NEW!
Version 12.4

TC2000®

User Guide

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TC2000 12.4 USER GUIDE

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www.Worden.com

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TC2000 v12.4 User Guide

Welcome

Welcome to the updated TC2000 v12.4!

TC2000 is a market analysis software that has been designed to combine an easy-to-use interface with feature flexibility, so that with little prep time, you can start to use the software to enhance the way you trade.

This reference should serve as a guide to software features and their implementation. The guide is designed to discuss the logistics of designing a personal trading environment, from screen real estate manipulation to charting and organizational functionalities. This guide should provide you with a firm foundation upon which to build.

There are no trading strategies or instructions here; this guide offers no trading advice, so you should not make any trading decisions based on any information contained here.

Should you encounter inaccuracies or material that requires correction, please feel free to make note of needed modifications. Send such notes to **support@TC2000.com**.

Call TC2000 toll-free to set up a TC2000 account or to have questions about an existing account answered. **(800) 776-4940**

Accessing TC2000 v12.4

To access TC2000 v12.4 visit **www.TC2000.com**.

If you are a current TC2000 customer with TC2000 service...

Enter your Username or Email and Password when prompted. You will be logged in to TC2000.com, which is a browser-based version of TC2000. There is no difference in functionality between TC2000.com and the downloadable TC2000 application.

If you would prefer not to work in a browser-based environment and would like to have a program file and desktop icon-accessible version of TC2000 on your computer, choose *Install to My PC* or *Install to My Mac* from the sign-in screen at www.TC2000.com.

If you have created WatchLists, saved Charts, written PCFs, or have created EasyScans in a previous version of TC2000 or FreeStockCharts.com, those items will be available to you for use in TC2000 v12.4. You will be prompted to import previous settings when running TC2000 v12.4 for the first time. If for some reason your personalized items are not available for use when you open TC2000, select *Import TC2000 v7* from the **File Menu** to initiate the import process.
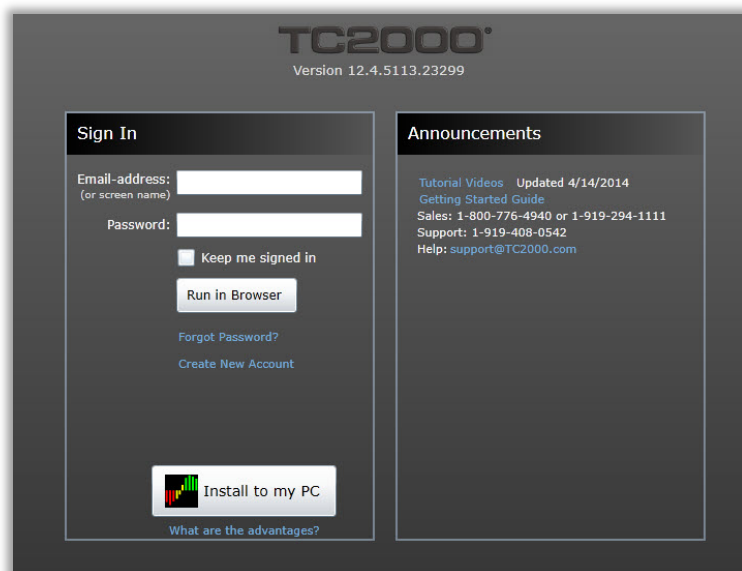
If you are not a current TC2000 customer and do not have a TC2000 login:

Create a new account by providing requested information located within the *Create Account* section of the sign-in screen at TC2000.com.

When prompted, provide a Screen Name, Email Address, Password, and First and Last name. Then choose *Create Account*. Next, either choose to activate a 14 Day Trial and select a post-trial service level. This will allow you to explore the features of TC2000 and pay for the service after the free trial expires.

If you would prefer not to work in a browser-based environment and would like to have a program file and desktop icon-accessible version of TC2000 on your computer, choose *Install to My PC* or *Install to My Mac* from the sign-in screen at www.TC2000.com.

Note: To manage any and all account settings from inside TC2000 v12.4, select the *My Account* option from the **Help Menu**.

What's New in TC2000 v12.4

1. Charts are up to **300% faster**. As you spacebar through any WatchList, you'll notice snappy charts that load instantly. **Alerts** are also faster and easier to manage.

2. Whether you're working with one monitor or four, **floating windows** will give you a ton of new options for laying out your research.

3. Full **multiple monitor** support. Drag any Layout Tab window onto any monitor. No limitations on the number of monitors and setups can be saved for future use as Layout Tab groups.

4. The new **Add Plot button** (shortcut key '/') allows you to browse a library of all available chart data that can be plotted including Technical Indicators, Fundamental data, Sector and Industry Indexes, Market Indexes, Breadth Indicators, Exchange Traded Funds, Forex, and additional Symbols.

5. An **upgraded pointer mode** allows you to select a date and view detailed chart data for all chart indicators at that specific point in time. For charts with different timeframes, notice that the pointer now works across charts.

6. **Data box** details have been expanded to include descriptive figures for chart spans. Drag the pointer between any two points on the chart to measure number of bars, performance, and annualized returns.

7. **Drawing Tools** are now on every chart. Click the Paint Palette in the upper-right corner of any chart to open the Drawing Toolbar. **Fibonacci Projections** have been added to the library of available drawings. When drawing Trendlines, hold the Shift key and drag to draw perfectly horizontal lines.

8. Drawings can now be assigned to specific **Drawing Boards**, which act as layers that keep drawings of different types separate. Any of the eight boards can be toggled on or off at any time for any chart. Use the **Scratch board** for a particular chart template to jot thoughts and drawings that might not need to be available for use on any other templates.

9. **Apply technical indicators** to anything - including historical fundamentals, sectors, industries, T2 market indicators, or any other technical indicator.

10. **Historical fundamental** data can now be plotted and used for sorting and EasyScans. Fundamental figures such as sales, dividends, and key ratios include 25 years of historical data.

11. Open a **Related Items WatchList** to learn more about any symbol. You'll see any Indexes and Exchange Traded Funds the current symbol is a part of. You'll also have immediate access to lists of all the stocks that share the same Sector or Industry category. New **Morningstar Sectors & Industries** as well as Breadth Indicators (T2s) now stream in real-time.

12. The **Worden Notes & Reports** are easier to access and more efficient to use.

TC2000 v12.4 Account Management

To access and/or change account information in TC2000, select the *My Account* option from the **Help Menu**. The *My Account* option enables you to manage your TC2000 subscription quickly and easily from inside the software.

From *My Account*, biographical info, service level / account status, certain program defaults, alert notification preferences, and active exchange information can be assigned. Account management options have been expanded substantially from previous version of TC2000, so make sure to take a look!

There are two main service levels available: Gold and Platinum. Software functionality is the same whether you are a Gold or Platinum customer, but features available vary from one service level to the other.

Gold customers have access to streaming real-time data from the BATS Exchange. Price charts and indicator values for Gold customers will, therefore, update intra-day in TC2000 v12.4. Manual updates of price and volume data are no longer required at the Gold level. Each trade that takes place on the BATS Exchange is displayed in real-time for all stock Charts. Full-market data, which is reflective of trades on all of the major American exchanges, is never more than 15 minutes delayed.

Note that results of Scans and Sorts for Gold customers are based on delayed data and are not reflective of broad market real-time Price and Volume information.

Platinum customers access true full-market streaming real-time data that reflects trades across all of the major American exchanges. Scan and sort results for Platinum customers are always reflective of the latest real-time data available. Pre- and post-market data, live bid and ask markers, unlimited real-time alerts, streaming EasyScan results, intraday time frames for scan conditions and PCFs are all exclusive to Platinum TC2000. Platinum customers are also able to participate in Platinum User Groups, which provide an environment for interactive dialog with other users and Peter Worden, one of the co-founders of Worden Brothers, Inc. and TC2000.

Data Feeds and Exchanges associated with a subscription include US Stocks and Indexes, Canadian Stocks and Indexes, Forex, Mutual Funds, Pink Sheets, and Bulletin Boards.
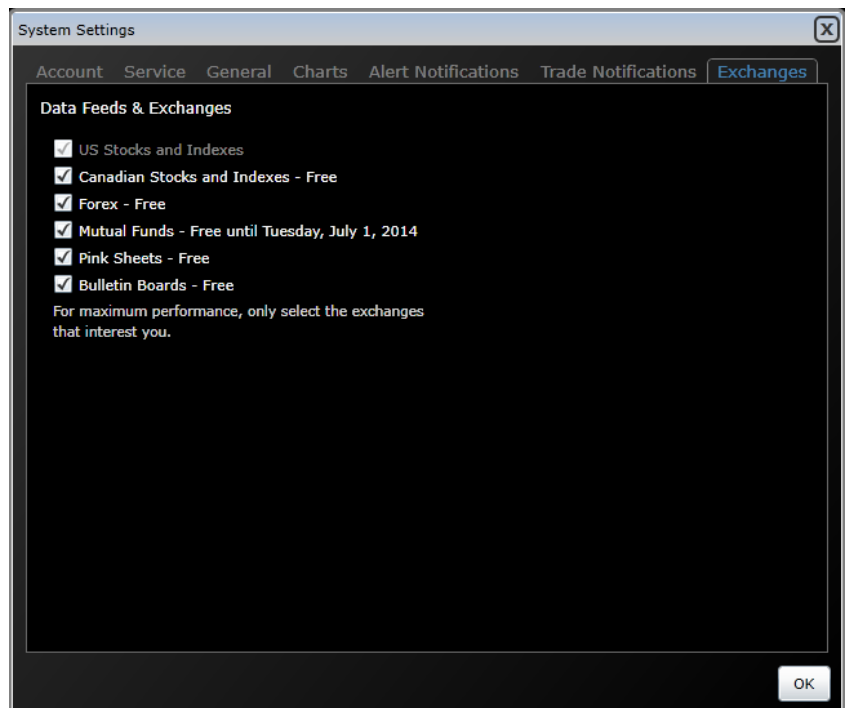
Terms to Know

Layout Tab
The term Layout Tab refers to a group of tool windows, which may be floating, tabbed with one another, or docked into a specific screen position. Layout Tabs may contain many items at a time - like several Charts, more than one WatchList, News and Notes, a User Group window, etc. As long as tool windows are contained within the same Layout Tab, the items can all be described as one Layout Tab.

Layout Tab Group
A Layout Tab Group is a collection of Layout Tabs, saved under one name, that when accessed subsequently opens the set of Layout Tabs as a group.

Pre-Built
There are several types of Pre-Built items in TC2000 v12.4. Pre-Built Charts, scans, indicators, Conditions, and column sets, can all be accessed and used. Pre-Built items are built and maintained by TC2000; libraries of Pre-Built items may change at any time. All Pre-Built items can be implemented within the software in the same way as a personally created item of the same type.

Chart
A Chart is a grouping of indicators/plots. Charts always begin with a Price History plot and can have as many other indicators or plots added to them as are desired. Plots on a Chart may be stacked on top of one another, contained within individual panes – they may also be overlaid, such that many (related or unrelated) plots are resident within the same pane. A Chart always has its own toolbar, and its indicators are all controlled by the same Timeframe and Zoom and Pan slider settings.

Indicator
An indicator is a graphical plot displayed within a Chart's pane. Indicator values are displayed along the x (time) axis in increments determined by the Timeframe assigned to the indicator's Chart; values are displayed along the y (value) axis as is determined by scale settings.

Timeframe
The Timeframe selected within the Timeframe drop-down of a Chart at any time dictates how much information is included in each plotted bar of data on the Chart. When the Timeframe is set to 1 Day as is the default setting, Price History bars show 1 Day of trading information at a time. If this Timeframe were changed to 1 Week, each bar shown on the Chart would represent an entire week's trading activity. Each Chart has its own Timeframe drop-down.

Zoom and Pan Slider
This slider gives you control over how much historical information is displayed on a Chart at a given time. To zoom out, and view more historical data values for your indicators, grab the left-most handle of the slider and drag it to the left, enlarging the size of the slider. Also try using the scroll wheel on your mouse to zoom in or out on Chart data. To change the historical period in view, grab the entire slider, and drag it to the left or right.

Active Symbol
The Active Symbol is the symbol for which information is displayed on a particular Chart. Each Chart can have its own Active Symbol.

WatchList
A WatchList is any group of tickers that is displayed as a list inside a WatchList window. Click any item within a

WatchList to display its information on all Charts that either share its symbol color group or do not belong to a symbol color group. WatchLists can be sorted by symbol, indicator value, or stocks that meet a specified Condition.

Condition
A Condition is a user-defined entity that describes a specific behavior for an individual Indicator or the interaction between more than one indicator. A Condition can be used to identify stocks that are actively exhibiting the behavior defined, by either including the Condition in a scan - or by sorting a WatchList by the Condition. One or more Conditions can be incorporated into any scan.

Sort
To sort is to arrange (rank) the items in a WatchList by some assigned criteria. WatchLists can be sorted by symbol, indicator value, or markers for stocks that meet a specified Condition.

EasyScan
To scan is to apply a Condition, or a set of Conditions to a WatchList of items in order to identify those - if any - that meet the behavioral criteria of the Condition(s). Only the WatchList items that pass all scan Conditions remain in the list's results when the scan is active.

Alert
An alert is a notification that a monitored behavior is underway. Alerts can be emailed, or text messaged and are based on the real-time passing of a user-defined Condition, price-level, or interaction with a Trendline.

User Group
User Groups (Platinum only) are channels of communication between multiple TC2000 users. It is possible to communicate with others individually through Private Messaging, or as a group through User Groups.

Layout Tabs

Layout Tabs are collections of windows that can be arranged any way you want. Windows can contain different types of content, like Charts, WatchLists, News, Notes, Chat, Drawing Tools, etc. As long as tool windows are contained within the same Layout Tab, the items can all be described as one Layout Tab.

Version 12.4 provides two default Layout Tabs called **TC Classic** and **TC Classic+**, each of which was designed to meet common Charting needs in an easy to use way.

TC Classic is a great Layout Tab for basic Charting needs. Click a stock in the WatchList to view its Chart and any associated News or Notes.

Easily add Indicators, flip through Charts, and do some research.

TC Classic+ has everything TC Classic has, plus some useful tools. Click one of the Indexes in the top-left WatchList; view the stocks that make it up in the WatchList below.

Then choose a stock within that center WatchList and view its Industry and Sub-Industry families in the upper-right corner WatchList.

Stick any symbols of interest into the Flagged and My Favorites WatchLists tabbed in the middle right. As you find symbols you like, remember **Shift-F** will flag a symbol or group of symbols, and **Shift-V** will send a symbol or group to the My Favorites list.

If you're a Platinum user, check out what other users are saying in the All-TCNet Chat; if you have a question, let us know in the Help Forum, and keep an eye on important upcoming Corporate Calendar events - all in the bottom-right corner windows.

As a collection, TC Classic and TC Classic+ are called the *Factory Default Layouts*. (A Layout Group is a collection of Layout Tabs). You can access the Factory Default Layouts again at any time by **File > Open Factory Default Layouts**.

You can create your own Layout Tabs and have as many open at a time as you would like.

When Layout Tabs are open, the tabs are in the row of tabs along the bottom of the application. Click any Layout Tab to fill the TC2000 application window with its content.
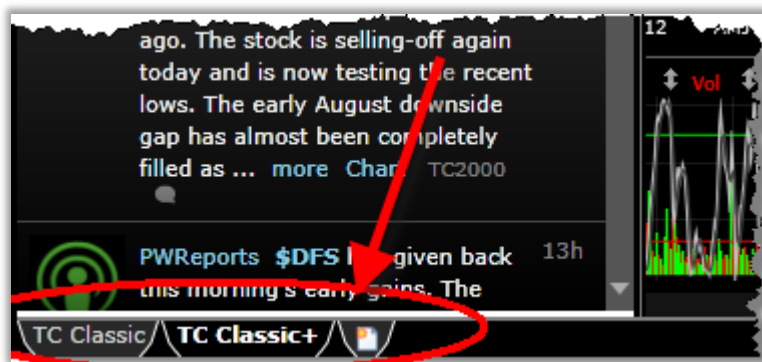
The default Layout Tabs can be altered to best suit your needs. Existing windows can be tweaked or deleted, and new windows can be added. TC2000 provides a fully customizable trading research environment.

CUSTOMIZING A LAYOUT TAB

Adding Windows to a Layout Tab

The elements that can be added to a Layout Tab are tool windows, which contain different types of information, including Charts, WatchLists, Drawing Tools, Alert Monitor, User Groups, News & Notes, etc. You have the freedom to add as many windows as you want by either tabbing or docking them to the Layout Tab. These tools provide you with the flexibility to customize your research and trading environment, so that the information displayed works best for you.

Many of the items listed above are items with representative buttons located on the Main Toolbar. To add a tool window to a Layout Tab, select the Main Toolbar button which contains the type of content the window should display. Note that while Drawing Tools are present on each chart, a separate drawing tool window can be accessed and added by the *Tools* menu. Indicators, Conditions, Financials, and Columns can be found within the *Library* button.

Content within the Main Toolbar menus is categorized into Personal and Pre-Built Libraries. Locate an item of interest from one of the Main Toolbar menus, select it, and a window containing its content will be added to the Layout Tab.
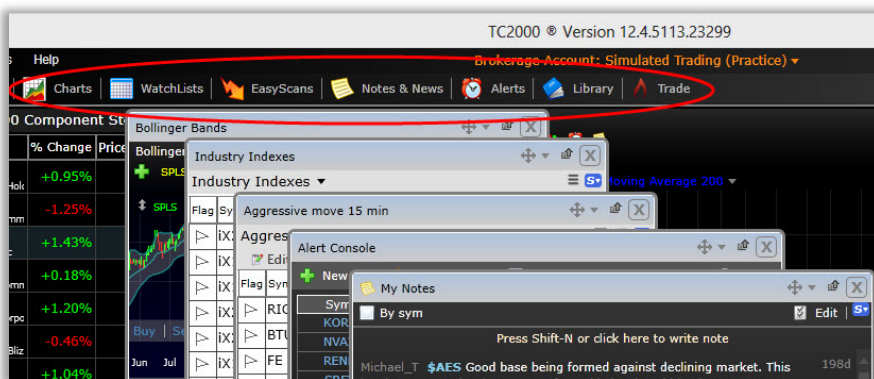
Tool windows added to Layout Tabs in this way are added as undocked windows, meaning that they can be moved freely within the Layout Tab screen real estate and are not attached or docked to any other window within the Layout Tab. It is, however, possible to assign a position to any undocked window by tabbing or docking it to another window within the Layout Tab.

Repositioning & Resizing Main Toolbar

Reposition

To change the main toolbar position from the horizontal default to a vertical bar along the left side of the program, click the small icon at the extreme left of the horizontal toolbar. Select Left and the tool bar is repositioned.
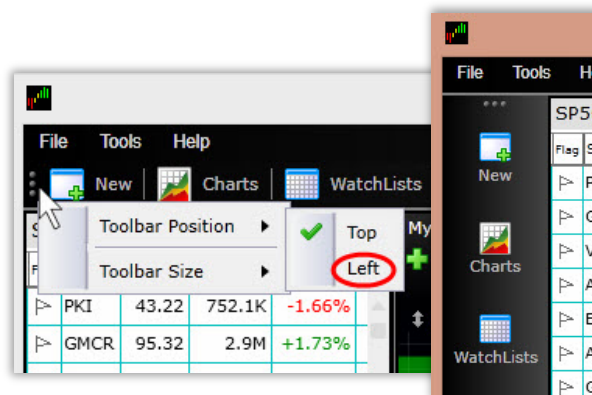
Resize

To change the main toolbar size click the small icon at the extreme left of the horizontal toolbar. Select Images Only or Text Only and the tool bar is resized accordingly. Resizing can be applied to either the horizontal or vertical Main Toolbar position.
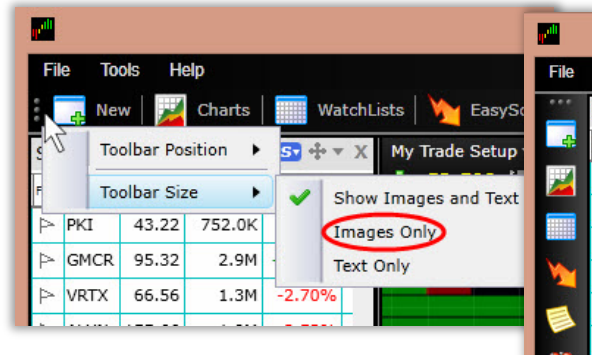
Tool Window Controls

Move

There are three options for the position of any window within a Layout Tab. The window can either be left undocked, tabbed with or docked relative to another window or set of tabbed windows. The *Move* button (and its drop-down), located in the upper-right corner of every window provides the ability to assign any window's position. Using the *Move* button, you can literally setup any Layout Tab and its windows in any desired configuration.

As new windows are added to Layout Tabs, they are floating. To assign a semi-permanent position to the window (semi-permanent because the window will stay where assigned until you manually move its location) select the *Move* button.

Docking

Docking a window places it adjacent to another window or group of windows already docked within a Layout Tab. When the Move button is clicked, multi-directional arrows are displayed within each docked window. Simply select the arrow that corresponds to the new, desired placement of the window being docked. Note that arrows are displayed at application extremes as well, which can be used to place windows along the entire length of the application window.
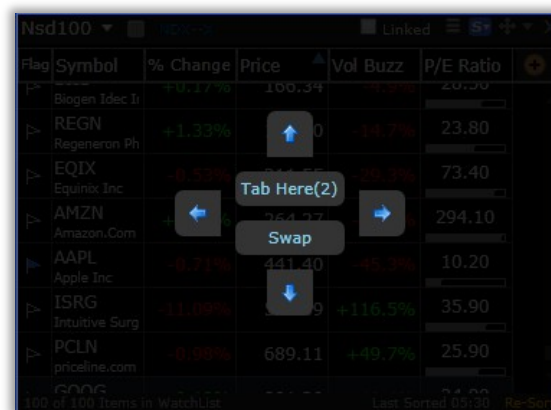
Tabbing

Tabbed windows are like sheets of paper stacked atop one another. Each window in a tabbed set has a representative named tab. Select the tab for any of the tabbed windows to display that window's content.

