

C H A P T E R

# 2

## *Advanced Charting*

eSignal's Advanced Charting offers an extremely flexible user interface and includes a full array of line drawing tools, advanced analytics and a formula engine that lets you create your own studies. You can import and create, save and even encrypt your own formulas, select from an extensive library of formulas and helpers, use advanced scaling features and customize your own Advanced Charting Favorites Toolbar.

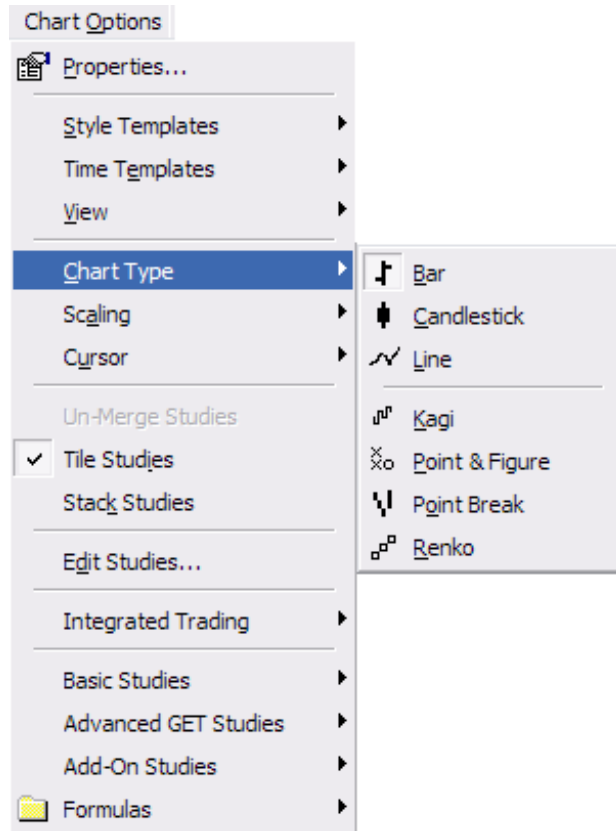
You can choose from the following Advanced Chart types:

**Daily charts:** Daily charts display historical daily data for an issue in graphical format.

**Interval charts:** Interval charts track an issue's current and previous intraday days' prices in time intervals that you choose such as 15, 30, or 60 minutes.

**Note:** You can retrieve up to 120 days of interval data in an Advanced Chart window.

You can access the Advanced Charts through the Advanced Chart Toolbar, the Chart Options menu, or by right-clicking inside a bar chart.



## ***eSignal Advanced Chart Styles***

eSignal's Advanced Charting supports the following chart styles:

**Bar**

**Candlestick**

**Line**

**Kagi**


**Point & Figure**

**Point Break**

**Renko**

Each of these chart types is described in the following sections.

## Bar

 A Bar Chart displays a series of bars for the interval you specify. This bar is comprised of four separate data points:

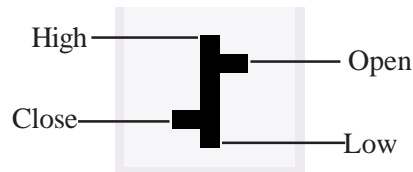
**Open:** the opening price of the issue at the beginning of the bar interval

**High:** the highest price the issue reached during the bar interval

**Low:** the lowest price the issue reached during the bar interval.

**Close:** the closing price of the stock at the end of the bar interval.

The Open, High, Low and Close are specific to the time frame covered by each bar. A Bar's height is derived from its high and low prices during the period it covers. The Open is displayed on each bar as a small horizontal tick to the left side of the bar while the Close is shown on each bar as a small horizontal tick to the right side of the bar.



If an OHLC Bar is green, that means that its closing price was higher than its opening price. Conversely, if an OHLC bar is red, its closing price was lower than its opening price.



## Candlestick

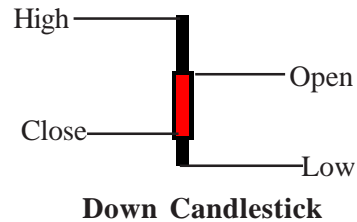
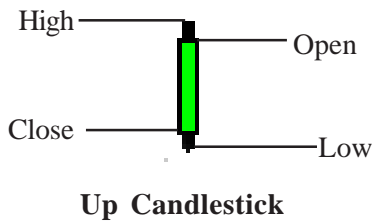
Like Bar charts, Candlestick charts plot open, high, low, and close data for the chart interval you specify. However, Candlestick charts display OHLC data in a more visual way which many traders find appealing.

The body of a Candlestick is drawn as a rectangle between the opening and the closing prices during the interval (e.g., 15 minutes). You will notice that Candlesticks are either red or green in an eSignal Advanced Chart window. Candlestick coloration depends on the price activity during the interval the Candlestick represents. The wicks at the top and the bottom of each Candlestick represent the high and low prices traded during the interval.



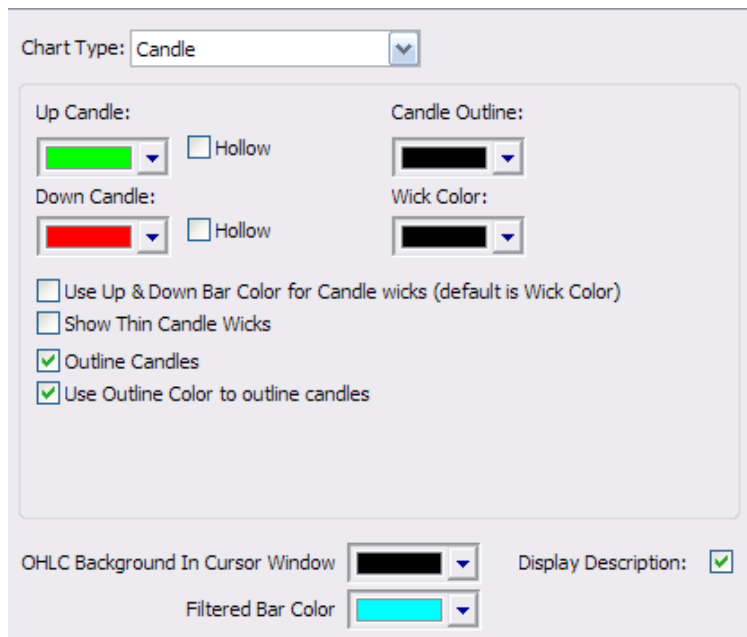
## A Closer Look At Candlesticks

If the open is greater than the close, the Candlestick is colored in red. Conversely, if the Open is lower than the close, the Candlestick is green.



To change the colors or line styles used for a Candlestick chart:

- 1 Right click on the Chart and select **Edit Studies**.
- 2 The Study Properties window opens. Customize your color and line choices (thin wick or fat wick).
- 3 When you are finished making changes, click **Apply This** and then **OK** to make the changes to the current study while the Properties window is open. Click **Apply All** and then **OK** if you made property changes to several studies and want to change them all while the window is still open.

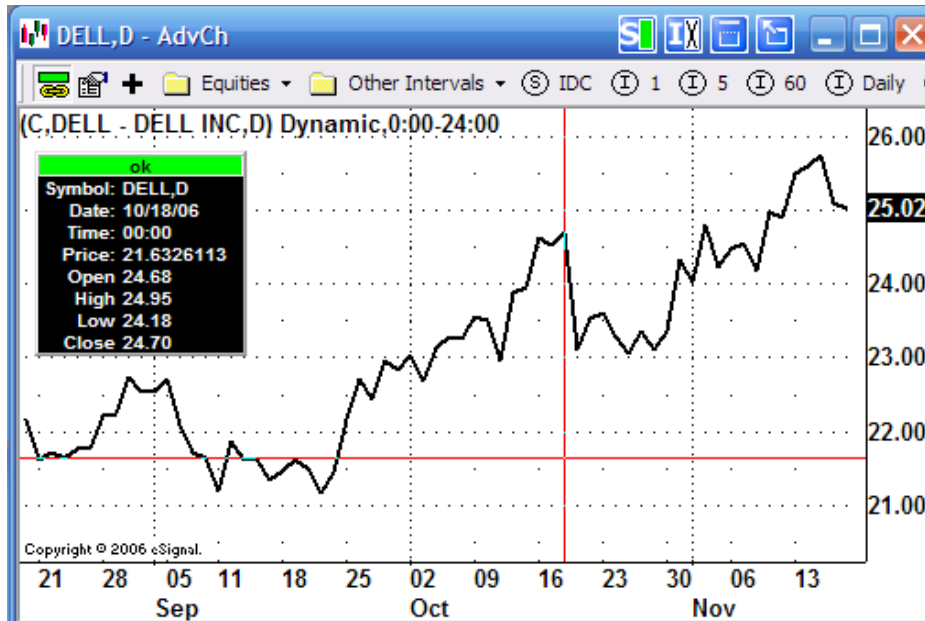


## Line




A Line chart plots the closing price for the interval you specify (i.e. 5 minute intra-day). If you are overlaying multiple symbols on a chart, using a Line chart format makes the chart easier to read.

