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Ensign Manual

Introduction
Welcome to Ensign, the newest generation of technical analysis charting software developed by Ensign Software, Inc. Ensign has been providing superior software to traders since 1981.

Ensign is state-of-the-art software designed for investors, brokers, and traders around the world. Whether you trade the markets every day or make long term decisions, Ensign has everything you need to trade market trends, analyze investment opportunities, and become a more successful trader. Ensign’s proprietary Playback feature even allows you to practice your trading anytime with real market data.

Ensign can be used with several different data sources to provide real-time Charts, quotes, news, portfolio management, and technical analysis for the symbols you trade. Dozens of studies and drawing tools can be used to analyze chart data and to enhance trading decisions.

Software Support
Software Support can be obtained from the following sources.

1. Ensign Software Support:
   • Hours: Monday through Friday, 6 AM – 3 PM (Mountain Time Zone)
   • Phone: 801-328-1382
   • Email: service@ensignsupport.com

2. The Ensign Software web site is a rich source of information and help.

3. Ensign Chat Rooms are used for software support, discussions, and occasional training sessions. Many Ensign customers use the chat rooms to share and discuss trading ideas and software tips. The Chat rooms are free to all traders and a good resource for both software and trading help.

Click the following links to view these topics:

• License Agreement
• Subscription
• System Requirements
• Data Vendors
• Testimonials
Getting Started

Running the Program
To run Ensign double-click the Ensign icon on the computer desktop. You can also click the Windows Start button, select Programs, select the Ensign Software folder, and then select the Ensign program icon.

Exiting the Program
To Exit the program click the Close (X) button in the top-right corner of the program window, or click the Ensign label in the top-left corner. You can also select the Window tab on the ribbon and then click the Exit button.

Ribbon
One of the unique design concepts of the Ensign program is the Ribbon. Ensign does not have a program window that contains your charts and other screens. Instead, all of Ensign's features are accessed from a Ribbon. Any window that you open (including charts and quote pages) can be dragged, sized, and located anywhere that you like (including multiple monitors). The Ribbon is designed to help you quickly access the buttons that perform desired tasks (like opening a chart). Buttons are organized under 4 tabs that each contain similarly grouped features and tasks.
Through out this documentation, references to particular buttons will be in the format of: 
ribbon tab | button or ribbon tab | button | sub-menu
For example, the Window | Exit task is performed by selecting the Window tab on the ribbon, and then clicking the Exit button.

Minimize and Restore the Ribbon
To Minimize the Ribbon right-click the mouse on the Ribbon and select Resize Ribbon. The Ribbon buttons will be hidden and only the tab headings will be shown. This can be done to maximize screen space.

To use the Ribbon while minimized, click a tab. The ribbon buttons will be temporarily displayed. Click the desired button. The Ribbon will return to a minimized state after you click the button. To restore the Ribbon to its full size, right-click the mouse on the tab area and select Resize Ribbon.

The icon pictures on the Ribbon can be hidden by clicking Setup | System and unchecking the Show Ribbon Icons box. To display the icons, recheck the box and rerun Ensign. The Ribbon without icons will appear as shown below. Only text will be displayed.

Data Feed Activity
The ball which shows on the right hand side of the Ribbon uses color to indicate the following states of a data feed.

- **Green** - The data feed is alive. Data is being received.
- **Yellow** - Warning. A live feed is not seen. The warning shows for 30 seconds.
- **Red** - A live feed has not been seen for more than 30 seconds.
- **Blue** - A refresh for a chart data set has been requested.
- **Purple** - A refresh response was received and is being processed.

Pin the Ribbon to Stay On Top
Click the Pin button in the top-right corner of the Ribbon to cause the ribbon to always be on top. Other program windows will not be able to hide the Ribbon. Click the Pin button again to unpin the Ribbon. The ribbon will then be able to be covered or hidden by other program windows.

Finding a Lost Ribbon
The Ribbon may be located on a screen which has been disconnected. Press the CTRL-HOME keys to relocate the Ribbon to the primary monitor.
Universal Toolbar Buttons

- Help – Open a manual to the appropriate page of documentation.
- Video – Watch a training video on the topic.
- Delete – Delete the selected item.
- Properties – Open a property form for customization.
- Minimize a window – Note: Double-click the minimized window to restore its size.
- Maximize a window – The window expands to occupy an entire screen.
- Normalize a window – Undo the maximized window state and return to a normal size.
- Close a window – Note: The Close button on the main Ribbon exits the program.

Accessing Ribbon Buttons with the Keyboard

The ribbon buttons can be accessed using the keyboard. To access a particular tab, press the Alt key and the underlined letter in the tab word. For example, to access the Setup tab, press Alt+S. The button names on the Ribbon also have an underlined letter. After selecting a tab you can execute a ribbon button by continuing to hold down the Alt key and press the underlined letter in the name. For example, to open the Chart sub-menu press Alt-S-C. When a sub-menu appears, you can press the down arrow on the keyboard and then press Enter to select an item, or you can continue to hold down the Alt key and press the underlined letter in the sub-menu commands. For example, pressing Alt-S-C-D will open the Chart Data Panel form.

Note: A chevron (down arrow) will appear below a button if a sub-menu exists.

Hints

As you move the mouse over buttons and entry boxes, a Hint box may appear. Hints describe the action that will be performed by selecting or clicking the item. Hints can be globally disabled by unchecking the Show Hints check box on the Setup | System form.

Voice and Sound

Some of the features and tools in Ensign generate a computer voice to confirm an action. For example, if you save a layout file the program can say 'The layout file has been saved.' To disable the voice feedback, uncheck the Enable Voice box on the Setup | System form.

Ensign can generate sound alerts to notify when price alerts, draw tool alerts, and study alerts are triggered. To globally disable all sound alerts, uncheck the Enable Sound box on the Setup | System form.
Window Ribbon

Arranging Windows and Resizing

Ensign allows you to open several different kinds of windows, including charts, quote pages, news pages, etc. Windows can be sized, overlaid, stretched, maximized, arranged, and moved to any location on the screen (including multiple screens). To adjust the size of a window, position the mouse on the edge or corner of a window, then hold down the left mouse button and drag to the desired size. Drag a window by the top of the window to move the whole window. Double-click the top of the window to maximize to full-screen. Double-click the top of the window again to normalize the window size. All open windows can be arranged at the same time by clicking the Window tab, and then clicking the Cascade, Tile Horz., Tile Vert. or the Snap to Grid buttons.

Cascade - The windows will overlap like a deck of cards.*
Tile Horz. - The windows will arrange horizontally.*
Tile Vert. - The windows will arrange vertically.*

Note: If you have multiple monitors, the Cascade and Tile functions will only arrange the windows that share the same monitor with the currently selected window. Or, if the optional MDI desktop frame is activated, only those windows whose top-left corner is inside the MDI frame.

Snap to Grid - Forms will be adjusted slightly so their top/left location and their width and height fall on a 16 pixel grid. This makes it easy to align forms tightly. When the Ribbon has focus, the hot keys `CTRL-ALT-S` will Snap to Grid. Also, double clicking on the message area of the Ribbon will Snap to Grid.

Close - Click Close to close all windows, or select the sub-menu to Close All windows, or just the windows in a Layer, or just the active Window.

Find - Click the Find button to display a list of all open windows. Select an entry in the list to bring that window to the front.

Note: The Layer will be changed if the window is on another Layer.

Window Color - Click the Window Color button to change the window background color.

Window Font - Make changes to window's font, font style, font size, and font color.

Print - Print the active window.
Image To - Send or save the active window image to one of the following:

- Ensign Server - A web based file server
- File - A local file on your computer
- Email - Attach image file to an email
- Full Screen to File - A local file on your computer
  Note: The settings for saving Images are located on the Setup | System | Images form.
- Clipboard - Image can be pasted in a document

Exit - Exit the Ensign program.

Help Ribbon

Click the Help tab to view help resources for Ensign.

Staff

Click the Staff button to open the on-line Software Support chat window. You can ask questions to the Ensign Software support staff by typing in the chat window.

Run Remote

Ensign's support staff can connect directly to your computer and help diagnose and correct software issues. They can also demonstrate how to use the software. Click the Run Remote button to start a remote help session. Inform the staff representative of the ID number that will appear. Ensign's staff will then be able to connect to your computer and help.

Home

Click the Home button to open the home web page for Ensign Software. You will then have access to all of the Ensign Software web pages.
Contact Us

Software Support hours are 7 AM to 4 PM (Central time zone), Monday-Friday. Receive Support or sales information by phone, email, or the on-line Support chat room in Ensign Windows.

Contact Ensign Billing with questions regarding Order status, trial and expired status, Ensign ID changes, billing information, and subscription start/stop.

Use these email addresses to submit questions on any of the following topics.

Datafeed Support:
service@ensignsupport.com

DYO programming:
dyo@ensignsoftware.net

ESPL programming:
espl@ensignsoftware.net

Software Support
service@ensignsupport.com
Phone: 801-328-1382

Ensign Billing
billing@ensignsoftware.net
Phone: 208-552-2230
Skype: ensign.billing

Ensign Software, Inc.
ensign@ensignsoftware.net
Ensign Software Inc.
2036 W. 450 S. Circle
Saint George, UT 84770

Click the Contact Us button to view contact information for Ensign Software.

Docs

Click the Docs button to open and read the Ensign 10 documentation.

Videos

Click the Videos button to access and watch short training videos. The videos are a great way to learn quickly how to use the program.
What's New

Click the What's New button to view the What's New page on the Ensign Software web site. This page informs you of program fixes, updates, and changes to the documentation.

Downloads

Click the Downloads button to open the Downloads page on the Ensign Software web site. All file downloads that are available can be accessed from this page. The program, database files, and manuals can be downloaded.

Upgrade Ensign

Click the Upgrade button to download and install the current version of the program. Ensign Software makes frequent improvements and enhancements to the software. You are encouraged to upgrade the software on a regular basis. To view the current program version date, click the Window | About Ensign button.

Symbols

Click the Symbols button to view symbol guides for different vendor feeds and exchanges. A symbol guide for different market symbols can be accessed on the web. Sometimes the data vendors use a slightly different symbol to access the same market.
Reports

Click the Reports button to display information about the computer and the amount of memory that each open window is using. This information can be used to identify charts that may be using a huge amount of memory. A summary is displayed at the bottom of the list.

User - The user name entered in the computer
Run - The date and time when the software was last run
Memory - Amount of memory in the computer
Monitors - Number of monitors attached to the computer
Screen - Screen pixel resolution settings
Path - The file path on the hard disk where the software was run from

Click on an entry in the Memory Report to bring that form to the surface.

To increase or recover memory resources, try the following:

- Close some of the open windows (particularly excess chart windows)
- Reduce the number of bars that particular charts are storing
- Reduce the number of studies, draw tools, and objects that are applied to the charts
DYO Studies

Use the Reports sub-menu to display the DYO Studies Report. The DYO report shows each chart and lists the DYO's that the charts own.

Click on an entry on the DYO Studies Report to bring the chart to the surface or to open the DYO Property form.

<table>
<thead>
<tr>
<th>Chart: ES #F.6</th>
<th>Layer: 1</th>
<th>Template: Trend Runner System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Settings</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
<tr>
<td>Trades</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
<tr>
<td>Profit Curve</td>
<td>Location: Sub 5</td>
<td>Scale: Data Set +5%</td>
</tr>
<tr>
<td>At Risk</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
<tr>
<td>Calculate Stats</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
<tr>
<td>Show Stats</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
<tr>
<td>Fill Markers</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
<tr>
<td>Trade Markers</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
<tr>
<td>Email Move SELL Stop</td>
<td>Location: Chart</td>
<td>Text: Move SELL Stop to [51] - CT [18] - HP</td>
</tr>
<tr>
<td>Email Move BUY Stop</td>
<td>Location: Chart</td>
<td>Text: Move BUY Stop to [51] - CT [18] - HP</td>
</tr>
<tr>
<td>Email Profit Target</td>
<td>Location: Chart</td>
<td>Text: Profit Target Hit [201] - Last [4C] -</td>
</tr>
<tr>
<td>Email BUY/SELL Entry</td>
<td>Location: Chart</td>
<td>Scale: Chart Scale</td>
</tr>
</tbody>
</table>

Log

Click the Log button to display the Ensign Log window. The log window is used by Ensign staff to view the sequence of internal program events and to figure out software issues.

About Ensign

Displays the Ensign Software company address, the software Version Date, and copyright notice.
Setup Ribbon

Click the Setup tab to view the Setup ribbon buttons. These buttons open various forms for configuration of the program's properties and settings.

Feeds

Click the Setup | Feeds button to connect to the vendor feeds you subscribe to.

Activity

Click the Activity tab to view a summary of all the feeds that are currently being used.

The gauges will have a green background when data is being processed. The gauges will have a white background when a connection is being established or when data has stopped flowing.

All data feeds supported by Ensign can be received simultaneously. The Forex feed from FXCM is a real-time feed included FREE with your Ensign subscription.

The other data feeds require a subscription with a data vendor, or require you to have a brokerage account. Fees vary among data vendors. Some real-time data feeds from brokers are free but require that you have an active trading account with the broker. Data vendors usually collect exchange fees for real-time data. These fees are often waived by brokerage data feeds. Some of the supported broker data sources include: Interactive Brokers, TransAct and Infinity Futures, Ninja, ATC, and Global Futures.
Data Feeds

Click the Data Feeds tab to configure and connect to your data feed source.

You can connect to more than one data feed at the same time if needed. Select a data feed from the list and enter any necessary information to activate the connection. Most data feeds have similar settings. Some will require a Username and Password from your data feed provider.

Connect – Check this box to connect to the data feed. Uncheck the box to disconnect from the data feed.

Auto Connect – Check this box to have Ensign automatically connect to the data feed when Ensign runs.

Beep on Connect – When checked, Ensign will make a sound when the data feed connects.

Warn on 'No Feed' – Display a warning message when data is not seen for 2 minutes.

Email on 'No Feed' – Send an email if the data is not seen for 2 minutes.

Auto Add Symbols – Check this box to have Ensign add symbols to the Symbol list automatically when a chart is opened for a new symbol.

Sync Computer’s Clock to Feed – Sets the computer’s time from the data feed clock time stamp.

Receive All Symbols - For the FXCM Forex data feed, this will cause all symbols to be received.

Show Inverse Pairs – For the FXCM Forex data feed, this will cause inverse symbol pairs to appear. For example the software will show both USD/JPY and JPY/USD.

Name – If required, enter the Username associated with your data feed account.

Password – If required, enter the Password associated with your data feed account.
**Symbol List** – The Symbol List is your personalized Watch List. Ensign will only receive real-time data for those symbols entered in this list. Type directly in the list to add, remove, or rearrange the symbols. There are 6 tabs below the Symbol List that allow you to setup 8 different customized symbol lists. Only the list that is showing will be active.

**Data Feed** – The Data Feed panel displays status information about the data feed connection.

**Symbol Guide** – Click this button to open and view the data feed Symbol Guide on the web.

**Run Button** – Some of the data feeds will have a RUN button that allows you to manually run the data software where the data originates and connects to Ensign.

**Refresh Source** - Some data feeds show this frame for selecting the Refresh Source used to refresh charts for that vendor. The 1st selection will refresh each chart according to the Refresh selection on the chart’s property form. The 2nd selection will globally force the refresh to use the data feed. The 3rd selection will globally change the source to refresh from Barchart, etc.
System

Click the Setup | System button to view and configure system settings.

System

Select the System tab to view and edit the System settings.
System

Backup Templates on Exit – Eight folders are backed-up to the AutoBackup folder when the program exits. A folder is made for each day of the week, and contains the folders and their sub-folder shown in the red frame. The location uses the path entered in the Backup Drive and Folder edit box. The default is the program's folder of C:\Ensign10\.

Show Ribbon Icons – Show or hide the icons on the Ribbon.

Show Hints – Show or hide Hints in the program.

Enable Voice – Enable or Disable computer voice confirmation for some program actions. Use Queue Max to limit the depth of the queue of voice messages waiting to be played. When the queue is full, new voice messages are discarded.

Enable Sound – Enable or Disable alert sounds. Use Queue Max to limit the depth of the queue of sounds waiting to be played. When the queue is full, new sounds are discarded.

Pin this Layer – Causes all open windows from the indicated Layer (1 through 9) to Show in all other Layers.

Scaling – Use this drop down box to match the operating system’s font enlargement property. Ensign 10 needs to know the enlargement factor to correctly locate the top left corner and size of forms for printing.

Printer

Auto select orientation – The program will print in either Landscape or Portrait mode (which ever is the best fit).

Stretch to fill paper size – Print the window or form using the screen proportions, and fill the printed page.

Print chart background – Uncheck this box to print charts using a white background (conserves ink and toner).

Alternate print method – Prints screens using the Form method.

Fixed Pitch Font for Report – Reports are printed in a fixed pitch font, which you can specify in the entry box.

Color Dialog

The color dialog box used to select colors in Ensign can be either the Standard dialog form or Ensign's Hexagon style form.

Select the style that you prefer for making color choices.
What's New Button
Click the What's New button to open and display the Ensign What's New page on the web.

Optional Features
Place a check mark next to a recently added feature, if instructed to do so by software support. This will enable the feature. Some features are added for testing ahead of a general release while a new feature is developed.

Save to ASCII
Ensign allows you to save quote pages, options pages, and the Top 100 list to an ASCII file. View the Save To File documentation for details. The settings in this panel specify the Number of Columns to save from the page, and how to format the date in the file.

Local Daylight Savings
Displays the start and end dates for daylight savings time.

Desktop Environment
Enable – Place a check mark in this box to enable a Multi-Document Interface (MDI program) emulation. A program desktop frame will appear below the Ribbon and can be used to contain charts and other windows. When the Cascade, Tile Vert., and Tile Horz. buttons are clicked on the Window tab, all windows that are inside of the desktop frame will be arranged inside the frame. The program desktop frame can be sized by dragging the frame edge. Note: Moving the Ribbon to a different location on the screen will also drag the desktop frame and its child windows. When the Desktop Environment is disabled, the Cascade, Tile Vert., and Tile Horz. buttons will arrange windows using a monitor's work area minus the space used by the Ensign Ribbon, and moving the location of the Ribbon will not reposition other windows.

Expand to Fill Screen – Click this button to expand the program desktop frame to fill the screen.

Glass Effect – This is a variation of the opacity of the frame. Enter a high opacity value and then check this box.

Opacity – This setting allows you to see through desktop frame. Slide the pointer rightward to make the desktop frame more opaque (solid). Slide the pointer leftward to permit screen images beneath the desktop frame area to show through.

Color – Specify the background color of the desktop frame area.

Picture Filename – Optionally browse for and select a .jpg graphics file from the C:\Ensign10\Background folder to display a picture on the desktop frame background.
Security

Select the Security tab to display the Security screen. The Ensign ID identifies your system and is needed on the Order Form to start a subscription to Ensign. The Ensign ID is different on every computer. On request, Ensign Software can authorize multiple computers for you (at no additional cost) as long as they are not used at the same time. Note: If you reformat your hard disk, or reinstall the operating system, then the Ensign ID will change to a different value. In this case, contact Ensign and provide the new Ensign ID, otherwise the software will expire.
Scheduler

Select the Scheduler tab to display the Scheduler screen.

<table>
<thead>
<tr>
<th>Time</th>
<th>Message Text or Layout={name} or Script={name} or Run={program}</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45</td>
<td>Layout=MyStocks</td>
</tr>
<tr>
<td>14:50</td>
<td>The Stock Market will close in 10 minutes</td>
</tr>
<tr>
<td>15:00</td>
<td>Play=C:\Ensign10\closingbell.wav</td>
</tr>
<tr>
<td>15:10</td>
<td>Speak=Remember to back up your files</td>
</tr>
<tr>
<td>17:50</td>
<td>Script=C:\Ensign10\ESPL\MyProgram\PrepareFiles</td>
</tr>
<tr>
<td>18:00</td>
<td>Run=C:\MyTools\CopyFiles.exe</td>
</tr>
</tbody>
</table>

The scheduler is used to trigger an event at a specified time. The program can display a Text message on the screen, open a Layout, run an ESPL script, Run a program on your computer, Speak some text, or Play a .wav sound file. Several examples are shown above. Place a check mark in the left-side box to enable the scheduled event. Enter a time in the Time column to specify when the event should occur (ex. 09:30, 15:10). Make sure that you enter a Time that matches the Time Zone setting (from the Setup | Charts screen). Note: If a time is entered with only the minutes (and not the hour), then the scheduler will trigger every hour. For example, an entry of :05 will trigger the event every hour at 5 minutes past the hour (24 hours a day).

**Message:** A message box will open and display the entered Text message at the specified time.

**Layout:** Enter a Layout name to open at the Time. Example: Layout=MyStocks

**Script:** Enter an ESPL project file name to run, for example, Script=C:\Ensign10\ESPL\MyProgram\Recalc
Specify the full path to the project file. The ESPL variable can be assigned a value by adding the value to the end of the file name separated by a space character. Example: …\Recalc 2

**Run:** Enter the name of an external program to run at the Time. Example: Run=C:\myprocess.exe

**Rerun:** This command will exit Ensign 10 and rerun Ensign 10 without saving any changes to a layout.

**Speak:** A computer voice will say the entered Text at the specified Time. Example: Speak=Hello

**Play:** Enter the name of a sound file that will be played at the Time. Example: Play=C:\trumpet.wav

**Scan:** Open the Chart Scanner and run the ESPL Script. The optional parameter sets the ESPL value.

**Message Box**

Properties are present to control the display of the Message Box.

**Stay On Top** – When checked the Message Box will be a top surface form.

**Open @** – When checked the Message Box will open at the provided Top and Left pixel coordinates instead of being displayed at screen center.
Images

Select the Images tab to display the Images setup screen.

Ensign has the ability to save a Chart as a graphics file. Quote pages, News pages, and Properties windows can also be saved as graphics files. The files can either be saved locally on the hard disk, or automatically uploaded to a web site. For example, press CTRL-J on the keyboard while viewing a chart to save the chart to a file. The file will save to the location specified on the Images setup screen. Save Quote pages and News windows by first selecting the window and then selecting the Window tab, and then the Image To | Ensign Server menu.

You can save a Properties window as a graphic file by pressing CTRL-J when the OK button (on the Properties window) has the focus (indicated by the dotted rectangle on the button). If necessary, press the tab key on the keyboard multiple times to move the focus to the OK button.

Printing Graphic files: If you plan on printing a chart graphics file, you may want to change the chart colors to a printer-friendly color scheme before saving the file. Otherwise the printed copy may have a dark background (that wastes printer ink or toner, and makes it hard to see the chart). Press CTRL-K on the keyboard to change the color scheme of a chart to a printer-friendly color scheme. The printer-friendly color scheme has a white background and black font color.
Save To - Select either Hard Disk or a Web site as the Save To location. Select Web site #1 to enter FTP settings for a 1st web site. Select Web site #2 to optionally enter settings for a 2nd web site. This allows you to upload to site #1, then optionally save to site #2 if desired. Note: Many Ensign users use the www.dacharts.com web site to upload and share chart images using the default parameters on the Images setup screen. If desired, you can change the settings and upload to any web site that you have FTP access to.

File Name - The File Name panel is used to specify the format of the file name. There are 4 different file name formats to choose from.

Fixed - Uses the 'File name or Prefix' entry as the file name every time. It will overwrite a previously saved copy.

Automatic # - Uses the 'File name or Prefix' entry, plus an incrementing number for each time that you press CTRL-J. Enter a unique 'File name or Prefix' for use with the Automatic # selection (like TraderJoe- ). The file name will change and increment each time that you save a chart, for example, TraderJoe-1.png, then TraderJoe-2.png, etc. Edit the 'Next Automatic #' entry box if you need to reset the incrementing number.

Chart Name - Uses the Chart name as the file name. Note: If you save the same chart several times each day, the previously saved graphics file will be overwritten each time (since it always has the same file name).

Ask for name – You will be prompted to type a file name each time you save a chart image by pressing CTRL-J.

Upload Beep – Place a check mark in the 'Upload Beep' box to play a Beep sound when the save is completed.

Hard Disk Path – Enter the folder on the hard disk where graphics files will be saved. This is the folder where the graphics files will be saved if you have 'Hard Disk' selected as the 'Save To' selection.

FTP web server address - Specifies the URL or IP address of the web site where the FTP upload will save the graphics file to (Example: charts.dacharts.net ).

FTP web site path - Specifies the FTP folder on the web site where the file will be saved (Example: 2012-03-20).

URL Path - The 'URL path to display in chat room' box allows you to specify a URL path when posting a screen capture in the Ensign Chat rooms. The URL path for the www.dacharts.com web site will automatically update in Ensign Windows. This is necessary since there is a new folder used for each new day. Click the 'Reset to dacharts' button to return the entries to the installation defaults. This will automatically change the settings to be able to upload to the 'dacharts' web site. This site hosts most of the customer uploads for Ensign.

File name or Prefix - Enter the file name that will be used when saving charts (Example: JohnCharts- ).

User name and Password – These edit boxes specify the User Name and Password required to log on to the web site FTP server.

Next Automatic # - This entry box allows you to specify or reset the counter that can be optionally added to the file name (when the ‘Automatic #’ file name format is selected). The counter will start at 1 and increment to 99 before starting over at 1 again.
ESPL

Select the ESPL & DYO tab to display this setup screen.

ESPL Project Autorun

If you want to automatically load and run a particular ESPL program, when the Ensign program runs, then place a check mark in the Enable Autorun box. Enter the Path and Filename where the ESPL project file can be located. Optionally enter the ESPL variable value (that specifies which ESPL procedure to run).

DYO Parameters

**Show # with Variable name**: Place a check mark in this box to cause the DYO property form to show the index number ahead of the user assigned name. For example, the DYO would show:

10 MyVar := 12 Ave High / 28 Divider when the box is check, or
MyVar := Ave High / Divider when the box is unchecked.

Viewing the index values can be helpful when developing a DYO. You may want to uncheck the box when the DYO is finished to see a cleaner reading DYO script.
**Begin Private Index:**  DYO variables have indexes in the range of 0 to 999. This parameter sets a starting boundary for those variables that will be private to a chart. The suggested default is to begin at index 200.

**End Private Index:**  Set the ending boundary for the variables that will be private to a chart. Default is index 399.

**Send to TextFile Path and Filename:**  This parameter is used with the DYO Action statements

if # then TextFile(Message) and if ## then Textfile( #2 )

The text from the message will be appended to the specified file.

**Read from TextFile Path and Filename:**  This parameter is used the with DYO Action statement

if #2 then ReadFile( col #3, row #4)

The text from the ASCII file is read. The 1st parameter for col #3 specifies the field to read where fields are separated by commas. The 2nd parameter for row #4 specifies the row in the file to read. The first line is row 1.

**Send to Application Title:**  This parameter is used with the DYO statement Action | SendKeys(Message) The sendkeys string is sent to another application to control it. This parameter specifies the name of a currently running program that receive the sendkeys. For example, this could be used to trigger a trade in your order entry software.
Maintenance

Select the Maintenance tab to display the Maintenance setup screen.

This screen was implemented to assist Ensign Software Support personnel in helping customers with software issues. However, this screen can be used by customers to delete old files and help maintain the software. Place a check mark next to each task that you want to perform, then click the Perform selected Tasks button to execute the request.

1. **Erase all quote tables in memory**: This will clear all the Quote records in RAM memory. This may be useful if the Quote tables have become corrupted. This allows new Quotes to come in and rebuild the quote table.

2. **Delete Quote Files in ENSIGN folder**: This will delete all quote files that are used to store quote information. This may be useful if the quote files have become corrupted and need to be rebuilt again.

3. **Delete Database folder symbols no longer on the Setup | Vendor list**: This will delete tick and intra-day database files when their symbol is not found on any of the Setup | Vendor symbol lists.

4. **Delete Database folder symbols that do not have intra-day or tick based charts**: This will delete tick and intra-day database files for symbols that do not have tick, range, volume, second and minute chart files that need the database files. [read more » Tune-up Ensign](#)

5. **Delete files and folders in News Folder**: This will delete all News story files. This will clean up the hard disk of old News stories or corrupted News story files.
6. **Delete a specific Date in all daily chart files:** Enter a specific date. The bar for that date will be purged from all existing daily chart files. This can be helpful if a bar was accidentally stored on a Holiday or a weekend.

7. **Delete old Tick chart files:** Use this feature to delete old tick chart files from your computer. This can be helpful if a large number of expired charts are taking up room on the hard disk. Enter a value in the entry box. Any chart that hasn't been updated for N days will be deleted.