When the *Move* button is selected, a *Tab* option is displayed within each docked window. Select the *Tab* option within the window with which the current window should be tabbed.
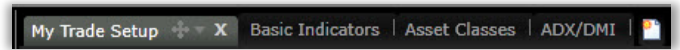
Once two or more windows are tabbed with one another, not only is the original *Move* button present in the upper-right corner of each window; a master *Move* button is also visible. Should you ever want to move the entire group of tabbed windows to a new location within the Layout Tab, use the master *Move* button using the same operating principles as you would with the original *Move* button to move the complete tabbed set.

Undocking

Should you wish to undock a window that is currently docked or tabbed within the Layout Tab, use the Move button drop-down, and select *Undock.*
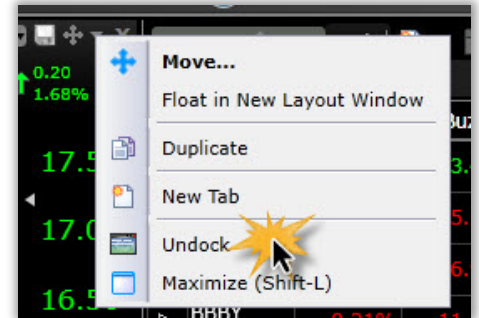
Full Screen Mode (Maximize)

The *Move* button drop-down also includes a *Maximize* option. Select to view the window's content in full-screen mode. As an alternative, you could use the **Shift-L** shortcut to maximize the content of a window. Repeat the **Shift-L** command to return the window and its content to its original position within the Layout Tab.
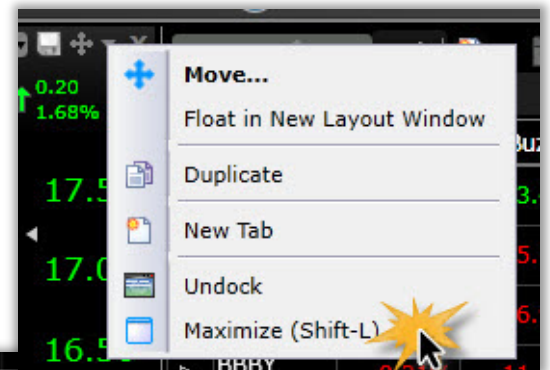
Delete

The *Delete* button located in the upper-right corner of every window provides the ability to close the relevant tool window and cease displaying its contents on-screen.
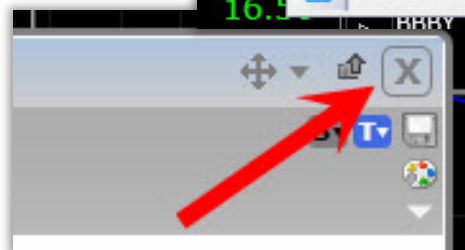
Tool Linking

Some types of tool windows can be linked by Symbol; others can be linked by Timeframe. When windows are linked, it means that a change made to one window will cause the same change to be reflected in the other window.

Linking Symbols

WatchLists, Charts, EasyScans and Notes & News windows all have a *Symbol Linking* icon located in the upper-right corner of each window. Symbol linking works on the premise that windows can be assigned to symbol linking color groups. Windows that share the same color group assignments are linked by symbol. That means a change to the active symbol of one of the windows in the symbol linking color group initiates the same change in all of the other windows that belong to the same color group. If you set more than one window to the same symbol linking color, when you change the symbol in one window, you'll change the symbol in the other window.

Color groups for WatchLists and Charts can be assigned using the symbol linking drop-down. There is a total of 8 color groups.
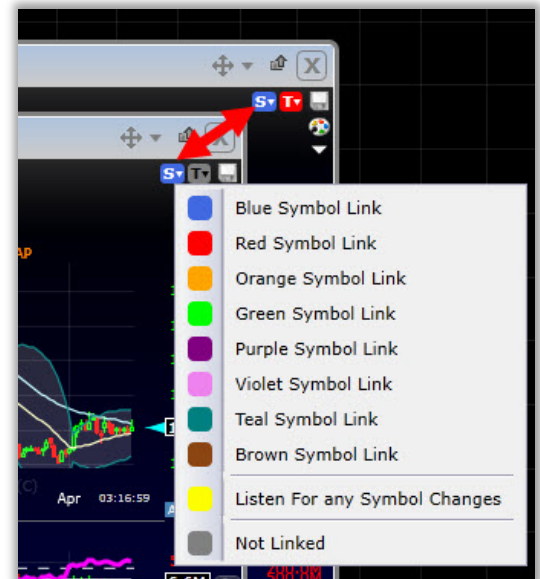
Chart symbol linking drop-downs have two extra options: *Listen For any Symbol Changes* and *Not Linked.* Select *Listen For any Symbol Changes* if you want any symbol assignment within the Layout Tab to change the active symbol for the "listening" window. Select *Not Linked* if you want the active symbol of the window to remain constant without regard for new symbol assignments elsewhere within the Layout Tab.

Some windows have two Symbol Linking icons, one in the upper-left and one in the upper-right corner of the window. For such windows, the color group assigned in the upper-left corner dictates which symbol content will be displayed within the window; the color group assigned in the upper-right corner dictates the symbol that will be sent to other windows. Essentially, the left icon controls symbol input and the right icon controls symbol output.

Linking Timeframes

Charts all have a *Timeframe Linking* icon located in the upper-right corner of each window. Timeframe linking works on the premise that Charts can be assigned to Timeframe linking color groups. Windows that share the same color group assignments are linked by Timeframe. That means a change to the Timeframe of one of the Charts in the Timeframe linking color group initiates the same change in all of the other windows that belong to the same color group.

There is a total of 8 timeframe linking colors. In addition, *Listen For any Timeframe Changes* and *Not Linked* options are available. Select *Listen For any Timeframe Changes* if a change to any Chart within the Layout Tab should change the Timeframe of the "listening" window. Select *Not Linked* if the Timeframe of the Chart should be independent of changes made to the Timeframes of other Charts within the Layout Tab.
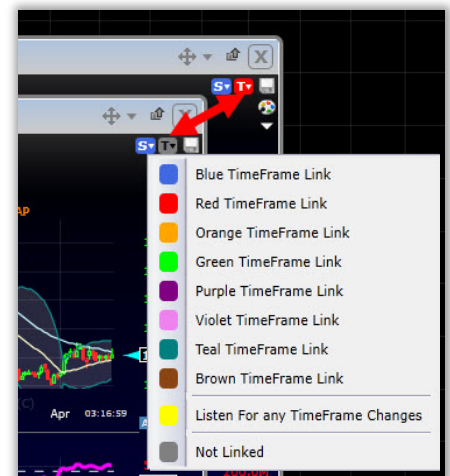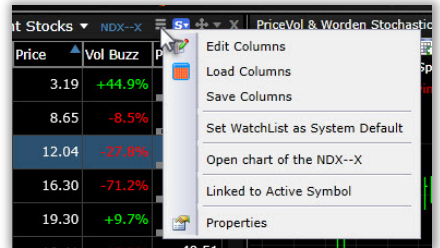
Save

Chart tool windows and EasyScans contain a *Save* button located in the upper- right corner of the window. Select the *Save* button, and choose the appropriate item from the menu displayed. Basic *Save* and *Save As* options are available.
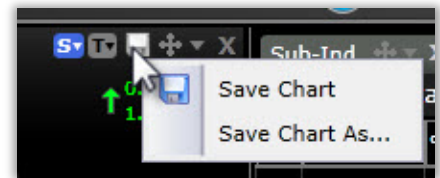
Change List/Scan Properties

In the case of WatchLists, select the *Change List/Scan Properties* icon to view a list of available options, including *Edit Columns, Load Columns, Save Columns, Set WatchList as System Default,* and *Properties.*

Load Columns

In the *Change List/Scan Properties* drop down menu, there is a *Load Columns* button. Choose this option to view a list of available Column Sets, including any personally saved and Pre- Built sets.
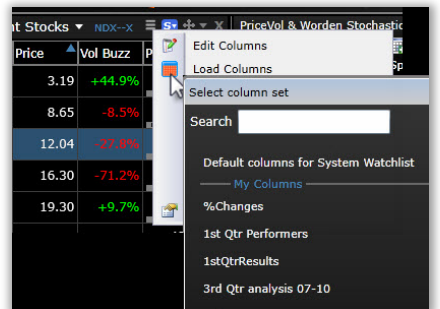
Change Symbol or View Chart

WatchList windows also contain a *Change Symbol or View Chart* button. For WatchLists with representative Charts (like Indices), select either the *Change Symbol* or *Open Chart* option from the menu provided to view a Chart of the associated symbol's plots.
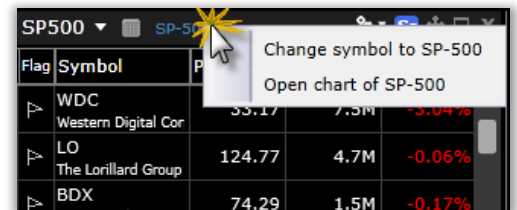
It is also possible to create new, customized Layout Tabs from scratch using a pre-configured design called a *Starter Layout Tab*. There are two ways to generate a new Layout Tab: the **New** button, *Layout Tab* option; or the *Add Layout Tab* button to the right of the Layout Tabs located along the bottom of the application window. Either method generates the *Select a Layout Tab* dialog, where you can choose an appropriate Layout Tab design from the collection of Starter Layout Tabs displayed.

Incidentally, saved Layout Tabs and copies of the TC Classic and TC Classic+ Layout Tabs can also be opened by the *Select a Layout Tab* dialog.
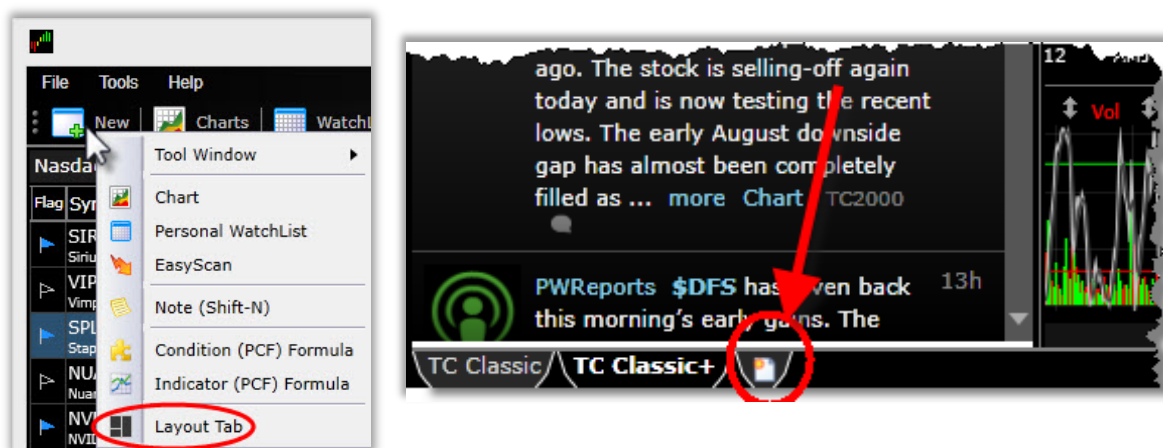
Once a Starter Layout Tab is selected, a formatted Layout Tab containing blank windows is displayed, and each window can be filled with any standard window content, including Charts, WatchLists, EasyScans, Notes & News, Drawing Tools, an Alerts Console, User Group, or Private Message.

When a Layout Tab is opened, its contents are displayed as they were last saved. Layout Tab content will fill the entire TC2000 application screen.

Note that opened Layout Tabs create additional Layout Tabs along the bottom of the TC2000 application screen. Multiple Layout Tabs can be opened at once. To view the content of any Layout Tab listed as a tab along the bottom of the screen, select the Layout Tab's tab, and its contents will appear on-screen.
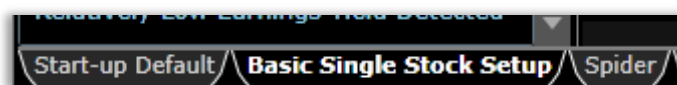
Right-click any Layout Tab to Float, Duplicate, Save, Rename or Close the Layout Tab. You can also rearrange the tab order.
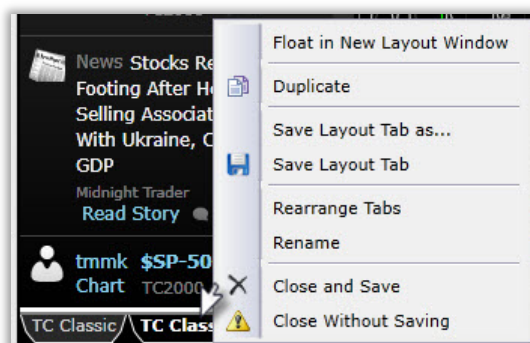
SAVING AND RETRIEVING A LAYOUT TAB

To save a group of windows as a Layout Tab, right click on the Layout Tab at the bottom of the Layout and select *Save Layout Tab* from the menu. Provide a name for the Layout Tab when prompted, and select *Save*.

If working with a previously saved Layout Tab, you may choose to save a new version of the Layout Tab by selecting *Save As* from the menu.

If opened in the future, a saved Layout Tab will display windows as they were displayed when last saved.

To open a previously saved Layout Tab click the *New* button in the Main Toolbar, Layout Tab option; or the *Add Layout Tab* button to the right of the Layout Tabs located along the bottom of the application window. (See above).

Note that you can have as many Layout Tabs open at a given time as you would like. Each Layout Tab will be represented by a named tab located along the bottom of the TC2000 application window. Select any Layout Tab name to view its contents inside the TC2000 application window.

Also note the *Layout Tab History* option listed in the File Menu. Periodically, the TC2000 application saves a backup of your work. Auto-saved versions of your work can be accessed by the *Layout Tab History* option.
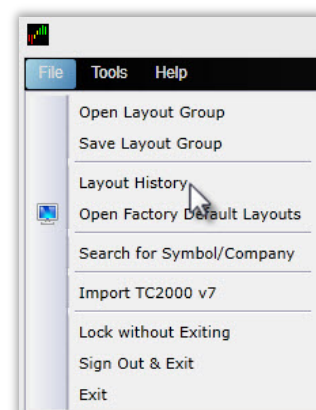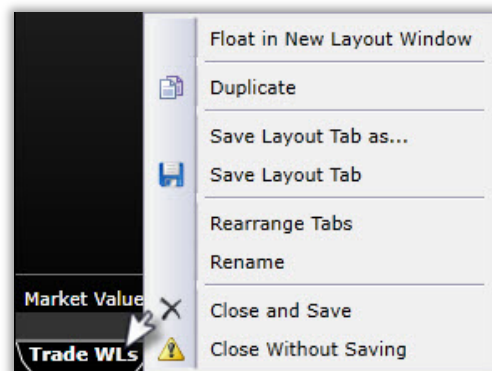
LAYOUT TAB GROUPS

A Layout Tab Group is a collection of Layout Tabs saved under one name. To save a collection of Layout Tabs as a Layout Tab Group, select *Save Layout Tab Group* from the File menu. To open a previously saved Layout Tab Group, select *Open Layout Tab Group* from the File menu.

When a previously saved Layout Tab Group is opened, all Layout Tabs associated with it are opened and populate as they were the last time the Layout Tab Group was saved. This includes multiple monitor configurations.

The Factory Default Layout Tabs, TC Classic and TC Classic+ can always be opened as a group of Layout Tabs by the File menu. Choose *Open Factory Default Layout Tabs* to close any open Layout Tabs and view only TC Classic and TC Classic+.
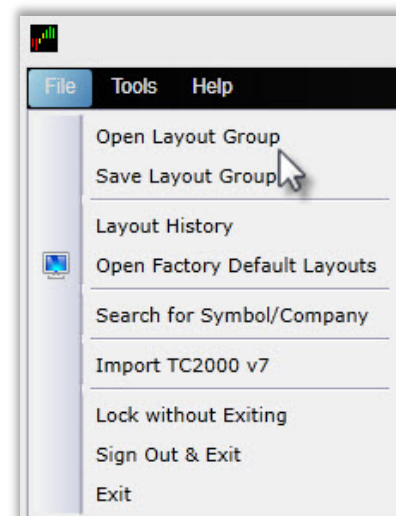
FLOATING A WINDOW

To float any Layout Tab for use as a separate window or on an additional monitor, click the *Float* button at the top right of the undocked window.

In any existing window in a Layout Tab, you can click the *Drop Down Arrow* next to the Move button and choose *Float in New Layout Window*.

With either of these methods, you'll notice a change in the style of the window. The new window is now independent of the main Layout Tab and can be viewed even with the main Layout Tab minimized. You will see multiple windows present in your computer taskbar. Floating windows can be minimized, maximized, or left floating on any monitor.

To move the *Floating Window* to another monitor, simply click on the upper border of the window and drag it to the desired monitor.

Each floating window is a true Layout Window. You can add tools to it by docking and tabbing as previously described. Once you have the multiple windows set up the way you desire, you can save it as a Layout Group. This will retain the configuration as you have set it up.
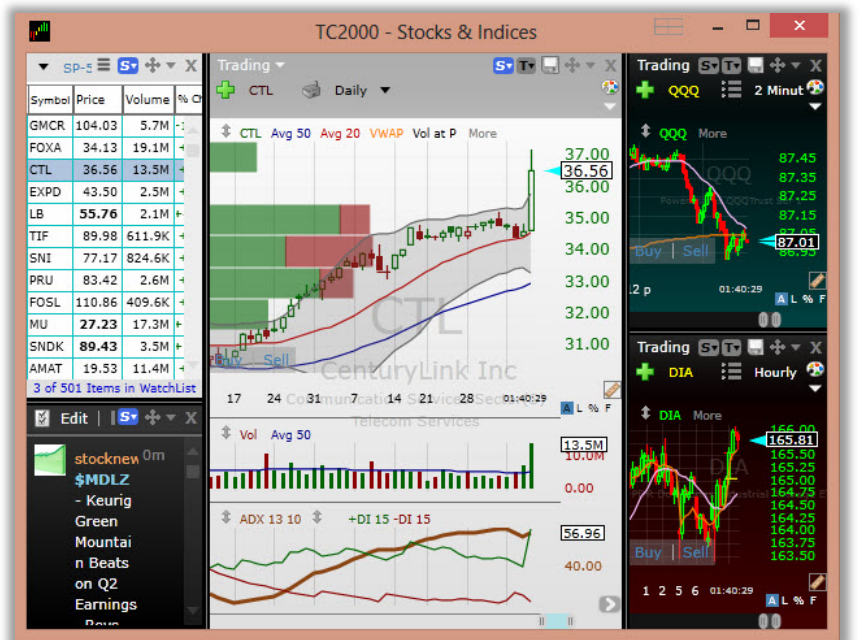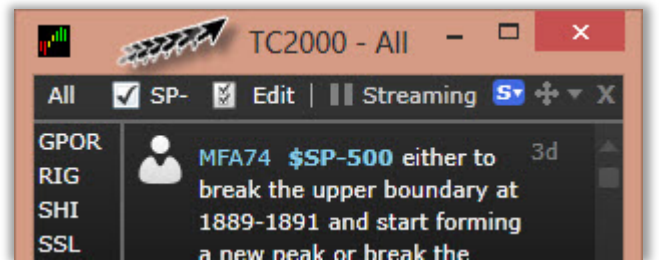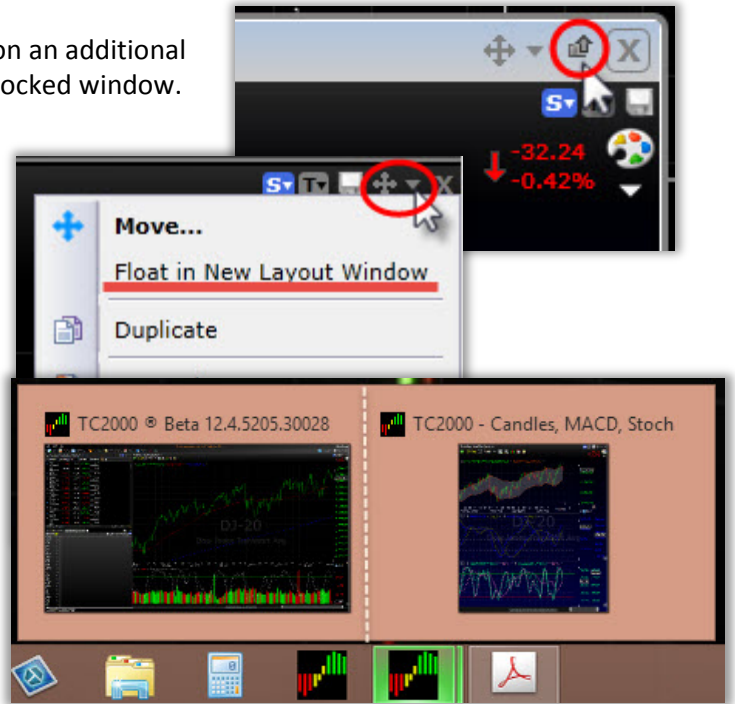
Charts

WHAT IS A CHART?

A Chart is a grouping of indicators/plots. Charts always begin with a Price History plot and can have as many other indicators or plots added to them as are desired. Plots on a Chart may be stacked on top of one another, contained within individual panes – they may also be overlaid, such that many (related or unrelated) plots are residents of the same pane. A Chart always has its own toolbar, and its indicators are all controlled by the same Timeframe and Zoom and Pan slider settings.

CHARTS BUTTON (MAIN TOOLBAR)

The *Charts* button located on the Main Toolbar provides access to a library of any and all system Charts, including those that have been created and saved personally as well as those that were created and added to the library by TC2000

Select the *Charts* button to view the *Charts* dialog. You may either manually locate a Chart of interest using the scroll bar along the right edge of the dialog, use the *My Charts* and *Pre-Built Charts* sub-category menus, or you can type to search for a desire Chart by keyword.

To expand one of the sub-category menus, select the *plus sign* located next to the sub-category name of interest. To collapse the sub-category menu, select the *minus sign* located next to the sub-category name of interest.

Charts that you create and save will be stored in the *My Charts* sub-category within the *Charts* button of the Main Toolbar.

Charts created and added by Worden will be located within the *Pre-Built Charts* sub-category of the *Charts* button.

Any of the *My Charts* can be assigned an F1-F12 hotkey, can be re-named, or can be deleted from the *My Charts* menu. Use the hotkey drop-down, the edit icon, or the delete icon to accomplish these tasks, respectively.