Shortcut: Press the Home key to go to the latest bar in the active Advanced Chart window.




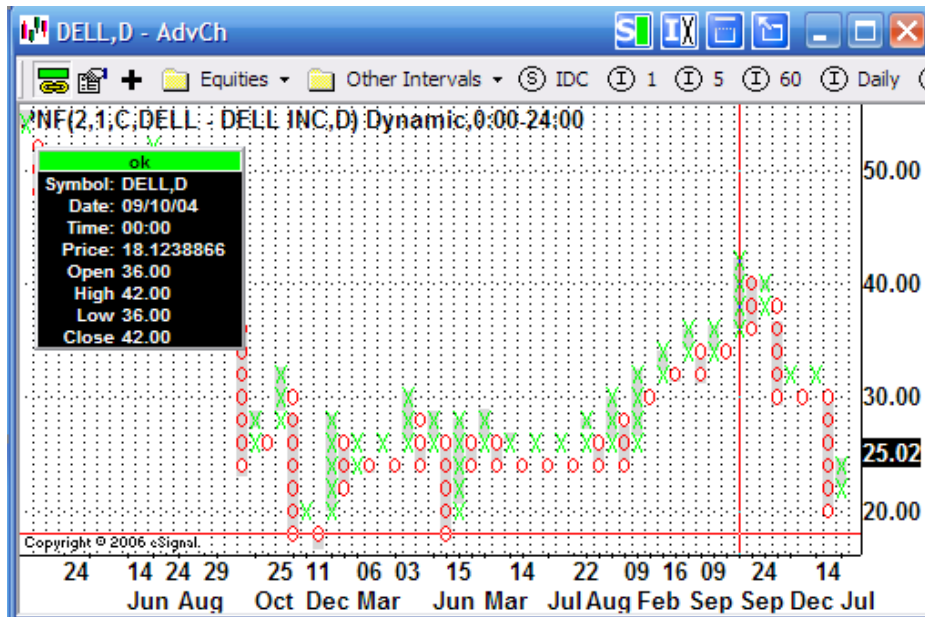
## Kagi

 Kagi charts plot a single line until price reverses by a predetermined amount where another line is then begun. It is an attempt to smooth out the noise of daily trading activity so that trend can be more clearly represented. The thickness of Kagi lines are significant when prior highs and prior lows are exceeded.




## Point and Figure

 Point and Figure charts disregard the passage of time and chart only price changes. An "x" is drawn when the price rises by a predefined box size. An "o" is drawn if the price falls by a predefined box size. No x's or o's are drawn if the market moves an amount less than the box size.





## Point Break

 A Point Break chart displays new lines if the close of the period moves outside of the period of the previous block of trading. If not, then no lines are drawn.

The first line is drawn when the prices are greater, lower, or the same as the opening price. If prices exceed the prior high (low) price a new line is drawn. If current prices are within the prior high or low, no new line is drawn.

When using a Point Break chart, prices must exceed the prior three high or low lines to indicate a reversal.



## Renko



Renko charts display price movements if they are bigger than a fixed amount.



## Anatomy of an Advanced Chart Window

An Advanced Chart window displays historical data for issues in graphical form. The data displayed is determined by the symbol you enter, the chart type and the time interval you select.

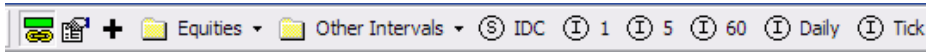


What could be simpler than clicking a toolbar button to pull up an Advanced Chart window that you access often? eSignal's Advanced Chart window contains a Favorites Toolbar that lets you access your favorite charts instantly. The Favorites toolbar lets you pull up preset charts that you can further customize to meet your needs.

When you initially open an Advanced Chart, the Favorites toolbar contains certain preset folders (Equities and Other Intervals) and shortcuts (1 minute interval chart, Daily etc.). You can experiment with the Favorites toolbar shortcuts and pull-down menu choices and then customize them to reflect your own needs.

You can customize the Favorites toolbar by adding new shortcut folder names and favorites names within the folders, by removing existing favorites shortcuts, changing the content of existing folders, and even adding new direct toolbar shortcuts.

When you open an Advanced Chart window, the Favorites Toolbar appears at the top of the window.



The Favorites toolbar contains several chart shortcut icons.



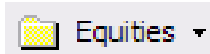
Click the **Link** button to link the active Advanced Chart window symbol to your Quote window cursor. When the link feature is enabled, the Advanced Chart window symbol changes whenever you move your cursor to a new symbol.



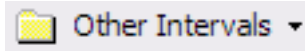
Click the **Properties** button to open the Properties window, where you can customize your favorite charts and set other chart options.



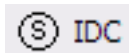
Click the **Add** button to add a new custom chart to your Favorites toolbar.



Click the arrow next to the **Equities** button to select a favorite equity chart from those you have already saved to the Equities folder.



Click the arrow next to the **Other Intervals** button to apply them to the active Advanced Chart window.



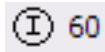
Click the **IDC** button to convert the active Advanced Chart window to a daily chart for the symbol IDC.



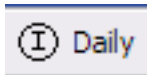
Click the **1** button to change to a 1 minute intraday chart for the active Advanced Chart window symbol.



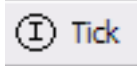
Click the **5** button to change to a 5 minute intraday chart for the active Advanced Chart window symbol.



Click the **60** button to change to a 60 minute intraday chart for the active Advanced Chart window symbol.



Click the **Daily** button to change to a daily chart for the active Advanced Chart window symbol.

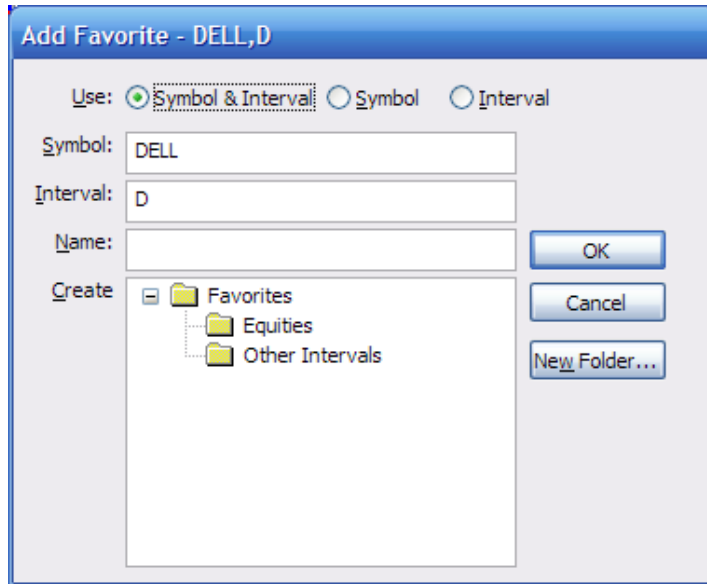


Click the **Tick** button to change the active Advanced Chart to a tick chart.

## Building a Favorites List

You can use the Favorites toolbar to create your own favorite list of symbols and intervals (e.g. INTC, 5), symbols (INTC) and intervals (e.g. 5) used to quickly retrieve the exact charts you need. To add to your favorites list:

1. Click the **Add** button. The Add Favorite window opens.

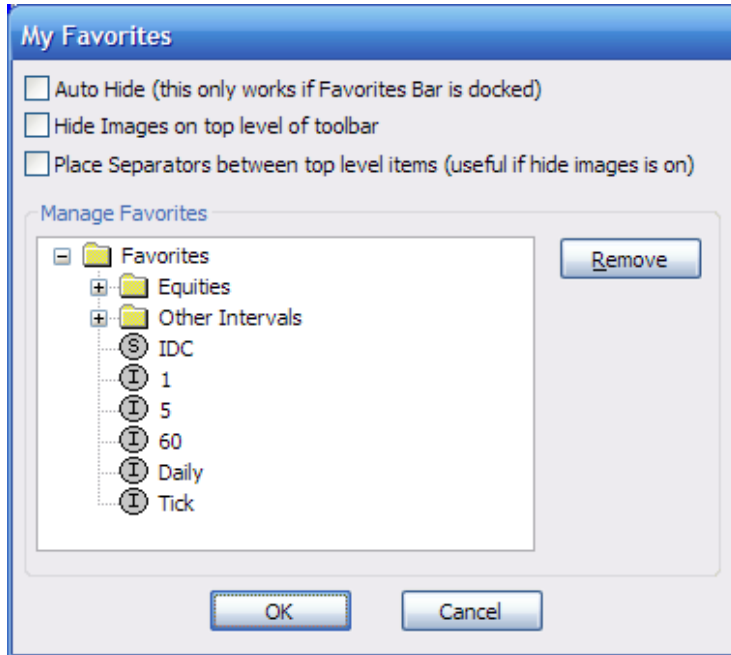


2. In the Use area, select either **Symbol & Interval**, **Symbol**, or **Interval**.
3. Enter the symbol, interval (D=Daily, 15= 15 minutes, T=Tick, etc.), enter a name for the favorite, select a folder where you want to save the favorite, and click **OK**.
4. If you want to create a new folder, click on the **Favorites** folder and then click the **New Folder** button. Then enter the name of the new folder in the window that appears and click **OK** to save it. You can also create folders within folders (by clicking on the + sign).
5. If you want to add a Favorite shortcut button directly to the Favorites toolbar, close the **Favorites** folder if it is open by clicking the - to its left. Then add a new favorite name, symbol and interval and click **OK** to add it.