8. **Delete old Range, Renko, Point & Figure, and Kagi chart files:** Same as above. Only Range, Renko, Point and Figure, and Kagi chart files are deleted.

9. **Delete old Volume chart files:** Same as above. Only Volume chart files are deleted.

10. **Delete old Minute and Seconds chart files:** Same as above. Intra-day chart files are deleted.

11. **Reset Symbol Properties:** Will reset all the Symbol Property entries to their default settings.

12. **Reset Study Defaults:** Will reset the Default setting for all studies (the Default Tab) back to original settings like a new installation. It will not reset Tabs 1 through 14.

13. **Reset all Charts to the Default Properties:** Will cause all charts to be reset to the current default settings.

14. **Backup Ensign Windows:** Will save the entire \Ensign10 folder, chart data, and program files into a backup folder named \Backup. The location for the \Backup folder uses the path entered in the Backup Drive and Folder edit box on the System tab of this Setup form.

15. **Restore Ensign Windows:** Will restore and copy the entire \Backup folder and its sub-folders to the \Ensign10 folder. The location for the \Backup folder uses the path entered in the Backup Drive and Folder edit box on the System tab of this Setup form.

The Backup Drive and Folder can be changed to reference another hard disk, thumb drive, or cloud drive.
Buttons

Select the buttons tab to display the Ribbon Buttons setup screen. This screen allows you to customize which buttons are displayed on the Ribbon tabs.

Place a check mark next to each item that you want to display on the Ribbon. Uncheck any items that you do not use, and want to hide.
Click the Setup | Charts button to view the Charts setup screens. There are several tabs that can be viewed to customize the chart settings. All settings will be used as properties for all charts.

**Properties**

Select the **Properties** tab to display the chart Properties setup screen.

### Global Chart Properties

Place a check mark in the check box to activate a chart feature.

- **Show Open Hash** - Plots the open price on the left side of the bar.
- **Show Color Grouping boxes** - Displays three Color Group boxes in the bottom-right corner of the charts. The three boxes from left to right are for a Template group, Symbol group, and Time group.
- **Show Session Break grid lines** - Display vertical lines on the chart marking the beginning of each trading session. The session breaks will be displayed even if grid lines are turned off on the chart.
Show Current Price highlighted on scale - Print the Current Price at the right edge of the chart, as the price pointer moves up and down on the chart.

Show Net with Current Price highlight - Prints the net change along with the Current Price on the chart.

Show Up / Down Tick Highlight Colors – The background color of the the changing price on a chart will be green for an up tick, and red for a down tick.

Show Vertical Grid in study sub-windows - Plot vertical grid lines in the study sub-windows.

3-D Candlestick Body shading - Plots candlesticks with 3-D shading.

Auto Rescale when dragging - Automatically rescale the grid price levels when the chart bar spacing is changed or moved.

Insert Zero Volume spacer bars - Plot a bar at all time intervals (even if there were no ticks during the interval).

Cap Constant Volume bars - If checked, Constant Volume charts will start a new bar when the volume exceeds the Constant Volume amount. Excess volume from the last tick will be applied to the new bar. If unchecked, the Volume for a bar will include all volume from the tick that causes the bar to exceed the Volume amount.

Time Stamp Bar Open time - Marks a bar's Time Stamp based on the Bar Open Time, instead of the Bar Close Time. This feature only affects Intra-day Charts. It does not affect Range, Tick, and Volume charts.

Auto Delete Old Draw Tools – Automatically delete draw tools that have a 1st anchor point that is earlier in time than the 1st bar in the chart file. When chart bars are rotated out of a chart file (deleted), then chart draw tools that were attached to those bars are also deleted.

Auto Rebuild Intra-day Bars for Today – Causes an intra-day chart to rebuild from the minute database file, when opened during the market session. Note: If Auto Refresh is enabled for 'minute' charts, then a chart will refresh and rebuild automatically.

Give priority to data feed, less on graphics – If checked, this setting will cause Ensign to give higher priority to processing in-coming data, than updating graphical information. This could prevent data loss during very fast markets.

Include filename in the Save to ASCII path – If unchecked the path for the chart's pop-up menu Save to ASCII will be C:\Ensign10\Ascii\. When checked, the filename is added as a sub-folder, such as C:\Ensign10\Ascii\ES #F.\n
New Bar

New Tick bar at 1st, 2nd Session Open - Causes Constant Tick charts to start a new bar at the day session market open time and/or the evening session open time.

New Range bar at 1st, 2nd Session Open - Causes Constant Range charts to start a new bar at session Open times.

New Renko bar at 1st, 2nd Session Open - Causes Renko charts to start a new bar at session Open times.

New Volume bar at 1st, 2nd Session Open - Causes Constant Volume charts to start a new bar at session Opens.

Time Zone on Charts

Click the drop-down arrow to select a Time Zone. The time displayed on your charts will be from the selected time zone. For example, if you select Eastern then the time stamps on all of your charts will be shown in Eastern Time Zone times.

Form Caption Font

Click the Font button to specify the font, font style, font size, and font color that should be used as the default for new charts, and for the Form caption on the chart.
Cursor Style

The following chart Cursor Styles and Properties can be selected:

**Cross** – The mouse cursor on the chart will be a small cross.

**Big Cross** – The mouse cursor on the chart will be a full-screen cross.

**Arrow** - The mouse cursor on the chart will be a standard arrow cursor.

**Horz Line** - The mouse cursor on the chart will be a horizontal line.

Properties

**Show Big Cross with Arrow** – When “Big Cross” is selected as the cursor style, then a cursor Arrow will also be plotted at the center of the Big Cross.

**Show Vertical Cursor on All Charts** – A vertical line will plot and move in all open charts at a matching time and date where the mouse cursor is currently located in a chart.

**Show Horizontal Cursor on All Charts** – A horizontal line will plot and move in all open charts at a matching price level where the mouse cursor is currently located in a chart.

**Show Price Left of Cursor** – The price level of the current mouse location will be printed to the left of the cursor.

**Show Price Right of Cursor** – The price level of the current mouse location will be printed to the right of the cursor.

**Show Future Date/Time** – When moving the mouse cursor to the right of existing bars (into the future), the date and time of the future bars will be printed next to the mouse cursor. This allows you to move your mouse into the future and see where the date and time location of future bars will occur.
Settings
Select the Settings tab to display additional settings for charts.

Daily Update Times
Enable the Daily Update Times to update chart files at the specified times. The daily update processes are optional. The updates are used by traders who need their chart files to be updated each day because they export the file data into other processes, or use the data for external analysis. Since chart files are only updated when a chart is displayed, the update processes will update every chart file, even though the chart was not manually displayed during the day.

Enable Updates – Place a check mark in these boxes to enable each update process.

Intra-day - The Intra-day process opens every chart file for tick, range, volume, and intra-day time frames. The chart files are updated with current data. The intra-day update process will run at the specified time. You can also click the Intra-day button to manually start the intra-day update process.

Daily - The Daily update process opens every daily, weekly, monthly, quarterly, and yearly chart that is found and updates the chart files with the most current data. The daily update will run automatically at the specified time. You can also click the Daily button to manually start the daily update process.
Maximum Number

The maximum number of chart bars, objects, and saved days can be specified for all charts.

**Tick Bars** – Enter the default maximum number of bars initialized for new tick, volume, range and seconds charts.

**Minute Bars** – Enter the default maximum number of bars initialized for new intra-day chart time frames.

**Daily Bars** – Enter the default maximum number of bars initialized for new daily, weekly, monthly, quarterly, and yearly charts.

**Objects** – Enter the maximum number of chart objects, studies, and lines allowed on any chart.

**Tick Days** – When a tick based chart is opened for the first time, the Tick database is used to extract the tick data and build the initial chart. Refresh data is also used to fill-in current data. This setting specifies a threshold of how many days back in the database is allowed as a starting point while creating the new chart.

**Minute Days** – When an intra-day chart is opened for the first time, the Minute database is used to extract the data and create the initial chart. Refresh data is also used to fill-in current data. This setting specifies a threshold of how many days back in the database is allowed as a starting point while creating the new chart.

**File Records** – Chart files can have private settings for maximum number of bars that exceed the defaults they were initialized with. The File Record parameter is an absolute file size maximum number of bars.

Values

The following values can be specified as chart defaults.

**Scroll Speed in seconds** - Specify the number of seconds to pause, before displaying a new chart when the auto-scroll feature is turned on. The auto-scroll feature allows a chart window to scroll through the displayed symbols in a quote page. The chart changes to the next symbol at this specified time interval.

**# of Bars to shift chart leftward** - As chart bars are plotted on a chart in real-time, the bars will eventually reach the right edge of the chart. The chart then shifts leftward to make room to add more bars. This setting is used to specify the number of bars to shift the chart leftward. Minimum value is 1. A suggested value is 10.

**Width and Height** – When a chart is the active window, you can press the Backspace key on the keyboard to change the current chart window size. Enter a pixel size for the Width and Height of the chart (example: 640 x 480). The chart will change to this size when the Backspace key is pressed. Press the key again to revert back to the normal size. If a zero value is entered as both the width and height, then Ensign will auto-determine a size.

**Chart Logo** – An optional logo can be shown in the top left corner of every chart. The logo will be read from a 'logo.bmp' file in the C:\Ensign10 folder. The color white in the logo image will be a transparent color allowing the background to show through. The combo box is used to disable the display of the logo, show it behind bars and studies, or show it on top of the bars and studies.

Example shows a Bull logo:
Auto Refresh

When a chart is opened, the chart bars are loaded from a chart file which was saved when the chart was last closed. Then data is read from the Database files to bring the chart current, which assumes the database files are current by being on-line and collecting real-time data. The chart data can optionally be refreshed from various historical data sources. Refreshing a chart will also refresh its Database files, and vice versa.

You can specify if your charts should be refreshed or not when they are opened:

**Auto Refresh On Chart Open for:**
- A master switch to enable or disable refresh when any chart is opened.
  - **Tick** – Enables automatic refresh for all Tick chart time frames.
  - **Minute** – Enables automatic refresh for all Intra-day chart time frames.
  - **Daily** – Enables automatic refresh for all Daily, Weekly, Monthly, Quarterly and Yearly charts.

Each chart type has its own parameter for the amount of refresh to request. This amount is relative to the last time Ensign 10 was closed. For example, if the Daily refresh is set to refresh 7 days and the program was last run 1 month ago, the size of the refresh request will be 1 month plus 7 days.

**Turn Off Refresh after FXCM awakens** – This is a feature for the FXCM feed. If the FXCM feed is off-line for more than 5 minutes, the charts currently open will automatically refresh when the FXCM feed resumes. Check this box to turn off this auto refresh.

**Refresh All Open Charts** – Click this button to manually refresh all open charts according to the quantities entered on the Tick, Minute, and Daily rows. The states of the check boxes are ignored.

**Refresh Tick Database on program run** – Causes Ensign to download and update the raw Tick database for all symbols when the program first runs. This is a time consuming task, but will update the historical Tick database for all of your symbols. When a chart is subsequently opened it will not need to be refreshed, because all of the data is already current. Specify the number of hours to refresh, such as 2 hours.

**Refresh Minute Database on program run** – Causes Ensign to download and update the 1-minute database from which all intra-day charts are created. This is a time consuming task, but will update the Minute database for all of your symbols. When an intra-day chart is subsequently opened it will not need to be refreshed, because its data set is already current. Specify the number of days to refresh, such as 2 days.

**Turn Off Database Spike Filter** – Ensign filters a tick when its delta from a prior tick is 20 times the average delta. This is assumed to be an erroneous spike tick. Check this box to disable this filter and store all refresh ticks.

**Refresh All Database Files** - Click this button to manually refresh all chart database files for the quantities entered on the Tick Database and Minute Database rows. For example, enter a value of 2 hours to refresh all Tick database files for the past 2 hours of data, and enter 1 day to refresh all Minute Database files for today.
Data Panels

Select the Panels tab to customize settings for the Chart Caption and the Bar Data panel.

The Chart Caption is on the top row of a chart and displays the chart symbol and time frame.

```
EUR/JPY Daily  113.6500  1.3200  113.7520  112.2630  112.3280  113.6500  113

09-01-10 C:108.1380 H:108.6040 L:106.5710 O:106.7386 V:37,428 I:0 S:111.0721
```

The current price values for the Last, High, Low, Volume, etc., can also be displayed in the Chart Caption. The Bar Data panel is optionally displayed on the 2nd row of the chart. The Bar Data panel displays the price values for any bar that the mouse cursor is pointing to. This allows you to point the mouse to a particular bar and view it's High, Low, and Close prices, etc.

The ordering of the price values that are printed in the Chart Caption and the Bar Data panels can be customized, along with the length of the text label that describes each price value.

Select – Select either Chart Caption or one of the Data Panel choices. You can configure the Data Panel for Tick charts, Volume charts, Range charts, Renko charts, Point & Figure charts, Intra-day charts, and Daily charts (each with customized price arrangements).
Visible Fields – This panel displays the possible price values that can be displayed on the caption or data panel. Place a check mark next to each price field that you want to display. Checking the Template Name box will show the name on the right side of the Bar Data panel if the panel is wide enough to show it.

Arrange Order - To move a price field to a different position, drag a field name vertically on the list.

Field Labels – This panel changes the length of the labels for each price field.

  - No Labels – Labels are not shown to mark the prices.
  - Short Labels – Show a one character label to mark the prices:
    - C=Close, N=Net, H=High, L=Low, O=Open, B=Bid price, A=Ask price
    - V=Volume, I=Open Interest, and R=Range.
  - Long Labels – Print the full descriptive label for each price field.

Font - Click the Font button to specify the font, font style, and font size for the Bar Data Panel.

Alignment – The Bar Data fields can be aligned to the Left or to the Right edge of the chart.

Bar Data Panel

Press Ctrl-B while viewing a chart to hide or show the Bar Data Panel.

Pop-Up Menu: While viewing a chart, right-click the mouse on the Bar Data Panel to view a pop-up menu. The pop-up menu (shown at right) is an alternative way to specify which price fields are displayed on the Bar Data Panel. The pop-up menu can also specify the length of the text labels, and Hide the panel.

Timer Alert: An optional Timer Alert can be enabled. The Timer Alert will display a small clock icon on the Bar Data Panel when the bar is nearing completion.

  1) On daily charts the Alert will appear when there is 15 minutes left before the close time.
  2) On intra-day charts the Alert will appear when there is 30 seconds left before the bar completes.
  3) On constant tick charts the Alert will appear when the bar is 80% completed.
Keyboard

Select the Keys tab to customize the actions performed by the Mouse Wheel and the Keyboard Arrow Keys.

Mouse Wheel

Roll Up and Roll Down - Click the drop-down arrows to select an action that will occur when you either Roll the mouse wheel Up or Roll the mouse wheel Down.

Mouse

Double Click Chart Background – Select the item in the drop-down box that will be displayed if you double-click on the chart background.

Enable Stack Tab Double Click – Check this option to have a double click on a stack tab undock the chart from the stack.

Enable Stack Tab Reordering – Check this option to be able to drag a stack’s tab horizontally to reorder the tabs.

Keyboard

Enable Keyboard for Charts – Place a check mark in this box to enable keyboard commands on charts. To disable keyboard commands on charts, uncheck the box. If you inadvertently press keys on the keyboard which apply studies and tools on your charts, then you may want to uncheck the box.

Ctrl-Alt-W does all charts – This command is a hot key that hides or shows sub-windows on a chart. If this box is checked, then this command will hide or show sub-windows on all visible charts.

Left/Right Bar Shift – Enter a number in the box. The chart will shift left or right (by this many bars) when you press Shift-> or Shift<- (the ‘greater than’ and ‘less than’ characters) on the keyboard.
An entry of ‘8 hr’ will shift the chart to the nearest 8 hour boundaries of 0:00, 8:00, or 16:00. Other useful entries would be ‘1 hr’, ‘2 hr’, ‘3 hr’, ‘4 hr’, ‘6 hr’ and ‘12 hr’.

**Keyboard Arrow Keys**

**Up, Left, Right, Down** – Click the drop-down arrows to select an action that will occur when you press the Up, Down, Right, or Left arrow keys on the keyboard.

**Keyboard Chart Time Frames or Layer # or ESPL#**

Enter a Chart Time Frame or the keywords ‘Layer1’ through ‘Layer9’ in the entry boxes. Pressing a key on the 10-keypad can change the active Chart’s time frame, or change the visible windows to a different Layer (which is the same as clicking on one of the Layer bullets on the Main ribbon).

The entry can be ESPL# where # is the value to assign to the ESPL variable, and then the ESPL script will execute. Example: ESPL51 would execute the ESPL script with ESPL having a value of 51.

**Tool Hot Keys**

Select the Tools tab to assign single character hot keys to initiate a draw tool. The draw tool is started by pressing the hot key, then move the mouse to click on the tool’s construction points.

The example for Draw Lines has both a lower case t and an upper case T. Either letter would initiate the draw line tool.
Study Hot Keys

Select the Studies tab to assign single character hot keys to add a study to the chart. This example shows the letter 'S' has been assigned as the hot key for adding the Stochastic study to the chart.

In this example, the + key has been assigned to toggle the Price Histogram Split Out display mode, and the – key has been assigned to toggle the Price Histogram Tight Alignment display mode.
Select the ColorBars tab to assign single character hot keys to add a Color Bar study to the chart. The example below shows that the letter 'c' has been assigned as the hot key for adding the Close vs. Open color bar study to the chart, and the letter 'n' will return the chart to the Normal bar coloring.

The Day of Week color bar study is useful with the Weekly Price Histogram where each day is shown in a different color.
General Keyboard Keys
Alt - Activate the Menu
Ctrl-F4 - Close the active window
Ctrl-Tab - Change the active window
Alt-Tab - Jump between programs running on the computer
Alt-F4 - Exits the program if all the windows are closed

Function Keys
F1 - Activate On-line Help
F2-F11 - Displays the 1st-10th Layouts
F12 - Display a Snap Quote

Chart Control Keys
b - Toggle bars on or off
T - Tick chart
D - Daily chart
W - Weekly chart
w - Monthly chart
1-9 - Custom Time Frames
/ - Custom Time Frame
* - Custom Time Frame
Shift < - Shift Chart View Left
Shift > - Shift Chart View Right
Page Up or Up Arrow - Slide chart view up
Page Down or Down Arrow - Slide chart view down
] - Compress Bar Spacing
[ - Expand Bar Spacing
Period key (.) - Slide forward one bar at a time
Comma (,) - Slide chart back one bar at a time
{ or Left Arrow - Increase Bar Height scaling
} or Right Arrow - Decrease Bar Height scaling
= - Restore chart to default scale and position
Shift (=) - Jump to first bar in chart
Chart Types
B - Bar Chart
J - Japanese Candlesticks
L - Line Chart
# - Continuation Chart (Futures)

Chart Browse Keys
Press the Home key to browse back one chart, press the End key to browse forward one chart (while a quote page is open).

Chart Hot Keys
The following keyboard commands can be used while viewing a chart. The commands can be used to change the chart symbol in the active window, display a Time & Sales for the current chart, display Snap Quotes, display and change the chart properties, set alerts, edit chart data, and control chart templates.

Each hot key is a Control Key sequence. Hold down the Ctrl key and then press the companion key once. Example, to set an alert on a chart, move the mouse cursor to the desired alert price level and then press Ctrl-A (hold down the Ctrl key and then press the letter A once).

Ctrl-A Set a price Alert at the cursor position
Ctrl-B Toggle the Bar Data panel on/off the chart
Ctrl-C Toggle the Big Cross cursor on/off the chart
Ctrl-D Delete the chart bar at the cursor location.
Ctrl-E E-mail the current window or chart image
Ctrl-F Toggle a Chart to Zoom Fullscreen and back to Normal size.
Ctrl-H Edit the High price to the cursor location on the bar that is being pointed to.
Ctrl-I Inserts a bar on a chart at the mouse cursor location.
Ctrl-J Saves a .PNG Graphics image of the current Chart or Properties window.
Ctrl-K Toggle the Chart colors to Printer Friendly Colors, then back to Original Colors.
Ctrl-L Edit the Low price to the cursor location on the bar that is being pointed to.
Ctrl-O Display the Chart Objects list for the current chart.
Ctrl-P Display the Chart Properties window.
Ctrl-Q Display Snap Quote window for the current chart symbol.
Ctrl-R Remove both High and Low alert from a chart.
Ctrl-S Prompts for a symbol, and then changes the current chart window.
Ctrl-T Display Time & Sales window for the current chart symbol.
Ctrl-V Toggle the Volume bars on/off the chart
Ctrl-X Toggle the chart Bars on/off the chart
Ctrl-Y Toggle the Study Data panel on/off the chart
Ctrl-Z Adjust the chart prices for Stock Splits or scale adjustments
Ctrl-1 through Ctrl-9 and Ctrl-0 can be used to apply one of the first 10 Templates on a chart.
Alt-S Pause or resume Auto Scroll mode.

**Quote Page Hot Keys**

The following keyboard commands can be used while viewing a Quote Page. Each hot key is a Control Key sequence. Hold down the Ctrl key and then press the companion key once. Example, to add a new symbol to a Quote page press Ctrl-S (hold down the Ctrl key and then press the letter S once).
Ctrl-B Hide the Button Bar
Ctrl-F Toggle page Format
Ctrl-H Hide the Tabs
Ctrl-J Save a graphical picture of the Quote page to a .PNG graphics file.
Ctrl-K Activate Ticker Tape
Ctrl-N Display any News Stories for the selected symbol
Ctrl-Q Display Snap Quote window for the selected symbol
Ctrl-R Delete Row
Ctrl-S Add Symbol to Quote Page
Ctrl-T Display Time & Sales window for the selected symbol
Ctrl-D Display Daily chart for the selected symbol
Ctrl-W Display Weekly chart for the selected symbol
Ctrl-M Display Monthly chart for the selected symbol

= The Equal key will open the selected Quote page symbol using the default double-click Time Frame.

Ctrl-1 through Ctrl-0, and Ctrl- - and Ctrl- = Top row of keyboard. Displays a chart for the selected symbol, using one of the first 12 time frames from the Time Frames button panel.
Home - Advance the Tab focus forward (view the next Custom Quote page)
End - Advance the Tab focus backward (view the previous Custom Quote page)
Pop-Up Menu

Select the Menu tab to select which menu items appear on a chart’s pop-up menu. A chart’s pop-up menu is displayed when you right-click the mouse on the chart. Uncheck all boxes that you do not want to appear in the pop-up menu. Click here to read about each chart pop-up menu item.
Package

Click the Setup | Package button to view the Package Manager screen. A package is a collection of Ensign files that can be uploaded to an internet server (storage location) for distribution to other traders. A package has the following characteristics:

- Create a package by dragging files or folders from a directory tree and dropping the files on the package list.
- The package content is compressed for significant size reduction.
- The package can be password protected for security against unauthorized use.
- Extraction from a package decompresses and distributes the files to their correct folder locations.
- Extraction can be limited to specific files.
- Packages can be used for backing up important files and folders.
- Packages can be uploaded to either private or public folder locations on the Ensign server.
- Ensign customers can create, password protect, and manage private folders on the Ensign server.

Build

Click the Build tab to create or edit a Package. A package is a list of files that can be uploaded to a server. If allowed, other users can then access the files. This allows Ensign customers to easily share templates, DYO settings, and other program files.

Drag files and folders from the directory tree on the left to the package list on the right. Individual files are shown with the page icon. Folders will show a folder icon.

New – Click the New button to clear the package list and start a new package.

Open – Click the Open button to load and open a previously saved package list from the \Ensign10\Packages folder.
Password - Click the Password button to enter a password that will be required to extract files from the package. Leave the password blank if you want an unprotected package.

Save – Click the Save button to compress the files on the package list. The files will be saved into a single file that you provide the name for. Package files are saved in the \Ensign10\Packages folder.

Delete – Click the Delete button to erase the currently selected package file.

Server

Click the Server tab to view the packages that are currently saved on Ensign's server.

Select Site – Click the drop-down arrow to select a server to view. The following servers are available.

- Ensign's Packages
  Contains official releases by Ensign
- Ensign's Videos
  Contains video clips created by Ensign
- General Public
  Items shared by other users
- Mentor Folders
  Access private folders if you have a password

The view on the left shows the packages on your computer that can be uploaded. The view on the right shows the packages on Ensign's server that can be downloaded.

Upload - Click on a package name in the left-side view to select it, and then click the Upload button to transfer the package from your computer to the Ensign server.

Download - Click on a package name in the right-side view to select it, and then click the Download button to transfer the package from the Ensign server to your computer.

And Extract – Check this box to have Ensign automatically extract the files after downloading a package.

Refresh – Click the Refresh button to update the directory listing in the view.

Delete – Click the Delete button to erase the selected package from either the computer or from the server.

Note: Only Ensign staff can upload to Ensign's Packages and Videos site. Everyone may download from them.
Extract

Click the Extract tab to select a package and extract its files to your computer. Note: If the ‘and extract’ check box is checked on the Server tab, then a package will automatically extract when it is downloaded, and you will not need to use this screen.

Open – Click the Open button to select a package file from the \Ensign10\Packages folder. If necessary, enter the Password if the package requires one. The package files will then show on the list.

Check All – Click Check All to place a check mark next to each file in the package. Files that are checked will be extracted when you click Extract.

Check Non-Existent – Click Check Non-Existent to automatically check only the package files that do NOT already exist on your computer. This allows you to prevent your current files from being overwritten.

Uncheck All – Click Uncheck All to uncheck all the package files. You can then manually check those that you want to extract.

Extract – Click Extract to extract and save the package files to your computer. A package knows what folders to save the files in.

Settings

Click the Settings tab to view the setup screen for uploading your own packages. This screen will be blank if you are not a current Ensign subscriber.
If you are a current Ensign subscriber, then the screen will display fields for setting up your own Package folders on Ensign's server. Two folders are available to you (Public and Private). Your private folder will allow you to upload and download personal packages for backup purposes and distribution of your own systems. For example, you can upload an important template file as a backup to your Private folder. If you have installed Ensign on a 2nd computer, the Private folder can be used to upload and download files between the computers.

Your Public folder allows you to share your packages with other Ensign users, and optionally allow others to share their packages with you. Other Ensign users would access your Public folder using the Mentor Folders server. This is similar to Ensign's Official Folder, but it is between you and users you wish to share with.

To setup your Packages do the following (Note: The first three fields are required):

**Email** - Enter your email address. This will not be shared with nor seen by anyone. Ensign Software will email some instructions to you. Follow the instructions in the email to create your Private and Public folders.

**Display Name** - Enter the name you wish others to use when connecting to your personal package site. Try to be unique as duplicate names are allowed but could be problematic. For example, 'MySite' is not a good name to use.

**Admin Password** – Enter your Administrator Password. This is only for your use. Do not share this with anyone. This allows you to maintain your Package folders.

The next two fields are optional. However, you should use them for increased security.

**Upload Password** – This password restricts who can upload to your Public folder. Users who know your Display Name and your Upload Password can upload packages to your public folder.

**Download Password** - This password restricts who can download from your Public folder. Users who know your Display Name and your Download Password will be able to download packages from your public folder.

The Save Settings and Send to Email buttons are for updating the information for your Package folders.

**Save Settings** – Click this button to update Ensign's server with the information you have provided. If you are setting up for the first time, then an account will be created in the server database.

**Send to Email** – Click this button to send your account information to your email address. This is a way to remember your upload and download passwords if you happen to forget them.

To setup an account fill-in all fields and click the Save Settings button. An email will be sent to the email address provided. Check your email and follow the instructions in the email. If any error occurs during this process, please follow the prompts. Save your email for future reference as it contains your passwords. If you lose the email or choose to delete it, then you can click on the Send to Email button and have the information sent to you again. If you do not get an email, then check your settings and make sure your email address is correct. Check your Spam filter as well. Sometimes emails are placed in a spam folder unexpectedly. Once you have followed the instructions in the email, then you are setup and ready to use your personal Package folders.
Mentor Folders

Enter the site name and password to access packages on another user's Public folder.

To connect to a Mentor site, click one of the buttons shown below the Select Site drop down list, or use the Select Site drop down list to make a selection. Fill in the site's Upload Password (optional) and Download Password. These fields are case-sensitive so make sure you use the correct capitals and lower-case letters. When entries are correct, the site's directory of packages will be shown.

**Upload Password** - A mentor may or may not want you to upload packages to his site. This field is optional and may be left blank. The Upload button will function when the Upload Password is correct, if one is required.

