pane to set the Accumulate/Distribute parameters.

Configure BasketTrader

Use the BasketTrader configuration section to modify the layout of existing pages, or apply a new layout to a page.

To define BasketTrader configuration settings

1 On the **Configure** menu select *Global Configuration,* or click the configure wrench icon from the BasketTrader window.

2 Click *BasketTrader Layout* in the left pane.

3 Use the right pane to configure the following fields:

Settings

- **Show total row on basket pages** - Check to display the *Total* row on the BasketTrader. The Total row displays the total P&L values for all P&L fields you have displayed.

- **Instant removal of basket orders from pending page** - Check to have executed trades instantly removed from the pending page.

Configure BookTrader

Use the BookTrader configuration page to define basic settings, hotkeys, buttons and to control the visibility of column fields.
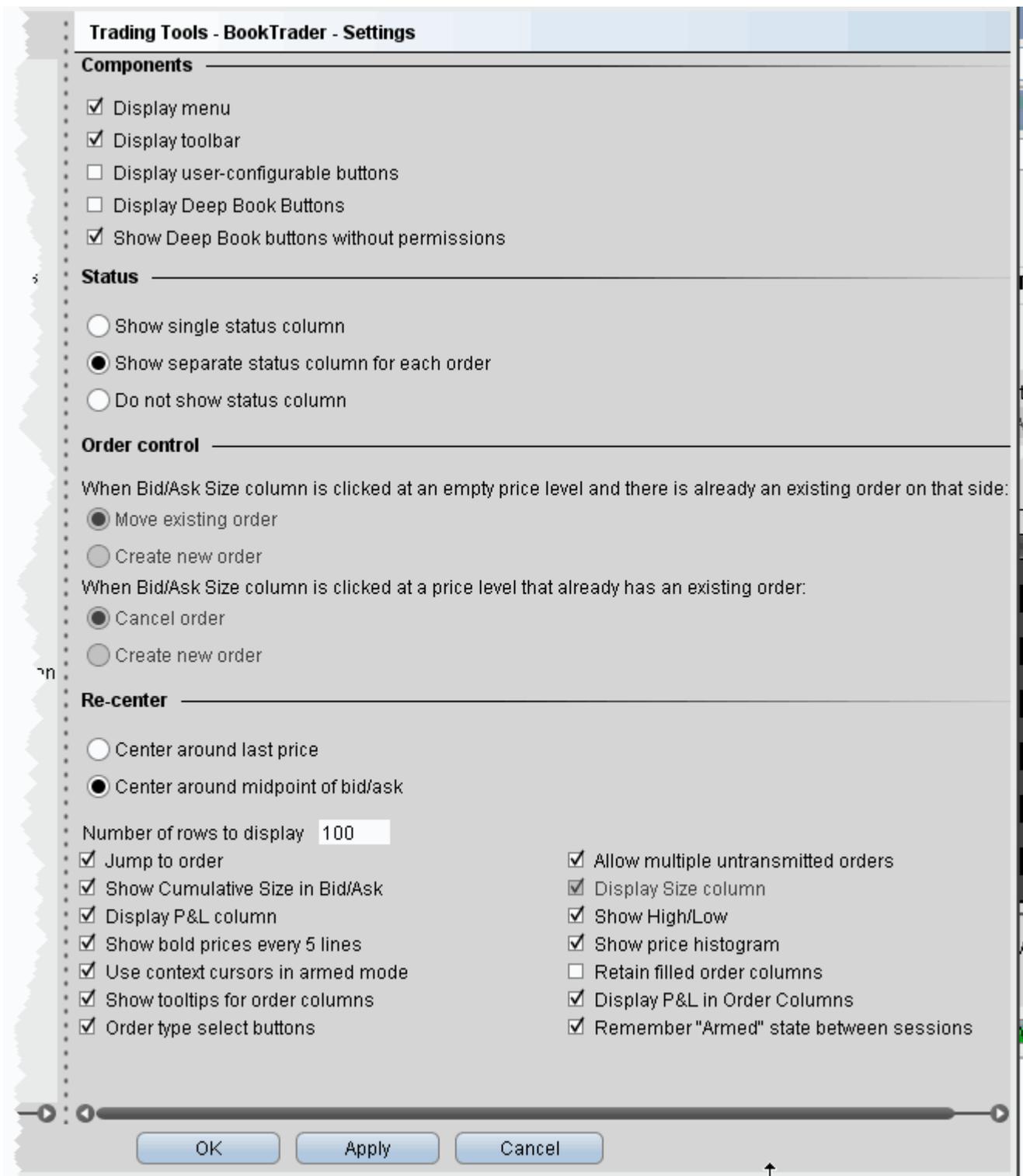
To define BookTrader configuration settings

1   Click the *Configure* wrench icon on any window.

2   Click **BookTrader** and then *Settings* in the left pane.

3   Use the right pane to set the following:

Components

- **Display menu** - Check to see the BookTrader menu.

- **Display toolbar** - Check to see the BookTrader toolbar.

- **Display user configurable buttons** - opens the [Buttons](#) panel on the BookTrader window.

- **Display Deep Book Buttons** - check to show the Deep Book buttons panel in BookTrader. Depress a button on the panel to include that data in the price ladder.

- **Show Deep Book buttons without permissions** - check to display buttons for any subscribable deep book data to which you don't currently subscribe.

Status

- **Show single status column -** check to display one Status column on the Bid side, and one Status column on the Ask side. When this status is selected, use the **Order control** section to tell TWS how to handle multiple orders on the same side.

- **Show separate status column for each order** - check to have a new Status column created for each order. When this status is selected, the Order control section is unnecessary and becomes inactive.

- **Do not show status column -** check to hide the status from BookTrader. When this status is selected,use the Order control section to tell TWS how to handle multiple orders on the same side.

Order control

- **Move existing order** - select if you want an existing order to be moved when an empty price level on the same side is clicked. This selection does not allow multiple orders on the same side.

- **Create new order** - select if you want to allow multiple orders on the same side at different price levels.

- **Cancel order** - select if you want to cancel an existing order at a specific price level when that same price level is clicked. This selection does not allow multiple orders on the same side at the same price level.

- **Create new order** - select if you want to allow multiple orders on the same side at the same price level.

Re-center

- **Center around last price** - If selected, when you click the Re-center button the BookTrader ladder puts the central focus back around the last traded price.

- **Center around midpoint of bid/ask** - If selected, when you click the Re-center button the BookTrader ladder puts the central focus back around the midpoint of the bid/ask price.

Other

- **Number of rows to display** - Enter a value that defines the number of rows, or prices, you will see.

- **Jump to order** - If checked, your cursor will jump to the order in the Orders panel after you transmit.

- **Allow multiple untransmitted orders** - If checked, you can create more than one order in the Underlying panel. Otherwise, only one untransmitted order is allowed.

- **Show Cumulative Size in Bid/Ask** - If checked, the cumulative size is shown at the top of the Bid column and Ask column.

- **Display Size column** - check to display a *Size* column on the Bid side and Ask side. Note that this checkbox is only active if Cancel order when Bid Size /Ask Size column is clicked at a price level that already has an existing order is selected in the **Order control** section.

- **Display P&L column** - Click to display the P&L column on both the bid and ask sides of the BookTrader ladder. The P&L column.

- **Show High/Low** - When checked, identifies the high and low prices by displaying different colored backgrounds.

  - The **High** price is highlighted by a **Bright Blue** background.

  - The **Low** price is highlight by a **Red** background.

- **Show bold prices every 5 lines** - Use this feature to help make prices easier to follow by having every 5th row bolded.

- **Show price histogram** - Checked by default. If checked, a colored field displays the volume of trading each day at each price level on the BookTrader price ladder. The bar colors coincide with colors in the Price field, for example the last trade is teal blue, the current best ask is green, etc. See the topic on BookTrader colors for details.

- **Use context cursors in armed mode** - Check to include a text description below your cursor. For example, if you hold your cursor in the yellow Bid Size column, the text Buy appears to let you know that clicking at a price level in this field will initiate a buy order.

- **Retain filled order columns** - Valid only in Advanced Mode. When checked, the new Order column will remain visible after the order has filled.

- **Show tooltips for order columns** - Valid only in Advanced Mode. When checked, displays an order-relevant tooltip when you hold your mouse cursor over a field in the Order column.

- **Display P&L in Order Columns** - Valid only in Advanced Mode. When checked, the P&L will display in the new Order column when an order executes

- **Order type select Buttons** - Valid only if *Show separate status column for each order* is select in the Status section. Displays a toolbar with order type buttons. Click a button to put the mouse cursor into that specific order type mode.

- **Remember armed state between sessions** - check to keep BookTrader armed so that it is in armed mode the next time you log in to TWS.

Hotkeys

Opens the **Hotkeys and Mouse Shortcuts** dialog box. You can modify the configuration of existing shortcuts by selecting an action and clicking *Configure*. For more information see the BookTrader Hotkeys topic.

Buttons

Create custom buttons to add to the toolbar, or edit existing buttons.

Quote Panel

Hide or display fields in the Quote Panel using the *Columns* page of the Page Layout. Modify text and background colors using the *Colors* page.

Order Columns

Hide or display fields in the Orders area using the Columns page of the Page Layout.

Trade columns

Hide or display fields in the Trade panel.

BookTrader Colors

Allows you to change text/ background colors for many of the BookTrader fields. To change a color, click the Text or Background button in the appropriate row and select a new color from the palette.

- Ask size, disarmed and armed
- Bid size, disarmed and armed
- Prices, such as Ask, Bid, Last, High and Low
- P & L

BookTrader Sound Manager

Opens the Sound Manager for the BookTrader where you apply sound settings for placing a limit order (click bid or ask price), cancelling an order, and placing a stop order (right-click bid or ask price). You can also elect to disable an event sound by unchecking the checkbox in the appropriate row.

Configure FXTrader

FXTrader is customizable on many levels, from the color and number of cells to the method used to calculate order quantity.
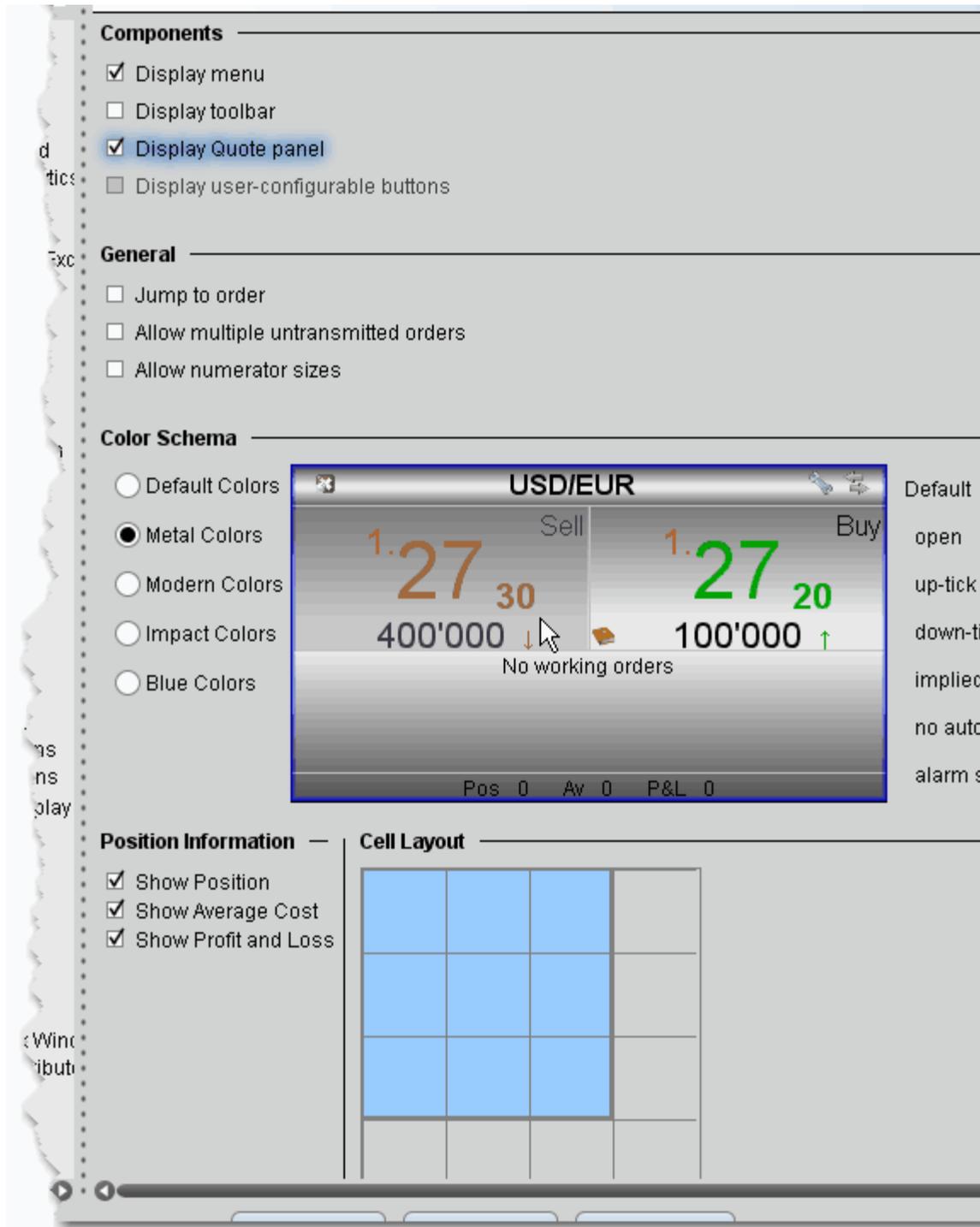
To define FXTrader configuration settings

1 On the **Configure** menu select *Global Configuration,* or click the *Configure* wrench from the FXTrader page.

2 Click *FXTrader* in the left pane.

3 Use the right panel to set these parameters:

Settings Page

Components

- **Display menu** - Check to see the FXTrader menu.
- **Display toolbar** - Check to see the FXTrader toolbar.
- **Display Quote panel** -Check to show the Quote panel with market data at the top of the window.
- **Display user-configurable buttons** - check to show customizable <u>buttons</u>.

General

- **Jump to order**- Automatically positions the cursor on a newly created order in the **Orders** panel.
- **Allow multiple untransmitted orders** - If checked, you can create more than one order in the Underlying panel. Otherwise, only one untransmitted order is allowed.
- **Allow numerator sizes** - adjusts the display to allow trading the numerator instead of the denominator.

Color Schema - Use these settings to change the look of your FXTrader interface by changing the color of cells and text.

Position Information and Cell Layout

- Show Position - When checked, the position is displayed at the bottom of the trading cell.
- Show Average Cost - When checked, the average cost of the position is displayed at the bottom of the trading cell.
- Show Profit and Loss - When checked, the unrealized P&L is displayed at the bottom of the trading cell.
- Cell Layout Grid - Modify your FX Trader grid to be as small as one cell or as large as 4x4. The blue cells will display in your FX Trader.

Configure ISW

The Integrated Stock Window comprises Level I and II market data, real-time charting and complete order management all in a single window. Use the configuration window to customize basic settings, buttons and hotkeys, the chart parameters and Level II market data panels.
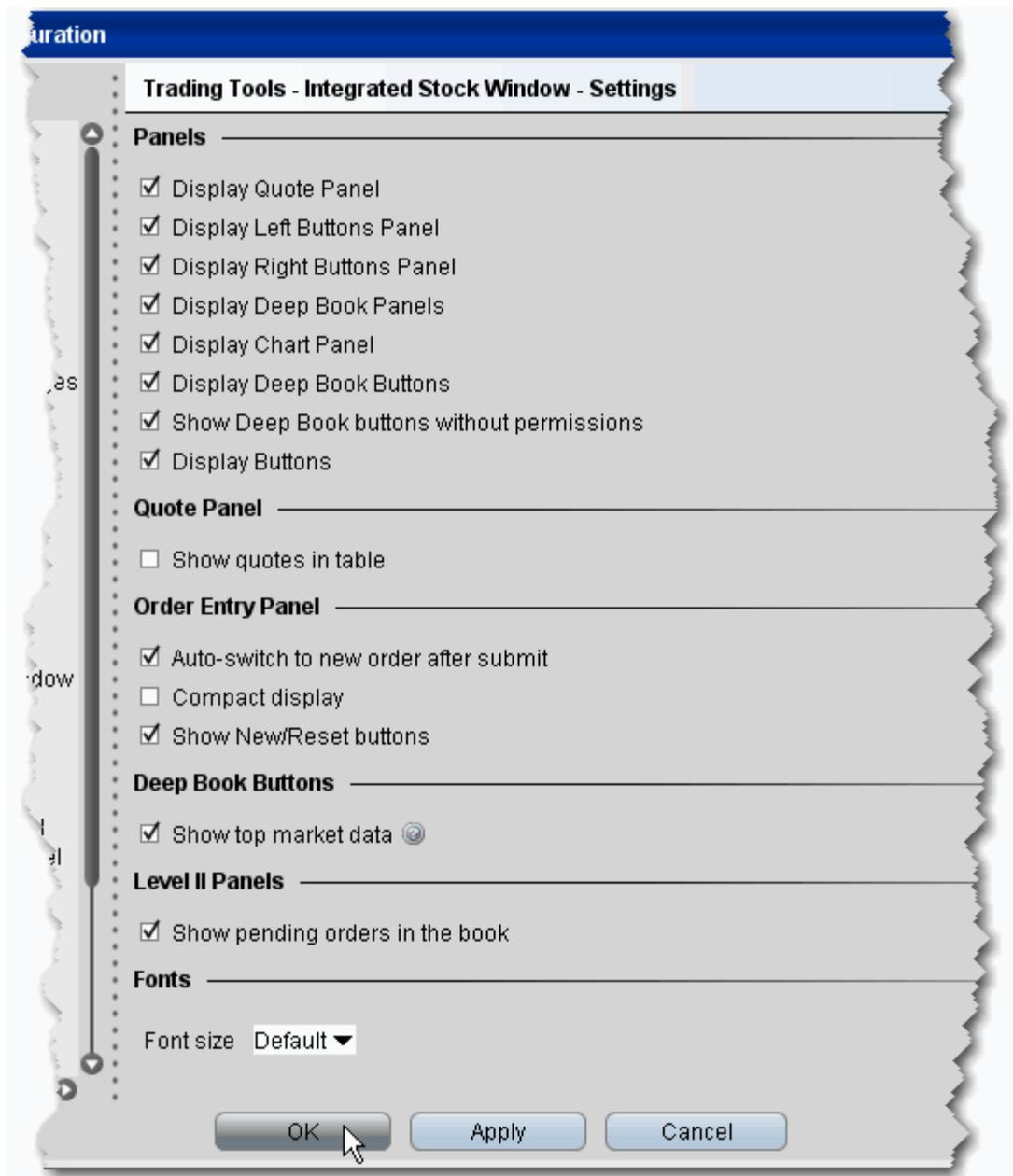
To define ISW configuration

1 On the **Configure** menu select *Global Configuration,* or click the *Configure* wrench from the Integrated Stock Window.

2 Click *Integrated Stock Window* in the left pane.

3 Select a sub-category, and use the right panel to set these parameters:

Settings

Panels

- *Display Quote Panel* - check to see the Quote Panel in the ISW.
- *Display Left Buttons Panel* - check to see the left buttons panel in the ISW.
- *Display Right Buttons Panel* - check to see the right buttons panel in the ISW.
- *Display Deep Book Panels* - check to see the deep book bid and ask panels on either side of the chart panel.
- *Display the Chart Panel* - check to see a real-time chart at the center of the ISW.
- *Display Deep Book Buttons* - check to display all available deep book buttons, which allow you to show/hide market center data from the deep book panels.
- *Show Deep Book buttons without permissions* - check to show inactive deep book buttons, which indicate subscription data that could be included if you subscribe.
- *Display Buttons* - check to see the price bump buttons at the bottom of the chart panel.

Quote Panel

- *Show quotes in table* - leave checked to display the quote panel in the basic TWS quote panel table format. Uncheck to display the quote panel in label view. Note that you can toggle between display views using the View icon on the quote panel itself.

Order Entry Panel

- *Auto-switch to new order after submit* - if checked, after you transmit an order the start of a new order is set in the Order Entry Panel order box. If unchecked, after you transmit an order you will see the transmitted order in the OEP order box.
- *Compact display* - if checked, labels are removed from fields to condense the display size.
- *Show New/Reset buttons* - check to display the New and Reset buttons in the Order Entry Panel. Clicking the New button switches to a new order. Clicking Reset clears the order field.

Deep Book Buttons

- *Show top level market data* - if checked, the **Others** button displays in the Deep Book panel. If **Others** is depressed, Level I data is included from exchanges that don't offer deep data, exchanges to which you don't subscribe, and subscribed exchanges whose data buttons are not selected.

Level II Panels

- *Show pending orders in the book* - check to see your own orders highlighted in white, in the deep order book panels. Only you can see your pending orders.

Fonts

- Font size - select a new font size for the ISW display.

Hotkeys

Opens the **Hotkeys and Mouse Shortcuts** dialog box. You can modify the configuration of existing shortcuts by selecting an action and clicking *Configure*. For more information see the BookTrader Hotkeys topic.

Buttons

Create custom buttons to add to the toolbar, or edit existing buttons.

Quote Panel

Hide or display fields in the Quote Panel using the *Columns* page of the Page Layout. Modify text and background colors using the *Colors* page.

Left and Right Buttons Panels

Configure the buttons that display on the far right and far left of the ISW.

Chart Settings

Customize the chart display using this subset of chart settings, including:

Show time parameters panel - if checked, the toolbar that displays time parameters is visible at the top of the chart.

Show splits and dividends - if checked, splits and dividends (when applicable) are noted directly on the chart.

Show chart value label - if checked, the **Price**, **Volume** and other axis labels are displayed.

Highlight last price - check to highlight the price of the last trade.

Highlight bid price - check to highlight the last bid price.

Highlight ask price - check to highlight the last ask price.

Highlight high price - check to highlight the high price for the day.

Highlight low price - check to highlight the low price for the day.

Highlight cursor price - if checked, the price under your cursor is highlighted along the chart's price axis.

Show horizontal crosshair line - when checked, both the vertical and horizontal crosshair lines are displayed on a chart when you are in Crosshair Mode. When unchecked, only the vertical crosshair line displays.

Auto-complete trendline - if checked, you can instruct TWS to complete a freehand trendline. Begin your trendline by clicking and holding the mouse. To use auto-complete, release the mouse key, then click again. TWS completes the trendline across the chart, following your trajectory.

Show x bars - if checked, all charts will use the number of bars defined.

Display price axis - use the dropdown list to display the price axis on the right, left or both right and left.

Display time axis - use the dropdown list to display the time axis on the top, bottom or both the top and bottom.

Bar chart spike protection (max. % change from previous bar) - if you want to apply spike protection, enter a percentage value. If any bar exceeds this percentage relative to the previous bar, it is automatically eliminated from the chart.

Chart Colors

Use this section to modify colors used in the ISW chart.

Level II Panels

Add or remove columns from the Level II panels.

Configure Option Portfolio

Use the Option Portfolio configuration page to define columns visible in the Quote panel.
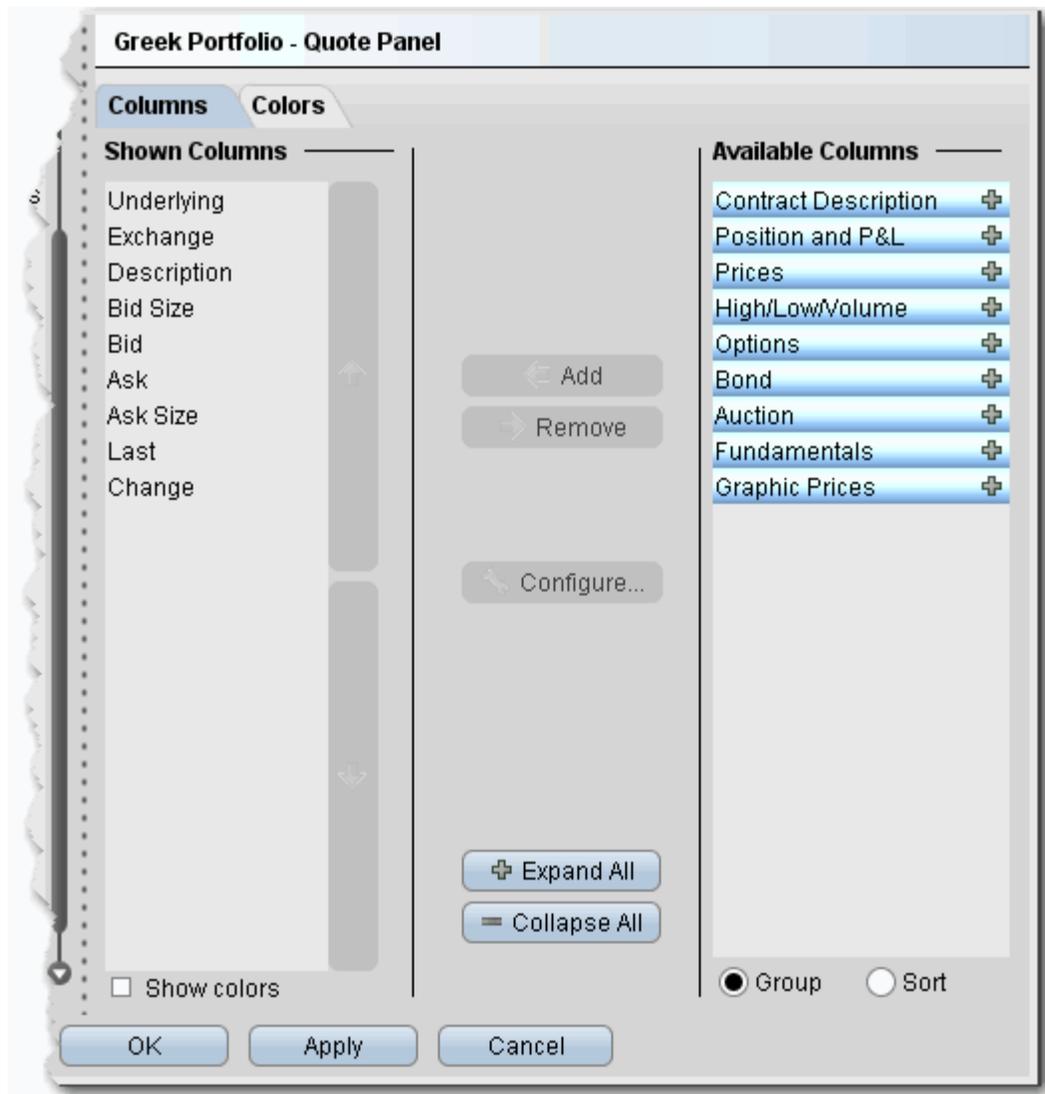
To define Option Portfolio configuration settings

1   On the **Configure** menu select *Global Configuration,* or click the *Configure* wrench from the Option Portfolio page.

2   Click *Option Portfolio* in the left pane.

Use the right panel to add or remove columns from the Quote panel.

Configure OptionTrader

Use the OptionTrader configuration page to define basic settings, hotkeys, buttons and to control the visibility of column fields.

To define OptionTrader configuration settings

1   Click the *Configure* wrench from any window.

2   Click *OptionTrader* in the left pane and then click *Settings*.

3   Use the right pane to set these parameters:
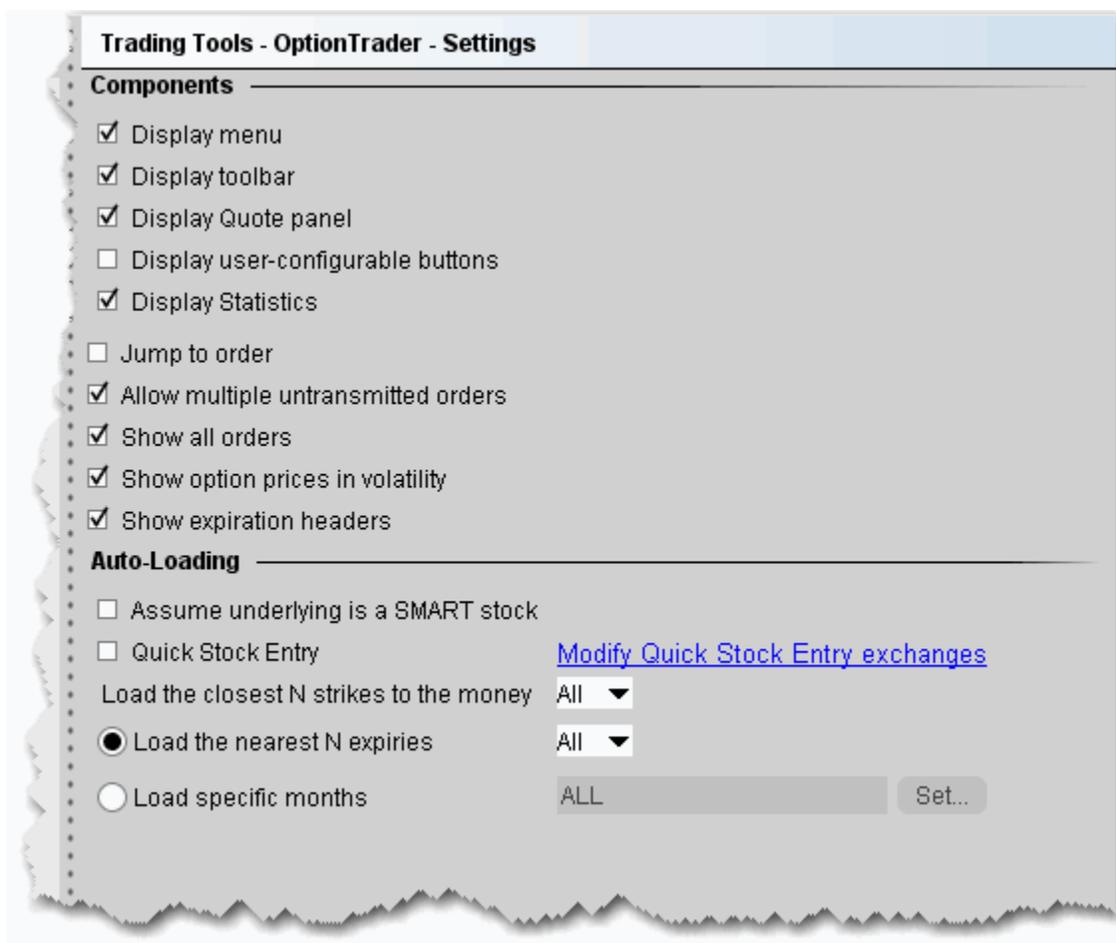
Settings

Components

- **Display menu** - check to see the OptionTrader menu.
- **Display toolbar** - check to see the Option Trader toolbar.

- **Display Quote panel** - check to display the Quote Panel, which displays a single line of market data for the asset. You can create an order from the Quote panel by click the bid or ask price.

- **Display user-configurable buttons** - hide or display buttons you create using the [Buttons](#) panel.

- **Display Statistics** - a configurable, optional panel that shows option-related data and statistics.

- **Jump to order**- automatically puts the cursor on the newly created order in the **Orders** panel.

- **Allow multiple untransmitted orders** - if checked, you can create more than one order in the Underlying panel. Otherwise, only one untransmitted order is allowed.

- **Show all orders** - check to view all orders for the underlying.

- **Show options prices in volatility** - check to view volatility instead of dollar prices.

- **Show expiration headers** - check to sort option chains using a single header for the expiry followed by a list of strike prices. This helps save room in the option chain *Description* column.

AutoLoading

OptionTrader automatically loads option chains based on the criteria you set in this area.

- **Assume underlying is a SMART stock** - uses smart instead of a specific exchange.

- **Quick stock entry** - check to auto load stock and bring up the exchange dialog immediately when you enter an underlying.

- **Load the closest N strikes to the money** - choose a number to limit how many options load in the chain.

- **Load the nearest N expiries** - only shows you those options with the N closest expiries.

- **Load specific months** - hard-code the exact months whose options you want to see.

Option Chains

Hide or display option chain fields.

Configure the Portfolio Window

The Portfolio window is an automated trading page you can elect to create based on the current content of your portfolio. Configure the Portfolio window to hide or show panels, market data and order management columns by default. You can modify any of these settings directly from the window at any time.

To configure the Portfolio window

1 On the **Configure** menu select *Global Configuration.*

2 Click ***Trading Tools*** and then *Portfolio Window* in the left pane.

3 Configure Settings, Trade Columns, Order Management columns or the Market Value panel.

4 Use the right panel to set these parameters:

Settings

- Display market value panel - opens the Market Value panel populated with data from the Account Information window.
- Display orders panel - Opens the Orders panel in the Portfolio window. New orders will be displayed in this separate panel rather than directly below the ticker.
- Display trades panel - Opens the Trades panel to display executions.
- Jump to order - if checked, automatically places the cursor on newly created orders in the **Orders** panel.

Trade Columns

Check the columns you want to show in the Trades panel.

Order Management

Customize the layout of the main window by adding or removing columns from the Market Data and Order columns.

Market Value

Check the columns you want to show in the Market Value panel.

Configure the Rebalance Window

Use the Rebalance configuration page to define basic settings, hotkeys, buttons and to control the visibility of column fields.

To define Rebalance configuration settings

1   On the **Configure** menu select *Global Configuration,* or click *Configure* from the Rebalance menu.

2   Click *Rebalance* in the left pane. You can expand the options in the left pane or in the right panel.

3   Use the right panel to set these parameters:
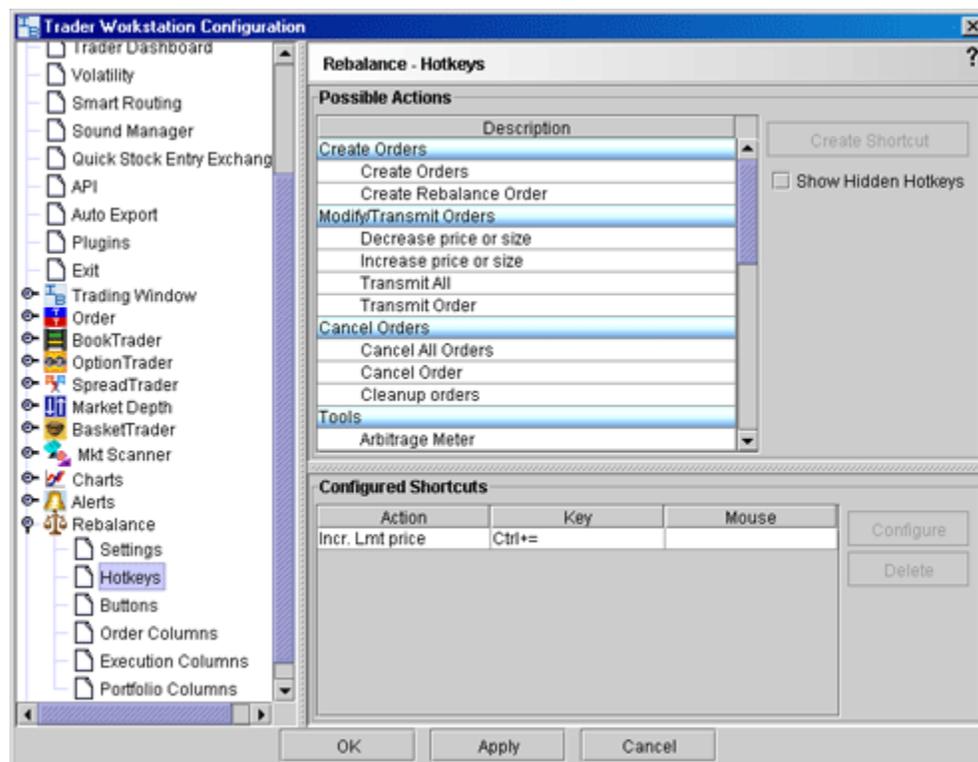
Settings

- *Display menu* - check to see the Rebalance menu.
- *Display toolbar* - check to see the Rebalance toolbar.
- *Jump to order-* automatically puts the cursor on the newly created order in the **Orders** panel.
- *Allow multiple untransmitted orders* - if checked, you can create more than one order in the Underlying panel. Otherwise, only one untransmitted order is allowed.

Hotkeys

Opens the **Hotkeys and Mouse Shortcuts** dialog box. You can modify the configuration of existing shortcuts by selecting an action and clicking *Configure*. For more information see the Assign Mouse Shortcuts topic.

Buttons

Create custom buttons to add to the toolbar, or edit existing buttons.

Order Columns

Hide or display fields in the Orders area using the *Columns* page of the Page Layout.

Execution columns

Hide or display fields in the Executions area using the executions columns.