Any of the *Pre-Built Charts* can be assigned an F1-F12 hotkey directly from the *Pre-Built Charts* menu.

Note that in addition to opening personally saved and Pre-Built Charts from the *Charts* button, it is also possible to open a basic Chart containing only Price and Volume data from this location as well. Select the *Blank Chart* button to open a floating Chart window that may either be left as-is or can be edited to include content of interest to you.
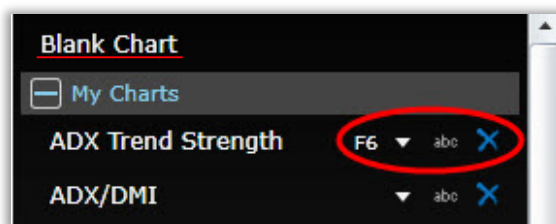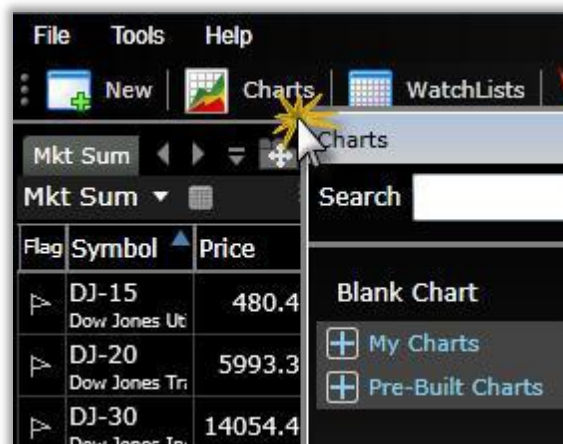
To assign a symbol for a Chart, one option is to select a symbol from a WatchList that shares a symbol linking color group with the Chart. Click any symbol in a linked WatchList to display information for the selected symbol on a Chart.

Press the *spacebar* on the keyboard to navigate sequentially through a WatchList, assigning a new active symbol with each new selection from the WatchList. Hold down the Control (Ctrl) key and press the *spacebar* to move backward through the WatchList. Use Backspace to move sequentially backward through your recent viewing history.

Alternatively, to change the symbol for a Chart, jump to a symbol in one of the following ways:

Typing Shortcut
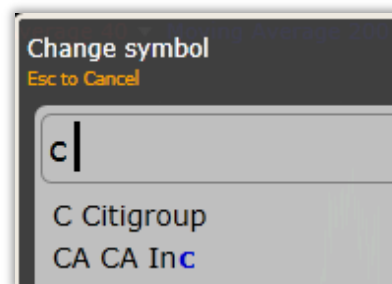To jump to any ticker symbol in the system, simply start typing any part of the symbol or company name. The smart search feature will narrow the list to only those items containing the letters typed. To jump to the desired Chart, type the complete symbol and press the *Enter* key or click the symbol or company name when it appears in the smart search list.

Optional J Key
For TC2000 users who may be accustomed to and wish to use the 'J" key to get the "Jump to" dialog, you may set up that option in TC2000 by the *System Defaults* option within the Tools menu. Select the radio button next to *Use TeleChart 2007 Hot Keys* within the *TC2000 Options* dialog.

Note that if there are multiple Charts open within the Layout Tab, you will need to click somewhere within a specific Chart's background to ensure that it is the window in focus and will be the recipient of the subsequent symbol change.

Activating Scrolling Ticker

Toggle Scrolling Ticker

To activate a scrolling list of symbols across the top of your TC2000, click on the Tools Menu on the main toolbar and choose Show Scrolling Ticker.
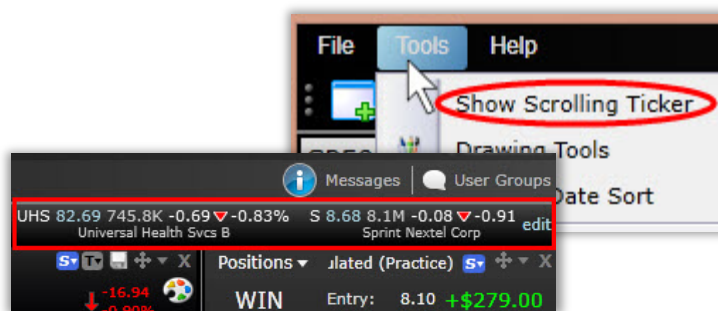
Edit Scrolling Ticker

To edit the Scrolling Ticker click on the Edit button at the extreme right of the scrolling ticker window. Use this window to choose any WatchList in your TC2000 to scroll using the drop down. Change the speed (faster or slower) with the slider bar. Choose Show Volume if you want to see the Volume displayed along with the Ticker, price, net/percent change and Company Name for each entry.
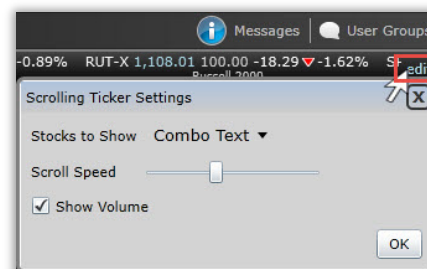
Price Graph Type

Price information can be displayed in several different styles, which are described individually below. Left-click the Price plot, and select the *Edit* option in order to assign a style to the Price plot.

Line

The Price plot has four components available for each time increment: Open, High, Low, and Close. The *Line* plot style draws a point at the Price Close value for each date, as illustrated in the graphic below. Each point is then connected by a line to the next point on the Chart. The connecting line has no data behind it; the line's only purpose is to connect the values of sequential data points.
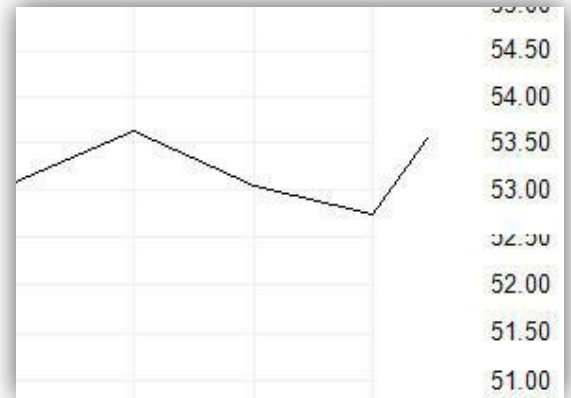
OHLC Bar

The Price plot has four components available for each time increment: Open, High, Low, and Close. The *OHLC Bar* plot style only displays all four of the available pieces of Price information for each date or time: Open, High, Low, and Close. For each historical date, the OHLC Bar draws a vertical line connecting the Price High and the Price Low for the date. A left-facing tick or hash is drawn at the level of the Price Open for the date, and a right-facing tick or hash is then drawn at the level of the Price Close for the date, as labelled in the graphic below.

HLC Bar

The Price plot has four components available for each time increment: Open, High, Low, and Close. The *HLC Bar* plot style only displays three of the available pieces of Price information for each date or time: High, Low, and Close. For each historical date, the HLC Bar draws a vertical line connecting the Price High and the Price Low for the date. A right-facing tick or hash is then drawn at the level of the Price Close for the date, as labelled in the graphic below.

CandleStick

The Price plot has four components available for each time increment: Open, High, Low, and Close. The *Candlestick* plot style displays all four components of Price for each historical date.

A candlestick may either be opaque or transparent. An opaque candlestick represents the four Price components as labelled in the graphic below. A transparent candlestick represents the four Price components as labelled in the graphic below.

Bar

The *Bar* plot style is typically used to display non-Price data (i.e. indicator values) in a specific style. The Bar plot style draws a solid column from zero to the indicator value for each date or time, depending on the time-period increment. Time-period increment is determined by the bar interval assigned to the Chart.
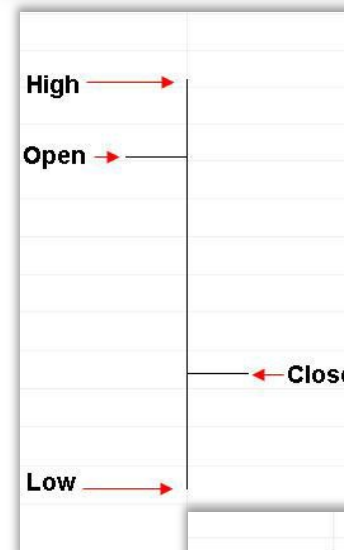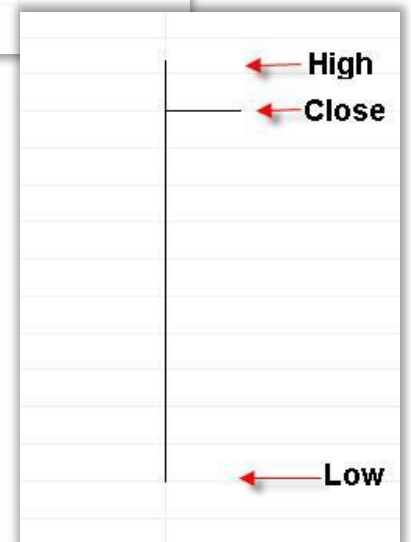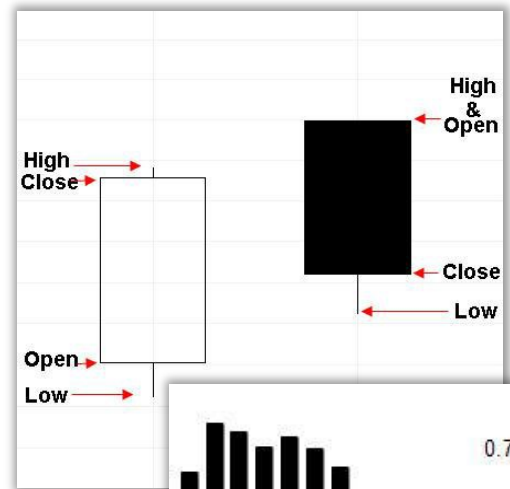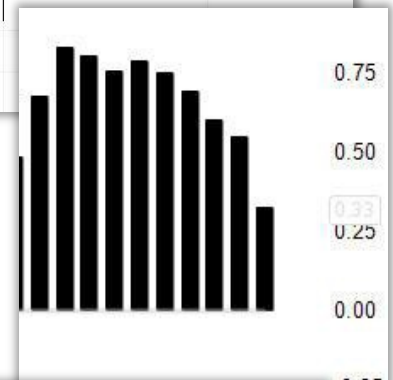
Area

The Price plot has four components available for each time increment: Open, High, Low, and Close. The *Area* plot style draws a point at the Price Close value for each date. Each point is then connected by a line to the next point on the Chart, much like the Line plot style. The Area plot style then fills the area above or below the Close line, as illustrated in the graphic below.
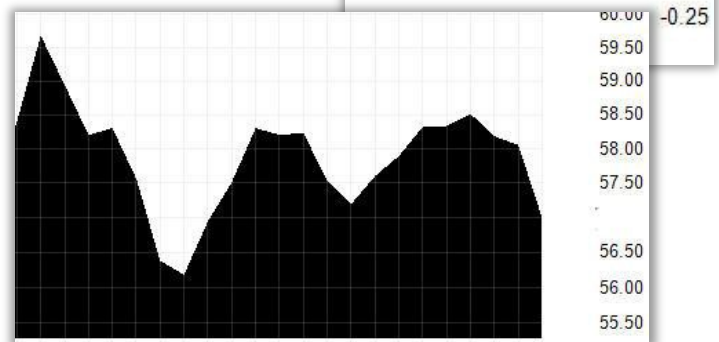
Heiken-Ashi

The Price plot has four components available for each time increment: Open, High, Low, and Close. Heiken-Ashi Charts look similar to candlestick Charts in that four elements are plotted for each bar. Each bar's four elements are a factor of both the current available bar information and the previous bar's information, according to these rules:

1. Close price: the average of open, close, high and low price from the current bar.
2. Open price: the average of the open and close of the previous candle.
3. High price: the high price is chosen from either the high, open or close price, whichever has the highest value.
4. Low price: the low price is chosen from either the high, open or close price, whichever has the lowest value.
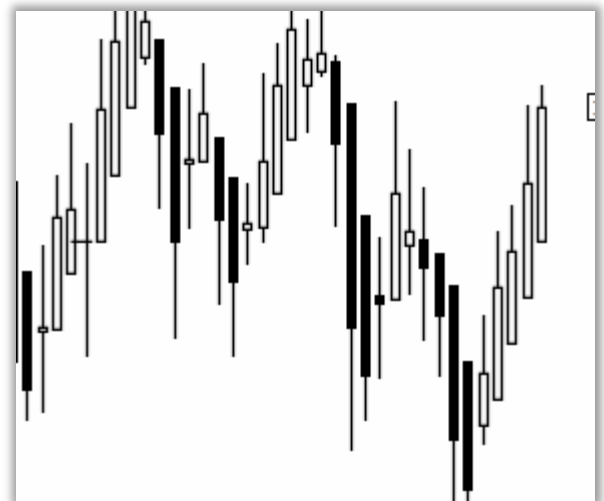
Chart Timeframe

The *Timeframe* drop-down sets the amount of time associated with each bar. If set to *1 Day* the Chart will plot a daily Chart with one trading day assigned to each bar. All of the Timeframes in TC2000 are calendar based. As a result, a weekly Chart assigns one trading week to each bar (some bars may not contain five days of trading if there was a market holiday).

To the right of every Timeframe listed within the drop-down, is the hotkey associated with that Timeframe. Pressing the hotkey on the keyboard changes the Timeframe of the Chart. For example, press the 1 key on the keyboard to change to a daily Chart. Press the 5 key to change to a weekly Chart.

Intra-day Timeframes have two-key combinations for their hotkeys, including CTRL and a numeric key.

(See the Tool Linking section of this user guide for more information about grouped Chart Timeframe assignments.)

Chart Scaling

All indicators have scales - both horizontal and vertical. An indicator is nothing more than a series of points plotted along corresponding horizontal and vertical coordinates. Both the horizontal (date scale along the bottom of the Chart) and the vertical (values of the plot) scales contribute to the way the indicator's values are displayed on the Chart. You have control over many scale display characteristics. To access the properties of a scale display, right-click the scale for the plot and make the desired selection.
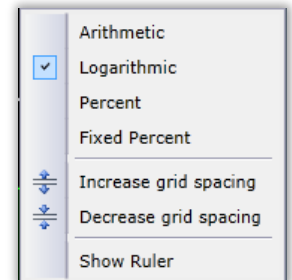
Scaling Method
The first four options visible when viewing the Scaling menu describe scaling methods.

> **Arithmetic**
> Each scale unit is a fixed distance from the next scale unit on the Scale Display. Each scaling interval represents the same distance or change in variable value.

> **Logarithmic**
> Displays scale units on a logarithmic scale where the distance between each scaling unit on the Scale Display is an automatically determined fixed percentage. This percentage value will vary depending on the volatility of the data displayed on the Chart.

> **Percent**
> Displays scale units with equal spacing, which each represent a set percentage distance from one another. This percent change value is not assignable by the user.

> **Fixed Percent**
> Displays scale units with equal spacing, which represent a set percentage distance from one to another. This percent change value is assignable by the user.

Increase or Decrease Grid Spacing

The next two options available when viewing the *Scaling* menu are *Increase grid spacing* and *Decrease grid spacing*. For any of the scaling methods discussed above, it is possible to increase the distance between scaling markers by selecting *Increase grid spacing*. This might be a good option if the scale looks cluttered and is hard for you to read. It is also possible to decrease the distance between scaling markers by selecting *Decrease grid spacing*. This may be a good option when there is not enough scaling detail. An easy shortcut to this process is to hover your cursor over the scale and use the scroll wheel on the mouse to increase/decrease grid spacing.

Show Ruler

The final option visible when viewing the *Scaling* menu is to *Show Ruler*. The Ruler provides a way to measure performance relative to a user-specified location on a Chart.

When *Show Ruler* is first selected, a percentage scale is made visible and a set of cross-hairs are added to the Chart. Left-click anywhere within the Chart background to change the position of the cross-hairs. The center of the cross-hairs is the location from which relative performance will be measured. The value outlined on the percent change scale represents the percent change in Price value from the location selected with the cross-hairs to the last data point available on the Chart.

You might also choose to view performance across a period of time in Net or Hundred Dollar terms. Select the **N or $** buttons visible when showing the Ruler to assign which mode the Ruler should display. The *Net* option displays performance across the specified period of time in dollars. If the Price has dropped $3.72 since the point on the Chart pin-pointed by the cross-hairs, the value scale for the Ruler reads -3.72.

The Hundred Dollar option displays the current account value for a hypothetical initial investment of $100 at the location on the Chart pin-pointed by the cross-hairs. The value outlined on the Hundred Dollar scale represents the current number of dollars associated with the trade, with no adjustments made for commissions and fees. If the latest Price available for the Chart is higher than the location pin-pointed by the cross-hairs, the value outlined on the scale will be greater than 100; if the latest Price available for the Chart is lower than the location pin-pointed by the cross-hairs, the value outlined on the scale will be between 0 and 100.

Ruler Settings

You have the ability to automate cross-hair behavior to some extent for the Ruler. Right-click the Ruler scale when visible or right-click within the background area of a Chart and select *Ruler Settings* to see a list of available options.

Center on Yesterday's Close

This selection automatically snaps the cross-hair location for the Ruler to the Close Price yesterday. It is still possible to left-click any other Chart location to view a temporary set of cross-hairs whose current regular Chart scale values and Ruler scale values will be highlighted and outlined.
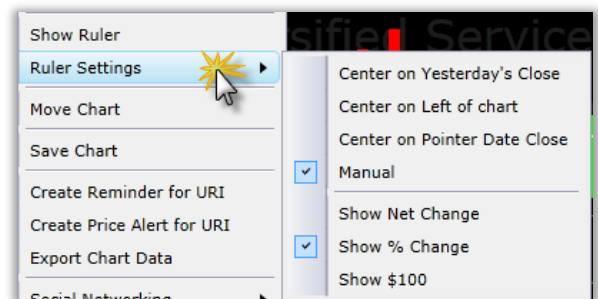
Center on Left of Chart

This selection automatically snaps the cross-hair location for the Ruler to the Close Price of the first visible Price bar on the Chart. Change the zoom level of the Chart (zoom out or in), and the position of the cross-hair will automatically be re-assigned. It is still possible to left-click any other Chart location to view a temporary set of cross-hairs whose current regular and Ruler scale values will be outlined.

Center on Pointer Date Close

This selection automatically snaps the cross-hair to the Close Price associated with any Price bar selected. Click and drag to change the pointer's location date, and the cross-hair center location will snap to the Close Price associated with that bar. It is still possible to view regular and Ruler scale values for any location pointed to by clicking the background area of the Chart.

Manual

The *Manual* selection is the default mode for the Ruler, and operation in manual mode is as described above in the Show Ruler section.

Date and Scale Margin Sliders

Charts are auto-scaled by default, meaning that the highest value visible across the period of time associated with the Zoom and Pan settings is identified as the top scale value for the Chart, and the lowest visible value across the period is identified as the bottom scale value for the Chart. Having this as the default method ensures that each Chart will take up as much vertical space as is available within the Price pane. Chart data also occupies all available horizontal space on a Chart by default.

There are two sets of sliders available, which allow you to make adjustments to the amount of vertical and horizontal space a Chart's data occupies. These sliders are called the *Date and Scale Margin Sliders.* Located at the top and bottom of each pane's left-most scale are two left-facing arrow heads, which can be grabbed and dragged with a mouse. Dragging one of the arrow heads changes the upper scale limit for plotting and the lower scale limit for plotting. Essentially, this provides a way to condense visual information into a narrower vertical range.

Located at the right end of each Price scale, to the left of the bottom *Scale Margin Slider* is the *Date Margin Slider*. It is represented by an upward facing arrow head, which when grabbed and dragged makes future date space available on the right end of a Chart. This space can be useful as trend projection space, etc.

Chart Aesthetics

Right-click anywhere on a Chart, and select *Chart Properties* then *Colors & Grid* to view the *Chart Color and Grid Settings* dialog. The following controls are available for making Chart altering Chart appearance.

Back Color Drop-Down
Assign the background color for a Chart. Use the drop-down to select the desired color.

Gradient Drop-Down
Assign a gradient or fade color for the background of a Chart. Place a checkmark next to the Gradient drop-down and select the desired color.

Value Grid Line Slider
Assign level of opacity of horizontal value lines associated with scale markers. Slide to the left to make Value Grid Lines invisible; slide to the right to make Value Grid Lines completely opaque.

Date Grid Line Slider
Assign level of opacity of vertical value lines associated with date and/or time information on the Date Scale. Slide to the left to make Date Grid Lines invisible; slide to the right to make Date Grid Lines completely opaque.

Symbol Watermark Slider
Assign level of opacity of the Symbol Watermark for the Chart, which includes Symbol, Company Name, Industry, and Sub-Industry information for the Active Symbol. Slide to the left to make the Symbol Watermark invisible; slide to the right to make the Symbol Watermark completely opaque.

Value Scale Size Slider
Assign relative size of the vertical Value Scale(s). Slide to the left to decrease the size of the Value Scale(s); slide to the right to increase the size of the Value Scale(s).

Date Scale Size Slider
Assign the relative size of the horizontal Date Scale. Slide to the left to decrease the size of the Date Scale; slide to the right to increase the size of the Date Scale.

Date Scale Location Drop-Down
Assign position of the Chart's Date Scale. The Date Scale can either be located horizontally along the bottom of the Price pane or can be located horizontally along the bottom of the entire Chart (below the bottom pane associated with any Chart.)

Date Margin Value
Assign the amount of future date open Chart space for a Chart. Increase the value to move Price and indicator data to the left, displaying future date space with no data, which may be made useful as projection space.