Thereafter, you can access new favorite charts from the Equities, Other Intervals, or other pull-down menus you have defined or, directly from a Favorites toolbar icon.

## Managing Your Favorites List

To manage your favorites list, click the **Properties** button on the toolbar to view saved favorite charts in the Equities, Other Interval, Favorites and other user-defined folders. The My Favorites window opens.



\* Expand the Favorites, Equities, or Other Intervals folders to list currently saved favorites in these folders. To remove a favorite, click on it and then click the Remove button.

\* To add a new favorite chart to the list, click on the + on the Favorites toolbar, select the folder you want to save it in, then enter the symbol, interval, and favor-ite name in the window that appears, and click OK to add the new favorite.

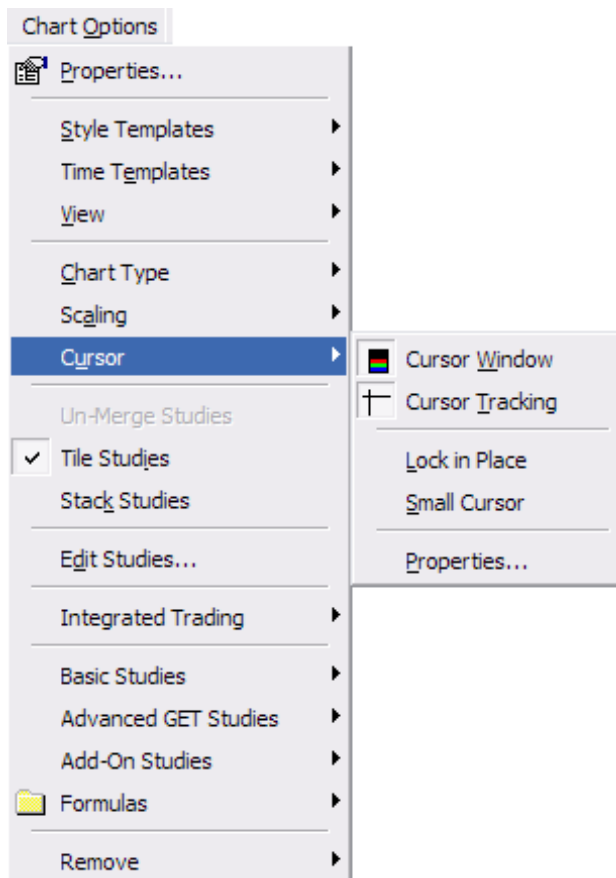
You can also create new favorites folders. To create a new folder, click the + on the Favorites toolbar, click on the Favorites folder in the My Favorites window, enter a folder name, then click the Add Folder button. Once you have created a new folder, select it from the My Favorites window, then enter a new symbol, interval and name for each favorite chart that you want to put in the new folder.

- \* The Favorites Toolbar supports auto hide. You enable auto hiding by clicking on the Properties toolbar button, checking the Auto Hide box, and clicking OK. When the auto hide feature is active, the Favorites Toolbar appears when you move your mouse cursor where it was resizing, and disappears when the mouse is moved off the toolbar.
- \* The Favorites Toolbar is dockable to other edges of the window (top, bottom, left, right). All other eSignal toolbars are dockable too. If a toolbar is docked, you can turn on the autohide feature.
- \* You can conserve screen space on the toolbar by selecting some options under properties (separators between top level items, hide images).

## Cursor Window

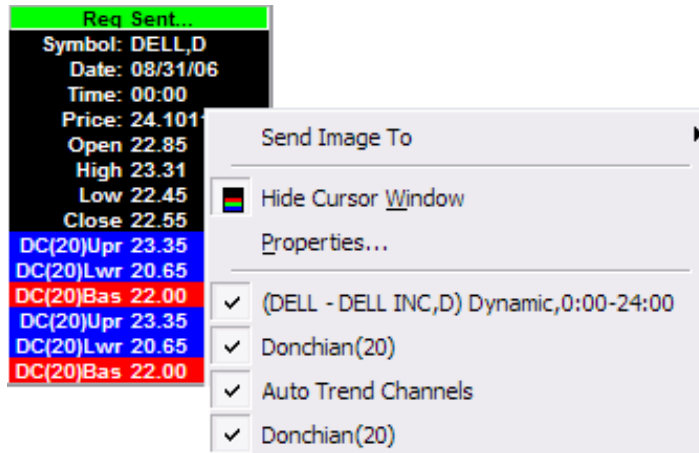
The Cursor window displays the data for the bar or point you currently have high-lighted. It is displayed by default when you open an Advanced Chart window. You remove the cursor window by de-selecting it from the Advanced Chart Right-click or Chart Options menus, or, or clicking on the Cursor Tracking icon on the Advanced Charts toolbar.

When you right-click in the main chart area or select the **Chart Options** menu, the following Cursor options appear.





Just right-click on a Cursor Window to access the following menu and customize its look and feel.



See the “Using the Right-Click Menus” section later in this chapter for further detail.

## Charting Area

The charting area contains the actual chart. Depending on the chart type and properties you’ve set, the chart area may include a cursor window, cursor tracking, a volume histogram, and various technical studies.

## Using the Advanced Chart Toolbar


In addition to the Favorites toolbar that is embedded inside an Advanced Chart window, there are several other charting-related toolbars that you can use to customize your charts: the Advanced Chart Toolbar, the Line Toolbar and the Advanced Line Toolbar. For more information about the Line Toolbar and the Advanced Line Toolbar, see *Chapter 3: Line Tools*.

You can toggle these three toolbars on and off by selecting/deselecting them from the eSignal View menu. In addition, all eSignal Advanced Charting toolbars are dockable, which means that they can be moved anywhere on your screen.



Click the **Bar Chart**  button to pull up an open, high, low, close bar chart.

Click the **Candlestick**  button to pull up a Candlestick chart.

Click the **Line**  button to pull up an OHLC line chart.


Click the **Point and Figure**  button to pull up a Point and Figure chart.

Click the **Point Break**  button to pull up a 3 Line Break/3 Point Break chart.

Click the **Renko**  button to pull up a Renko chart.

Click the **Kagi**  button to pull up a Kagi chart.

Click the **Auto Scale**  button to Auto Scale chart data.

Click the **Scale Price**  button to Scale Price data only.

Click the **Logarithm**  button to switch to a logarithmic scale.


Click the **Increase Bar Width**  button to increase bar width.

Click the **Decrease Bar Width**  button to decrease bar width.

Click the **Increase Bar Spacing**  button to increase bar spacing.

Click the **Decrease Bar Spacing**  button to decrease bar spacing.

Click the **Cursor Tracking**  button to have your Advanced Chart symbol track your cursor.

Click the **Cursor Window**  button so that the Advanced Chart window displays a Cursor window that shows data for the bar or point your Advanced Chart cursor is on.

Click the **Reset**  button to reset your chart.

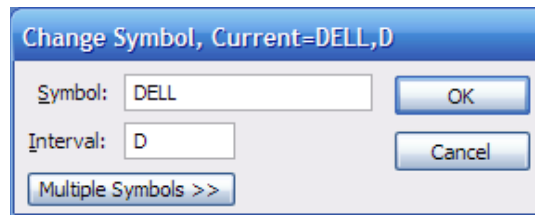
Click the **Advanced Chart Properties**  button to specify Advanced Chart window properties.

## Viewing Data in an Advanced Chart Window

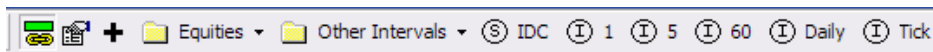
You can create a new Advanced Chart window by right-clicking a symbol in a Quote, Portfolio, Summary or Leaders window and selecting Advanced Chart, or by choosing **New** from the **File** menu. If you already have a Chart window open and don't want to open another one, you can display a new chart in the open Advanced Chart window.