Portfolio columns

Hide or display fields in the Portfolio area using the Portfolio columns.

Configure SpreadTrader

Use the SpreadTrader configuration page to define basic settings, hotkeys, buttons and to control the visibility of panels and fields.

To define SpreadTrader configuration settings

1   On the **Configure** menu select *Global Configuration,* or click *Configure* from the SpreadTrader menu.

2   Click *SpreadTrader* in the left pane.

3   Use the right panel to set these parameters:

SpreadTrader - Settings

Components
- ☑ Display menu
- ☑ Display toolbar
- ☑ Display Quote panel
- ☑ Display user-configurable buttons

Settings
- ☐ Jump to order
- ☑ Allow multiple untransmitted orders

EFP Settings
- ⦿ Raw prices
- ○ Annualized interest rate
- ○ Continuously compounded interest rate

Price Display
- ○ Decide based on ticker count
- ⦿ Realtime
- ○ Snapshot

[OK]   [Apply]   [Cancel]
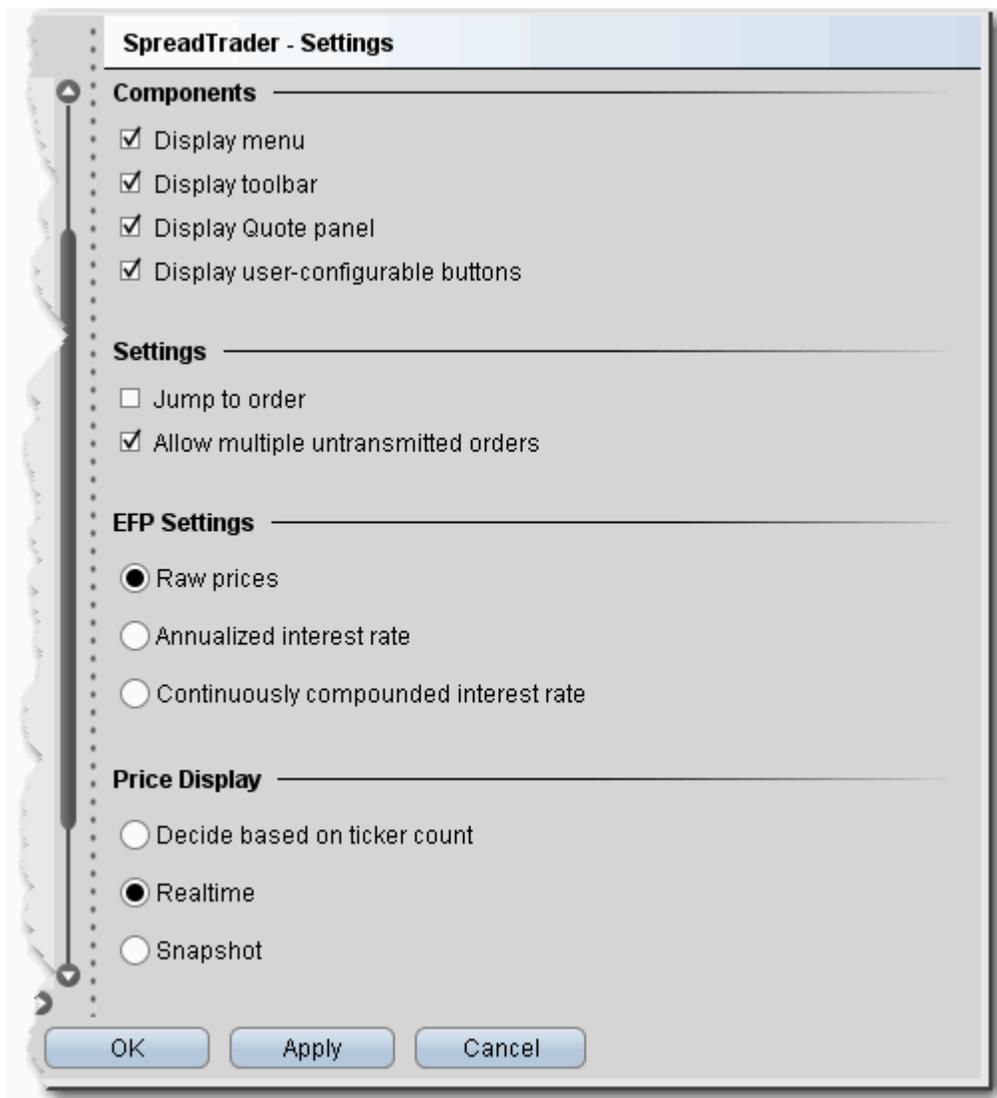
Settings Page

Components

- **Display menu** - check to see the SpreadTrader menu.
- **Display toolbar** - check to see the SpreadTrader toolbar.
- **Display Quote panel** - check to show the Quote panel with market data at the top of the window.
- **Display user-configurable buttons** - check to show customizable buttons.

Settings

- **Jump to order**- automatically puts the cursor on the newly created order in the **Orders** panel.
- **Allow multiple untransmitted orders** - if checked, you can create more than one order in the Underlying panel. Otherwise, only one untransmitted order is allowed.

EFP Settings

- **Raw prices** - this is the default bid or ask price.
- **Annualized interest rate** - the implied annual interest rate with no compounding.
- **Continuously compounded interest rate** - the implied annual interest rate compounded several times/day.

Price Display

- **Decide based on ticker count** - TWS decides whether to use realtime or snapshot prices based on the number of tickers in the matrix. If the number of tickers exceeds your available market data limit, a snapshot is used. For information on how market data is allocated per account, see the Notes section of the Market Data overview page.
- **Realtime** - realtime prices that continually refresh.
- **Snapshot** - a static snapshot of prices at the time of the request. These prices do not refresh.

Configure the Trading Window

Use the Trading Window configuration section to customize the buttons panel that you can display on pages, to modify the layout of existing pages, or apply a new layout to a page.

To define display configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click **Trading Tools** in the left pane and then select *Trading Window*.

3   Under the Trading Window heading you can use the right panel to set the following parameters:

Configure Buttons Panel

Create and customize buttons to perform common trading actions. Use the Configure page to hide or show the Buttons panel by default, and to add, edit or delete buttons, and re-arrange the button's order on the panel.
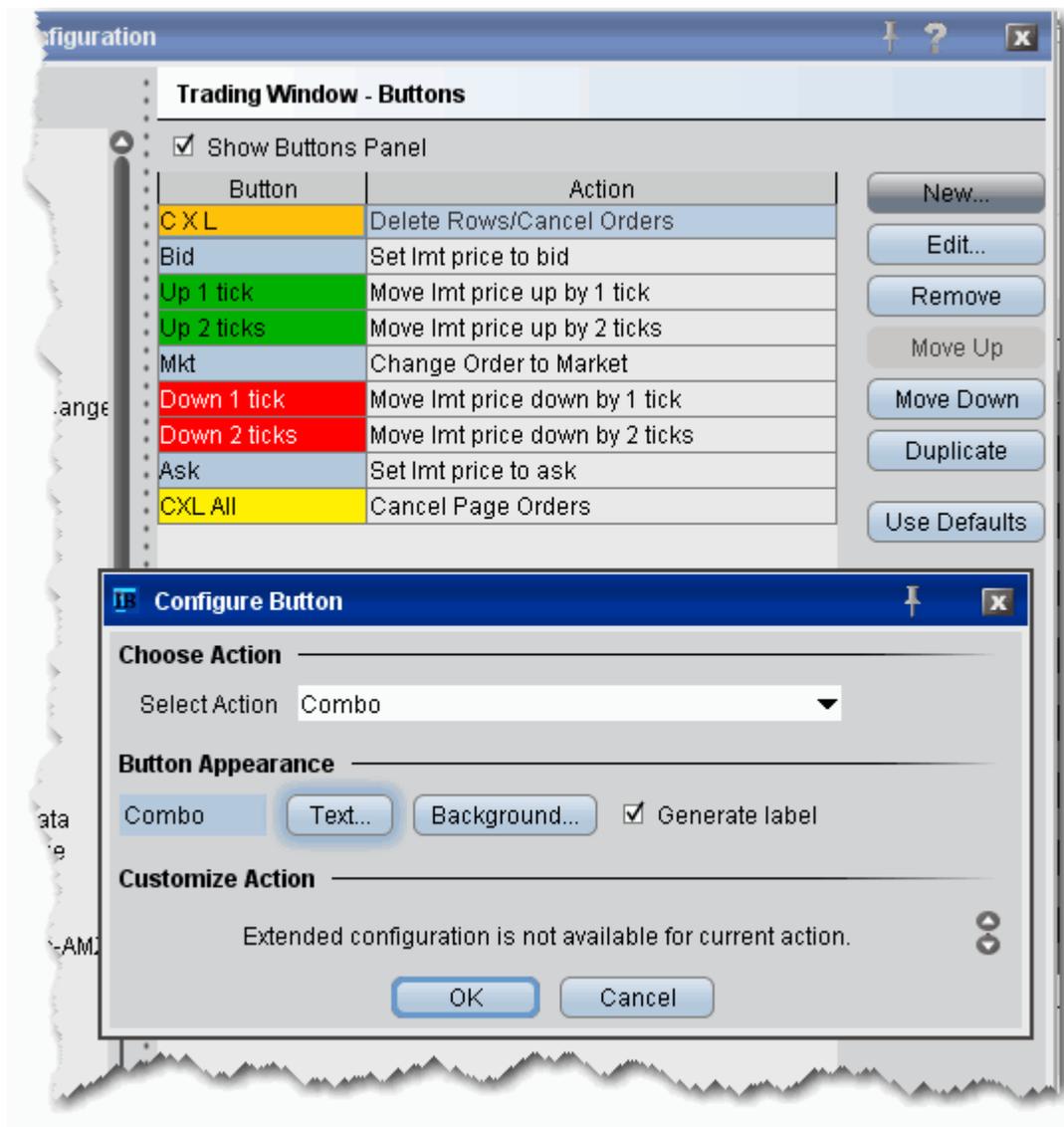
Add a button

1 Click *New*.

2 Select an action to assign to the button.

3 Modify Text and Background colors if desired.

4 Leave *Generate Label* checked to have the button appropriately labeled with the associated action.

5 Customize the action if needed, and if offered.

6 Click OK.

Add action buttons to any trading page. To edit a button, select the button and click *Edit*. To create a new button, select *New*. Select an action from the Select Action list. A text title will automatically be generated. If customization is available, select custom actions for the button.

Pages
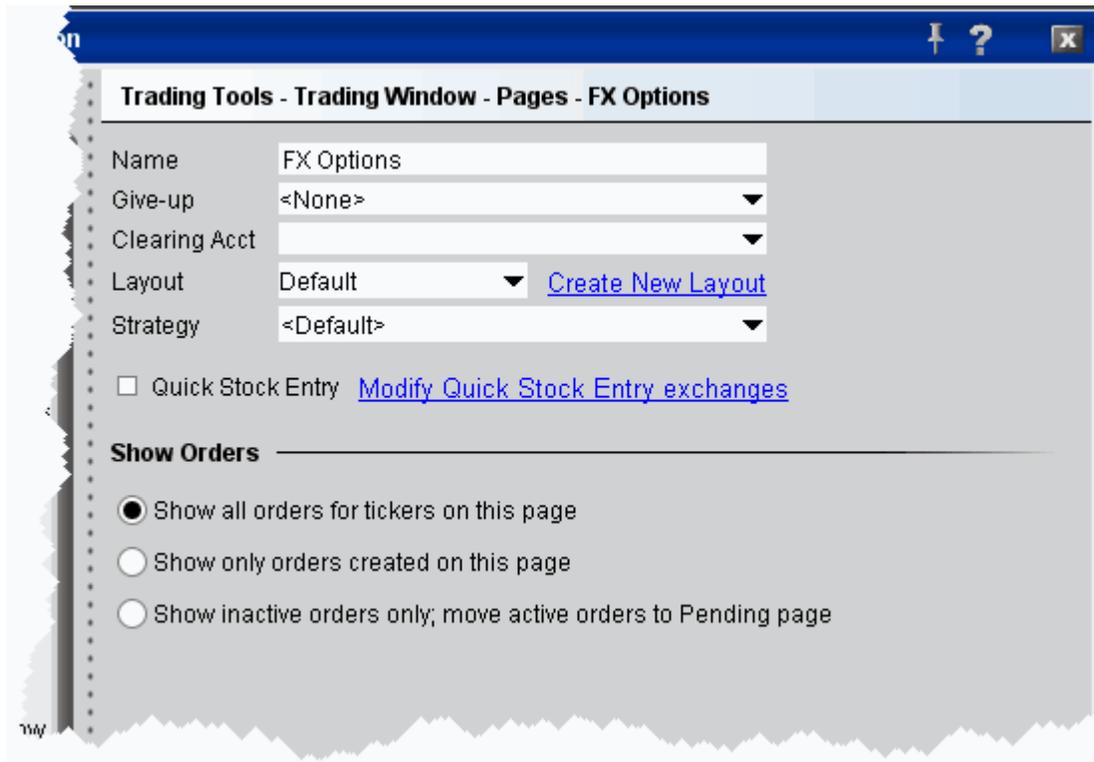
The Pages selection presents a list of all current page tabs you have set up in the Trading Window. Click a page name to modify the following page-level parameters.

- **Name** - change the name of the current page by deleting and re-typing a name.
- **Give-up** - if applicable, select a destination.
- **Clearing Acct** - if applicable, select a default clearing account.
- Layout - apply a page layout to the selected page.
- Strategy - select a Preset order default strategy.
- **Quick Stock Entry** - check to instruct the selected page to use Quick Stock entry.
- **Modify Quick Stock Entry Exchanges** - click to open the configuration page that lets you enter valid quick stock exchanges.

Show Orders - page level instructions on how to handle order display

- **Show all orders for tickers on this page** - orders will display for any tickers that have an order regardless of the page on which it was created.

- **Show only orders created on this page** - only orders created on this page will show, regardless of whether there are active orders for tickers displayed on this page.

- **Show inactive orders only, move active orders to Pending page** - this page will only show deactivated or non-transmitted orders. Active orders created on this page will display on the Pending page.

Page Layouts

Opens the layout manager for the selected page layout. A layout is a page template that allows you to define the layout, look and feel for a trading page, and then apply that configuration to any page. Note that when you modify and save the settings for a layout here, your changes are applied to ALL trading window pages that use the specified page layout. Use the page layouts to add and hide market data and order management fields on a page, modify text and background colors, and both enable and configure the Rapid Order Entry panel.

Information Tools

Introduction

Configure settings account information and data tools, including alerts, charts, market depth, scanners and news.

- [Configure Alerts](#)
- [Configure Charts](#)
- [Configure Market Depth](#)
- [Configure News Feeds](#)
- [Time & Sales](#)
- [Trader Dashboard](#)
- [Configure Alerts](#)

Configure News Feeds

You can elect to add more pre-configured news feeds to your workstation browser. You can also subscribe to Reuters News Service via the Market Data subscriptions page in Account Management.

To view Reuters News

1   On the **Configure** menu, select *Global Configuration*.

2   In the left pane, click the horizontal key to expand the **News Configuration** feature, then select *News Suppliers*.

3   In the **Pre-configured Providers** section at the top of the right page, check *Reuters News Service*.
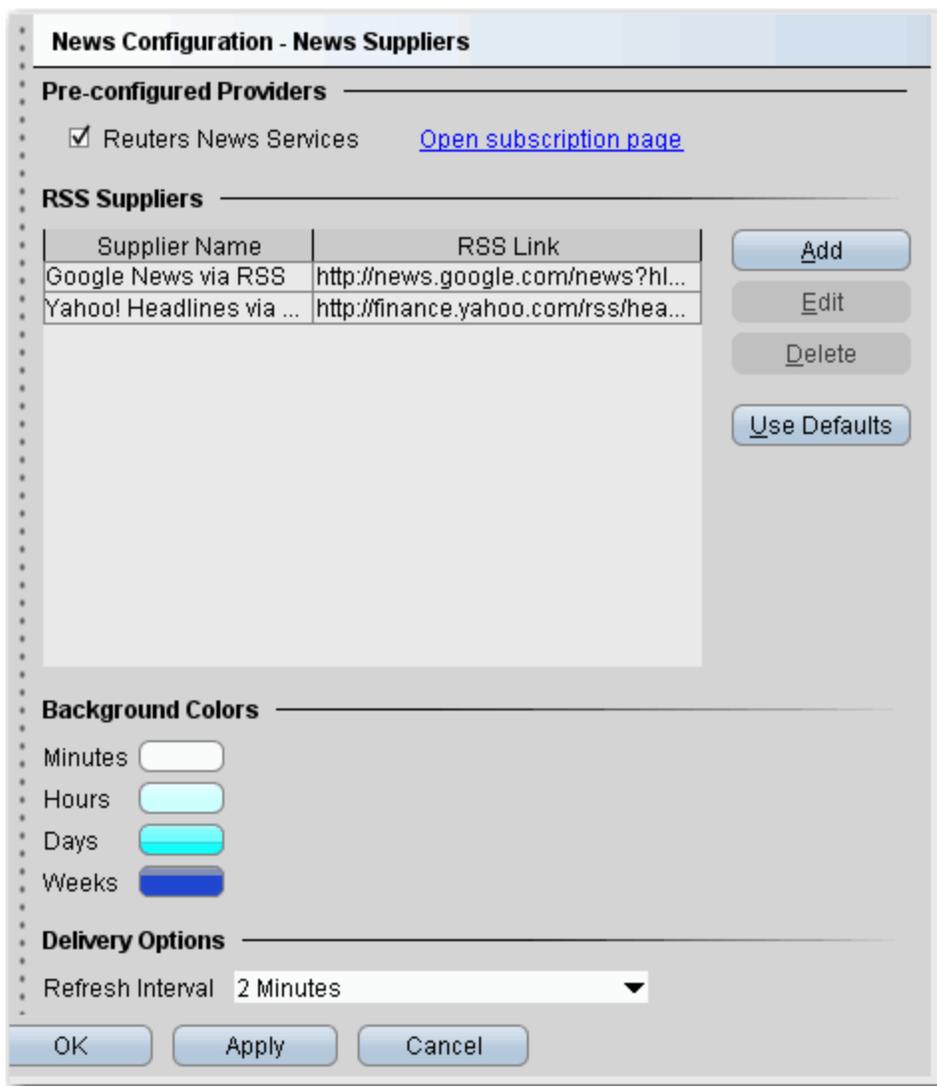
If this selection is grayed-out, it means you have not subscribed to this service in Account Management.

To add existing news feeds

1   On the **Configure** menu, select *Global Configuration*.

2   In the left pane, click the horizontal key to expand the **News Configuration** feature, then select *News Suppliers*.

3   The right pane displays the current list of news suppliers whose headlines you can access. Click the **Add** button to configure a new supplier.

4   Select a supplier name from the dropdown list. The RSS Link is automatically loaded. Click **OK.**

5   The new supplier appears in the list of available news feeds.

Note: You can elect Refresh Intervals of 1, 2, 3, 4, 5, 10 and 15 minutes. Note that refreshing the news feeds requires some system resources, and more frequent refresh intervals may have a minor impact on your system performance depending on your connection type.

Configure Market Depth

Use the Market Depth configuration page to define basic settings, hotkeys, buttons and to control the visibility of column fields.

To define Market Depth configuration settings

1   On the **Configure** menu select *Global Configuration,* or click *Configure* from the Market Depth menu.

2   Click *Market Depth* in the left pane. You can expand the options in the left pane or in the right panel.

3   Use the right panel to set these parameters:
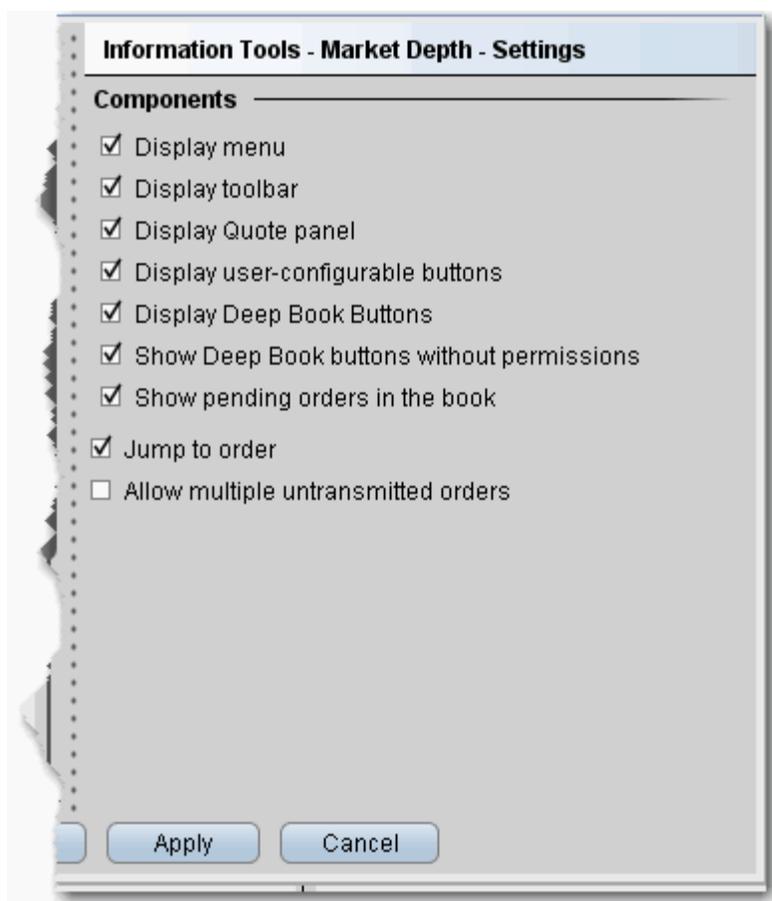
Settings

Components

- **Display menu** - check to see the Market Depth menu.
- **Display toolbar** - check to see the Market Depth toolbar.

- **Display Quote panel** - check to display the Quote Panel, which displays a single line of market data for the asset. You can create an order from the Quote panel by click the bid or ask price.

- **Display user-configurable buttons** - if checked, the buttons that allow configuration are displayed.

- **Display Deep Book Buttons** - if checked, the Deep Book Buttons panel will display, with a button for each market center for which you have deep book data permissions.

- **Display Deep Book buttons without permissions** - if checked and Deep Book Buttons panel is also displayed, the buttons for deep data will display even if you do not have permissions. These buttons will be visible but inactive.

- **Show pending orders in the book** - if checked, any orders you transmit from the DepthTrader window will show, highlighted in white, in the Deep Book data.

- **Jump to order** - automatically puts the cursor on the newly created order in the **Orders** panel.

- **Allow multiple untransmitted orders** - if checked, you can create more than one order in the Underlying panel. Otherwise, only one untransmitted order is allowed.

Configure Charts

Use the Charts configuration page to define basic settings, hotkeys, buttons and to control the visibility of column fields.

To define Charts configuration settings

1   On the **Configure** menu select *Global Configuration,* or click *Configure* from the Charts menu.

2   Click *Charts* in the left pane. You can expand the options in the left pane or in the right panel.

3   Use the right panel to set these parameters:
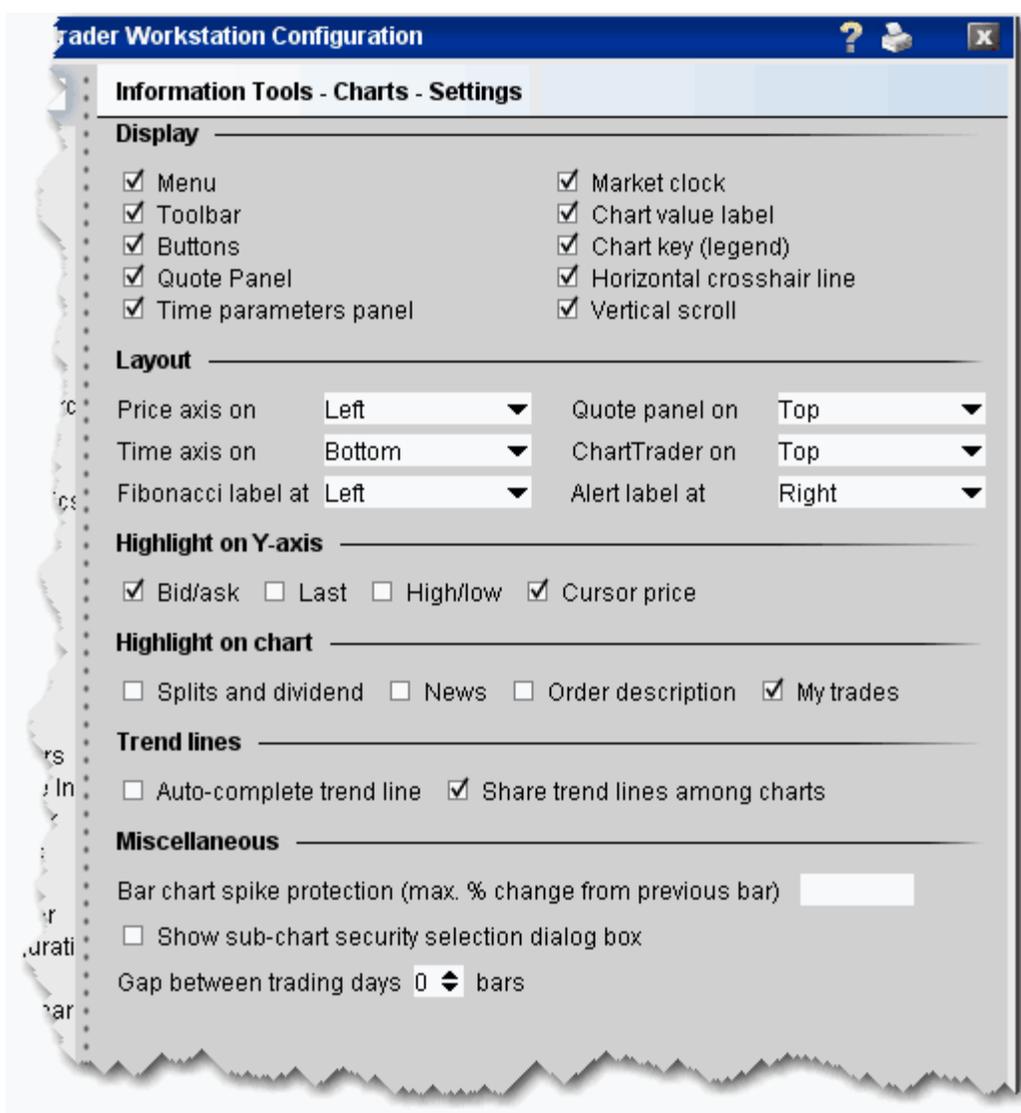
Display

Name - Description	Name - Description
Menu - check to display the **Charts** menu.	**Market clock** - if checked, displays the time in the top title bar.
Toolbar - check to display the **Charts** toolbar.	**Chart value label** - if checked, the Price, Volume and other axis labels are displayed.
Buttons - check to display configurable ChartTrader buttons.	**Chart key (legend)**- if checked, displays a key to the color, type of chart and asset charted along the bottom of the chart.
Quote panel - if checked, the Quote panel, which shows market data for the contract, displays at the bottom of the chart window.	**Horizontal crosshair line** - when checked, both the vertical and horizontal crosshair lines are displayed on a chart when you are in Crosshair Mode. When unchecked, only the vertical crosshair line displays.
Time parameters panel - if checked, the toolbar that displays time parameters is visible at the top of the chart.	**Vertical scroll** - check to enable the *Enter visible range* right-click menu commands. This allows you to zoom in by entering a top/bottom range, and use the vertical scroll bar to scroll up and down the entire height of the chart.

Layout

Price axis on: Left, Right, or Both	**Quote panel on:** Top or Bottom
Time axis on: Top, Bottom or Both	**ChartTrader on:** Top or Bottom
Fibonacci label at: Left, Middle or Right side of the top red Alerts bar.	**Alert label at:** Left, Middle or Right side of the top red Alerts bar.

Highlight on Y-axis

Check the prices to highlight along the y-axis. "Cursor price" is the price over which your cursor is currently hovering within the chart.

Highlight on chart

Check the events to highlight within the chart itself. Holding your cursor over any of the highlighted events will display a text description of the event.

Trendlines

Auto-complete trendline - if checked, you can instruct TWS to complete a freehand trendline. Begin your trendline by clicking and holding the mouse. To use auto-complete,

release the mouse key, then click again. TWS completes the trendline across the chart, following your trajectory.

Share trend line among charts - if checked, a trendline drawn on one chart will appropriately be reflected on other active charts on the same underlying.

Miscellaneous

Bar chart spike protection (max. % change from previous bar) - if you want to apply spike protection, enter a percentage value. If any bar exceeds this percentage relative to the previous bar, it is automatically eliminated from the chart.

Show sub-chart security selection box - when checked, a box asking if you want the sub-chart to use the same security as the selected chart is displayed when you elect to Add New Chart.

Gap between trading days - define the number of missing bars (up to 9) allowed between trading days.

Time & Sales

Define the layout of the Time & Sales page that you can display for a chart.

- *Settings* - choose to show quote line and show last only.
- *Hotkeys* - define Time & Sales hotkeys and shortcuts.
- *Quote Panel* - Hide or display fields in the Quote Panel area.
- *Colors* - modify colors.
- *Columns* - uncheck to remove columns from the Time & Sales main data area.

Trader Dashboard

The real-time Trader Dashboard is an optional tool that can be displayed at the top of the pages tabset. This customizable panel allows you to monitor data fields from your Account Information window, keep abreast of the most recent activity for specific contracts, and view current real-time news headlines for products in your portfolio and for any tickers you are watching.

To configure the Trader Dashboard

1   On the **Configure** menu, select *Global Configuration*.

2   In the left pane, click *Trader Dashboard*.

3   Use checkboxes in the right pane to set the following:

   • Check *Show news* to display news headlines for any products in your portfolio and to alert you to recent news on any tickers you elect to display.

- To see only portfolio-relevant news, check *Display News for products in portfolio* only*.*

- To only see indicators of recent news next to individual tickers that you are watching, check *Display recent news indicator* only.

- Check *Show price change in percentage* to view the last price and price change values as percentages in ticker lines.

- Check Show price change in value to view the last price change as an absolute value.

4 Click the **Add Account Data** button, and scroll down the list. Double-click each Account field that you want to add to the dashboard. Each field you double-click is added to the *Display Item* list on the configuration pane. Click OK to close the *Add* box.

The descriptions for Account Information fields are in the Account Information topic.

5 To add a last price/price change field for a contract, enter the underlying in the *Symbol* field and click **Add Ticker,** then define the contract parameters just as you do when you add market data to the trading page. The last price/price change displays in red to indicate downward movement and blue to indicate upward movement.

6 Click **OK**. The **Trader Dashboard** is displayed at the top of your trading window, just above the pages tabset.

You can change the display name for selected dashboard fields using the Change Label feature.

Rename Dashboard Field Labels

You can modify the names of the fields on the dashboard to make them shorter or more informative to you. For example, you might want to shorten Net Liquidation Value to Net Liq, or Special Memorandum Account to SMA.

To customize an attribute label

1 Highlight the label you want to modify from the Display Item table.

2 Click the Change Label button to the right of the table.

3 In the Custom Label box, uncheck the *Use Default Label* selection.

4 Enter a new name for your attribute in the Label field and click OK.

   The new labels are listed in the Label column of the Display Item table.

Configure Alerts

Use the Alerts configuration page to define basic settings, hotkeys, buttons and to control the visibility of column fields.

To define Alerts configuration settings

1   On the **Configure** menu select *Global Configuration,* or click *Configure* from the Alerts menu.

2   Click *Alerts* in the left pane. You can expand the options in the left pane or in the right panel.

3   Use the right panel to set these parameters:
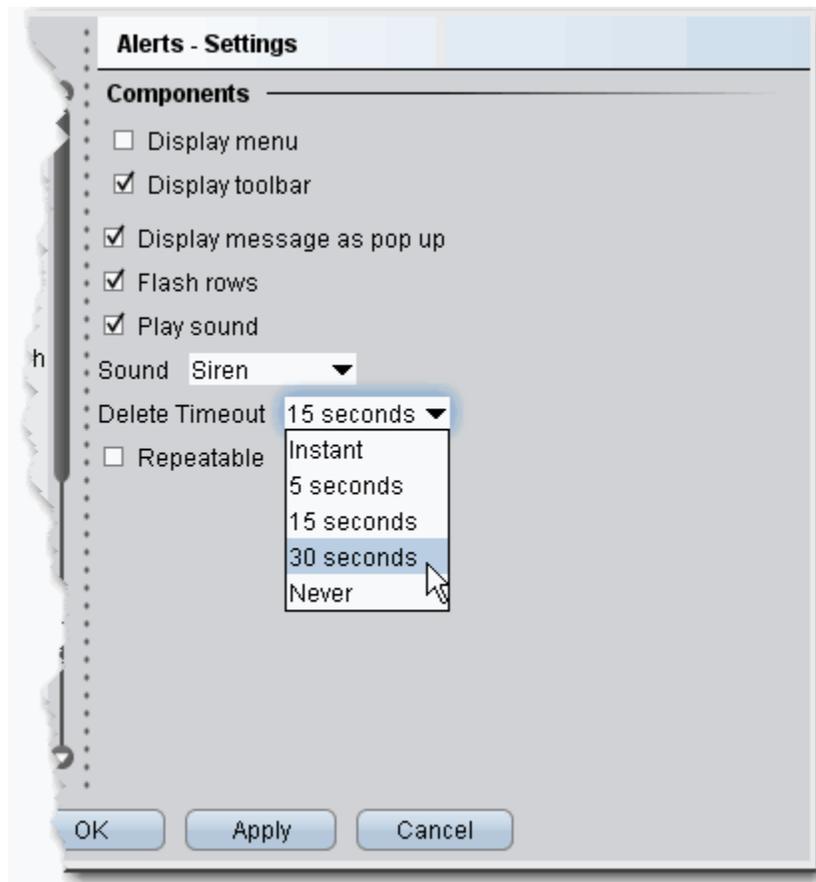
Settings

Components

- *Display menu* - check to see the Alerts menu.
- *Display toolbar* - check to see the Alerts toolbar.

- *Display message as pop up* - if checked, the default for Alerts is a pop up message.
- *Flash rows* - if checked, the rows of market data used for the Alerts will flash when the Alert has been activated.
- *Play sound* - if unchecked, *None* is selected by default on the **Audio** tab of the Alerts page.
- *Sound* - select a default alert sound.
- *Delete Timeout* - set the time after which the alert notifications will stop.
- *Repeatable* - if checked, this feature will be checked by default in the Duration area of the Alerts page.

Hotkeys

Opens the **Hotkeys and Mouse Shortcuts** dialog box. You can modify the configuration of existing shortcuts by selecting an action and clicking *Configure*. For more information see the Assign Mouse Shortcuts topic.

Buttons

Create custom buttons to add to the toolbar, or edit existing buttons. Click New to create a new button.

Order Columns

Hide or display fields in the Orders area using the *Columns* page of the Page Layout.

Page Layout

Introduction

Create a Page Layout

The Layout feature lets you create custom layouts that you can then apply to your trading pages. Use the **Layout** editor to identify which columns you want to display, where you want the columns to be in relation to each other, and the text and background colors used to convey trading information for a specific layout.

If you want to change the way your pages display but want them all to look the same, you can simply change the **Default** page layout. If you want to apply different layouts to specific pages or save the default settings, create a new layout by copying the **Default**, renaming and editing it.

To create a page layout

To create a new layout, you must copy an existing layout, rename it, and then edit it to your specifications.

1   On the **Configure** menu, click *Global Configuration* and then click *Trading Window*.

2   Select *Other Layouts* in the left pane, and then click the **New** button in the right pane.

3   Enter a name for the new page layout and click **OK**.

4   Click *Edit* to open the **Page Layout** editor.

5   Modify column visibility, column order, and text and background colors and click OK. The layout remains unused until you apply it to a page.