**Download Password** – This password must be correct to list and download packages from a Mentor's site.

You can be have your own site, just like a Mentor. Contact Ensign Software to have a site setup for you. You can then upload packages to your site, and download them from another computer using the package feature. Your site can be password protected.
Click the Setup | Internet button to display the Internet Services Download screen. This screen is used to download program upgrades, documentation updates (manuals), and various data files.

The Installed column shows what version date (for an item) is currently installed on your computer. The Released column shows the version date available for download. Select a bullet to specify which item that you want to download and upgrade. Click the Download button to start the download process. Click the What's New button to view a list of new features in the software.

Select the Daily bullet to download continuation chart data files for various Futures markets and other chart files. Indicate in the Save To Vendor drop-down list where you would like the daily files to save (select Ensign Internet if you don't have a real-time data feed source).

Select the Tick files & Play Back bullet to download tick files. Tick files are the source for tick charts, Volume charts, constant range charts, Renko charts, Kagi charts, and Point and Figure charts. Tick files are also used as the source for the Play Back feature. Tick files are available on various dates for the following Futures symbols: ES, NQ, TF, and YM. Indicate in the Save to Vendor drop-down list where you want the tick files to save. The Play Back feature can then use this tick data to create a Play Back session.

Note: The IQFeed.exe must be downloaded and installed in order to connect to the DTN IQFeed data source. The Visual C++ Library must be installed in order to receive the TransAct futures data feed.
Email

Click the Email tab to display the Internet Services Email screen. Ensign allows you to email charts and screen images. To email an item you must first specify a few settings on this screen.

The upper-left sections of this screen are used to specify the recipient of your email. Place a check mark in the 'Ensign Support' box to send the email to Ensign Software Support. Place a check mark in the 'Ensign Software' box to send the email to Ensign Software. Place a check mark in the 'Other' box to send the email to one specific email address. Place a check mark in the 'List' box to send the email to a list of email addresses. Enter the email addresses in the list memo box. If desired, you can create up to eight different email lists by using the TABS at the bottom of the list window. Optionally enter some text in the 'Message' memo box at the bottom of the screen. The message will be the body of the email. If desired, click the 'Clear' button to erase the message.

The upper-right sections of this screen are used to enter your email settings. Enter your email address in the 'Enter your email address here' box. This entry will be used as the email sender and reply address. Enter the Outgoing Mail Server (SMTP) address and Port that your Internet host requires for your email account.

A Gmail account would use these three settings. The User ID for a Gmail account is your email address at Gmail, and the Password is the one you used to create your Gmail account.

Optionally browse for a file attachment. Click the 'View' button if you want to preview the attachment.
Optionally enter a ‘Subject’ line for the email. If your email host requires authentication, enter the User ID (login) and Password required to authenticate. Click the Send button to send the email. When the email has been successfully sent, a 'Finished' message will appear and the computer will beep.

**Use Ensign’s Email Settings**

If you have difficulty sending email with your own email settings, can elect to send email out though an account created by Ensign. Check the box 'Use Ensign's'. The fields for private settings will be hidden, and the email will be sent out using properties that work for this Ensign account.

**Emailing a Chart**

To email the current chart, select Email Image from the chart pop-up menu. The image will be saved to the \Ensign10\Images folder, and then the Internet Services Email window will open. Specify the destination email address and other email settings and then click the Send button.

Note: Image files are saved as .PNG graphics files in the \Ensign10\Images folder on the hard disk (or the folder that you specify in the Images Setup screen). Select Setup | System | Images to display the Images Setup screen. If desired you can change the 'Hard disk path' where images are saved. The .PNG file will be attached to the email by default. If necessary, click the Browse button to browse your hard disk and attach a different file. A default email Subject Line will be created. If desired, you can change the Subject Line.
Theme

Click the Setup | Theme button to change the color theme of the Ribbon and various forms in the software. The following color themes are available: Luna, Obsidian, Silver, Blue, Olive, Gray, Classic, XP, Vista, and Windows 7.

Printer

Click the Setup | Printer button to view the Print Setup screen. This screen allows you to select a printer and edit its properties. You can also specify the paper size, source, and print orientation.

![Print Setup Screen Image]
Custom Symbols

Click the Setup | Custom Symbols button to view the Custom Symbols screen. The Custom Symbols screen is used to create your own custom symbols. For example, the custom symbol screen can be used to create and update spread symbols, crush symbols, crack symbols, ratios, butterflies, baskets, and composite symbols. The custom symbols will update in real-time as market prices are received from your live data feed source. Several different custom symbols can be programmed.

Custom symbols are implemented using the ESPL programming language. The Get statement and the Put statement are the core ESPL statements for implementing custom symbols.

1. **Get** – The Get statement has 3 parameters (2 of which are optional). The 1st parameter is the symbol to retrieve data from. The 2nd parameter is the data field to read (the default is eLast). The 3rd parameter is the data feed vendor source. The vendor can optionally be set in advance by assigning the 'Feed' variable. If omitted, the vendor will be looked up.

2. **Put** – This statement has 6 parameters, 4 of which are optional. The 1st parameter is the new custom symbol to update. The 2nd parameter is the price of the new tick. The 3rd parameter is the new tick volume, and the default is 0. The 4th parameter is the price scale format, and the default is 2 decimals. The 5th parameter is the vendor feed, which can be set by assigning the 'Feed' variable. The 6th parameter is the timestamp for the tick in Eastern time zone.

In the example, line 9 assigns the Feed variable with the constant for the eFXCM data feed. Line 10 gets the last prices for 2 symbols, and evaluates an expression. Line 12 updates the custom symbol named 'EUROspread'. All ESPL statements and resources are available for programming custom
symbols. The example in this section shows the basics of getting prices from existing symbols and updating a calculated value for a new symbol. Note: All custom symbols should be in the same script. The symbols are updated via a timer that executes once per second when the Disable check box is unchecked.

**Toolbar Controls**

<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable</td>
<td>Check this box to disable calculations while editing is being done. Uncheck the box when the design is complete and ready to go on-line.</td>
</tr>
<tr>
<td>3 x Sec</td>
<td>Check this box to have the Custom Symbols update 3 times a second instead of once per second. This triples the CPU calculation burden.</td>
</tr>
<tr>
<td>Run</td>
<td>Click this button to save, compile and execute the script. Break points can be set, and debugging can be done by single stepping through the code and viewing variable values in the watch window.</td>
</tr>
<tr>
<td>Print</td>
<td>Click the Print button to print the script.</td>
</tr>
</tbody>
</table>

**Pop-up Menu**

- Run F9
- Trace Into F7
- Step Over F8
- Run to Cursor F4
- Toggle Break Point F5
- Add Watch Ctrl+W
- Open Output Window Ctrl+P

See the ESPL manual for information on using the debugging tools.

**Vendor Constants**

The following constants can be used to specify which data feed source to Get or Put the symbol data.

<table>
<thead>
<tr>
<th>Constant</th>
<th>Data Vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td>eFXCM</td>
<td>FXCM forex</td>
</tr>
<tr>
<td>eIB</td>
<td>Interactive Brokers</td>
</tr>
<tr>
<td>eSignal</td>
<td>eSignal</td>
</tr>
<tr>
<td>eTransAct</td>
<td>TransAct Futures</td>
</tr>
<tr>
<td>eIQFeed</td>
<td>IQFeed</td>
</tr>
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<tr>
<td>eEnsign</td>
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### Data Field Constants

If available, the following constants can be used to get price information from symbols.

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</table>

### Optimize Trades

This feature is documented in the DYO.PDF manual. Click Help | Docs | DYO Manual from the menu to view that manual.

### Chart Scanner

This feature is documented in the DYO.PDF manual. Click Help | Docs | DYO Manual from the menu to view that manual.
Playback

Click the Setup | Playback Setup button to use the Playback feature. The Playback feature is a powerful tool that allows traders to practice their trading with real market data. The Playback feature allows you to replay (on a chart) the tick-by-tick trading that occurred for specified symbols. Tick data for the specified day is used to create a play file. The file can then be played at anytime just like a tape recorder can replay its recordings. The played file will duplicate the trading day in actual time, or up to 20 x actual speed.

Playback is implemented as a data feed and is listed as one of the supported data feeds on the Setup | Feeds screen. Select Ensign Playback at the bottom of the list.

Setup Playback

1. The Symbol List is used to specify which symbols that you want to Playback. The example shows 3 symbols. Note: The number of symbols that you enter and the speed at which they are played will increase the CPU usage of your computer.

2. Pick a date (to be played) for the Playback using the calendar selection tool.

3. Pick a Playback speed using the Speed combo box.

4. Enter a Start time for the playback. Data ahead of this time and date will appear on a chart when
it is opened, and the Playback session will be from the Start time and forward. The Start time is entered in a hhmm format using Eastern time. A typical entry is 930.

5. Start the Playback session by placing a check mark in the Connect check box. Data for the specified symbols will start to update at the selected speed. The Connect process will load and/or build a play file if one is not available. Open a chart for one of the specified symbols to view the Playback session in progress.

**Building a Play File**

The Playback data feed reads data from a play file which is built from tick database files. These source files can be collected in real-time from your data vendor, obtained by refreshing a tick based chart, or downloaded from the Internet. The play file is created when the Connect box is checked to start the Playback.

If a play file exists, you are prompted whether the file should be used or recreated.

The prompt indicates whether the play file contains data for all the symbols on the symbol list.

If symbols are missing, the file should be recreated by clicking the No button.

The play file is built from tick database files. Ensign will look for existing tick files and ask if the files should be used or replaced.

If a file is complete, click Yes to use it.

If a file needs to be replaced, click No and Ensign will look for another file or try to download the file from the Internet.
ES #F, NQ #F, YM #F
Ensign maintains an archive of tick files for 3 popular Futures symbols:

ES #F: The Emini S&P 500 futures market
NQ #F: The Emini Nasdaq futures market
YM #F: The Mini Dow Jones futures market

Tick files for these 3 futures symbols can be downloaded and played. This data is a useful resource for those who might not have access to a data vendor. Perhaps you are learning to trade and have not subscribed to a real time data vendor.

Files for the date selected in the calendar tool will be downloaded and used to build the play file. Ensign’s web site contains tick files for these 3 symbols for the last 3 months. Tick data for all other symbols is available for only the current week, and is downloaded from Barchart. If you have a live data feed source, then Ensign will collect and store tick database files in real-time and these files can be used to build the Playback play file.

Open a Chart

After the play file has been loaded or created, the Playback feed is started. You are then prompted to go to the Charts panel where you would open charts.
**Playback Controls**

Check the Connect check box to turn on the Playback feed. Uncheck the box to turn Playback off.

**Toolbar**

Click the Pause button on the toolbar to pause the Playback feed. The button image will change to a Play button. Click the Play button to resume a playback. The button’s Hint shows the current playback speed. Playback can also be paused by clicking the Playback Pause button on the Setup ribbon. Click the button again to resume play.

The play speed can be changed at any time using the two triangle buttons. The down button will change to a slower speed, and the up button will change to a faster speed. The button’s Hint indicates the speed that will be changed to.

Click the Rewind button to have the Playback go back 10-minutes in time and replay the data feed. Click the Jump Ahead button to have the Playback skip forward 10-minutes in time. These actions redraw the chart to remove, add or adjust bars so the playback can continue.

The Reset button will restart the playback at the beginning, which is at the Start Time entered on the Playback setup form.

**Playback Data Feed**

The Playback feature is designed and treated like a data feed. Playback symbols can be viewed on a quote page by clicking the PB button at the bottom of the quote page.

![Playback Quotes](image)

Charts, time and sales, and snap quote forms can be opened from the quote page.

On the Charts panel, PB (Playback) will be listed as a data feed choice in the 1st column, and also as a tab on the bottom of the panel. Note: PB will not appear if you do not have any symbols on the Playback symbol list (on the Setup | Feeds screen).
Charts use the real symbol name. Note in the bottom right corner of the chart is the vendor tag of 'PB' indicating this is the ES #F symbol on the Playback feed. ES #F on the IB feed would have 'IB' in the corner, or ES #F for eSignal would have 'ES' in the corner.

ES #F for eSignal, ES #F for IB and ES #F for Playback could all be open simultaneously and updating. The eSignal and IB charts would update with current data that is either real-time or delayed, and the
Playback chart would update for the date and time selected on the setup form.

Playback charts will open with the same Studies and Draw Line tools used for the real vendor symbol. For example, if an eSignal ES #F.5 minute chart contains several studies and tools, then the Playback ES #F.5 minute chart will open with the same studies and draw lines.

**Play File**

The play file is an ASCII file that is saved in the \Playback folder and uses the date of the Playback as the file name. This file can be included in a package, uploaded, and distributed to other traders who can participate with you in running the same Playback session.

The other traders would download the package and have the identical play file you are using. The package download will save the file in the \Playback folder.

Click the Connect check box to load the play file. Ensign will see the existence of the file, and prompt if that file should be loaded? Answer Yes to load the exiting file, or answer No to build a new play file from tick database files resident on your computer.

**Summary**

The Playback feature is used by traders to practice their trading. The trading day for specified symbols can be replayed at a specified speed. Studies, Draw Tools and trading ideas can be tested on the data. The Playback feature is treated as a data feed choice, and configured on the Setup | Feeds screen. Multiple symbols can be played simultaneously. A play file is created from the tick database files either collected in real-time, refreshed from a vendor, or downloaded from the Internet. Ensign has Playback data files for ES, NQ, and YM for the past few months (updated through the most recent Friday). Other symbols are downloaded from Barchart and include the most recent 1 week of data.

A previously built Playback file can be loaded and played at any time. Play files from the \Playback folder can be added to packages and distributed to other traders.

When a Playback Chart is opened, the bar data prior to the Playback Start Time will already appear on the chart. The remaining data will be played and added to the chart at the selected Playback speed. Charts can be refreshed from your data vendor or from Barchart to show additional historical data.

A Playback session can be paused, resumed, sped up or slowed down. A Playback session can be stopped and then restarted using a different Start Time. The play file does not need to be recreated when the feed is paused, resumed, stopped and restarted.
Downloading Playback Files

An alternative method of downloading the archived Ensign Playback files (for the ES, NQ, TF and YM symbols) can be accessed on the Internet Services form. Click the Setup | Internet button to display the Internet Services screen.

1) Click the Download tab

2) Select the Tick files & Playback bullet. After connecting, a list of files can be display in the drop-down list box. Select a file. Note: The Symbol and the Date YYMMDD are used for each file choice.

3) Click the Download button. The Playback file will download and save into the folder for the selected Vendor. This file will then be available for creating a play file. Repeat the steps to download other Playback files.
Click the Setup | Clock button to open a Clock and Calendar window. The Clock window can be helpful to traders who want to see the time and date, and to view a calendar. It can be a reminder of when the markets will be closing, or a reminder to exit or enter a trade at a specific time of the day. Drag the border of the clock window to display more calendar months, or to minimize the window frame so that just the time is showing. Click the black arrows to scroll through the calendar one month at a time. Click the double-black arrows to scroll one year at a time. Click the X button in the top right corner to close the window.
Symbol Property

Click the Setup | Symbol Property button to open the Symbol Properties window. This window is used to change the property settings for specific symbols and market groups. This ensures that the symbols will display properly (with correct price scaling) on charts and quote pages. The Symbol Properties window allows you to specify the market hours, time zone, trading exchange, price format, chart scaling, study scaling, quote scaling, futures month codes, and various other items. The Market hours for Day Session and Evening Sessions can also be specified.

A list of Symbols and Market Groups is displayed on the left side of the window. To edit the properties for a symbol, use the scroll bar on the right side of the list box to scroll down and select a particular symbol. Make changes to any setting and then click the X to close the window.

To add a symbol to the list, type the symbol in the Add Symbol box and then press ENTER. After a symbol has been added to the list, then you can edit the properties for the symbol.

To Delete a symbol from the list, first select the symbol, then click the Trash can icon (top-right corner).

Note: All symbols that are not specifically entered in the Symbol Properties list will use the market hours and scale that are associated with their Market Group. For example, the default open and close times for all Canadian stocks (@CANADIAN) are 08:30 and 15:00. The market group entries begin with the '@' character in the market hours list. Do not remove the market group entries from the market hours list.
Market Hours

**Market** - The Market drop-down list is used to specify the Market Group for a symbol. For example, if the symbol is a Futures Market symbol, then select *Future*. Use the following list to select an appropriate Market.

- NYSE – Use for all U.S. stock symbols, except for the Nasdaq symbols.
- Nasdaq – Use for all U.S. Nasdaq stock symbols.
- Canadian – Use for all Canadian stock symbols.
- LStock – Use for all London or other Foreign stock symbols.
- SOption – Use for Stock Option symbols.
- Future – Use for all U.S. Futures Market symbols.
- LFuture – Use for all London or other Foreign Futures Market symbols.
- FOption – Use for all Futures Options symbols.
- Index – Use for all Index symbols.
- Fund – Use for all Mutual Fund symbols.
- Cash – Use for all FOREX and Cash symbols.
- Indicator – Use for DTN Indicator symbols.
- Statistic – Use for Statistic symbols.
- Spread – Use for Spread symbols.
- Other – Use for all other symbols.

**Exchange** - The Exchange drop-down list is used to specify the trading exchange for the symbol. These entries are used only by the Interactive Brokers version of Ensign Windows. Refer to the Interactive Brokers Symbol Guide pages on their web site to verify which exchange a symbol is traded on.

**Zone** - The Zone box is used to specify the market hours Time Zone that is used for the specified symbol. For example, select *Central time zone* for a Futures Market symbol that trades on the Chicago Board of Trade, then enter Central Times for the Day Session and Evening Session Trading hours. A symbol that trades in London should have *London* selected for the time zone, with local London times entered for the open and close hours.

**Day Session Only Check Box** - Place a check in this box to specify that Intra-day charts will not display the evening session trading. This will cause Intra-day charts to only display the day session trading (even though evening session open and close times are entered).

**Day from 1st Session Check Box** – Place a check in this box to indicate that the Daily bar for this symbol should start from the 1st session of the day.

**Open and Close Times** - Enter the time range that an intra-day chart will collect data and display bars during the day. Intra-day charts will not update when the market is closed. Enter an opening time of 00:00 and a closing time of 24:00 if a particular symbol is always open. Times can be entered for Sunday, Monday through Thursday, and Friday sessions.

**Sync with** - The time that chart bars will sync to. Example, a sync time of 7:20 will cause a 30-minute chart to build and sync bars at 7:20, 7:50, 8:20, 8:50, etc. The sync time is usually the same as the day session opening time. Enter the times in military format. For example, enter 15:00 instead of 3:00 pm.

**Evening Session Open and Close Times** - Some markets have additional trading sessions in the evening or night. Intra-day charts will display bars during these trading sessions if open and close times are entered to span the extended market hours. Delete the times in these two boxes to hide chart data during the evening sessions. Note: Day session open and close times must always be entered if evening session times are entered (even if a symbol does not trade during the day).
Price Format

Chart - Specify the chart price scaling for the symbol or market group. Not all symbols trade in dollars and pennies (decimal). Some trade in 8ths, 32nd, and 64ths, etc. If necessary, change the price scaling for a symbol so that it will chart correctly.

Studies - Specify the price scaling for studies that are placed on charts for this symbol.

Quotes and Options - Select from the drop-down list the digit format that should be used to display a price quote for a specific symbol. For example, a symbol price of 1.3256 should have a price format of #.####

Minimum Grid - Enter a price amount for the minimum Chart grid line distance. For example, a value of 0.25 would be appropriate for a symbol that trades in quarter point increments.

Tick and $ / Tick - These 2 boxes are used to specify a Tick size, and the Dollar value per Tick. These values are then used to calculate trading result calculations. For example, a market that has a Tick size of .0001 and a Dollar value per Tick of 12.50 can be specified.

Roll Schedule

Months - Specify the Futures Contract months that are traded by a particular Futures symbol. For example, HMUZ would indicate that a market has March, June, September, and December contracts. The following is a list of the 12 futures month codes: F=Jan, G=Feb, H=Mar, J=Apr, K=May, M=Jun, N=Jul, Q=Aug, U=Sep, V=Oct, X=Nov, Z=Dec.

Roll Day - This entry is used to specify the exact day that a Futures continuation chart should roll-over from the current contract into the next specified contract month. Ensign Software generally rolls-over continuation charts on the 1st day of the month prior to expiration. The roll day can be changed if necessary.
Click the Setup | Cross Ref button to open the symbols Cross Reference window. This window is used to coordinate minor differences in a Symbol (depending on which data feed source it originates). For example, the E-mini S&P 500 symbol is normally ES, however, on the DTN IQfeed the symbol is @ES (see below). The Cross Reference screen allows Ensign to properly identify the ES market, even when @ES is charted or displayed on a quote page. The data received from various Refresh sources can also be adjusted (for example divided by 100).

The settings on this screen are normally updated by Ensign. Don't change the settings unless instructed by Ensign to do so.
Holiday Schedule

Click the Setup | Holiday Schedule button to open the Holiday Schedule window. This window is used to prevent chart data from updating on market Holidays. This will prevent duplicate chart bars from being saved on days when the markets are closed for a Holiday (or some other reason).

To add a new Holiday date to the list, select a date using the Calendar tool, then click the Add button. Place a check mark in each exchange box that observes a Holiday on the selected day. Click the All button to place a check in all the exchange boxes. Click the All U.S. button to place a check in only the United States exchanges boxes.

Holiday dates can be removed by selecting a date in the list and then clicking the Delete button.
Main Ribbon

The buttons on the Main ribbon are used to open forms and windows for the primary features of the Ensign program, such as charts and quote pages.

Layout

Click the Main | Layout button to open the Layouts panel. Ensign can display several charts, quote pages, and windows at the same time. A collection of open windows is called a Layout. Ensign allows you to save a layout so that it can be easily restored and viewed. Layouts remember the window locations and sizes, and enable traders to view their favorite charts and quote pages without having to repeatedly open, size, and move windows to the locations they are accustomed to. The layout will remember the layers and window locations and restore them when it is opened. Layouts also remember the status of the Lock Line Placement, Lock Studies, Lock Lines, and Price Magnet states.

Creating and Saving a Layout

The first step in creating a new layout is to open several windows and position them on the screen. You can apply various studies and draw lines on the chart windows. The layout will remember every detail of each window that is opened. To save the layout, click the Save As button on the Layouts panel and then enter a layout name in the entry box. The layout name will be added to the list box. The screen will be memorized with all the open windows, studies, and tools. There is no limit to the number of layouts that can be saved. Click the Save button to resave a layout after making changes to the windows. To save a layout under a different name click on the Save As button and enter a new layout name. Place a check mark in the Save Prompt check box to enable an automatic reminder to save your layout anytime a layout is changed.

NOTE: While viewing a chart you can access the Layouts panel by right-clicking on the chart and selecting Layout Panel from the pop-up menu.
Opening and Using Layouts

Layouts are opened from the layouts panel by selecting the layout name in the list box and then clicking the Open button. Double-clicking on the layout name will also open the layout.

Place a check mark in the Auto Open check box if you want the first layout in the list to automatically open and display when Ensign is run. Click the X Close button to close the layouts panel, or click the Layout button again.

Function keys F2 through F11 can be used to open the first 10 layouts on the list.

Forms may have been located on multiple monitors when the layout was saved, but these monitors are no longer connected to the computer. Therefore, press CTRL-END prior to opening a layout to force all forms to open on the primary monitor.

Deleting and Repositioning Layouts

To delete a layout, click the Layout button and then select the layout name in the list box. Click the Trash Can button to delete the layout from the list box.

To rearrange the order of the list, drag a layout name vertically up or down on the list. To sort the layout names in alphabetical order place a check mark in the Sorted check box. Uncheck the box to arrange the layout names manually.

At the bottom of the layout list are 8 tabs for selecting a layout folder. The tabs permit layouts to be grouped on different tabs, and the layout files are stored in different folders on the hard disk. The layout folders are named Layout# where # is a digit 1 through 8. You might use one folder for layouts under development, and another folder for permanent layouts. Layout files can be moved from one folder to another by dragging a layout name from the list to the desired Tab at the bottom of the list. Drop the file on the Tab (1-8) of your choice.
Opening Layouts with the Scheduler

Layouts can be automatically opened at a specific time by using the Scheduler. Select Set-Up | System | Scheduler to show the Scheduler window. Each scheduler row can open a Layout. Enter the keywords 'Layout=Name' on a Message Text row (where 'Name' is the name of the Layout to open). For example, to display a layout named MyStocks, enter Layout=MyStocks. The layout named MyStocks will open at the specified time.

Sharing Layouts with other Traders

If desired, layout files can be emailed to other Ensign users. This allows traders to share their layouts with their associates. Layouts are saved in text files in the \Ensign10\Layouts\Layout# folders, where # is a digit 1 through 8. The file name extension is .txt (example: MyStocks.TXT). When a layout file is saved in the \Ensign10\Layouts\Layout1 folder, the new layout will appear in the layouts list for tab 1 the next time the layouts panel is opened. Including a layout file in a Package is the easiest way to distribute a layout to other traders.

Downloading Layouts from Ensign's Web Site

Layout files can be downloaded from the Ensign internet servers. To download a file click the Setup | Package button, select the Server tab, and then select Ensign's Official Folder (from the Select Site drop-down list).

The layouts created by Ensign Software are located in this folder and begin with the word Layout. Layouts distributed by other traders are usually located in the General Public Folder. Select one or more packages to download from the server and click the Download button. Check the 'and Extract' box before downloading and the extraction of the layouts will be performed automatically after the packages are downloaded. The extraction saves the layout files in the same layout folder that they were packaged from.
Click the **Main | Chart** button to open the Charts panel. The Charts panel is used to easily open the charts that you trade and analyze. Ensign can display a chart for any symbol in any time frame (including seconds, minutes, daily, weekly, monthly, 2-month, 4-month, 6-month, quarterly, yearly, constant tick, constant range, constant volume, Renko, Kagi, and Point and Figure charts).

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</tr>
</tbody>
</table>

**Hide** – Check the 'Hide' box (top-right) to specify auto-closing of the charts panel after a chart is opened. Uncheck the box to have the panel remain open so that additional charts can be opened.

**New Chart and Replace** - Selection whether charts are opened in a new chart window, or in a current chart window (replacing the active chart).

**Template** - When the Template check box is checked, a template will load when the chart is opened. Enter the name of the template in the 'Template Name' box.

**Symbol Group** – The Symbol Group box is used to open the Symbol on all charts that match the Symbol Group color. A new chart will be opened if the Symbol Group color is black. If the color is something else, then Ensign tries to find a chart with the same symbol group color, and changes the Symbol on the chart that is already open.
Opening a Chart

When the charts panel is opened, it will highlight the chart Symbol and Time frame that was last used. To open a chart, select a symbol, a time frame, and then click the Open button.

If a chart time frame of your choice is already highlighted, you can double-click on a symbol to open a new chart (for that symbol and time frame). If a symbol of your choice is already highlighted, then you can double-click on a time frame entry to open a new chart (for that symbol and time frame).

To open a chart for a symbol that is not in the Symbols list, type the symbol and its time frame in the 'Chart to Open' box and then press the ENTER key. For example: Typing CAD/JPY.5 will open a 5-minute chart for the CAD/JPY Forex symbol.

Tabs

A tab is shown for each of the vendors for whom symbol lists have been established on the Setup | Feeds form. Click on a tab to show the symbols for that vendor. The symbols are listed alphabetically.

To remove a tab for a vendor, go to the Setup | Feeds form, select the vendor and double click on the vendor's symbol list to remove all symbols from the list.

Editing

To add, edit, or delete chart Symbols and Time Frames (Time, Tick, Range and Volume), simply click in any column and type your entries. After adding a new entry press the ENTER key so that each row contains a unique entry. You can use Cut (Ctrl-X), Copy (Ctrl-C), and Paste (Ctrl-V) to manage and organize the list contents.

Sorting

Click a button at the top of a list to sort the list alphabetically (or numerically).
## Time Frames

The following letters are used to specify Time Frames for different kinds of charts.