Apply to...
Settings assigned by this dialog can be attributed to *All Charts in this Layout Tab, All Charts,* or set as the *Default for new Charts* within the menu provided for this option.
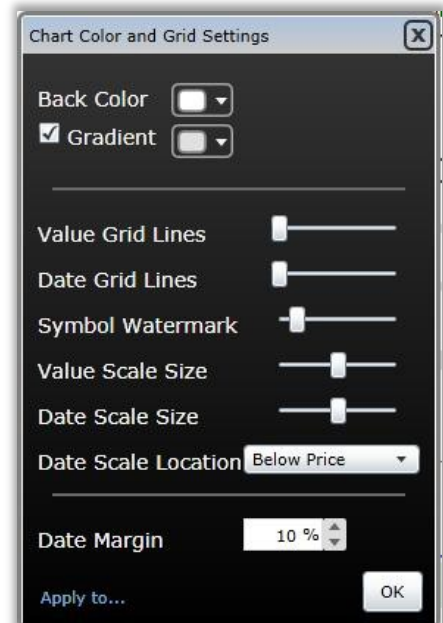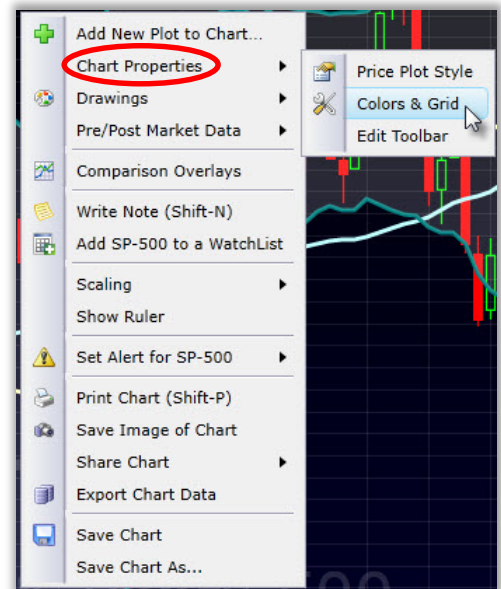
To activate a temporary *Crosshair* on the Chart and view values for all Chart indicators relative to the position of the crosshairs, hold the left mouse button down and drag the cursor to the desired location on the Chart. The crosshair pointer shows the scale values on vertical scales. The values for each indicator displayed on the Chart for the bar defined by the cursor are shown in the data box at the top left of the Chart. Release the mouse button to disable the temporary crosshair pointers and data box.

Click the background of a chart to activate the pointer. Select a date to view detailed chart data for all chart indicators at that specific point in time. Data box details have been expanded to include descriptive figures for chart spans. Drag the pointer between any two points on the chart to measure number of bars, performance, and annualized returns.

For charts with different timeframes, notice that the pointer now works across charts. Place the pointer on a longer timeframe bar, and the pointer highlights the relevant chart history on all shorter timeframe charts.

To keep the *Crosshair Pointer* and the data box on the screen (without the mouse) press the Period key once for just the crosshairs and twice for both the crosshairs and the data box. Press the period key again to disable both.

Both the temporary and permanent versions of the crosshair can be activated by the *Drawing Tools* menu as well. Select the *Cross* option within the Drawing Tools menu to initiate the crosshair with data box; select the *Plain* option within the *Drawing Tools* menu to activate the crosshair with no data box.

Adding Plots to a Chart

There are several ways to add a plots to a Chart in TC2000 v12.4. Each is discussed below.

Select the *Indicators* section of the *Library* button located on the Main Toolbar. Either manually locate the plot of interest using the scrolling ticker located along the right edge of the indicator list, or type to search for a plot of interest by keyword. Once a selection is made follow on-screen prompts to assign the plot to the Chart in the desired pane.
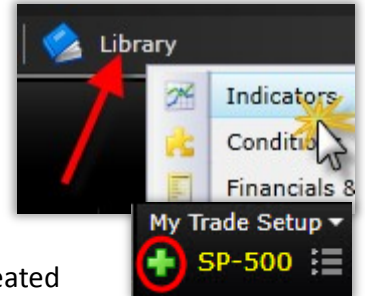
As an alternative to the *Indicators* button on the Main Toolbar, select the *Add Plot Icon* to open a menu of all library plots including any indicators you have created and saved. You may type within the *Search* field at any time to limit the list based on keyword. To make a selection from the menu of available items, select the desired item from the list to add it to the active Chart. Alternatively, right click anywhere on the chart and choose the *Add New Plot to Chart* option.
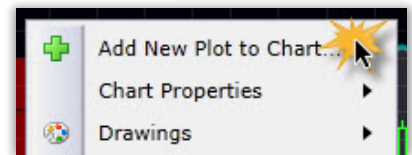
Note that if the selection made is a child plot - meaning its calculation is based on the value of some other plot that needs to be assigned - you will be prompted to assign the parent plot from a list of all other indicators currently included on the active Chart.
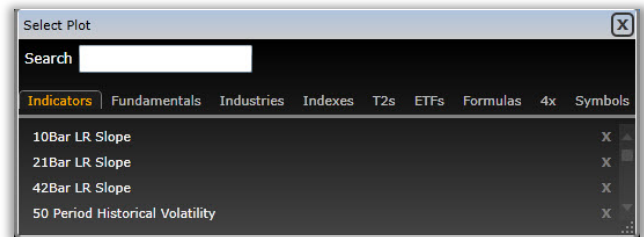
As an alternative to using the *Add Plot* button, try hitting the forward slash key **/** on the keyboard to initiate a search dialog. Type the name of the plot of interest, and once located within the search results list displayed, select it with the mouse or navigate to it with the arrow keys on the keyboard and make the desired selection. The plot will be added to the Chart as it been added by the *Add Plot* button. All system plots are available in this way.

Plots added using the *Add Indicator* button as described are added to new individual panes by default. It is possible to add a plot to a pane that already exists and that contains another indicator or plot. To add a plot to an existing pane, left-click one of the plots within the existing pane, and choose *Add Plot Here...* from the menu that appears. Either manually locate the plot of interest using the scroll bar along the right edge of the dialog, or search by keyword within the *Search* field. The plot selected will be added to the existing pane.

A scale for the added plot is made visible within the pane that now contains two or more plots. Use the right-facing arrow located in the lower right corner of the Value Scale area to toggle through scale visibility modes. View scales for one or all indicators within the pane.
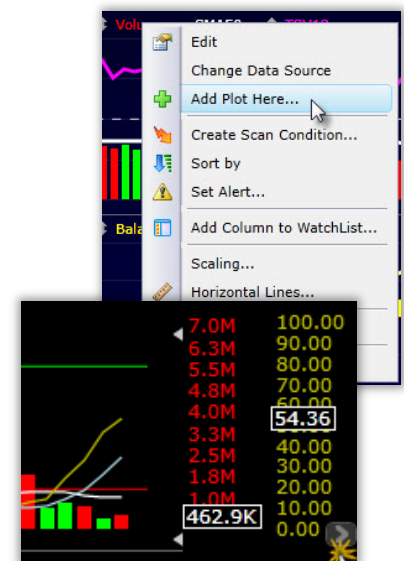
Plots that reside in their own panes may be re-located in one of several ways. They may either be repositioned relative to another pane (moved above or below), overlaid with another existing pane, or pinned to the side for later review.

Use the *Move* button located to the left of every plot to initiate the on-screen prompts that allow the selection of any of the described movement options.

Select any of the directional arrows displayed to move the selected plot or pane above or below an existing pane; select the *Overlay* option displayed on other existing panes to assign both plots to the same pane; or choose *Pin* to hide the contents of the selected pane, leaving only a named tab visible that can later be selected to view the pane's contents once more.

Plots available for display in chart panes are:
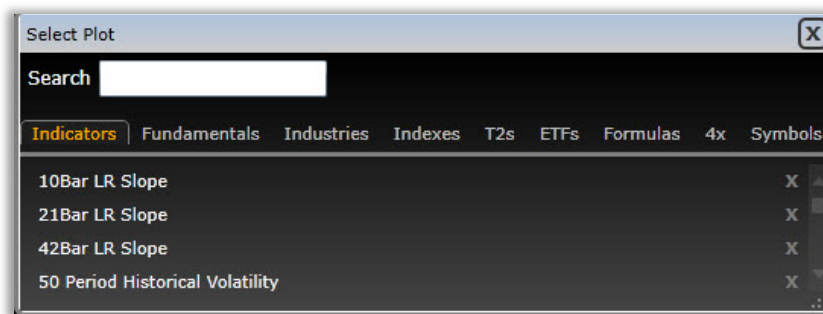
- Technical indicators—over 70 modern technical indicators
- Historical Fundamentals—70+ fundamentals with up to 25 years of historical data
- Industries—Morningstar Sector and Industry breakdowns
- Indexes—Over 330 different US Market Indexes
- T2 Market Indicators—25+ Market Indicators (market internals and breadth indicators)
- ETFs—1500+ Exchange Traded Funds
- 4x (Forex)--Over 55 Foreign Currency Pairs
- Price Charts Other Symbols—plot any other symbol as a separate price plot on the same chart
- Custom Personal Criteria Formula (PCF) Indicators—custom formula based indicators

All data streams in real-time according to your level of service.
- Gold: streaming 15-minute delay (plus BATS real-time data)
- Platinum: streaming, full market real-time.

Managing Plots on a Chart

Once there is a plot in a chart pane of a Chart, its name is made visible within the legend of the pane where it resides. To manage the indicator, click the name of the indicator and make a selection from the menu provided. From a plot menu, you may do the following functions:

> **Edit**: Assign plot characteristics like Plot Style, Plot Color, Period, Line Style, Line Width, Plot Opacity, and optional personalized Legend Label.
> **Change Data Source:** Change the source from which the plot is calculated.
> **Add Plot Here:** Select and add a child indicator or other plot to the pane where the selected indicator resides.
> **Create Scan Condition:** Use dialog provided to set up behavioral criteria required for selected plot. Use the Condition created to save for later use or to Scan/Sort a chosen WatchList immediately.
> **Sort By:** Apply related plot values to a WatchList as a sort column.
> **Set Alert:** Describe behavioral criteria for the plot selected. The behavior described will be monitored for the current Chart and alerts will be delivered based on current notification settings.
> **Add Column to WatchList:** Follow prompts to select location for plot's column data to be added to a WatchList of choice.
> **Scaling:** Assign Scaling Method, including Auto (default), pre-configured options, or customize the selected plot's scale. Also assign Grid Line settings based on Logarithmic, Arithmetic, and Line # options.
> **Horizontal Lines:** Select to either edit existing or add new horizontal plot guides for the plot selected.
> **Save this indicator:** Save an indicator or plot to the library. Saved plots retain characteristics assigned using the Edit functions and if viewed subsequent to saving appear as they did the last time they were saved. Personally saved plots are available to be added to any Chart using one of the standard plot addition methods.
> **Remove:** Delete the selected plot from the Chart.
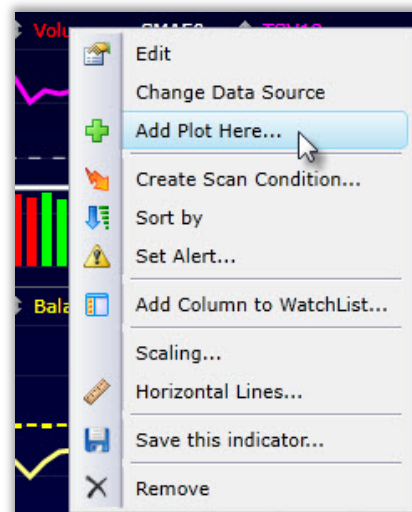
Viewing Historical Charts

It is possible to view up to 500 bars of historical data for any plot on any Chart. Whether you are viewing a Daily, Weekly, 5-Minute, or 1-Minute Chart, 500 bars of Price and indicator data are available to view. To assign a zoom level for the Chart and ultimately control the amount of historical information in view and the period of data isolated to view use the *Zoom & Pan* slider at the bottom of the chart.
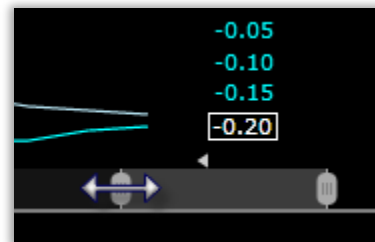
This slider gives you control over how much historical information is displayed on a Chart at a given time. To zoom out, and view more historical data values for your indicators, grab the left-most handle of the slider and drag it to the left, enlarging the size of the slider. Using your mouse scroll wheel is a shortcut to zoom in or out on Chart data. To change the historical period in view, grab the entire slider, and drag it to the left or right.

The Timespan buttons at the bottom of the chart show you chart data for exactly that period of time. (e.g. 5Y = 5 years; 3M=3 months)
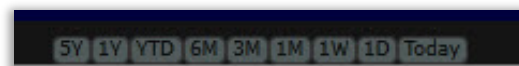
Each Chart displays a default toolbar, which contains basic buttons that can be used to accomplish several standard Charting-related tasks. Default toolbar items include the following:

New Chart Drop-Down
Add Plot Button (Plus sign)
Ticker Symbol
Open Component WatchList
Industry information icon
Timeframe Drop-down
Add to Personal WatchList Button
Edit Chart Settings Button
Edit Indicators Button
Create Alert or Reminder Button
Write a Note Button
Sector and Industry Memberships

This Chart toolbar can be made visible or invisible and can be edited to include other selected data fields or function buttons. To access and edit the toolbar or to change visibility settings, right-click within the background space to the right of the Chart toolbar, and select *Edit Toolbar* when prompted.
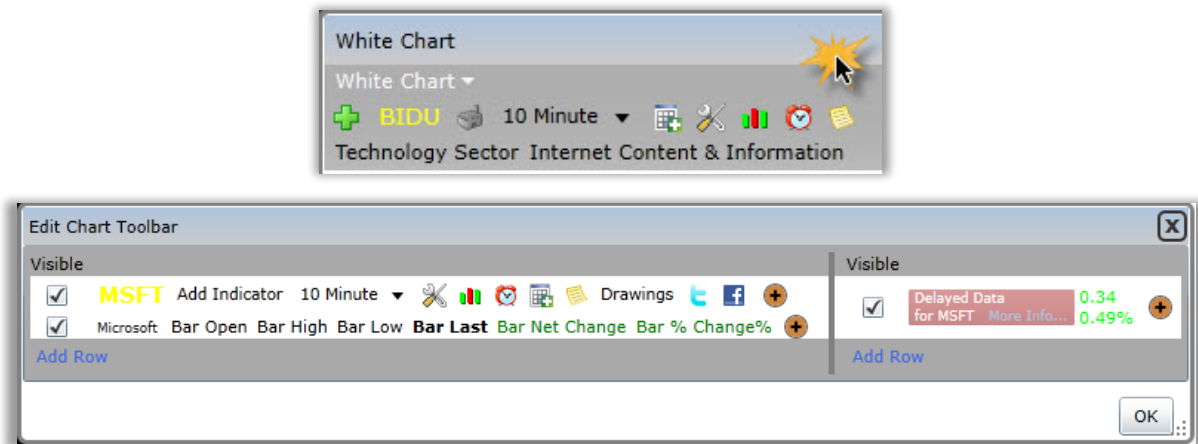
Control visibility settings for the default toolbar using the checkmark located to the left of the listed toolbar items. Right-click any of the existing toolbar fields to edit the field's properties. Move the relative position of each field, delete if desired, or change label and font characteristics for the field.

To add a field to the default toolbar, select the *Add Field* button located on the far-right end of the existing toolbar fields (orange **+**). Either manually locate the desired field using the scroll bar along the right edge of the *Edit Field* dialog, or type to search by keyword. Once the desired field is located, select it using the mouse, and the field will be added to the existing toolbar.

It is possible to create additional toolbars, which can be customized to contain only the information and function buttons you need access to at the top of your Charts.

If you would like to create a customized toolbar or add a new line of information to an existing visible toolbar, select the *Add Row* button, then select the *Add Field* button within the new toolbar line that is created.

The toolbars selected are universal and will be visible on every Chart opened.

One of the tool window controls available to every Chart is the *Save* button. Select the blue disk icon located in the upper right corner of any Chart window, and select *Save Chart* from the menu provided.

Provide a name when prompted, and select *Save*. All Chart characteristics are saved with a Chart. When a previously saved Chart is opened, it appears as it did the last time it was saved.
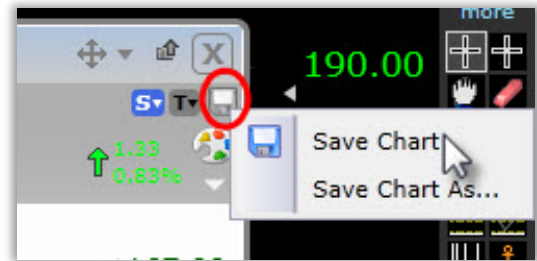
To open a previously saved Chart, select the *Charts* button located on the Main Toolbar to view the Charts dialog. You may either manually locate a Chart of interest using the scroll bar along the right edge of the dialog, use the *My Charts* and *Pre-Built Charts* sub-category menus, or you can type to search for a desired Chart by keyword.

Charts opened in this way are added to Layout Tabs as undocked windows and can be moved, docked or floated as separate windows using the methods described in the *Customizing a Layout Tab* section of the user guide.

An existing Chart within a Layout Tab can be changed to display the content of a previously saved Chart. In the upper-left corner of every Chart is a new chart drop-down (the name of your current Chart Template will be present as the current drop down selection). Select the drop-down to view a list of available previously saved and Pre-Built Charts. Select one of the items to open view its content within the exiting window.
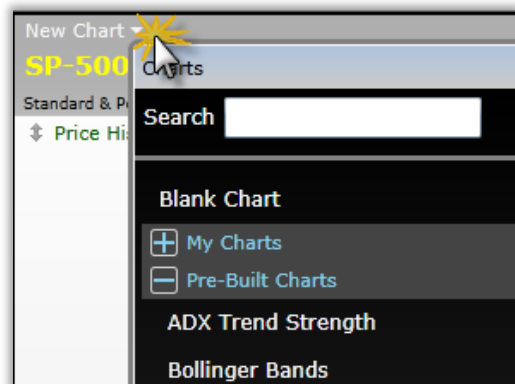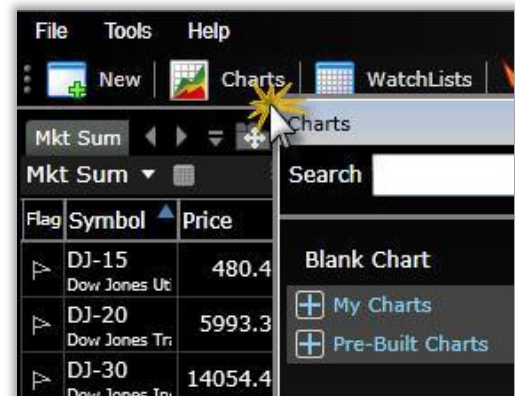
WatchLists

A WatchList is any group of tickers that is displayed as a list inside a WatchList window. Some WatchLists are created and maintained for you and are instantly available by the WatchList drop-down menu. These lists include Indices, Industries, Exchange Traded Funds, ETF components, Forex, Pink Sheets, Mutual Funds, etc.

When a new WatchList window is generated, by default it displays a list of the Nasdaq 100 stocks. A different default WatchList can be assigned, if desired. Choose the *Change List/Scan Properties* icon in the upper right corner of a selected WatchList window. Then choose *Set WatchList as System Default* from the menu provided.
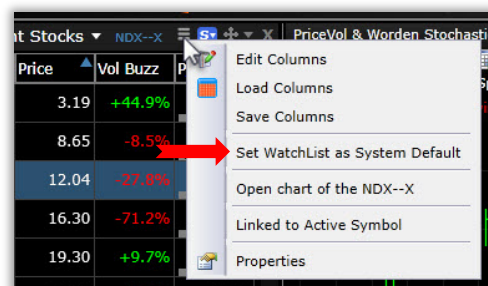
Selecting a WatchList

To view the contents of a specific WatchList, click the *WatchList* drop-down, and either locate the desired list name manually using the scroll bar along the right edge of the menu, or begin typing to limit the list based on keyword. You may also use the sub-category menus provided to view a list of only a certain type of WatchList.

Note that selecting a WatchList from the *WatchList* button on the Main Menu generates the new list in a floating window that can be left floating or docked or tabbed with another window or group of windows within the Layout Tab. Selecting a WatchList from the WatchList drop-down of an existing WatchList window changes the items displayed within the existing window.
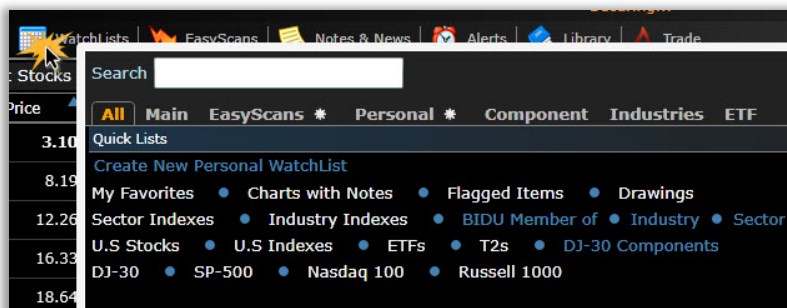
WatchList Menu Categories

Categories of WatchList type include All, Main, Personal, Component, Industry, ETF, and Clubs.

> **All:** Displays a list of all system WatchLists, organized alphabetically by sub-category.
> **Main:** Displays a list of all of the most commonly accessed WatchLists, organized alphabetically.
> **EasyScans:** Displays a list of all personally created and saved EasyScans as well as a list of Pre-Built EasyScans provided by default.
> **Personal:** Displays a list of only those lists created by the user. Personal WatchLists can be opened or deleted from this location.
> **Component:** Displays major index component lists.
> **Industry:** Displays a list of Main and Sub-Industry groups, organized alphabetically first by Main Industry, then by Sub-Industry.
> **ETF:** Displays Exchange Traded Fund component lists, organized alphabetically.
> **Clubs:** Displays WatchLists published to user-enrolled clubs, organized by club name.

The *WatchLists* button located on the Main Toolbar provides access to a library of any and all system WatchLists, including those that have been created and saved personally as well as those that were created and added to the library by TC2000.

Select the *WatchLists* button to view the WatchList dialog. You may either manually locate a WatchList of interest using the scroll bar along the right edge of the dialog, use the sub-category menus, or you can type to search for a desired WatchList by keyword.

To view only the WatchLists within one of the sub-category menus, select the radio button associated with the desired sub-category.