Apply a Page Layout

You can apply a layout to existing trading pages one page at a time, or to a new page when you create it.
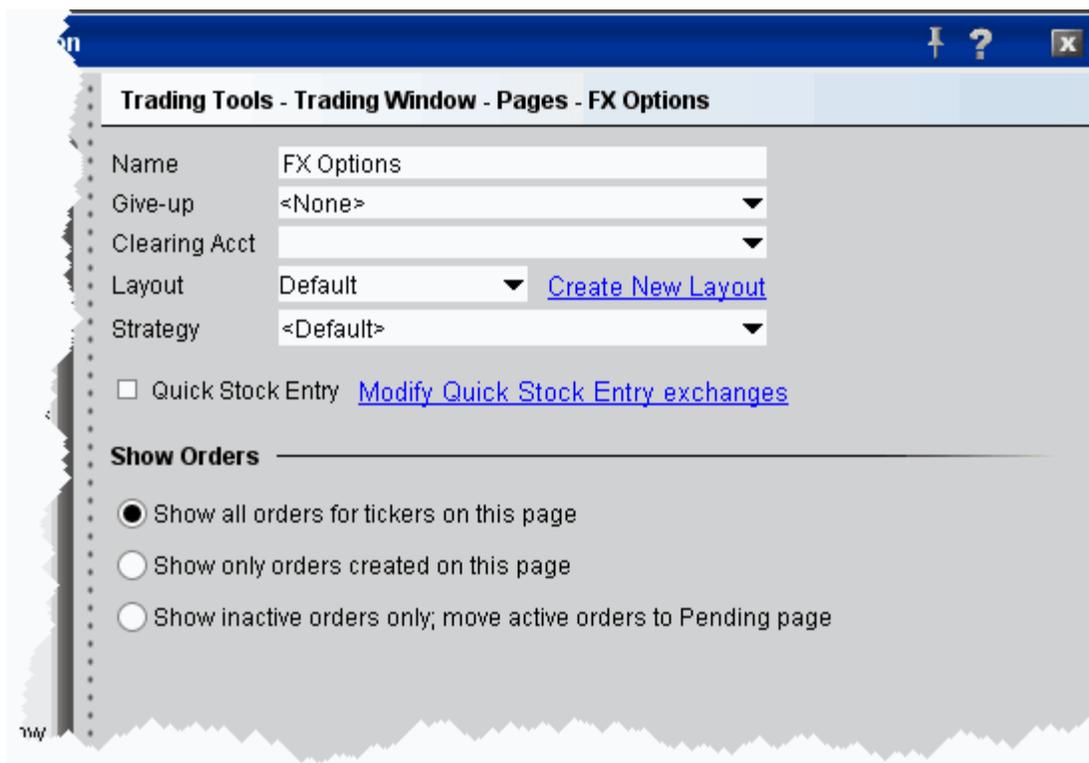
To apply a layout to an existing page

1   On the **Configure** menu, select *Global Configuration*.

2   In the left pane, select *Trading Window* and then *Pages*.

3   Choose the page on which you want to apply a layout.

4   In the *Layout* dropdown list, select the layout you want to apply.

5   Choose an order default strategy.

6   Click **OK**.

> **Note:**   *All pages use the **Default** layout and **Default** strategy until you specify otherwise.*
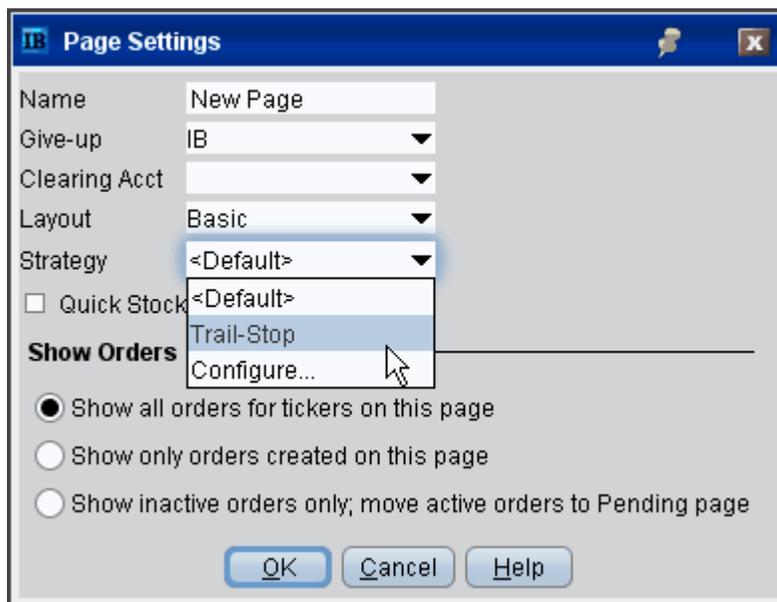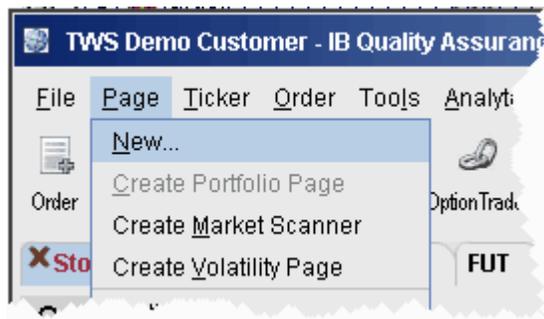
To apply a layout to a new page

1   On the **Page** menu click *New* and enter a page name.

2   In the **Layout** drop-down, select the desired layout to apply to the new page.

3   Choose an order default strategy.

4   Specify how you want orders to display on the page.

5   Click **OK**.

Edit a Page Layout

The Layout feature lets you create custom layouts that you can then apply to your trading pages. Use the **Layout** editor to identify which columns you want to display, where you want the columns to be in relation to each other, and the text and background colors used to convey trading information for a specific layout.

If you want to change the way your pages display but want them all to look the same, you can simply change the **Default** page layout. If you want to apply different layouts to specific pages or save the default settings, create a new layout by copying the **Default**, renaming and editing it.
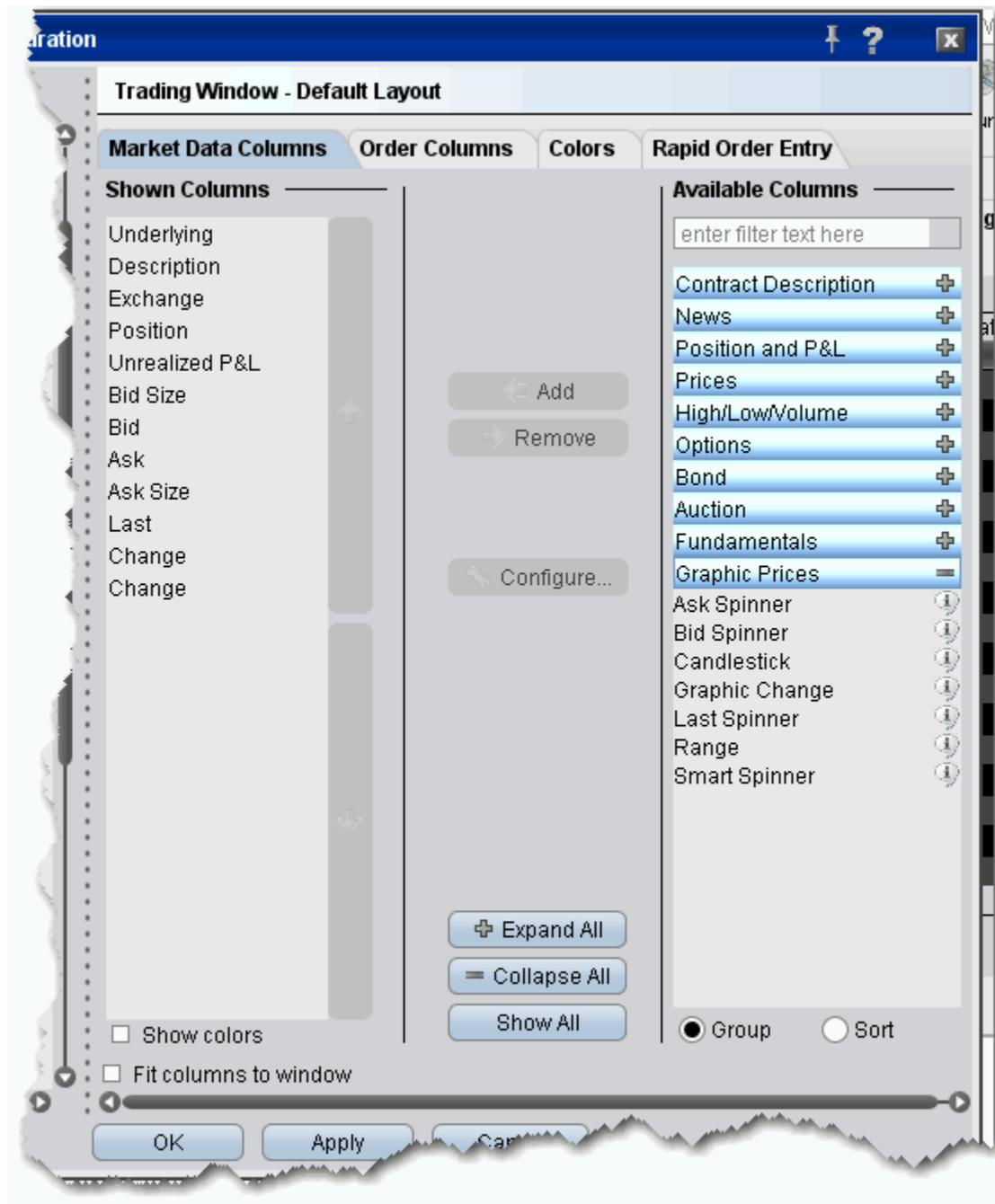
To edit a page layout

1 On the **Configure** menu, click *Global Configuration* and then click *Trading Window*.

2 In the left pane, select the layout you want to edit.

3 Use the *Market Data Columns* and *Order Columns* tabs to **Add** or **Remove** fields.

Fields in the Market Data Columns page display along the TOP row of field headings on a Trading page. Fields in the Order Columns page display along the bottom row of fields headings. If you display the same field on both the Market Data and Order row pages, it appears as a single field like the Underlying, Exchange and Description fields above.

4 If desired, change text and background color using the *Colors* tab and click OK.

The layout remains unused until you apply it to a page.

Display Market Data Columns

You can choose to display or hide many of the columns on the trading page using the Layout manager in Global Configuration.

To display/remove market data columns on a page
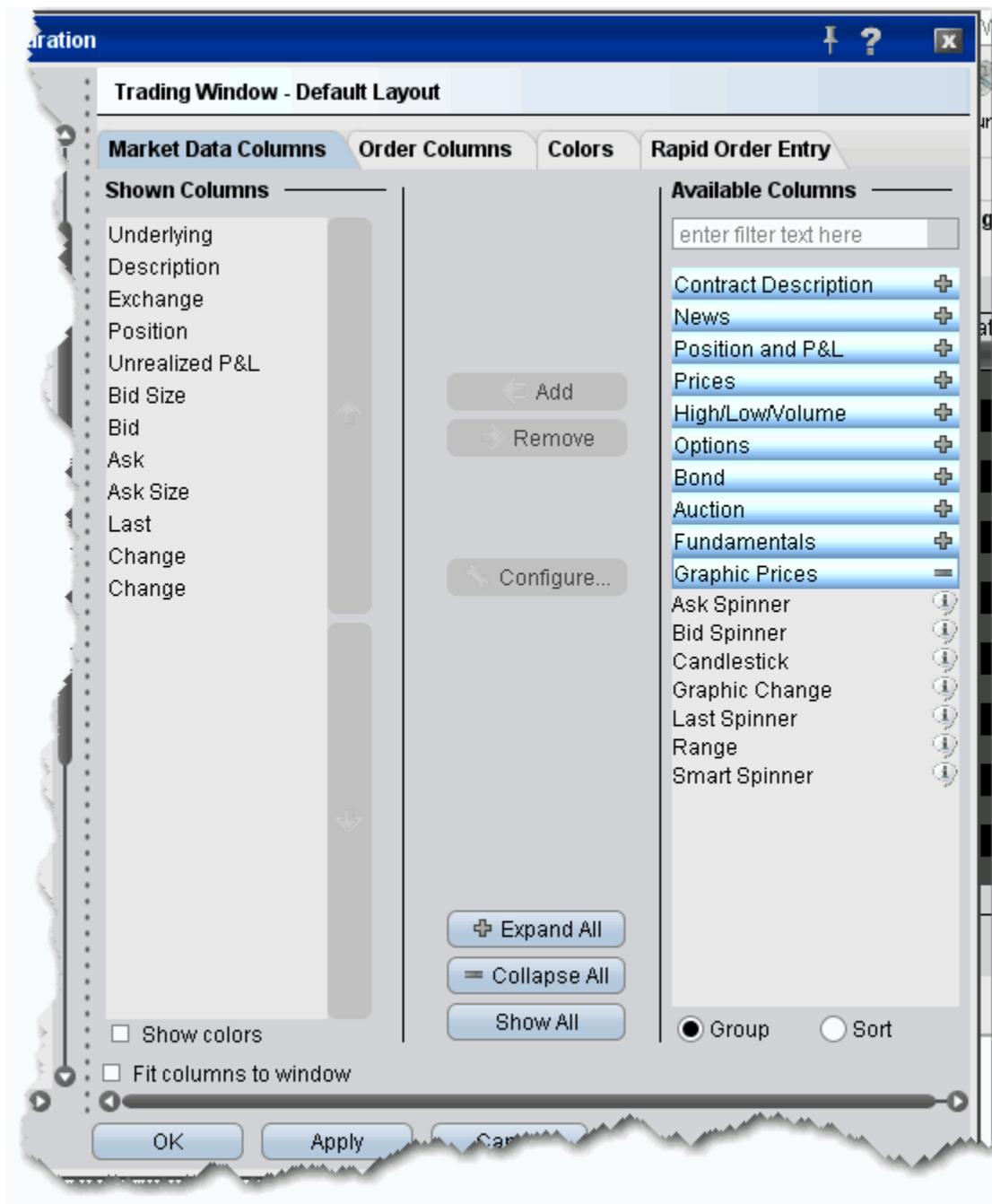
1   Right click and column heading on a trading page, and select *Customize Layout*.

2   Click the **Market Data Columns** tab to view columns.

The columns already displayed on your trading window appear in the *Shown Columns* list on the left side of the page. The remaining columns are grouped by category in the *Available Columns* list to the right.

3 To display columns, select one from the *Available Columns* list and click the **Add** button to move the column into the *Shown* list.

4 To remove a column, select a column in the *Shown Columns* list and click the **Remove** button.

Column titles in **bold** are always visible and cannot be removed. Use the Filter field to help find the column you're looking for, or click the Sort radio button to list all columns alphabetically.

For descriptions of data displayed in Market Data columns, see Market Data Columns.

Configure Columns

You can configure the text and background on individual columns in the trading window.

For price and size columns, you can turn off the dynamic coloring, which indicates upward movement in price or size in green and downward movement in red, by unchecking the *Use Dynamic Colors* box.
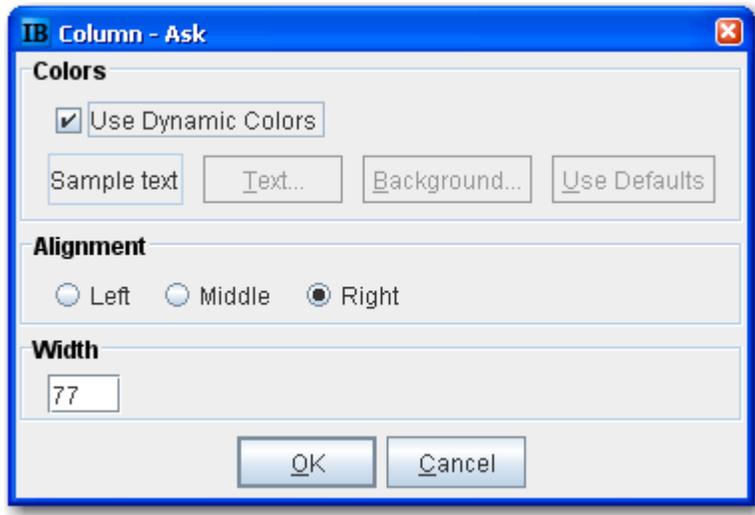
To configure columns

1   Right click the column name and select *Configure xyz Column*.

2   If dynamic coloring is available, you can uncheck the feature if desired.

3   Modify the background and text color of the column using the *Text* and *Background* color-pickers. Click User Defaults to return to original TWS colors.

4   Alignment moves the data within the column.

5   Width controls the column size.

Display Order Management Columns

You can choose to display or hide many of the columns on the trading page using the Layout manager in Global Configuration.
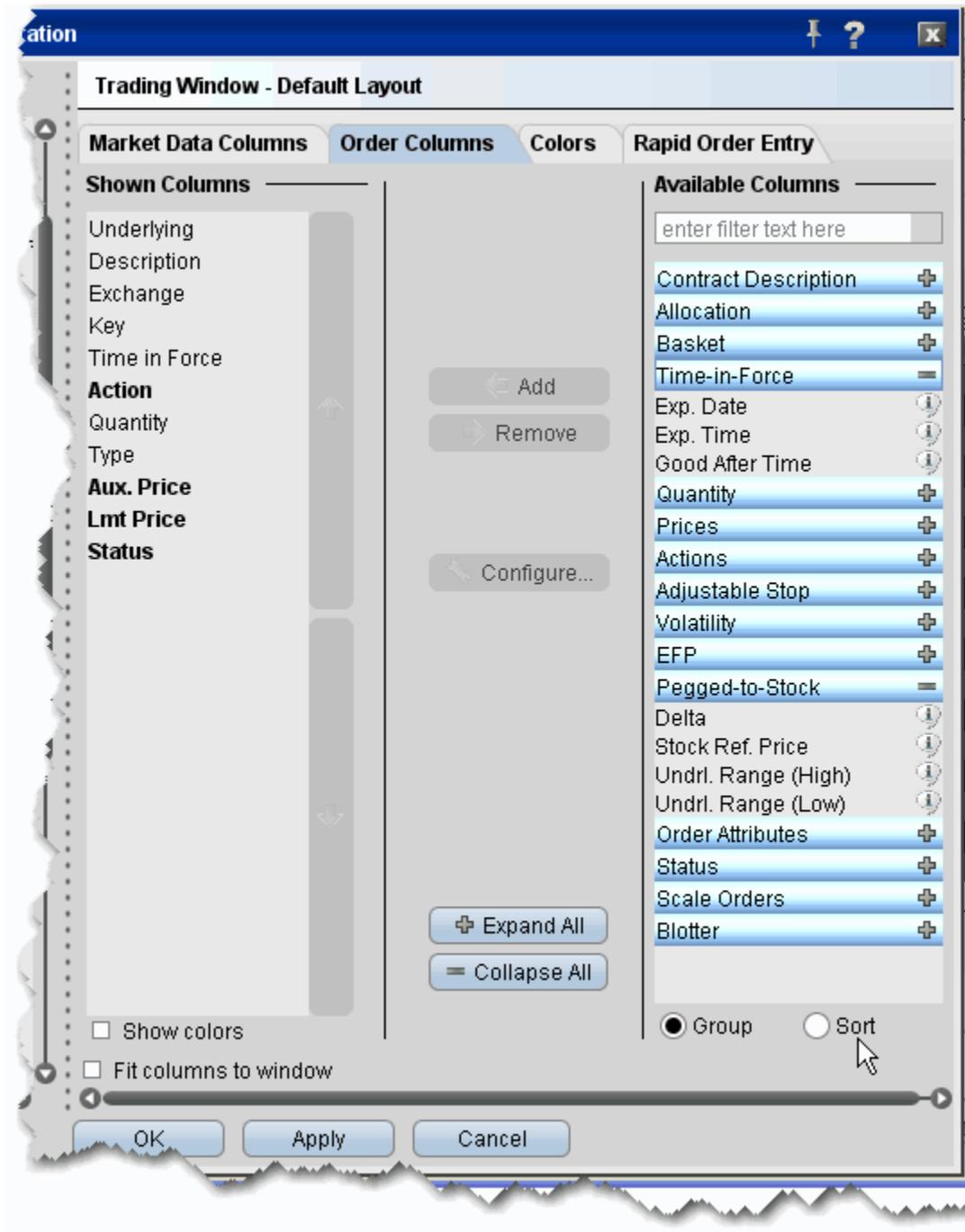
To display/hide order columns on a page

1 Right click the field labels on a trading page, and select *Customize Layout*.

2 Click the **Order Columns** tab to view columns.

The columns already displayed on your trading window appear in the *Shown Columns* list on the left side of the page. The remaining columns are grouped by category in the *Available Columns* list to the right.

3 To display columns, select one from the *Available Columns* list and click the **Add** button to move the column into the *Shown* list.

4 To remove a column, select a column in the *Shown Columns* list and click the **Remove** button.

Column titles in **bold** are always visible and cannot be removed. Use the Filter field to help find the column you're looking for, or click the Sort radio button to list all columns alphabetically.

For a description of data displayed in Order columns, see <ins>Order Management Columns</ins>.

Rearrange Trading Page Columns

You can reposition columns on a trading page by dragging and dropping a column into a new location. Since order management and market data columns are stacked, you will be asked if you want to move one of the columns, or both together.
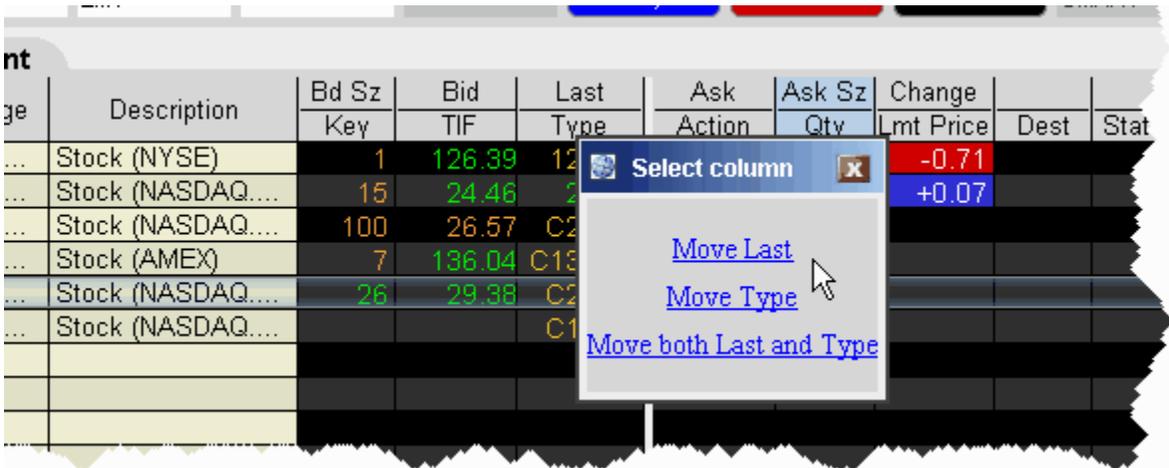
To reposition a column

1 Click your mouse on the column you want to move.

2 Holding the mouse key, drag the column left or right to its new position.

3 Release the mouse button.

4 In the confirmation message, select a single column, or elect to move both columns together.

Change Background and Text Colors

You can modify the background and text color for specific columns and rows using the *Layout Editor.*
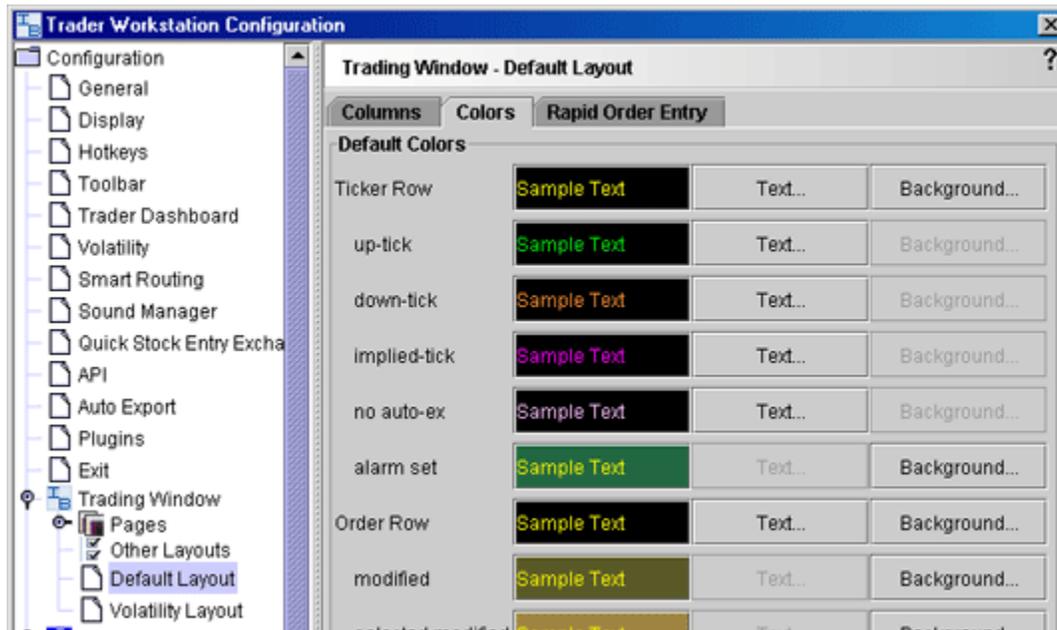
To change colors in a page layout

1 On the **Configure** menu, click *Global Configuration*, then click *Trading Window* in the left pane.

2 Select a layout (use **Default** to change the basic layout, click **Other Layouts** to find a custom layout you designed).

3 Click the **Colors** tab and elect to modify either the text or the background color.

You can modify text and/or background colors for the following items:

- Ticker Row (*text & background*) - row that contains the market data for the product.
- Up-tick (*text only*) - a tick that is moving up.
- Down-tick (*text only*) - a tick that is on the decline.
- Implied-tick (*text only*) - the implied tick for a combo order that is \simulated by adding the values of the legs, as opposed to market data which represents an actual order for the combo.
- No auto-ex (*text only*) - for options, tells you that orders placed against this market will not execute electronically.
- Alarm set (*background*) - tells you that this line has an alarm set against it.

- Order Row (*text & background*) - the order row that is created when you click on a bid or ask price for a product.

- Modified (*background*) - the background for orders that have been modified.

- Selected modified (*background*) - the background for modified orders you have highlighted (to transmit or cancel, etc.)

- Total Row (*text & background*) - the optional total rows displays in different color to help it standout.

- Background Grid (*background*) - the background of the entire trading page grid.

- Background Auction (*background*) - the background of an order row whose instrument is participating in an auction, and cannot be cancelled.

Modify Rapid Order Entry Settings

The Rapid Order Entry panel is one component of a trading page, and consequently its settings are managed through the Page Layout Manager. Any changes you make to the Rapid Order Entry settings are applied via that page's assigned page layout. If you have not created or applied page layouts to specific pages, all pages are controlled through the default page layout. The procedure below assumes some familiarity with the page layout manager.

To modify Rapid Order Entry settings

1   On the **Page** menu, click *Layout*. The name of the layout that you are editing appears in the title bar of the Layout Manager.

2   Click the **Rapid Order Entry** tab to view the current settings.

3   Use the checkboxes, editable fields and Display Settings described in the table below to enable/disable features, set default values and select a default order type.

4   Click **OK**.
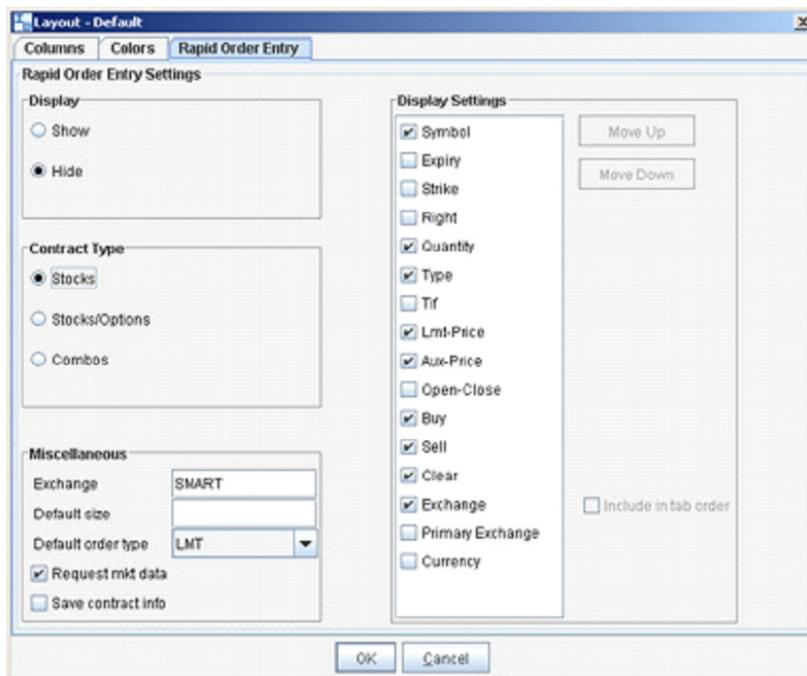
Note: Note that you are making changes to a component of a page layout, not to a specific page. These changes will also be applied to all other pages using this layout.

Rapid Order Entry Settings

You can record hot key assignments for rapid order entry actions. Note that your standard hot keys (Buy, Sell etc) are not valid within the Rapid Order Entry panel.

Display

- Show - displays the Rapid Order Entry panel at the top of any pages using the layout.

    - Hide - hides the Rapid Order Entry panel at the top of any pages using the layout.

Contract type

- Stocks - automatically configures the Rapid Order Entry panel to allow you to trade stocks. You will see the Display Settings list to the right from which you can select the fields you want to use.

- Stocks/Options - automatically configures the Rapid Order Entry panel to allow you to trade stocks or options. You will see the Display Settings to the right from which you can select the fields you want to use.

- Combos - automatically configures the Rapid Order Entry panel to allow you to create and trade combination and spread orders. The Display Settings list is not relevant to this layout.

Miscellaneous

- Exchange - enter the default routing exchange. We recommend using Smart to get the best execution.

- Default size - set the default order size. You may edit the value in this field from the panel.

- Default order type - sets the default order type. You may edit this value from the panel.

- Request market data - controls whether you will see a line of market data above the order management line that is created when you transmit an order.

- Save contract info - when checked, the information for the current contract will remain after you transmit an order. Unchecked, all fields are cleared after you transmit an order.

Display Settings

Check any fields that you want to appear on the Rapid Order Entry panel.

- Move up/move down - puts the checked fields in order. The order in which they appear in this list determines the order in which they will appear on the Rapid Order Entry panel, and the order in which the cursor will be inserted as you tab through the fields if Include in tab order is checked.

- Include in tab order - this box must be checked or unchecked for each of the selected fields in the list. Checking instructs your cursor to land in that field as you tab through.

Trading Page Field Descriptions

Introduction

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Market Data Columns

- [Contract Description Columns](#)
- [News Columns](#)
- [Position and P & L Columns](#)
- [Price-based Columns](#)
- [High/Low/Volume Columns](#)
- [Options Columns](#)
- [Bond Columns](#)
- [Auction Columns](#)
- [Fundamentals Columns](#)
- [Graphic Prices Columns](#)
- [Order Presets](#)
- [Stock Borrow/Loan](#)

Contract Description Columns

Column Name	Description
Contract Description	
Category	A category within an industry in which the underlying can be categorized.
Company Name	Shows the company name for the underlying.
Data Source	Identifies the source of the top market data.
Description	Identifies the instrument type and other descriptive contract information.
Drill down	
Industry	The type of industry under which the underlying is categorized.
Exchange	The market data exchange. If no other exchange is specified for order routing, this exchange is also where the contract will be routed. Select SMART order routing to route directly to the best available market.
Notes	An editable, unlimited text field where you can enter notes about the underlying, etc. When you mouse over the Notes text, it displays in a pop up box so you can read the entire note. **Note:** The **Notes** field is not editable on system-generated pages, since these pages (including the Pending page and Portfolio page) function differently from user-maintained pages. They are dynamically created and populated at the start of a TWS session and do not have the capability to save user-entered text.
Shortable	Uses colors to identify whether or not there is stock available for the customer to short it. Colors relay the following information: Red - No shares are available Dark Green - The system is trying to locate shares. Light Green - At least 1000 shares are available.
Sub-category	The most detailed description of the industry under which the underlying is categorized.
Symbol	Shows the exchange symbol for the contract.
Underlying	The underlying symbol for the contract. To toggle between underlying and symbol mode, on the **View** menu select the desired mode.

News Columns

Column Name	Description
News	
News Time	Displays the time and date of the latest contract-related news story. Rows use a color gradient to help differentiate latest from oldest stories at a glance. To view this field, you must activate the RSS News feed feature via the Feature Selector>Fundamental Analysis category.
News Title	Displays the title of the news story. To view this field, you must activate the RSS News feed feature via the Feature Selector>Fundamental Analysis category. For a deeper look at a story, double-click the title.

Position and P & L Columns

Column Name	Description
Position and P & L	
Avg Price	The average cost of the current position.
Cost Basis	The cost basis is calculated using the formula: average price x position x multiplier
Market Value	Equal to (position * market price).
Position	Your current position in the selected contract.
P&L	Displays gains or losses. To modify the P&L calculation used, right-click the field and select or deselect *Include today's opening position in P&L calculation.*
Unrealized P&L	Calculates unrealized P&L for stocks, stock options and futures options. Unrealized P&L is calculated using the formula: (current market price - average cost/share) x total number of shares The average cost per share is updated in realtime. This field is automatically added to the Trading window when the customer takes a position. Once removed it is not automatically added again.
Realized P&L	Calculates the realized profit and loss per position.
Unrealized P&L Spinner	A graphic real-time representation of unrealized profit and loss, where the arrow color indicates whether your current unrealized P&L is positive (blue) or negative (red), the direction indicates whether the last price change was negative (pointing left) or positive (pointing right), and the length of the arrow represents the distance between the purchase/sale price and the last bid/ask.

Price-based Columns

Column Name	Description
Prices	
Ask	The best ask price for a contract. This is the best price at which you could currently BUY.
Ask Size	The approximate depth of the current offer.
Bid	The best bid price for a contract. This is the best price at which you could currently SELL.
Bid Size	The approximate depth of the current bid.
Change	How much the current price has risen or declined from the previous day's closing price. If the price has declined, the background is red. If the price has risen, the background is blue. To toggle between dollar change and percent change, click the column title.
Change (%)	The percentage that the current price has risen or declined from the previous day's closing price. If the price has declined, the background is red. If the price has risen, the background is blue. To toggle between percent change and dollar change, click the column title.
Change Since Open	The change in price (by dollar value or percent) since the day's opening price. If the price has declined, the background is red. If the price has risen, the background is blue. To toggle between percent change and dollar change, click the column title.
Close	Displays the last available closing price for the asset. For US equities, we use corporate action processing to get the closing price. This means the close price is adjusted to reflect forward and reverse splits, and cash and stock dividends.
Dividends	Dividend information displayed on a "best efforts" basis.
EXT	*Requires a subscription to eSignal market data.* The exchange where the contract has traded.
Gap	Displays the difference between the previous night's closing price and the day's opening price. You can toggle this display between showing the gap in currency units or percentage points (100% x Gap / Today's Open). To toggle the display, right-click the column title and select *Toggle Display*.
Last	The last price at which the contract traded. A "C" in front of the last price indicates that this is the previous day's closing price.
Last Size	The size of the last contract traded. If the last contract traded is larger than the previous one, the font is green. If it's smaller, the font is red.
Mark Price	The mark price is equal to the LAST price unless: Ask < Last - the mark price is equal to the ASK price. Bid > Last - the mark price is equal to the BID price.
Mid	The midpoint between the current bid and ask.
Open	The opening price for the day.

Column Name	Description
RSI Colorful	*Requires a subscription to eSignal market data.* The Relative Strength Index compares the magnitude of recent losses to recent gains and relays that comparison in the form of a number that ranges from 0 to 100 where 0 indicates weaker performance. For quick reference, the background color is red if the RSI is less than 20, and green if the RSI is higher than 80.
RSI Numeric	*Requires a subscription to eSignal market data.* The Relative Strength Index compares the magnitude of recent losses to recent gains and relays that comparison in the form of a number that ranges from 0 to 100 where 0 indicates weaker performance.
Spread	The difference between the current ask and bid.
Trade Time	Time of the last trade. The background color indicates the relative activity of a security compared with all other active contracts on your trading pages. The lighter background indicates more activity for the contract. Darker indicates that other securities are trading more actively.
VWAP	The volume-weighted average price.
Y Close	*Requires a subscription to eSignal market data.* The previous trading day's last trade price.