To display a new chart in an open Advanced Chart window:

1. Make sure the Advanced Chart window is active, then just type a new symbol. A Change Symbol window opens as shown below. Type in a new symbol and interval, then click **OK**. The Advanced Chart window you had open changes to reflect the new symbol and interval you entered. Available intervals that you can enter are **D** (for Daily), **W** (for Weekly), and **M** (for Monthly), and intervals in minutes (i.e. 60, 30, 15, etc.).



2. When you initially open an Advanced Chart window, there are preset chart intervals and Favorites lists (lists of preset charts) for Equities and Other Intervals that you can choose from the Favorites Toolbar as shown below.



3. You can quickly change the interval for data in the Advanced Chart window by selecting from the preset intervals of 1, 5, and 60 minutes and Daily from the Favorites Toolbar.

To redisplay a Favorite chart in an Advanced Chart window:

1. Click the down arrow on the **Equities** list or the **Other Intervals** list or any other user-defined folder list and select the name of a previously saved favorite chart from the pull-down list.

## Specifying Advanced Chart Window Settings

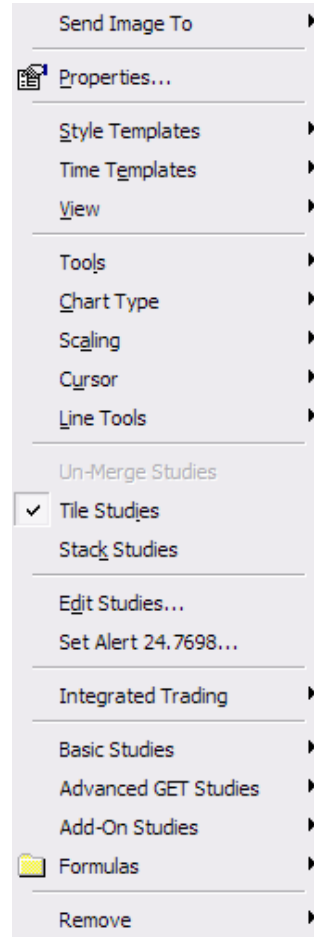
You have complete access to Advanced Chart Window settings by using either the Advanced Chart Window right-click menu and/or the Chart Options menu. The Advanced Chart Window right-click menus vary, depending upon where you click on the chart.

If you right-click in the data area of the Advanced Chart window, you will see the Main Advanced Chart window right-click menu that is discussed in the following section.

### Main Advanced Chart Right-Click Menu

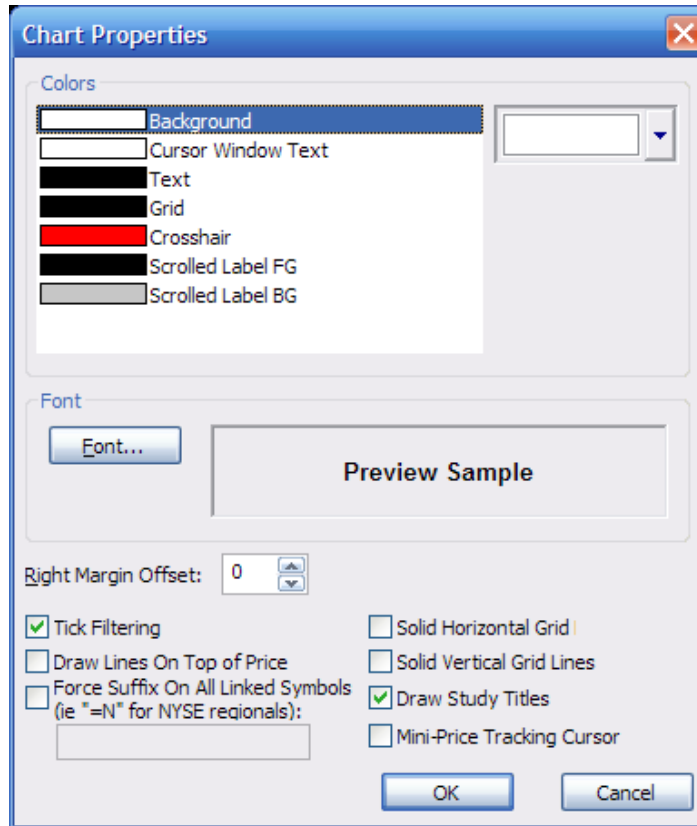
Once you have created an Advanced Chart window, you are just a few right-clicks away from customizing window properties, changing chart styles, selecting scaling methods and cursor options, adding and editing studies, formulas and advanced line tools, and un-merging and removing existing studies.

Please note that you can access the same Advanced Chart window settings menu by clicking on the Chart Options menu when an Advanced Chart window is active. The only difference between the Advanced Chart window right-click and Chart Options menu is that the right-click menu enables you to select individual studies while the Chart Options menu does not.



## Properties

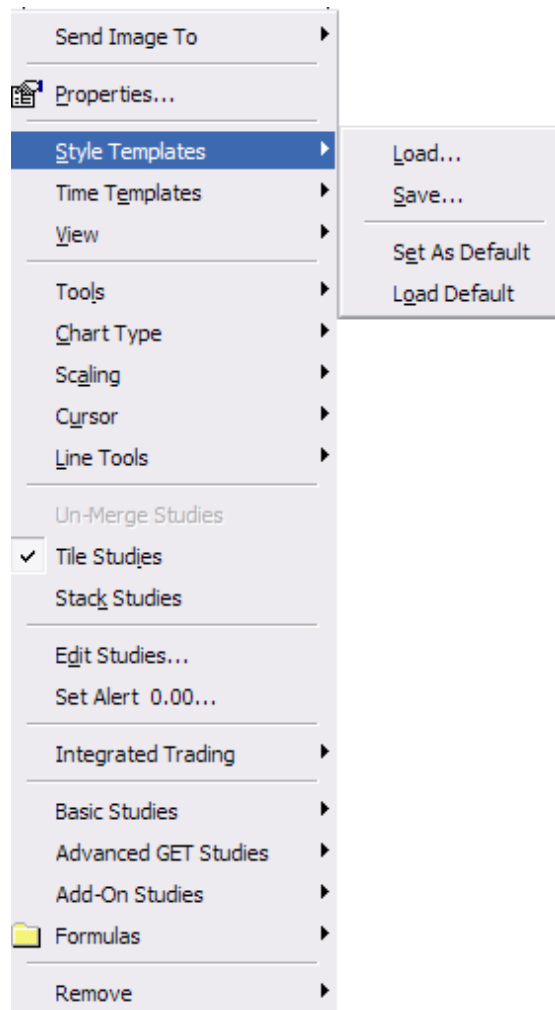
Click **Properties** to specify chart colors, fonts, margins, and ticker filtering settings.



## Style Templates

You may want to set up different Style Templates for various types of issues. You can do this by saving each of these Advanced Charts as a separate Style Template so that you can load it whenever you want.

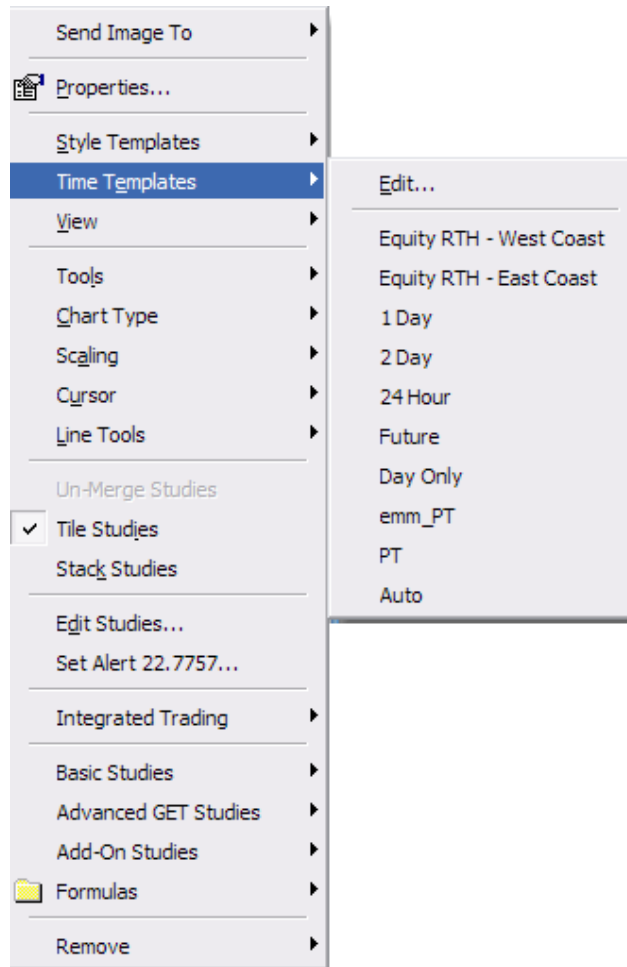
Select **Style Templates** to load a particular style template, to save a chart as a style template, to set a particular chart as your style template, or to load the default chart style template. The default eSignal style template is called Default.ach. However, you can make any existing advanced chart a style template and once you save it as the Default, it will then be available.