Personally created WatchLists will automatically be saved and will be stored in the *Personal* sub-category within the *WatchLists* button of the Main Toolbar.
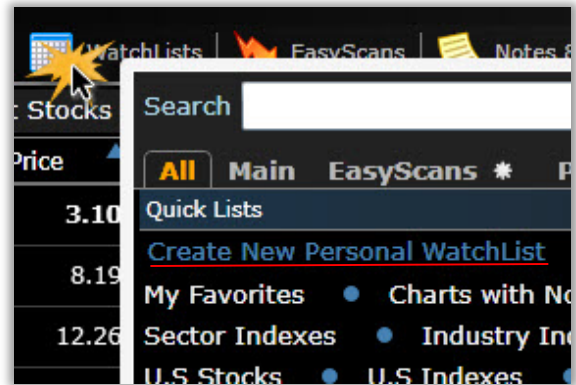
Note that in addition to opening existing WatchLists from the *WatchLists* button, it is also possible to create a new WatchList from this location. Select the *Create New Personal WatchList* button, provide a name for the list when prompted, then either select the *Add Symbols* button displayed within the blank personal WatchList or right-click in the background area of the blank list and select *Add Symbols to List* from the menu provided. Follow on-screen prompts to add any desired tickers to the WatchList.

All WatchLists opened from the *WatchLists* button of the Main Toolbar open as undocked windows that may either be left undocked, moved or floated as a separate window according to the directions discussed in the *Customizing a Layout Tab* section of the user guide.

SORTING A WATCHLIST

WatchLists can be sorted by symbol, indicator value, or Condition. Any of these sorts can be performed in ascending or descending order.

Sorting by Symbol
Left-click the *Symbol* column header located in the WatchList header area. The initial sort order will be ascending, from A to Z. To change the sort order to descending, left-click the Symbol column header once more.
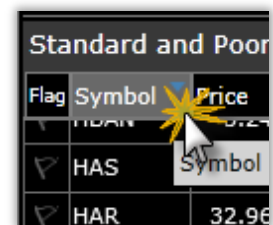
Sorting by Plot Value
Any displayed plot can be used to create a sort column within a WatchList. A sort column created in this way will order the items in the WatchList by the current value of the plot used to create the column. Click any displayed plot name in the Chart legend and choose *Add column to WatchList* from the menu provided. Follow the on-screen prompts to assign plot column positioning within a WatchList of your choice.

You are given the choice to either *Add Column*, in which case the numerical value of the plot selected will be displayed next to each item in the WatchList for which the information applies - or - to *Add Column & Sort*, in which case the column is still created as above, but the list will be ordered by the values in the new column.

Timeframes, column header labels, and relative positioning or columns can all be adjusted using a menu accessed by right-clicking an existing column header.

When a plot is selected from the *Add Plot* button located on the Main Toolbar, on-screen prompts provide the ability to add indicator values to any visible WatchList as a column as well. The *Add Column* and *Add Column & Sort* options discussed above are both available.

Sorting by a Condition
Any Condition may be used to sort a WatchList, identifying the items in the list that pass the Condition with a colored check mark. Click any indicator on a Chart and select *Create Scan Condition* to set up a behavioral criteria for the plot selected. The Condition created may be saved if you wish. Choose a scanning method; then follow on-screen prompts to select the WatchList to which a sortable Condition column should be added.

On-screen prompts provide a choice to either *Add Column*, in which case a check mark is placed next to any item within the WatchList for which the Condition is true - or - to *Add Column & Sort*, in which case the items within the newly added column that have checkmarks are sent to the top of the Condition column.

The position of Condition columns can be adjusted once the column is present in a WatchList. Right-click any Condition column header, to edit, move, save, or delete the column.

It is also possible to use a previously saved Condition to create a Condition column within a WatchList. This can be accomplished in one of two ways. Either select the *Add Column* button located to the right of any column headers within the WatchList of interest and locate the Condition within the *My Conditions* sub-category, or select the *Conditions* section of the *Library* button located on the Main Toolbar, and select a previously saved Condition from the menu provided. Follow on-screen prompts to assign a suitable position for the Condition column.
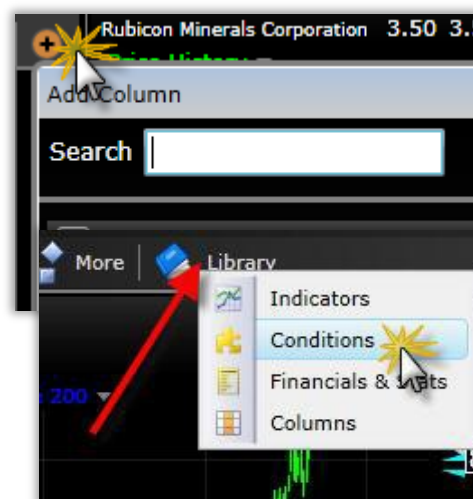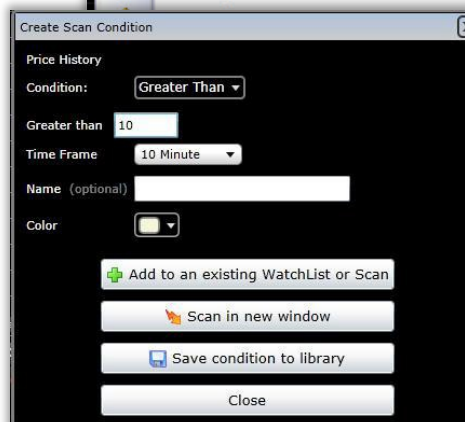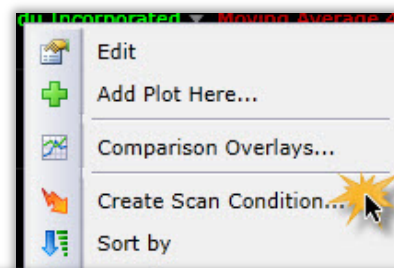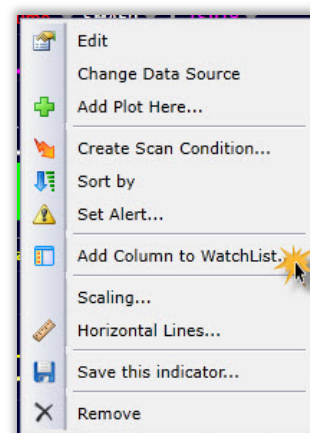
CREATING AND DELETING A WATCHLIST

To create a personal WatchList, select the *WatchLists* button from the Main Toolbar, and choose *Create New Personal WatchList* from the *Quick Lists* section of the *All* sub-category tab.

Provide a name for the list when prompted, then either select the *Add Symbols* button displayed within the blank personal WatchList or right-click in the background area of the blank list and select *Add Symbols to List* from the menu provided. Follow on-screen prompts to add any desired tickers to the WatchList. Remember than when adding symbols to a list, you can enter partial or complete tickers and company names to search for the desired ticker.

Personally created WatchLists will automatically be saved and will be stored in the *Personal* sub-category within the *WatchLists* button of the Main Toolbar.

Personal WatchLists can be deleted using the [X] icon displayed next to each personal WatchList within the *Personal* sub-category of the *WatchList* drop-down.

When a personal WatchList is active within a WatchList window, an *Add Symbol* button is visible. A rename option is available by clicking on the *Properties* icon. Choose the *Rename* option to rename the WatchList.
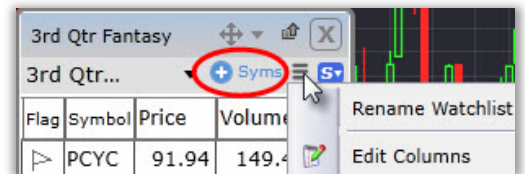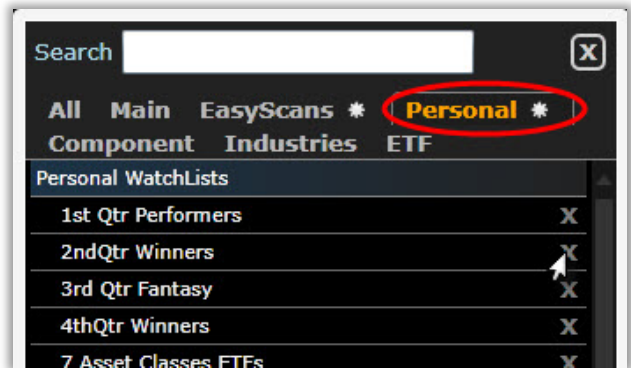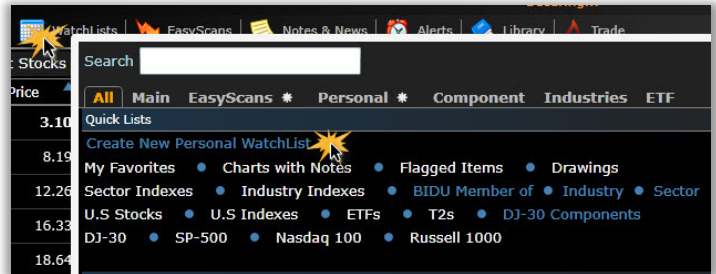
WATCHLIST AESTHETICS

To assign WatchList aesthetics, right-click in the blank background space of any WatchList, and select *Properties* from the menu provided. Assign Background Color, Grid Color, and Font Size characteristics as desired. Use the *Apply to...* button to apply these changes to other WatchLists. Select either *All WatchLists in this Layout Tab, All WatchLists,* or assign the settings to be the *Default for new Windows.*
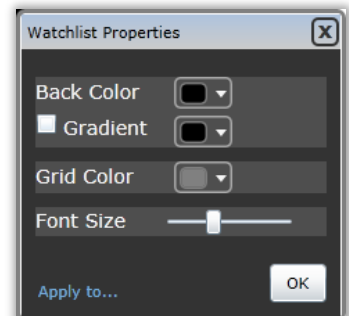
The Related Items WatchList shows any Indexes and Exchange Traded Funds the current symbol is a part of. You also have immediate access to lists of all the stocks that share the same Sector or Industry category. Plus, if the current symbol is an Index or an ETF, you'll find a list of its components or holdings.
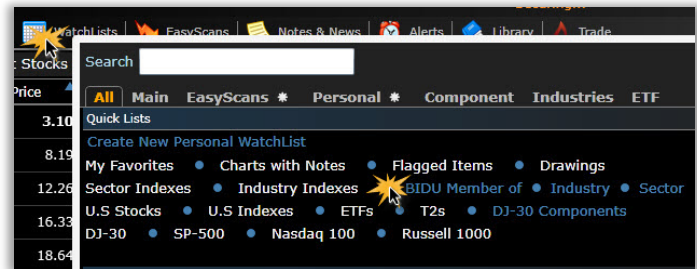
The Related Items window paints an instant picture of a symbol's position within the market and relationship to other symbols. There are a couple of ways to open a Related Items WatchList. Click the WatchLists button on the Main Toolbar, and choose any of the blue WatchLists within the QuickLists section. Blue WatchLists include *Member of, Industry, Sector,* and *Components.*

Alternatively, click the Industry Information button on any chart, and choose Open Sector/Industry WatchList.
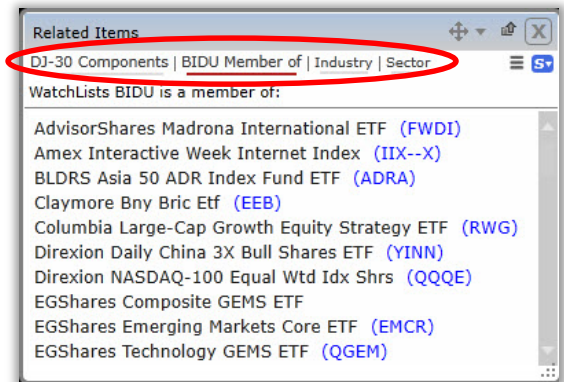
CONTROLLING THE ACTIVE SYMBOL

The Active Symbol is the symbol for which information is displayed on a particular Chart, or in the case of a WatchList, the Active Symbol is the currently selected symbol within the list.

Click any item within a WatchList to display its information on current "listening" Charts.

Hit the *spacebar* to navigate sequentially through the list of WatchList items; use the *backspace* key to navigate backward and sequentially through the list of WatchList items.

EasyScans

WHAT IS AN EASYSCAN AND HOW DOES IT WORK?

What is an EasyScan?
A scan is composed of a Condition or group of Conditions. To scan is to limit a WatchList to only those items that meet the behavior criteria standards specified by any Conditions listed within the scan. Scans can be initiated based on indicators directly from a Chart, or they can be added to a WatchList by the *EasyScans* button, located on the Main Toolbar.

Note: the term *Scan* should be contrasted with the word *Sort*. Make sure you understand the difference between the two. Whereas a scan limits the items displayed in a WatchList to only those that meet its Condition(s), to *sort* is to arrange (rank) the items within a WatchList by some value or Condition. Sorting a WatchList never limits its contents - the contents are simply placed in a specific sort order.
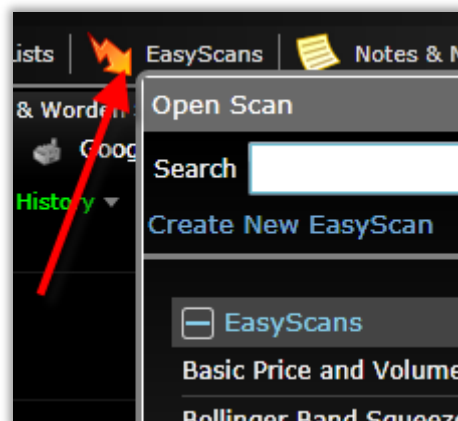
How Does it Work?
Selected Conditions are applied to WatchLists as scans. Multiple Conditions may be created and applied to the same WatchList in an additive way, which means that scans can consist of only one Condition or might consist of many Conditions. All Conditions listed for a scan must be true in order for stock or other item that passes the scan to be listed as one of the results of the scan. Conditions can be created from the chart indicators, pulled from the TC2000 pre-built libraries or written using Personal Criteria Formulas.

To view the Conditions associated with any active scan, select the *Edit* tab within the scanning WatchList window. To view the results of any active scan, select the *Scan* tab within the scanning WatchList window. The results listed will remain constant unless refreshed. To refresh the results of a scan, use the *Refresh* button located on the *Results* tab. **Platinum** users can select the *Streaming* tab, which constantly displays an actively refreshed list of items passing all related scan Conditions.

The number of stocks returned as a result of the scan can be seen in the bottom left corner of the WatchList that was scanned.

To save an EasyScan once it has been created, use either the *Disk* icon located in the upper-right corner of the scanning window.
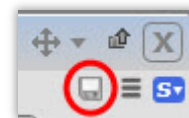
Once a scan is active, if the WatchList visible within a given WatchList window is changed, the scan will become inactive.

EASYSCANS BUTTON (MAIN TOOLBAR)

The *EasyScans* button located on the Main Toolbar provides access to a library of any and all system scans, including those that have been created and saved personally as well as those that were created and added to the library by TC2000.

Select the *EasyScans* button to view the *Open Scan* dialog. You may either manually locate a scan of interest using the scroll bar along the right edge of the dialog, use the sub-category menus, or you can type to search for a desired scan by keyword.

To expand one of the sub-category menus, select the *plus sign* located next to the sub-category name of interest. To collapse the sub-category menu, select the *minus sign* located next to the sub-category name of interest.

Scans that you create and save will be stored in the *EasyScans* sub-category within the *EasyScans* button of the Main Toolbar. Scans created and added by TC2000 will be located within the *Pre-Built Scans* sub-category of the *EasyScans* button. Any of the *EasyScans* scans can be deleted from this location.

Note that in addition to opening personally saved and Pre-Built scans from the *EasyScans* button, it is also possible to create a new scan as well. Select the *Create New EasyScan* button to open the *Edit Scan* dialog, where Conditions may be added, a name may be provided, and the scan can be saved, if desired.
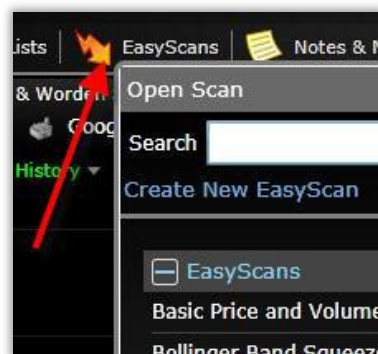
INITIATING AN EASYSCAN FROM A CHART

To create a scan based on a plot Condition from a Chart, click the plot name in the legend of its pane, and choose *Create Scan Condition* from the drop down menu. Use the dialog provided to assign conditional parameters. When finished, select *Add to an existing WatchList* to scan an existing WatchList in the Layout Tab *or Scan* or *Scan in new window* to open the EasyScan in a new undocked window.

If you would like to add another Condition to a scan that is already active within a WatchList, choose *Add to an existing WatchList or Scan* after defining the parameters of the Condition. Then choose to add the Condition to the already active scan.

This adds the second Condition to the original scan, and WatchList items that are returned as a result of the scan will be those that passed the original Condition and the newly added Condition.
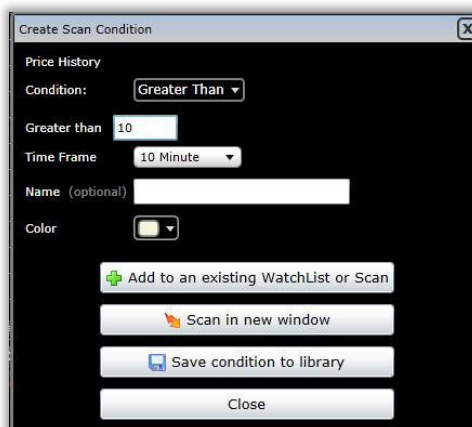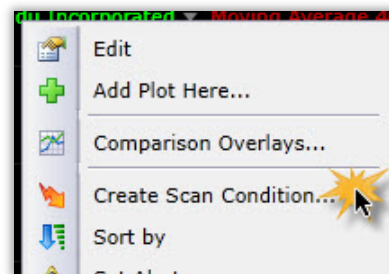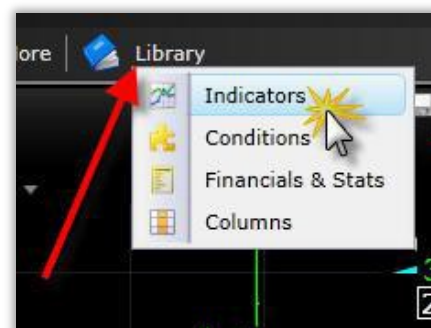
Chart Plots

A chart plot is a graphical plot displayed within any pane of a chart window. Plot values are displayed along the x (time) axis in increments determined by the Timeframe assigned to the Plot's Chart; values are displayed along the y (value) axis as is determined by scale settings. There are many technical indicators available for plotting by either the *Add Plot* button located on the default Chart Toolbar, or by the *Indicators* section of the *Library* button located on the Main Toolbar. However, there are also a wide variety of other data that can be plotted on any chart.

See the *Adding Indicators to a Chart* section of the user guide for more information about how to find an indicator of interest and add it to a chosen Chart pane.

INDICATORS BUTTON (MAIN TOOLBAR)

The *Indicators* section of the *Library* button located on the Main Toolbar provides access to a library of any and all system plots, including those that have been created and saved personally as well as those that were created and added to the library by TC2000.

Select the *Indicators* menu item to view the *Select Plot* dialog. You may either manually locate a plot of interest using the scroll bar along the right edge of the dialog, use the sub-category menus, or you can type to search for a desired indicator by keyword.

There are several sub-categories of plots within the *Select Plot* dialog.
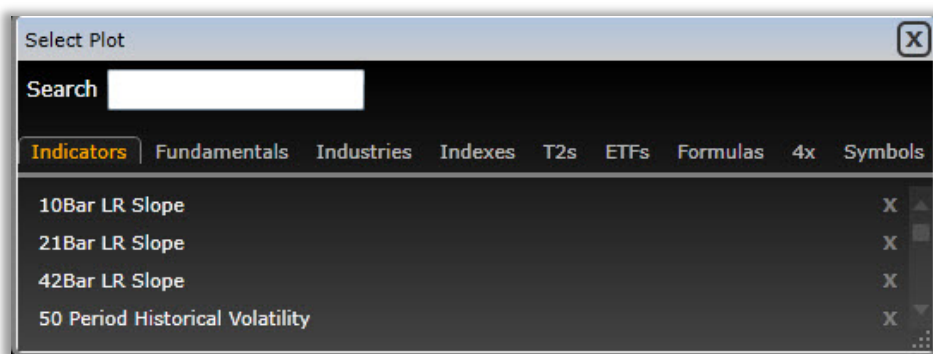
Indicators - contains standard technical indicators made available for addition to Charts. System Indicators include Moving Averages, Bollinger Bands, Stochastics, etc. These plots can be used for sort/scan conditions.
Fundamentals – financial and data sheet information that can be plotted historically on the chart for up to 25 years. Fundamentals include: Earnings, Sales, Book Value, PEG Ratio, Capitalization, etc. These plots can be used for sort/scan conditions.
Industries – charts of the major sectors and industries are composites of price and volume for all the stocks that make up each industry. These charts stream in real-time for easy stock to industry comparisons in any timeframe.

Indexes - charts of the major indexes are composites of price and volume for all the stocks that make up each index. These charts stream in real-time for easy stock to index comparisons in any timeframe.

T2s - charts of the market breadth indicators characterize the big picture and broad internal characteristics of the market on which they are based. These charts stream in real-time.

ETFs - charts of the ETFs (Exchange Traded Funds) are representative of all the stocks that make their holdings. These charts stream in real-time for easy stock to ETF comparisons in any timeframe.

Formulas – Personal Criteria Formula written to return a value (non-Boolean) form can be plotted as technical indicators on the chart. These plots can be used for sort/scan conditions.

4x (Forex) – over 50 foreign currency pairs are available in their own WatchList. These Forex charts stream in real-time to give current information on the relationship between foreign market currencies.

Symbols - add as many separate Price graphs for as many symbols as desired to any single chart. All share the same zoom and can be overlaid for easy performance comparisons.

To access one of the sub-category menus, select the appropriate tab located across the top of the *Select Plot* dialog.

User-created indicators/plots that are saved will be stored in either the *Indicators* tab or the *Formula* tab, depending upon the method that was used to create them. Indicators created and added by TC2000 will be located within the *Indicators* tab. All other plots will fall under their appropriate tab designation Any personal indicator or formula can be either edited or deleted from this location. Use the *X* to the right of any personal indicator or formula to delete. Use the *Edit* option next to the formula name to edit any personal formula.