High/Low/Volume Columns

Column Name	Description
High/Low/Volume	
13 week low	The lowest price for the past 13 weeks.
13 week high	The highest price for the past 13 weeks.
26 week low	The lowest price for the past 26 weeks.
26 week high	The highest price for the past 26 weeks.
52 week low	The lowest price for the past 52 weeks.
52 week high	The highest price for the past 52 weeks.
Average Volume	The average daily trading volume over 90 days (multiply this value times 100).
Low	Low price for the day for the selected contract.
High	High price for the day for the selected contract.
Relative Volume	*Requires a subscription to eSignal market data.* Compares today's volume with volume from the previous trading day. Indicator grows toward the right as today's volume increases.
Relative Volume 3D	*Requires a subscription to eSignal market data.* Compares today's volume with volume from the previous trading day. Indicator grows toward the right as today's volume increases.
Volume	Trading volume for the day for the selected contract.
Volume Spinner	A graphic representation of volume activity, where a blue bar representing 10,000 shares moves across the field from left to right. The faster the bar moves the higher the trading volume. A temporary color change indicates that the last sale was greater than 10,000 shares.
Y High	*Requires a subscription to eSignal market data.* The highest price from the previous trading day.
Y Low	*Requires a subscription to eSignal market data.* The lowest price from the previous trading day.
Y Volume	*Requires a subscription to eSignal market data.* The trading volume from the previous trading day.

Options Columns

Column Name	Description
Options	
Ask Exch	Identifies the options exchange(s) posting the best ask price on the options contract.
Bid-Exch	Identifies the options exchange(s) posting the best bid price on the options contract.
Call/Put Interest	Call option open interest/put option open interest.
Call/Put Volume	Call option volume/put option volume for the trading day.
Closing Implied Vol.	The implied volatility of the option on yesterday's closing price.
Historical Vol.	Displays actual historical volatility for an option.
Imp Vol (%)	The implied volatility is based on the average of the best bid and offer for an option. This calculation is non-linear, and may not converge for low vega options. In such cases, no implied volatility estimate will be displayed.
Model	The option model price is calculated using the underlying price, interest rate, dividends and other data that you enter using the Option Model Editor.
Model IV	The option model implied volatility.
Open Interest	Charts the total number of options that were not closed.
Opt. Imp. Vol. Change	The absolute change in implied volatility between the current value and the value calculated using yesterday's closing price.
Opt. Implied Vol	A prediction of how volatile an underlying will be in the future. The IB 30-day volatility is the at-market volatility estimated for a maturity thirty calendar days forward of the current trading day, and is based on option prices from two consecutive expiration months.
Opt. Volume	The total number of contracts traded over a specified time period.
Opt Volume Change	Change in volume from the previous day's close.
Put/Call Interest	Put option open interest/call option open interest, for the trading day.
Put/Call Volume	Put option volume/call option volume for the trading day.

Bond Columns

Column Name	Description
Bond	
Bid Yield	The yield-to-worst. This is the lower of yield to maturity and yields to all calls. The yield is only shown if it is offered on the exchange.
Ask Yield	The yield-to-worst. This is the lower of yield to maturity and yields to all calls. The yield is only shown if it is offered on the exchange.
Last Yield	The yield-to-worst. This is the lower of yield to maturity and yields to all calls. The yield is only shown if it is offered on the exchange.
Bond Attributes	Bond attributes of last sale price which may include: Non-standard settlement date (normal settlement for bonds is T + 3), including C - cash trade ND - next day trade S# - seller's option Other Attributes W - weighted average trade A - afterhours trade
10 yr Hedge	The hedge ratio with a 10-year treasury bond.
Convexity	Measures the sensitivity of the duration (and therefore of the price) of a bond to changes in the interest rate.
Duration	Measures the sensitivity of the bond price to changes in the interest rate. A larger duration value may indicate greater sensitivity to interest rate changes.
Value of BPs	

Auction Columns

For Arca options orders.

Column Name	Description
Auction	
Auc. Price	The price at which the auction would occur if no new orders were received and the auction were held now. The indicative price for the auction.
Auc. Volume	The number of shares that would trade if no new orders were received and the auction were held now.
Imbalance	The number of unmatched shares for the next auction; shows how many more shares are on one side of the auction than the other.
	Blue indicates an imbalance on the buy side (more buy orders), red indicates an imbalance on the sell side (more sell orders).

Fundamentals Columns

Column Name	Description
Fundamentals	
Dividend Yield %	Dividends per share/current price, expressed as a percentage.
Dividends (TTM)	This is the sum of the Cash Dividends per share paid to common stockholders during the last trailing twelve month period.
EPS Growth	This growth rate is the compound annual growth rate of *Earnings Per Share* over the last 5 years, excluding *Extraordinary Items* and *Discontinued Operations*. NOTE: If the value for either the most recent year or the year furthest out is zero or negative, the growth rate cannot be calculated and 'NA' (Not Available) will display.
Market Cap	The market cap value is calculated as follows: Current Price x Current Number of Shares Outstanding
P/E	This ratio is calculated by dividing the current Price by the sum of the Diluted Earnings Per Share from continuing operations BEFORE Extraordinary Items and Accounting Changes, over the last four interim periods.
Price/Book	This is the Current Price divided by the latest interim period Book Value Per Share.
Quick Ratio	Also known as the Acid Test Ratio, this value is defined as Cash plus Short Term Investments plus Accounts Receivable for the most recent interim period divided by the Total Current Liabilities for the same period. NOTE: This item is Not Available (NA) for banks, insurance companies and other companies that do not distinguish between current and long term assets and liabilities.
Return on Equity	This value is the Income Available to Common Stockholders for the trailing twelve months divided by the Average Common Equity, and is expressed as a percentage. Average Common Equity is calculated by adding the Common Equity for the 5 most recent quarters and dividing by 5.

Graphic Prices Columns

Column Name	Description
Graphic Prices	
Ask Spinner	A red bar whose placement in the field represents the cents in the current best Ask price, relative to a dollar. A bar in the center of the field indicates that the cents value in the Ask price is close to $.50. A bar toward the left indicates that the cents value is closer to zero, and to the right indicates that it's approaching one dollar.
Bid Spinner	A green bar whose placement in the field represents the cents in the current best Bid price, relative to a dollar. A bar in the center of the field indicates that the cents value in the Bid price is close to $.50. A bar toward the left indicates that the cents value is closer to zero, and to the right indicates it's approaching one dollar.
Candlestick	A graphic representation of the direction and magnitude of price change. The wide end of the arrow represents the opening price, and the narrow end represents the last price. An arrow pointing to the right indicates that the price is higher than the previous close, and an arrow pointing to the left indicates that the price has dropped from the previous close. A brighter shade indicates a greater magnitude of price change.
Graphic Change	A graphic representation of the difference between the last price and the previous day's closing price. The arrow is centered in the field, and colored green if the last price is higher than the close, and colored red if it's lower. The longer the arrow the wider the difference between the two prices. The field accommodates graphing changes up to $2.00 below and $2.00 above the close.
Last Spinner	A magenta bar whose placement in the field represents the cents in the current Last price relative to a dollar. A bar in the center of the field indicates that the cents value in the Last price is close to $.50. A bar toward the left indicates that the cents value is closer to zero, and to the right indicates that it's approaching one dollar.
RSI	*Requires a subscription to eSignal market data.* The Relative Strength Index compares the magnitude of recent losses to recent gains and relays that comparison in the form of a number that ranges from 0 to 100 where 0 indicates weaker performance. For quick reference, the indicator shows a red bar if the RSI is less than 50, and a green bar otherwise. Bar size and color hue change based on the RSI value.

Column Name	Description
RSI Scaled	*Requires a subscription to eSignal market data.* The Relative Strength Index compares the magnitude of recent losses to recent gains and relays that comparison in the form of a number that ranges from 0 to 100 where 0 indicates weaker performance. The scaled version uses values from 20 to 80. For quick reference, the indicator shows a red bar if the RSI is less than 50, and a green bar otherwise. Bar size and color hue change based on the RSI value.
Range	A graphic comparison of the last price to the day's high and low. The indicator starts in the center of the field and moves toward the left (in red) as the last price approaches the day's low, and to the right (in green) as the last price approaches the day's high. If the last price equals the low or high, the bar changes color. You can elect to view the Range in three visual different modes, basic Range, Range 3D, and Range 3D Alert. Only the last shows a color change when the price equals the high or low.
Smart Spinner	A graphic representation of the cents in the current price relative to a dollar. If you hold a short position, the bar is red and represents the cents in the Ask price. If you hold a long position, the bar is green and represents the cents in the Bid price. For contracts in which you hold no position, the bar is gray, and represents the cents in the Last price. A bar in the center of the field indicates that the cents value in the price is close to $.50. A bar toward the left indicates that the cents value is closer to zero, and to the right indicates that it's approaching one dollar.

Order Presets

Column Name	Description
Preset	Displays the current default strategy for the contract, and contains a drop-down selection list of all order strategies available for the contract. If a custom strategy is in place for the contract and the Presets field is not displayed, the Preset Strategy icon will be shown in the contract description field.

Stock Borrow/Loan

Column	Description
Underlying	The underlying symbol.
SLB Lot ID	The ID number of the contract used for returns recalls and rebates.
Position	Your current position in the asset. On the LoanBorrowTrader, this represents your current borrow position.
Lendable	Shows the quantity available for lending in the underlying, based on your current position.
Avg Rate	The average borrow rate of your current Borrow/Loan positions.
Auction Borrow Size	The volume of shares being bid for at the Auction Borrow rate.
Auction Borrow	This value represents the best rate quoted to lend the underlying, and is the percentage of the total collateral you will receive (without interest) for lending the contract, in addition to the collateral you receive based on the price of the underlying. Hold your mouse over the value to see the Total Rate (interest - borrow fee). Click the Auction Borrow field to create a Lend order.
Auction Lend	This value represents the best rate quoted to borrow the underlying, and is the percentage of the total collateral you must put up for borrowing the contract. The borrow fee is in addition to the collateral you pay based on the price of the underlying. Hold your mouse over the fee to see the Total Rate (interest - borrow fee). Click the Auction Lend field to create a Borrow order.
Auction Lend Size	The volume of shares available to borrow at the Auction Lend rate.
Auction rate	The indicative rate for the next scheduled auction. Auctions occur every 15 minutes while the Borrow/Loan market is open.
Borrow Size	The volume of shares being bid for at the last auction rate during continuous trading.
Borrow	The last auction rate that was established during continuous trading.
Lend	The last auction rate that was established during continuous trading.
Lend Size	The volume of shares available to borrow at the last auction rate during continuous trading.
Auction Volume	The total number of shares available for the next auction.

Column	Description
Previous Auction Volume	The total number of shares that were available for the previous auction.
Last	The equilibrium rate established at the last auction.

Order Management Columns

- [Mandatory columns](#) (can't be removed from the trading window)
- [Contract Description](#)
- [Time in Force](#)
- [Quantity](#)
- [Prices](#)
- [Actions](#)
- [Adjustable Stop](#)
- [Volatility](#)
- [EFP](#)
- [Pegged to Stock](#)
- [Order Attributes](#)
- [Status](#)
- [Scale Orders](#)

Note: Changes to a page layout are automatically applied to any pages that already use the layout.

Mandatory Columns (can't be removed from the trading window)

The columns below are always displayed on an order line in the trading window.

Column Name	Description
Shown Columns (mandatory columns that cannot be removed)	
Action	The order action. BUY or SELL.
Type	The order type.
Quantity	The number of units in your order.
Lmt. Price	The limit price for order types to which this price applies, including Limit, Stop Limit, and Relative orders.
Aux. Price	This field reflects the *Election* price for Stop and Stop Limit orders, and the *Offset Amount* for Relative and Trailing Stop orders. You can set these auxiliary amounts in the Default Order Settings box.
Basis Points	Used with futures EFPs. The basis point value is equal to the implied interest rate x 100.
Status	The order status. See Guide to System Colors for details.

Contract Description Columns

Column Name	Description
Contract Description	
Description	Identifies the instrument type and other descriptive contract information.
Exchange	The market data exchange. If no other exchange is specified in the Destination field, this is also the destination to which the contract will be routed. Select SMART order routing to route directly to the best available market.
Symbol	The exchange symbol for the contract.
Underlying	Shows the underlying symbol. Note that if you want a single Underlying field on the trading window with no order field below it, check the Underlying field for both market data and order management.

Time in Force Columns

Column Name	Description
Time in Force	
Exp. Date	For GTD orders. Keeps the order active until the close of market on the date you enter. Date format is YYYY/MM/DD.
Exp. Time	For GTD orders. Keeps the order active until the time on the date you enter in the *Exp. Date* field.
Good After Time	Activates the order after the specified time has elapsed.
Time in Force	The time span over which your order remains active. By default, the time in force is day, which means any part of your order that has not executed by the time the market closes will be cancelled by the system.

Quantity Columns

Column Name	Description
Quantity	
Display Size	Enter a display size to create an iceberg order.
Min Quantity	Enter the minimum acceptable quantity that must be available for the order to execute.
Quantity Type	Used in conjunction with Quantity Value field to automatically calculate order quantity based on your instructions.
Quantity Value	Used in conjunction with Quantity Type field to automatically calculate order quantity based on your instructions.
Total Qty	The total quantity of the original order.

Price-based Columns

Column Name	Description
Prices	
Current Price	The current working price of an order at the exchange.
Discretionary Amt	Enter a discretionary amount with a limit order to create a discretionary order.
Lmt Offset.	Used for trailing stop limit orders to determine the limit price for the contract.
Pct. Offset	Creates an offset price based on a percentage off the best bid or ask. Use a decimal value between 0 - 1.
Stop Price	The Election price for Stop and Stop Limit orders, and the initial stop price for trailing stop and trailing stop limit orders.

Actions Columns

Column Name	Description
Actions	
Cancel	Click to cancel the order.
Transmit	Click to send the order to the order destination.

Adjustable Stop Columns

Column Name	Description
Adjustable Stop	
Adj Order Type	The order price submitted when the trigger price is hit on a stop, stop limit, trailing stop or trailing stop limit order.
Adj Stop Lmt Price	The initial limit price for the adjusted stop limit or trailing stop limit order.
Adj Stop Price	The new stop price for the adjusted order.
Adj Trailing Amnt	The new trailing amount for a trailing stop or trailing stop limit order.
Trigger Price	The price that triggers the one-time adjustment of a stop, stop limit, trailing stop or trailing stop limit order.

Volatility Columns

Column Name	Description
Volatility	
Continuous Update	If checked, the option limit price is automatically updated based on significant movement in the price of the underlying. Also used for EFPs.
Hedge Aux Price	If needed, enter the auxiliary price for a delta neutral order type that requires another price field.

Column Name	Description
Hedge Order Type	Define an order type for a delta neutral trade. This will be submitted in conjunction with dynamic management of your volatility orders.
Reference Price Type	For dynamic volatility orders. Choose the average of the NBBO, or the bid or ask price to be used as the reference price.
Undrl. Range (High)	The optional low-end value of a stock range for Volatility orders. If the price of the underlying falls below this value, the order is cancelled.
Undrl. Range (Low)	The optional high-end value of a stock range for Volatility orders. If the price of the underlying rises above this value, the order is cancelled.
Volatility	Displays volatility for the option at a specific strike price.
Volatility Type	Select either Annual or Daily implied volatility calculation for VOL orders.

EFP Columns

Column Name	Description
EFP	
Continuous Update	For EFPs. If checked, the limit price is automatically recalculated based on movement in the basis points.
Int. Rate	For EFPs.

Pegged to Stock Columns

Column Name	Description
Pegged-to-Stock	
Delta	Used for pegged to stock orders. This value is used as a percent, and is multiplied by the change in the underlying price. this value is added to the starting price to determine the price for a call option.
Stock Ref Price	An optional value used for Pegged to Stock option orders. If left blank, the NBBO midpoint is used. This value is subtracted from the current NBBO midpoint to determine a change in the stock price.
Undrl Range (High)	The optional high-end value of a stock range for Pegged to Stock orders. If the price of the underlying rises above this value, the order is cancelled.
Undrl Range (Low)	The optional low-end value of a stock range for Pegged to Stock orders. If the price of the underlying falls below this value, the order is cancelled.

Order Attributes Columns

Column Name	Description
Order Attributes	
All or None	Marks the order as AON, to ensure the order will not execute unless/until the entire quantity is available.
Block	Mark your high-volume limit order as a block order. You may want to consider using ScaleTrader for large volume orders.
Consider Cost	If checked, Smart router will consider trade costs, including commissions, when deciding where to route your order.
Hidden	Check to create a hidden order.
Hide Pennies	For US Options orders in pennies, hides the pennies from the market.

Column Name	Description
ISE Order Type	For Midpoint Match orders on the ISE Stock Exchange, select from two order types. A *Standard* order is entered as a market or limit order but is not displayed to the trading community. Standard orders support the Immediate or Cancel (IOC) order attribute. An SOI (Solicitation of Interest) order broadcasts the symbol to ISE MPM users. These orders have a minimum order quantity of 2000.
Non-Guaranteed	Check to indicate that you will take all the risk for partially executed smart-routed spread orders.
OCA Group	Allows you to create a one-cancels-all advanced order group without opening the Order Ticket window.
Open/Close	Specifies whether the order is to open (or increase) a position, or close (or decrease) a position.
Origin	The customer type from which the order originated. Mainly used for institutional accounts.
Preserve Time Priority	Check to keep your order in the queue regardless of incurred exchange fees.
Shareholder	A tag used by large shareholders who trade Canadian products.
Sweep to Fill	Check to create a sweep-to-fill order.
Soft Dollars	Use the dropdown list to select the soft dollar tier for the order. This field is only visible for accounts that have soft dollar functionality enabled.
Trigger Method	Displays a dropdown field with a list of all available Trigger Methods. This allows you to select a new method on a per-order basis.

Status Columns

Column Name	Description
Status	
Destination	The routing destination.
Key	System-created key to identify bundled limit, bracket and trailing stop orders.
Trade Price	The price at which the order or portion of the order executed.

Scale Order Columns

Column Name	Description
Scale Orders	
Scale Incr.	This amount is used to calculate the per-unit price of each component in the scale ladder. Note that the price increment cannot be negative.
Scale Init	Set the initial component size for the scaled order.

Column Name	Description
Scale Profit Offset	A value in this field instructs TWS to submit profit-taking orders, and defines the minimum amount of profitability you will accept to exit a position. ScaleTrader will submit an opposite-side profit order against the original order, using the limit price of the parent component plus/minus the profit offset. For example, if you submit a 10,000 share BUY limit order at $65.00 with a component size of 1000, and enter $15.00 as the **Scale Profit Offset**, as soon as the first component executes, TWS will submit a 1000 share SELL limit order at $80.00. Use the Scale tab on the Order Ticket to set advanced profit order instructions.
Scale Sub	Set the subsequent component size for the scaled order. If you leave this field blank, ScaleTrader uses the initial component size.

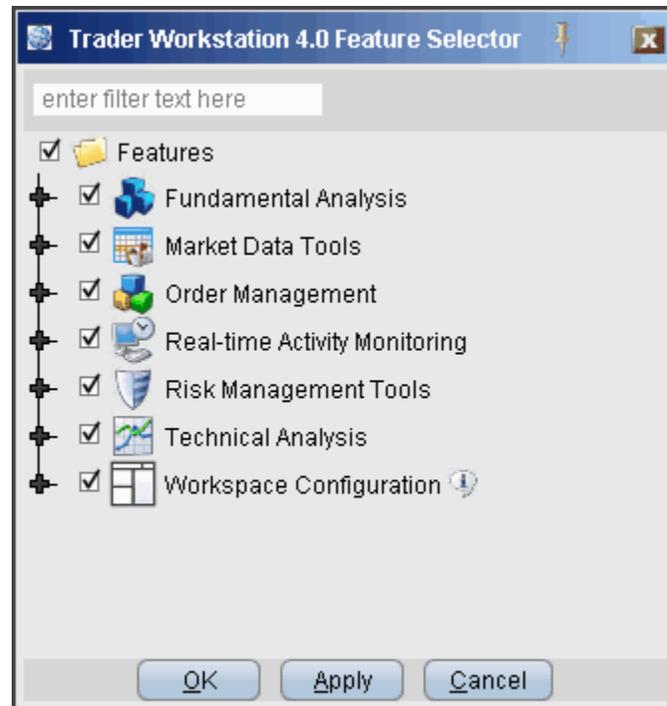# *Feature Selector*

Introduction

- [Open the Feature Selector](#)
- [Enable Features through Menus](#)

For instructions on how to enable features in TWS, [click](#) to watch the video.

Open the Feature Selector

The Feature Selector groups features in categories and subcategories. To help you find what you're looking for, use the text **Search** box at the top of the window. The list is filtered to show only those features which include the text you've entered in their title. To clear the search and display all categories again, click the *Clear* icon that appears to the right of the **Search** box.

To open the Feature Selector

- On the **Configure** menu select *Feature Selector*.

You can disable an entire category of features with a single click, or drill down to a specific feature within a group using the expand/collapse icon.

To disable/enable a feature using the Feature Selector

1   Click to remove the checkmark next to a feature or a feature group.

2   Click the expand icon to drill down in a group.

You can also enable features from the menus.

Enable Features through Menus

The Feature Selector, accessible through the **Configuration** menu or by clicking the **Configure** icon on the toolbar, allows you to disable features you don't use. These disabled features are hidden from the menus and screens. You can now enable these features at any time without having to search for them within the Feature Selector by expanding the menu to show disabled features.

Enable a feature from its menu

Menus which contain disabled features show a double "expand" arrow following the final menu command.

1   Click the double arrows at the bottom of the selected menu.

2   Disabled features now appear in the menu, highlighted in dark grey. Select the feature you want to use.

3   Click **Yes** to the question "Would you like to enable this feature now?"

The feature is enabled, and will become active if appropriate. For example, if you have an underlying selected and elect to enable Market Depth, the Market Depth window will open for the selected underlying after you click "Yes." If you don't have an underlying selected, the Market Depth feature will be enabled but will not open since it has no data to display.
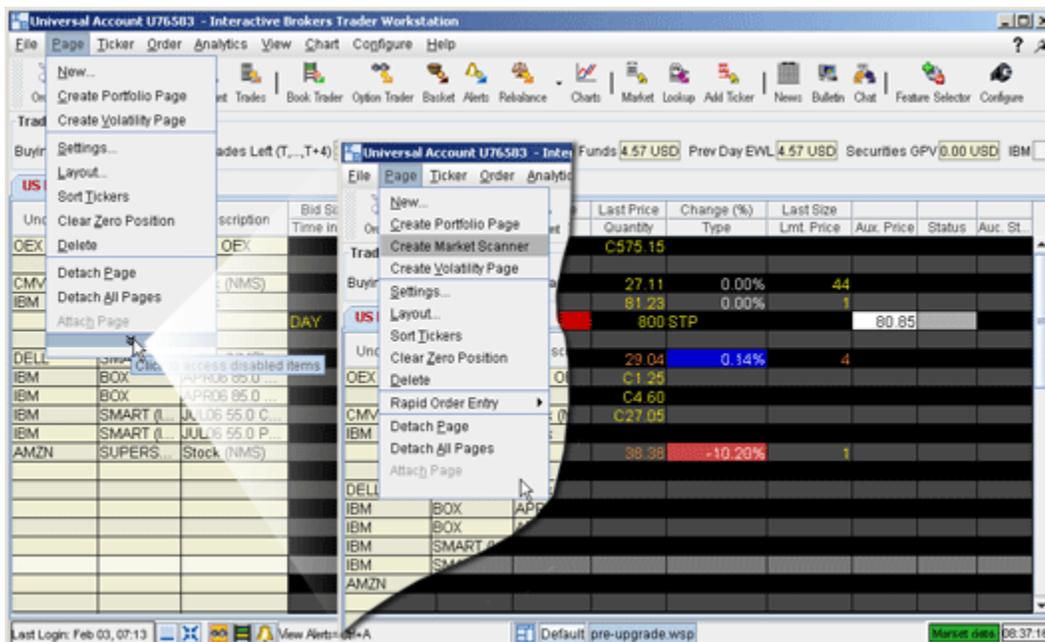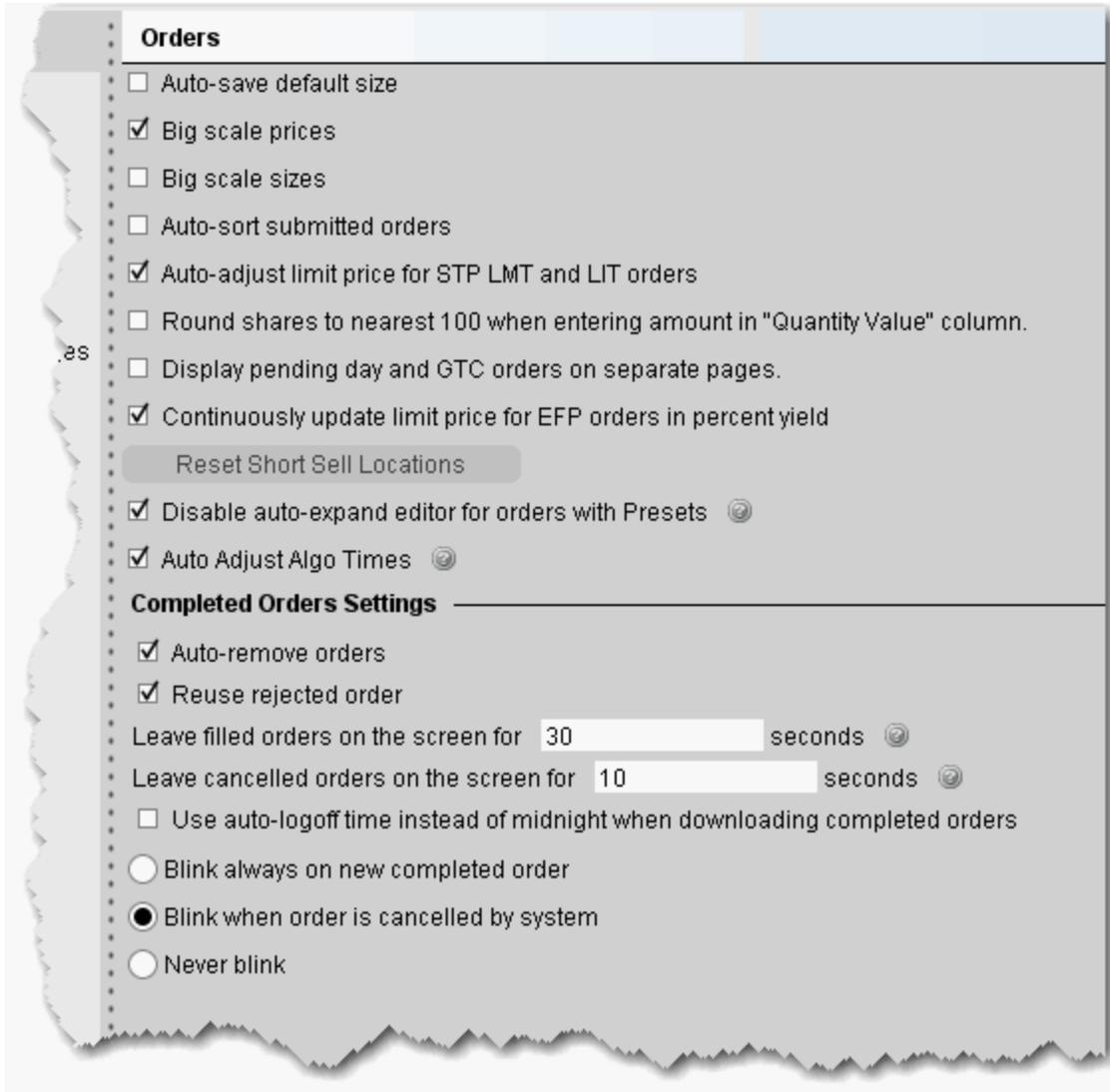
Configure Order Defaults and Presets

Introduction

Use the Orders configuration page to specify global default settings. Use the Order Presets feature to create multiple named order default strategies.

- [Orders - Default Settings](#)
- [Create Order Presets](#)
- [Using Presets from the Trading Window](#)
- [To modify the default offset amount](#)
- [Modify the Stop Trigger Method](#)

Orders - Default Settings

Use the Orders page to define general, global default settings.

To define General order configuration settings

1   On the **Configure** menu select *Global Configuration.*

2   Click *Orders* in the left pane.

3   Use the **Orders** page set the following parameters:

Orders

- **Auto-save default size**- when checked, any change you make to the quantity of an order is saved as the default size for that instrument type, after the order is transmitted.

- **Big Scale prices** - when checked, the increment used in the price wand is increased. The price wand presents a selection of prices above and below the order price, and is invoked when you click and hold the cursor in the *Price* field on an order line.

- **Big scale sizes** - when checked, the increment used in the size wand is increased. The size wand presents a selection of quantities higher and lower than the order size, and is invoked when you click and hold the cursor in the *Quantity* field on an order line.

- **Auto sort submitted orders** - this feature is check by default. When unchecked, orders created on the same underlying are no longer sorted by limit price.

- **Auto-adjust limit price for STP LMT and LIT orders** - if checked, the limit price in stop limit and limit if touched orders will automatically be adjusted when you modify the stop price. The limit price adjusts based on the offset amount you define when you create the order.

- **Round shares to nearest 100 when entering amount in "Quantity Value" column** - if checked, the system will round the order quantity to the nearest 100 shares.

- **Display pending day and GTC orders on separate pages** - if checked, pending orders will be separated by GTC and DAY times in force to display on different pages.

- **Continuously update limit price for EFP orders in percent yield** - if checked, TWS will continuously update the limit price for EFP orders where the price is entered in "percent yield." To enter price in percent yield, right-click on price column header and select *Show Percent*.

- **Reset Short Sell Locations** button - for non-cleared customers or customers who can clear-away only. By default, TWS remembers how many shares you located when doing a sell short order. Clicking this button clears out that memory.

- **Disable auto-expand editor for orders with Presets** - if checked, orders that generally invoke the inline order editor that displays when you create an order (for example, algo orders) will not display IF an order preset is assigned. Only check this if you will not want to edit these orders on a per-order basis.

- **Auto adjust algo times** - If checked, algos that are submitted at the close or use an invalid start or end time will be automatically adjusted to use the valid trading date. This setting could be useful for VWAP orders entered when the markets are closed.

Completed Orders Settings

- **Auto-remove orders** - this feature is checked by default. When unchecked, executed and cancelled orders remain on the both the trading and the pending pages.

- **Reuse rejected order** - if checked, rejected orders will remain on the trading page.

- **Leave filled orders on the screen for** - lets you increase or decrease the number of seconds before filled orders are deleted from the Trading window.

- **Leave cancelled orders on the screen for** - lets you increase or decrease the number of seconds before cancelled orders are deleted from the Trading window.

- **Use auto-logoff time instead of midnight when downloading completed orders** - if checked, TWS will download orders from the time of the last auto-logoff. Otherwise completed orders from midnight to the current time are downloaded.

Order Presets

Introduction

The order Presets feature allows you to create and save multiple, named order strategies with default values, per instrument type and per symbol. The *Active* preset is used as the default for all instrument types. Use the Preset drop-down field from the ticker line to set a preset strategy for all new orders on the ticker.

- About Order Presets
- Create Order Presets
- Define Order Preset Values
- Primary Order Settings
- Scale and Adjusted Stop Fields
- Target Order (Profit-taker) Settings
- Attached Stop Order Settings
- Miscellaneous Defaults
- Define Precautionary Settings
- Algorithm Settings
- Default Display Settings
- Using Presets from the Trading Window

About Order Presets

Order presets present a hierarchical layout of order strategies whose characteristics and values are set ahead of time, and can be set as the default order strategy or can selected prior to the creation of an order. The below sections explain the hierarchy of presets, and the function of each section on a preset page based on its position in the hierarchy.

The Hierarchy

Order presets are laid out as shown below, in a three-level hierarchy. Each sub-level inherits the settings from its parent preset. In the image below, the named preset *Scale* inherits the default values from its parent *Stocks(2)* preset, while the *Stocks* preset inherits applicable default values from the highest level **Presets(1)** preset. This hierarchy is described in more detail below.
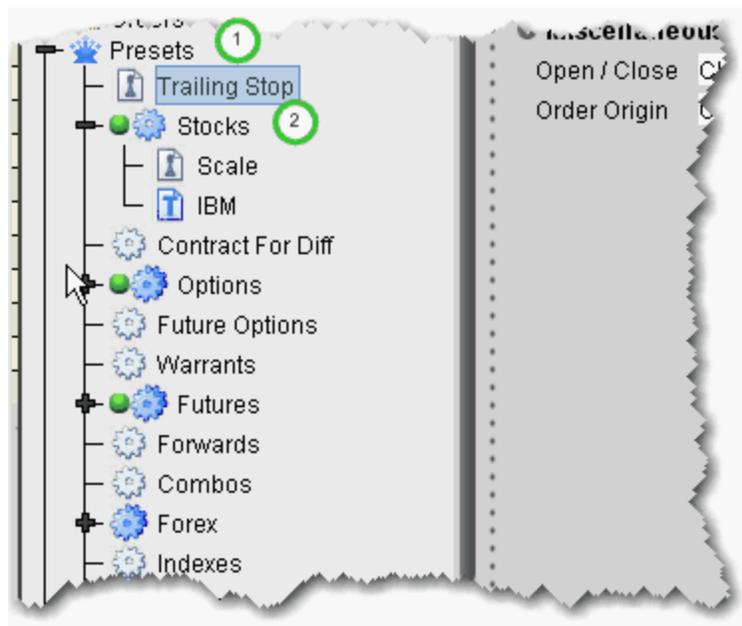
The top level preset contains settings that apply to orders of all types on all asset classes. If you create named presets at the top level, the preset can be applied to orders on all asset types. Settings at the top level are inherited by and can be changed on the asset-level presets. Use this level to make a change that you want to affect all presets; for example, you may want to allow all orders to activate outside regular trading hours. Define this setting at the top level and elect to propagate some or all of the changes to other applicable presets using the Propagate Settings box shown below:
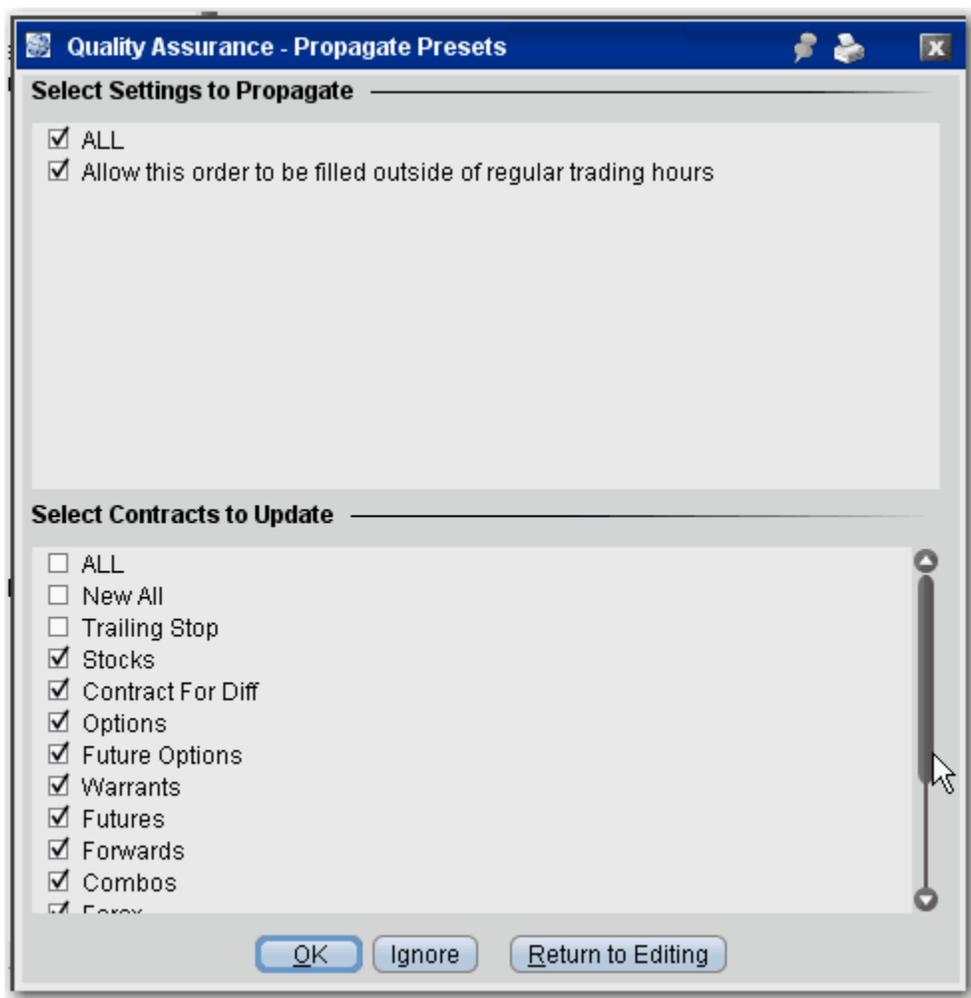
The **Propagate Settings** box is displayed any time you make a change in a higher level preset that could be applied to sub presets.