## Time Templates

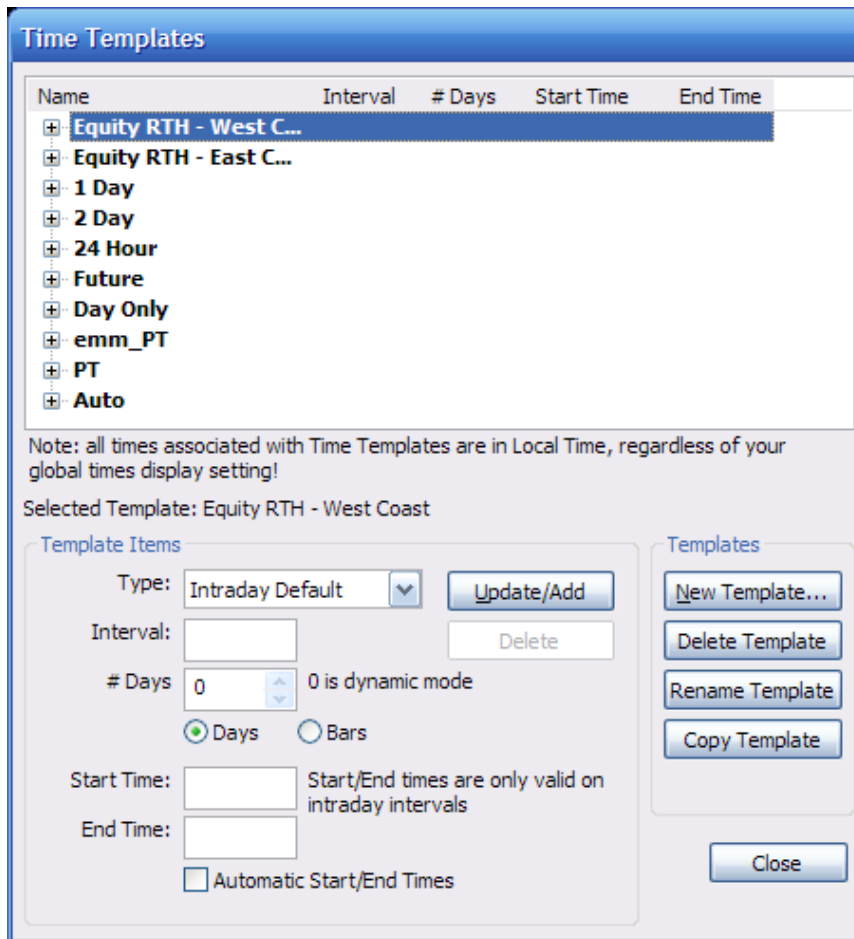
Select **Time Templates** to load a particular time template or to load one of the default chart time templates that comes with eSignal.

Template files all have the suffix of.ach (i.e. Advancedchart.ach) and are stored under the eSignal program directory. The Style and Time Templates submenus can also display up to 4 of the most recently saved or loaded templates for easy access.



To Edit A Time Template:

1. Right-click on the main data area of an Advanced Chart window.
2. Select **Time Templates**, then **Edit** from the right-click menu.
3. The Time Templates window opens. It lists all default templates and any others that you have saved. The Time Template that is currently being used by the active chart is highlighted and its Template items are listed in the Template Items section of the window.





4. You may change the Default Type, Interval, number of days or start and end times.
5. When you are finished updating the selected Time Template, click the **Update/Add** button.
6. You can also use the Time Templates window to create a new template (click the **New Template** button), delete an existing template (click the **Delete Template** button), rename a template (click the **Rename Template** button), or copy an exist-ing template (click the **Copy Template** button).
7. When you are finished managing your Time Templates, click the **Close** button to close the Time Templates window.

### ***Title Bar***

Select **Title Bar** from the Advanced Chart right-click menu to toggle the Advanced Chart window title bar on and off.

## ***Chart Types-Description & Interpretation***

### ***Bar***

Select **Bar** from the **Chart Type** right-click submenu to change the active Advanced Chart window to an OHLC (Open, High, Low, Close) Bar chart.

### ***Candlestick***

Select **Candlestick** from the Chart Type submenu to change the active Advanced Chart window to a Candlestick chart.

### ***Line***

Select **Line** from the Chart Types submenu to change the active Advanced Chart win-dow to a Line chart that connects the closing prices (by default) for each chart inter-val. You can also base the Line chart on a variety of price sources such as open, high, low, close, or combinations of these sources. When a line chart is active, right click and select Edit Studies to select from several Sources on which you can base the line.

## **Point and Figure**

Select **Point and Figure** from the Chart Types submenu to change the active Advanced Chart window to a Point and Figure chart. Point and Figure charts disregard the passage of time and chart only price changes. An "x" is drawn when the price rises by a predefined box size. An "o" is drawn if the price falls by a predefined box size. No x's or o's are drawn if the market moves an amount less than the box size.

## **Point Break**

Point Break charts originate from Japan and were introduced to the western world by Steve Nison (author of *Beyond Candlesticks*).

A green block is drawn in a new column on the chart if the closing price exceeds the previous high price. Conversely, a new red block is drawn if the close makes a new low. If there is neither a new high or low, nothing is drawn.

With a default Point Break, if a rally is powerful enough to form three consecutive green blocks, then the low of the last three green blocks must be exceeded before a red block is drawn. If a sell-off is powerful enough to form three consecutive red blocks, then the high of the last three red blocks must be exceeded before a green block is drawn.

To draw line break blocks, today's close is compared to the high and low of the previous block. A block is drawn only when today's close exceeds the high or low of the previous block. If today's close is higher than the top of the previous block, a new green block is drawn in the next column from the prior high to the new high price. If today's close is lower than the bottom of the previous block, a new red block is drawn in the next column from the prior low to the new low price. If the close fails to move outside the range of the previous block's high or low, then nothing is drawn.

With the default Point Break chart, a downside reversal (i.e., green blocks change to red blocks) occurs when the price moves under the lowest price of the last three consecutive green blocks. A red reversal block is drawn from the bottom of the highest green block to the new price. An upside reversal (i.e., red blocks change to green blocks) occurs when the price moves above the highest price of the last three consecutive red blocks. A green reversal block is drawn from the top of the lowest red block to the new high price.

Indicators calculated on Three Line Break charts use all the data in each column and then display the average value of the indicator for that column.

### **Interpretation/Trading Signals**

\* Buy when a green block emerges after three prior red blocks and sell when a red block appears after three green blocks.

### **Renko**

The Renko charting method is thought to have acquired its name from *renga* which is the Japanese word for bricks. Renko charts were introduced by Steve Nison, author of the book *Beyond Candlesticks*.

Renko charts are similar to Point Break charts except that in a Renko chart, a line (or brick as they are sometimes called) is drawn in the direction of the prior move only if a fixed amount (i.e. the box size) has been exceeded. The bricks are always equal in size. For example, in a five unit Renko chart, a 20 point rally is displayed as four equally sized, five unit high Renko bricks.

To draw Renko bricks, today's close is compared with the high and low of the previous brick (green or red). When the closing price is greater than the previous brick by the box size or more, one or more equal height, green bricks are drawn in the next column. If the closing price falls below the bottom of the previous brick by the box size or more, one or more equal height, red bricks are drawn in the next column.

If the market moves up more than the amount required to draw one brick, but less than the amount required to draw two bricks, only one brick is drawn. For example, in a two unit Renko chart, if the base price is 100 and the market moves to 103, then one green brick is drawn from the base price of 100 to 102. The rest of the move -- from 102 to 103 -- is not shown on the Renko chart. The same rule applies whenever the price does not fall on a box size divisor.

Indicators calculated on Renko charts use all the data in each column and then display the average value of the indicator for that column.

### **Interpretation**

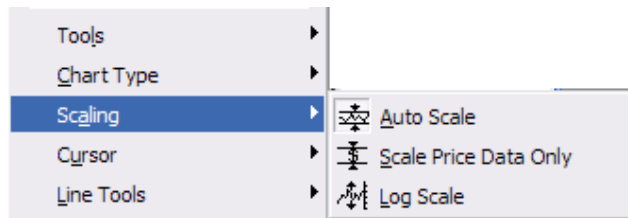
Basic trend reversals are signaled with the emergence of a green or red brick. A new green brick indicates the beginning of a new uptrend. A new red brick indicates the beginning of a new downtrend. Since the Renko chart is a trend following technique, there will be times when the market induces whipsaws. However, a trend following technique is intended to allow traders to ride on the major portion of the trend.