<table>
<thead>
<tr>
<th>Notation</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Daily chart. Daily bars includes trading from the open time through the day session close.</td>
</tr>
<tr>
<td>W</td>
<td>Weekly chart. A weekly bar includes trading from Sunday through Friday.</td>
</tr>
<tr>
<td>M</td>
<td>Monthly chart. A monthly bar includes data for each calendar month.</td>
</tr>
<tr>
<td>M2</td>
<td>2-Month bar. Bars end Feb 28th, April 30th, June 30th, August 31st, October 31st, and Dec 31st</td>
</tr>
<tr>
<td>M4</td>
<td>4-Month bar. Bars end April 30th, August 31st, and December 31st</td>
</tr>
<tr>
<td>M6</td>
<td>6-Month bar. Bars end June 30th and December 31st</td>
</tr>
<tr>
<td>Q</td>
<td>Quarterly chart. Bars end March 31st, June 30th, September 30th and December 31st.</td>
</tr>
<tr>
<td>Y</td>
<td>Yearly chart. A yearly bar includes data for each calendar year.</td>
</tr>
<tr>
<td>T</td>
<td>Tick chart. Each bar (data point) is a single trade tick.</td>
</tr>
<tr>
<td>####</td>
<td>Intra-day chart. Each bar contains #### minutes of trading data.</td>
</tr>
<tr>
<td>S####</td>
<td>Seconds chart. Each bar contains #### seconds of trading data. Note: 'S' prefix.</td>
</tr>
<tr>
<td>- ####</td>
<td>Constant tick chart. Each bar contains #### number of ticks. Note: Minus sign prefix.</td>
</tr>
<tr>
<td>R####</td>
<td>Range chart. Each bar includes #### points (price range) in size. Note: 'R' prefix.</td>
</tr>
<tr>
<td>N####</td>
<td>Renko chart. Each bar's candle body includes #### points (price range). Note: 'N' prefix.</td>
</tr>
<tr>
<td>K####</td>
<td>Kagi chart. A new bar starts after a #### point (price range) reversal. Note: 'K' prefix.</td>
</tr>
<tr>
<td>K#.##%</td>
<td>Kagi chart. A new bar starts after a percentage of price reversal. Note: 'K' prefix and '%'</td>
</tr>
<tr>
<td>V####</td>
<td>Volume chart. Each bar includes #### of volume traded. Note: 'V' prefix.</td>
</tr>
<tr>
<td>####x#</td>
<td>Point &amp; Figure chart. Format is Box size x Reverse count. Example for ES #F: 25x3</td>
</tr>
</tbody>
</table>

Examples:

V5000 = Volume chart where each bar contains 5000 shares traded.
R100 = Range chart where each bar is 100 trading points in size.
N100 = Renko chart where each candle body is 100 trading points in size. A new bar prints when the Renko size is achieved either above or below the prior bar's candle body.
K100 = Kagi chart where a new bar starts after a reversal of 100 trading points.
K0.05% = Kagi chart where a new bar starts after a reversal of 0.05% of price.
5 = 5-minute intra-day bar chart.
-200 = Constant tick chart where each bar contains 200 ticks (price changes).
S90 = Seconds chart where each bar is 90 seconds in duration.
100x3 = Point and Figure chart with a 100 point box size and a 3 box reversal.
M = Monthly chart.
Q = Quarterly bar chart.
Tip: The Wickless Candles bar style is often used with Renko charts, as in this example.

Tip: Using Bar Standard with a 2 pixel line thickness is recommended for Kagi charts.
Tip: The Point & Figure bar style is recommended for Point & Figure charts, as in this example:

Studies and Draw Tools can be applied to Point and Figures charts, as well as to the other chart types. It is recommended that the Close vs. Open color bar study be used to color the columns.
### Chart Toolbar

Every chart has a Chart Toolbar displayed in the top-right corner of the chart. The toolbar is used to work with chart objects, apply studies, templates, draw tools, and color bar studies to the chart. You can also change the chart time frame, access the Chart Controls panel, and set many chart properties (like colors and preferences).

### Chart Objects

Click the Chart Objects button to open the Chart Objects panel. The Chart Objects panel displays a list of all the studies, draw tools, and objects that are currently applied to the chart. Charts can display dozens of studies, lines, notes, arrows, and tools. Each item placed on a chart is called a Chart Object. The Objects are displayed when the Chart Objects button is clicked.

Each Chart Object can be customized by selecting the object from the list, and then clicking the Properties button. Chart Objects can be removed from a chart by selecting the object (or group of objects), and then clicking the Delete button. Remove all chart objects from a chart by clicking the Delete All button. Click the Undelete button to restore the last study that was deleted. An object in the list can be repositioned by selecting the item and dragging it vertically up or down on the list. Note: Studies calculate in the order they appear on the list.
**Color Box** - A Color box is displayed in the top-left corner of the Chart Objects panel. The color of the box helps you distinguish between multiple objects of the same type. As Chart Objects are selected from the list, the color of the box will change to match the line color of the study. The color box will also contain the object's study value. The study value indicates the study parameter (ex. the number ‘10’ would be displayed for a 10 period moving average).

**Show Legend** – Uncheck the Show Legend box to hide the legend details. The legend summarizes the settings that are associated with different chart objects and studies.

**Hide** - Check the 'Hide' box (top-right) to specify auto-closing of the Chart Objects panel when an object's property form is opened. Uncheck the box to have the panel remain open so that additional objects can be selected.

Each chart object in the list has a check box. Check the box to hide the chart object on the chart. Study objects still calculate although they are hidden.

**Variables Report**

Click the Variables button for a report showing where variables are used in DYOs and other chart objects.

Example: 21 Start Date = [Initialize], Properties

21 is the variable index. 'Start Date' is the custom name given to this variable.

The variable is referenced in two DYOs named 'Initialize' and 'Properties'. Square brackets will surround a DYO's name when the variable is assigned a value in the DYO.

Variables can be moved from one index to another by using the Move and To drop down lists. After selecting the Move and the To locations, click the button to perform the move.

In this example, variable 21 Start Date is being moved to the unused variable 26. Variable 21 would then be unused. All references to variable 21 would be changed to reference 26.
Tip: Clicking on a row in the report will set the selection in the Move drop down list.

Tip: Double clicking in the Move edit field or in the To edit field will erase the name assigned to the selected variable. The edit field will show just the index.

Tip: The name assigned to the variable index can be entered or edited in either the Move edit field or in the To edit field after the variable has been selected. Click in the edit field and enter a space and the variable name after the variable's index.

**DYOs Report**

Click the DYOs button to view a report of all the DYOSs on a chart. The report summarizes the DYO objects and their labels.

In this example, the chart has a DYO named 'Profit $', which uses sub-window 1, and has a caption note of 'Dec 08'. This DYO has labels on row J and row L. The labels have text or values that resolve to '654' on row J, and to '-162' on row L.

Tip: Clicking on a row in the report will open the property form for that chart object.

**Print All**

Click the Print All button to have the program open the property form for every object on the chart, and print a copy of the object's property form. This is a quick way to create printed documentation of the objects that make up a template's design.
Studies

Click the Studies button to display a list of studies that can be placed on a chart. Click a study in the list to add the study to the chart.

Hide - Check the 'Hide' box (top-left) to specify auto-closing of the Studies panel after a study is selected. Uncheck the box to have the panel remain open so that additional studies can be added to the chart. This permits multiple studies to be quickly added to the chart.

Properties - Click the Properties button to select which studies are to be shown or hidden on the Studies panel. You can decide which studies are displayed in the list. Click the Save button that replaces the Properties button to save the changes.

Help - Click the Help button to open the Studies Manual.

Close - Click the red X button to close the Studies panel.

Note: The chart Studies are documented in the Studies.pdf manual.
Templates

Click the Templates button to open the Templates panel. Templates are used to apply multiple Studies to a chart at one time. For example, a Template could be created that adds 3 studies to the chart at the same time. This is much faster than applying each study one at a time.

Creating and Saving a Template

To create a new template, first open a chart and apply all the studies that you want to include in the template. Set the parameters and colors of each study to your preferences. Next, click the templates button to display the Templates panel.

Click the Save As button, and then enter a Template name in the entry box. The template name will be added to the list box. There is no limit to the number of templates that can be saved. If you make changes to a template, click the Save button to save the template after making changes to a chart. To save a template under a different name click on the Save As button and enter a new template name.

The Template will remember every detail regarding each study. Draw Lines that are placed in study sub-windows are also remembered. Note: A Template will not remember Draw Tools that are placed on a chart (except 'Daily Price Lines') since each chart is different.

Super Template

A super template will contain additional information for setting the chart's 15 color properties, candlestick properties, grid style, and margins. To create a super template, use a '+' character in the name of the template when saving the template.
Using Templates

Templates are applied to a chart by selecting the Template name in the list box and then clicking Open. Double-clicking on the Template name will also open the Template.

All Charts - This check box specifies whether the template is applied to multiple charts, or just the active chart window. If the All Charts check box is checked, then the selected template is applied to all charts open on the current layer. If the All Charts check box is unchecked, then the template is only applied to the active chart, unless the Color Group option is being used.

Same TF - Checking this box will restrict the template to charts with the same time frame as the current chart. Example: Apply the template to all 2-minute charts.

Color Group - Charts can be associated with each other as a template group by setting the Template color group box on each chart. Use this check box option and associated color panel to apply the template to the charts which match the template's group color.

Hide - Check the Hide box to specify auto-closing of the Templates panel after a template is opened. Uncheck the box to have the panel remain open so that other templates can be quickly opened.

Sorted - Place a check mark in the Sorted check box to sort the templates in alphabetical order. Uncheck the box to arrange the names in a custom ordering by dragging names up and down the list.

Replace - When the Replace box is checked, the template being applied to the chart will replace the studies that are currently on the chart. Uncheck the box to have the template's studies added to the studies on the chart.

Erase Lines - Check this box to have the template remove all draw tools from the chart.

CTRL 1..9 - This option when checked will make Ctrl-1 through Ctrl-9 into hot keys for applying the first 9 templates on the list. When the box is unchecked, Ctrl-1 through Ctrl-9 are hot keys for changing to layer 1 through layer 9.

Deleting and Repositioning Templates

To delete a template from the templates list, click the templates button and then select the template name in the list box. Click the Delete button (Trash Can image) to remove the template name from the list box.

Drag a template name vertically up or down on the list to rearrange the order of the list.

At the bottom of the template list are 8 tabs for selecting a template folder. The tabs permit templates to be read and saved in different folders. The template folders are named \Template# where # is a digit 1 through 8. You might use one folder for templates under development, and another folder for permanent templates.

Template files can be moved from one folder to another by dragging a template name from the list to the new tab at the bottom of the list.
Sharing Templates with other Traders

If desired, template files can be emailed to other Ensign users. This allows traders to share their templates with associates and friends. Templates are saved in text files in the \Ensign10\Templates\Template# folder, where # is a digit 1 through 8. The file name extension is .tmp (example: MyTemplate.tmp). When a template file is saved in the \Template1 folder, the new template will appear in the tab 1 templates list the next time the template panel is opened. The easiest way to distribute a template is to include it in a Package, and upload it to the Ensign web server.

Downloading Templates from Ensign's Web Site

Click the Setup | Package button. Select the Server tab and the Ensign's Official Folder. The templates created by Ensign Software will be in this folder and begin with the word Template.

Templates distributed by other traders will probably be located in General Public Folder.

Select one or more packages to download from the server and click the Download button. Check the 'and Extract' box before downloading so the extraction of the templates will be performed automatically after the packages are downloaded. The extraction puts the template files in the template folder they were packaged from. Look for Ensign's templates in the 2nd template folder.

Templates are documented in the Templates.pdf manual.
**Draw Tools**

Click the **Draw Tools** button to display a list of draw tools. Click on a tool on the list to add the tool to the chart. The cursor will then change to a pencil. Construct the tool on the chart by clicking locations on the chart where the key points of the draw tool should be. Click elsewhere on the chart to 'Finish' the tool. Some draw tools have 2 key points. Some draw tools have 3 key points.

**Hide** - Check the **Hide** box (top-left) to specify auto-closing of the Draw Tools panel after a tool is selected. Uncheck the box to have the panel remain open so that additional Draw Tools can be quickly added to the chart.

**Magnet** – Check the **Magnet** check box to activate the price Magnet feature. When the Magnet is activated the mouse cursor will snap to the closest High, Low, Close, or Open price while applying or adjusting tools on a chart. For example, the Magnet enables you to apply lines and tools exactly on the High or Low price of a bar.

**Lock Tool Placement** – Check this check box to prevent tools from being moved once they have been drawn. A tool can still be selected for the purpose of deleting the tool or opening its property form.

**Properties** - Click the **Properties** button to configure which tools are to be shown or hidden in the Draw Tools list. You can customize which tools are shown in the list. Click the Save button that replaces the Properties button to save the changes.

**Help** - Click the Help ? button to open the Draw Tools Manual with instructions on how to draw a tool on a chart.

**Close** - Click the red X button to close the Draw Tools panel.

Draw Tools are documented in the Tools.pdf manual.
Color Bars

Click the Color Bars button on the chart toolbar to display the Color Bars panel. Color Bar studies scan bars on a chart for the selected test criteria and color the chart bars depending on the results. A Bullish color (up) or Bearish color (down) will be assigned to bars that match the test criteria. Select Normal from the Color Bars drop down list to change the chart bars back to the normal bar color. The Color Bars list will highlight the Color Bar study that is currently in use on the chart.

Properties - Click the Properties button to configure which color bar studies are to be shown or hidden on the Color Bars panel. You may want to display only those studies that you use. Click the Save button (that replaces the Properties button) to save the changes.

Hide - Check the Hide box (top-left) to specify auto-closing of the Color Bars panel after an item is selected. Uncheck the box to have the panel remain open so that additional Color Bar studies can be quickly accessed.

Check the Price bullet to color the chart bars. Check the Ask/Bid bullet to color the Ask/Bid volume bars. Check the Volume bullet to color the volume bars.

The default colors can be changed by selecting Set-Up | Charts. The following color bar selections are available:

123 Reversal: Colors bars where a 123 reversal is taking place.

4-Minutes by 4-Minutes: This study is best used on a 1-minute chart. The color of the bars will alternate at the completion of each 4-minute period. This is used to quickly see what bars are included in each 4-minute time span.

Ask/Bid Volume: Chart bars will be colored with the bullish color when the Ask Volume exceeds the Bid Volume, and with the bearish color when Ask Volume is less than the Bid Volume.

Buy/Sell Pressure: Buy Pressure and Sell Pressure are similar to Ask Volume and Bid Volume. However, the Pressure values are derived from bar prices using proprietary formulas. Chart bars will be colored with the bullish color when the Buy Pressure exceeds the Sell Pressure, and with the bearish color when Buy Pressure is less than Sell Pressure.

Candle Doji: Colors bars that form a Doji Candlestick.

Candle Hammer/Grave: Colors bars that form a Hammer/Grave Candlestick.

Candle Marubozu: Colors bars that form a Marubozu Candlestick.

Candle Spinner: Colors bars that form a Spinner Candlestick.

Close Outer 10%: Chart bars that have a closing price in the top 10% of the bar will be colored with the bullish test color. Bars that have a closing price in the bottom 10% of the bar will be colored with the bearish test color. All other bars will be colored with the normal bar color.

Close Outer 25%: Chart bars that have a closing price in the top 25% of the bar will be colored with the bullish test color. Bars that have a closing price in the...
bottom 25% of the bar will be colored with the bearish test color. All other bars will be colored with the normal bar color.

**Close Price Reversal:** Colors bars where a Closing price reversal is occurring. Example, a reverse to the downside occurs when bar High >= Prior High, Close < Prior Close, and Close is in bottom 1/3rd of bar range. Use the reverse logic for a reverse to the upside.

**Close vs. Open:** Chart Bars that have a Close price that is higher than the Open price will be colored with the bullish test color. Chart Bars that have a Close price that is lower than the Open price will be colored with the bearish test color.

**Day by Day:** This study should be used with intra-day chart times. The color of the bars will alternate at the completion of each day. This is used to quickly see what bars are included with each calendar day.

**Day of Week:** Each day of the week is a different color. Useful with the Weekly Price Histogram.

**Double Bar Turn:** Colors bars that form a Double Bar Turn.

**Dunnigan:** This study will color bars that have a Higher High and Higher Low with the Bullish color. Lower Lows and Lower Highs will be colored with the Bearish color. Outside bars will be colored with the 3rd Color Bar color. Inside bars will be colored with the 4th Color Bar color.

**Full Moons:** This study will color the bars from Full Moon to Full Moon with the same color.

**Gap:** Chart Bars will be colored with the bullish test color if the Low of the bar is greater than the previous bar’s High. This creates an unfilled gap. Chart bars will be colored with the bearish test color if the High of the bar is less than the previous bar’s Low. This also creates an unfilled gap.

**Gap Open:** Chart Bars will be colored with the bullish test color if the Open of the bar is greater than the previous bar’s High. However, the gap may have been filled by the bar's Low. Chart bars will be colored with the bearish test color if the Open of the bar is less than the previous bar's Low. The gap may have been filled by the bar's High.

**Hour by Hour:** This study should be used with intra-day chart times. The color of the bars will alternate at the completion of each hour. This is used to quickly see what bars are included in each hour of trading.

**Island Reversal:** Chart Bars that have been stranded by a gap up and then a gap back down on the next bar will be colored with the bearish color. Chart Bars that have been stranded by a gap down and then a gap back up on the next bar will be colored with the bullish color.
**Key Reversal Pair:** Chart Bars that close near the High of the bar, and are followed by a bar that closes near the Low are called a reversal pair. These bars will be colored with the bearish color. Chart Bars that close near the Low of the bar, and are followed by a bar that closes near the High will be colored with the bullish test color.

**Large/Small Range:** Chart Bars that have a range (High-Low) greater than 1.618 times the average range of the last 5 bars will be colored with the bullish test color. Chart Bars that have a range smaller than .382 times the average range of the last 5 bars will be colored with the bearish test color.

**Large/Small Volume:** Chart Bars that have a volume greater than 1.618 times the average volume of the last 5 bars will be colored with the bullish color. Chart Bars with volume less than .382 times the average volume of the last 5 bars will be colored with the bearish color.

**Major Trends:** Chart Bars that are included in a Major up trend will be colored with the bullish test color. Chart Bars that are included in a Major down trend will be colored with the bearish test color. A Major Trend High turning point is determined by having four bars before and four bars following that all have lower highs than the turning point. A Major Trend Low turning point is determined by having four bars before and four bars following that all have higher lows than the turning point. A turning point cannot be identified until 4 bars after the fact. Once a top and bottom turn are identified, all bars between the two turns are colored as a trend.

**Minor Trends:** Chart Bars that are included in a Minor up trend will be colored with the bullish test color. Chart Bars that are included in a Minor down trend will be colored with the bearish test color. A Minor Trend High turning point is determined by having two bars before and two bars following that all have lower highs. A Minor Trend Low turning point is determined by having two bars before and two bars following that all have higher lows.

**Minute by Minute:** This Color Bar study should be used with 'Tick' charts. The color of the bars will alternate at the completion of each minute. This is used to quickly see what trades are included in a minute of trading.

**Month by Month:** This Color Bar study should be used with Daily, Weekly, or Monthly charts. The color of the bars will alternate at the completion of each month. This is used to quickly see what bars are included with each month of trading.

**Moon Phases:** This study will color the bars based on the Phases of the Moon (New Moon, First Quarter Moon, Full Moon, Third Quarter Moon). This is most useful on a daily chart.

**Narrow Range 7:** This will color the bars that have a price range that is either the largest or the smallest in comparison to the preceding 6 bars.

**Net Change:** Chart Bars that have a Close price that is higher than the previous bar's Close will be colored with the bullish test color. Chart Bars that have a Close price that is lower than the previous bar's Close will be colored with the bearish test color. If the closing price is the same, then the normal color for the bar will be used.

**Normal:** Remove the Color Bar study and change the chart bars back to the normal bar color.

**Open Outer 20%:** Chart bars that have an Opening price in the top 20% of the bar will be colored with the bearish test color. Bars that have an Opening price in the bottom 20% of the bar will be colored with the bullish test color. All other bars will be colored with the normal bar color.

**Outside/Inside Bars:** An outside bar's High price is higher than the previous bar's High, and has a Low
that is lower than the previous bar's Low. An inside bar's High is lower than the previous bar's High, and its Low is higher than the previous bar's Low. Outside bars will be colored with the bullish color. Inside bars will be colored with the bearish color.

**Pivot Point Reversal**: Colors bars where a Pivot Point Reversal is occurring.

**Quarter by Quarter**: This should be used with Daily, Weekly, or Monthly charts. The color of the bars will alternate at the completion of each quarter. This is used to quickly see what bars are included with each quarter of trading.

**Small Trends**: Chart Bars that are included in a Short term up trend will be colored with the bullish test color. Chart Bars that are included in a Short term down trend will be colored with the bearish test color. A Small Trend High turning point is determined by having one bar before and one bar following that both have lower highs. A Small Trend Low turning point is determined by having one bar before and one bar following that both have higher lows.

**Trends**: Chart Bars that are included in an up trend will be colored with the bullish test color. Chart Bars that are included in a down trend will be colored with the bearish test color.

**Turning Points**: Chart Bars that have a High greater than or equal to the previous bar's high, and greater than the following bar's high, will be colored with the bearish color. Chart Bars that have a Low less than or equal to the previous bar's low, and less than the following bar's low, will be colored with the bullish color.

**Tweezers**: Colors bars where current High = Prior High and Prior High > Prior High 2 bars back. Also Colors bars where current Low = Prior Low and Prior Low < Prior Low 2 bars back.

**Volume Increase/Decrease**: Chart Bars that have an increase in volume when compared to the previous bar will be colored with the bullish color. Chart Bars that have a decrease in volume will be colored bearish.

**Week by Week**: This study should be used with Daily charts. The color of the bars will alternate at the completion of each week. This is used to quickly see what bars are included with each week of trading.

**Weekly High/Low**: The bar that contains the high for the week will be colored with the bearish test color. The bar that contains the low for the week will be colored with the bullish test color. If one bar contains both the high and the low for the week, then it will be colored with the overlay color.

**Year by Year**: This should be used with Daily, Weekly, or Monthly charts. The color of the bars will alternate at the completion of each year. This is used to quickly see what bars are included with each year of trading.
Controls

Click the Controls button on the chart toolbar to display the Chart Controls panel. The Chart Controls panel is used to initiate an action on a chart (like Zoom In, Zoom Out, Move Up or Down, etc.).

Hide - Check the Hide box (top-row) to specify auto-closing of the Chart Controls panel after an item is selected. Uncheck the box to have the panel remain open so that additional selections can be made.

Properties - Click the Properties button to customize and change which Chart Controls are displayed in the list. If you seldom use some of the items, you may want to hide them. Place a check mark next to all items that you want displayed in the list, then click the Save configuration button that replaces the Properties button.

The following describes each item in the list.

Scroll Down and Scroll Up

The Scroll Down and Scroll Up selections are used in conjunction with a Quote page (that contains several symbols) and a Chart. First, open a chart for one of the symbols in the Quote page, then click the Scroll Up or Scroll Down arrow selections to browse up or down through the Quote page symbols. The chart will change to the next symbol up or down in the Quote page list. The HOME and END keys on the keyboard can also be used to browse through Quote page symbols. Note: Charts can also be browsed by selecting 'Previous Chart' or 'Next Chart' from the chart pop-up menu (right-click on a chart to view the pop-up menu).

Auto Scroll

Ensign also allows you to Auto Scroll through charts based on a timer. The Scroll Speed (in seconds) to pause between each chart can be specified by selecting Setup | Charts | Settings from the ribbon. To auto scroll through several charts, open a Quote page, display a chart from the quote page, then select Auto Scroll from the chart pop-up menu (right-click on a chart). A chart for each symbol in the quote page will be displayed. The system will pause for the specified number of seconds between each chart display. This feature allows traders to automate the viewing of their charts. Select Auto Scroll again from the pop-up menu to stop the chart scrolling.

The keyboard Alt-S keys can be used to pause and resume Auto Scroll mode.

Zoom In and Zoom Out

Click the Zoom In selection to activate the chart zoom feature. The chart cursor will change to a Pencil while in the zoom mode. Use the mouse to drag a rectangle outline around an area of the chart to be zoomed. Zooming-in on a chart area allows for magnified inspection of the selected area. Click the Zoom Out selection to zoom back out to the previous chart view. The chart view can be zoomed-in several times in a row. In this case, the Zoom-out button will step back through the prior zoom levels.
Lock Studies
Click the Lock Studies selection to lock the chart studies. The icon next to this selection will then change to a locked icon. This will cause any chart studies that are currently displayed on the chart to transfer to the next chart (if you change the time frame or chart symbol). The transferred studies are not permanently saved on each chart. This feature allows you to browse through several charts while viewing the same studies. Click the Lock Studies selection again to unlock the chart studies. The icon will change to an unlocked icon. When you unlock the studies, then each chart's original studies will be displayed the next time the chart is opened.

Lock Lines
Click the Lock Lines selection to lock the Lines and Draw Tools on a chart. The icon next to this selection will then change to a locked icon. This will cause all the currently displayed lines and tools to transfer to the next chart (if you change the Time Frame). Lines and Tools will not transfer to a different chart Symbol. The transferred lines are not permanently saved on each chart. This feature allows you to browse through several different chart Time Frames while viewing the same lines and tools. Click the Lock Lines selection again to unlock the chart Lines and Draw Tools. The icon will change to an unlocked icon. When you unlock the lines, then each chart's original lines and tools will be displayed the next time the chart is opened.

Shorter Bars and Taller Bars
Click the Shorter Bars and Taller Bars selections to increase or decrease the bar height and scaling. You can also use the Mouse or the Arrow keys on the keyboard to adjust the bar height.

Using the Mouse: Move the mouse to the right edge of a chart, hold the left mouse button down, and drag up or down on the price scaling numbers. Drag down to compress the bars vertically. Drag up to expand the bars vertically.

Using the Mouse Wheel: Select Setup | Charts | Keys to optionally specify an action for the mouse wheel. The Roll Up and Roll Down actions can be set to Zoom In and Zoom Out to increase and decrease the bar height when the Mouse Wheel is rolled up or down.

Using the Keyboard Arrow Keys: Select Setup | Charts | Keys to optionally specify an action for Keyboard Arrow keys. Set the action to Zoom In and Zoom Out to increase and decrease the bar height when an Arrow key is pressed. Note: You can optionally press Shift - { and Shift - } keys to increase and decrease the bar height.

Compress and Expand Bar Spacing
Click the Compress and Expand selections to increase or decrease the bar spacing. You can also use the Mouse or the Arrow keys on the keyboard to adjust the bar spacing.

Using the Mouse: Move the mouse to the bottom of a chart, hold the left mouse button down, and drag left or right on the Date and Time text. Drag left to expand the bar spacing. Drag right to expand the bar spacing.

Using the Mouse Wheel: Select Setup | Charts | Keys to optionally specify an action for the mouse wheel. The Roll Up and Roll Down actions can be set to Compress Bar Spacing and Expand Bar Spacing to increase and decrease the bar spacing when the Mouse Wheel is rolled up or down.
Using the Keyboard Arrow Keys: Select Setup | Charts | Keys to optionally specify an action for Arrow keys on the keyboard. Set the action to Compress Bar Spacing and Expand Bar Spacing to to increase and decrease the bar spacing when an Arrow key is pressed. Note: You can optionally press the ‘[ ’ and ‘]’ bracket keys to expand and compress the chart bar spacing.

Fatter Bars and Thinner Bars
Click the Fatter Bars and Thinner Bars selections to increase or decrease the bar thickness. A chart can be customized to have very thick bars, or very slim bars.

Move Up, Move Down, Move Left, Move Right
Click the Move Up, Move Down, Move Left, and Move Right selections to slide a chart in a certain direction. You can also use the Mouse and some Keyboard keys to move a chart around in the window frame.

Using the Mouse: Click and hold down the mouse inside a chart window and drag right, left, up, or down to slide the chart view. The chart will maintain its price scaling and bar spacing. This is useful for sliding the chart up, down, forwards or backwards while looking at studies or chart bars. This can also be helpful to see where projection lines or studies extend into the future.

Using the Mouse Wheel: Select Setup | Charts | Keys to optionally specify an action for the mouse wheel. The Roll Up and Roll Down actions can be set to Move Chart Up, Move Chart Down, Move Chart Left, or Move Chart Right when the Mouse Wheel is rolled up or down.

Using the Keyboard: Select Setup | Charts | Keys to optionally specify an action for Keyboard Arrow keys. Set the action to Move Chart Up, Move Chart Down, Move Chart Left, or Move Chart Right to move a chart by using the Arrow keys.