The second level, or asset-level presets, contain both the top level settings and asset-specific settings. For example, the Stock preset contains all the fields on the top level preset as well as *Algorithm* and *Display Settings* areas that are valid only for stocks.

Under the asset-level presets, you can create named and ticker-specific presets.

Named presets inherit all settings from the asset-level preset, and also include contract-specific settings you can define for your strategy. You can create multiple named presets for an asset type, for example on that creates a trailing stop order, one for scale orders, one for bracket orders, and select the preset strategy from the market data line before you create an order.

Ticker presets will be active by default for that ticker. As with all presets you can select a different strategy on a market data line before you create an order.

Create Order Presets

Presets expand the usefulness of default order settings by allowing you to create multiple sets of order defaults at the instrument level or ticker level, and apply them from the trading page *prior to creating an order* using the drop down selection in the **Presets** field.
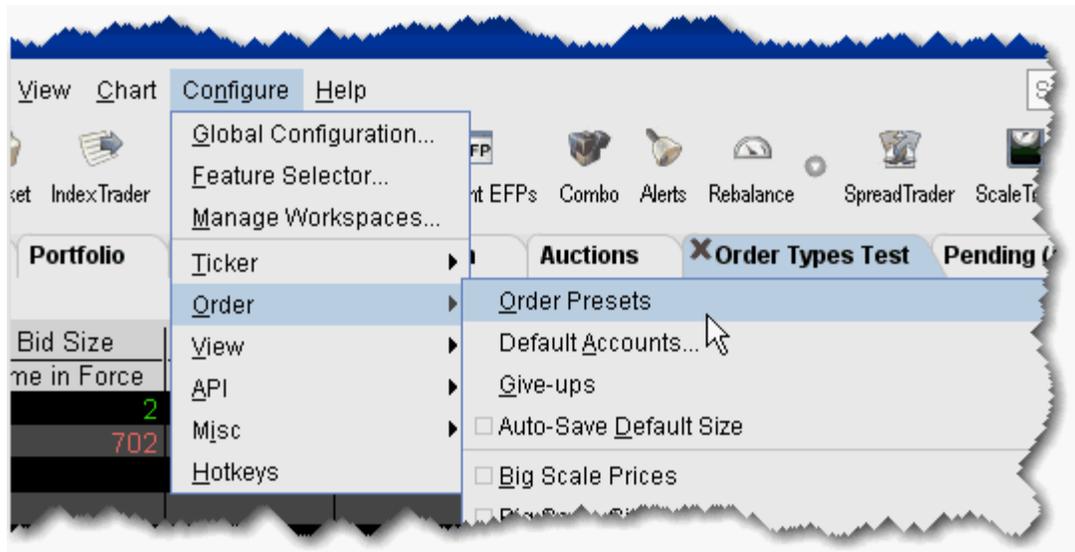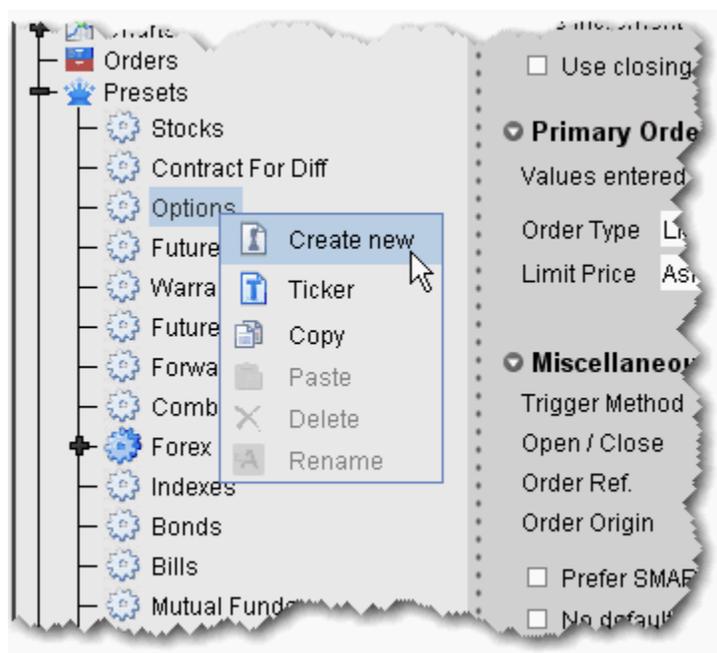

To configure presets

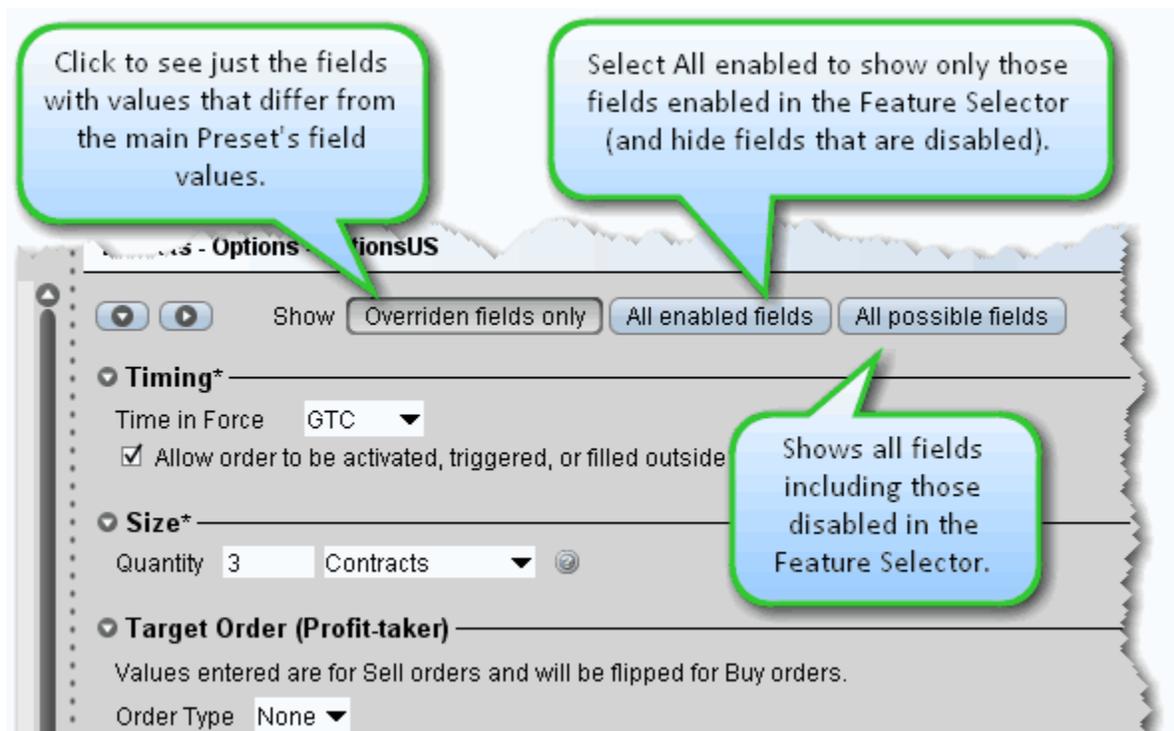1   From the **Configure** menu, select *Order* and then *Order Presets*.

> **Note:** *Global Configuration opens with focus in the **Presets** category in the left pane.*

2 Select the instrument for which you want to define a preset.

3 Use the right-click menu and select *Create new*.

4 Enter a name and click *OK*.

The settings for the new preset are derived from the default settings defined at the main preset level identified by the crown. This upper level page includes all possible settings. When you create a sub-preset and modify the basic settings, you can elect to view only the differences between the sub and main presets by depressing the *Overridden fields only* button.

Note: The asterisk next to a group label indicates that you made changes but haven't yet saved your settings.
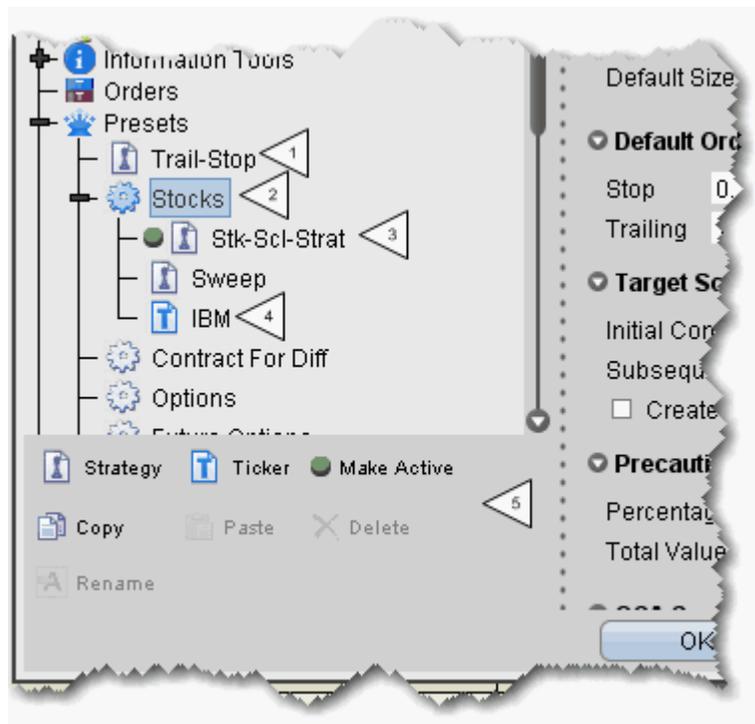
5 The new strategy is highlighted in the left pane with its associated order defaults page in the right. Edit the order fields you want to associate with the order strategy and click OK. The numbered descriptions in the table below correspond to the image above:

1 Strategies defined at the top Preset level, such as Trail-Stop in this example, can be applied to any instrument type, but cannot be designated as "Active."

2 The top-level instrument type is the default order preset for all contracts of that type, until another is made Active. Instrument-level presets appear below the top-level instrument type and will only be available from the Preset drop-down for tickers of that instrument type.

3 One preset for each instrument can be active. The Active preset is identified by the green ball, and becomes the default order strategy for all contracts of that type. In the above example, all Stock contracts on all pages will use the Stk-Scl-Strat order defaults when you create an order. Select a different preset for any contract using the Preset drop-down list on the market data line.

**4**   Ticker-level presets become the default for that ticker and are not available for any other tickers even on the same instrument.

5   The Preset icons function as follows:

Strategy - click to create a new preset strategy for the selected level, either top, instrument-level, or ticker-level.

Ticker - becomes available when you select an instrument type. Click to create a ticker-level preset.

Make Active - click to make the selected preset active for all symbols of the instrument type, except those with a ticker-level preset defined.

Copy - copies the strategy settings from the selected preset.

Paste - overwrites the settings from the selected preset with the copied settings.

Delete - removes the selected preset strategy with no confirmation message.

Rename - change the name of the selected preset.

The default values that you can define for each Preset vary slightly based on the instrument/contract you select. The defaults you can set are defined in the tables below.

Define Order Preset Values

The presets pages are broken into categories, including Timing, Size, Primary Order, Target Order, Attached Stop Order, Miscellaneous, Algorithm and Display Settings.
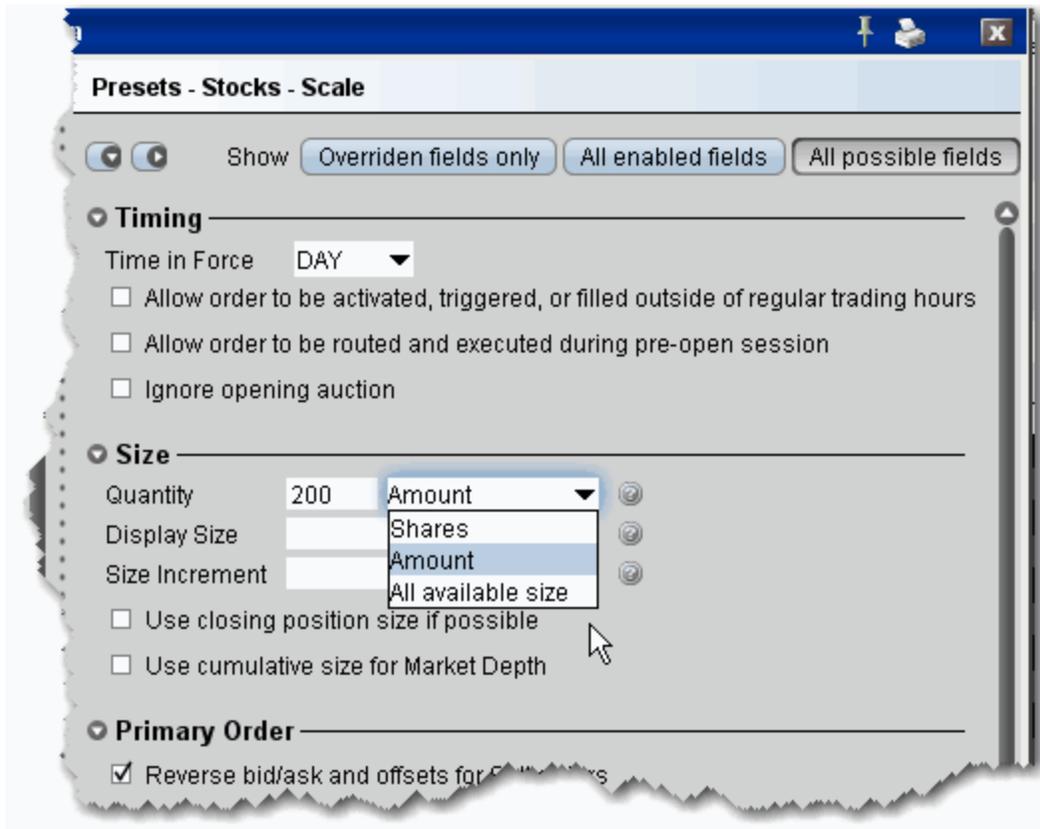
Timing and Size Settings

Define default values for time in force and trading hours, order quantity, size increment used in the size wand and more.

Field Name	Description	Notes
Time in Force	The time in force determines how long the order will remain working at its destination.	

Field Name	Description	Notes
Allow order to be activated, triggered or filled outside of regular trading hours	If unchecked, trading hours are determined by the opening/closing times of the order destination, stop orders will not trigger outside of regular trading hours.	Valid for US stocks listed on major exchanges. Please note that the *Regular Trading Hours Only* option may not be available for particular products that are not listed on an exchange. IB customers are solely responsible for ensuring that this parameter is available for the product involved. May not be available for IOC, At-the-Open (MOO and LOO), FOK, MOC or LOC orders.
Allow order to be routed and executed during pre-open session.	Check to allow orders to participate in the pre-open session from 4:00 - 8:00 am.	Can be applied to orders set for Regular Trading Hours only.
Ignore opening auction	Check to ignore the opening auction which takes place at the open.	
Quantity	Choose the **unit** (shares, contracts) to specify a default order quantity. Choose **Amount** to calculate the quantity based on the default amount. The Amount is assumed to be in the currency of the traded asset; no currency conversion is done. Choose Available Amount to base the quantity on the available bid or ask size.	
Display Size	The default amount that will be displayed for Iceberg orders.	
Size Increment	The interval by which the order size increase/decrease is displayed when using the size wand, or the amount by which the quantity will increase/decrease when using the hotkeys.	

Field Name	Description	Notes
Use closing position size if possible	**When checked**, if you hold a position in the asset, the system will create the order equal to the quantity of your open position on the assumption that you want to close out your position. If you hold no position, the system will use the default order size.	
Use cumulative size for market depth	**If checked**, when you create an order from any line in the aggregated Market Depth window, the order size is set to the total cumulative size x 100. Otherwise, the order size will be equal to the default order quantity.	

Primary Order Settings

The primary order is also called the parent order. Values you set will be used when you select the associated order type, for example, the Stop Price value will only be used if you select *Stop* as the order type on an order management line. Based on the settings below, the default order type is a LIMIT order.

Field Name	Description	Notes
Values entered are for buy orders and will be flipped for sell orders.	Uncheck to disable auto-inverting of the properties set below for sell orders.	This feature can only be turned off in the user-defined named presets.
Order Type	The default order type that will be used any time you create an order using this preset.	
Limit price	The value used for the default limit price, if your order uses a limit price. Pick from bid, ask or last.	Use the +/- offset field to enter an offset amount or percentage that will be added to/subtracted from the price. Note that you can enter a positive or negative value.

Field Name	Description	Notes
Stop Price	The value used for the default stop price. Pick from limit, bid, ask or last. This value is used if the default order type is a stop order, and also if the default order type is not a stop order, but in the order line you elect to change the order type to a Stop order.	Use the +/- offset field to enter an offset amount or percentage that will be added to/subtracted from the price. Note that you can enter a positive or negative value.
Stop-limit price	The value used to determine the limit price in a stop limit order. Pick from Limit, Stop, Bid, Ask or Last.	Use the +/- offset field to enter an offset amount or percentage that will be added to/subtracted from the price. Note that you can enter a positive or negative value.
Offset Amount	The relative offset amount used for relative orders. This amount will be added to the best bid (for a buy order) and subtracted from the best ask (for a sell order) to create the limit price at which the relative order will be submitted.	
Relative limit price	The value used to calculate the starting price for a Relative order. Choose from bid, Ask, Last or None. If you choose None, the price defaults to the Bid price for Sell, and the Ask price for a Buy.	
Trailing amount	The trailing value used for a trailing stop order.	
Touched trigger	Value used to calculate the Trigger Price for Limit if Touched and Market if Touched orders.	

Scale and Adjusted Stop Fields

These fields show only for named presets and apply to the primary order.

Field Name	Description	Notes
Initial Component Size	Set a default size for the initial component of a scale order.	
Price Increment	The incremental amount by which the price of each successive component will change.	
Subsequent Component Size	Set the component size for all remaining order components of the scale order.	Leave blank to use the *Initial Component Size* for all components.
Profit-taker	Define the amount that will be added to/subtracted from the last filled component price for the opposite side profit order.	
Restore size after taking profit	Check to have the size of the order restored at a specific price level after the profit order fills.	

Field Name	Description	Notes
Adjusted order type	When you select an adjusted order type, the stop order you're adjusting will not trigger when the stop price is hit. Instead, it will be changed to this order type, and use the other parameters below. Select one of the stop order types. When your current stop price is penetrated, it will change to this order type and use the instructions you set in the following fields.	
Adjusted stop price	When the trigger price is hit, the adjusted stop price is implemented for the new order.	
Adjusted stop limit price	Used for Stop Limit and Trailing Stop Limit orders. This value will be the limit price of the order if it is triggered and submitted.	
Adjusted trailing amount	Used for Trailing Stop and Trailing Stop Limit orders. This value will replace the original trailing amount if the adjusted order is triggered.	

Target Order (Profit-taker) Settings

The target order fields are linked to the parent or Primary order, and will not be available if you elect a scale primary order with Restore size after taking profit enabled.

Note that you must enter these values as if the parent order was a Buy order. In the case that the parent order is a sell, the values will automatically be flipped.

Field Name	Description	Notes
Order Type	The order type for the child profit-taking order.	If you select *None* no target order will be created.
Limit Price	The limit price for the profit taker.	Select Parent order to create a target price equal to the price of the parent order +/- a defined offset amount or percent.
Offset Amount	If Relative order types is selected, define the relative offset amount.	
Initial Component Size	Set a default size for the initial component of a scale order.	
Price Increment	The incremental amount by which the price of each successive component will change.	
Subsequent Component Size	Set the component size for all remaining order components of the scale order.	Leave blank to use the *Initial Component Size* for all components.

Attached Stop Order Settings

The attached stop fields are related to the parent order.

Attached Stop Order

Field Name	Description	Notes
Order Type	The order type for the attached child order.	If you select *None* no attached order will be created.
Stop Price	The stop trigger price for the attached stop order.	Select Parent order to create a stop price equal to the price of the parent order +/- a defined offset amount or percent.
Stop-limit Price	The limit price at which the attached order will be submitted when triggered.	Only used if the order is a stop limit or trailing stop limit order type.
Trailing Amount	If the order is a trailing order, this value represents the amount by which the order will trail the market price.	The order trails in only one direction.

Adjusted Stop Fields

These fields are used if the **Attached Stop Order** type above is *Adjustable Stop*.

Field Name	Description	Notes
Adjusted Trigger Price	The trigger price that triggers adjustments to the existing stop order.	
Adjusted Stop Price	The adjusted stop trigger price for the order.	
Adjusted Stop Limit Price	The adjusted limit price at which the order will be submitted.	
Adjusted Trailing Amount	The new trailing amount which defines the amount by which the order will now trail the market price.	

Miscellaneous Defaults
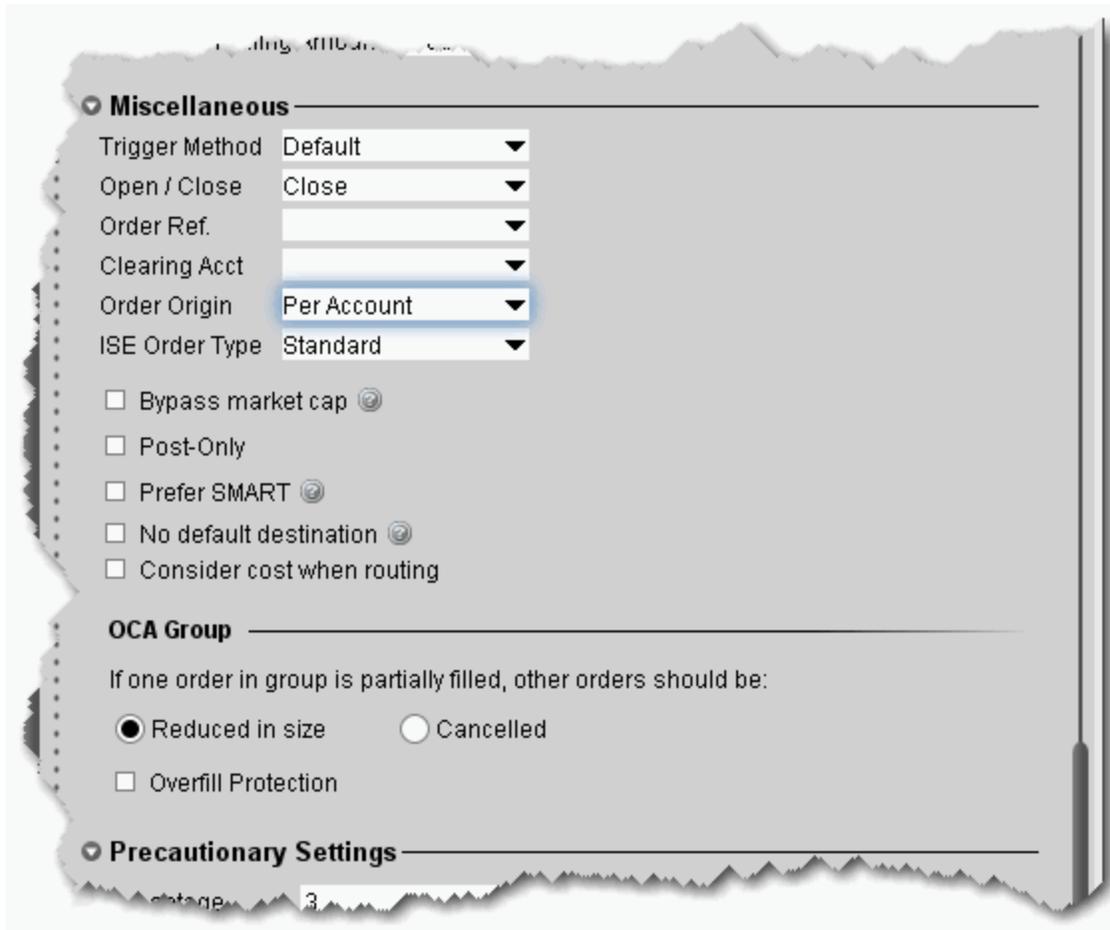
Field Name	Description	Notes
Trigger Method	The trigger method is used to trigger Stop, Stop Limit, Trailing Stop and Trailing Stop Limit orders.	You can Modify the Stop Trigger Method.
Open/Close	Identifies the default action to either open or close a position.	For non-cleared customers.
Order Ref.	A user-controlled field to identify orders.	This setting will be overridden by the page level setting.
Clearing Acct	Select the clearing account.	For non-cleared customers.

Field Name	Description	Notes
Order Origin	Defines the origin of your order in relation to the market.	
ISE Order Type	The Standard order is completely anonymous. The SOI order broadcasts the symbol to other ISE MPM members and may get execution priority.	
Bypass market cap	If checked, the IB price cap (for buy orders) and price floor (for sell orders) will be ignored.	Please note that checking this feature could result in an execution price that is outside of what is considered fair or consistent with an orderly market.
Post only	If checked, when there is non-displayed liquidity at the same price point, the order price is adjusted low (for a buy) or higher (for a sell) by one penny to avoid taking that liquidity. If the order comes in at a price higher (for a buy) or lower (for a sell) than an order already sitting on the book, it becomes an IOC (immediate-or-cancel) order at the better price.	
Prefer SMART	If checked, TWS will SMART route all orders if Smart-routing is available, regardless of the routing selection defined for the ticker.	
No default destination	If checked, all orders using this preset will be created with a blank default routing destination.	
Consider cost when routing	If checked, Smart routing will consider the total cost of executing the order, including commissions and other fees, when deciding where to route the order. If unchecked, only the exchange price is considered.	Your order may not execute at the best exchange price since we take into account total price, including commissions.

OCA Group Defaults
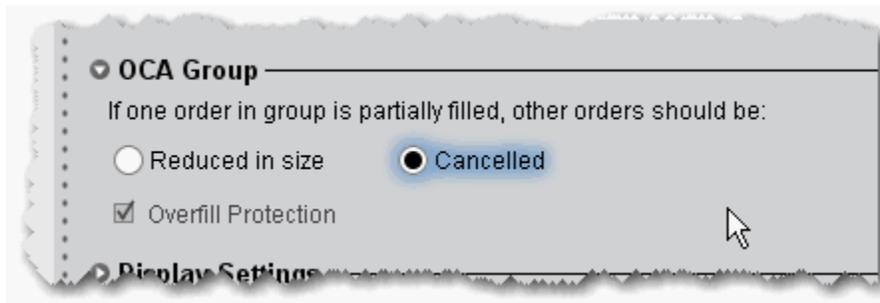
Use the One-Cancels-All order attribute to work related orders in conjunction with one another.

Field Name	Description	Notes
If one order in group is partially filled, other orders should be...		
Reduced in size	The default is to have other orders in the OCA group proportionately reduced in size based on the quantity of the filled portion.	
Cancelled	All other orders in the group are cancelled	
Overfill Protection	If checked, this dictates that only 1 order in the group will be routed to an exchange at a time. This strategy completely removes the possibility of an overfill.	

Define Precautionary Settings

Precautionary values are used by the system as safety checks. If you submit an order that violates any of these custom settings, you will have to confirm your intent to transmit the order before TWS submits it.

Field Name	Description	Notes
Percentage	This option was created as a safety net to prevent you from transmitting a limit order that has a mistyped limit price. If you attempt to transmit a limit order with a price outside of this calculated percent off the market price, you will receive a message asking you to verify that you meant to enter that off-percentage price before it will transmit the order. The market price used is the price displayed in either the bid (sell) or ask (buy) field at the time you transmit the order. This option can be left blank.	
Total Value Limit	If you transmit an order with a price that exceeds the total dollar amount you specify, you will receive a message informing you that the Total Value constraint has been violated, and you must confirm that you want to submit the order regardless.	
Size Limit	Limits the value in the *Quantity* field. If you enter a higher value, you can override the default size limit by clicking Yes in the warning box.	

Field Name	Description	Notes
Number of Ticks	Like the *Percentage* option above, number of ticks is also a safety net to prevent you from transmitting a limit order that has a mistyped limit price. If you attempt to transmit a limit order with a price outside of this calculated number of ticks off the market price, you will get a message asking you to verify that you meant to enter the off-percentage price before it will transmit the order. The market price used is the price displayed in either the bid (sell) or ask (buy) field at the time you transmit the order. This option can be left blank.	
Algorithm Total Value Limit	If you transmit an algo order with a price that exceeds the total dollar amount you specify, you will receive a message informing you that the Total Value constraint has been violated, and you must confirm that you want to submit the order regardless.	Enter "0" to disable the limit. If you do not enter a value, the algo value limit defaults to the Total Value Limit (above) x 10.
Algorithm Size Limit	Limits the value in the *Quantity* field for algo orders. If you enter a higher value, you can override the default size limit by clicking Yes in the warning box.	Enter "0" to disable the limit. If you do not enter a value, the algo size limit defaults to the Size Limit (above)x 10.

Algorithm Settings

Choose an algo destination to use the algo order as the default order type.
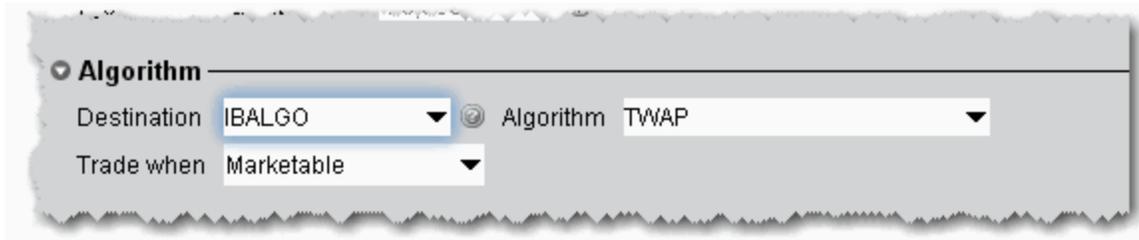
Default Display Settings
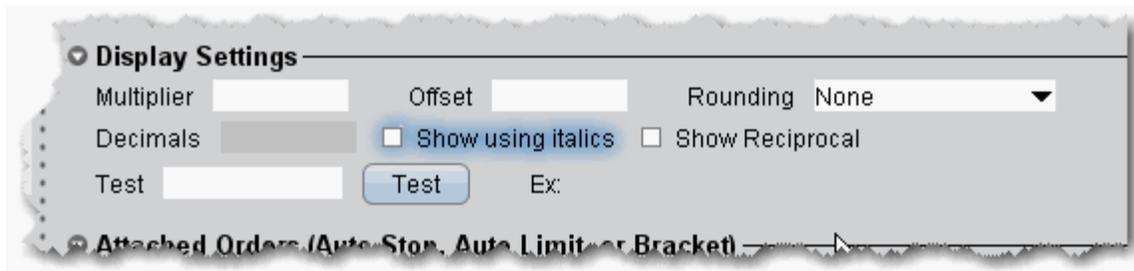
Display settings change the way values are displayed on the trading window.

Field Name	Description	Notes
Multiplier	Multiplies the price by this value.	
Offset	You can use this to offset a displayed price for instance for a specific futures contract. Say ES bid/ask is 1314.75/1315.00. First, select *Futures* in the middle pane, then click the **Add** button at the bottom of the column and enter ES. Enter an offset of 1300. To see how this will display, in the *Test* box enter 1314.75 and click the **Test** button. The example displays as 14.75.	
Rounding	Change the default of None to Round, Nearest Valid Price or Truncate. Use the Test entry field to enter a value, can click Test to see the result.	
Decimals	Overrides the default 2 decimal-place price display.	
Show using italics	Displays price data italicized.	
Show Reciprocal	Re-calculates the quote to 1/quote. This setting allows Asian contracts to be viewed in the familiar local format.	You can apply the reciprocal display to specific contracts using the Add button beneath the left-pane list. Select an instrument type, click Add, and enter a symbol. Highlight that symbol and click Show Reciprocal.
Test	Used to test the display changes you have made. Enter a hypothetical price value, then click the *Test* button. All of the Display Setting changes are applied and the result shows as the Example.	

Using Presets from the Trading Window

To use a Preset order default strategy, simply select it from the Preset field in the ticker line on your trading window. Note the following:

- Presets created at the top Presets level are available on any instrument.

- Presets created at the instrument level are available only for that instrument.

- Ticker level - only one preset can be created for a specific symbol, and it can only be used for that symbol. A ticker-level preset is used as the default for the symbol.

To use the Preset field from the Trading Window

1 Right-click the row of field headings and select *Customize Layout*.

2 From the Order Presets category, select *Preset* and **Add** to the Shown Columns list.

3 Click the Preset drop-down from a market data line to see the preset strategies available for the selected ticker.
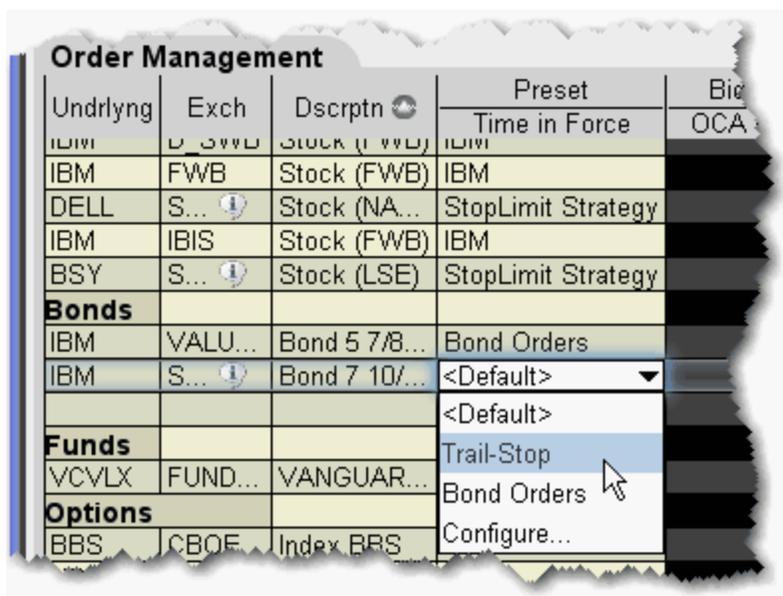
Note: Existing customers: Each top level instrument strategy uses the original order defaults you defined, unless you elect to copy and paste a new set of values.

The displayed value is the default strategy for that instrument or ticker; select a new strategy from the drop-down list. The list includes all global presets and all instrument-level presets. The Default is the current active strategy defined in Global Configuration. New orders will use the displayed preset strategy. If you change the strategy, the change will not apply to existing orders.

If the page does not have the *Preset* column displayed, a Strategy icon appears next to any tickers that have a custom strategy applied. If no strategy icon is displayed, the ticker uses the default instrument-type set of order defaults.

To modify the default offset amount

1   On the **Configure** menu, click *Order* and then click *Order Defaults.*

2   In the center pane, select the instrument type for which you want to modify offset amounts.

3   In the **Default Order Sizes and Offsets** area in the right pane, you can modify the Stop Offset, Trailing Amount, Relative Amount and Discretionary Amount.

> **Note:** *To set a default offset for a specific contract rather than an instrument type, select an instrument type and click the **Add** button at the bottom of the instrument type list. Enter an underlying symbol and click OK.*

Modify the Stop Trigger Method

You can modify the trigger method for Stop, Stop Limit, Trailing Stop and Trailing Stop Limit orders on a per-order basis using the Order Ticket. You can also set the default trigger method for a strategy using the *Trigger Method* dropdown in the **Miscellaneous** section of the order Preset.

To change the default Trigger Method

1   On the **Configure** menu, select *Global Configuration*.

2   In the left pane, select *Presets*.

3   In the **Trigger Method** dropdown list, select a default type that will be used for all orders affected by the preset.

To modify the stop trigger method for the current order

1   Display the Trigger Method field on the trading window.

2   Highlight a stop, stop-limit, trailing stop or trailing stop limit order and select a method from the *Trigger Method* field.

Trigger Method	Description
Default	For NASDAQ stocks (NMS, Small Cap, OTC) and US options, the default trigger method is the double bid/ask method, where two consecutive ask price (bid price) values must be less than (greater than) or equal to the trigger price, and the second bid or ask must have greater size if it is at the same price level as the first bid or ask.
	For CASH contracts, the default trigger method is bid/ask, where the ask price (bid price) value must be less than (greater than) or equal to the trigger price.
	For all other contracts, the default trigger method is the *Last* method, described below.
Last	For a buy (sell) order to be triggered:
	• One last price value must be greater than (less than) or equal to the trigger price
	• The exchange or other market center where the order is to be executed must also publish (and the system must also receive) an ask price equal to or higher than, and a bid price equal to or lower than, the trigger price.
	• Last must be within the bid/ask (i.e. >=bid and <= ask) or within leeway percentage outside the bid/ask (i.e. >=bid-0.5% of last and <=ask+0.5% of last)
	Note: The Last method has leeway to trigger up to 0.5% above the ask price or up to 0.5% below the bid price. This 0.5% amount of leeway is subject to change at any time without notice.
Double Last	For a buy (sell) order to be triggered:
	• Two consecutive last price values must be greater than (less than) or equal to the trigger price, **or**
	• The last price value must be greater than (less than) or equal to the trigger price and the last size must be an increase.
Bid/Ask	For a buy (sell) order to be triggered:
	• A single bid (ask) price must be greater than (less than) or equal to the trigger price.