Since a Renko chart isolates the underlying trends by filtering out minor ups and downs, they are excellent for helping determine support and resistance levels.

## ***Kagi***

Kagi charts plot a single line until price reverses by a predetermined amount where another line is then begun. It is an attempt to smooth out the noise of daily trading activity so that trends can be more clearly represented. The thickness of Kagi lines are significant when prior highs and prior lows are exceeded.

## ***Scaling***



### ***Auto Scale***

Select **Auto Scale** from the Advanced Chart right-click menu to automatically scale the active Advanced Chart window. Autoscaling adjusts the Y-Axis to fit the chart's high and low prices. If this feature is disabled, you would have to scroll up and down vertically while scrolling backwards to adjust the scaling.

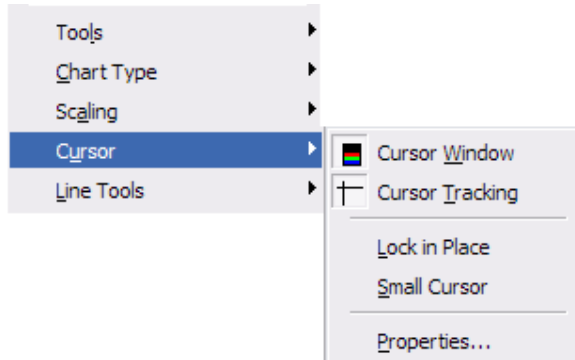
### ***Scale Price Data Only***

Select **Scale Price Data Only** from the Advanced Chart right-click menu to scale only the price data in the active Advanced Chart window. This eliminates applying any price studies to the scaling and makes it easier to read the price chart.

### ***Log Scale***

Select **Log Scale** from the Advanced Chart right-click menu to apply a logarithmic-scale to the active Chart window. A log scale is often used to pinpoint small price changes in a high priced stock.

## Cursor



### Cursor Window

Select **Cursor Window** to display information about various data points in a summary window. When the Cursor Window is active, the data it displays for bars and studies updates as you move the cross hairs along the chart. If you hold down the ctrl key while moving the cross hairs, only the X-cross hair value updates in the Cursor Window. Hold down shift and only the Y-hair updates.

### Cursor Tracking

Select **Cursor Tracking** to toggle the Advanced Chart window cross hairs on and off.

### Lock in Place

Select **Lock in Place** if you want the information currently displayed in the cursor to remain or be locked in place even when you move the chart cross hairs.

### Small Cursor

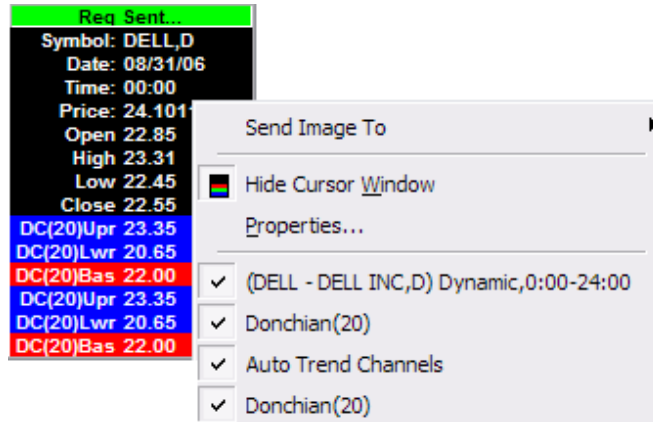
Select **Small Cursor** to make the cursor small.

### Properties

Select **Properties** to pull up the Cursor Window Properties window.

## Cursor Window Right-Click Menu

When you right-click the Cursor window, you will see a menu similar to the one shown below:



1. Select **Properties** to pull up the Cursor Window Properties window.
2. Specify your Cursor Window property preferences by selecting/deselecting from the various options shown. You may also change the Cursor Window font.
3. Select **OK** to apply your changes to the Cursor Window.
4. The Cursor Window right-click menu also displays other data relating to the Price (Symbol, Interval), Volume and lists any other studies that have been added to the Advanced Chart. If you wish to remove any of this additional data from the Cursor Window to conserve space, simply click on the check mark next to each item in the right-click menu.

**Cursor Window Properties**

Show Server Status     Show Time     Show Labels  
 Show Symbol     Show Date     Short Labels  
 Show Bar Count     Show Price     Left Justify Labels  
 Show Bar Index

Show Labels from Left to Right (only matters if # columns is more than 1).  
Number of Columns:

Font

Auto Hide

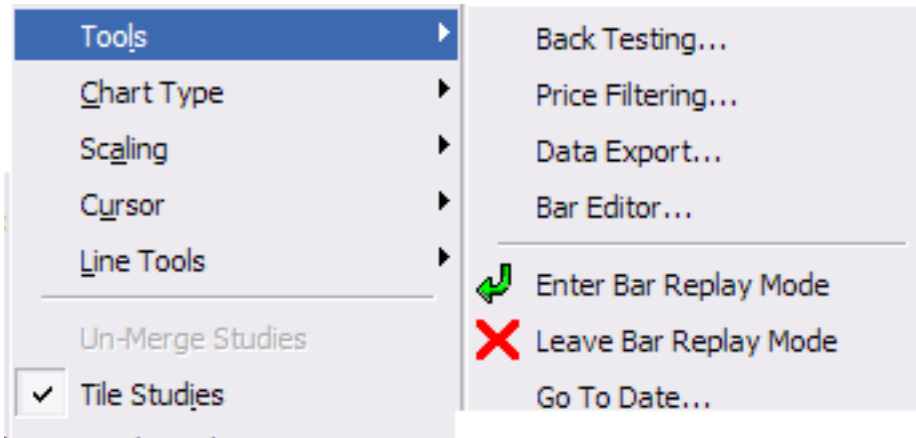
Off  
 Show when mouse in chart window  
 Show when chart window is active  
 Auto hide Cross Hairs when auto hiding cursor window

Axis Cursor Labels

Show Cursor Labels In X and Y Axis  
Text Color:    
Background Color:

## Tools

Select **Tools** and then select one of the following menu options from the Tools submenu to backtest formulas, set price filtering criteria, to Export Data or to replay chart data.

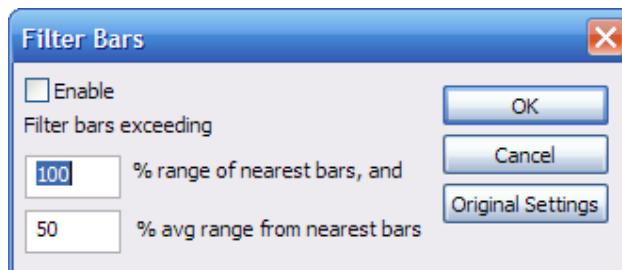


## Back Testing

Select **Back Test** to back test a formula that you have applied to the active Advanced Chart window.

## Price Filtering

This filter on the Advanced Charts allows you to set a % range or % average range of a bar compared to the bars before and after. If a price comes in that is outside the filtered range, it will be displayed in a different color of your choice and won't be used to calculate any studies or to set chart scaling.





To set up price filtering:

1. Select **Price Filtering** from the Advanced Chart right-click menu. Alternatively, select **Tools**, then **Price Filtering** from the **Chart Options** menu.
2. In the Filter Bars dialog box, click **Enable** to enable filtering. Then enter your desired % range of nearest bars and % average range for nearest bars.
3. Click **OK** to exit the dialog and apply price filtering.
4. Click **Cancel** to exit the dialog without applying filtering.
5. Click **Original Settings**, then **OK** to revert to the default price filtering settings.

### **Data Export**

You can export all Advanced Chart data (including data on studies applied to the chart) in tabular format. Exported data can be either in text format, separated by commas or, in an html format. You can also copy Advanced Chart window data to your clipboard and paste it into any other program that accepts clipboard data.

To export Advanced Chart window data, right-click on an Advanced Chart window, then select **Tools**, then **Data Export** from the menu. Alternatively, you can select **Tools**, then **Data Export** from the Chart Options menu (Alt-O,L, Data Export).

To save the Advanced Chart data to a text file:

1. In the Data Export dialog box that appears, click the **Save As Text** button to save data as a comma delimited text file.
2. In the Save Data as Text File dialog box enter the file name you want and select a special directory, if desired, then click the **Save** button.