Some additional keys can be used for the following:

Page Up and Page Down - Slide the Chart view up and down

<table>
<thead>
<tr>
<th>Key</th>
<th>Action Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period Key (.)</td>
<td>Shift the Chart to the right 1 bar</td>
</tr>
<tr>
<td>Comma Key (,)</td>
<td>Shift the Chart to the left 1 bar</td>
</tr>
<tr>
<td>Shift +</td>
<td>Pressing Shift + will jump to the 1st (earliest bar) of the chart</td>
</tr>
<tr>
<td>Equal Key (=)</td>
<td>Pressing the Equal key will jump to the last (current) bar.</td>
</tr>
<tr>
<td>Shift-Period (&lt;)</td>
<td>Shift the Chart view left a specified number of bars</td>
</tr>
<tr>
<td>Shift-Comma (&gt;)</td>
<td>Shift the Chart view right a specified number of bars</td>
</tr>
</tbody>
</table>

Note: Setup | Charts | Keys to specify the 'Left/Right Bar Shift with <>' setting.
Example, a setting of 10 will cause the chart to shift 10 bars.

Bar Chart
Click the Bar Chart selection to change the chart type to a Bar chart. A Bar chart displays each data point with an Open, High, Low, and Close. The Open price is a hash mark on the left side of the bar. The Close price is a hash mark on the right side of a bar. The height of the bar represents the High and
Low price range attained during the bar time period.

**Candlesticks**

Click the Candlesticks selection to change chart type to a Candlestick chart. Japanese Candlesticks are constructed from the Open, High, Low, and Close prices of a bar. Chart bars are hollowed-out, or filled-in to look like candles. Solid candles occur when the Close price for a bar is less than the Open price. Hollow candles occur when the Close price for a bar is higher than the Open price. Various candle formations suggest bullish or bearish conditions. Candlestick terminology is a little intriguing. To become more familiar with hammers, doji, morning stars, hanging man, dark cloud cover, evening star, doji star, shooting star, dragonfly doji, gravestone doji, spinning tops, and harami crosses, please refer to a Japanese Candlestick book or manual.

**Solid Candles**

The candle bodies are solid, not hollow.

**Zebra Candles**

A slanted line is plotted in the candle to show the open and close sequence.

**Rockets Chart**

A thick wick is plotted on the candle end nearest to the open price. Shows direction.

**Line Chart**

Click the Line Chart selection to change the chart type to a Line chart. A Line chart connects all the Close prices with a line. The High, Low, and Open prices are not represented. A line chart presents a different view of market movement, and can be helpful in determining Elliott Waves and other market formations. A line chart is also a nice way to display a ‘Tick’ chart by connecting each tick with a line.

**Erase Bars**

Click the Erase Bars selection to erase a section of the chart's bars. Occasionally it may become necessary to delete a group of bars on a chart. When this selection is activated the chart cursor will change to a Pencil while in the erase mode. Use the mouse to drag a rectangle outline around the chart bars to be deleted. After outlining the bars, a window will prompt for a confirmation before deleting the bars.

**Percent Scale**

Click the Percent Scale selection to change the chart type to a Percent Scale chart. The chart price scale (left side) will change to a percentage. The first bar on the left edge of the chart window will be referenced as 100 percent. The remaining bars on the chart will be scaled either above 100 or below 100. The Percent Scale chart is used to see how far a market has risen or fallen by percent, based on the starting bar. Percent Scale charts can also be used with multiple Overlay Charts to compare relative movements between the charts.
**Log Scale**
Click the Log Scale selection to change the chart type to a Log Scale chart. The price scale (left side) will change to a log scale.

**Default Scale**
Click the Default Scale selection to return the chart view to the Default Scale and bar position. The default scale can also be activated by pressing the '=' equal key on the keyboard. This can be useful if the chart bars have gone off the screen, are too compressed, have been compressed or moved right, left, up, or down. This feature will return the chart view to its original position and price scale. Note: If the last bar of the chart is not currently visible (the chart has been dragged to the right), clicking Default Scale will return the chart view back to the current bar.

Hold the SHIFT key down while clicking Default Scale (or press SHIFT '=' on the keyboard) to jump to the first (earliest) bar of the chart. Click the Default Scale (or press '=' on the keyboard) to jump to the last (most recent) bar of the chart.
Click the Times Panel button on the chart toolbar to display the Time Frames panel. Click a button to change the time frame of the chart. Example, click the 30 button to change a chart to a 30-minute chart time frame. Note: The Time Frames panel can also be opened from a Quote page to select the time frame for the chart to be opened.

Properties - Click the Properties button to customize and change the Times. Make changes to the Times in the grid and then click the Save button (that replaces the Properties button).

Enter a positive number to display intra-day bars where the number is the time period in minutes.

Seconds charts use the letter S and the number of seconds in the bar. S90 is a 90 second bar.

The entry for a constant tick bar is a minus number. -89 is a bar with 89 ticks in the bar.

Constant range bars (momentum bars) use the letter R and the size of the range without a decimal point. R100 is a 1 point range bar on an e-mini futures chart.

Renko charts use the letter N and the size of the candle body without a decimal point. N100 is a 1 point range on an e-mini futures chart.

Constant volume bars use the letter V and the size of the volume for the bar. V1000 is a 1,000 volume bar.

T will open a tick chart where each tick is a bar. D will open a daily chart. W is used to display a weekly chart. M displays a monthly chart.

Point & Figure charts use the format of Box Size x Reverse count. Example: 25x3

Hide - Check the 'Hide' box (top-row) to specify auto-closing of the Time Frames panel after a time frame is selected. Uncheck the box to have the panel remain open so that additional chart time frames can be quickly accessed.

Time Group – The Time Group Color Box can be used to change the chart time frame on all charts that have a matching Time Group Box (lower-right corner of a chart). For example, change the Time Group color box to RED, and then click a new Time, and all charts that have a RED Time Group box will change to the new Time Frame. This feature allows you to quickly change the Time Frame for several charts at the same time.
Properties

Click the Properties button on the chart toolbar to open the Chart Properties window. The chart properties window is used to customize a chart. The properties will override the chart Default settings. Each chart can have its own custom colors, grid lines, chart type, and values, because every chart has its own chart Properties file. A chart will reopen in the same state as it was when last viewed. For example, if you adjust the bar spacing and then close the chart, the properties file will be updated. When reopened, the chart will display using the adjusted bar spacing.

Note: A Layout saves all chart properties in the layout file when the layout is saved.

Show

Bars - Place a check mark in the box to display the chart Bars. Uncheck to hide the bars.

Bar Data Panel - Show or hide the Bar Data Panel on the top row of the chart.

Study Data Panel - Show or hide the Study Data Panel on the left edge of the chart.

Open Interest - Show or hide an Open Interest line (for Futures) in the Volume window.

Settings

The A/B Column includes 4 check boxes that Show, Hide, and Customize a graph at the bottom of the chart. For intra-day charts the graph displays the Ask volume and Bid volume for each bar. For Daily charts the graph shows the Buy and Sell pressure based on a proprietary formula using chart data (similar to Ask and Bid volume).
The Volume Column includes 4 check boxes that Show, Hide, and Customize a separate graph at the bottom of the chart. The graph displays the Volume for each bar on the chart.

- **Show** - Show or hide the graph at the bottom of the chart.
- **Equi-Volume** - Display the graph with Equi-Volume bars, where the bar thickness represents volume.
- **Candle Style** - Display the graph with solid Candles.
- **No Frame** - Show or hide the frame outline of the Equi-Volume or Candles.

**Beep on each tick** - Causes a beep sound to occur each time that the chart receives a new price tick. This allows you to hear the market trading. The pitch will change up or down depending on the direction of the tick.

- **Reopen Position** – This box controls where a chart should open on the screen. When unchecked, Ensign opens a chart at a default window position. Check the box to open the chart in the same position on the screen each time that it is displayed. The chart position is only remembered (saved) when the chart properties window is displayed (and then closed). Opening at a remembered position is not the same as using a layout to open a chart and position it.

- **Optimize Speed** – Place a check in this box to reduce the CPU processing required to update a chart and its studies. Studies will not recalculate if a newly received tick is the same price as the previous tick.

- **Redraw Chart** - Causes the chart to repaint whenever a new bar is created. This cleans up ghosting or window borders that may exist when the chart moves sideways (especially when windows are overlapping each other). Checking this box is the cleanest way to run your charts but consumes more CPU time than when not checked.

- **Horz Price Line** – Plots a horizontal line on a chart, equal to the current trading price. The line will update and move as the price changes on the chart.

**Grid Line Style**

The Grid Line Style is used to specify the chart grid line type. The grid lines on a chart can be plotted as Dots, Vertical lines, Horizontal lines, or both Vertical and Horizontal lines. Grid lines can also be displayed for the Volume bars.

**Bar Style**

Click the Bar Style drop-down box to select a chart type. There are 24 different ways to display the chart data, including Bar Chart, Line Chart, Candlesticks, Close Ticks, Ensign Rockets, etc. The following will describe each chart type:

- **Bar Standard** – The high of the bar represents the High price for the period. The low of the bar represents the Low price for the period. The dash on the left side of the bar represents the Open price. The dash on the right side of the bar represents the Close price.

- **Line Chart** – The Close price of each bar is connected by a line. The high, low, and open price of the period are not represented.

- **Close Ticks** – The Close price of each bar is shown as a tick mark (dash).

- **Candlesticks** - A Japanese Candlestick displays the same Open, High, Low and Close price information as the standard bar. However, a rectangle (candle body) is plotted between the Open and the Close prices. The left-side Open dash and the right-side Close dash are replaced by the rectangle. The Open and the Close prices are communicated to you via the candlestick frame or the color of the candle body. Ensign has invented several proprietary candle types. These new candle types permit Color Bar studies to color the candle bodies with any color, yet retain the Open/Close relationship in the candle frames.
Candlesticks

A solid Japanese Candlestick body is drawn for Down Candles (the Close price is less than the Open price). The top of the candle body is the Open price, and the bottom of the candle body is the Close price. A hollow Japanese Candlestick body is drawn for Up Candles (the Close price is greater than the Open price). The bottom of the candle body is the Open price, and the top of the candle body is the Close price.

Bar Style: Candlesticks
Frame Color: Normal Bars Color
No Frame Box: Use frame color or body color for wicks
Down Candle: Normal Bars Color
Up Candle: Hollow shows chart background
Color Bars: Normal

Framed Candles

This variation of a standard candlestick outlines the candle with a frame. The Down Candle bodies (solid) are colored. The Up Candle bodies are hollow.

Bar Style: Candlesticks
Frame Color: Candle Frame
No Frame Box: Unchecked
Down Candle: Down Color
Up Candle: Hollow shows chart background
Color Bars: Close vs. Open

Solid Candles

Solid Candles will plot the Up Candles with a solid body (instead of a hollow body). One color is used for Down Candles, and a different color is used for Up Candles. In this example, the Close price is at the bottom of the Red candle bodies and at the top of the Green candle bodies. The Open price is at the opposite end of the candle body from the Close price.

Bar Style: Solid Candles
Frame Color: Candle Frame
No Frame Box: Use either Frame color or candle fill color
Down Candle: Down Color
Up Candle: Up Color
Color Bars: Close vs. Open
### Color Bar Candlesticks
Candlesticks can also be drawn using Color Bar selections. This example uses the Dunnigan Bars selection on the Color Bars list. Both the frame and the body must be colored. This is because the Open and Close relationship is indicated by the candle body being solid or hollow.

<table>
<thead>
<tr>
<th>Bar Style</th>
<th>Candlesticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame Color</td>
<td>Varies. Same as the candle body color</td>
</tr>
<tr>
<td>No Frame Box</td>
<td>Use either Frame color or candle fill color</td>
</tr>
<tr>
<td>Down Candle</td>
<td>Body is solid. Color varies</td>
</tr>
<tr>
<td>Up Candle</td>
<td>Body is hollow. Color varies</td>
</tr>
<tr>
<td>Color Bars</td>
<td>Any, except Normal and Close vs. Open</td>
</tr>
<tr>
<td>1st Color</td>
<td>Bullish Bars Color</td>
</tr>
<tr>
<td>2nd Color</td>
<td>Bearish Bars Color</td>
</tr>
<tr>
<td>3rd Color</td>
<td>3rd Color (Outside Range Color)</td>
</tr>
<tr>
<td>4th Color</td>
<td>4th Color (Inside Range Color)</td>
</tr>
</tbody>
</table>

### Ensign Corners™
Ensign Corners™ is a blend of a standard bar and a candlestick. The Open is shown with a hash mark on the left side of the candle body. The Close is shown with a hash mark on the right side of the candle body.

<table>
<thead>
<tr>
<th>Bar Style</th>
<th>Ensign Corners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame Color</td>
<td>Candle Frame</td>
</tr>
<tr>
<td>No Frame Box</td>
<td>Use either Frame color or candle fill color</td>
</tr>
<tr>
<td>Down Candle</td>
<td>Close hash mark at bottom of rectangle</td>
</tr>
<tr>
<td>Up Candle</td>
<td>Close hash mark at top of rectangle</td>
</tr>
<tr>
<td>Color Bars</td>
<td>Any</td>
</tr>
<tr>
<td>1st Color</td>
<td>Bullish Bars Color</td>
</tr>
<tr>
<td>2nd Color</td>
<td>Bearish Bars Color</td>
</tr>
<tr>
<td>3rd Color</td>
<td>3rd Color (Outside Range Color)</td>
</tr>
<tr>
<td>4th Color</td>
<td>4th Color (Inside Range Color)</td>
</tr>
</tbody>
</table>

### Ensign Rockets™
This variation uses a different line thickness for the candle wicks and one edge of the candle body frame. This presentation format is called Ensign Rockets™. The wick and body edge on the Open side of the candle body are drawn with a thicker line. This is the thrust side of the Ensign Rocket. The Close side of the candle body is the Rocket nose, and shows the direction the Rocket is headed.

<table>
<thead>
<tr>
<th>Bar Style</th>
<th>Ensign Rockets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame Color</td>
<td>Candle Frame</td>
</tr>
<tr>
<td>No Frame Box</td>
<td>Use either Frame color or candle fill color</td>
</tr>
<tr>
<td>Down Candle</td>
<td>Rocket thruster on the top</td>
</tr>
<tr>
<td>Up Candle</td>
<td>Rocket thruster on the bottom</td>
</tr>
</tbody>
</table>
Ensign Flutes™

This variation draws a rectangle from the High to the Low instead of from the Open to the Close. Like a standard bar, the Open price is shown with a hash mark on the left side. The Close price is shown with a hash mark on the right side. This presentation format is called Ensign Flutes™.

Bar Style: Ensign Flutes
Frame Color: Setup | Charts | Candlestick: Frame
No Frame Box: Use either Frame color or candle fill color
Down Candle: Close mark below the Open mark
Up Candle: Close mark above the Open mark
Color Bars: Any
1st Color: Chart Properties: Bullish Bars Color
2nd Color: Chart Properties: Bearish Bars Color
3rd Color: Setup | Charts: Outside Range Color
4th Color: Setup | Charts: Inside Range Color

Ensign Z-Flute

This is a variation of the Ensign Flute, and adds a Z line from the Open to the Close, like the Ensign Zebras.

Ensign C-Flutes

This variation shows just the Close price as a block in the middle of the flute.
Ensign X-Flutes

This variation plots a flute with no indication of the Close price. The color of the flute indicates its direction.

Line & Close

This chart type combines a Line chart and Close Ticks chart. You can make the line thickness bolder with the line thickness selection.

Line & Range

This chart type adds the bar’s high/low range to the Line & Close style chart.

Line & Band

This chart type plots a high/low band to the Line & Close style chart.
Bar Fat Close

This chart type plots a fat marker at the Close price on a regular bar chart. The color of the bar indicates its direction.

Bar High/Low

This chart type highlights the High and Low prices with a T shape. The Close price is shown as a block. The color of the bar indicates its direction.

Ensign Pipes

This chart type colors a Pipe with an Up or Down color between the Open and Close prices. The Open price is shown with a hash mark on the left side. The Close price is shown with a hash mark on the right side. The rest of the pipe is colored with the candle frame color.

Ensign Z-Pipes

This chart type colors a Pipe with an Up or Down color between the Open and Close prices, and adds a Z line from the Open to the Close, like the Ensign Zebras. The rest of the pipe is colored with the candle frame color.
Ensign C-Pipes

This chart type colors a Pipe with an Up or Down color between the Open and Close prices, and marks the Close price as a block in the middle of the pipe. The rest of the pipe is colored with the candle frame color.

Ensign X-Pipes

This chart type colors a Pipe with an Up or Down color between the Open and Close prices. There is no indication of the Close price. The rest of the pipe is colored with the candle frame color.

Mountain

This chart type plots a line connecting the Close prices with a color filled area below the line.

Wickless Candles

This chart type is typically used by Renko charts, where the high low range of the wicks is not shown.

Point & Figure

This style is typically used with Point & Figure charts, where the columns are divided to show the Box size. Use the Close vs Open color bar selection to color the Up columns with the Up color and the Down columns with the Down color selections.
Colors and Line Style
Click a color box to change the color of the Bars. You can also customize the Up and Down colors for Candles, Point & Figure, and Colorbar studies. The 3rd and 4th color boxes are used by various Colorbar studies. Click the Candle frame box to change the color of the frame. Click the drop-down list boxes to change the Line style and thickness for Bars and for the Candle Frames.

Equi-Volume
Place a check mark in the Equi-Volume box to plot Candlesticks in an Equi-Volume format. The width of the Candle gives a visual representation of the amount of volume that exists in that bar. Below are 2 sets of the same 30-minute bars. The bars on the left do not show Equi-Volume. The bars on the right have the Equi-Volume feature enabled. The Equi-Volume feature allows you to see which bars have more volume (fatter bars).

No Frame
Place a check mark in the No Frame box to plot the Candlesticks without a frame. The following shows candles with and without frames.

Don't Fill Candle Body
Place a check mark in this box, to plot all Candles with a hollow center. The following shows candles with no fill.

No Wicks – Check this box to remove the top and bottom wicks from the candles. Only the price range between the open and close prices will plot.

ColorBars – Click the drop-down list box to select a Colorbar study to apply to the chart bars.

Ask/Bid – Click the drop-down list box to select a Colorbar study to apply to the Ask/Bid graph. Note: Place a check mark in the A/B ‘Show’ box to plot the Ask/Bid graph at the bottom of a chart.

Volume – Click drop-down list box to select a Colorbar study to apply to the Volume graph. Note: Place a check mark in the Volume ‘Show’ box to plot the Volume graph at the bottom of a chart.

Bar Spacing in pixels – Specify the number of pixels between each bar.

Right Margin in pixels – Specify the margin space (in pixels) to maintain on the right side of the chart. The current margin is posted as part of the label.

Top & Bottom Margins – Specify the top and bottom margins to maintain on a chart.

Candle Maximum Width - As the chart bar spacing is increased, the candle bodies will be drawn wider. Use this parameter to limit the maximum width of the candle body.
**Candle Minimum Spacing** - As the chart bar spacing is decreased, the candles are drawn closer together. Use this parameter to set a minimum space to maintain between candles. The body width will be decreased before the minimum spacing is overruled. Use a negative number to have the candle bodies overlap. This is particularly useful with the Equi-Volume option checked.

**Font**
Click the Font button on the Chart Properties form to change the font, font size, font color, and font style. Changing the font size will increase or decrease the size of all the prices, times, and values printed on the chart. This can make the prices easier to see.

**Load Default and Save Default**
Click the Load Default button on the Chart Properties form to reset the chart properties for the current chart to the default settings. Click the Save Default button to cause all future charts to use the settings from this chart as the new Default settings. The Save Default file is used by all new charts to initialize their properties.

**Color Theme**
The Color Theme section is used to specify colors for various chart items. Click the drop-down list box to select a Theme. Colors can be customized for the chart Background, Scale font, Volume (Ask), Bid Volume, Grid Lines, Data Panel, Data Font, Big Cross, and the Horizontal Price Line colors. The Line style and thickness of the Grid Lines can be specified using the drop-down list box (next to the Grid Lines label).

The chart background color can also be changed by clicking the ribbon Window | Window Color button. If the background color is changed from a dark background to a white background, then the font color should also be changed. Otherwise the screen will print white numbers on a white background and the numbers will not be visible.

You can save changes to existing Themes, and also create your Themes. To save changes to an existing theme, make your changes, then click the Save button. To create a new Theme, set all the colors to your desired settings, then Type the name of the new Theme in the drop-down list box, then click the Save button.
Scale

The Scale section is used to customize the grid line scaling for the selected chart. NOTE: The grid line scale can be manually adjusted on a chart by holding down the left mouse button and then dragging the mouse up or down on the grid line numbers on the right-side of the chart.

Chart scaling affects the grid lines and the grid line distances. A specific High and Low range can be applied to the chart. An Interval distance between each grid line can also be specified. The scale can be set to Automatic, Data Set, Use Range, Use Interval, Square Chart, and Force Interval.

Place a check mark in the Percent box to display the chart in a Percentile mode. The Percentile mode will cause the Closing price of the first bar on the left edge of the chart to be equal to 100%. Any movement in the chart prices from this starting point will increase or decrease in Percent. This lets you determine how far a chart has moved in a percentage basis (from a given start point).

Place a check mark in the Log box to display the bars in a Log scale. A log scale will use the same vertical space for the range 1 to 10, as it does for the range from 10 to 100, and for the range from 100 to 1000. A log scale would be appropriate for charts with a huge change in price.

- **Automatic** - Calculates an automatic high and low range and grid distance based on the visible bars.
- **Data Set** - Calculates a scale range based on the entire chart data set, including bars not displayed on the screen. The scale range is usually large in order to encompass the entire range that the chart data set has ever traded to.
- **Use Range** - Enter a High and Low price in the entry boxes. The distance between the High and Low prices will be maintained as the market moves up or down.
- **Use Interval** - Enter a grid distance in the 'Interval' entry box. The distance between the grid lines will use the entered price value, or a multiple thereof as needed to create the required scale range.
- **Square Chart** - Enter a value in the Points per Bar (Pts/Bar) entry box. The chart will be rescaled (squared) based on the entered value. For each bar on the chart, the scale range will increase by the Points per Bar entry. The scale will be effected by the number of visible bars on the chart and the Pts/Bar entry. This scale mode is used by traders using Gann Lines or other Line tools, who want to place tools on the chart at a particular angle.
- **Force Interval** - Enter a grid distance in the 'Interval' entry box. The distance between each grid line will be forced to this interval price.

**Template** – The Template label is for your information, and displays the name of the study Template that is currently applied to the chart (if any). This can be useful if you can't remember which Template you had applied to a chart.
Symbol
The Symbol tab allows you to specify the Market Hours and Price Format used by the chart.

Market Hours
The Market Hours panel displays the root Symbol and the data source (vendor), and enables you to specify the Time Zone and Market Hours for the specific chart symbol.

Time Zone – Select the Time Zone that corresponds to the Market hours. The Times displayed on the chart will correspond to the selected Time Zone. For example, select ‘Central’ time zone for a Futures Market symbol that trades on the Chicago Board of Trade, then enter Central Time Zone trading session times. A symbol that trades in London could have ‘London’ selected for the time zone, with local London times entered for the open and close hours.

Day Session Only – Place a check mark in this box to only display chart bars from the Day Session trading. Evening Session bars will be hidden.

Day from 1st Session – Uncheck this box if the official trading Day begins with the Evening session.

Market Hours – Enter market hours for each day of the week, including times for the Evening sessions. Enter a 'Sync with' time that corresponds with the market open. For example, a sync time of 07:20 will cause a 30-minute chart to build and sync bars at 07:20, 07:50, 08:20, 08:50, etc. The sync time is usually the same as the day session opening time. Enter all market hour times in military format. For example, enter 15:00 instead of 3:00 pm. Some markets have trading sessions in the Evening or night. Intra-day charts will collect bars during the Evening session if open and close times are entered to span the Evening market hours. Delete the times in the Evening session boxes to disable chart collection for Evening sessions. Note: Day session open and close times must always be entered if Evening session times are entered (even if a symbol does not trade during the day).

Price Format
Chart - Specify the chart price scaling for the symbol. Not all symbols trade in dollars and pennies (decimal). Some trade in 8ths, 32nd, and 64ths, etc. If necessary, change the price scaling for a symbol so that it will chart correctly.

Studies - Specify the price scaling for studies that are placed on this chart.

Quotes and Options - Select from the drop-down list the digit format that should be used to display a price quote for this chart symbol. For example, a price of 1.3256 should have a price format of #.####

Minimum Grid - Enter a price amount for the minimum Chart grid line distance. For example, a value of 0.25 would be appropriate for a symbol that trades in quarter point increments.

Tick and $/Tick - These 2 boxes are used to specify a Tick size, and the Dollar value per Tick. These values are then used to calculate trading result calculations. For example, a market that has a Tick size of .0001 and a Dollar value per Tick of 12.50 can be specified.
Data

The Data tab displays the data Vendor, Symbol, and Period (time frame) for the chart. You can also specify settings for Maximum bars, Spike filtering, Refresh source, and File saving.

<table>
<thead>
<tr>
<th>Properties</th>
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<td>Do not save chart file when chart closes</td>
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**Layout** - Indicates whether this chart is part of a Layout or not. If the chart is not part of an active Layout then 'No' will be displayed.

**Chart Flag** - Displays 'Set' if the chart is linked to a live quote record on a quote page. Displays 'Cleared' if the chart is not linked to live quotes.

**Drive/Path** - The Drive and Path labels display where the chart file was loaded from.

**Bars in File** - Displays how many bars are currently in the chart file.

**Save/Resize Bars** - Enter the number of bars to resize the chart file to when it reaches the Maximum Bars count. Over time the chart will grow back to the maximum again. The Save/Resize value should be around 60 less than the Maximum Bars value.

**Maximum Bars** - Enter a value in the Maximum Bars box to specify a maximum number of bars allowed for the chart. Example, a value of 5000 will limit the chart to 5000 bars. Ensign charts can hold as many as 262,120 bars, however, a smaller maximum is recommended. The Maximum Bars box is used to increase the number of bars that will be stored in the data file for this chart.

**Spike Filter** - Place a check mark in this box to activate a bad tick filter on this chart.

**Filter Size** - Specify the bad tick filter size in this box. For example, an entry of 3.50 would cause any tick greater than 3.50 to be ignored by the chart (as a bad tick).

**Refresh Source**

This panel is used to specify the chart Refresh settings. Ensign Windows refreshes chart data by downloading chart information from various data sources. There are certain cases where you must specify which refresh source to use in order
to refresh a chart. Select a source, and specify the Source Symbol that should be used to refresh from (from that source). If necessary, a Price Adjustment can be activated to move the decimal places in the incoming refresh data. Place a check mark in the Preserve Existing Bars box to prevent the refresh data from overwriting current bars already on the chart.

**File Save**

Place a check mark in this box to prevent the chart from saving its data when the chart is closed.

**Volume**

The Volume tab is used to customize the Scale level for the Volume graph at the bottom of the chart.

- **0 to Max Data** – The scale range encompasses all volume amounts from 0 to the largest volume number.
- **0 to Max Data +5%** - The scale range encompasses all volume amounts from 0 to the largest volume number, plus it adds an extra 5% of spacing.
- **0 to Max Data +20%** - The scale range encompasses all volume amounts from 0 to the largest volume number, plus it adds an extra 20% of spacing.
- **Min to Max Data** – The scale range is from the smallest volume number to the largest volume number.
- **Fixed Range** – The scale range is a Fixed Range that you can specify in the Scale High and Scale Low entry boxes (which appear when this item is selected).

**Buttons**

The Buttons tab is used to Show or Hide the buttons and icons on the chart toolbar. Place a check mark next to an item to Show the button on the toolbar. Uncheck the box to Hide the item. This allows you to maximize the space on your chart, and only show toolbar buttons that you frequently use. There are 6 customized Draw Tools buttons and 6 customized Control buttons that can be optionally displayed. This allows you to select favorite draw tools and controls and have unique buttons to activate those features. Select from the drop-down lists the draw tools and controls for the customizable buttons.

The selection list for the Draw Tools also permits a button to be assigned for use with a DYO. Clicking a button defined with the last 5 choices would set variables 301 through 305 to True.
Removing Draw Tools from the Chart

Assign Delete Object to one of the Controls buttons. The button icon will be the Trash can. Click this button on the toolbar to remove the active Draw tool from the chart. Click on a draw tool to activate it. Bullets will mark the start and end point of the Draw tool while it is activated. If you click the Trash can icon while the tool is selected, then it will be removed from the chart. Draw Tools can also be removed from the chart, by using the Chart Objects panel.

Pin Chart to Stay on Top

Assign Pin to one of the Controls buttons. Click the Pin button on the chart's toolbar to cause the chart to always stay on top. The icon will then change to a downward pointing pin. When a chart is pinned it will always be on top and cannot be covered by other windows in the Ensign program.
Chart Pop-Up Menu

Right-click the mouse on a chart to view the chart Pop-Up menu. Many features and actions can be accessed from the pop-up menu. Many of the items on the pop-up menu are used to open panels and windows. Often it is more convenient to use the chart pop-up menu to open these windows rather than moving the mouse back to the main ribbon to open the windows. The panels or windows will open near the chart, instead of near the main ribbon.