Note that in addition to opening personally saved and Pre-Built plot or indicator from the *Indicators* button, it is also possible to create a new indicator formula as well. Select the *Write Indicator Formula* button to open the *Edit PCF* dialog, where a mathematical formula describing an indicator can be entered for use elsewhere in TC2000.
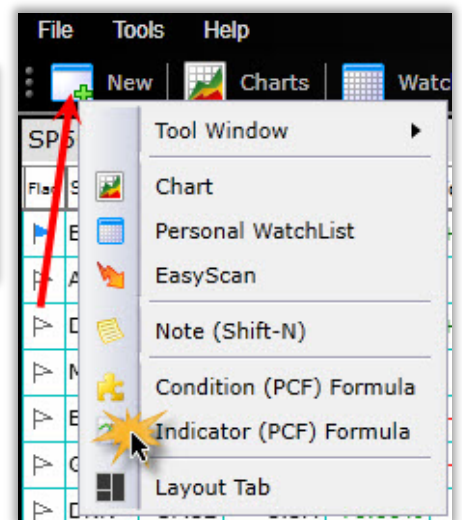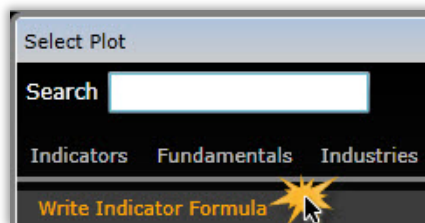
Alternately, use the *New* button on the main Toolbar and choose Indicator (PCF) Formula to open the *Edit PCF* dialog.

Formula-based indicators can be plotted, used to scan, or can be used to display column values for WatchLists - just like any other indicator.

CHANGE INDICATOR DATA SOURCE

The data source on which an indicator is calculated can now be changed. Left-click on the Indicator name in the legend of its pane. Select Change Data Source option. A list of visible indicators upon which that indicator can be based now appears. Click on the desired source and the indicator is now based on that source of data.
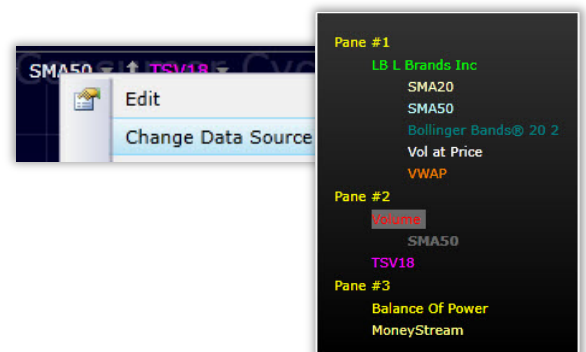
Conditions

A Condition is a user-defined entity that describes a specific behavior for an individual indicator or the interaction between multiple indicators. All indicators, including Price, Volume, or any other technical or fundamental piece of data available within TC2000 can be used to create conditions. A Condition is used to identify stocks that are actively exhibiting the behavior defined by either including the Condition in a scan, which can include one or more Conditions - or by sorting a WatchList by the Condition. Conditions are created by a chart plot, a selection from the TC2000 pre-built condition library or written by a Condition Formula.

Conditions created with plots on a Chart are initiated as follows:

1.   Click the name of the indicator of interest. (Note that the indicator must be visible on a Chart, and the name of the indicator in the Chart's pane legend should be selected.)
2.   Choose *Create Scan Condition* from the menu displayed as a result of Step 1.
3.   Use the drop-downs provided within the *Create Scan Condition* dialog to set parameters for the Condition. These parameters will ultimately describe the behavior of interest. Behavioral parameters as well as Timeframe will be assigned within this dialog.
4.   Take note of the default color assigned to the Condition (or change the color for the Condition by the *Color* drop-down, if desired). You may also choose to save the Condition at this point, in which case, the Condition will be available for use at any time in the future by the *Conditions* button located on the Main Toolbar.
5.   Select either the *Add to an existing WatchList or Scan* button or the *Scan in new Window* button, and follow on-screen prompts to implement the Condition as either a scan or sort criteria.
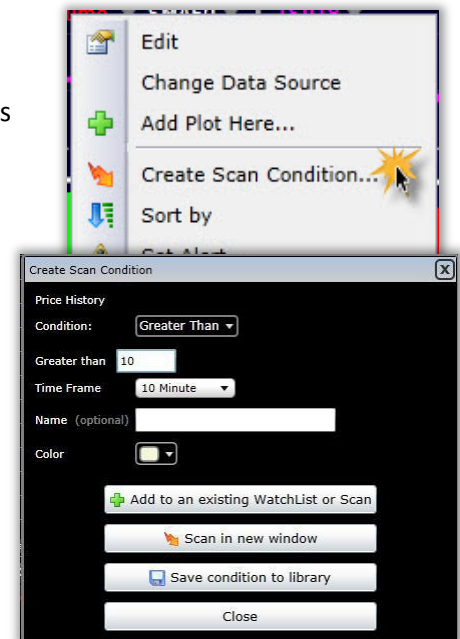
Conditions created by Condition Formula are initiated as follows:

1.   Select the New Button on the Main Toolbar, and choose *Condition (PCF) Formula*
2.   Within the *Edit PCF* dialog displayed, enter a name for the Condition, select a Timeframe for the Condition, and enter a Boolean (True or False) mathematical formula that describes the intended condition behavior.
3.   You may choose to test the formula written using the *Test Formula* button, if desired.
4.   Select OK.
5.   The Condition created has been saved to the *My Conditions (Formulas)* sub-category of the *Conditions* menu, which can be accessed by the *Conditions* button located on the Main Toolbar.
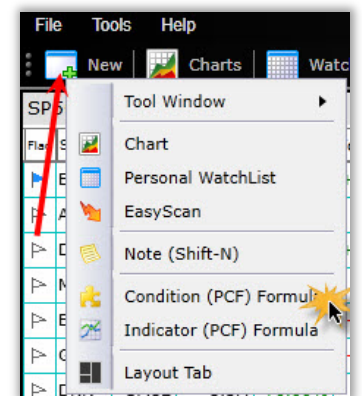
Note, there are some basic rules for writing Condition Formulas as Personal Criteria Formulas. Refer to the PCF Appendix at the end of this guide for more information.

The *Conditions* section of the *Library* button located on the Main Toolbar provides access to a library of any and all system Conditions, including those that have been created and saved personally as well as those that were created and added to the library by TC2000.

Select the *Conditions* option to view the *Conditions* dialog. You may either manually locate a Condition of interest using the scroll bar along the right edge of the dialog, use the sub-category menus, or you can type to search for a desired Condition by keyword.
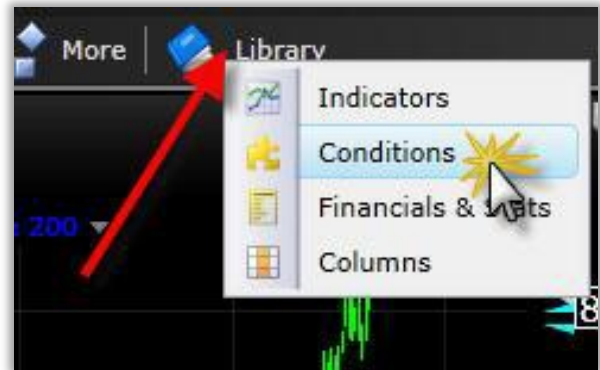
There are several sub-categories of Condition within the *Conditions* dialog.

My Conditions - includes those Conditions that were originally created from an Indicator on a Chart and were saved by the user.

My Conditions (Formulas) - includes those Conditions that were originally created and saved by a Condition Formula (a Personal Criteria Formula mathematically defining a behavior of interest).

Pre-Built Conditions - includes Conditions that were either created by or written by TC2000 and were uploaded for your use. Pre-Built Conditions can change at any time.
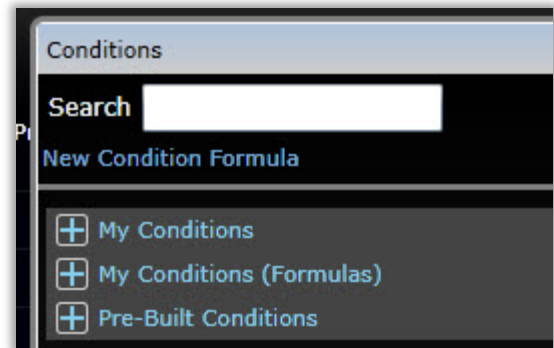
To expand one of the sub-category menus, select the *plus sign* located next to the sub-category name of interest. To collapse the sub-category menu, select the *minus sign* located next to the sub-category name of interest. Conditions created and added by TC2000 will be located within the *Pre-Built Conditions* sub-category of the *Conditions* button.

Conditions that you create and save will be stored in either the *My Conditions* sub-category or the *My Conditions (Formulas)* sub-category, depending upon the method that was used to create them.

Any of the *My Conditions* can be deleted from this location; any of the *My Conditions (Formulas)* Conditions can be either edited or deleted from this location.
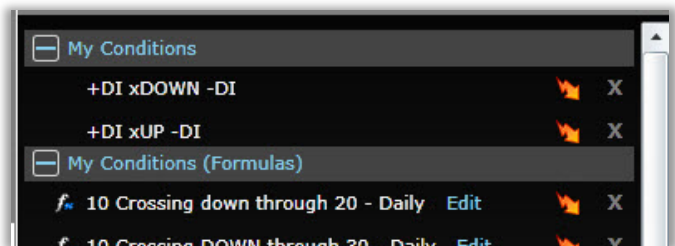
A sort or scan can be initiated from any conditions using the lightning bolt icon to the right of the condition name.

Financials & Stats

WHAT ARE FINANCIALS & STATS AND HOW DO I USE THEM?

Financials and Stats are fundamental data reported by public companies. *Financials and Stats* data are provided to TC2000 by Morningstar; the latest available reported value for each data field is updated and made available to users on Saturday of each week.

Sorting by Fundamentals

These data can be used either as Sort or Scan criteria. To use *Financials and Stats* data as part of a sort or scan, follow these steps:

1. Select the Financials and Stats section of the *Library* button located on the Main Toolbar.
2. Either locate the data field of interest manually by scrolling through the list, or type within the Search field to locate the field of interest.
3. Select the desired piece of data.

Follow the on-screen prompts to implement the selected data field as either a sort or a scan.

Remember that Financials can be used to scan or sort an existing WatchList window and its content or can be used to scan or sort in a new window, in which case a new floating WatchList window will be generated containing the scan or sort (depending on which was selected).

If you choose to add the Financial data as a sort column, the column added to the WatchList chosen will be populated with the latest available reported value for the data field chosen. Note that there will be a *Market Ranking* gage located beneath each WatchList item's reported value. This ranking represents where that items value ranks relative to all of the other reporting companies' values.

If the *Ranking* gauge appears to be completely or nearly completely opaque, the associated company has a very high value for the selected data field relative to all of the other reporting companies in the market.

If the *Ranking* gauge appears to be completely or nearly transparent, the associated company has a very low value for the selected data field relative to all of the other reporting companies in the market.

If you choose to add the Financial data as a scan, an *Edit Condition* dialog will appear, in which you can assign behavioral parameters for the piece of data. Once the parameters have been assigned, select *OK*. Within the scanned WatchList, only the items that meet the Conditions defined will remain. See the *EasyScans* section of this guide for more information on the process of scanning.

Financials and Stats can now be plotted on any chart as a separate pane or overlaid in any other plot pane.

To plot a historical fundamental, use any of the plot methods listed above in the *Add Plots to Chart* section of the user guide to open the Select Plot menu.

From the *Select Plot* dialog, chose the *Fundamentals* tab. You may either manually locate a plot of interest using the scroll bar al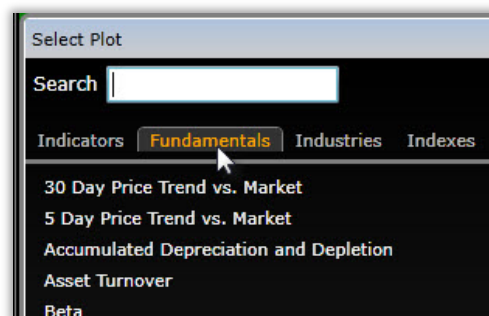ong the right edge of the dialog, use the sub-category menus, or you can type to search for a desired indicator by keyword.

This plots the selected fundamental historically and in sync with the price chart on which is it plotted.

This plot can be used to create a WatchList sort column, EasyScan conditions or overlaid on other plots as described previously in the User Guide.
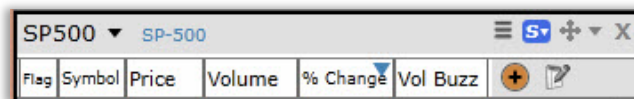
Financials & Stats available are:

Accu. Depreciation & Depletion	EPS Percent Change Latest Year	Percent Change Rev Last Qtr
Asset Turnover	Gross Fixed Assets	Percent Shares Held by Insiders
Beta	Gross Margin	Percent Shares Held by Institu.
Capitalization	Gross Operating Profit	Pre Tax Income-EBT
Common Stock Equity	High Price Divided by Earnings Ratio	Price Growth Rate 1-Year
Common stock at par value		Price Growth Rate 2-Year
Capital srpls or addl paid-in cap	Latest Float	Price Growth Rate 3-Year
Retained earnings/earned srpls	Latest Net Profit Margin	Price Growth Rate 5-Year
Common Stock Equity	Latest Short Interest Ratio	Price to Sales Ratio
Cost of Sales	Latest Total Net Income	Price Volatility
Current Book Value per Share	Long Term Debt Divided by Total Capital	Relative Strength 1-Year vs SPX
Debt to Equity Ratio		Return on Assets (ROA)
Diluted EPS from Total Operations	Long Term Debt to Equity Ratio	Return on Equity (ROE)
	Low Price Divided by Earnings Ratio	Revenue Grth Rate Last 4 Qtrs
Dividend Growth Rate 5-Yr		Sales 1-Year
Dividend Yield	Net Fixed Assets	Sales Growth Rate 5-Year
Earnings 1-Year	Net Profit Margin (Post Tax)	Short Term Debt
Earnings as Percent of Sales 1Yr	Operating Cash Flow 1-Year	Total Assets
Earnings Growth Rate 5 Year	Operating Income before Depreciations-EBITDA	Total Current Assets
EPS Latest Quarter		Total Income before Interest Expenses-EBIT
EPS Percent Change 2nd Qtr Bk	P/E Ratio	
EPS Percent Change 3rd Qtr Bk	P/E Ratio vs 5 Year Average P/E	Total Volume Last 13 Weeks
EPS Percent Change 4th Qtr Bk	PEG Ratio	
EPS Percent Change Latest Qtr	Percent Change Revenue 1-Yr	

Columns

WHAT ARE COLUMNS AND HOW DO THEY WORK?

Columns contain either numerical or Condition information for listed items within a WatchList. The TC Classic Layout Tab contains a WatchList with the following columns: Net Change, % Change, Price, Volume Buzz, and Volume.
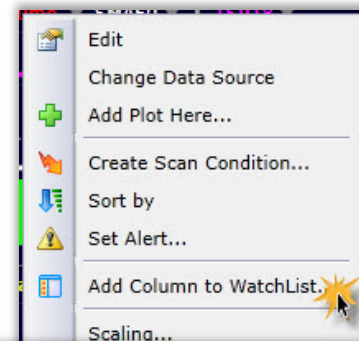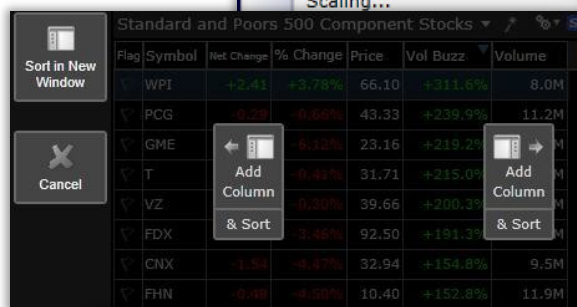
Columns can be generated by an indicator from a Chart, the *Add Column* button located within every WatchList window, the *Properties* button located within every WatchList window, or the *Columns* section of the *Library* button located on the Main Toolbar.

Creating a Column from an Indicator on a Chart
To create a column of plot values for one of the plots on a Chart, click the name of the indicator on the Chart's pane legend. Select *Add Column to WatchList* from the menu displayed. Then follow on-screen prompts to assign the column type to be created. The column may either be

- added but not sorted
- added and sorted
- added as a sort in an undocked window.

Choose *Add Column* from the on-screen prompts to add a column of indicator data but not sort the items in the WatchList by column values. Choose Add Column *&Sort* from the on-screen prompts to add a column of indicator data and sort the items in the WatchList by the populated values. Choose *Sort in New Window* to generate a new floating WatchList window containing the desired column with WatchList items sorted.

Creating a Column using the *Add Column* Button
In the upper-right corner of every WatchList is an *Add Column* button. You may manually search for the column of interest within the *Add Column* dialog that appears when the *Add Column* button is selected. Scroll through the columns listed until the desired column is located; then select its name and follow on-screen prompts to assign the column type to be created.
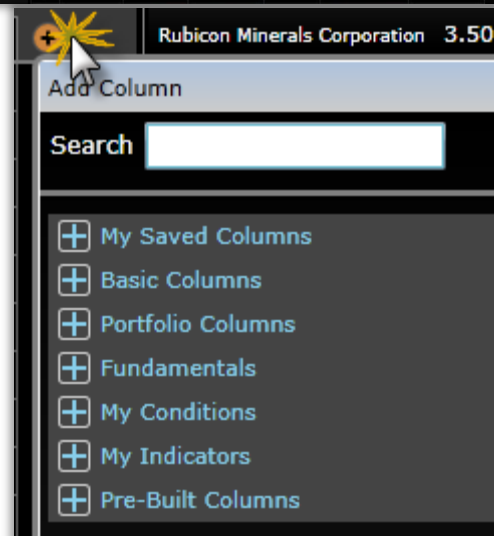
There are several sub-categories of columns, which may originally be minimized. To expand one of the sub-category menus, select the *plus sign* located next to the sub-category name of interest. To collapse the sub-category menu, select the *minus sign* located next to the sub-category name of interest.

Sub-categories include *My Saved Columns, Basic Columns, WatchList Tracking, Fundamentals, My Conditions, My Indicators,* and *Pre-Built Columns.*

As an alternative, search for the column of interest by typing the name of the desired column into the *Search* field.

My Saved Columns and Basic Columns are worth mentioning in greater detail here. Items belonging to the other sub-category menus can be read about in the corresponding user guide section.

> **My Saved Columns** - Contains all of the columns or groups of columns that have been added by a user and saved. When several columns are visible within a WatchList, it is possible to save the columns as group. In the upper-right corner of every WatchList window is a *Save* button. Select the *Save* button, and choose *Save Columns* to save the current columns as a group. This saved group will be available from the *My Saved Columns* sub-category of the *Add Column* button going forward.

> **Basic Columns** - Contains often-needed column information, including the following: Symbol Column, Company Name, Note Date, Flag Column, Price, Todays Volume, Todays %, Todays Net, Today's Volume Buzz, Ask Price, Bid Price, Exchange, Optionable Stocks, Split Date, Industry, and Sub-Industry.

Adding Columns from the Library Button
The *Columns* section of the *Library* button located on the Main Toolbar provides access to a library of all saved and pre-built columns, including those that have been created and saved personally as well as those that were created and added to the library by TC2000.

Select the *Columns* button to view the *Add Columns to Layout Tab* dialog. You may either manually locate a column of interest using the scroll bar along the right edge of the dialog, use the sub-category menus, or you can type to search for a desired column by keyword.

There are two sub-categories of column within the dialog.

> **My Columns** - contains columns and column sets that were previously added to a WatchList and saved. Saved groups of columns will be marked with the label *Column Set*.

> **Pre-Built Columns** - contains columns or groups of columns that were created and are maintained by TC2000. Groups of columns will be marked with the label *template*. Pre-Built Columns can change at any time.
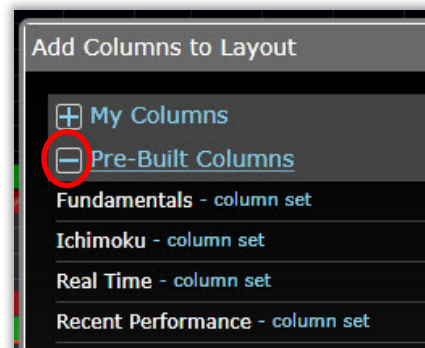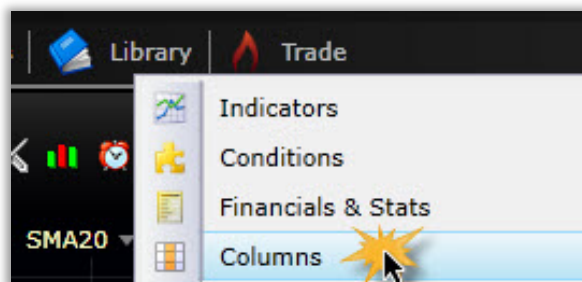
To expand one of the sub-category menus, select the *plus sign* located next to the sub-category name of interest. To collapse the sub-category menu, select the *minus sign* located next to the sub-category name of interest.

Once the column or column set of interest have been located, select its name then follow on-screen prompts to assign it to a WatchList window. For individual columns selected, you'll assign them a position to the right or left of existing columns within a WatchList.
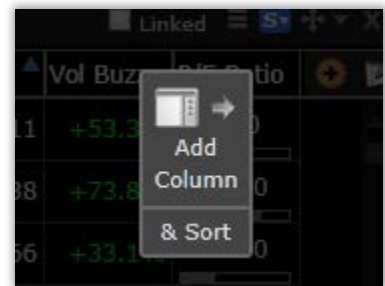
For column sets selected, you'll choose a WatchList whose existing columns should be replaced. Columns and column sets that you create and save will be stored in the *My Columns* sub-category. Any of the *My Columns* can be deleted from this location.

Columns created and added by TC2000 will be located within the *Pre-Built Columns* sub-category of the *Columns* button.

Swapping Existing Columns for a Saved Column Set
Existing columns within a WatchList window can easily be replaced with a different column set. Click the *Properties* button located adjacent to any WatchList drop- down and choose the *Load Columns* option. This opens a list of available column sets - both personally saved and pre-built. The chosen column set will instantly replace the existing column set.