Trigger Method	Description
Double Bid/Ask	For a sell order to be triggered: • Two consecutive ask prices must be less than or equal to the trigger price, or • One ask price value must be less than or equal to the trigger price and the ask size must be an increase. For a buy order to be triggered: • Two consecutive bid prices must be greater than or equal to the trigger price, or • One bid price value must be greater than or equal to the trigger price and the bid size must be an increase.
Last or Bid/Ask	For a buy (sell) order to be triggered: • A single bid (ask) or a single last price must be greater than (less than) or equal to the trigger price.
Mid-point	For a buy (sell) order to be triggered: • The midpoint of the bid/ask must be greater than (less than) or equal to the trigger price.

Workspaces and Panels

Introduction

- [Managing Workspaces](#)
- [Quote Panel](#)
- [Orders Panel](#)
- [Log Panel](#)
- [Trades Panel](#)
- [Portfolio Panel](#)

Managing Workspaces

Create a custom trade environment on your desktop based on your trading needs. When you log in, select a workspace from the set of buttons on your toolbar. You can create a workspace that includes any of the TWS self-contained windows.
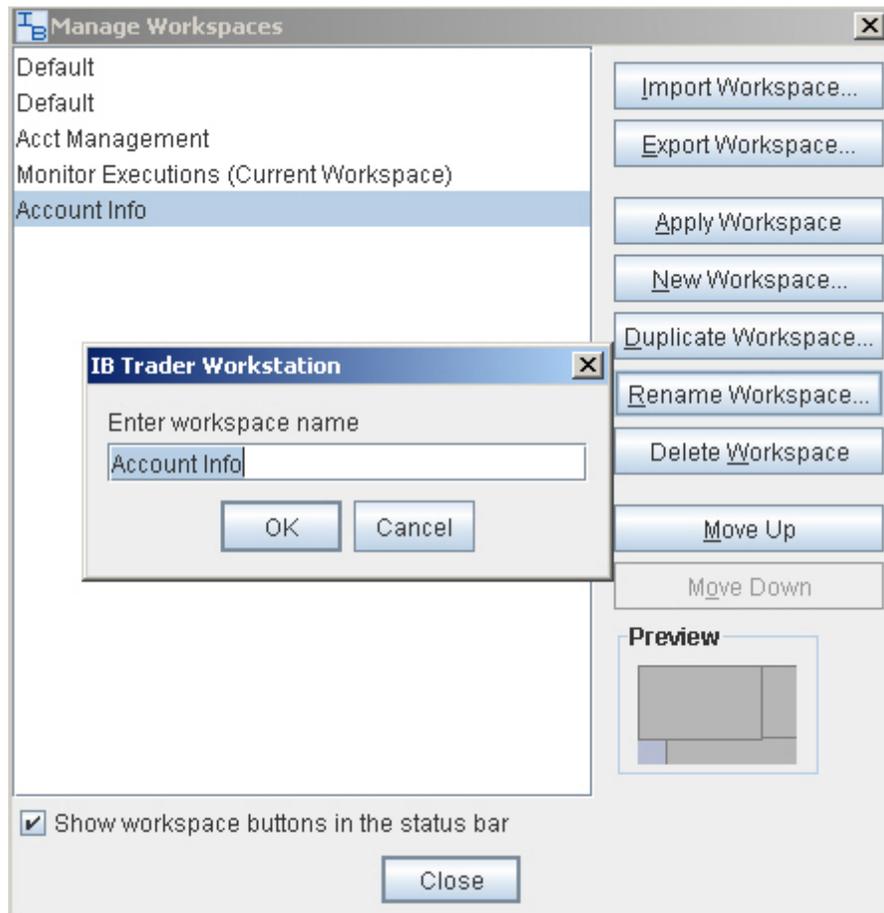
Create a workspace

1   Arrange windows on your desktop in any combination and any design.

2   On the **Configure** menu select *Manage Workspaces* (or click the ellipses on the workspace section of the toolbar).

3   Click *New Workspace* and enter a workspace name.

4   Click OK, and the new workspace appears in the list. The last used workspace is loaded when you login.

To delete a workspace, right-click on the appropriate workspace icon on the status line at the bottom of the application, and select *Remove Workspace*.

Quote Panel

The Quote panel is displayed at the top of the self-contained trading modules, and displays market data for the contract specified by the tab. This panel works just like a market data line on the trading screen. Click the Bid price to create a sell order, click the Ask price to create a buy order. Unlike the trading window which creates order directly below the ticker line, the self-contained modules display orders on the Orders panel.
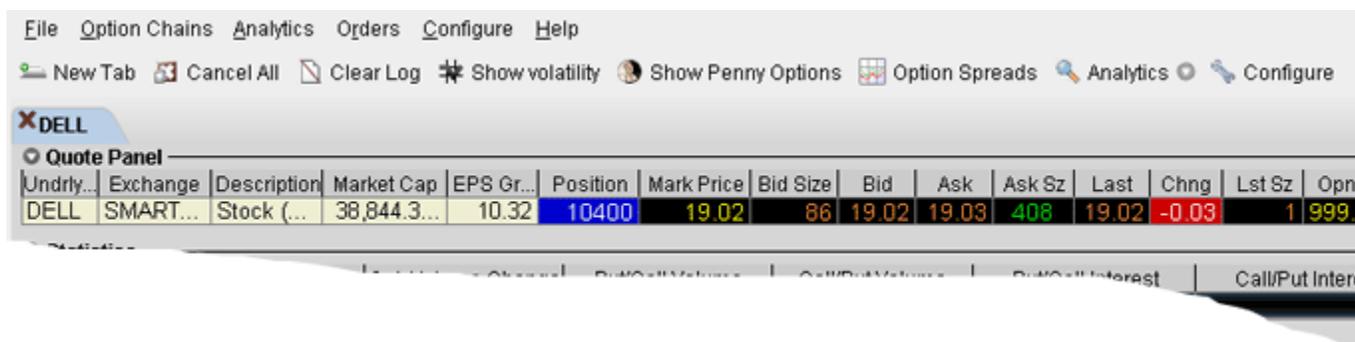
Configure Columns on the Quote Panel

1   Click the *Configure* wrench icon in the top right corner of the panel. This opens Global Configuration for the module-specific panels.

    a   Add fields for display by selecting a field from the **Available Columns** list, and clicking *Add*.

    b   Remove fields by selecting a field from the **Shown Columns** list and clicking *Remove*.

2   Click **OK**.

Orders Panel

Use the Orders panel to manage orders created from the Quote Panel in a self-contained trading module. Manage your orders just as you would from the main trading screen. You can configure the Orders panel to hide or display columns.

To configure the Orders Panel

1   Click the Configure wrench icon in the top right corner of the panel. This opens Global Configuration for the module-specific panels.

    a   Add fields for display by selecting a field from the **Available Columns** list, and clicking *Add*.

    b   Remove fields by selecting a field from the **Shown Columns** list and clicking *Remove*.

2   Click **OK**.

Log Panel

The Log Panel displays records all order actions including transmission, exchange acknowledgement, fills, and cancellations from a tab in one of the self-contained trading modules. You can delete the content of the log by clicking the Clear Log icon at the top of window.
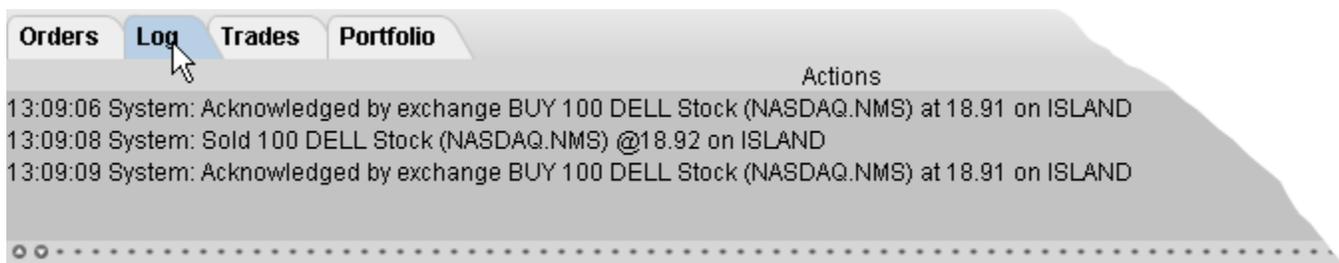
Trades Panel

The Trades panel shows real-time trade reports for orders transmitted from the active tab.
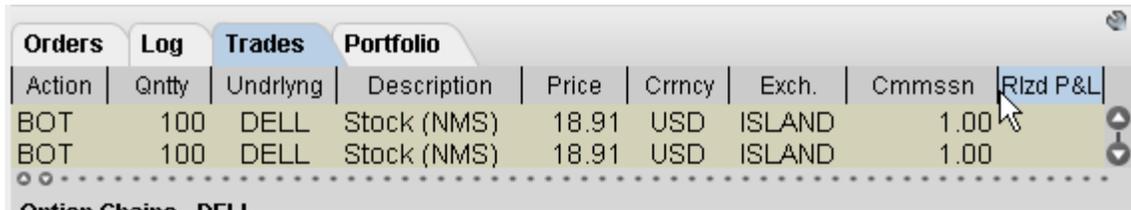
To configure columns on the Trades panel

1   Click the *Configure* wrench icon in the top right corner of the panel. This opens Global Configuration for the module-specific panels.

    a   Add fields for display by selecting a field from the **Available Columns** list, and clicking *Add*.

    b   Remove fields by selecting a field from the **Shown Columns** list and clicking *Remove*.

2   Click **OK**

Portfolio Panel

The Portfolio panel shows displays position-relevant information as seen in the Portfolio section of the Account window, but only for positions in the active contract in the Quote panel.

To configure columns on the Portfolio panel

1   Click the *Configure* wrench icon in the top right corner of the panel. This opens Global Configuration for the module-specific panels.

    a   Add fields for display by selecting a field from the **Available Columns** list, and clicking *Add*.

    b   Remove fields by selecting a field from the **Shown Columns** list and clicking *Remove*.

2   Click **OK.**

For more information on the fields in the Portfolio panel, see the Account Information topic.

Menus

- File Menu
- Page Menu
- Ticker Menu
- Order Menu
- Trading Menu
- Information Menu
- Analytics Menu
- View Menu
- Chart Menu
- Configure Menu
- Help Menu
- Right-click in a Blank Line
- Right-click on a Market Data Line
- Right-click on an Order Management Line

File Menu

Use the **File** menu commands to export reports to your PC, save settings and create a basket file. The **File** menu commands are described in the table below.
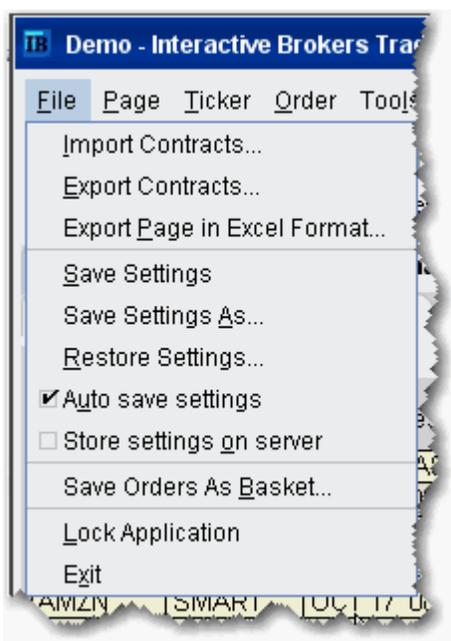
Menu Command	Description
Import Contracts	Allows you to import a comma-delimited text file to your trading page.
Export Contracts	Allows you to export a .csv file that can be opened in Excel.
Export Today's Reports	Exports the day's execution reports as a text file to the directory on your PC that you set.
Export Previous Day's Reports	Exports the execution report (as a text file) for the selected day to a directory on your PC that you set.
Export Page in Excel Format	Exports the active trading page as a text file to a selected file directory. You can open this text file within Excel and copy the data to a spreadsheet.
Save Settings	Locally saves any changes you made to your trading screen layout, defaults, and menu selections.
Restore Settings	Opens the Restore Settings box, where you can choose to restore a settings file from a previous session.

Menu Command	Description
Auto save settings	If unchecked, page and setting changes you make to TWS will not automatically be saved when you log out.
Store Settings on server	If checked, all settings will be saved on the IB server when you log out (instead of only being saved on your local PC), and will be used the next time you log in from a browser, regardless of the location of the machine you use.
Save Orders As Basket	Saves all orders on the active Trading page in a basket file. Use a Basket to trade a saved set of orders with one action.
Exit	Closes Trader Workstation and saves local settings.

Page Menu

Use the **Page** menu to create, edit and delete trading pages, and to modify the page layout. Menu commands are described in the table below.
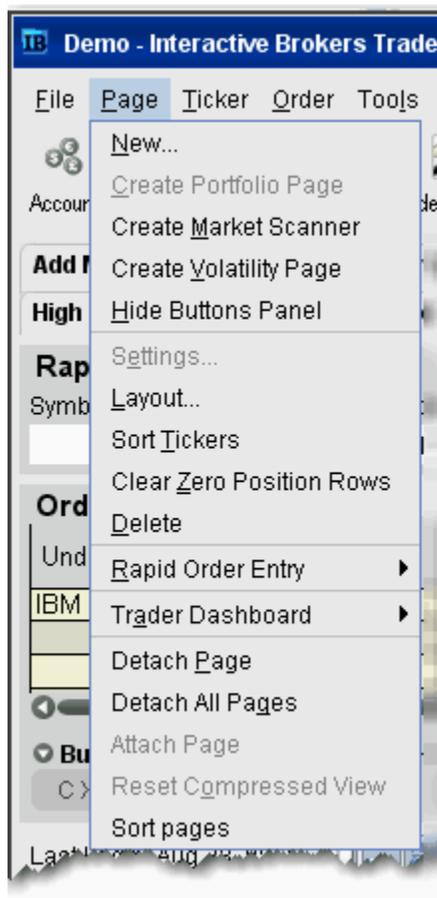
Menu Command	Description
New	Creates a new trading page.
Create Portfolio Page	Creates a new trading page called Portfolio complete with market data lines for all assets in which you hold a position. These are displayed in the Portfolio section of the Account window.
Create Market Scanner	Creates a new trading page called Scanner where you can view the top 20 contracts based on many different parameters such as most active, top gainers, top losers, etc.
Create Volatility Page	Creates a new trading page that uses the Volatility page layout.
Hide/Show Buttons Panel	Shows or hides the action button panel at the bottomof a trading window.

Menu Command	Description
Settings	Opens the **Settings** screen for the active page, under **Trading Window** > *Pages* in Global Configuration. Lets you rename a page and change page settings, including the give-up and clearing account, assigned layout, and page-level preset Strategy. Also, define whether the page is enabled for Quick Stock Entry, and how to display active orders for symbols that occur on multiple pages.
Layout	Opens the Page Layout editor to the Default page layout. Use this window to determine which columns are visible on your trading screen, and the text, background and other characteristics of rows and columns.
Sort Tickers	Alphabetically sorts market data lines on the open trading page.
Clear Zero Position	Removes all market data lines from the Portfolio page for contracts in which you no longer hold a position. This ensures that the Portfolio page only includes assets in which you hold a position.
Delete	Lets you delete the selected page. Gives a warning message before deleting.
Rapid Order Entry	Use the Rapid Order Entry submenus to Show or Hide the Rapid Order Entry panel, and to define the available instrument types. Use the Configure submenu to open the Rapid Order Entry configuration page in the Global Configuration box.
Trader Dashboard	Show or hide the Trader Dashboard.
Detach Page	Undocks the active trading page and recreates the page as a separate window on your desktop. To re-dock, on the **Page** menu of the detached page select *Attach Page*.
Detach All Pages	Detaches all trading pages from the toolbar into separate windows.
Attach Page	Reattaches the trading page to the trading toolbar.
Reset Compressed View	Pending Page only - use this command to reset the Pending page to its normal, uncompressed default view, showing all pending orders. You can filter pending orders by contract, action, exchange etc using the search filter field on the Pending page.
Sort Pages	Automatically re-sorts your tabset alphabetically beginning at the top row left.

Ticker Menu

Use the **Ticker** menu to add a market data line and invoke actions related to the selected market data line. Menu commands are described in the table below.

Menu Command	Description
Add Symbol	Opens the Request Ticker box where you enter contract information. This creates a new market data line.
Lookup Symbol	Opens the Contract & Securities search page from the IB web site.
Contract Search	Returns all symbols for the company name you enter. Filter your return results by unchecking specific products.
Subscribe to Market Data	Opens the Account Management login screen. From here you can perform all of your account management tasks, such as subscribing to market data services, transferring funds, and viewing account statements.
	You must subscribe to market data services to receive market data and view Level II, NYSE Deep Book quotes and Market Depth.

Menu Command	Description
RFQ - Request for Quote	Use to request market data for instruments not showing data.
Insert Row	Inserts a blank row ABOVE the selected market data line.
Delete Row	Deletes the selected blank and populated data row with no confirmation message.
Clear Row	Clears data from the selected row.
Edit	Lets you cut, copy or paste a market data line between pages. If you select any field in the line, the entire line is cut/copied. If you try to paste a duplicate market data line on the same page, the Paste command is grayed out.
Show Description	Displays the Ticker Description box which contains information about the selected underlying.
Show Details	Shows details for the selected underlying.
Show Positions	Shows current positions for the selected asset.
Create Header Row	Inserts a non-data row into the page. Enter a title or label to use this row as a separator or label for a group of tickers.
Edit Dividends	Opens the Dividend Editor window.
Future Rollover	If you have futures contracts that will be expiring, use this feature to roll them over prior to expiration.
View Trades	Opens the Trades window and shows all trades for the selected underlying.

Order Menu

Use the **Order** menu to create, transmit, cancel and restore orders. The menu commands are described in the table below.
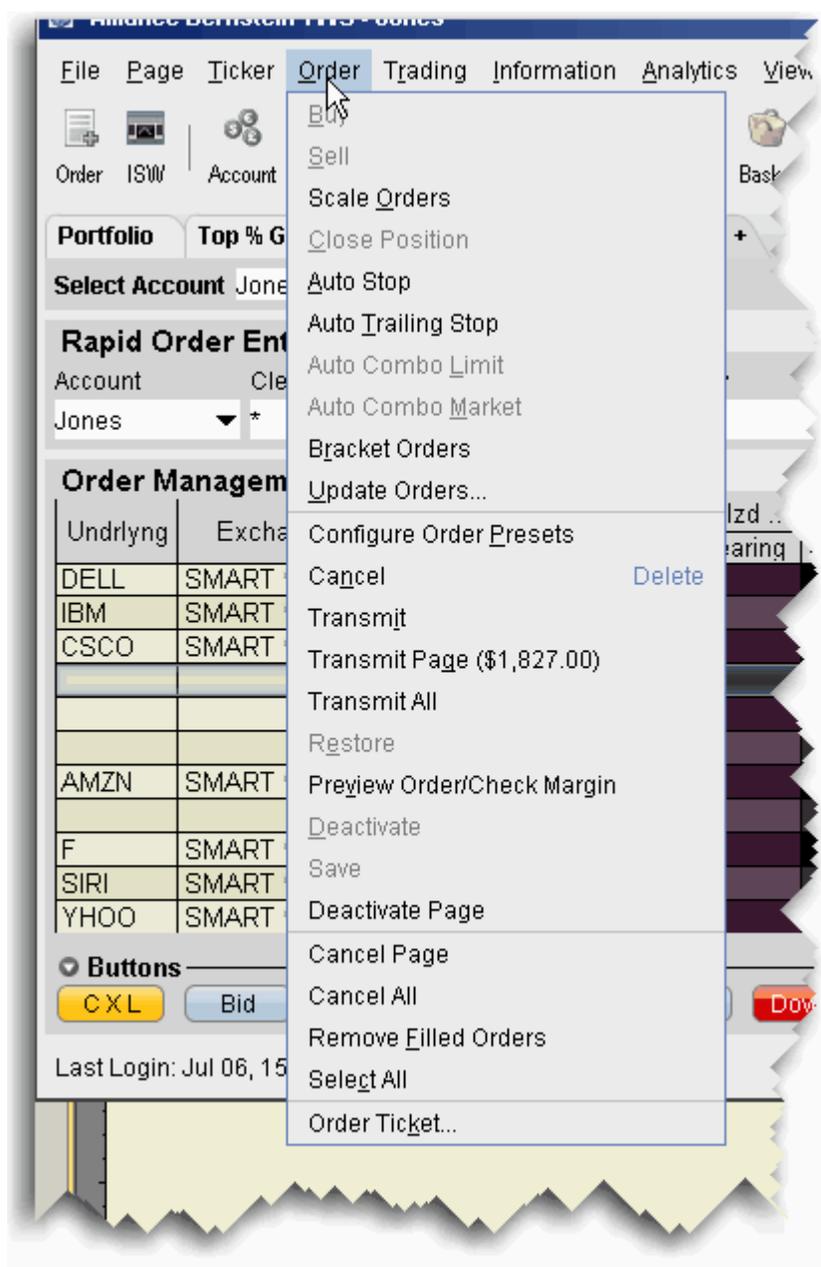
Menu Command	Description
Buy	Creates a Buy order on the selected market data line, or opens the Order Ticket window if no asset is selected.

Menu Command	Description
Sell	Creates a Sell order on the selected market data line, or opens the Order Ticket window if no asset is selected.
Scale Orders	Create orders that specify the total amount to be bought/sold at incrementally decreasing/increasing price intervals.
Close Position	Creates an opposite-side order for a selected asset in which you hold a position. You must manually transmit the order.
Auto Stop	Attach a stop order to the limit order.
Auto Trailing Stop	Attach a trailing stop to a limit order.
Auto Combo Limit	Flips the parent combination order and submits an opposite side limit order. You must enter a limit price. For example, if you have a BUY calendar spread, the parent order looks like this: *Buy 1 XYZ OPT NOV06 80.0 CALL* *Sell 1 XYZ OPT OCT06 80.0 CALL* When you attach an auto combo limit, TWS flips the combo and create a SELL calendar spread order like this: *Sell 1 XYZ OPT NOV06 80.0 CALL* *Buy 1 XYZ OPT OCT06 80.0 CALL* You must enter a limit price for this order. Since the attached order is dependent on the parent order, it will not be transmitted until the parent order executes.
Auto Combo Market	Flips the parent combination order and submits an opposite side market order. See *Auto Combo Limit* above.
Bracket Orders	Creates a pair of orders that bracket your original order. Bracket orders are designed to limit your loss and lock in a profit by "bracketing" an order with two opposite-side orders. A BUY order is bracketed by a high-side sell limit order and a low-side sell stop order. A SELL order is bracketed by a high-side buy stop order and a low side buy limit order.
Update Orders	Define parameters to automatically update the order type, time in force, limit price (with or without a limit offset) for one or multiple orders. Additionally, specify a validation procedure to be used when attributes are not applicable to all orders.
Configure Order Presets	Opens the product-specific Order Presets page in Global Configuration.
Cancel	For non-working orders, cancels the order and deletes it from the order management line. For working orders, sends a cancellation request to the order destination. A working order is not confirmed cancelled until the Status field turns red.
Transmit	Transmits the selected order to the order destination.
Transmit Page	Transmits all orders on the active trading page to their order destinations. The value in parenthesis shows the value of all orders on the page.
Transmit All	Transmits all order in TWS, on all pages.
Restore	Used to undo changes to a working order on an order management line BEFORE YOU RE-TRANSMIT THE ORDER.

Menu Command	Description
Preview Order/Check Margin	Shows your margin requirements as a "what if" scenario for the selected non-submitted order.
Deactivate	Cancels a transmitted order at the exchange, but leaves it on the trading page for later re-submission.
Save	Re-transmits a deactivated by sending it to the specified exchange.
Deactivate Page	Cancels all transmitted orders on the page, but leaves them on the trading page for later re-submission.
Cancel Page	Sends a cancellation request for each non-transmitted and working order on the active trading page. Working orders are not confirmed cancelled until the **Status** field turns red.
Cancel All	Sends a cancellation request for every non-transmitted and working order on all of your trading pages. Working orders are not confirmed cancelled until the **Status** field turns red.
Remove Filled Orders	If you de-select *Auto-Remove Orders* on the **Settings** menu, use this command to remove all executed and canceled orders from your trading and Pending pages.
Close All Positions	Creates **and transmits** an opposite side limit order at the market price for each open position. If no market data is available, creates an opposite side market order, and you must transmit it manually.
Close Portion of Positions	Enter a percentage of open positions you want to close. Creates **and transmits** an opposite side limit order at the market price for this percentage of open positions. If no market data is available, creates an opposite side market order, and you must transmit it manually.
Close Positions on Page	Creates **and transmits** an opposite side limit order at the market price for each open position on the active trading page. If no market data is available, creates an opposite side market order, and you must transmit it manually.
Select All	Selects all orders on the page.
Order Ticket	Opens the Order Ticket window which you use to create and transmit an order. If you have selected a market data line, the Order Ticket window displays the selected asset and order destination.

Trading Menu

Use the **Trading** menu to open any of the order management tools.
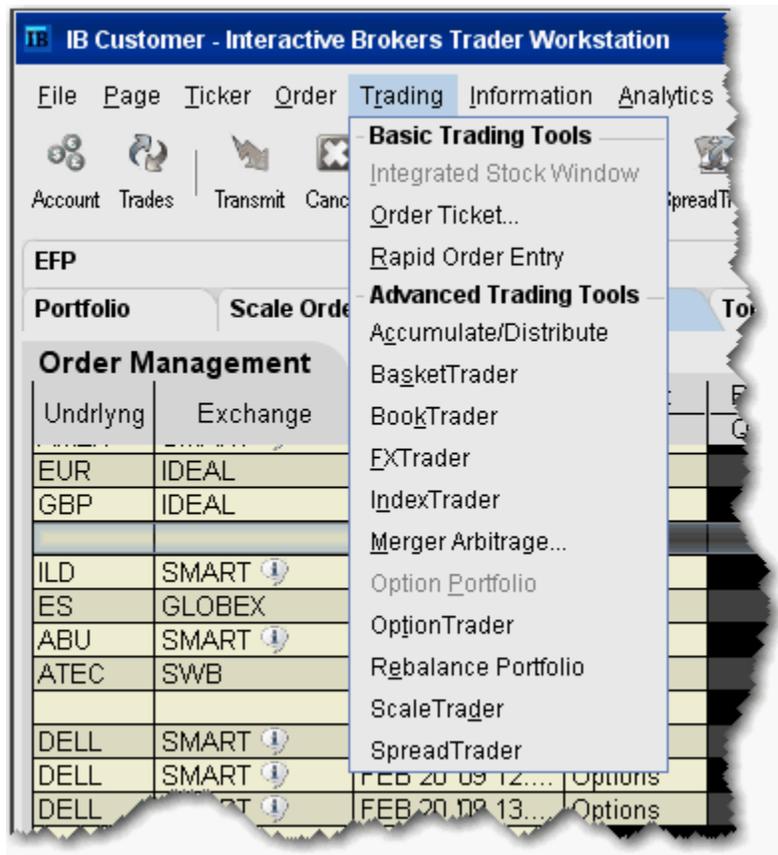
Menu Command	Description
Integrated Stock Window	The ISW is a comprehensive market data/order management workspace for a single stock.
Order Ticket	Opens the order ticket. The ticket will be populated with the selected contract
Rapid Order Entry	Use the Rapid Order Entry submenus to Show or Hide the Rapid Order Entry panel, and to define the available instrument types. Use the Configure submenu to open the Rapid Order Entry configuration page in the Global Configuration box.
Accumulate/ Distribute	Create a custom algorithm for large orders that submits incrementally sized components at specified time intervals. Use Randomization to avoid being noticed in the market.
BasketTrader	Trade and manage baskets of orders on multiple products.

Menu Command	Description
Blotter	Institutional only - Receive and manage large volume electronic orders.
BookTrader	Instantaneously transmit orders from the book data ladder with a single click.
FXTrader	Trading window specifically designed for FX traders.
IndexTrader	Create a customized basket order modeled on an index.
Merger Arbitrage	Create a combination order for an anticipated merger.
Option Portfolio	Find and trade the best combination of options to achieve a specified values in any of the Greeks.
OptionTrader	Complete option management interface.
Rebalance	Opens the Rebalance window.
ScaleTrader	Create large volume orders scaled incrementally with profit-taking orders built in.
SpreadTrader	Quickly create options, futures and EFP spreads.

Information Menu

Find market data, news and research and other information-related tools.
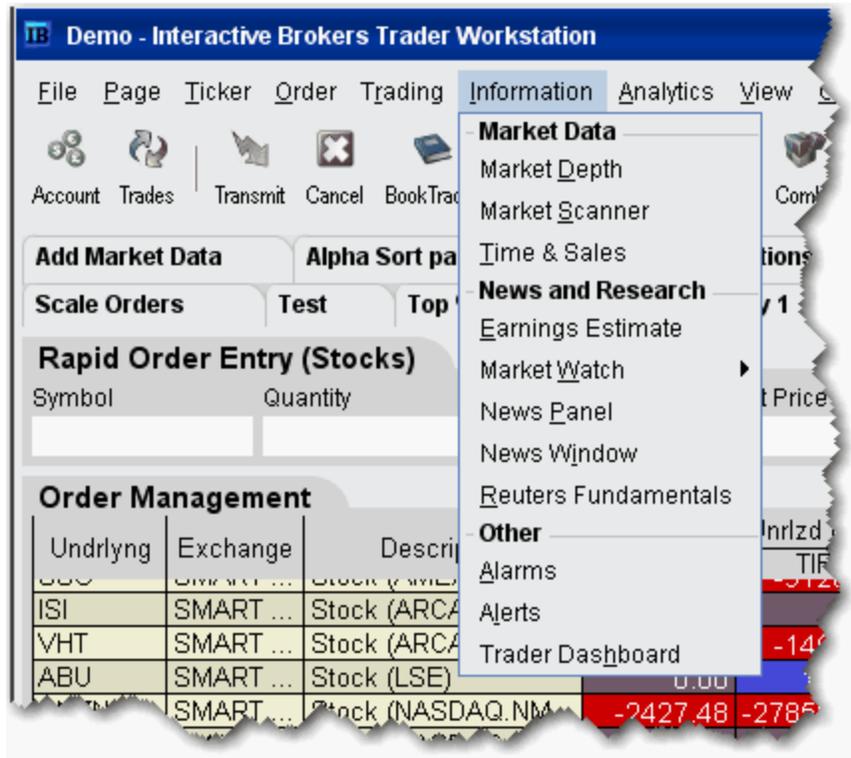
Menu Command	Description
Market Depth	Opens the aggregated Market Depth window for the selected contract.
Market Scanner	Opens the Market Scanner page.
Time & Sales	Displays time & sales for the selected contract.
Earnings Estimates	See earnings estimates including per share book value, prior year's earnings estimate and estimated earnings growth rate for the selected underlying.

Menu Command	Description
MarketWatch	• *Analyst Information* - Shows analyst recommendations for the selected contract. • *Charts* - displays MarketWatch charts for the selected underlying. • *Company Profile* - Profiles the selected underlying, including per share data, company at a glance, valuation ratios and profitability. • *Financials* - Income statement and other financials for the selected underlying. • *Insider Trading* - Shows the last ten insider trading actions for the selected underlying. • *News & Research* - Industry-related news and commentary based on the selected underlying. • *SEC Filings* - SEC filings associated with the selected underlying.
News Panel	Displays industry-related news and commentary based on the selected underlying.
News Window	Opens a browser window with related news on the selected underlying.
Reuters Fundamentals	Opens the <u>Reuters Fundamentals</u> page, if you have subscribed.
Alarms	Opens the **Alarm Settings** box where you can set a price movement or volume change activated alarm for the selected asset. To ensure you don't lose alarms when you log out of the application, select *Preserve the alarm between sessions* when you set the alarm.
Alerts	Opens the Alerts window where you can modify or create time, price or margin-based alerts.
Trader Dashboard	Show or hide the customizable Trader Dashboard panel to display at-a-glance account or symbol data.

Analytics Menu

Interactive Analytics is a risk assessment suite comprising Portfolio Analytics, Option Analytics, and the Option Modeler.
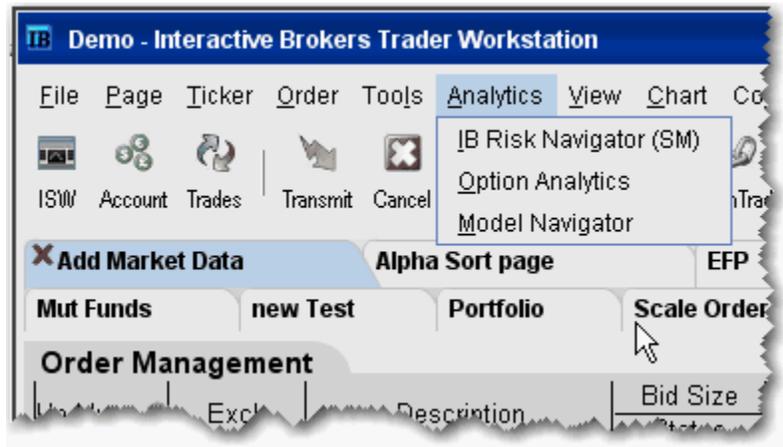
Menu Command	Description
IB Risk Navigator[SM]	Opens the IB Risk NavigatorS[M] real-time risk tool.
Option Analytics	Displays the Greeks for put/call options for selected contract.
Model Navigator	Calculate and recalculate option model prices by editing pricing assumptions in the Model Navigator.

View Menu

Use the **View** menu to see reports, pending orders, and bulletins and status. The menu commands are described in the table below.
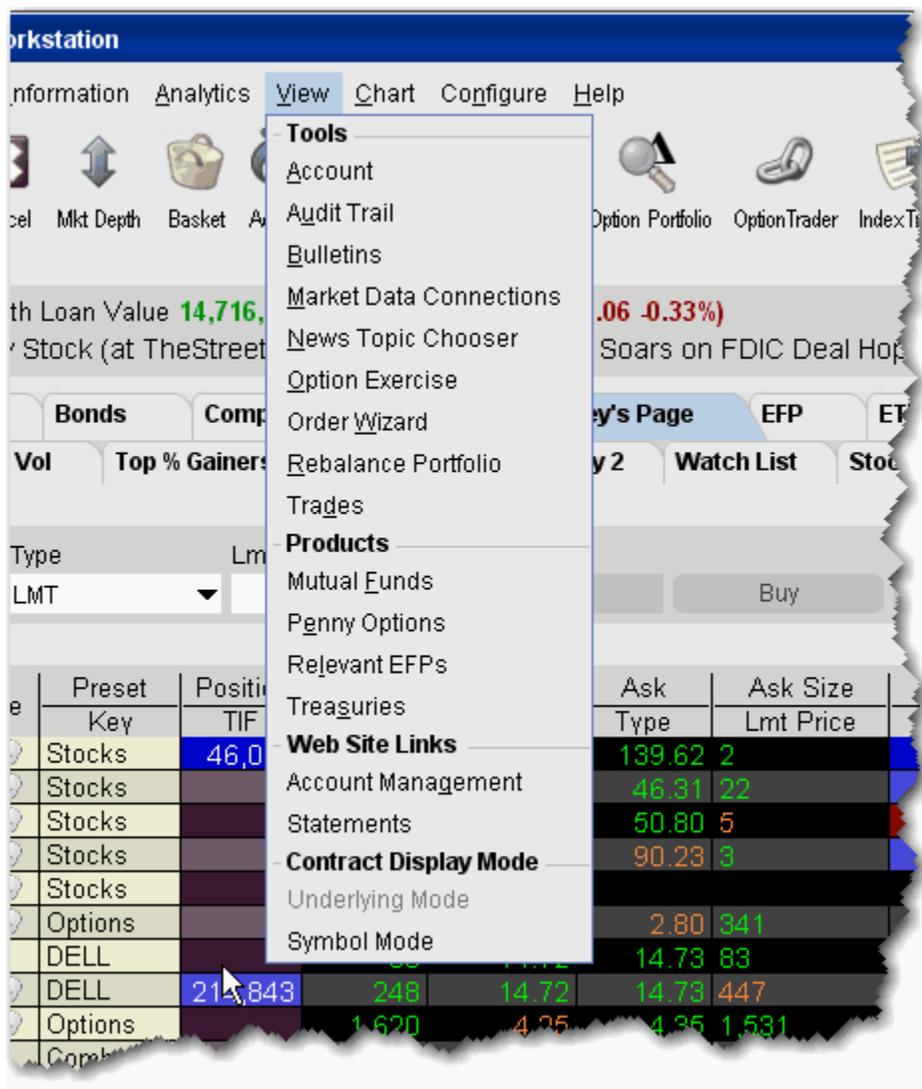
Menu Command	Description
Account	View account information including positions and account balance.
Audit Trails	View a log of your daily trading activity saved in an html file. Each week's audit trail reports overwrite those from the previous week.