**Objects** – Select Objects (or press CTRL-O on the keyboard) to open the chart Objects window.

**Studies** – Select Studies to open the chart Studies window.

**Templates** – Select Templates to open the chart Templates window.

**Draw Tools** – Select Draw Tools to open the Draw Tools window.

**Color Bars** – Select Color Bars to open the Colors Bars window.

**Controls** – Select Controls to open the chart Controls window.

**Times** – Select Times to open the Time Frames windows.

**Properties** – Select Properties (or press CTRL-P on the keyboard) to open the chart properties window.

**Layout Panel** – Select Layout Panel to open the main Layout panel.

**Chart Panel** – Select Chart Panel to open the main Chart panel.

**ESPL Run Panel** – Select ESPL Run Panel to open this window.

**Time & Sales** – Select Time & Sales (or press CTRL-T on the keyboard) to open a Time & Sales window for the chart symbol.

**Snap Quote** – Select Snap Quote (or press CTRL-Q on the keyboard) to view a Snap Quote window for the chart symbol.

**Sim Broker** – Select Sim-Broker to open the Sim-Broker window.

**Show**

Select **Show** from the pop-up menu to show or hide the chart Bar Data panel, Study Data panel, Line Data, Chart Bars, Volume graph, Studies, Draw Tools, Price Scale, Time Stamps, Sub-Windows, and to enable a chart Cursor on All Charts. There are keyboard short-cut keys for many of the items. For example, uncheck the Studies item to hide all the studies currently on the chart. Uncheck the Chart Bars item to hide the bars. Recheck the item (or press CTRL-X on the keyboard) to show the Chart Bars again. Place a check on the Cursor on All Charts item to enable a chart cursor that will track across all open charts. This allows you to easily view chart formations that occur at the same time on different charts.
Alerts

Select Alerts from the chart pop-up menu to set and remove price alerts on the chart. First, move the mouse chart cursor to a price level where you want to set a price alert, then right-click on the chart, select Alerts | Set from the pop-up menu (or press CTRL-A on the keyboard). A short alert line will appear on the right edge of the chart, marking the price alert level. The alert will trigger if the market moves to the alert price. You can set 2 price alerts on a chart (one above the current price, and one below the current price). Select Remove High, Remove Low, or Remove All to remove price alerts from the chart. Press CTRL-R on the keyboard to remove both price alerts from the chart.

Edit

Select Edit from the chart pop-up menu to Edit bar prices on a chart. Editing chart data is necessary if a chart has become corrupted by a spike or bad tick. Chart bars can be edited directly on the chart with the mouse or with the keyboard. You can edit the High, Open, Close, and Low price levels of any bar. For example, to edit the High price of a bar, first move the mouse chart cursor and point to the price level (on a bar) that you want the new High price to be, then select Edit | High from the pop-up menu (or press CTRL-H on the keyboard). The High price will change to the price level of the mouse cursor.

Select High to adjust the high of the bar to the indicated mouse cursor position.
Select Low to adjust the low of the bar to the indicated mouse cursor position.
Select Open or Close to adjust the open and close prices if necessary.

Note: The exact price of a bar's high or low are not always known. In these cases an estimated price can be used to correct the bar. Graphically editing the current bar on a Daily chart will change the corresponding prices for the chart symbol in the quote page. Correcting a bad price on the Daily chart will correct the bad price in the quote page too.

You can also insert a new bar. Move the mouse chart cursor to the location on the chart where you want the new bar to be inserted, then select Edit | Insert Bar from the pop-up menu (or press CTRL-I on the keyboard). A new bar will be inserted at the Close price of the prior bar.

Select the Data Set item to view a grid of rows and columns for each bar on the chart. Use the grid to manually make changes to any bar prices. The grid will include the Date, Open, High, Low, Close, Volume, and Open Interest. For intra-day charts, the bar Time is displayed instead of the Open Interest value. Move the grid cursor to the row and column that requires editing, and then make the desired changes. Use the Tab key, Arrow keys, and the Page Up and Page Down keys to move the cursor around the grid. Click the Insert Row button to insert a new row below the selected row. Click the Duplicate Row
button to duplicate the currently selected row. Click the **Delete Row** button to delete the selected row. Click the **Cancel** button to abort any changes and close the window. Click the **X** button to save and close the grid when your changes have been made.

Select the **Remove Gap** item to adjust chart prices and to remove gaps in the chart data. Move the chart cursor to the bar after a split (or gap) then select **Edit | Remove Gap** from the chart pop-up menu. The bars that are leftward of the selected bar will all be adjusted in price (based upon the Open price of the new bar).

### Refresh

Select **Refresh** from the chart pop-menu to download chart data and refresh the bars on a chart. You can choose the amount of data to refresh. There are also several keyboard short-cut keys that will Refresh various amounts of chart data. For example, select **Refresh | Today** from the chart pop-up menu to make sure that all of the data for today has been refreshed on the chart.

### Rebuild Visible

Select **Rebuild Visible** from the chart pop-up menu to rebuild chart bars from the program's chart database. Any missing bars on the chart will be replaced or rebuilt with chart bar data from the database for the chart symbol. Use the Database manager to view and replenish available data in the database for the chart symbol.

### Adjust for Split

Select **Adjust for Split** from the chart pop-up menu to adjust chart bars for stock splits and price adjustments. Occasionally a chart will have a dramatic change in price caused by a Stock Split or by a Decimal Shift in the chart price. Select the **Automatic** item to automatically determine the split and adjust the chart, or select any of the many split ratios to adjust the chart for splits, reverse splits, divisions, and multiplications. Press **CTRL-Z** while viewing a chart to automatically adjust for a Stock Split.

### Delete

Select **Delete** from the chart pop-up menu to delete individual bars, or entire sections of chart data. You can also quickly delete All Studies and All Draw Tools from the chart.

Select the **Delete Bar** item to delete one bar. Point the mouse cursor to the bar to delete and then **Delete | Delete Bar** from the pop-up menu. A window will prompt for a confirmation before deleting the bar.

Select **Delete Left**, **Delete Right**, **Delete Above**, or **Delete Below** to delete bars based on the mouse cursor location. For example, to delete all chart bars that are to the Left of the cursor position select **Delete | Delete Left** from the pop-up menu. To delete all chart bars that are to the Right of the cursor position select **Delete | Delete Right** from the pop-up menu. To delete all chart bars that are Above the cursor position select **Delete | Delete Above** from the pop-up menu. To delete all chart bars that are Below the cursor position select **Delete | Delete Below** from the pop-up menu. All of these delete commands are useful for quick removal of unwanted bars from a chart.
Select **Delete All Bars** to delete every bar on the chart. This might be useful if the chart data has become corrupted and you want to refresh all the data.

Select **All Studies** to delete all chart Studies at one time. This can also be done from the Chart Objects window.

Select **All Draw Tools** to delete all chart Draw Tools at one time. This can also be done from the Chart Objects window.

**Recalc Studies**
Select Recalc Studies from the chart pop-up menu to recalculate all studies on the chart. This may be necessary if you need ESPL studies to recalculate, or the order of studies in the Chart Objects list has been rearranged.

**Reset Defaults**
Select Reset Defaults from the chart pop-up menu to reset a chart to the chart default properties. Any color settings or chart properties that do not match the program's chart default settings will be changed back to the default settings.

**Undo Delete**
Select Undo Delete from chart pop-up menu to undo the last Delete action on the chart. For example, if a study has just been deleted from the chart it will added back to the chart again.

**Print**
Select Print from the chart pop-up menu to print the current chart to the printer.

**Email Image**
Select Email Image from the chart pop-up menu to email the current chart image. The Internet Services window will open and allow you to specify the destination email address and other email settings. Click the **Send** button to send the attached chart image file to the specified email address.

**PNG Color Set**
Select PNG Color Set to change the chart's current color scheme to be Printer Friendly. This reduces the amount of printer ink or toner required to print the chart.

**Data to Clipboard**
Select Data to Clipboard from the chart pop-up menu to copy the chart data (Date, Open, High, Low, Close, Volume, and Time or Open Interest) to the clipboard. You can then paste the data into a spreadsheet or word processor document, and view the numeric data for each bar.

**Calendar Days**
Select **Calendar Days** from the chart pop-up menu while viewing a Daily chart to insert spacer bars for weekends and Holidays. Normally Ensign will only save and display actual trading days. Some traders
like to insert the extra days as spacer bars for timing and cycles. The spacer bars will be averaged between the closest actual trading days. Re-select the menu item to return the chart back to normal display, and remove the spacer bars. This feature only work on Daily charts.

**Large Window**

Select Large Window from the chart pop-up menu (or press the BACKSPACE key on the keyboard) to toggle the size of the chart window. The desired size is specified on the Setup | Charts | Settings screen. On the Setup screen, enter a pixel size for the Width and Height of the chart (example: 640 x 480). The chart will change to this size whenever the BACKSPACE key is pressed. Press the key again to revert back to the prior size. If a zero value is entered as both the Width and Height, then Ensign will auto-determine a size. This feature allows you to select a chart, then increase the size to a predetermined size (zoom in for some analysis), then reduce it back to the original size (all using the BACKSPACE key or this pop-up menu item).

**Dock on Stack**

Select Dock on Stack from the chart pop-up menu to dock the active chart on the Stack object. The Stack feature allows multiple charts and program windows to be stacked in a common frame. You can easily flip through the items in the stack. Read more about stacks [here](#).

**Go To Layer**

Select Go To Layer and then the Layer number from 1 to 12. The selected layer will be displayed. This is equivalent to clicking on a layer button on the main ribbon toolbar.

**Move to Layer**

Select Move to Layer and then a Layer number from 1 to 12. This will move the chart window to a different Layer. The Layer feature allows you to show different chart and program windows depending on which Layer is selected. Read more about Layers [here](#).

**Scale Mode**

Select Scale Mode to specify how a chart will calculate and display the price scale. Select Automatic, Data Set, or Use Range. These selections can also be specified on the chart properties screen.

- **Automatic** - Calculates an automatic high and low range and grid distance based on the visible bars.
- **Data Set** - Calculates a scale range based on the entire chart data set, including bars not displayed on the screen. The scale range is usually large in order to encompass the entire range that the chart data set has ever traded to.
- **Use Range** - Enter a High and Low price in the entry boxes (on the chart properties screen). The distance between the High and Low prices will be maintained as the market moves up or down.

**Auto Scroll, Previous Chart, Next Chart**

Ensign has the ability to scroll through a quote page of symbols and display a chart for each symbol. To use this feature, first open a quote page and then open a chart for one of the symbols on the quote page. Select Auto Scroll from the chart pop-up menu to start the slide show of charts. The speed between each chart display can be specified on the
Setup | Charts | Settings screen (in the 'Scroll Speed in seconds' entry box). If you want to manually scroll the chart to the Next Chart or Previous Chart symbol on a quote page, then select Previous Chart or Next Chart from the chart pop-up menu.

**New Symbol**
Select this menu item to change the symbol on the chart.

**Duplicate Chart**
This menu will open a new chart with the same symbol, studies, and chart properties.

**Big Cross Hair**
Select Big Cross Hair from the chart pop-up menu to Show or Hide the Big Cross Hair cursor. If selected, a Big Cross will be displayed at the mouse cursor location on the chart.

**Align Charts**
Select Align Charts from the chart pop-up menu to Align (in Time) the chart data from all open (and similar time frame) charts. For example, assume that 4 charts are open, and they are all 1-minute charts of different symbols. You could slide the chart data on one chart several hours into the past. Then select Align Charts from the pop-up menu. The other 3 charts would then jump back in time to match the current Time of the bars displayed in the first chart. This features allows you to quickly see what the market was doing (at the same time) in all of your open charts.

**News Stories**
Select News Stories from the chart pop-up menu to display any News story that is associated with the chart symbol. This feature is only enabled if you subscribe to a data feed that provides you with real time News stories during the day. For example, the eSignal data feed, and the DTN IQFeed both have real time News story capabilities.

**Save Objects**
Select Save Objects from the chart pop-up menu to manually save all chart objects. Saving the objects will ensure that a sudden crash of the computer or software will not lose your settings. This also allows you to copy the chart settings and share them with other traders.
Save to ASCII

Select Save to ASCII to store the chart data to a file on the hard disk. The data is stored in a text format that can be imported to a spreadsheet, word processor, or used in your own custom programs. The data file is saved to the \Ensign10\ASCII folder on the hard disk. The file name will be the chart symbol. For example if viewing an IBM stock chart, the file name would be IBM.TXT.

There are 5 different file formats that can be selected: Excel Columns, Excel Commas, Excel hh:mm:ss, MetaStock 5, and MetaStock 7.

**Excel Columns** – Columns of chart data (Date, Open, High, Low, Close, Volume, Open Interest or Time)

**Excel Commas** – Chart data separated by Commas (same data as above)

**Excel hh:mm:ss** – Columns of chart data (like Excel Columns above). The Time will exported with colons separating the hours, minutes, and seconds (example: 15:10:45).

**MetaStock 5** – Comma delimited chart data (Date, Open, High, Low, Close). The file extension is .CSV. The date format is MM/DD/YY.

**MetaStock 7** – Comma delimited chart data (Date, Time, Open, High, Low, Close, Volume). The file extension is .TXT. The date format is MM/DD/YY.
A stack is a collection of windows that share the same window frame. To create a stack, open 2 or more windows and arrange them so they mostly overlap each other. Then click the Stack button on the Main ribbon. The windows will be collected into a Stack frame, and show one or more rows of buttons at the top of the form which are used to display the items in the Stack.

The following window types are capable of being in a Stack: Charts, News, Chat Room, Spreadsheets, Quote pages, Options pages, and the web Viewer. The sample Stack above contains 5 charts and 1 quote page.

Undock – An item can be removed from the stack by double-clicking its tab.

Redock – An item can be added to an existing stack by holding down the Alt key while dragging the window over the stack. Or, move the window over the stack, click the Stack button, or right mouse click, and select the Dock on Stack pop-up menu.

Rearrange – The order of the item buttons on the stack can be rearranged by dragging a button leftward or rightward.

Properties – Click the Properties button on the stack's toolbar to give the stack a title.
Color – The color of a stack tab can be set by a chart’s property form.

In this example, the Color properties for the EUR/USD.240 chart have been set to color the tab red with a black font. These properties can be manually set on the chart property form.

Or, the tab coloring can match the Colorbars studies which is coloring the current bar. Check the box titled ‘Stack Tab Colorbar’ to color the tab to reflect the current bar’s color.

A DYO has Action statements to set the Stack Tab color, and the Stack Font color. The color used is obtained from the DYO row's color box.

ESPL can set the stack tab color by using SetVariable(eStackTab,0,color);, and set the font color with SetVariable(eStackFont,0,color); These statements are setting the chart’s color properties.
Layers

Click the Layer buttons (1 through 12) on the main ribbon to use the Layer feature. The Layer feature allows you to view a group of open windows based on the Layer that is selected. For example, select Layer 1, and then open and arrange 8 chart windows on your screen. Then click Layer 2. All the first 8 charts will be hidden (although still open and updating). You could then open and arrange several other charts in Layer 2. Click Layer 1 to switch the view back to the original 8 charts. Layer 2 will then be hidden. There are 12 different Layers that can potentially be setup with whatever charts and program windows that you like. Save a Layout to memorize all the Layers for later use. The Layers will be restored when the Layout is re-opened.

You can also change Layers from the chart pop-up menu, or using the keyboard. The keyboard keys of CTRL-1 through CTRL-0 will change layers. Select Setup | Charts | Keys to optionally enter Layers in the 'Keyboard Chart Time Frames or Layer#' boxes. For example, enter 'Layer3' in box 3. This will show Layer 3 whenever the number 3 is pressed on the 10-key pad on your keyboard. The Mouse Wheel can be also be configured to change layers on the Setup | Charts | Keys form. Choose 'Select Higher Layer' or 'Select Lower Layer' from the drop-down list to specify the Mouse Wheel action.

Select Window | Close from the ribbon to close all windows in all Layers. Select the Window | Close | Close Layer sub-menu to close just the windows in the current Layer.

Select Window | Find on the main ribbon to display a list of all windows that are open in all Layers. Select an item in the resulting Windows List to display the item. The Layer will be changed if necessary to show the selected item.

Note: Do not open more charts and windows than your computer CPU can handle (with real-time updating). The Layer feature is great for organizing many different windows as long as you don't overwhelm your computer.

Pin this Layer

A Layer can be optionally pinned. A pinned Layer will appear in all other layers. For example, assume that there are 3 charts that you want to view in every layer. You could open and position those charts in Layer 1, and then pin Layer 1. You could then setup several other Layers with various charts and program windows. Since Layer 1 is pinned, the 3 charts from Layer 1 will be displayed in every other Layer. Make sure that you don’t position other charts in the same screen location as the 3 original charts from Layer 1.

Select Setup | System from the ribbon menu to specify which Layer is to be pinned. Layer 9 is pinned in the example above. Enter a 0 value if you don’t want any Layer to be pinned.
Quote

Ensign can collect and display quote information for symbols received from the data feeds. Click the Quote button to view a quote window. Several quote windows can be displayed at the same time if needed. A quote window can be used to develop custom quote pages, access charts, display a ticker tape, find news stories, and view Time & Sales. A listing of the Top-100 symbols in several categories can also be requested.

Vendor Pages

Vendor pages display the current price for every symbol collected from a vendor and are listed in alphabetical order. A button bar at the bottom of the quote window is used to switch vendor pages. The buttons show 2 letters to indicate the vendor. Hover the mouse over the button to show the vendor name in the button's hint. The example shows the FXCM Forex vendor page.

Managing Symbols

The symbols on the vendor pages come from the symbol lists on the Setup | Feeds form. Add or remove symbols by editing the Setup | Feeds symbol lists.

Also, symbols can be added directly to a vendor page by using the pop-up menu Add Symbol or pressing the Ctrl-S keys. Type the symbol on the input panel and press Enter or click the Add button. The new symbol will sort alphabetically into the vendor page and make the same addition to the vendor's Setup | Feeds symbol list.
Controls

Finding a Quote

To view a quote for a symbol, select the vendor by clicking on a vendor page button at the bottom of the quote page. For example, to view a quote for IBM from eSignal, click on the ES vendor button to display the symbols from eSignal in alphabetical order. Use the vertical scroll bar to scroll down to the IBM symbol, or type in the symbol on the keyboard. Press Enter on the keyboard before starting a new symbol search. Press Backspace to rest the view to the top of the symbol list.

Columns

The quote window displays several columns of price data for each symbol (ex. High, Low, Last, etc.). The columns can be moved and rearranged by dragging the column titles to a new location with the mouse. For example, to move the 'High' column to a different location, click on the word 'High' and drag the mouse left or right to the desired location. The column will be repositioned when the mouse button is released.

The width of each column can be adjusted by dragging the separator line between column titles. To reset a single column, double click on the right side separator bar in the title row. To reset all the columns to a default width select pop-up menu Rows and Columns | Auto Adjust Col Widths.

Fields - The title that is displayed for a column can be changed by double-clicking on the column title. A selection window will appear after double-clicking on the column title. For example, to change the High column to display the Bid prices instead, double-click on the word High and then select Bid from the selection window. To clear (blank out) a column, double-click on the column and then select Delete Column on the list.

See Appendix – Quote Fields for a full listing of available fields.

Settlement Prices - An asterisk character '*' is placed next to a symbol's Net value when a settlement price is received for the day. Settlement prices for futures and options are usually received within the half-hour after a market closes. Any symbol that has an asterisk in the Net column is either settled for the day (after market hours), or hasn't traded yet that day. Not all vendor feeds send this flag to indicate the symbol has settled.

Format

Click the Format button to toggle the quote page format from a vertical format to a horizontal format. The vertical format lists symbols listed down the left edge of the window. The horizontal format lists symbols horizontally across the window. The first 4 columns of price data (from the vertical format) will be displayed in the horizontal format. Drag and arrange the columns so that the horizontal format will display the desired 4 price fields. Click Format again to toggle back to the vertical format.
Opening a Chart

There are multiple ways to Open a chart from a quote window.

1. Select a symbol and then click the Times panel button on the toolbar. Click a button on the Times panel.
2. Double-click the mouse on any symbol in the quote window (uses default time frame).
3. Select a symbol and then press the ‘=’ equal sign key on the keyboard (uses default time frame).

   NOTE: The double-click default chart time frame is specified on the quote properties form.

Scrolling through Charts

Once a chart has been opened from a quote window, the Home and End keys on the keyboard will display charts for the next symbol in sequence on the quote window (up or down). Browsing up and down through the quote window symbols is a convenient way to quickly look at all the charts on a custom quote page. Press the Home key to display the chart for the preceding symbol up the quote page. Press the End key to display a chart for the next symbol down the quote page.

Editing Bad Prices

Occasional reception of bad ticks or prices may corrupt the High or Low prices for a symbol. The daily price ranges in the quote page can be corrected by editing a Daily chart for the affected symbol. Display the daily chart and graphically edit the current day’s bar by pointing to the correct price with the mouse. Once the mouse is positioned on the current bar, and at the correct High or Low price level, right-click the mouse and select Edit | Low or Edit | High from the pop-up menu. You can also press Ctrl-L or Ctrl-H on the keyboard to edit the bar to the price that the mouse is pointing to.

Keyboard

Several keyboard keys can be used on a quote window.

- Press the PAGE UP and PAGE DOWN keys to scroll up and down through the quotes.
- Delete   Press the DELETE key to delete a selected row.
- Home     Advance the Tab focus forward (view the next Custom Quote page)
- End      Advance the Tab focus backward (view the previous Custom Quote page)
- =        The Equal key opens a chart for the selected symbol using the default double-click Time Frame.

The following hot keys can be used while viewing a Quote Page. A hot key requires the Ctrl key to be held down while pressing the companion key once. Example, to add a new symbol to a Quote page press Ctrl-S (hold down the Ctrl key and then press the letter S once).
Ctrl-F  Toggle page Format
Ctrl-J  Save a graphical picture of the Quote page to a .PNG graphics file.
Ctrl-K  Show or Hide the Ticker Tape
Ctrl-R  Delete Row
Ctrl-S  Add Symbol to Quote Page
Ctrl-T  Display Time & Sales window for the selected symbol
Ctrl-X  Transfer the selected symbol to the custom quote page showing in the custom list box.

**Toolbar Buttons**

**Times Panel**
Click on a symbol to select it, and then click the Times Panel button to display the Times Panel to select the time frame of the chart to open.

**Time & Sales**
Click on a symbol to select it, and then click the Time & Sales button to display a Time & Sales form. Click the Properties button on the T&S form to configure the form's colors.

**Snap Quote**
The Snap Quote feature is used to quickly find a quote for any symbol. Snap Quotes eliminate the need to browse through quote pages to find a symbol. This feature is particularly useful for Brokers who look-up many quotes for customers during the day.

A Snap Quote window displays the price data for one symbol. The prices for the Last, Net, Open, High, Low, Bid, Ask, Volume, Open Interest, Market, Tick Time, Bid Size, Ask Size, and Tick Volume are shown in the window. The Symbol is displayed in the window title bar.

To request a Snap Quote, click on a quote page symbol to select it, and then click the snap quote button on the toolbar. A Snap Quote can also be displayed from a chart using the chart's pop-up menu Snap Quote.

The F12 function key will also retrieve snap quotes. An entry window will prompt for a symbol. Type in a symbol and then press Enter. The Snap Quote window will then appear containing all the price data. Double-click anywhere on the Snap Quote window to open a Chart for the symbol (The chart will be set to the default time). Click the New Symbol button to request a Snap Quote for a different symbol.

Several snap quote windows can be opened at the same time if desired. Press Ctrl-T from the keyboard, while the Snap Quote window is active, to open a Time & Sales window for the selected symbol.
News Stories

Select a symbol on a quote page and then click the News button on the toolbar to display news stories that are related to the symbol. A news window will open and display the news story titles that have been received that are related to the selected symbol.

For example, selecting IBM on a quote page and then clicking the News button will display all news stories related to IBM. This feature is a quick link from a quote page to the news window. If there are no current news stories for a particular symbol then the news window will not be displayed.

Hide Button Bar

To hide the vendor buttons and custom page tabs, click on the Buttons button on the toolbar. Hiding the button bar will provide more screen space for viewing quotes. Click the Buttons button to redisplay the vendor buttons and custom page tabs, or press the Esc key.

Properties

The colors and update effects can be customized on the properties form.

Colors - Click on a square color box to select a color.

Theme - Several color themes have been provided. Select a theme from the Color Theme combo box. A theme can be adapted to personal preference, and then saved by clicking the Save button.

A new theme can be created by entering a name for the theme in the Color Theme combo box, and then click the Save button.

Update – The settings in the Update section are used when a quote is received. The font on the quote page row can change when the Enable Font Color box is checked. The background of the quote page row will highlight when the Enable Row Color box is checked. These effects last for the duration entered in the Highlight Duration field.

Double Click time frame - Enter a Time Frame. Example, 'D' for a daily chart or '5' for a 5-minute chart. The entered chart Time Frame is used when a chart is opened from a Quote page by double-clicking on the symbol's row.
Quote Page Pop-up Menu

Clipboard
Select pop-up menu Clipboard | Copy to Clipboard to save the currently displayed symbols and prices to the Windows clipboard. The first eight price columns will be copied to the clipboard. Once the quotes have been copied to the Windows clipboard, they can be pasted into Spreadsheet programs or other Windows applications. Only the visible symbols from the quote window will be copied to the Windows clipboard, except when using the Top-100 feature (all 100 symbols will copy to the clipboard). Select pop-up menu Clipboard | Symbols to Clipboard to copy just a list of the symbols to the clipboard. This list can be pasted into the Internet Services form’s Download window for internet chart updating.

Printing
Select pop-up menu Print Quotes or click the ribbon Window | Print button to print the currently displayed symbols to the printer. Only the symbols that are visible in the quote window will print. The first eight price columns will be printed if printing in Portrait mode. The first eleven price columns will be printed if printing in Landscape mode. To print an entire vendor page, save the page to an ASCII file first, and then load and print the ASCII file from a word processor.

Show Ticker Tape
The Ticker Tape feature scrolls symbols and prices across the top of a quote window. Select pop-up menu Show Ticker Tape, or press Ctrl-K. Select the menu again or press Ctrl-K to disable the ticker tape.

Since multiple quote windows can be displayed at the same time, each quote window will have its own ticker tape. Cascade the quote windows to easily see multiple ticker tapes. A ticker tape will only scroll the symbols on a custom page, or the visible rows on a vendor page. For example, if a vendor page is re-sized so that 5 symbols are displayed, then only those 5 symbols will scroll across the title bar when any price changes occur. Bid and Ask prices for the displayed symbols will scroll with a lower case 'a' or 'b' following the price.

The ticker panel will use the First Band Color set on the properties form. The Symbol uses the Regular Cells Font Color. Symbols with a positive Net will show their prices using the Up Font Color, and those with a negative Net will use the Down Font Color.

Top 100
The Top-100 Quotes feature scans through all the symbols in a vendor page and displays the Top-100 symbols that match the scan criteria. The scan can be set-up to automatically update based on a timer. The Top-100 button is only visible on a vendor quote page (not on Custom quote pages). Click one of the vendor buttons at the bottom of the quote page to view symbols by vendor. Click the Top-100 button on the quote page, or select Top 100 from the pop-up menu to display the list of selection criteria.

The symbols can be scanned for the following items:
See Appendix – Top 100 Selections for a description of each item.

**Filtering** - The Top-100 symbol search can be filtered with price and volume ranges. The search can also exclude symbols that have not traded or are settled for the day. The 'Range Filter' panel allows for 'High' and 'Low' prices to be entered. For example, if a high price of 50.00 is entered, and a low price of 40.00 is entered, then the Top-100 scan will include only symbols with prices between 40.00 and 50.00. Place a check in the 'Include Settled' box to include symbols that are settled for the day, or have not traded yet during the day.

The scan can also be filtered by Volume. The 'Volume Filter' panel allows for a 'High' and 'Low' volume range to be entered. This allows each scan to filter out all symbols that don't have volumes within the specified range.

The Top-100 list is generated each time the Top-100 feature is accessed. The list will change during the day as different symbols trade up or down. To start an automatic scan, enter a time in the 'Auto (minutes)' entry box. Example, enter a 3 to enable an automatic Top-100 scan every 3 minutes based on the filter criteria.