Alternatively, you could view the Columns section of the *Library* button on the Main Toolbar to access a list of available i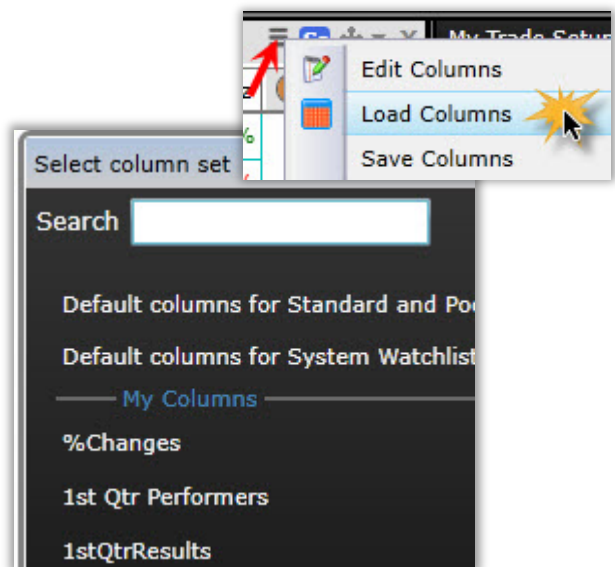ndividual columns and column sets. If you choose an individual column from the library, you'll assign it a position to the right or left of the existing columns within a WatchList. If you choose a column set from the library, you'll choose a WatchList whose columns should be replaced by the selected set.

Assigning Default Column Sets for WatchLists
Once added to a WatchList, a group of columns can be assigned as new default columns, so that any time a new WatchList window is generated, the default columns assigned will be visible. To assign a new default group of columns, select the *Properties* button located in the upper-right corner of every WatchList window and choose the *Save Columns* option. Choose *Save as Default for:* within the menu provided. Mark the check boxes next to any of the desired default targets, which include System WatchLists, EasyScans, Industry Group WatchLists, and Personal WatchLists. Select *Save* when finished.
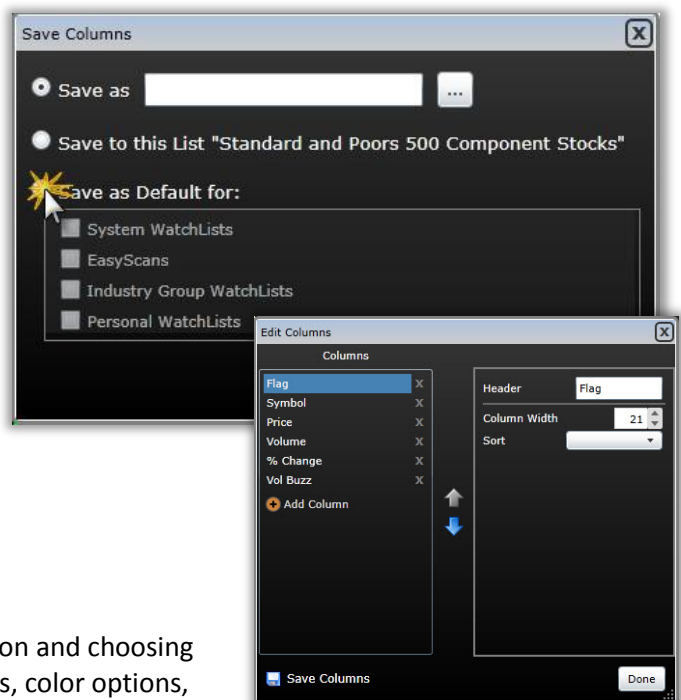
Edit Column Properties
Edit the column properties by clicking the Properties button and choosing the Edit Columns option. Change the order of the columns, color options, etc. from the menu.

Drawing Tools

A menu of Drawing Tools can be accessed by clicking the *Drawing Tools* icon (paint palette) at the top right of the chart. The keyboard shortcut Ctrl + T toggles the menu through the small icon, larger icon and no menu modes. When the *Drawing Tools* menu is visible, the *Drawing Tools* dialog is displayed, providing a menu of all available tools. The Drawing Tools include all of the following:

Lines - Trend Line, Horizontal Line, Vertical Line Chart Text
Fibonacci Tools - Arc, Retracement, Fan, Projections and Time Zone
Andrew's Pitchfork
Error Channels Gann Fans Quadrant Lines
Regression Tools - Regression Line, Regression Channel, Raff Regression Channel, and Error Channel Speed Lines
Tirone Levels
Shapes - Ellipse, Rectangle, and Arrows.

To activate any of these tools, select the desired tool from the Drawing Tools menu, then click within the Charting area to initiate the drawing.

The *Ctrl+Click* command initiates the last drawing tool used. There is also a *Repeat Mode* check box located in the bottom left corner of the Drawing Tools menu. If selected, any drawing tool initiated will remain active until the *Esc* command is used to exit the drawing or another drawing from the list is selected. The *Snap to* option automatically attaches the end of your drawing to the closest component of the bar/candle (OHLC).

Click any Chart drawing to edit or delete it from the Chart; all Chart drawings for a particular symbol may be managed by the *Drawings* button, located on the default Chart Toolbar.

Drawing Tool Settings
Right click on the chart to access the *Drawings* option located in the drop down menu to initiate the *Manage drawings for…* dialog. Within the dialog, it is possible to view a list of all drawings for a particular symbol with their details and manage the display settings.

The *Manage Drawings for…* dialog includes the following options:

- **Delete all drawings on (symbol)** – deletes all drawings from all drawing boards for the named symbol
- **Drawings individual drawings** – click the x next to any drawing name to delete that single drawing
- **Location** – at the right of each drawing's description the location of that drawing is stated in red
- **Board #**--shows the Drawing Board on which that particular drawing is located.
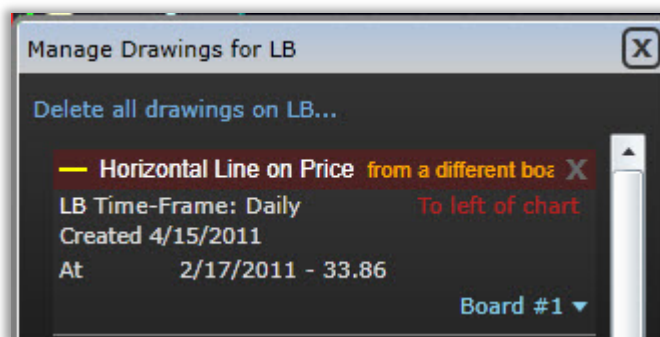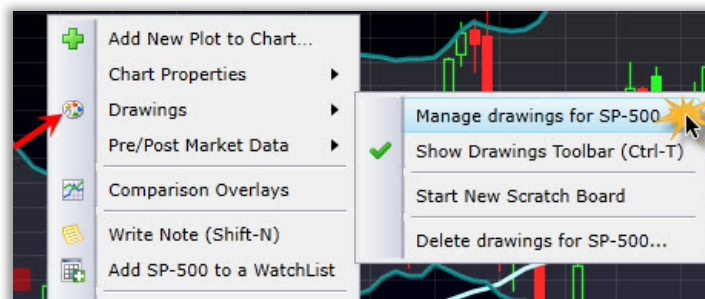
Drawing Boards

Drawings can now be assigned to specific *Drawing Boards*, which act as layers that keep drawings of different types separate. The *Drawing Boards* tool is located at the bottom of the *Drawing Tools* menu. Click the *Drawing Tools* icon (paint palette) to open the drawing tools. Click the *More* button to expand the menu and get more information on the Drawing Boards. (Alternatively, use the Ctrl + T hotkey.)

Any of the eight boards can be toggled on or off at any time for any chart using the tick boxes next to the board numbers. The highlighted board is the board on which any drawings made at that time will be placed. Click on any board to highlight it and drawings will be placed on that board. Check marks appear on any board whose drawings are visible (active).

Ctrl-Click any board number within the Drawing Toolbar to make its drawings visible. Any, all or none of the boards can be visible at any time.

Use the *Scratch board* for a particular chart template to jot thoughts and drawings that might not need to be available for use on any other templates.

The middle column of the menu contains the number of drawings for that symbol on that board. Click the number to move the drawings to another board or delete all of the drawings for that symbol from that board.

The right-hand column contains the number of symbols that have drawings on that board and the total number of drawings on that board. Click on that number to open a WatchList of those symbols, move all the drawings from that board to another or to delete all of the drawings from that board.

Drawing Boards		
Board	LB	#Syms/ Drawings
☐ #1	5	1159/1966
☐ #2	0	7/11
☐ #3	0	2/2
☐ #4	0	8/9
☐ #5	0	2/3
☐ #6	0	15/21
☐ #7	0	7/7
☐ #8	0	1/4
☑ scratch	0	503/866
☐ All	5	1094/2145
☑ Show drawings		
☑ Only > 5.0 % ⏶⏷ chart		

CREATING ALERTS FROM DRAWING TOOLS

Trendlines and horizontal lines drawn on Charts can be used to create real-time alerts. Click any trendline or horizontal line on a Chart and select *Set Alert* from the menu displayed.

Set frequency, expiration, and note information as desired; then select *OK* to finalize the alert. Review the alert within the *Alerts* dialog, which can be initiated by the *Alerts* button, located on the Main Toolbar.

For more information about alert functionality, see the *Alerts* section of the user guide, which follows.

Edit

Set Alert

Move to ▶

Manage drawings for LYB

✔ Show Drawings Toolbar (Ctrl-T)

Start New Scratch Board

Delete drawings for LYB...

✕ Delete
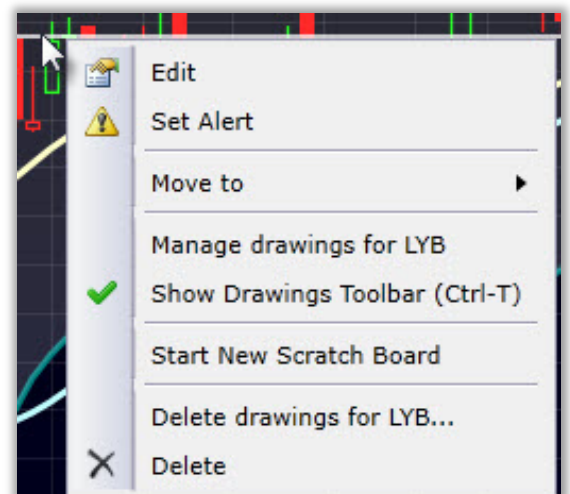
Alerts

WHAT ARE ALERTS AND HOW DO THEY WORK?

Alerts are notifications received from TC2000 when certain events take place on a specific symbol's Chart. There are five types of alerts: Price Alerts, Trendline Alerts, Scan Alerts, Condition Alerts, and Reminders.

Price Alerts trigger when an established price for an individual stock (or other issue) has been reached. Notification(s) for the event will depend on personally assigned notification settings.

Trendline Alerts trigger when a personally drawn trendline on a Chart has been violated. Note that to create a trendline alert, click the trendline (or horizontal line) of interest on a Chart and select *Set Alert* from the menu displayed. Notification(s) for the event will depend on personally assigned notification settings.

Scan Alerts monitor an individual stock for particular behavior(s). When the item being monitored meets the Conditions of the scan, the alert triggers. The scan used in a Scan Alert is chosen from the library of saved scans. Notification(s) for the event will depend on personally assigned notification settings.

Condition Alerts monitor either an individual stock or a group of stocks (or other items) for a particular behavior. The behavior monitored is based on the selection of a Condition from the library of saved Conditions. When one or any of the items being monitored meets the Condition, the alert triggers. Notification(s) for the event will depend on personally assigned notification settings.

Reminders are set for an individual stock (or other item) and are assigned a particular reminder date. Notification(s) for the reminder will depend on personally assigned notification settings.

The easiest way to initiate an alert is to Right Click anywhere on the chart, select Set Alert for (sym) and then choose the type of alert desired.

Depending on the type of Alert, make the selections as to conditions, symbol and Alert Name. Common to all alert types is the Restart option. Choose whether to restart the alert (if unchecked, the alert will not be restarted after it fires). If you choose to restart it, choose when (after it fires the first time) it should restart. Also, choose how long to monitor the alert.

Leave a description to and make any changes to the notification settings that may be desired (optional).

Any existing alerts can be viewed and managed by the Alert Console, which is accessible using the *Alerts* button, located on the Main Toolbar. The *Alert Console* generated by the *Alerts* button includes options for managing existing alerts; alerts account information; delivery settings options; the ability to create new alerts; the status of existing alerts and a list of all existing alerts with relevant information. You can also access the *Alert Log* from this menu.
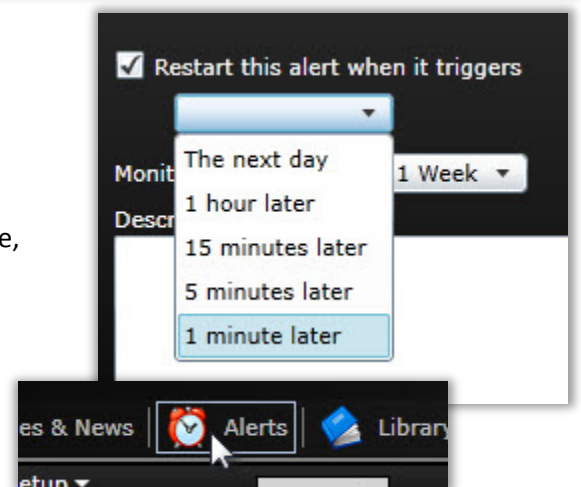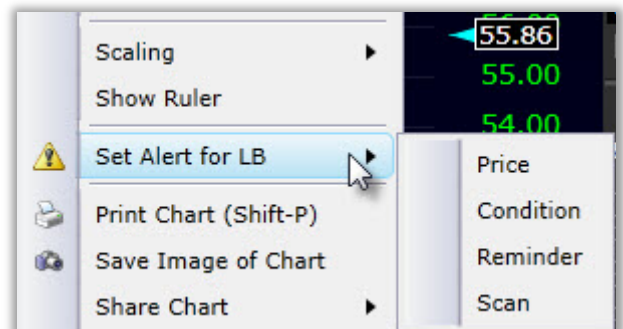
The *Alert Console* displays any and all alerts. Symbol, Date Created, Name, Status with status light, and Management columns are all displayed for this type of alert.

The console gives you an easy, visual way to see the current status of all your alerts: the status lights.

- A Green Light—means the alert is currently running and actively being monitored by TC2000 servers
- A Yellow Light—means the alert has triggered, but is now paused waiting for the restart time you set. At that point that alert will restart and be actively monitored again
- A Red Light—simply means the alert is no longer being monitored at all
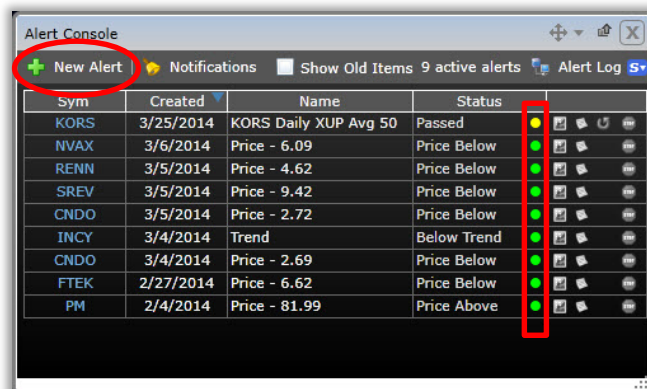
Within the *Alerts Console*, use the *New Alert* button to initiate the creation of any new alert. Trendline Alerts cannot be 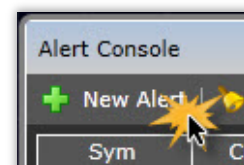initiated in this way and must be initiated by the selection of a trendline from a Chart.) For all other types of alerts, select the desired alert type from the menu provided and follow on-screen commands within type-specific dialogs to assign alert settings. Once created, the new alert will be displayed in the *Alert Console*.

Use the *Notifications* button to assign delivery settings for any triggered alerts. Add, delete, activate, or deactivate any Email address for delivery from this location. Select one of the Email addresses to either change the address assigned or to activate the *Text Message* option. Then set in- application alert settings for single symbols and lists of symbols below.
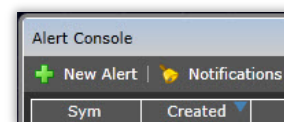
By default, when an alert expires, it is removed from the displayed list in the *Alert Console*. To view expired or completed alerts, place a check mark in the box located next to *Show Old Items*. Toggle this option based on desired view.
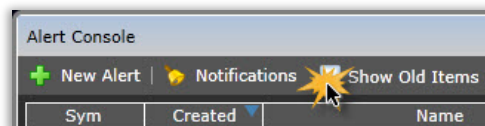
Select the *Alert Log* button to initiate the Alert Log window, which may be left floating (as it is by default) or may be docked or tabbed in accordance with standard screen real estate operations for TC2000 v12.4. Within the Alert Log window, use the *Time Period* drop-down to assign the number of days of information that should be displayed. Also, assign whether list alerts should be displayed using the check mark next to *Include List Alerts.* Information included in the log is for any alert that has triggered historically. Data displayed for each triggered alert includes Date and Time, Relevant Symbol, Status when Triggered, Name of Alert, and icons for Chart view and individual symbol log information.
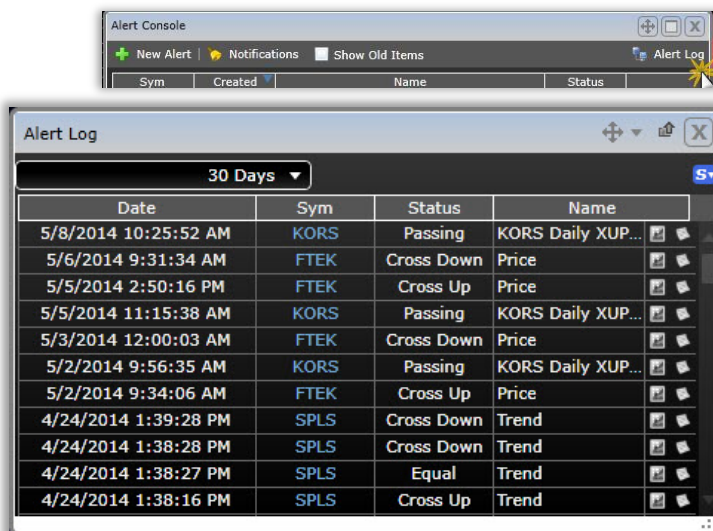
Notes & News

Notes are content written by a user associated with a specific symbol. News is content published by either a journalistic news source or to a social media outlet such as Twitter. Notes and News from a variety of sources are all aggregated inside TC2000, such that when researching Charts, related news for Chart symbols is available at your fingertips.

The types of Notes and News available include the following:
- Personal notes you have written for a symbol
- Notes of other TC2000 users you choose to follow
- News aggregated from journalistic news sources
- Symbol-specific Twitter posts
- Symbol-specific Corporate Calendar events (Platinum only)

The TC Classic and TC Classic+ Layout Tabs include three Notes & News windows by default: All, My Notes, and Following.

The All window includes all of the types of posts included in the list above. As articles or posts are created, they instantly become visible within the All window. The My Notes window displays notes that you have personally written or that you have copied from another Notes & News window. The Following window displays posts written by other TC2000 users who you have specifically chosen to follow.

In addition to the windows listed above, the TC Classic+ Layout Tab also includes the Corporate Calendar (Platinum only)
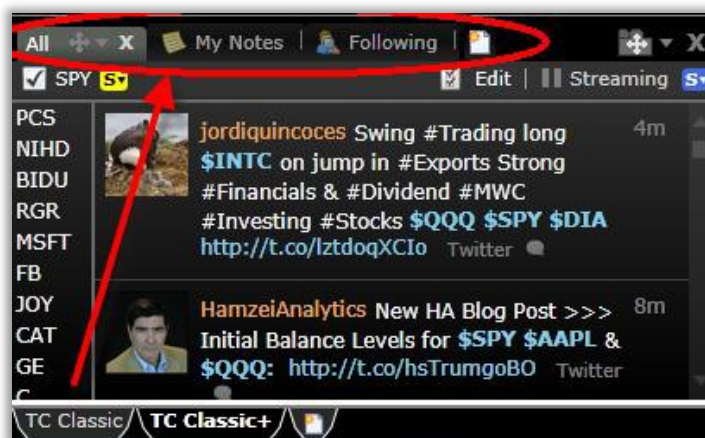
Things to Remember about Every Notes & News Window:

1. A check in the Symbol box means that only posts related to the current symbol will be displayed within the window. By default, the Symbol Linking color group for Notes & News windows is yellow, which means the symbol for which information is displayed will change any time any other symbol within the Layout Tab is selected. Remove the check from the Symbol box to show the most recent posts related to all symbols.
2. When a check in the Symbol box is present, a list of symbols is displayed along the left side of the window. The list contains symbols most-recently posted about, so that while the posts within the window are related only to the symbol you've most-recently chosen, it is still possible to see what symbols other users and news sources are posting about.
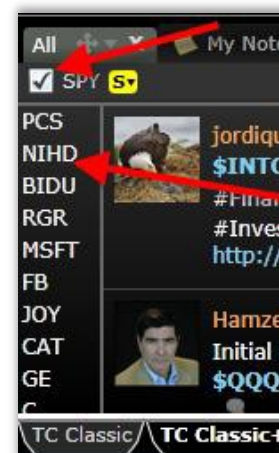
3. If content is streaming into a window quickly, click the *Streaming* button to pause it.
4. If you want to change the type of content displayed within a Notes or News window, click the *Edit* button in its upper-right corner.
5. For posts related to full articles, click the Read Story link to view the entire story text. To write a comment on a post, click the *Comment* button and enter text.
6. Any post from any Notes or News window can be copied to your My Notes window. Click the name of the author and choose Copy Post to My Notes.
7. If you come across a post and want to view all posts by the same author, click the name of the author and choose View "Author". You could also choose to *Follow* that author so that all of their future posts would automatically show up in your Following window.
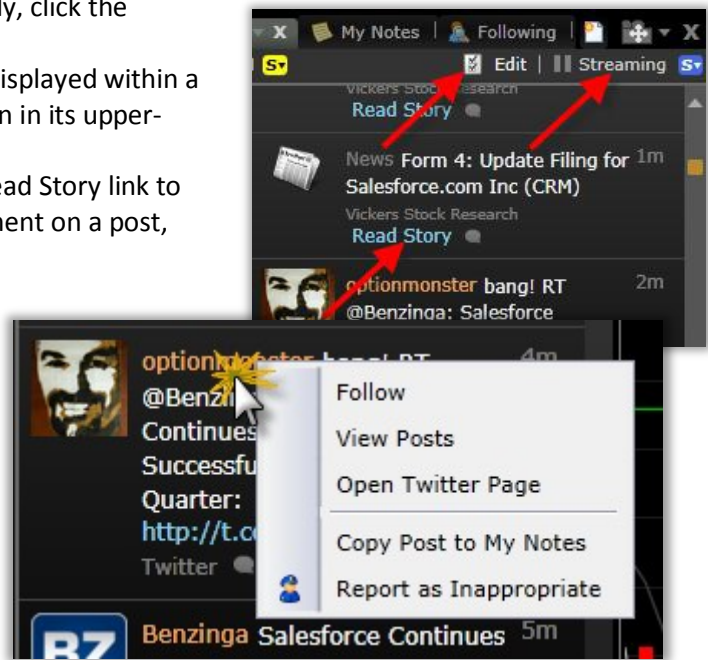
CREATING NOTES FOR CHARTS

Notes that are written can be either general or symbol-specific. To write a notes, use one of these methods: Hit **Shift-N** on the keyboard to initiate a note; select the *Notes & News* button on the Main Toolbar and select Write Note; or within a My Notes window that is already opened, click where prompted to write a note.