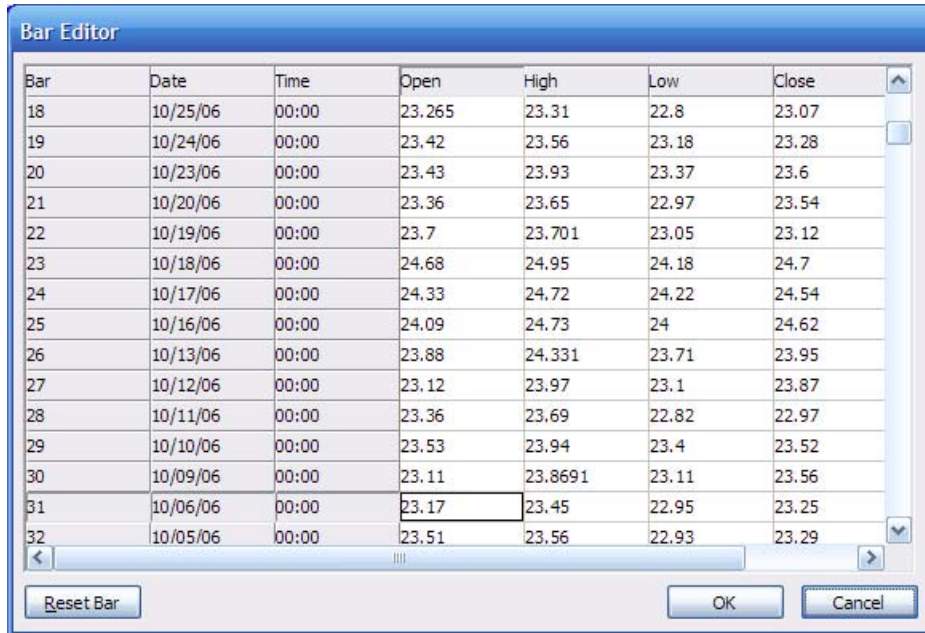
To save the Advanced Chart data to an HTML file:

1. In the Data Export dialog box that appears, click the **Save As HTML** button to save data to an HTML file.
2. In the Save Data as HTML File dialog box enter the file name you want and select a special directory, if desired, then click the **Save** button.

To copy the Advanced Chart data to the clipboard, click the **Copy to Clipboard** button in the Data Export window that appears. You may then paste the data into any application that accepts clipboard data.

## Bar Editor

Select **Bar Editor** to edit bar values for the active chart.



## Enter Bar Replay Mode

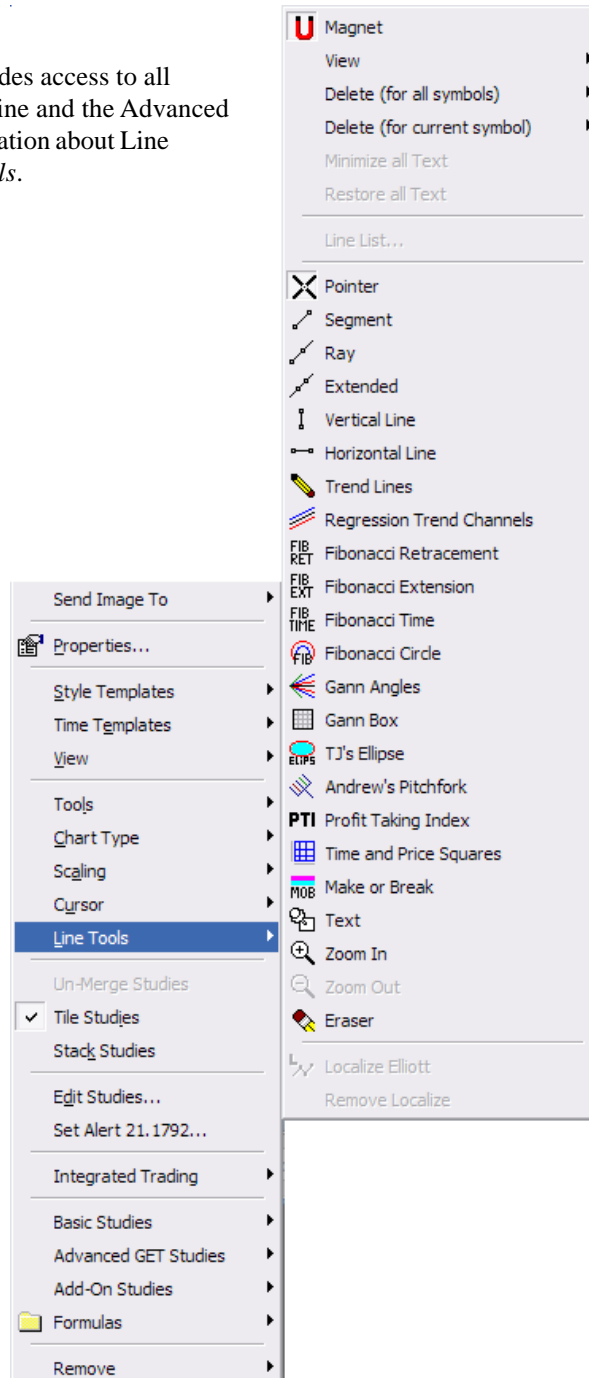
Select **Enter Bar Replay Mode** to enter replay mode where you can replay chart data.

## Leave Bar Replay Mode

Select **Leave Bar Replay Mode** to exit replay mode so that you can no longer replay chart data.

## Line Tools

The Line Tools Submenu provides access to all tools that are available in the Line and the Advanced Line Toolbars. For more information about Line Tools, see *Chapter 3: Line Tools*.

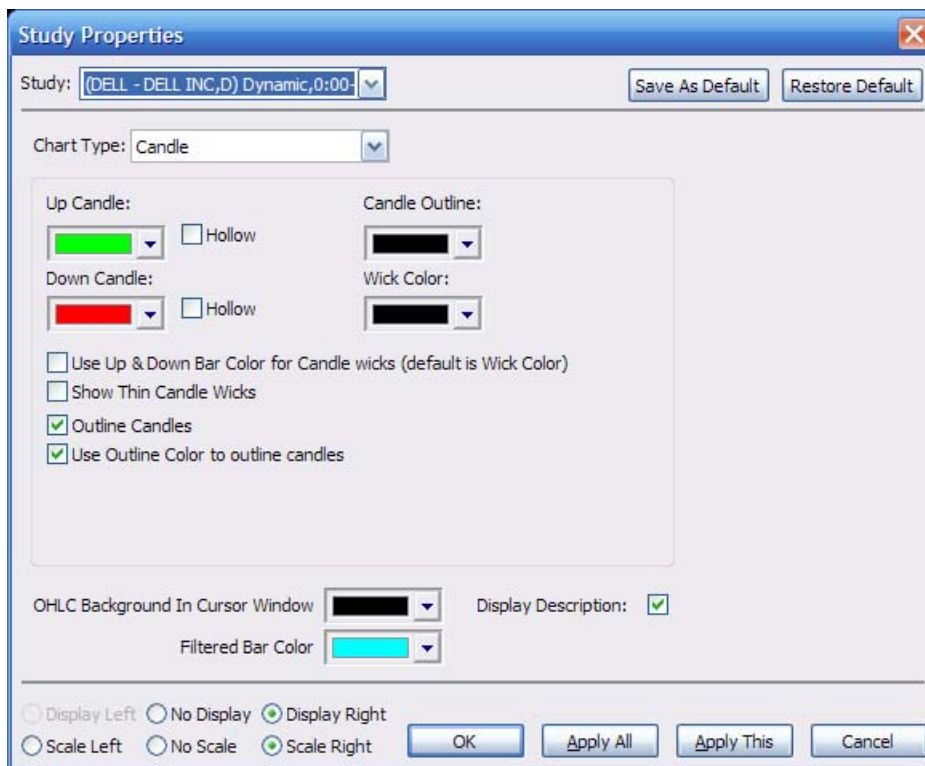


## Un-Merge Studies

Select **Un-Merge Studies** to un-merge any studies you have previously merged on the active Advanced Chart window.