**Saving the Top-100 List** - To save a Top-100 list to a custom quote page, drag the mouse down to select all the symbols in the list, and then transfer them to the specified custom quote page. The list can also be saved to an ASCII file by selecting Quotes | Save to ASCII from the menu while the Top-100 list is displayed. The ASCII file will be saved in the \ENSIGN folder. The ASCII file name will be the name of the vendor page (ex. ESIGNAL.TXT). Click the Print button on the Window ribbon to print the Top-100 list.

**Saving to a File**

Ensign can save a quote page to an ASCII text file. Several ASCII file formats are supported. Entire market groups, custom quote pages, or Top-100 lists can be saved to ASCII files. Saving quote pages to an ASCII file format can be used to export the quote data into Spreadsheet programs, Word Processors, and other technical analysis programs.
To save the active quote window to an ASCII text file select pop-up menu Save to File, then select a file format. The file formats are shown on the side menu. Each file format saves the data in a different way. The ASCII file is saved in the \ENSIGN\ASCII folder. The file name will be the name of the custom quote page, or the vendor name (ex. FXCM, ESIGNAL, etc.).

See Appendix – Save to File for a description of the file formats.

**Custom Quote Pages**

Custom Quote pages are used to place a variety of symbols on one page. This allows traders to group similar symbols into one location. Custom pages are not listed by vendor in alphabetical order. Instead, any symbol from any vendor can be placed on a custom quote page, and in any order.

**Creating**

The Custom button and the adjacent drop down list box (in the top left corner of a quote window) are used to display and create custom quote pages.

Custom quote pages are created by simply typing a new page name in the custom quote drop down list box. For example, to create a custom quote page named MyStocks, click the mouse in the drop down list box and type in the word MyStocks. Press the Enter key to complete the entry. The page will be cleared in preparation for symbols to be entered and arranged on the new page. A file on the hard disk will be created named MyStocks.QUO.

A new custom quote page Tab labeled MYSTOCKS will appear at the bottom of the quote window. The tabs are used to quickly display different custom quote pages. Click on a tab to switch to the indicated custom page. Click on the Custom button to display the custom quote page shown in the drop down list box. The custom page shown in the drop down list box can be changed by clicking on the box's down arrow and selecting a different page.

Note: Ensign is installed with a custom quote page named Custom. This custom page can be deleted, renamed, or used as desired. Also, typing a new name over the previously displayed name in the drop down list box does not harm or remove the previous custom quote page.

**Entering Symbols**

There are two ways to enter symbols on a custom page, 1) using the mouse to select and transfer symbols from vendor quote pages, 2) manually typing the symbols from the keyboard.

**Transfer** - Transfer a symbol to a custom quote page with the mouse by doing the following: a) select a vendor page, b) locate and select a symbol, c) click the Transfer button on the quote page. The symbol will be transferred (copied) to the custom page shown in the drop down list box. Transferring symbols can also be accomplished by selecting pop-up menu Transfer to Custom, or pressing Ctrl-X keys. To transfer several adjacent symbols from a vendor page to a custom quote page, drag the mouse over all the symbols to select them, and then click Transfer to transfer the selected symbols.

**Add Symbol** - When on a custom page, the Transfer button will be replaced with an Add Symbol button.
Click on the quote page in the position where symbols are to be added, and then click the Add Symbol button to manually enter symbols. An entry window will appear that allows symbols to be typed. Select the vendor in the drop down list on the left side of the input form, type in a symbol and then press Enter. The symbol will be inserted into the custom quote page at the cursor location.

The entry window will not close until the Close button is clicked, or Enter is pressed with the symbol edit box empty. Several symbols can be entered, one after another, to populate the custom page.

**Add Title** - Click on the quote page in the position where a title is to be added, and then click the Add Symbol button. An entry window will appear that allows symbols to be typed. Select the 'Add a Title Line' in the drop down list on the left side of the input form, type in a title and then press Enter. The title will be inserted into the custom quote page at the cursor location.

For example, entering GRAINS will add the word GRAINS to the quote row.

Blank rows can be entered by pressing the space bar and then Enter.

**Using Relative References for Futures Symbols**

Symbols from the 'Futures' market group can be added to a custom quote page by using a relative reference. The relative reference determines what the spot or lead month contract is, and displays the symbol in relation to the lead contract. This feature allows custom quote pages to be created for futures symbols without having to reorganize the page whenever a contract expires. The symbols will simply roll-up the page when the lead month expires.

A relative reference includes the futures symbol and the # character. For example, an entry of SP# is equal to the lead month for the S&P 500 futures contract. An entry of SP#1 equals the next contract out (lead contract plus one). An entry of SP#2 equals the next contract out, and so forth. Relative entries can be made for contracts as far as three years ahead. For example, an entry of CL#36 would equal the Crude Oil contract that is 36 contract months out in the future.

To enter relative references for futures symbols on a custom quote page click the Add Symbol button. Type the relative references in the entry window. Press Enter between each entry. For example, the front 4 contract months of US Bonds would be entered as US#, US#1, US#2, and US#3. Making these entries would cause the custom quote page to always display the front 4 contract months for US Bonds, regardless of the expiration. Ensign Windows determines the correct contract month to display by using the continuation chart 'Month' table from the Symbol Properties table. Select Set-Up | Symbol Properties to view or change the months associated with a future symbol's continuation chart roll-out schedule.

**Organizing Symbols**

The rows on custom pages can be moved or rearranged by clicking down in the Vendor column and dragging a row vertically to a new location.

Symbols on a custom quote page can be sorted Alphabetically, by Vendor, Up %, Down %, % Off High, % Off Low, % Range (similar to Fast Stochastic), and by Volume. Select pop-up menu Sort to specify the sorting desired.

**Renaming or Deleting**

To rename a custom quote page, select pop-up menu Custom Page | Rename Custom Page and then enter a new name. To delete a custom quote page, display the custom quote page and then select pop-
up menu Custom Page | Delete Custom Page. The custom quote page shown in the drop down list box will be deleted.

**Variables Quote Page**

A special custom quote page can be used to view the real-time values of Variables. Variables are used by studies and tools, particularly by the Design Your Own (DYO) study.

Create a custom quote page named Variables. This custom quote page will automatically populate with the values of the 1,000 variables (10 on each row). Variables which are private to a chart are for the chart which has focus. This quote page gives you a convenient place to watch the values in the variables while creating a DYO study.

Fields that show 'False' are either a Boolean flag or the value zero.

Fields that show 'True' are either a Boolean flag or the value 1.000.

All other values are shown in a decimal format.

The cells will show the Variable name if the variable has been renamed. The variable names are stored in the C:\Ensign10\Variables folder for the variables file last referenced by a DYO form. Variables files are ASCII files that can be edited using Notepad.

Tip: It is recommended that variables that are to be Boolean True or False should use variable names that begin with a space character. Example: Use ' Flag' instead of 'Flag'. The space character lets the program know that the words 'True' and 'False' should be displayed on the quote page instead of values.

Use the pop-up menu Rows and Columns | Auto Adjust Col Widths to size the columns to show the cell contents.
## Options

The Options Page displays option quotes and calculates theoretical option prices. The Black and Scholes Options model is used for the options pricing analysis. The page can display the Last, Net Change, Bid, Ask, Volume, High, Low, Open Interest, Theoretical Value, Implied Volatility, Historical Volatility, and Delta for each call and put that is available. Click the Option button on the Main ribbon to view the Options Page.

The Options Page can be used with both stock and futures option symbols. To view price information for an option, enter the option root symbol in the 'Security' entry box (ex. IBM, OEX.XO, @ESM2). The page will load all available calls and puts for the symbol and display them in the grid. The strike price levels are listed down the middle of the screen, with call prices on the left and put prices on the right. Use the vertical scroll bar to scroll down and view additional strike price levels. Or, press PageUp and PageDown on the keyboard to move vertically through the strike prices. Click the Tabs at the bottom of the page to switch between different option pages, or press Home and End to move the Tab focus. Drag the tabs left or right to change the ordering. Double-click on any option row to display a chart for the symbol. Charts can also be activated from the Options menu.

The Options Page is often used as a Quote page for option quotes since several strike prices.

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<th>Theoretic</th>
<th>Net</th>
<th>Last</th>
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<th>Put</th>
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</table>
for a particular option can be easily monitored at the same time. The option values update as each option trades.

Change the columns that are displayed by a selection of the Show combo box. Selecting Bid & Volume will display the Last, Net Change, Bid, Ask, and Volume. Selecting High & Low will display the Last, Net Change, High, Low, and Open Interest. Selecting Delta & Net will display the Last, Net Change, Theoretical Value, Implied Volatility, and Delta values.

The column widths can be adjusted by dragging the separator bar between column titles. Restore the default column width to all columns by selecting Reset Column Widths from the pop-up menu.

A price Ticker Tape can be activated on the window title bar by selecting Show Ticker Tape from the pop-up menu. The option symbol and price will scroll across the title bar when price changes occur. Select menu Hide Ticker Tape to disable the ticker tape. A 'Time & Sales' window can be opened from the menu for a selected symbol. A 'Snap Quote' window can also be opened from the menu for a selected symbol.

Select Save to ASCII from the pop-up menu to save the options page to an ASCII text file. Several ASCII formats are available. The pop-up menu has selections for printing the options page, copying the page to the Windows Clipboard, and docking the Options form on a stack.

The input boxes at the top of the options page are used to specify parameters that affect the calculations for the Theoretical Value, Implied Volatility, and Delta. These boxes can be changed to perform 'what-if' scenarios for the option pricing.

**CME Weekly Grain Options**

The CME's corn, soybean and wheat symbols have weekly options on the IQfeed. When one of these grain symbols is entered as the Security, a combo box shows with selections for Regular, Week 1, Week 2, Week 3, Week 4, and Week 5. Select the week and the month for the option expiration. The weekly expiration for July Corn would typically be in the prior month of June since the weekly options trade for just 28 days prior to their expiration.

Enter CN1 as the security to show the July 2011 pit corn options. Enter @CN1 to show the July 2011 electronic corn options. IQFeed's electronic symbols have the @ prefix.
Options Model Parameters

**Option** - Enter the option symbol root (ex. OEX.XO). All the option calls and puts for that symbol will be displayed. Do not enter a specific option with its strike price. Odd month futures option expirations (ex. SP1X) may also be entered.

**Month** - Select the option month to view. Example, selecting 'July' will display all the calls and puts for the July option. This is entered automatically for futures options. Press the up and down arrows to switch to other months while this box has focus.

**Security** - Normally, the Option and Security boxes will match each other and no entry will be required. In cases where the underlying security has a different root symbol than the option, then enter the underlying symbol. For example, the underlying contract for the SP2X futures option is the SP1Z futures contract. Enter SP2X as the Option, and SP1Z as the Security. The options model uses this box to determine the Historical Volatility of the underlying security.

**Price** - The underlying security's current price is entered in this box. The price is automatically entered if the price is available in the system. Manually change the price if desired to perform 'what-if' analysis (ex. What would be the Option price if the stock price went to a higher price).

**Historical Volatility** - The Historical Volatility is calculated from the daily data of the underlying security displayed in the Security box. If a daily chart file exists for the underlying security, then the Historical Volatility will be automatically calculated and posted to this box. This value for this box can be entered manually or changed if desired.

**Periods** - This is the number of days to use in the Historical Volatility calculation (ex. How volatile has the market been during the last 10, 20, or 30 days?). Change the Periods number to determine the Historical Volatility over different time spans.

**Expires** - Enter the option expiration date in the format of MM-DD-YY (ex. 12-31-00). The Days until expiration will be automatically calculated and posted in the Days box after making an entry in the Expires box. The expiration date will be automatically entered if the expiration date is available in the system.

**Interest Rate** - Enter an interest rate to be used in the calculations. A typical entry would be a number from 3 to 8.

**Days** - The days until expiration will be calculated from the expiration date. Change this box to do 'what-if' analysis (ex. What will the option price be with only 5 days until expiration?).

Definitions

**Historical Volatility** measures the volatility (up and down movement) of the option's underlying security. For example, if the volatility of a stock is very high, then the stock option will likely be priced higher because there is more risk involved. Volatility is measured by the changes in price from day to day and helps determine the price of an option.

**Theoretical Value** is the option price that the Black and Scholes model suggests should be the current value. If the actual option price is considerably higher than the theoretical price, then the option would be considered overvalued.

**Implied Volatility** is calculated by taking the current option price and determining the volatility that the option price is implying. If the implied volatility is very high (compared to the historical volatility), then the option price is reflecting a perceived higher volatility (or higher risk) by the traders.

**Delta** is a ratio that ranges from 0-100 and indicates how responsive the option price is to changes in the underlying security. For example, a Delta value of 25 suggests that the option price will move only one quarter as much as the stock price. A Delta value of 50 would suggest that if a stock price moved $10 dollars, then the option value would move $5 dollars. High Delta values indicate that the option is very responsive to changes in the underlying symbol's price changes. Typically, options that are far out of the money have low delta values.
Click the **News** button on the main ribbon to open the News window. You must have a real-time data feed like DTN IQFeed or eSignal to view live news stories. The news window displays incoming news stories on a variety of market topics.

### News Stories

News stories are listed in the order that they are received. Stories are also sorted by category and news vendor into folders. Click one of the folders in the left-side directory to view the news stories contained in the folder. Click a news story title line on the right-side to open and read the news story. Click the **Directory** button to return to the title list view. Click the **In Order** button to view all news stories in the order that they were received.

Click the **Find** button to search for a specific story. All stories that contain your search keyword will be displayed. In the example below, all news stories for PR Newswire have been displayed by searching for 'CPR'.

![News Window](image)

Click the **Find** button to search for a specific story. All stories that contain your search keyword will be displayed. In the example below, all news stories for PR Newswire have been displayed by searching for 'CPR'.

![Find Dialog](image)
News Story Alerts

Click the Alert Keyword button to display the news alerts screen. Enter keywords in the list. You will be notified when news stories are received that contain the keywords. The news story title will be preceded with the an <Alert> tag. You can specify an alert sound to trigger, with an optional alert message on the Main Ribbon.

**Message:** Check this box to enable an alert message on the Main Ribbon.

**Silent:** Select this to disable all news alert sounds.

**Beep:** Select this to enable a BEEP when an alert story arrives.

**Voice:** Select this to enable a Voice alert when an alert story arrives. Ensign will audibly read the title line using a computer generated voice.

**WAV:** Select this to play a specified sound file when an alert story arrives. Click the Browse button to select the WAV file on your hard disk to play when the alert story arrives.

You can specify how many days to automatically save alert stories. Enter a number in the Save Number of Days box. This will prevent your alert stories from being erased (for at least the specified time).

Account

Click the Account button on the main ribbon to open the trading account screen. This screen is used to keep track of your trades.

The trading account feature is used to display trades, deposits, withdrawals, and account adjustments. Ensign can track up to 500 different accounts. Each account can hold up to 1000 individual trade entries. To enter a new trading account select an account row and then click the New button. If a row is selected that already contains account information, then a confirmation prompt will appear. Answer Yes to overwrite the previous account and delete all trades associated with the previous account. Enter an account name, account number, and phone number, then click X to close and save the information. To view trades from a selected account, click the Open button, or double-click on the row.
Trades Window

When an account is selected and opened, the individual trading account window will appear. Individual windows for several different accounts can be open at the same time. Up to 1000 trades, deposits, or withdrawals can be entered in each account. The trades can also be sorted by symbol, entry date, exit date, balance, market value, position, market group, quantity, or notes.

The account balance, market value of open positions, total number of trades, average trade value, number and percentage of profitable and losing trades, and the current day’s dollar change are also displayed at the top of the window. These values quickly summarize all of the account activity. The prices for each entry update every five seconds.

To enter a new trade click the New button. A new trade can also be entered by double-clicking on a blank row. A trade entry window will be displayed. After entering the trade information click the X to save the information close the window, or click the Cancel Changes icon to abort the trade entries. Click the Default button to enter the same trade information as the previous trade. This is helpful for traders who trade the same market a lot. New trades will always be placed on the last row of the trade window.

The following entries can be made for a trade.

Transaction Type - Specifies a Long or Short position, or a Deposit or Withdrawal.

Vendor – Select the data feed source for the symbol that you are trading.

Symbol - Select a symbol from the vendor list box or manually type the symbol into the Symbol entry box.

Quantity – Enter the number of shares or contracts traded. Click on the up/down arrows, or type in the Quantity.

Entry Date - Double-click on the entry date box to enter today’s date, or manually enter the trade starting date.

Entry Price - Double-click the entry price box to retrieve the current price of the symbol. The current price of the symbol will
be displayed (in the proper format). Or, manually enter the price that the trade was initiated at.

**Exit Date** - Entering an exit date causes the exit price to freeze and maintain the closed position value.

**Exit Price** - Enter the exit price for a closed-out trade. If a trade is only partially closed-out, a new trade will have to be entered that reflects the round turn of entering and exiting the partial position. Edit the original trade to reflect the number of shares or contracts remaining after exiting a partial position.

**Commission** - Enter the total commission for the trade.

**Notes** - Optionally enter some notes or comments.

**Dollar Multiplier** - The Dollar Multiplier is used to convert a trade into a dollar amount. This number represents the dollar value per point for the symbol, and will usually default to the correct value. Adjust the multiplier if necessary to correct any errors in the balance calculations.

**Entering Deposits and Withdrawals**

Deposits and Withdrawals are used to add or delete cash amounts from an account. Also, account adjustments, dividends or distributions to a trading account can be accounted for. To make a deposit or withdrawal to a trading account, click **New** from the button bar as if entering a new trade. The trade entry window will be displayed. Select **Deposit+** or **Withdrawal-** from the Transaction Type entry box. Enter the date of the transaction and the transaction dollar amount. An optional note can also be entered. Deposits will be added, and withdrawals subtracted from the account balance. Click **OK** to save the entry.

**Editing and Deleting Trades**

To edit a trade, click on the trade row and then click **Edit** from the button bar. Trades can also be edited by double-clicking on a trade. The trade entry window will be displayed. Make any changes or additions to the trade and then click **X** to save the changes.

To delete a trade, click on the trade row and then click the **Trash can delete** button. A window will appear to confirm the deletion. Click **Yes** to delete the trade. Click **No** to abort the deletion. When a trade is deleted, the trade information will be removed and all other trades will move up one row.

**Splitting Trades**

To split a current trade entry into 2 trade entries, right-click on the window and select **Split Trade** from the pop-up menu. You will be prompted to enter the number of shares to move to the new entry. This feature is helpful when an order gets filled at several different prices. The new trade entry will be inserted on the line below the selected row, and the entries for symbol, position, prices and dates will be duplicated.
Sorting Trades

After several trades have been entered on a page, they can be sorted by symbol, entry date, exit date, balance, market value, position, quantity, or market group. To sort the trades right-click on the window and select Sort from the pop-up menu. The trades will sort according to the selection.

Selecting Displayed Trade Columns

Trade information is displayed in columns on the trading account screen. Click the Properties icon to view the columns selection window. Select the trade columns to display on the trading account screen and then click X to confirm the selections. Click the Cancel button to exit the screen and abort any changes. Available display columns include Symbol, Position, Quantity, Entry Date, Exit Date, Entry Price, Exit Price, Commission, Profit/Loss, Balance, Market Value (for stocks and mutual funds), Notes, Market Group, and Dollar Multiplier.

Adjusting Trade Column Widths

The width of a column can be increased or decreased by dragging the column separator at the top of a column. Column widths are automatically adjusted if the font size is changed.

Displaying Charts from the Trade Window

To display a chart for the selected trade row, right-click on the window and select Chart from the pop-up menu. Once a chart is displayed you can use the Home and End keys on the keyboard to scroll one chart ahead or back. This allows you to quickly browse through charts for all the entered trades. You can also use the Scroll Next and Scroll Previous chart buttons on the top row to browse through the charts.

Copying Trades to the Clipboard

To copy All Trades or individual trade information to the clipboard, right-click and select Copy All to Clipboard or Trade to Clipboard from the pop-up menu. If a trade was already copied to the clipboard, it can be pasted from the clipboard by selecting Trade from Clipboard. This allows you to move trades to a different account, or account row if necessary.

Printing Account Trades

To print the account trades, right-click and select Print Account from the pop-up menu.
Alerts can be set on the Last price, Bid price, Ask price, Tick Volume, and Total Volume. To enter or view an alert, click the Alerts button on the main ribbon. The Alerts window displays three tabs (Log, List, and E-mail). Click the Log tab to view the Alerts Log.

The Alerts Log displays a list of the last 500 alerts that have been triggered. Use the vertical scroll bar to scroll up and down through the list. Each entry in the list shows the Symbol, time of the alert occurrence, the alert price, and the alert type.

Clear - Click the Clear button to clear the list. The list will rebuild as new alerts are triggered. The Alerts Log is not saved when the program is exited.

Show Log – Check this box to cause the Alerts window to automatically open when an alert is triggered.

Check boxes are included on the Alerts Log screen that control the number of audible sound Alerts and the number of Alert entries allowed in the Log. These check boxes are intended to limit the Log and the Sounds associated with alerts to just the first alert occurrence, instead of for continual alert occurrences.

Log 1st Alert - Check this box to limit the Alert Log to list only the first occurrence of a Price alert in the log.
Log 1st Block - Check this box to limit the Alert Log to list only the first occurrence of a Tick Volume (block trade) alert in the log.

Beep Only 1st - Check this box to limit any alert sound to just the first alert occurrence for each specific alert.

Adding and Editing Alerts

Click the List tab to view a list of the current alerts. Click the Add button to enter a new alert. An entry window will prompt for a new symbol. Type a symbol and then press Enter. The symbol will then be added to the alert list box. Enter alert prices in the Last, Bid, Ask, Tick Volume, and Daily Volume entry boxes as needed.

Two alert prices can be entered for the Last, Bid, and Ask prices. The first alert price tests for prices that are greater than or equal (>=) to the entered alert price. The second alert price tests for prices that are less than or equal (<=) to the entered alert price. An alert for Tick Volume or Daily Volume will trigger if the symbol's volume is greater than or equal to the entered alert price.

To edit the price of an existing alert, select the symbol from the list box. The alert prices for that symbol will be displayed in the entry boxes. Change the alert prices and then click OK.

Removing Alerts

To remove an alert, select the symbol from the alerts list box and then click on the Delete button. To remove the price alerts for all the symbols in the list box, click on the Delete All button.

Email Alerts

Check the Email check box to have an alert message emailed.
**Alert Message**
Click the Message check box to disable or enable the Alert Message feature. If enabled, an Alert Message will appear in the Ensign Windows title bar when an alert has been triggered. The message will include the symbol and alert price.

**Stack Message**
Click the Stack check box to display alert messages on a Stack window caption. Uncheck the box to prevent alert messages from printing on the Stack window caption.

**Alert Sounds and Beeps**
Several options are available for making sounds when a price alert is triggered. Select Silent to request no alert sounds. Select Beep to hear a simple beep when a price alert occurs. Select WAV to play a Windows .WAV sound file when a price alert occurs.

Use the Browse buttons to locate and select a .WAV file on the computer to be played for the High and Low alerts. If desired, a customized .WAV file can be recorded and saved to the computer for each alert type. If a .WAV file is not specified, then the Windows 'Default' sound will play when an alert is triggered. Or, if all else fails it will beep.

High alerts and Volume alerts will play the .WAV file shown in the >= entry box.
Low alerts will play the .WAV file shown in the <= entry box.

Note: The Price Alert Sound options also apply to 'Line Alerts'. For example, if a line is drawn on a chart, and the line is set to an 'Alarmed' state, then a sound will play if an alert is triggered on the line. If Silent is selected, then no sound will occur.

**Setting Alerts from a Quote Page**
High and Low Alerts can be set from any Quote page window. The price for the alert has to be a current price shown on the quote page. You cannot specify a specific price. For example, to set a High Alert, click on the ‘High’ price field for a particular symbol, and then right click the mouse. Select Alerts from the pop-up menu. Then select from Set High, Set Low, Remove All, Remove High, or Remove Low. Select Set High to create a High Alert for the symbol using the current High of the day. The new high alert will be posted into the Alert List and Alert Log. Alerts can be set and removed in this manner directly from any quote page window. Remember to click on a price field in the quote page before setting the alert. The price field that was selected will be used as the price for the alert.

**Viewing Charts from the Alerts Window**
The Alerts Log and Alerts List contain listings of all the current alerts. To display the default time frame chart for any symbol in these lists, simple double-click any alert symbol. The chart will then be displayed. This allows you to scan the Alerts Log and Alerts List for symbols that are triggering alerts, and then conveniently display the chart for any symbol. Charts can be opened in different time frames by selecting an alert symbol, and then clicking the Time Frames button. Select a time frame to open the desired chart.
Setting an Alert from a Chart

To set a price alert directly on a chart, move the chart cursor to the desired price level and then press Ctrl-A on the keyboard, or right-click the mouse and select Alerts | Set from the pop-up menu. An alert line will appear on the right edge of the chart.

One alert can be set above the current price, and one alert below the current price. The color of the alert line will match the font color of the chart. To remove a High price alert from a chart, select Alerts | Remove High from the pop-up menu. To remove a Low price alert from a chart, select Alerts | Remove Low from the pop-up menu. To remove all price alerts from a chart, press Ctrl-R on the keyboard, or select Alerts | Remove All from the pop-up menu. The chart price alerts will be included in the 'Alerts' list for Ensign Windows. This list can be viewed by clicking the Alerts button from the main button bar.

Email Properties

Alert messages and images can be sent to an email address, or as a text message to a cell phone. This documentation shows the various ways that email can be generated by Ensign Windows.

Click the Alert button on the main ribbon to show the Price Alerts form. Select the Email tab.

1 - This section shows your reply email address and your outgoing mail server. This information is obtained from the Internet Services form, Email tab. Click the Setup Email button (5) to go to the Internet Services form to make changes.

2 - The 'Send to recipients:' list shows the email addresses that will receive the email alerts. This list is populated by the list selected on the Internet Services form, Email tab. Click the Setup Email button (5) to go to the Internet Services form to make changes to the recipients list.
3 - The DYO, Scheduler, and ESPL email features have the ability to create screen images to attach to the email. This section shows the path and file name of the image files that are to be attached to the email.

4 - The email messages to send are shown on this list. The list might show several messages that have accumulated to be sent. A typical message will show a time stamp, chart symbol and time frame, price, and the alert message. A double click on the message panel will erase the messages and the file attachments.

5 - Click the 'Setup Email' button to show the Internet Services form, Email tab, so that configuration changes can be made.

6 - Click the 'Send' button to send the email now. Otherwise, the email will be automatically sent at the next scheduled interval.

7 - The 'Send Email' radio selections are provided to turn this Email Alerts feature Off or On. This is a global setting so that email settings on individual Price Alerts, Study Alerts, DYOss, and Scheduler do not have to be changed.

8 - The 'Minutes' spinner is the interval at which email will be transmitted. The selection can be as often as every 1-minute.

9 - The Status shows the time of when the last email was sent. In the example, the next email will be sent 5-minutes later at 18:02.

An email is only sent when the Message list or the File Attachment list has content. When an email is sent, the Message list and the File Attachments list are both cleared. These lists will accumulate material for the next email to send.
Email Price Alerts

Individual symbols on the Price Alerts list can be enabled or disabled for sending an email alert message. Select the symbol on the list and check the Email check box. An email alert message will be sent when an alert is triggered on price, bid, ask, tick volume or daily volume.
Price Action Alerts

The Price Action study can generate alerts, and email an Alert Message. Check the Email check box to enable the email feature.

Draw Tool Alerts, and Daily Price Line Alerts

Draw Lines, Fibonacci Levels, Fibonacci Retracements, and Daily Price Line scan generate an alert when their lines are crossed. Check the Email check box to enable having the alert message emailed. An example message would be 12:09:58 =ESH0.5 1068.50 Cross Below Draw Line.

DYO Alerts

DYO signals that trigger can be emailed. Check the Email check box to enable a DYO for sending an email message. The text of the email message will be the Message text from the DYO property form.

DYOs can also email both message text and image attachments. Several Email statements are in the Global Action category. Be careful in how frequently images are emailed as there will be a CPU burden associated with both the preparation of the image file and sending the file.
attached to an email. The sending of the email is done on a separate thread so that the processing of a
data feed is not interrupted.

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Email Message - Email the text on the Message line of the DYO property form.
Email Label - Email the text from the line's Label column.
Email Chart - Save the chart image as a png file and attach the file to the email. The attached file will show on the File Attachments list.
Email Layout - Save an image of the entire Ensign desktop space and attach the file to the email. The attached file will show on the File Attachments list.

