

## TWS Overview for IB's Trading Lab

Interfaces	Trading	Risk Navigator
Classic TWS	Order Entry	Activity Monitoring
Mobile Trading	Order Types Matrix	Account Window
Getting Started	Activity Monitoring	Activity Statements
Analysis tools	Optimized Trading	
Market Scanners	Features	
Charts	OptionTrader	
Options Analysis Tools	Strategy Builder	
Options Strategy Lab	BookTrader	
Probability Lab	Algos	
Volatility Lab		

### Interfaces

The Mosaic workspace and the Classic TWS layout have been combined into a single tab-based frame so you can easily toggle between the two interfaces.



### Mosaic

The pre-configured Mosaic workspace has color-linked windows for intuitive, out-of-the-box usability. Basic order types are supported. Access is provided to more advanced features through the New Window button.

## Classic TWS

The **Quote Monitor** tab displays the same common market elements that are in the Mosaic Watchlists and includes expanded quote details such as bid/ask prices and sizes for all tradable products. Position values including P&L, average cost and market value are displayed for your held positions.

Colors are used to give you at-a-glance information - from directional movement, to order status and more. You can add/remove, rearrange and even resort the columns on each tab according to your trading preferences.

## Mobile Trading

For on-the-go access to your account via iPhone/iPad, Android



Remember that access to your account is active for only a single device at a time.

## Getting Started

### Watch list / quote monitors

- Enter underlying ticker or ISIN /Cusip, Contract search
- Contract description, Smart order routing

### Navigation

- Menus; right click menu, column sorting, hover help

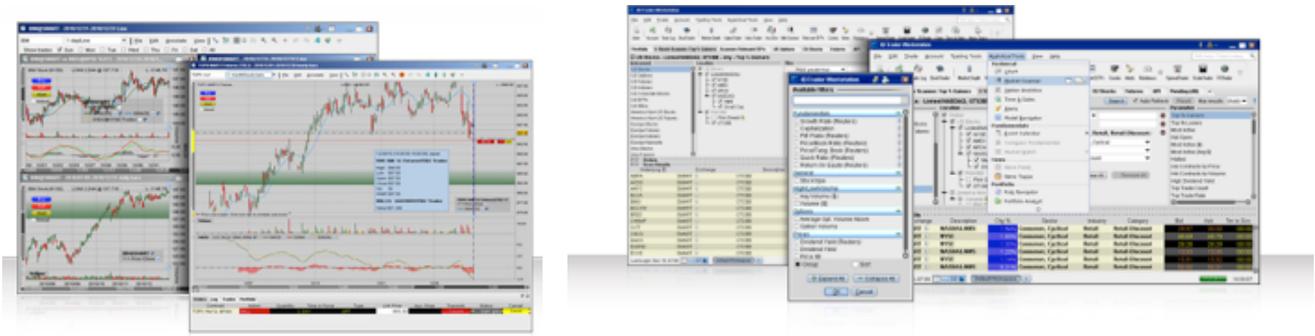
### Portfolio window

- Access from the Watchlist tabs. Shows held positions with real time P&L updates, system generated, updates in real time.

### Configuration

- Customize the Layout - Unlock the layout to add, resize, remove or rearrange the windows.
- Look for the configuration wrench in each window title bar to add market data fields, monitor unrealized P&L

## Analysis tools



## Market Scanners

Create, customize, edit and view Mosaic Market Scanners using the click the “+” tab in the Watchlist window. Define the scan universe by including the product, region, and optional industry filters. Items in green are included and update in the scanner results pane as you define the universe.

## Charts

The real-time scalable, customizable chart window allows you to monitor price variations while evaluating order criteria and market movement. Monitor multiple charts simultaneously, add technical studies and trend lines, and trade directly from the chart.