## Edit Studies

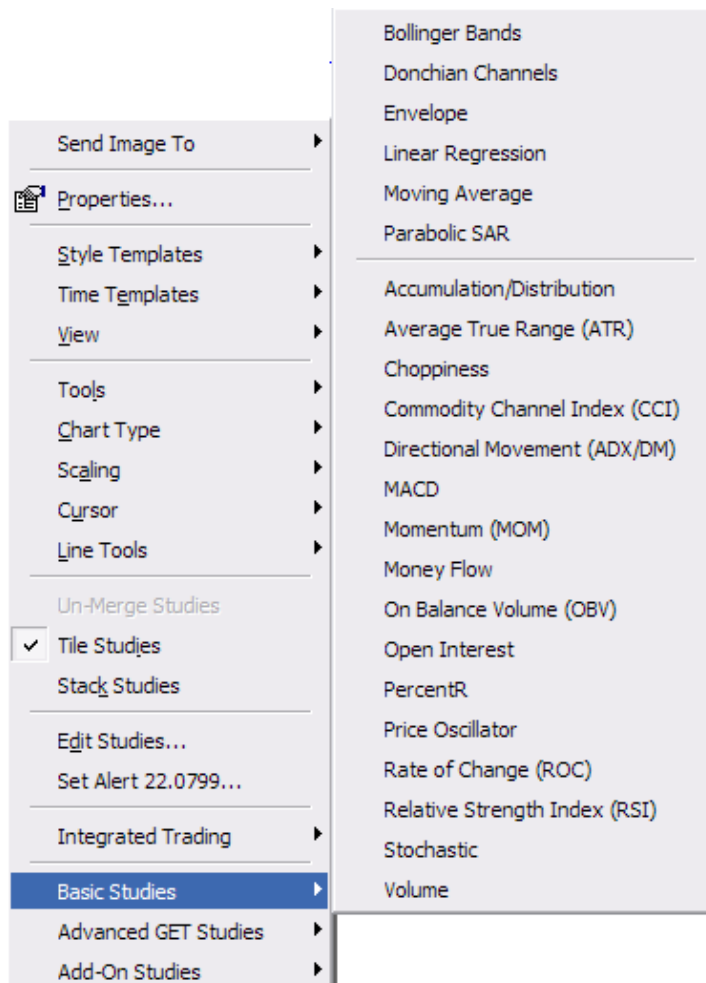
Select **Edit Studies** to edit a study that is currently applied to the active Advanced Chart window. Select a study that you want to edit from the pull-down study box, to edit settings, colors and other display options. When you have finished editing a study, click **OK** to apply your changes for that study to the Active Advanced Chart window. Since you have a pull-down of all studies, you can make changes to more than one study. **Apply This** applies the changes for the study and chart you are currently editing. **Apply All** applies the changes for all of the edits if you made changes to more than one study.



## Basic Studies

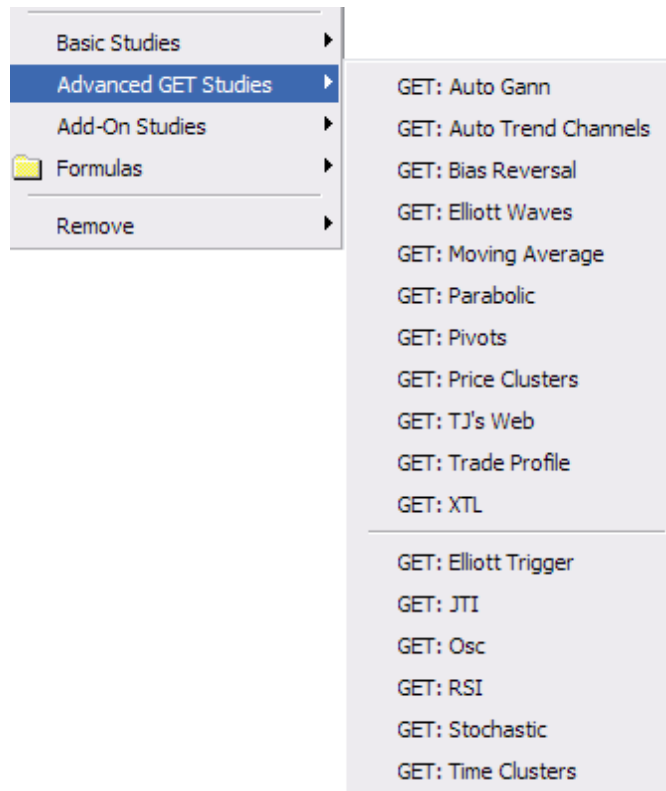
eSignal's Advanced Charting supports many basic studies that you can apply to your charts. Select **Basic Studies** to choose from a selection of over 20 technical studies that you can add to an Advanced Chart window.

Price only studies such as Bollinger Bands appear above the line in the right-click menu. You can apply multiple studies to Advanced Charts and even merge studies. For more information about Basic Studies, see *Chapter 4: Studies*.



## Advanced GET Studies

eSignal now offers Advanced Technical Studies from Advanced GET, a leading technical analysis software package as an add-on service. You can add Advanced GET studies to a Chart window by right-clicking on an Advanced Chart window and selecting **Advanced GET Studies**, then the specific tool you want to add from the sub-menu. For more information about Advanced GET Studies, see *Chapter 4: Studies*.

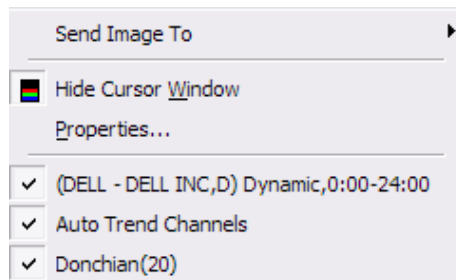


## **Remove**

Select **Remove** from the right-click menu to remove a study from the Advanced Chart window. Select **Remove**, then **Remove All Studies** to remove all studies that have previously been applied to the Active Chart window.

## **Y-Axis Right-click Menu**

By default, the Advanced Chart Y-Axis displays the current issue price (color-coded green for up from the last bar or data point price or red if below the previous bar or data point's close), the value of any studies calculated up to the present time, and the volume for the latest bar or data point displayed on the Advanced Chart.



If you do not want to see the above information on the Y-Axis, just click on the check mark to its left to remove the data.

## ***Advanced Chart - Click and Drag Features***

### ***Scrolling***

You can place your mouse on the X-Axis of an Advanced Chart and move pull or move it to the right to scroll back in time. Conversely, move your mouse to the left to scroll ahead in time.

### ***Rescaling***

To reset scaling, click the Reset Toolbar button on the Advanced Chart Toolbar.

### ***Resizing***

To resize the Y-Axis, click on it and drag it up or down.

### ***Repositioning Studies***

You can reposition studies by holding down the Control key, grabbing a study and dragging it to your desired location.

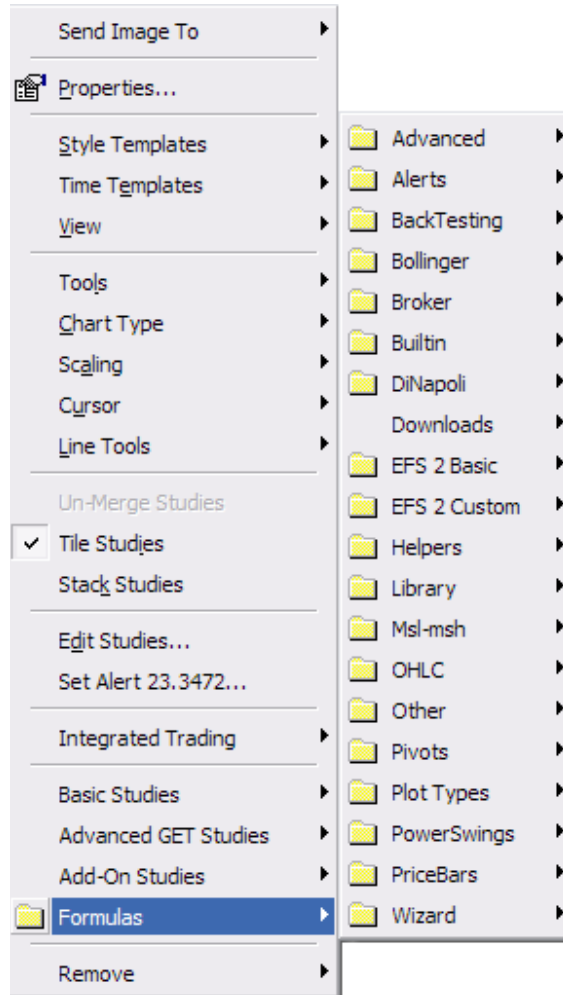
### ***Merging Studies (non-price)***

You can merge non-price studies in an Advanced Chart window. To merge studies, click on the first study, hold down the Shift key, and drag the study over the study you want to merge it with. Please note that you cannot merge price studies. To unmerge a study, right click on the section of the chart where the studies are merged, then select **Un-Merge Studies** from the right-click menu.



## Adding Formulas

eSignal's Advanced Charting supports an extensive library of analytical formulas. Select **Formulas** from the eSignal Advanced Chart right-click menu to access a listing of available formulas.



## Accessing Formula Folders

When you right-click in an Advanced Chart Window and select **Formulas** from the menu, you see several different formula folders. The following is an example of a formula folder and an image of the folder expanded so you can view the list of formulas it contains. All formula files have the extension .efs, and are stored in the eSignal directory.