Menu Command	Description
Bulletins	View bulletins and system status.
Market Data Connections	Displays the purpose and status of your market data connections.
News Topic Chooser	
Option Exercise	Use the Option Exercise window to exercise an option position prior to expiration date.
Order Wizard	Opens the Order Wizard panel at the bottom of your trading window.
Rebalance Portfolio	Opens the Rebalance window where you can trade by redistributing percentages of positions in your portfolio that make up your current (signed) net liquidation value.
Trades	View execution reports for the current day, view Trade Confirms via Account Management, and configure blinking Trades notifications from your trading toolbar.
Mutual Funds	Opens the Contract Selection box showing available families of no-load mutual funds.
Penny Options	View your latest account statement.
Relevant EFPs	Opens the Relevant EFPs market scanner which returns all EFPs relevant to your portfolio based on the stock and single-stock futures positions you currently hold.
Treasuries	Opens the Contract Selection box showing available T-Bonds, Bills and Notes.
Account Management	Logs you into your Account Management page. Use the menu in the left pane to view and edit account information.
Statements	Accesses the Account Management area with the page open to your statements.
Underlying Mode	If grayed out, you are already in Underlying entry mode, which mean you enter a ticker symbol and choose the instrument type and exchange in the normal manner.
Symbol Mode	Symbol entry mode is for advanced options traders. This mode requires that you enter the contract definition by the class or symbol defined by the exchange on which it's trading.

Chart Menu

Use the **Chart** menu commands to create a new interactive chart, or to open an existing chart in real-time or as an image.
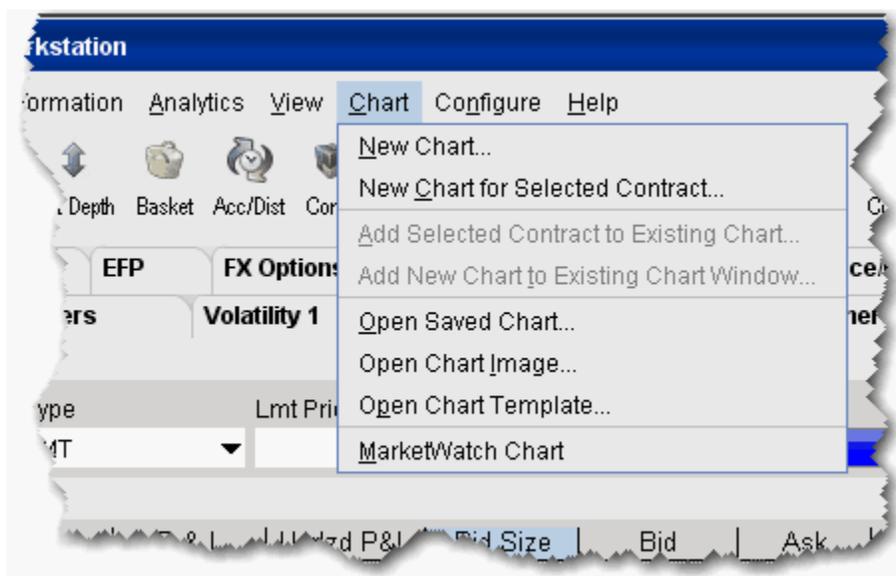
Menu Command	Description
New Real-time Chart	Opens a blank New Chart window for you to enter an underlying and create an Interactive Chart.
New Real-time Chart for Selected Contract	Opens the new chart window with the Contract Description populated based on the contract you selected in the trading window.
Add Selected Contract to Existing Chart	Allows you to add the selected contract to the open chart so that you are charting multiple contracts, or replace the main contract with the selected contract.
Add New Chart to Existing Chart Window	Creates a new, distinct chart for the selected contract, and includes the chart in the same window as the existing chart.
Open Saved Chart	Use to open a chart saved as a chart definition file (the file has a .def file extension). The chart opens as a real-time chart.
Open Chart Image	Use to open a chart snapshot that you saved as an image file (the file has a .jpg file extension). The chart opens as an image file to let you see the historical data of that saved moment.
Open Chart Template	Opens the Load Chart Template dialog box where you select a saved chart template to open.
MarketWatch Chart	View MarketWatch chart for the selected underlying.

Configure Menu

Use the **Configure** menu to modify defaults, set display options and show or hide features. The menu commands are described in the table below.
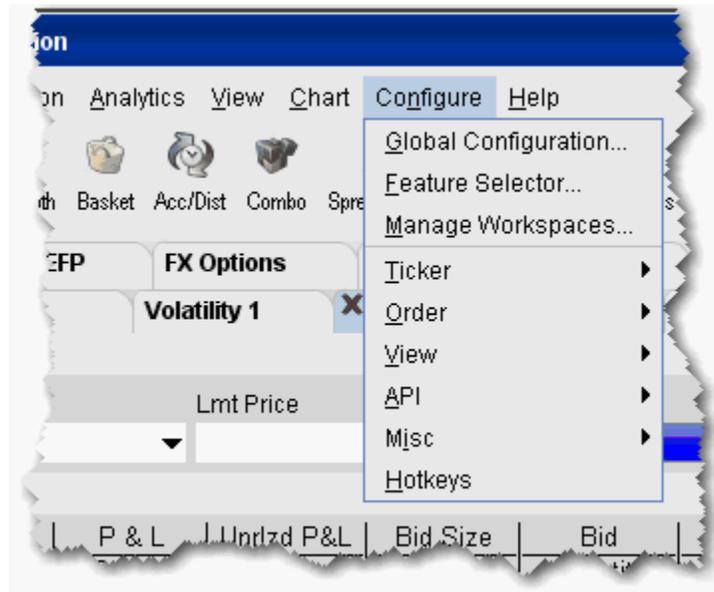
Menu Command	Description
Global Configuration	Opens the Global Configuration box where you define configuration settings for all aspects of the workstation.
Feature Selector	Opens the Feature Selector, which lets you hide or display specific features based on your needs.
Manage Workspaces	Opens the Workspaces management box where you can create, edit and import workspaces.
Ticker	Quick access to configuring ticker display settings.
Order	Quick access to configuring order settings.
View	Quick access to configure miscellaneous display items.
API	Quick access to configuring API features.
Misc	Quick access to configuring miscellaneous features.
Hotkeys	Quick access to configuring hotkeys.

Help Menu

The **Help** menu provides links to online customer service information including the User's Guide. Menu commands are described in the table below.
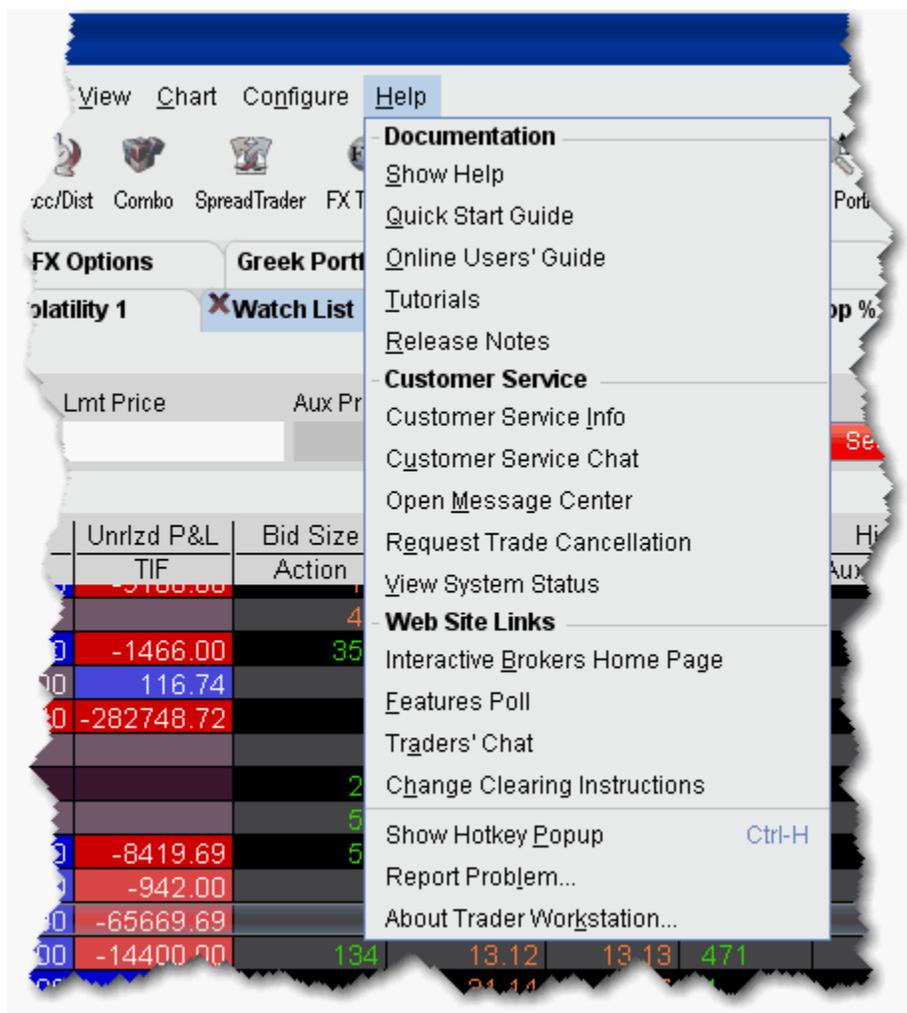
Menu Command	Description
Documentation	
Show Help	Opens the TWS javahelp window.
Quick Start Guide	Opens the TWS Quickstart page.
Online Users' Guide	Opens the TWS Users' Guide from your web browser.
Tutorials	Opens the Interactive Tours web page with focus on the TWS Basics tour.

Menu Command	Description
Release Notes	Opens the Trader Workstation release notes index.
Customer Service	
Customer Service Info	Opens the Customer Service information page on the IB web site.
Customer Service Chat	Opens the Account Management page. Click the Chat icon to chat live with a customer service representative.
Open Message Center	Opens the Message Center in Account Management. Use this feature to contact customer service to address any questions or problems.
Request Trade Cancellation	Opens the *Order Cancellation Request* box in Account Management.
View System Status	Displays the current status of IB systems.
Web Site Links	
Interactive Brokers Home Page	Opens the IB home page.
Features Poll	Opens the IB Features Poll page, where you can submit and vote on suggestions for new or enhanced IB features.
Traders' Chat	Opens the IB Traders' Chat page where you can log in and chat live with other traders.
Change Clearing Instructions	Opens the Settlement Instructions page in Account Management.
Show Hotkey Popup	Displays a list of all active hotkey actions and their associated key(s).
Report Problem	Opens a text pad where you can describe and submit your problem.
About Trader Workstation	Displays information about TWS, including the current release number and Java version you're running.

Right-click in a Blank Line

To see a right-click menu, select a line and then click the right mouse button. Select an item from a right-click menu using your mouse. The Right-click menu on in a blank line contains the following menu commands:
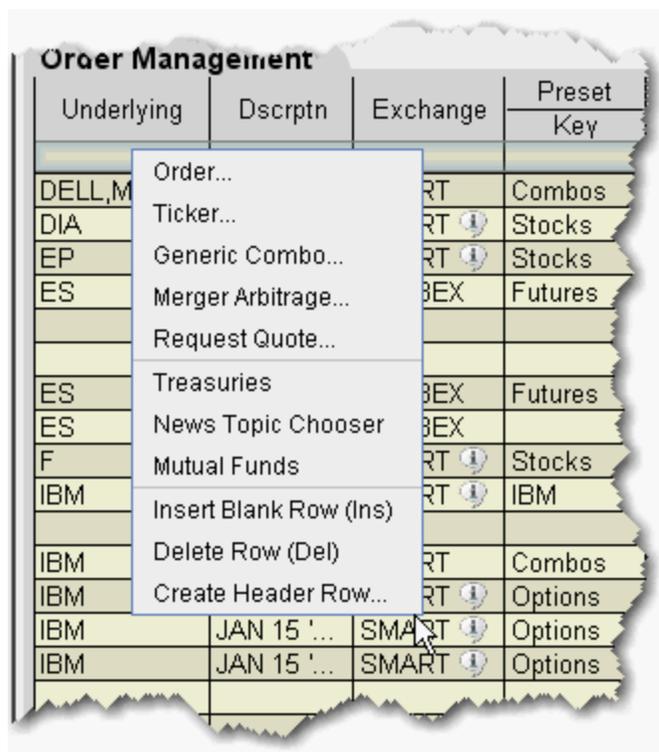
Menu Command	Description
Order	Opens the Order Ticket window which you use to create and transmit orders.
Ticker	Opens the Request Ticker box where you enter contract information. This creates a new market data line.
Generic Combo	Opens the Combo Composition box to the Underlying field. Begin defining legs for a spread order.
Merger Arbitrage	Create a combination order for an anticipated merger.
Request Quote	Enter contract information to request a quote.
Treasuries	Opens the Contract Selections box, showing available T-Bonds, Bills and Notes.
New Topic Chooser	Opens the News Topic Chooser, which lets you filter news by source, type and category.
Mutual Funds	Opens the Contract Selections box, showing available fund families.

Menu Command	Description
Insert Blank Row	Inserts a blank line above the selected line.
Delete Row	Deletes the selected row or rows. This command deletes both blank lines and market data lines without a warning.
Create Header Row	Insert a row with a label that can be used to help organize tickers within a page.

Right-click on a Market Data Line

To see a right-click menu, select a market data line and then click the right mouse button. Select an item from a right-click menu using your mouse. The right-click menu on a Market Data line contains the following menu commands:

Menu Command	Description
Trade	• Buy - create a Buy order • Sell - create a Sell order • Order Ticket - opens the Order Ticket from which you define order parameters.
Request for Quote	• Submit RFQ - request market data for instruments that are not showing data. • Modify RFQ - Invokes a dialog box in which you can change the price/quantity of the last quote request made. • Cancel RFQ - Cancels the last quote request made.
Insert Ticker	Adds a new market data line with the underlying symbol you request.
Insert Row	Inserts blank row above the selected row.
Delete Row	Deletes the selected row and its data.
Clear Row	Deletes data from row and leaves a blank row.
Edit	Elect to cut or copy the selected market data line.
Tools	• **Book Trader** - Opens the Book Trader window. • **Option Trader** - Opens the Option Trader window. • **Market Depth** - Displays the aggregated market depth window for the selected security. • **Set Alarm** - Opens the **Alarm Settings** box where you can set a price movement-activated alarm for the selected asset.
Contract Info	• Description - Displays the Ticker Description box which contains information about the selected underlying. • Details - Shows details for the selected underlying.

Right-click on an Order Management Line

To see a right-click menu, select an order management line and then click the right mouse button. Select an item from a right-click menu using your mouse. The right-click menu on an Order Management line contains the following menu commands:

Menu Command	Description
Transmit	Transmits the selected order to the order destination.
Cancel	For non-working orders, cancels the order and deletes it from the order management line. For working orders, sends a cancellation request to the order destination. A working order is not confirmed cancelled until the Status field turns red.
Deactivate	Cancels a transmitted order at the exchange, but leaves it on the trading page for later re-submission.
Preview Order/Check Margin	Opens the *Preview Order* box which shows the order parameters, commissions and margin impact of the order before you transmit.
Restore	Lets you undo changes to a working order on an order management line BEFORE YOU RE-TRANSMIT THE ORDER.
Attach	• **Auto Stop** - Attach a stop order to the limit order. • **Auto Trailing Stop** - Attach a trailing stop order to the limit order. • **Bracket Orders** - Attach a set of opposite-side orders that "bracket" the current order in an attempt to limit loss. • **Auto Combo Limit** - Flips the parent combination order and submits an opposite side limit order. You must enter a limit price. For example, if you have a BUY calendar spread, the parent order looks like this: *Buy 1 XYZ OPT NOV06 80.0 CALL* *Sell 1 XYZ OPT OCT06 80.0 CALL* When you attach an auto combo limit, TWS flips the combo and create a SELL calendar spread order like this: *Sell 1 XYZ OPT NOV06 80.0 CALL* *Buy 1 XYZ OPT OCT06 80.0 CALL* And you have to enter a limit price. Since the attached order is dependent on the parent order, it will not be transmitted until the parent order executes. • **Auto Combo Market** - Flips the parent combination order and submits an opposite side market order. See above.
Create	• Duplicate - Creates another order management line with the same order parameters directly below the selected line. • Scale Orders - Create a series of orders at incrementally decreasing/increasing price intervals.

Menu Command	Description
Modify	• **Order Ticket** - Opens the **Order Ticket** window where you can modify parameters before you transmit the order. • **Condition** - Opens the Conditional tab on the Order Ticket where you can create or modify a conditional order, which is an order that will automatically be submitted or cancelled ONLY IF specified criteria for one or more defined contracts are met.
Configure Order Presets	Opens the Presets configuration page for the selected ticker/instrument type. Note that any changes you make to the order presets do not apply to the current existing order.

Exercise and Rollover

- [Automatic Futures Rollover](#)
- [Exercise Option - Manual File](#)
- [Exercise an Option](#)

Automatic Futures Rollover

When activated, the system automatically displays a message on login, eight days prior to expiration, which allows you to selecting from a list of expiring contracts to roll over. You can also view the list from within TWS by selecting *Futures Rollover* from the **Ticker** menu.

To activate auto futures rollover

1   Click the Configure wrench icon on the trading window.
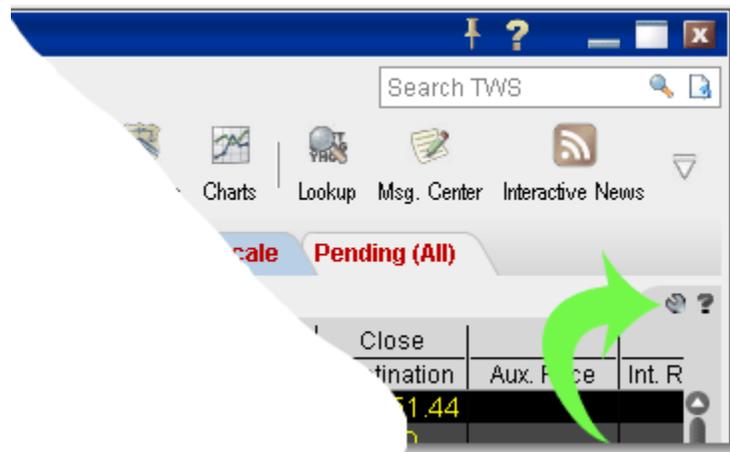
2   In the left pane of **Global Configuration**, select *General*.

3   In the right pane, check *Auto future rollover.*
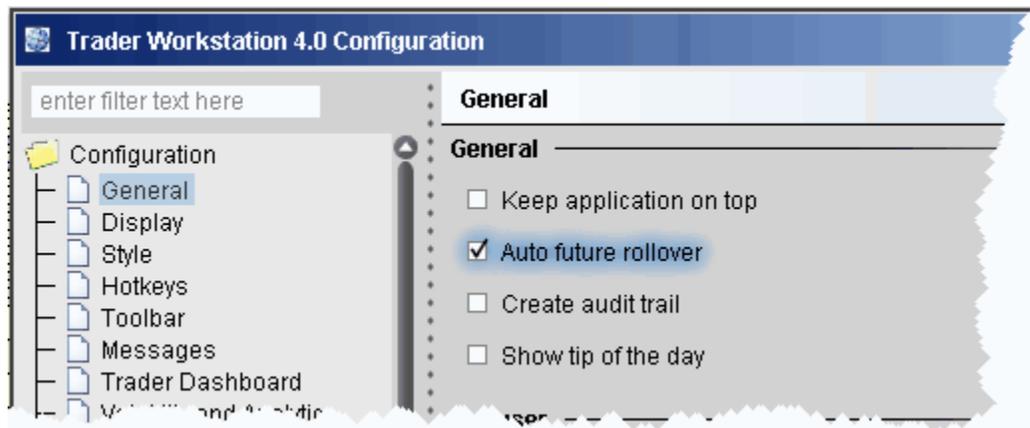
To view eligible futures rollovers from within TWS

1   On the **Ticker** menu, select *Futures Rollover*.

2   Check ALL contracts that you want automatically updated to the new front month.

Exercise Options - Manual File

The Option Exercise window now includes a **Load from File** button that lets you import a file with instructions to exercise or lapse specific options. You can create the file using any word processing program, and the file must include a comma-delimited list of values, one line for each option. You can use one of two different formats. Table 1 illustrates using the underlying, Table 2 shows fields for symbol mode.

For each option you want to include in the file, create one line of text and observe the following rules:

- Include one value for each field described in the table(s) below.

- Separate field values by commas.

- List field values in the order in which they appear in the table(s) below.

Field Name	Possible Values		Field Name	Possible Values
Table 1 - Underlying Mode			**Table 2- Symbol Mode**	
action	exercise, lapse		action	exercise, lapse
account #	IB acct number, i.e. U44982		account #	IB acct number, i.e. U44982
underlying	underlying symbol, i.e. IBM		local symbol	IBMSE
strike	i.e. 50		exchange	i.e. AMEX (smart is not accepted)
right	p, c		quantity	i.e. 3
expiry(yyyy mm)	i.e. 200501		override*	yes, no
multiplier	i.e. 100			
exchange	i.e. AMEX (smart is not accepted)			
quantity	i.e. 3			
override*	yes, no			

Field Name	Possible Values		Field Name	Possible Values
	* Specifies whether your settings will override the system's natural action. For example, if you have the action set to exercise an option and that contract is not in-the-money, you would receive a message saying that the contract was not in-the-money and would not exercise option. However, if you have the override set to "yes," this instruction will override the system and the option will exercise. Your lines in the file based on the examples in the tables above would look like this: exercise, U44982, IBM, 50, C, 200501, 100, AMEX, 3, no exercise, U44982, IBMSE, AMEX, 3, no			

Exercise an Option

Use the **Option Exercise** window to exercise options prior to their expiration date, or to exercise options on Expiration Friday that would normally be allowed to lapse according to OCC rules. You can also import a file with instructions, using the *Load From File* button on the bottom of the **Option Exercise** window.
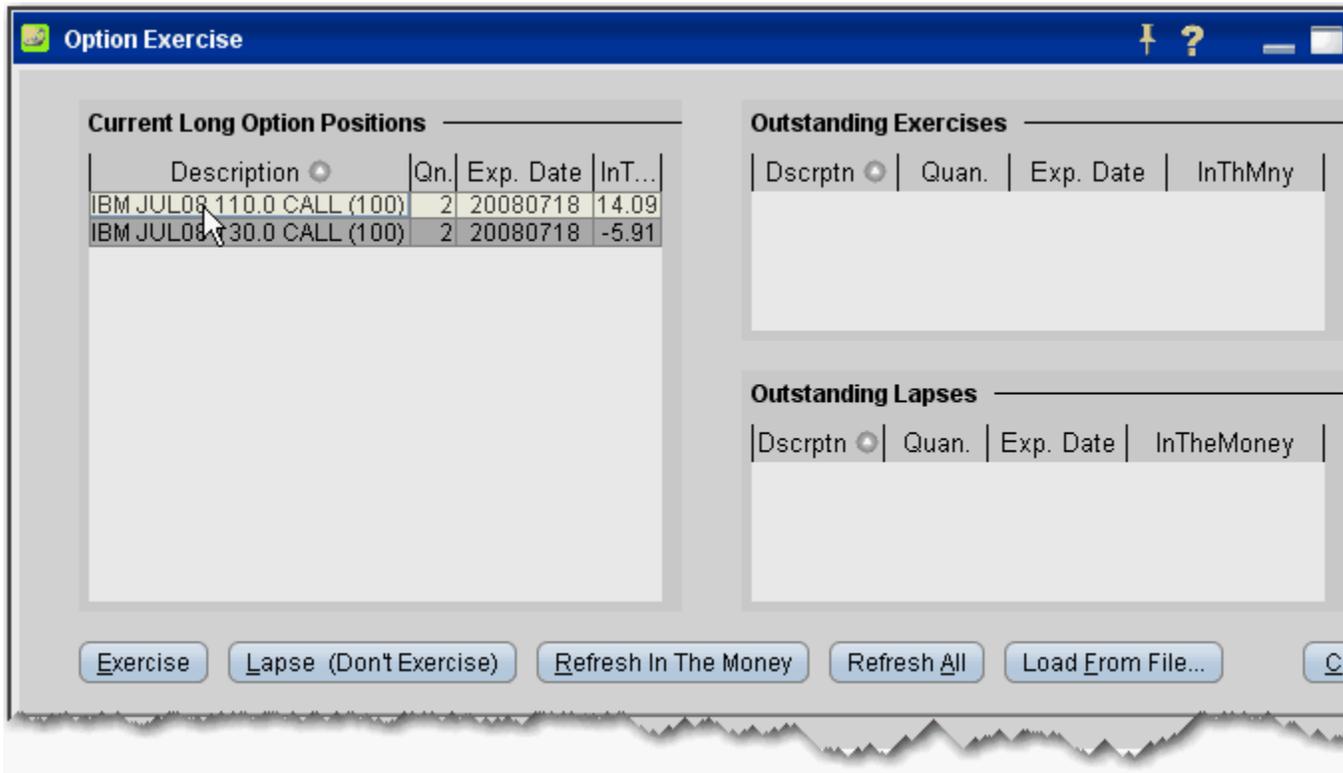
To exercise an option

Note: This process is irrevocable; once you commit to exercising an option, you cannot undo your actions.

1   From the **View** menu, select *Option Exercise*.

2   In the **Option Exercise** window, highlight the option you want to exercise in the *Current Long Option Positions* portion of the window.

3   Click **Exercise**.

4   Review/modify the number of contracts you want to exercise and click **OK**.

> **Note:** You cannot enter a value greater than the quantity in the Current Long Option Positions box.

5 Review your selection, and click "Yes" at the message that asks if you're sure you want to exercise the selected option.

The exercised option appears in the *Outstanding Exercises* portion of the window until it is cleared by the OCC.

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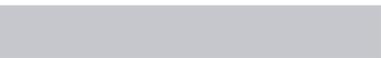
Pre-Trade Allocations

- Create an Order for Multiple Clients
- Allocating Shares
- Rebalance for Advisors
- Create an Account Group for Share Allocation
- Create a Share Allocation Profile
- Default Clearing for Allocation Profiles
- Edit a Share Allocation Profile
- Account Aliases
- Set Default Allocations

Create an Order for Multiple Clients

Advisors can also create orders and allocate shares for Separately Managed Accounts (SMAs) using the **Allocation** column on an Order Management line.
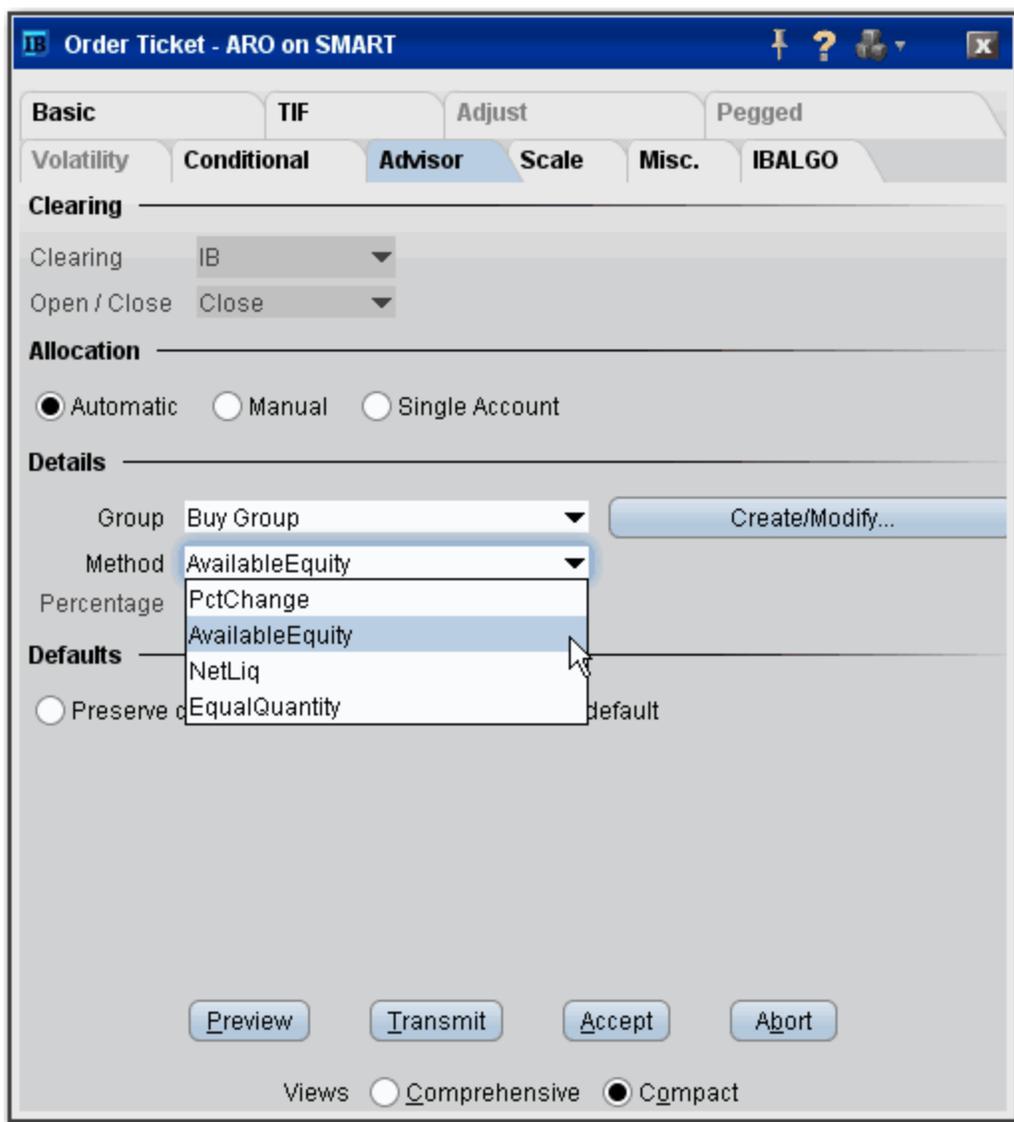
To create an order for multiple clients

1   Click the "Ask" or "Bid" price on a market data line to create an order.

- Click the **Ask Price** to create a **Buy** order.
- Click the **Bid Price** to create a **Sell** order.

2   Use the Allocation field dropdown list to select an Account Group, Account Profile, a single account or *All* accounts.

OR

3 Right-click on the order and select **Modify** then select *Share Allocation*.

4 In the **Allocation** dialog box, select an Account Group in the Automatic Allocation area, an Account Profile in the Manual Allocation area, or select a single account.

    a For the Account Group, modify the allocation method if necessary. If you choose the PctChange method, enter a positive or negative value in the *Percentage* field. All other automatic allocation methods are calculated using the order size.

    b If you use an Allocation Profile, select a group name.

    c To allocate all shares to one account, select a single account.

5 Click **OK** to complete the order.

6 To Transmit, click the red "T" in the Transmit field.

Allocating Shares

We provide several ways to distribute shares among accounts when you create an order. You can select an **Account Group**, which comprises a pre-defined subset of accounts and an associated allocation method. The Account Group allocates shares based on a ratio calculated by the system, or by a percentage. The numbers used to calculate the ratio derive from the method you chose when you created the group, or by the percent change you set.
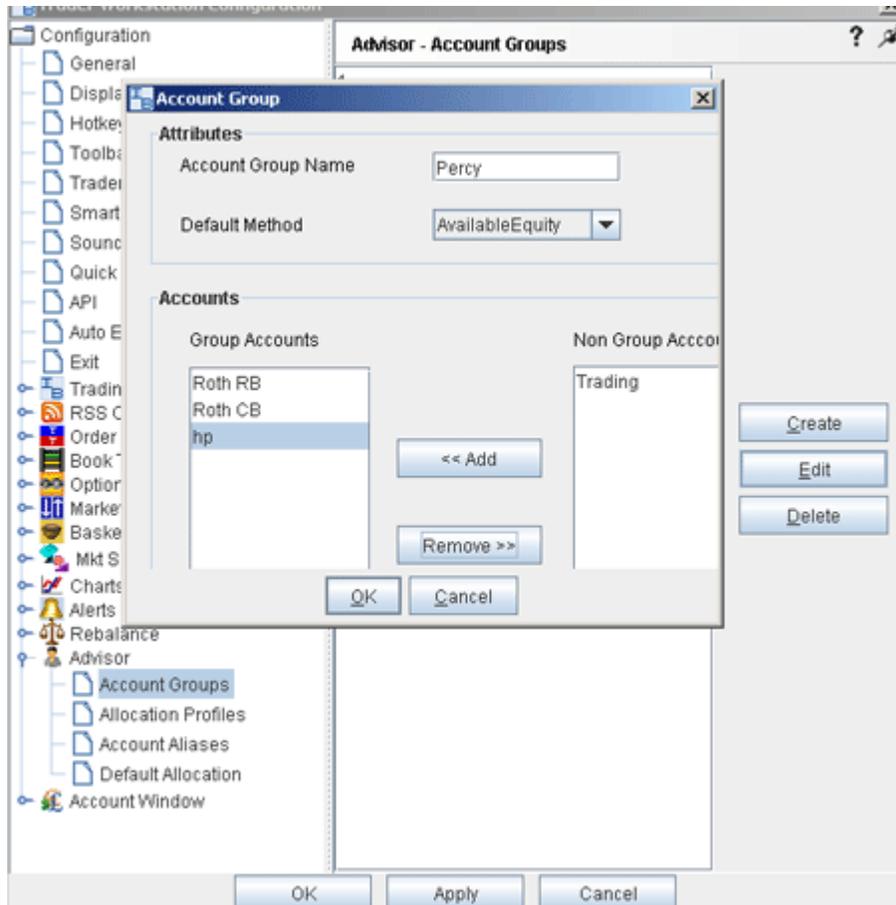
A second way to allocate shares is through an **Allocation Profile**, which distributes shares to each account in a profile based on a percentage, ratio or absolute number that you define. Both of these methods require that you create a group, assign accounts to the group, and define the group's allocation method.

You can also direct an order to a single account by selecting that account number or alias from the **Allocation** field on the order management line, or to all accounts by selecting *All* from the **Allocation** field. Set a default allocation from Global Configuration.

Rebalance for Advisors

Advisors can elect to have TWS automatically **Rebalance** ALL accounts, a single subaccount, or a user-defined Account Group, which includes a subset of accounts, by redistributing percentages of positions in their subportfolio(s) that make up the current (signed) net liquidation value. TWS opens and closes positions to rebalance the selected accounts' portfolio based on the new percentages you enter. You can add contracts and create orders just as you would from the main trading screen.
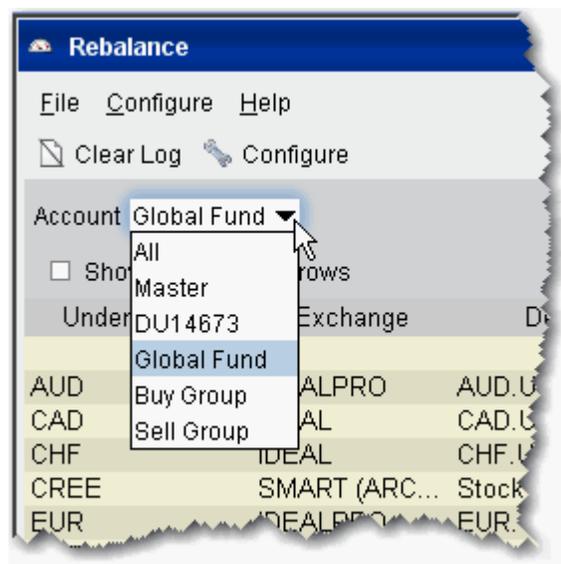
Rebalance a SubPortfolio

1 Open the Rebalance window by clicking the **Rebalance** icon on the trading toolbar.

2 In the Account dropdown, select: *All* to rebalance All accounts; *Master* to rebalance the master account, an account number to rebalance that account, or an Account Group to rebalance all accounts in the group.

3 The **Rebalance** window shows three columns that are different from those on your trading screen:

- *Deliv Value* - this is the deliverable value of the position, which is the same as the Market Value for the position shown in the *Portfolio* section of the **Account** window.