When you initiate a note, the current symbol is included in the note body as a clickable link in this format: $SYM. Other symbols included in the note written in the same format will also be clickable links that are tied to any Charts that share the same Symbol Linking color group (as the output color group assigned in the Notes or News window).

Charts, WatchLists, EasyScans, and Layout Tabs can all be attached to notes. When an attachment is included with a note, a copy of the attached item can be opened directly from the post in a Notes window in the future.

Notes can be posted privately or can be posted publically. To post a note privately, select *Post to Myself* when finished drafting the note. Only you will have access to a privately posted note in the future. To post a note publically, choose *Post Shared* when finished drafting the note. Notes posted publically are visible for others who are following your posts and for those who choose to view a window of All TC2000 User Notes.
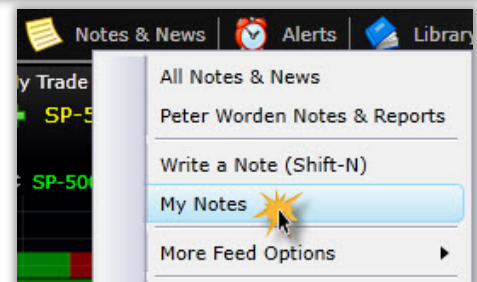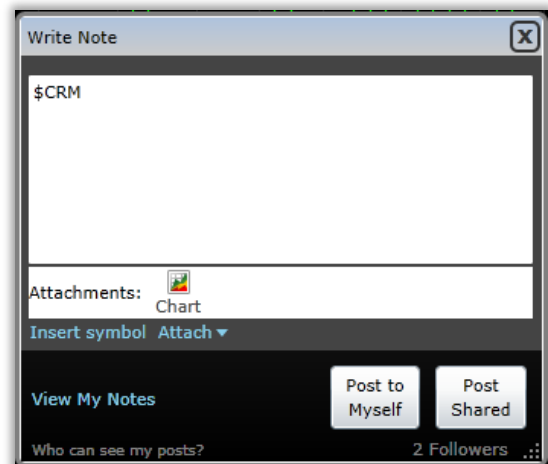
To view a list of your notes in the future, either view the My Notes window included in the TC Classic and TC Classic+ Layout Tabs, or select the *Notes & News* button on the Main Toolbar, and choose *My Notes*. Once the My Notes window is visible, to view only notes for the current symbol, place a check in the *Symbol* box in the upper-left corner. To view a list of all previously written and copied notes, remove the check from the Symbol box.

It is also possible to sort a WatchList by most recent note date. Use the *Add Column* button within a WatchList and choose My Notes from the Basic Columns section. Then sort by the column by clicking its header to find the most recent notes.

Remember that posts found in other Notes and News windows can be copied to your personal Notes window. Click the name of the author whose post is being copied, and select *Copy Post to My Notes*.
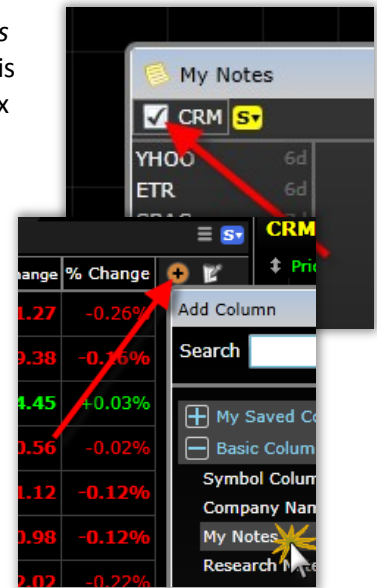
NOTES & NEWS BUTTON (MAIN TOOLBAR)

From the *Notes & News* button on the Main Toolbar, all of the following can be done:

- Various Notes and News windows can be generated
- Your Profile, including followers and people followed, can be managed
- New personal notes can be initiated.
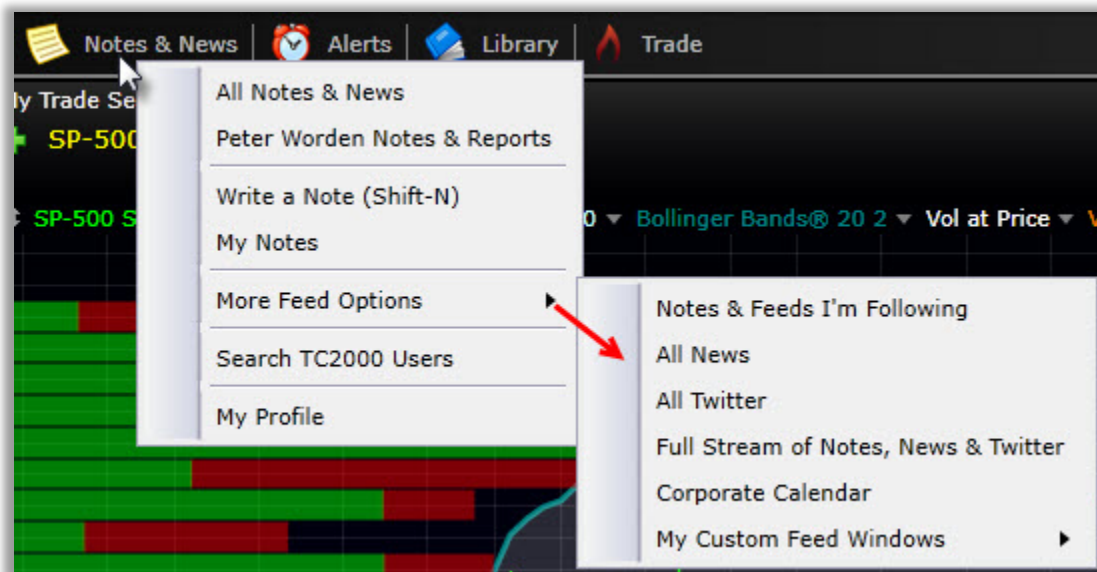
The following menu items with corresponding functionalities are located within the *Notes & News* button:

All Notes & News

Opens a window with the streaming feed of all News, Personal Notes,TC2000 User Notes, Twitter Posts and Corporate Calendar (Corporate Calendar is a Platinum exclusive feature).

Peter Worden Notes & Reports

Opens a window with the aggregated notes and nightly Worden Reports from Peter Worden (see below).

Write a Note -

Generate a new note window for a personal note.

My Notes -

Generate a window containing only your personally written and copied notes and/or posts. A My Notes window is part of the TC Classic and TC Classic+ Layout Tabs by default.

More Feed Options

View a list of various types of notes content that can be generated. Of note are the All TC2000 User Notes, Custom Feed Windows and Corporate Calendar items.

- Choose All TC2000 User Notes to generate a window that includes posts written by any other TC2000 User that was shared publically.
- Choose Corporate Calendar (Platinum only) to view a list of upcoming managerial and financial events for publicly traded companies, including General Meetings, Conference Calls, and Earnings Announcements.

Search TC2000 User Notes -

Search for a specific TC2000 User by name and generate a window that includes any of their publically posted notes.

My Profile -

Adjust name display settings, the list of people whose notes and posts are being followed, and manage an Ignored Users list. Add a user to the Ignored Users list if their publically posted content should not be visible in your Notes and News windows - and should not be visible within a User Group that's being viewed.
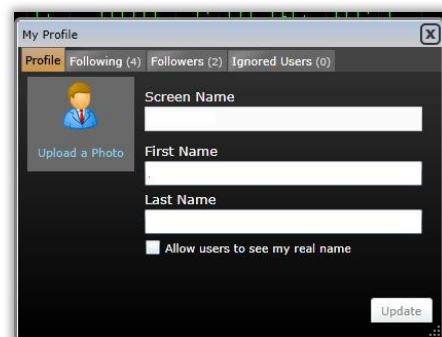
PETER WORDEN NOTES & REPORTS

The daily Worden Report and Notes from Peter Worden contain technical analysis lessons on individual stocks, ETFs or Indices (Worden Notes) as well as the evening overview of current Market conditions (Worden Report).

Use the spacebar to move consecutively through the WatchList from the stocks with most recent notes back. Use the scroll bar along the right side of the notes to scroll "blog" style through all comments on an individual symbol.

Click on the Reports Tab to see the nightly Worden Reports arranged from the most recent back. Use the scroll bar on the right of the reports to view previous notes.
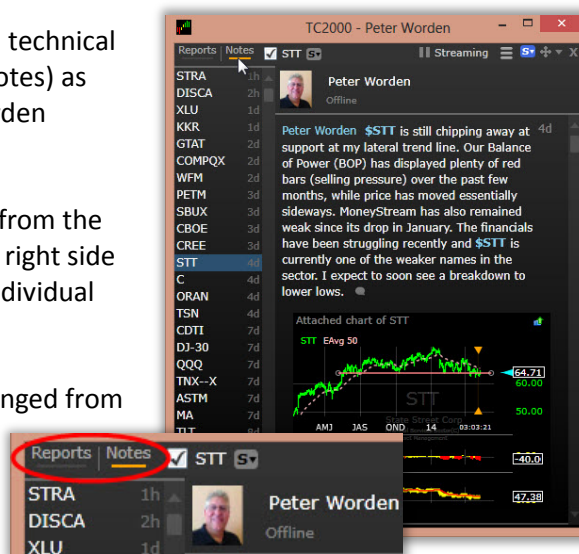
User Groups

WHAT ARE USER GROUPS AND HOW DO THEY WORK?

User Groups (Platinum only) are channels of communication between you and other TC2000 users. It is possible to communicate with others individually through Private Messaging, or as a group through User Groups.

All User Group options can be accessed by the *User Group* button located in the upper-right corner of the application. Click on the desired group name to open a chat window for that group.

Click to chat where prompted within a room. Charts, WatchLists, EasyScans, and Layout Tabs can be attached for others to view by the *Attach* button within the User Group editor.

Within the User Group dialog, you can search for the name of any of the rooms you may have been a member of in a previous version of TC2000.

Within a User Group window, click a poster's name to access a menu of options, including Follow, View Notes, Send Private Message, View Profile, Ignore, Report as Inappropriate, and Copy Post to My Notes. To manage your Ignored list, visit **Notes
& News > Profile> Ignored Users**.

You can also initiate your own room by the *Create User Group* button. Provide a name, and use the *Edit* button to invite other TC2000 users to join.

Use the Private Messages tab within the User Group dialog to send a one-on-one message to another user. The people you're following are listed for easy access. Click a name to begin a private message. Click where prompted to type your message; Charts, WatchLists, EasyScans, and Layout Tabs can be attached to private messages. Use the *Create User Group* button within a Private Message to create a User Group that includes you and your messaging partner. Other users can then be added to the room.
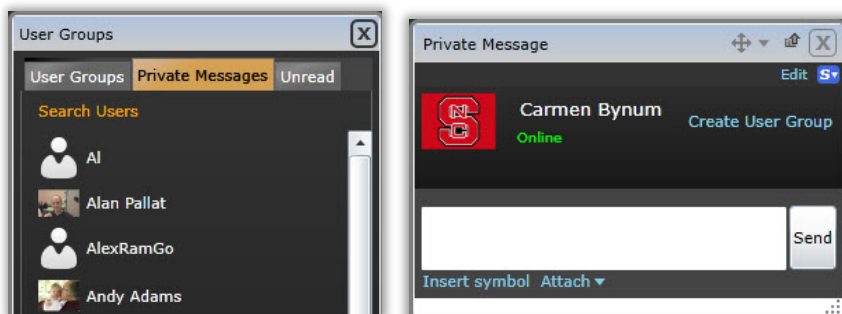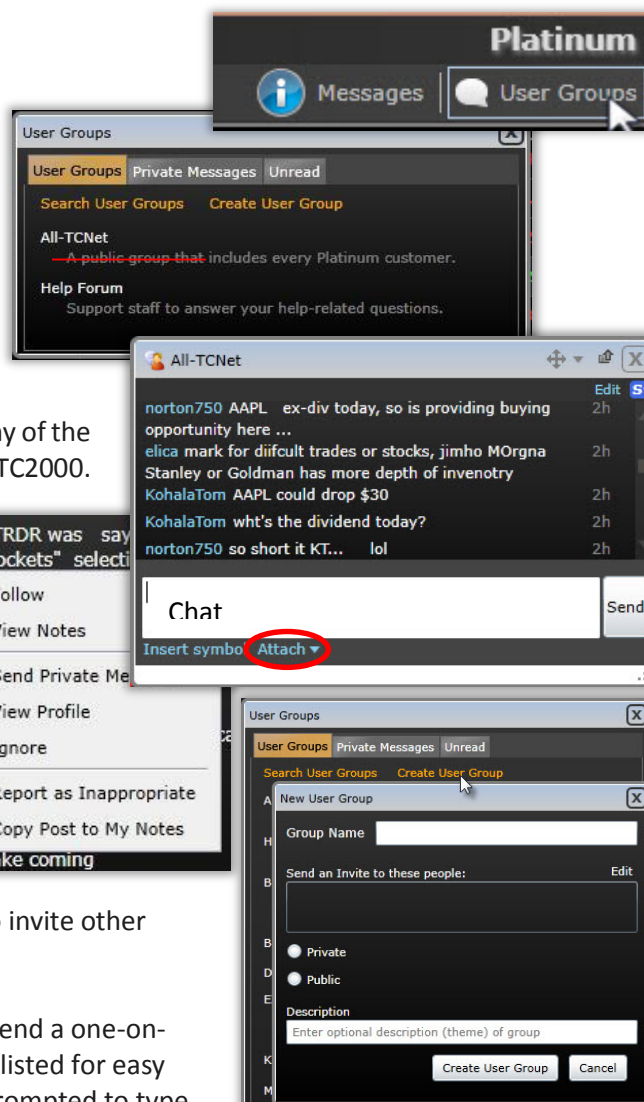
Appendix: Personal Criteria Formulas

BOOLEAN VS. EQUATIONS - MAKE PCFS MORE VERSATILE

All personal criteria formulas (PCFs) can be split into two different categories or styles. All PCFs are either Boolean with logical operators (<,>, or =) or equations (no logical operators and return a range of values). Though there is nothing wrong with Boolean PCFs, PCFs written as equations are more flexible and offer many advantages.

If you want to find stocks that had higher volume today than yesterday, your first instinct might be to write the Condition like:

More Volume Today
V > V1

"V" is today's volume and "V1" is the volume one day ago (yesterday). There is nothing wrong with the formula above and it would work perfectly to find what you wanted. Now say you also wanted to find stocks where the volume today was lower than yesterday. You would need to create a second formula:

Less Volume Today V
< V1

Later you may want to find stocks with the same volume as the day before:

Equal Volume Today and Yesterday
V = V1

You may want to find stocks with the volume 100,000 shares higher today than yesterday (volume in TC2000 v11 is NO LONGER reported in 100s):

100,000 More Volume Today than Yesterday V
> (V1 + 100000)

Though the above PCFs are completely accurate and would find what you are looking for, you can find all of these Conditions with only ONE PCF:

Volume Net Change
V - V1

In essence you use PCFs not to find the Condition you seek but to furnish the data needed to later isolate certain stocks. By using subtraction instead of a Boolean operator you can find any type of relationship between the volume today and yesterday's volume with only one formula! Boolean PCFs give only two potential results; every stock in the system returns either a "True" meaning the stock meets the formula's requirements (Today's volume IS higher than yesterday) or it returns a "False" meaning the stock does not meet the requirements (Today's volume IS NOT higher than yesterday). With Boolean logic, a PCF splits all the stocks into only two groups (True and False). A PCF written as an equations (like V-V1) returns a value for every stock in the system.

Equation PCFs can be limited using the range selector in the *Edit Scan* dialog for any scan being performed.

Using the range selector, you dictate how to limit the relationship. To find stocks that had more volume today than yesterday, limit Volume Net Change to only values greater than zero. Lower volume is found by limiting the range to only negative values. To uncover equal volume stocks limit the values to zero. Isolate stocks with 100,000 shares or more by limiting values to 100000 to MAX (100,000 or higher). PCFs written as equations also make great sort criteria, unlike Boolean criteria, because they return a range of values to rank stocks versus each other with.

Writing PCFs as an equation is easy if you use the following guidelines:

1. **Make your PCFs return a value by making them equations.**
2. **Every time you would use a logical operator, you can replace it with subtraction or division to make it an equation.**
3. **Use a PCF to extract information about a Condition or relationship. Use scan, or sort, to later isolate the stocks based on that relationship.**

When looking for a single element with a certain value, instead of locking the value range in the PCF itself with a Boolean operator, make the PCF return the values for the single element and use the range selector in a scan to set the value range desired (TSV19 instead of TSV19 > 0).

If looking for one element to be more, less or equal to another element, instead of using a Boolean operator, use subtraction to get the net difference or division to return the ratio between the elements. With the net difference or ratio, you can set the range of values to find the type of relationship you need.

EQUATION TEMPLATES

To make it easier writing your formulas as equations, here are a few templates to work from:

> **Percent Change**
>> **(X - Y) / Y *100**
>> Where X is the most recent element (The most current value like today's value), and
>>> Y is the older element (the previous value like yesterday's value)

Dividing the difference of a recent and past element then multiplying it all by one hundred makes an equation a percent change.

> **One vs. Another - A Ratio**
>> **X / Y**
>> Where X is one element and Y is the other element

This format gives the ratio between two separate elements. Values of "1" for this equation mean that X and Y are equal. Values greater than "1" indicate X has a higher value than Y, values less than "1" indicate Y is greater in value than X. A value of "2" indicates that X is twice the value of Y; a value of .5 indicates that X is half the value of Y, etc.

> **One as a Percent of Another**
>> **X / Y *100**
>> Where X is one element and Y is the other element

This format is the same as One vs. Another except the result is multiplied by one hundred to make the results indicate what percentage of Y is the value of X. Values of 100 mean X is 100% the value of Y (they are the same). A value of 50 designates X is 50% the value of Y (X is half of Y) and a value of 300 means X is 300% the value of Y (X is three-times the value of Y).

To know when to use either subtraction or division, decide if the raw original values should influence the result or if the raw original values should not be a factor. As an example, compare today's price to yesterday's price. Imagine stock ABC has a price per share of $150 yesterday and a price of $165 today. Also assume that stock XYZ has a price per share of $1.00 yesterday and a price of $1.10 today. If you want the two stocks to return different values sensitive to their difference in pricing, you want to use subtraction and create a net change.

Net Change:	C - C1
Stock ABC:	165 - 150 = 15
Stock XYZ:	1.10 - 1.00 = 0.10

With Net Change the results give Stock ABC a greater value for the criterion than Stock XYZ due to the difference in their price level.

If you want to discount, normalize or ignore the difference in their original values you want to use division and create either a ratio or a percent change.

Percent Change:	(C - C1) / C1 *100
Stock ABC:	(165 -150) / 150 *100 = 10
Stock XYZ:	(1.1 - 1) / *100 = 10

With a percent change, the stocks return equal values because using division negates the difference between the prices of the stocks and only reveals the values relative to each other.

Typically experimenting with both subtraction and division and then sorting a list by the results reveals the one to use in any given situation.

The syntax or language for writing Personal Criteria Formulas is very simple. This table explains the available elements and their purpose and meaning. Use the example formulas in the appendix to increase your ability to combine these elements accurately and efficiently.

Element	Meaning Returned	Element	Meaning Returned
O	Open Price	BOP1	One Day Average of BOP
H	High Price	TSV19	TSV with a Period of 19
L	Low Price	*	Multiply
C	Closing Price or Last Price	/	Divide
V	Volume	+	Add
AVG	Average of the Values	-	Subtract
MAX	Highest of the Values	ABS()	Value negating positive or negative
MIN	Lowest of the Values	LOG()	Log of a value
STOC12.5	Stochastic 12,5	EXP()	Exponential of a value
RSI30.9	Wilder's RSI 30, 9	SQR()	Square of a value

Example - Range vs. Average Range

Purpose: Determine if today's daily spread or range is abnormally high or low for the stock as compared to its average range.

Step 1: Decide what type of symbols or circumstances you are seeking.
You want to know how the size of today's bar compares to the normal daily trading range of the stock in order to find abnormally high or low activity.

Step 2: Decide what information you need to extract from TC2000 to find the desired symbols or circumstances.
You need to know two things about every stock to find where the close is as a percent of the daily range:

1. What today's range is
2. What the stock's average range is in the past

Step 3: Manipulate the information extracted from TC2000 to uncover what you are looking for.
Once you know how today's range compares to the average range for a stock, you can determine if today's range (or spread) is higher or lower than normal. This should help you uncover stocks experiencing abnormal activity.

Formula:
(H - L) / (AVGH60 - AVGL60) *100
*This formula represents the current price bar range as a percentage of the 60 bar average price bar range.

<u>Notes</u>