## Options Analysis Tools

### Options Strategy Lab

Evaluate multiple complex option strategies tailored to your forecast for an underlying with the Options Strategy Lab. Plug in your estimate for a Stock or ETF and TWS will return a variety of option strategies that are likely to have favorable outcomes based on your forecast. You can analyze each potential strategy to find one with the lowest price, highest risk/reward ratio, largest maximum gain or smallest maximum loss based on your price or volatility parameters.

### Probability Lab

The Probability Lab<sup>SM</sup> offers a practical way to think about options without the complicated mathematics. Use the Probability Lab to analyze the market's probability distribution, which shows what the market believes are the chances that certain outcomes will occur. Adjust based on your own forecast. Use the grab-and-pull bars in the dynamic market-implied Probability Distribution to create your own custom Probability Distribution. Always see your prediction alongside the market implied calculation.

## Volatility Lab

The Volatility Lab provides a snapshot of past and future readings for volatility on a stock, its industry peers and some measure of the broad market. Gauge and view what the option market is projecting for a stock's direction based on its historical movement with the tabs along the bottom of the frame to view Implied Volatility, Historical Volatility and Industry Comparisons.

## Trading

### Order Entry

Order Entry window provides a fast, convenient way to create and transmit orders. This color-linked window is compact with efficient pull downs and context sensitive selections to help you quickly define your order. Each field has an editable default value that can be manually changed before you transmit. Use the "Advanced +" button to create dependent orders such as Bracket, OCO or Hedge orders.

### Order Types Matrix

The Order Types Matrix is where you can get specific information, including definitions, examples and even step by step instructions for each order type; drill down through the links for increasing detail with examples and step by step instructions for each order type.

### Activity Monitoring

Once transmitted, **Activity Monitor** window allows you to track and modify live orders or view a running list of cancelled and completed orders with the title bar dropdowns.

To modify a working order, click the field you wish to change, and modify the criteria. Then be sure to click the **U** (update) button to transmit that change. The **C** button (Cancel) will send an order cancellation request.

- **Orders Monitor** – is the central location to view and manage current trades. The Orders window can be set to reflect all orders, working orders, canceled orders or complete orders with the title bar drop down.
- **Trades** - Shows individual trades for the current trading day. Use the "+" icon to expand the execution summary row to view the fills on individual lots.
- **Trades Summary** – Nets the buys and sells by ticker symbol with a summary of trades for the current trading session.

## Optimized Trading Features

### OptionTrader

This integrated suite of option tools allows you to view data and manage options orders from a single customizable screen that includes streaming option chain data, with access to pricing tools, risk analytics and quick-click order entry with complete order management.



- Filter Option Chains by strike & expiration; Weeklies; Option Chain buttons
- Global Configuration (wrench icon) lets you customize the view by adding Open interest, implied volatility, and the Greeks among others
- Market Statistics - Option pricing data has built-in information that can play a role in understanding sentiment in the markets with information such as Volatility Change, Option Volume change, Put/Call Ratios and Open Interest.

### Strategy Builder

In the Option Chains, open Strategy Builder with button in lower right of the window. Select the contracts to be used in creating the spread. Click the bid/ask price of each leg to build the spread. TWS calculates and displays an implied quote line where you can review, modify & transmit directly from the order row.