- *Current %* - this is the current signed percent of the position to your net liquidation value shown in the *Balance* section of the **Account** window. This figure is calculated by dividing the DLV by the NLV (Net Liq. Value).

- *Rebal %* - use this field to enter a new percentage of the NLV that you want the position to have.

4 In the **Rebal %** field, enter the new percent of the Net Liquidation Value that you want the position to have.

> **Note:** If you have selected "All" in the Account dropdown, the rebal percent for the instrument will be applied to all of your sub accounts' portfolios.

5   Click the **Create Orders** button to instruct the application to automatically create the orders to achieve the percent change.

6   Use the **Transmit All** button to send all orders, or click "T" on an order line to transmit a single order.

Note: For options, the rebalance % is based on the value of the underlying stock prices.

Open positions from the Rebalance window

1   First, add a ticker line to the **Rebalance** window by selecting the market data line on your trading screen, and then clicking the selection arrow attached to the Rebalance icon on the trading toolbar. Click *Add to Rebalance Window*. Or, enter an underlying symbol into a blank row on the **Rebalance** screen as you would on the main trading window.

2   Enter a value in the *Rebal %* column and click the **Create Orders** button.

3   Transmit the order.

Create an Account Group for Share Allocation

You can use an Account Group to automatically calculate ratios and allocate order shares to a pre-defined group of accounts based on a selected allocation method. When you create an order and choose a group, the order uses the default method to allocate shares amongst the accounts in the group.
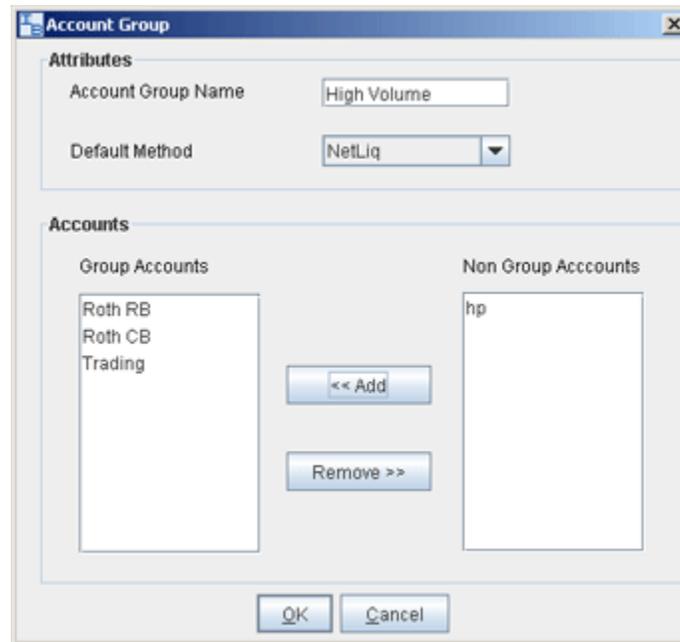
To create an Account Group

1   On the **Configure** menu, select *Advisor*, then select *Account Group.*

2   Click the **Create** button on the right side of the window.

3   Enter an Account Group name. Do not use the name "All" since this is reserved by the system.

Note: When you create an order, the choices displayed in the Allocation list are grouped first by Account Group, then Allocation Profile, and then individual accounts. However, they are not identified in any other way. When you create an account group, you may want to include a prefix such as "AG" in the name to identify the choice as an Account Group.

4   Select a default allocation method. You can change the allocation method for each order.

- **EqualQuantity** - Requires you to specify an order size. This method distributes shares equally between all accounts in the group.

   Example: You transmit an order for 400 shares of stock ABC. If your Account Group includes four accounts, each account receives 100 shares. If your Account Group

includes six accounts, each account receives 66 shares, and then 1 share is allocated to each account until all are distributed.

- **NetLiq** - Requires you to specify an order size. This method distributes shares based on the net liquidation value of each account. The system calculates ratios based on the Net Liquidation value in each account and allocates shares based on these ratios.

Example: You transmit an order for 700 shares of stock XYZ. The account group includes three accounts, A, B and C with Net Liquidation values of $25,000, $50,000 and $100,000 respectively. The system calculates a ratio of 1:2:4 and allocates 100 shares to **Client A***, 200 shares to* **Client B***, and 400 shares to* **Client C***.*

- **AvailableEquity** - Requires you to specify an order size. This method distributes shares based on the amount of equity with loan value currently available in each account. The system calculates ratios based on the Equity with Loan value in each account and allocates shares based on these ratios.

Example: You transmit an order for 700 shares of stock XYZ. The account group includes three accounts, A, B and C with available equity in the amounts of $25,000, $50,000 and $100,000 respectively. The system calculates a ratio of 1:2:4 and allocates 100 shares to **Client A***, 200 shares to* **Client B***, and 400 shares to* **Client C***.*

- **PctChange** - Do not specify an order size. **Since the quantity is calculated by the system, the order size is displayed in the Quantity field after the order is acknowledged.** This method increases or decreases an already existing position. Positive percents will increase a position, negative percents will decrease a position.

BUY ORDER	*Positive Percent*	*Negative Percent*
Long Position	Increases position	No effect
Short Position	No effect	Decreases position

SELL ORDER	*Positive Percent*	*Negative Percent*
Long Position	No effect	Decreases position
Short Position	Increases position	No effect

*Example 1: Assume that three of the six accounts in this group hold long positions in stock XYZ. **Client A** has 100 shares, **Client B** has 400 shares, and **Client C** has 200 shares. You want to increase their holdings by 50%, so you enter "50" in the percentage field. The system calculates that your order size needs to be equal to 350 shares. It then allocates 50 shares to Client A, 200 shares to Client B, and 100 shares to Client C.*

Example 2: You want to close out all long positions for three of the five accounts in a group. You create a sell order and enter "-100" in the Percentage field. The system calculates 100% of each position for every account in the group that holds a position, and sells all shares to close the positions.

5   The list of accounts in the *Non Group Account* section includes all accounts available to you. To add an account to the group, select a Non Group account and click **Add**.

6   Click *OK* to save the group and its settings.

Create a Share Allocation Profile

You can create profiles that allocate specific percentages or shares of each order to individual accounts based on the rules you set and values you input.

To create a share allocation profile

1   On the **Configure** menu, select *Advisor*, then select *Allocation Profiles*.

2   Click **Create** and enter a profile name, preferably one based on the way you plan to allocate shares between clients.

> **Note:** When you create an order, the choices displayed in the Allocation list are grouped by Account Groups, then Allocation Profiles, and then individual accounts. However, they are not identified in any other way. When you create a profile, you may want to include a prefix such as "P" in the name to identify the choice as a profile.

3   In the **Allocation Profile specifies** area, select a method of allocating shares between accounts:

- **Percentages** - this method will split the total number of shares in the order between listed accounts based on the percentages you indicate. For example, an order for 1000 shares using a profile with four accounts at 25% each would allocate 250 shares to each listed account in the profile.

- **Ratios** - this method calculates the allocation of shares based on the ratios you enter. For example, an order for 1000 shares using a profile with four accounts set to a ratio of 4, 2, 1, 1 would allocate 500, 250, 125 and 125 shares to the listed accounts, respectively.

- **Shares** - this method allocates the absolute number of shares you enter to each account listed. If you use this method, the order size is calculated by adding together the number of shares allocated to each account in the profile.

4 Click in the *Account* field to view all accounts. Select an account and tab over to the *Value* field.

5 Enter the percent, ratio or number of shares to be allocated to the selected account (you may need to delete the current value). Tab to create a new account line.

> **Note:** If you use percentages to allocate shares, percentages allocated must equal 100. If you use ratios, The system automatically calculates these percentages.

6 Continue until you have listed all the desired accounts for the current profile, and click **OK**.

Edit a Share Allocation Profile

After you have created share profiles, you can select one when you create an order.

To edit a share allocation profile

1   From the **Configure** menu, select Advisor then select *Allocation Profiles*.

2   Select an Allocation Profile and click **Edit.**

3   In the **Allocation Profile** window, you can add or delete accounts, select a different allocation method, or modify the allocated percentage or ratio for any accounts.

4   Click **OK** to save the edited profile.

Note: Percentages allocated must equal 100. If you use ratios, the system will automatically calculate share percentages based on the ratios.

Account Aliases

You can assign recognizable names to accounts via the Account Alias page in the *Account Administration* area of **Account Management**. The Account Aliases dialog box displays the list of accounts and aliases. When you create an order, the account alias appears in the Allocation list instead of the individual account number.
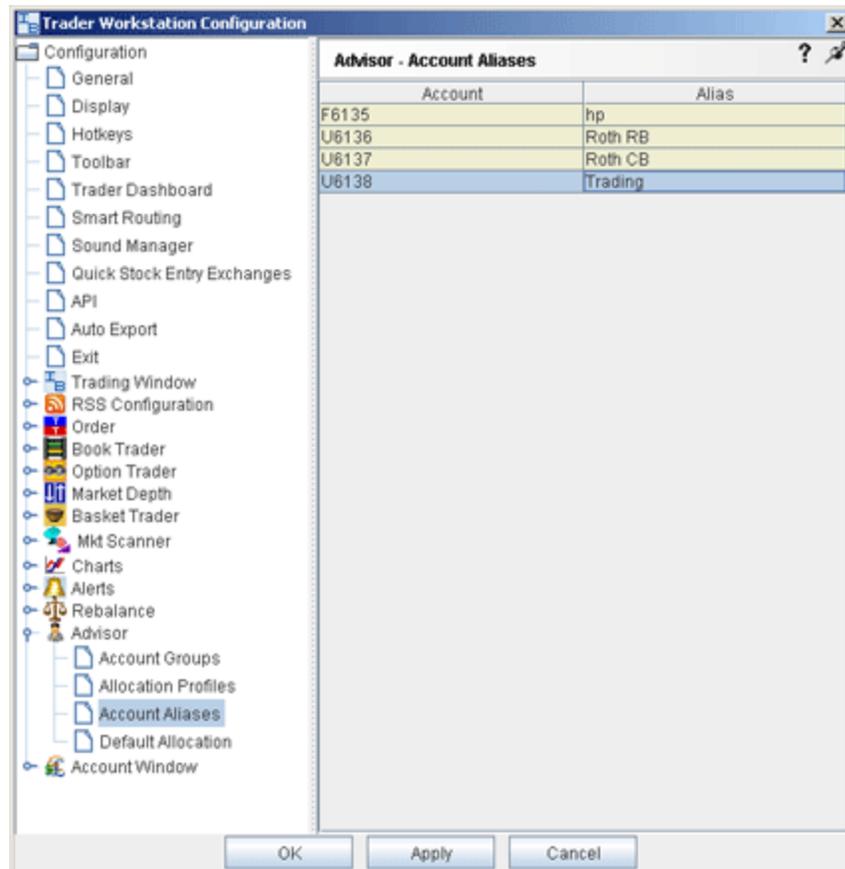
Set Default Allocations

The default allocation refers to the allocation that will be used automatically when you create an order. You can modify the allocation on a per trade basis, and change the default allocations at any time.

To set default allocations

1   On the **Configure** menu select *Advisor* then select *Default Allocation.*

Define settings described below:

- **Use currently subscribed account** - check this button to automatically allocate trades to the account or group selected in the *Account* dropdown on a trading screen, as shown above.

- **Use specified default** - check this button to set a specified absolute default allocation.

- Automatic Allocation - choose a user-defined Account Group and method to use for default allocation.

- Manual Allocation - choose an Allocation Profile to use as the default.

- Single Account Allocation - choose an individual account to use as the default allocation. NOTE: To allow the last selected individual account to be used for the default allocation going forward, select the *Use currently subscribed account* radio button at the top of the page.

- **Preserve default** - select to always use the default set up in the Default Allocation window regardless of changes you make on a per-order basis. If this is checked, you will need to use this window to modify the default allocation.

- **Use last submitted as a default** - select if you want the default allocation to change to the allocation you set on a per-order basis. If this is checked, the default allocation automatically changes when you change the allocation on an order.

- **If one or more accounts fails to meet the margin requirements when an order is submitted...**
For each order, all accounts designated for order allocation are vetted before the order is submitted to ensure that each has the capacity to support their allocation. The advisor can specify how the initial order submission will be treated in cases where some of the accounts cannot hold the designated allocation. They can elect to have the entire order rejected, or they can elect to have the order size reduced by the quantity that cannot be held. This quantity is deactivated. Once the order is submitted, please note that there is the possibility that the quantity of the working order may be reduced, for example in the case where an unrelated fill results in one of the accounts no longer being able to support the allocation. In an opposite scenario, if an account whose allocation was deactivated can now support the allocation, the deactivated quantity may be reactivated and submitted.

Default Clearing for Allocation Profiles

You can set up a default clearing profile as part of a manual Allocation Profile. The clearing defaults will be validated when you create an order.

To define a default clearing profile

1   From the **Advisor** configuration group, select *Allocation Profiles*.

2   In the top half of the window, choose the Allocation Profile for which you want to define clearing defaults.

3   In the Clearing Defaults section at the bottom of the window click *Create*.
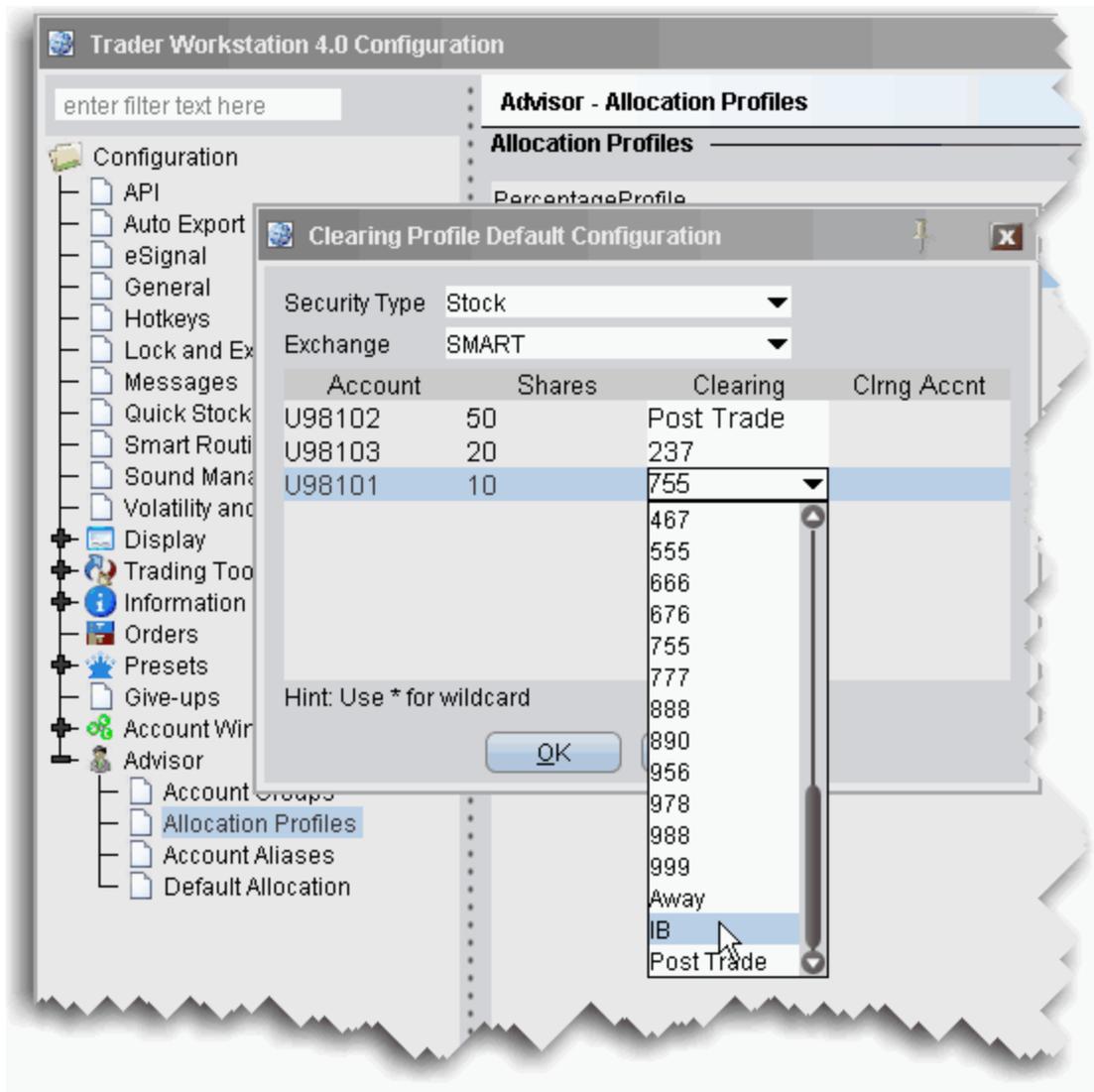
By default, all security types and all exchanges are included, indicated by the asterisk (*) in each selection field. If you prefer to define a clearing profile for a certain security type/exchange pair, select them from the dropdown lists.

4   Select a security type and exchange if desired. Otherwise, the asterisk indicates "all."

5   For each account in the Allocation Profile, choose a **Clearing** selection, and click OK.

Note that the clearing rules are only received when an order is created. Consequently some clearing defaults will be invalid for some security type/exchange pairs. If the clearing rule is not valid for an order, you will receive an information message with a link that allows you to modify the clearing defaults.

Using the Clearing Profile
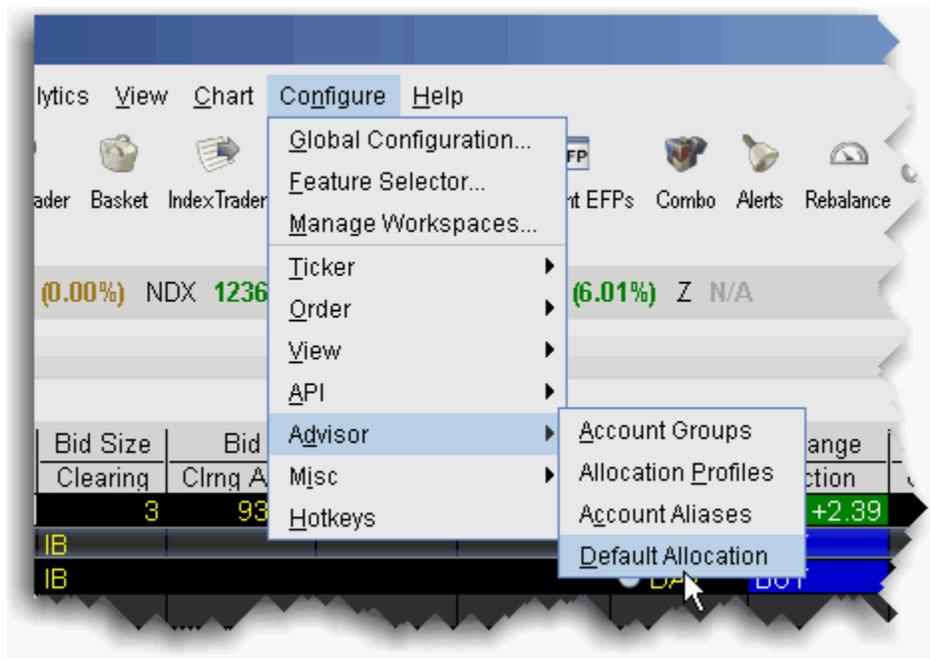
If you are selecting an allocation, the clearing profile will not be active. You must either have the Manual Allocation selected in Global Configuration as the specified default, or you must select the Manual Allocation radio button from the Advisor tab of the order ticket on a per order basis. If you choose an Allocation Profile from the Allocation dropdown list of an order line, you must also choose the clearing.
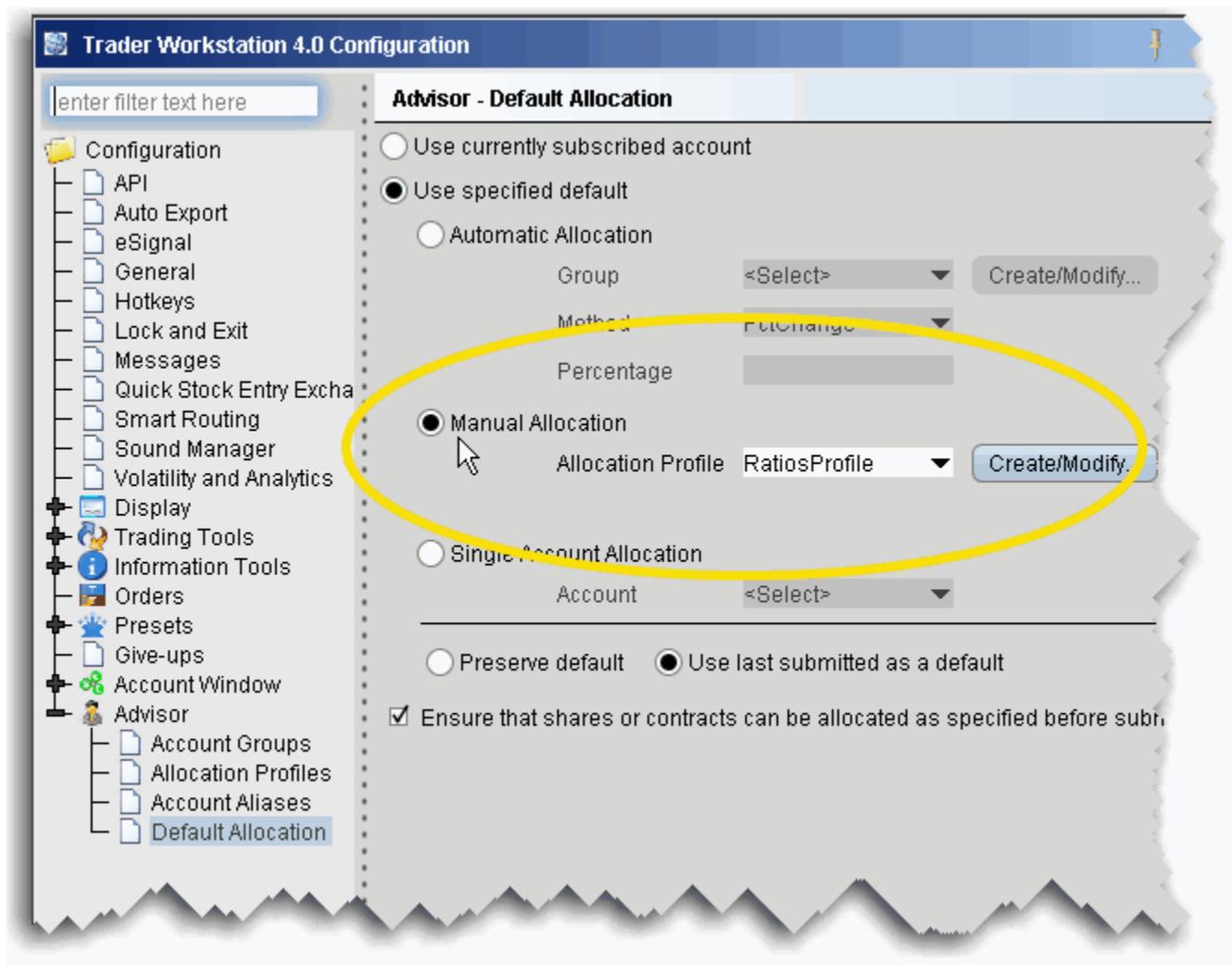
To set Manual Allocation as the default

1   From the Configure menu, select **Advisor**, then select *Default Allocation*.

2   From the Default Allocation window, select *Use specified default*.

3   Select Manual Allocation, and choose the Allocation Profile for which you defined the clearing defaults. Click OK.
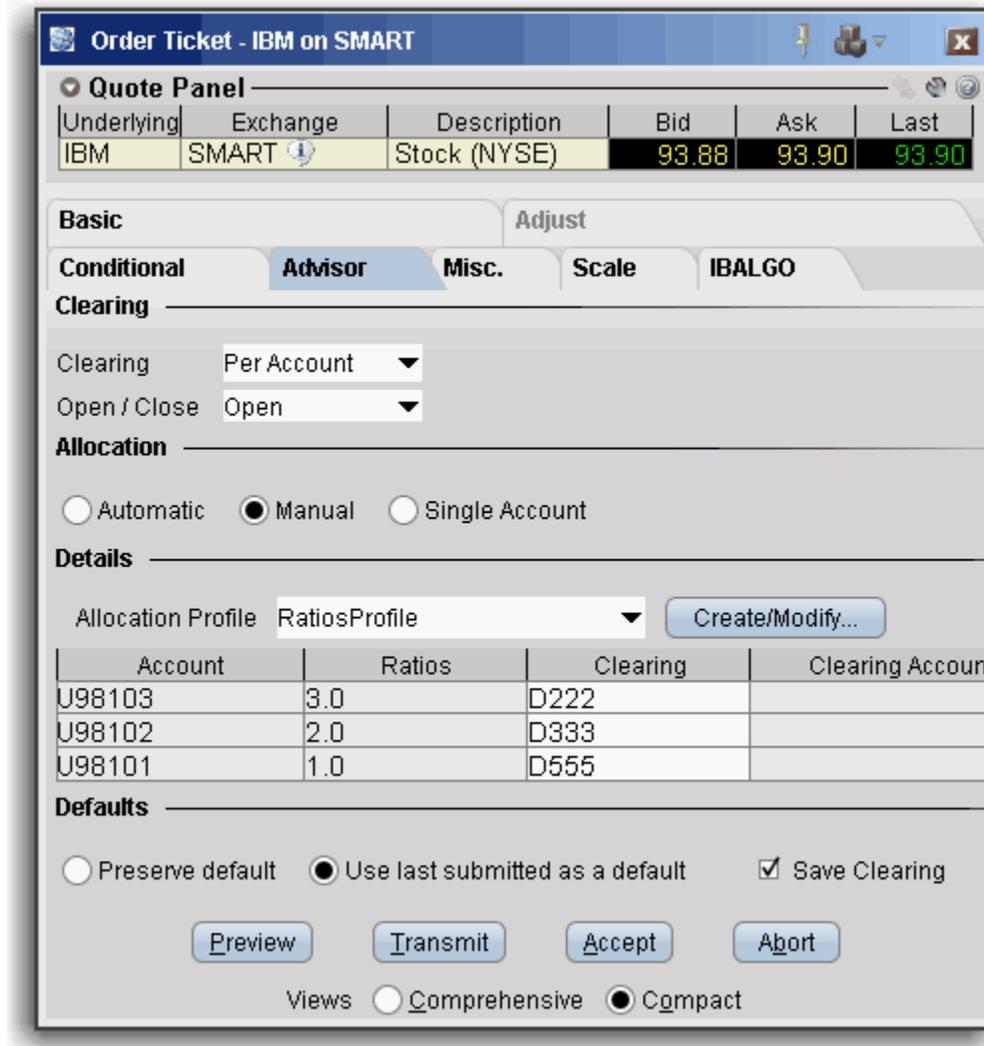
To select Manual Allocation on a per-order basis

1. From the order line, use the right-click menu to select *Modify* and then select *Order Ticket*.

2. On the **Advisor** tab, choose *Manual Allocation*, and then select the Allocation Profile for which you have defined the clearing defaults you want to use.

The clearing defaults in the Allocation Profile drive the default entry in the **Clearing** dropdown field. This list only contains clearing choices that are valid for ALL accounts in the profile.

- If all clearing choices in the profile are valid but different, the **Clearing** entry reads *Per Account* and each individual clearing entry shows the clearing destination.

- If all clearing entries are the same and valid, the **Clearing** entry shows the clearing destination, and the each individual clearing entry reads *Same*, indicating it is the same as the main **Clearing** entry.

- If there is no common, valid clearing choice for all accounts in the Allocation Profile, the **Clearing** field becomes inactive, and each individual clearing entry shows either the valid clearing destination from the profile, or the valid default - in the image above it would display the last valid submitted clearing destination, since *Use last submitted as default* is selected.

Give-up

-
-
-
-
-

IBExecution Services

As an IBExecution Services customer, you can tell TWS where you want to clear your trades on a per order basis. Note that before you can use IBExecution Services, you must first apply, and then enter your give-up instructions through Account Management. You can use IBExecution Services from both the Order Ticket and on an order management line to define pre-trade or post-trade give ups.

IBExecution Services on the Order Ticket
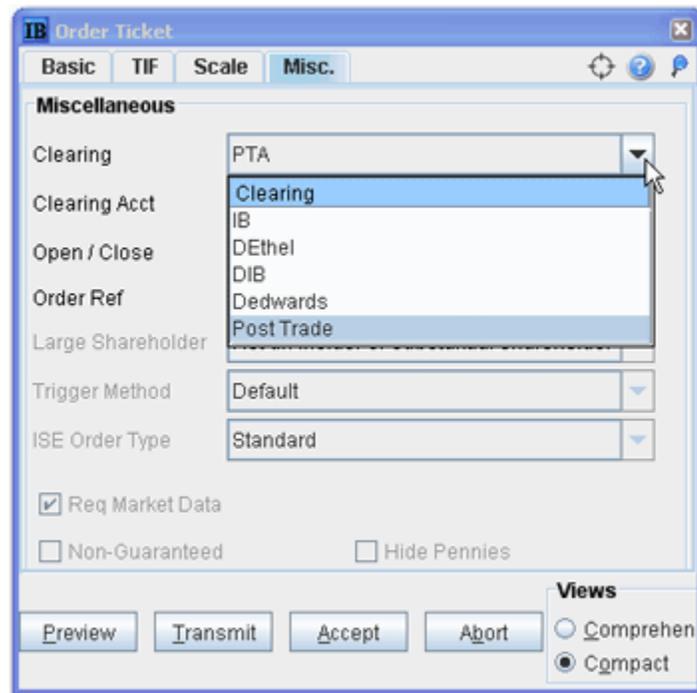
1   Right-click on a ticker and select *Trade*, then select *Order Ticket*.

2   Set up your order on the Basic tab, then click the **Misc**. tab to use IBExecution Services.

3   Use the Clearing dropdown to select your give up. Elect from one of three (3) types of clearing choice:

- **Interactive Brokers (IB)**. This was the previous default clearing destination.

- **Pre-trade**. At the time of the trade, choose a third-party clearing give-up location from the instructions you defined through Account Management. If you defined multiple DTCID or CMTA settlement instructions via Account Management, you will see multiple pre-trade choices. If you only have one away instruction, The account above has one DTCID instruction (for stocks) named "IB" and one CMTA instruction (for options) named "Timber." The pre-trade give-ups use a single-letter prefix before the title of the instruction for easy identification:

  - "D" is the prefix for a DTCID (stock) give-up.
  - "C" is the prefix for a CMTA (option) give-up.

- **Post Trade (PTA)**. This selection puts your trades into the PTA pool after execution. Allocate post-trade using the Trading Access section of Account Management, which is directly accessible by selecting *Post Trade Allocations* on the **View** menu.

  Note: The clearing choice you select will automatically be used as the default selection the next time you submit an order.

4 Use the **Open/Close** indicator for US Options orders to specify whether your order is designed to close/reduce a position or open/increase a position. You can set a default for this indicator in the Order Defaults section of Global Configuration.

5 The **Clearing Account** field is required for US futures and futures options orders that use *PTA* or *Away* clearing. You must specify the account number or other identity of the true beneficiary of the order. This information is reported to the exchange with the order. For Option and Stock orders, the clearing account number is in the settlement instruction and this field is optional.

IBExecution Services from an Order Line

As an IBExecution Services customer, you can instruct TWS where you want to clear your trades on a per order basis. Note that before you can use IBExecution Services, you must first apply, and then enter your give-up instructions through Account Management. You can use IBExecution Services from both the Order Ticket and on an order management line to define pre-trade or post-trade give ups.

IBExecution Services from an Order Management Line

1   Click the Ask or Bid price on a market data line to create a BUY or SELL order, respectively.

2   Use the **Clearing** dropdown to select to select your give up. Elect from one of three (3) types of clearing choice:

- **Interactive Brokers (IB)**. This was the previous default clearing destination.

- **Pre-trade Give Up**. At the time of the trade, choose a third-party clearing give-up location from the instructions you defined through Account Management. If you defined multiple DTCID or CMTA settlement instructions via Account Management, you will see multiple pre-trade choices. The account above has one DTCID instruction (for stocks) named "IB" and one CMTA instruction (for options) named "Timber." The pre-trade give-ups use a single-letter prefix before the title of the instruction for easy identification:

    - "D" means a DTCID stock give-up.

    - "C" means a CMTA option give-up.

- **Post Trade Allocation (PTA)**. This selection puts your trades into the PTA pool after execution. Allocate post-trade using the Trading Access section of Account Management, which is directly accessible by selecting *Post Trade Allocations* on the **View** menu. The clearing choice you select will automatically be used as the default selection the next time you submit an order.

3   Use the **Open/Close** indicator for US Options orders to specify whether your order is designed to close/reduce a position or open/increase a position. You can set a default for this indicator in the *Order Defaults* section of Global Configuration.

4   The **Clearing Account** field is required for US futures and futures options orders that use *PTA* or *Away* clearing. You must specify the account number or other identity of the

true beneficiary of the order. This information is reported to the exchange with the order. For Option and Stock orders, the clearing account number is in the settlement instruction and this field is optional.

Create DVP/RVP Instructions

Before you can use the DVP feature to transfer or receive a position, you must specify DVP instructions through the Account Login function on the website.

To add DVP/RVP instructions

1   From the Login dropdown list in the upper right corner of the IB website, select *Account Management*.

2   Enter your account username and password, and click *Login*.

3   Under the **Funds Management** section, click *Settlement Instructions*.

4   Click the **Add** button under the appropriate section, and complete the instruction fields.

Settlement Instructions

Add New Instruction

Instruction Name	D [ ]	Please provide a 7 character instruction name. You will use this instruction name in the TWS and post trade allocation screen to identify this instruction.
Type	DTCID	
Select Institution and Agent		
[Select Institution/ Agent ▼]		
Account ID	[ ]	Your account ID at your agent bank/broker
Account Name	Tim Skewis Pool Account	The title of your account with your agent bank/broker. *Note that IB will only transfer positions to an account with the same title as your IB account.*
Default	○ Yes ○ No	If no allocation is entered by the end of the trade day, the trade will be moved to the default instruction account.

⬅ Back   Continue ➡

Valid instructions will be approved within 24 hours, after which time you will see it as a selection in the Clearing dropdown list in a TWS order.

Short Sale Confirmation

Use the Short Sale Confirmation box to confirm that the shares you want to short are available at the clearing firm. This confirmation box pops up the first time you elect to short an underlying. If you enter the number of shares available, it will only require input once per underlying/per TWS session (a session lasts until you log out of TWS) as long as you stay within the available shares limit.

To confirm availability of shares for short sale

1 Select Short sell as the action on a buy/sell order line.

2 Enter confirmation information in the **Short Sale Confirmation** box.

> **Note:** Enter the Total Number of Shares available to avoid having to confirm availability each time you short this underlying.

3 TWS will track the number of shares available based on the short sell orders you submit on the underlying. If the number of available shares does not cover the order quantity, you will be required to confirm availability again.

Transfer a Position using DVP/RVP

After you have added instructions via the Account Management screen, you can select a prime or clearing broker account to whom you want to transfer all or part of any positions you currently hold, or from whom you want to receive positions into your account.

Note: Will only transfer and receive positions between accounts of the same type and with the same title as your account.

To transfer a position

Note: You will only complete these steps if you elected *On Demand* in the **Frequency** field when you set up your transfer instructions. If you chose *Standing* the instructions are carried out automatically.

1 Open the Account window.

2 On the Portfolio menu, select Transfer (DVP/RVP) and define the contract.

3 In the Transfer Information section of the dialog box, select an action, *Transfer out of IB (DVP)* or *Transfer into IB* (*RVP)*.

4 Enter the quantity to transfer. The quantity transferred must be equal to or less than the **Available Quantity**.

5 The Price field displays the current market price. You can modify the price to within 10% either side of the current market price.

6 Use the **Institution** drop-down to select a destination from the list of instructions you created from the Account Management page.

7   Click OK.

8   Click the *In Transit* tab on the **Account** window to see all pending positions in transit. This tab will also display any post-trade allocated orders you submitted.

> **Note:**   DVP/RVP settle on the third day after entry. If your contra broker has not accepted the DVP/RVP instructions by 12:00:00 ET the day prior to settlement date, will cancel the transaction. Please click **DVP/RVP Info** button on the Transfer dialog box for complete details.

Also note that you have the option of having your standing instructions implemented in compressed mode, which nets the day's transactions and uses the weighted average price. By default the transactions are implemented uncompressed, which means that they are not netted, and are sent as individual transactions. For more details on compressed and non-compressed modes, please contact your IB Sales Representative.