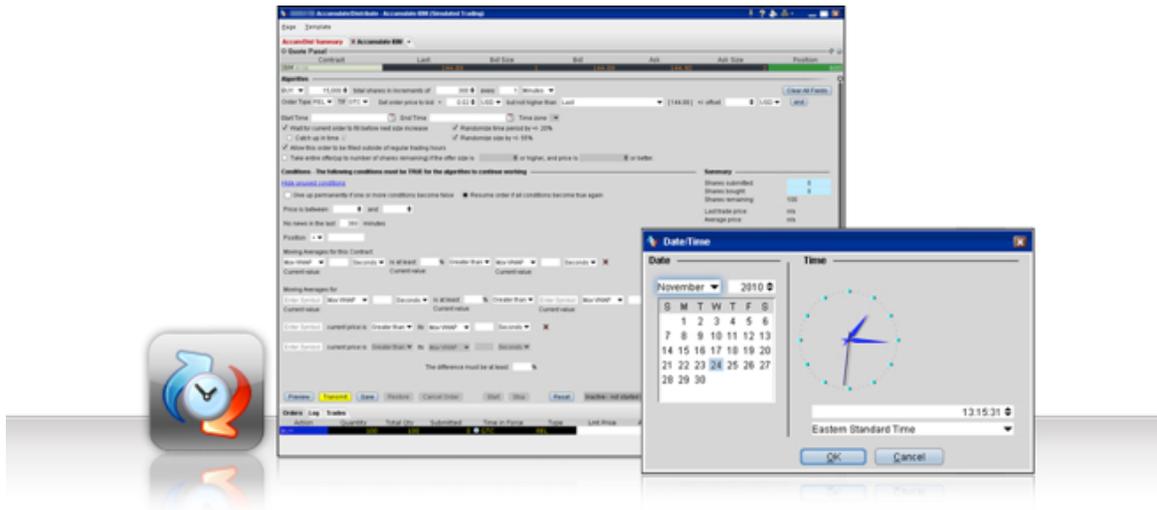
See: *Notes on Spread pricing*

### BookTrader

BookTrader lets you create, modify and transmit orders for a single contract from within a ladder of prices. This feature is helpful for traders looking to take advantage of immediate trading opportunities. BookTrader shows a series of prices above and below the best bid and ask in the price ladder.

## Algos

Quickly set up IBAIgo orders directly from the TWS Quote Monitor by choosing IBAIgo in the Destination field. The available algos will display according to the instrument selected.



### Accumulate/Distribute Algo

By slicing your large order into smaller, non-uniform increments and releasing them at random intervals over time, the Accumulate/Distribute algo can help to achieve the best price for large volume orders with less likelihood of being noticed in the market.

### ScaleTrader

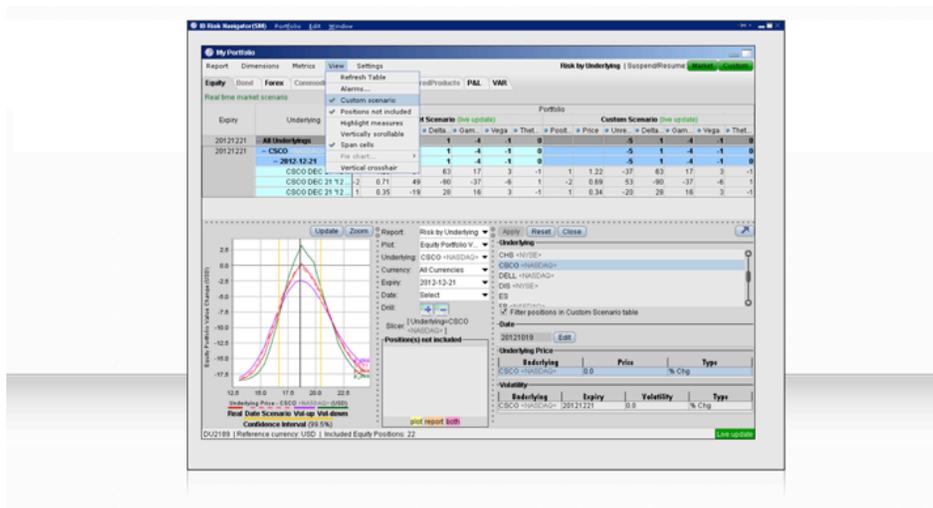
Facilitates the execution of large volume trades while minimizing the effects of increasingly deteriorating prices by automatically scaling your order into smaller, incrementally priced components and submits each component only after the previous one executes.

## Risk Navigator

The IB Risk Navigator<sup>SM</sup> is a sophisticated, real-time, market risk management tool that unifies exposure across multiple asset classes. Positions are grouped by asset class and viewed by category on the Product tabs.

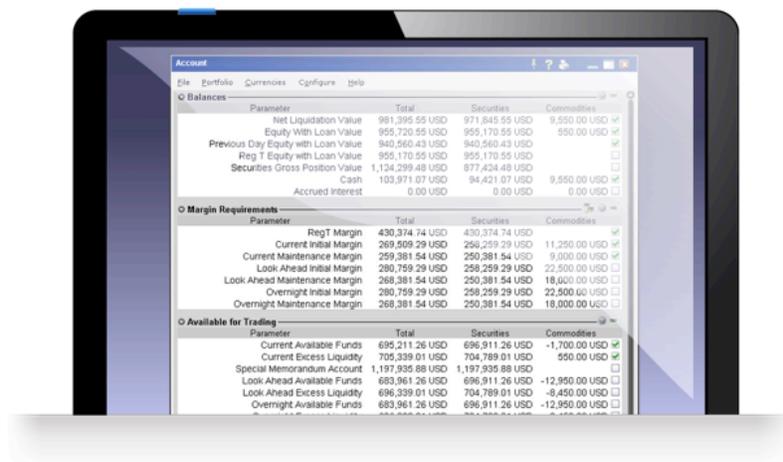
Each window has 3 distinct sections - Upper portion of window is a table with risk data, lower right is the navigation section, and lower left is P&L plot.

- Report Viewer displays the compiled data and risk measures across the top of the window based on the report chosen and criteria defined in Report Selector
- Risk Summary Graph plots your projected portfolio-relevant P&L based on changes in the underlying price, either for your entire portfolio or for a subset, which includes an underlying and its derivatives.
- Report Selector is the starting point for navigating - choose from available reports and define criteria with Underlying and Measure



## Activity Monitoring

The buying power of a Universal Account<sup>SM</sup> is determined on a real-time basis and can go up or down according to changes in the market value of your positions. IB's real time margin system continually enforces account limits and prevents trades if the account has insufficient available margin.



For the Trading Lab, the Account window shows two underlying account segments; a securities account governed by rules of the U.S. Securities and Exchange Commission (rules-based) and a futures account governed by rules of the U.S. Commodity Futures Trading Commission (risk-based).

### **Securities segment** (rules-based margin):

- You can take advantage of reduced intraday margin for securities – generally 25% of the long stock value during active market hours.
- Overnight Reg T Requirement is 50% of stock value – Just prior to the end of each trading day, during the Reg T enforcement period 10 minutes before the markets close, the account is checked to verify it will meet the overnight Regulation T (50%) margin requirements.

### **Commodities segment** (risk-based margin):

- Margin requirements are set by each exchange and can be seen on the Contract description window for each futures contract.
- Certain Futures products will be margined at 50% of the normal margin requirements during normal liquid trading hours for that product; see Futures Intraday Margin Requirements

## **Account Window**

Shows real-time account balances, current margin projections and the funds you have available for additional trades.

- Balances – displays key **account balances** for securities, commodities and in total. These balances don't include margin requirements.
- Margin Requirements – shows current initial and **maintenance margin** requirements based on your current positions. *Updates every 3 min throughout the trading day, and immediately after transactions.*
- Available for Trading – tells you if there are sufficient funds to put on your next trade.
- Market Value - Real FX Position – shows the total value of all positions separated by asset class.
- Portfolio lists all current positions sorted by underlying, and displays the total current market value and P&L for each position.

## Activity Statements

Information is presented in expandable/collapsible sections with drill-down detail, and you can create customized statements to include or exclude individual sections. In addition to daily reports, you can specify a date range to compile the activity in a single report. Flex Queries allow you to create highly-customized activity statements in text or XML format.

API Solutions Create your own automated rule-based trading system to take advantage of our high-speed order routing in implementing a programmed trading strategy with IB's proprietary API solutions.



IB's APIs allow you to trade products that are supported through TWS, including stocks, options, futures, forex, and bonds. Build your own trading applications in Excel (using DDE or ActiveX), C++, Posix C++, Java, and Visual Basic for ActiveX.