The statements for doing an Action # can also be used for sending the email. The Action # to put in the Number field is listed in this table.

- 240 - Email Message
- 241 - Email Label
- 242 - Email Chart
- 243 - Email Layout

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Scheduler Alerts

The Scheduler can be used to send an email message or an image of the Ensign desktop at a specific time of the day.

The example on the 1st line begins with the text 'Email Layout'. This will save an image of the entire Ensign desktop space and attach the file to the email. The remainder of the line can be an optional message.

The 2nd line example begins with the text 'Email' and will send an email with the balance of the line being the message text. The Time field controls when the email will be sent.

The Scheduler can be used to email an image of the desktop after the markets are closed each day at a fixed time such as at 17:30.
ESPL Alerts

Although ESPL has statements for preparing and sending an email, ESPL can also add message text to the Email Alerts feature and attach files to be included with the email. The message text for the email can be cleared, written and read using the global TStringList variable named sEmailLog. The attachments list can be erased, written and read using the global string variable named EmailAttach. See this example.

```
begin
  if ESPL=1 then sEmailLog.Add('This is a message for the email');
  if ESPL=2 then EmailAttach:='C:\Ensign10\Ensign-23.png,C:\Ensign10\Ensign-24.png';
  if ESPL=3 then writeln(EmailAttach);
end;
```

The ESPL=1 example will send an email with the message from the Add( ) string. The ESPL=2 example will attachment two image files to the email. Multiple files are separated by commas. The ESPL=3 example will read the EmailAttach variable and print its contents in the Output window.
Sim-Broker

The simulation broker feature can be used real-time to track trades for any symbol. Sim-Broker tracks trades for the chart that opened the Sim-Broker form. When a chart has focus, the Sim-Broker form can be opened by using the drop down menu on the Order button, or right mouse click on a chart to display a pop-up menu for the chart. Click on the Sim-Broker pop-up menu.

The form is divided into thirds. The left third is where orders are placed. The middle section shows a summary of trades that have executed. The right hand side shows a transaction log. Click on the Print button on the main Window ribbon to print the Summary information and the Transaction Log.

Place an Order

In the Order frame, select Buy or Sell, then select an order Type. The Type can be a market order, limit price, stop or stop and reverse. The trade quantity can be entered. Simulated stock trades might use a quantity of 100-200 etc. Use 1 or 2, or the quantity you would usually trade for ES or NQ futures.

The next box is where Price is entered, followed by the Submit button. For practice, select the Buy bullet, Market bullet, with a quantity of 1. Then click Submit button. In so doing a time stamped transaction is posted in the log. It will read: Buy 1 @ Market. Shortly thereafter a fill is received back with a time stamp and fill price.

This will initiate a position shown in the Summary frame. Further to the right the current price is shown. The next line in the summary shows the profit/loss for this open position. Under trades is shown the accumulation of all trades made using Sim-Broker and the total profit loss for all trades.

Underneath the summary window is an edit box where the commission for a round trip trade is entered. A typical commission is ten dollars. Next to Commission is a box to select a marker. When a marker is selected the fill prices for buys and sells will be marked on the chart.
Sell markers are shown in red and Buy markers are shown in green. The chart also shows the stops and limit buys/sells with short horizontal lines.

A position is closed out by buying or selling the opposite side of the position. After completing a round trip the Position Summary will show Flat, and a horizontal break line will be posted to the transaction log.

Limit Order

Pending limit orders and stops are shown in the pending frame with a price by the checked box. To enter a limit buy, select Buy and Limit. The Price window will show a static number that was the current price when the order Type was changed to Limit. Use the spinner arrow that is part of the Price box to increment or decrement the price. Click the Submit button to post a message to the transaction log: Buy 1 @ .......... The Pending frame will show a check mark by the word Buy and then a price.

If the market goes lower and touches the Limit Buy price, the check in the Buy check box will be removed. A message will post in the transaction log: Bought 1 @ and the fill price. Use the buy/sell Limit order to place orders where you want to buy or sell. Limit buys will be below the current price. Limit sells will be above the current price.

Stop Orders

Likewise, stops can be used to go long or short. Select Buy or Sell, and market type would be Stop. The stop also needs a price. Buy stops are placed higher than current price and will be shown on the chart with a short horizontal green line by the price scale. The Buy Stop BS check box in the pending section will become checked and show the stop price. Stops are easily adjusted by submitting the stop order again using a new price. The location of the alert line will be adjusted to the new stop price. A later stop cancels the earlier stop.

Cancel Order

The items that show in the pending frame can be canceled by unchecking the box. A buy stop is canceled by clicking the BS check box. This removes the stop and the entry made to the transaction log will show xx BS 1 @ ...... The xx in the log entry means 'canceled'.

Stop and Reverse

SAR is a stop and reverse. If long, enter a SAR at a lower price to go short. If the SAR price is touched, then the long position will be liquidated and reversed short the number in the Quantity box. If position is long 5, and a SAR with Quantity 1, it will then sell six, five to go flat and 1 to go short. SAR can be put on either side of the current price.

Auto Scalp

Enter a positive value in the Auto Scalp box to have Sim-Broker automatically place a Buy Limit or a Sell Limit order when an order is filled. The scalp distance is the Auto Scalp value. For example, if Auto Scalp is 2.00, and the Buy order is filled at 1190.00, a Sell Limit order will be placed automatically at 1192.00.
Auto Stop

Enter a positive value in the Auto Stop box to have Sim-Broker automatically place a Buy Stop or a Sell Stop when an order is filled. The stop distance is the Auto Stop value. For example, if Auto Stop is 1.00, and the Buy order is filled at 1190.00, the Sell Stop order will be placed at 1189.00.

Reset Button

The Reset button will clear the Summary information, and reset the position to Flat.

Erase Button

The Erase Button will clear the Transaction Log.

Display Control

The Sim-Broker form's orientation can be changed by clicking the white arrow button on the toolbar. The orientation can be horizontal or vertical. The form can also be resized to be smaller by dragging a form boundary.

The Sim-Broker's location might be on top of a chart, and then disappear behind a chart when the chart receives focus. Double click on the scale of the chart to bring the Sim-Broker back to the top surface.

Another characteristic is that Sim-Broker needs to be open so it can track prices and manage trades. The form can be minimized but not closed. Sim-Broker will not work if closed. Multiple Sim-Broker forms can be open simultaneously to track different symbols.

Sound

Click the alarm clock button on the toolbar to toggle sound on and off. When enabled, the trades will be announced.

Spreadsheet

The Spreadsheet feature is documented in the Spread.pdf manual.
Chat

Ensign offers free Chat rooms for use by all traders. A growing community of dynamic traders use Chat to exchange ideas and share chart images and strategies. The Chat feature is built into the Ensign program. A free stand-alone version of Chat can also be downloaded.

To open a Chat window, click the Chat button on the Main ribbon. The power of Ensign's Chat rooms comes from the ability to share your charts with other traders. Press Ctrl-F12 on the keyboard while viewing a chart to upload your chart to the chat room. All the traders in the chat room will be able to see your chart, and you will be able to see any charts that they post to the chat room. Traders around the globe can share strategies on how to trade the markets. You are not alone. The Chat rooms broaden your horizons and allow you to learn from other traders using the software!!
Rooms

The example shows the Support and other chat rooms. Click on a room name to enter that room. The room numbers that have the quote mark following the number are locked rooms that require a password to have access to the room. Typically these locked rooms are being used by trading mentors for their private patronage. If you do not know the password to access the room, a message from the room administrator will be shown. In the example, the B-Line room is an unlocked room, and the 4' Trading Tutor room is a locked room.

Upon entering the chat room, the Members List will be updated with the nicknames of patrons in the room. And several lines of recent transcript text for the room will scroll into the transcript area. User the vertical slider bar for the transcript to read material that has scrolled out of view. Pull the slider bar all the way to the bottom of the form or click on the text entry box to return to the normal view and scrolling of the transcript.

Type messages in the text entry box at the bottom of the chat form. When you press the Enter key your message is posted in the transcript and distributed to all members logged into this chat room.

The Show check box when checked will automatically show the chart images posted to approved web sites. The room administrator controls which sites are approved in addition to these four pre-approved sites: 'www.ensignsoftware.com', 'ensign.editme.com', 'www.ensignsupport.com', and 'www.dacharts.com'. Links to other web sites can be posted in the transcript, but they will not automatically show in the web viewer. For any link in the transcript, you can click on the link to have the viewer go to the web address.

Uploading a chart to a web site is a feature in Ensign Windows. The upload is performed by pressing the CTRL-J keys or by pressing the CTRL-F12 keys. The link for the upload is automatically posted into the transcript and the chart shows in the web viewer. Uncheck the Post box to disable the posting of the link to the transcript after the upload.

Dragging the mouse across text in the transcript will automatically copy the selected text to the Clipboard. The text can be pasted in other programs using the CTRL + V keys.

Remote Support

Click the Remote Support button to open a client window so that Ensign's staff can remotely connect to your computer to provide advanced support. Give the ID number from the client form to the staff member so they can connect to your computer.

Bulletin

Click the bulletin button to display the room's bulletin message. This message is maintained by the room mentor and may have important information regarding the room's use.

Properties

The first time you use the chat feature, you should click the Properties on the top of the chat form. The properties form is where you can enter a nickname to be known by in the chat room.
The other properties can be set as shown above, and will be briefly explained here.

- **Show Viewer** option shows a panel above the transcript where images can be viewed. It is a complete web browser.
- **Show Members List** option shows a member list on the right hand side of the transcript.
- **Show Time Stamps** option adds a time stamp to the beginning of every line in the transcript.
- **Show Arrivals** option posts a message in the transcript when a member joins the chat room.
- **Show Profile Links** Check this option to show the URL from a requested User Profile.
- **Scroll Transcript** Try with this option unchecked. Check it if the transcript fails to scroll.
- **Auto Logging** option automatically saves the transcript as an ASCII text file in the `...\ChatLog\` folder.
- **Voice Read** This option causes the chat room to audibly read chat room text with a computer voice.
- **Block Private Messages** Check this option to prevent receiving private messages.
- **Use My Font Color** option forces all text in the transcript to use the font color selected by you.

The chat room can play sounds for 4 different activities. Use the edit boxes to customize the wav files that are played. Erase the path and filename if you do not want any sound played for an activity.

- **Page** A patron can be paged by clicking on their nickname on the member list, then right mouse click for a pop-up menu. Select the 'Page User' menu on the pop-up menu.
• **PM** A Private Message can be sent to any patron by double clicking on their nickname on the member list.
• **Links** A sound can be played every time a new link is posted in the chat room that shows an image in the viewer.
• **Keyword** A sound can be played when the transcript text contains a word found on the Keywords list.

Use the Favorite URLs combo box to enter frequently visited web addresses. This list will populate the combo box on the right-hand side of the web viewer/browser for quick navigation to favorite URLs. Select an item on your list and click the Delete URL button to remove the selected entry.

Older computers do not handle large communication packets, so a Buffer Size property is provided. A value of 1410 seems to work with all computers, but newer computers running Windows XP handle work with a size of 8000 which is preferred. The first time eChat is run, it will perform a test to see if the larger buffer size of 8000 can be used.

Use the Profile URL and Profile Information sections to publish information about yourself. This information will show when another user requests to see your User Profile from the pop-up menu for the Members List. Click the OK button to close the property form.

Most of the properties can be accessed in the chat room by a right mouse click pop-up menu for the chat transcript. The Erase Transcript, Statistics Report, and Page Room menus are available to the chat room Administrator (i.e. the user who setup of the chat room with an Administrator Password). Erasing a transcript deletes the text from the chat server. The Global Message menu is available only to Ensign's staff.
Setup Room

Click the Properties button, and select the Chat Room tab on the properties form to configure the chat room you are currently in.

When the room is 'owned' by someone, an Administrator Password is required to unlock the properties form. On a locked form, the Room Name, Caption, URL, Welcome and Access Denied information can be read but not changed.

An available room will not have an Administrator Password. You are welcome to take ownership of the room by entering a password in the Administrator Password field, and fill in the form's entry boxes. In so doing, you have become the Administrator for this chat room. Only you (and those you share the Administrator Password with) will be able to make changes to the chat room properties form.

If you want the room to be locked so that access is restricted to your patrons, enter an access code or keyword of your choosing in the Access Password box. To have your room accessible to everyone, leave the Access Password box blank.

The room Administrator can boot users from their room using the Boot User pop-up menu. A booted user will be prevented from reentering the room and see an access denied message when access to the room is attempted.
To unbooth a user, select their entry on the Booted Users list so the entry shows in the combo box. Then click the Delete button by the Booted Users box. A user removed from the booted list will be able to access the room again.

The nickname of the administrator who last edited the room shows in the Administrator box and cannot be edited.

On the web viewer is a button with two blue bars. This button is used for quick navigation to a URL associated with this chat room. Define the URL for this button with an entry in the Web Button URL box.

Enter URL roots on the Approved URL Roots so that links posted to these URLs will automatically show in the web viewer. An example URL root would be 'www.ensignsoftware.com' To remove an entry, select it on the list and click the Delete button.

Fill in the Welcome Message which will show in the transcript when a patron enters your chat room. The Welcome Message might define the topic and room etiquette.

When a room is locked by the presence of an Access Password, the patron will be prompted to enter the Access Password. If the answer is correct, the patron is admitted to the room. If the answer is incorrect, the Access Denied Message will be shown in the transcript. Use this feature to inform the user how to contact the room administrator. Once the Access Password challenge has been correctly answered, reentry to the locked room will not require reentering the password, until the room Administrator changes the Access Password.

The Bulletin Message can be a lengthy text that is shown when the user clicks on the Bulletin button on the bottom left corner of the chat form. The bulletin might be a article written by the room mentor, information about today's trading, or instructions and training. Double click on the bulletin box to erase the bulletin.

After setting up the properties for the room (or making changes), click the OK button and the definition for the room will be updated and in effect.

101 chat rooms are available. You do not need special permission from Ensign to have your own chat room. Just go find one that is available and a likely candidate is any entry on the Chat Rooms drop down list with a name of 'Vacant'. Example:75 Vacant
Members List

The Members List shows the nicknames for the patrons in the chat room. Next to a nickname may be an icon. Some of the icons indicate the patron's status, such as showing a coffee cup to indicate they are taking a short break (up to 15-minutes), the round clock to indicate they are taking a longer break (up to 4 hours), or the moon icon to indicate they are away for the rest of the day.

The My Icon list box on the property form has 57 icons available. Your selection on the property form defines the icon used for My Icon. Sixteen of the icons are available for temporary selection using a right mouse click pop-up menu when the cursor is over the Members List. These icons are also available for quick selection using Ctrl hot keys as shown in this image of the pop-up menu. A double click on your own nickname will add or remove the moon icon to indicate your away status. Press the hot key a 2nd time to toggle off the icon, or press CTRL-M for My Icon.

Press the CTRL-Q keys for the Question icon. This icon will have the special effect of moving your nickname to the top of the Members List so that the room mentor realizes you have a pending question and are waiting for to be called upon to ask your question. When your question is answered, press CTRL-Q a 2nd time or press the CTRL-M keys to change your icon to My Icon.

The Page User menu will 'page' the member selected on the Members list prior to showing the pop-up menu. This feature will send a message to the member and play a sound on the member’s computer. This is a great way to let a user know you are trying to reach them and want their attention for a moment in the chat room.

The Ignore User menu will block all text and private messages from the selected user. Check the menu option again to Accept User. Ignored Users will show on the Member List with the Stop sign icon.

The Boot User menu is available to room administrators so they can kick an undesirable person out of their chat room. A booted user will be prevented from reentering that room.

Private Message

Double click on a member nickname to send a private message (PM) to the person. A separate small chat window will open on your computer and on the computer for the other person. Use this small window to have a private chat with the other person. The caption to the PM window shows the nickname of the person you are chatting with, and the time the PM window was created.
Viewer

The viewer at the top of the chat room can be undocked from the chat form and become an independent window, or it can be docked on a stack form. Also, other docking windows (charts, quotes, options, news) can be docked with the viewer on the top of the chat form. One use of the docking feature would be to open 2 chat forms, undock the viewer from each chat form to a stack form, and then hide the viewer space at the top of the chat form by unchecking the Show Viewer option. Size both chat forms to occupy a smaller space and have each chat form be associated with a different chat room. As images are posted to either chat room, they will show in their viewer in the stack, and update the name on the button for the viewer at the top of the stack form.
13:48 red12: Can anyone explain what the indicator MOF/SL is on the bline template?
13:50 red12: I think it has to do with the divergence of the MACD to LH, HH, LL, etc.
14:22 Osha: http://206.71.64.13:12001/graphics/mon/oshc-71.png
14:23 Osha: http://206.71.64.13:12001/graphics/mon/oshc-72.png
Database

Ensign has been designed around a database for the following advantages:

1. With Tick and Minute databases there is a reduced need to refresh to have complete databases.
2. Capacity: Database can go back many months. Initial refresh from Barchart will be 8 months.
3. Speed: Building chart bars from the databases is considerably faster than extracting from a tick pool.
4. Consistency: All time frames build bars from the same database. Chart bars can be deleted and rebuilt.
5. Efficiency: A refresh updates the database. Do not need to refresh multiple time frames. The refresh benefits closed charts too, which is a huge benefit.
6. Preserve: Ability to lock individual days in the database so subsequent refresh does not overwrite data known to be good. This will be particularly useful in maintaining continuation files for futures.
7. Extent: Intra-day and tick charts can auto refresh upon opening, if a refresh is needed. Mode to auto refresh database on program run.
8. Playback uses the tick and minute database files. This is the actual tick history.
9. Time & Sales: Quickly jump to any date, any time of day, and view the time and sales ticks.

Click the Database button to display the Database Manager form. This form can also be displayed from a chart's pop-up menu. The advantage of using the chart's pop-up menu is the form will be opened with the correct directory folder selected for the chart.

On the left side is a directory tool to navigate the Ensign10 folder to pick one of the Vendor folders, and either the Ticks\ folder or the Minutes\ folder. In each folder are sub-folders containing the database for each symbol that you follow. There is a tick database and a separate 1-minute database. Each day is a separate file providing the following advantages.

- If you need to replace or repair a day in the database, do so by working on that day's file.
- The whole database is never at risk of being corrupted or lost.
Legend

When you select a date in the database, a row of boxes show that days' contents. There is a box for each half hour of the day and the colors indicate something about the content in that half hour period. The 24 hour day will thus have 48 boxes, beginning with the evening session open and going through the day session close.

A box that is dark blue has data obtained by refreshing. A box that is green has data obtained from the live data feed, and a refresh of the same period will change green to blue. A box in the aqua color has no data, but that was the way it was in the refresh, so the omission is probably correct and doing another refresh is not going to add anything, because you already had a refresh covering that period. Most likely, the market is just idle or closed during that time period.

A box that is white indicates that no data has been seen (yet) in real-time or in a refresh, such as the remainder of the current day.

A red box, indicates that data is missing in the past, and may just needs to be refreshed. Boxes that have a center hole indicates those time periods have not been locked.

If the data is correct, and you do not want it to be changed, click the Lock File button and the boxes with holes become solid boxes. A refresh will make the box solid to begin with, meaning it is already as good at it can get and refreshing again will not benefit. The green box could be made locked by locking it, in which case the refresh will not replace it. To unlock a file that was locked, there is an Unlock File button, in which case a refresh could then replace the bars.

Building Chart Bars

When a chart is opened, it will load the existing chart file which might go way back. Then the database files for ticks or minutes are used to bring the chart current. The database can have many months of files, and these do not self delete. Though a chart may not have been opened for 2 weeks, database files for these 2 weeks may exist so the chart can be updated. After extracting the bars from the database files, the updated chart file is saved so the extraction is not needed the next time the chart is opened.

The building of bars from the database is very fast. Any updating done to the database by either the live feed or the refresh benefits all charts that are closed. A single refresh that adds to the database provides content for any chart that uses the database. The same principles apply to the minute database.

All intra-day charts read from the same 1-min bar files to be brought current. A single refresh request for 1-min data benefits all these open charts and all close charts yet to be opened.

Tick, range, seconds, and volume charts all build from the tick database. This leads us to another great feature, and that is the program is smart about what needs to be refreshed.

Auto Refresh Options

Because Ensign can be configured to automatically refresh, you can give less thought to the chart content. One of the things implemented to that end was to have Ensign do refreshing before you need the chart. Ensign does it in advance in anticipation of your wanting it.

On the Setup | Charts property form are 2 check boxes to enable an automatic refresh feature that starts a couple minutes after the program runs. Ensign will go through the symbols on the Setup | Feeds
symbol lists and determine how much data is needed to bring the databases current, and make refresh requests automatically.

Say a user with an eSignal connection is on-line until 9 pm at night, and then exits Ensign and turns it back on at 7 am the next day. Ensign's databases know they have data through 9 pm, so upon connecting if the auto refresh options are enabled, the program will start going through the symbol list for eSignal and request minute data from 9 pm through 7 am, and then when that process is finished, it will request tick data for the same time period.

The minute database is refreshed first because that completes most quickly. You might start to open some charts, and they may or may not be refreshed, yet, but an unrefreshed chart is detected, and its refresh request is then moved to the top of the queue. Eventually all pending requests on the queue are serviced, and hopefully you never see a single refresh request the rest of the day because the databases are current already.

**Refresh on Chart Open**

You may wish to have the auto refresh on program run turned off, and enable the options to refresh a chart when it is opened. Ensign can see a database file might be missing data, and go do a refresh and show the data when it is received. Either auto refresh method works well.
Interactive Brokers Refresh

Now the auto refresh is a good intention, but unfortunately it is tainted by which data vendor you use. And the taint is for the IB users, whose refresh from IB is plagued by 3 issues.

1. Any refresh request from IB is really slow to get a reply.
2. IB has a cap of 2000 records returned on any reply, so we have to break up a refresh for a given period into multiple requests. All that takes longer to get the total reply.
3. IB imposes a pacing restriction of 60 requests in a 10-min period. Since a period refresh might have been broken into multiple requests, the 60-limit gets used up pretty fast. Therefore, the auto refresh options for program run should be unchecked for IB users. Otherwise the refresh resource can be bottlenecked for a couple hours waiting for the 10 min limit period to expire.

Barchart does not have any such limits. So if you can, IB users should do their refreshing from the Barchart source.

If the feature is enabled to Refresh on program run, you should have an updated database within a couple minutes of running Ensign and thus not see another refresh request all day long.

Manual Refresh

If data is missing, a refresh can be manually requested, using 3 different methods.

1. From a chart, use the Refresh pop-up menu and select a quantity in the side menu.
2. From the Setup | Charts form, enter the number of hours to refresh and click the Refresh All Database Files button. This will refresh all tick database files if the Refresh Tick Database on program run check box is checked. This will refresh all minute database files if the Refresh Minute Database on program run check box is checked. If both check boxes are unchecked, Ensign will assume both databases are to be refreshed. The refresh requests are queued, and you can see the refresh progress on the caption of the main Ribbon bar.
3. Use the Database Manager form. Select the date to refresh, the quantity, and click the Refresh button.

If you select Barchart as the source, you can refresh 3 years of 1-min files in a single request. The refresh of 12 months of 1-min files takes less than 2 minutes, and would only be needed to be done once for a symbol. This gives you lots of back data for all the intra-day charts, and from then on you are just keeping the database updated each day via the live feed or an occasional short term refresh.
Merge Chart Files

Select **Merge Chart Files** to view the Merge Chart Files window. Merging chart files is used to correct bad data, add more data to an existing file, and to multiply or offset prices or volume. Merging can also be used to merge daily charts into a weekly or monthly chart. Weekly charts can be merged into a Monthly chart. Intra-day charts can be merged into other Intra-day charts. Merging chart data is often more preferable than copying chart files, because gaps are not introduced into the chart data.

The merge feature is used to merge a chart file into another chart file. Merging is used to create continuation charts from Futures data. Merging is used to create new chart files from existing chart files. New time frames can be created from lower time frames. For example, a 60-minute chart file can be created from a 5-minute chart file. Merging can also be used to adjust chart data for stock splits, or price adjustments. Price adjustments or splits are accomplished by multiplying, adding, or subtracting the chart data between a start and end date. If necessary, the Volume values for a chart can be multiplied separately.

![Merge Chart Files Window]

**Source** - Specifies the location of the source data file to merge.

**Target** - Specifies the chart file that will receive the merge data from the source file. Enter the same symbol as the ‘Source’ file if adjusting prices for a stock split or price adjustment. The file will merge into itself while adjusting the price data.

**Browse Button** - Browses for the ‘Source’ file or files to merge.

**Merge Button** - Starts the merge process.

**Merge only with Existing Files** - Select this box to merge data into existing files only. Any files on a data disk that do not already exist on the computer will not be merged. This is used to update existing chart files and not install new chart files that are not being followed. Leave the box blank to merge all chart files from the ‘Source’.

**From Date** - Optionally enter a starting date to specify the starting point for merging from the ‘Source’ file.

**To Date** - Optionally enter an ending date to specify the ending point for merging from the ‘Source’ file. The ‘From’ and ‘To’ entries are used to merge specific portions of the ‘Source’ file into the ‘Target’ file.

**Price Multiplier** - Specifies a value that will be multiplied to each data point during the merge process. This entry is normally used for stock splits. Entering a value of 10 will multiply all chart prices by 10.

**Price Offset** - Used to add or subtract a number to each bar price. Entering 200 would add 200 to all chart prices.

**Volume Multiplier** - Specifies a value that will be multiplied to each Volume value during the merge process.

**Volume Offset** - Used to add or subtract a number to each Volume value.
Creating Weekly and Monthly Charts from Daily Charts

The merge file feature can be used to create a weekly chart or monthly chart from daily data. Enter a daily chart file name in the ‘Source’ box (example: IBM.D), and the corresponding weekly chart name in the ‘Target’ box (example: IBM.W). The daily data will be merged into weekly bars. Enter IBM.M in the ‘Target’ box to create a monthly chart from the daily data.

Delete 1 Date

Click the Main ribbon tab, then select Database | Delete 1 Date from the menu to delete a specific date from all daily chart files. Enter the date to delete in the displayed entry window and then click OK. This feature will delete the indicated date from daily charts only. Intra-day, weekly, and monthly charts will not be affected. This feature is most often used to delete a bar from all daily charts after accidentally running the daily update process on a Saturday, Sunday, or on a Holiday. The date specified will be deleted from all daily charts. If the specified date is found in the Holiday list, then dates will only be deleted from Holiday symbols.

Import ASCII Data

Click the Main ribbon tab, then select Database | Import ASCII Data from the menu to view the Import ASCII Data screen. This screen is used to convert an ASCII data file to an Ensign chart file.

Importing ASCII Data is a two step process, 1) Converting the data to a standard merge format, and 2) Merging the data into the Ensign Windows chart files. Several entry boxes are used to specify the source and target files, as well as other merge filters and formats. Daily chart data can be imported directly into weekly and monthly chart files if desired.
Import control File – This drop-down box can be used to populate the form with a saved set of parameters. Select an entry from the drop-down list that best matches the ASCII data that you are going to import. Or type in the edit box a new name to be used to save this configuration under.

Source - Specifies the location of the source data file to merge. The source file must be an ASCII text file. The file can include chart data for a single symbol, or for multiple symbols. Enter the path and file name of the 'Source' file. After entering the file name in the 'Source' box, the file will be loaded and displayed in the import window. Click the Browse button to browse for the ASCII file on your hard disk.

Target - Specifies the Ensign Windows chart file that will receive the merge data from the 'Source' file. Leave the 'Target' box blank if merging an ASCII file that contains multiple symbols. The software will automatically determine the target location during the merge process. If the 'Target' box is blank, and the ASCII file does not contain the symbol, then the software will try to obtain a symbol from the Source file name. Intra-day files will import and save to the \ENSIGN10\MINUTE2 folder by default.

Convert Button - Converts the ASCII file data into a standardized format for merging. The standardized format is: Symbol, Date, Open, High, Low, Close, Volume, Open-interest (or Time). Clicking the Convert button will scan the ASCII file and validate all the ASCII lines in the file that can be merged. Validated lines will have a '+' plus sign added to the front of the line. Lines that will be skipped during the merge process will have a '-' minus sign added to the front of the line. After clicking the Convert button, the button will change to a Merge button. Click the Merge button to begin the merge process.

Merge Button - Starts the merge process. All ASCII lines that were validated during the convert process will be merged to the 'Target' chart file.

Merge Only with Existing Files - Select this box to merge data into existing files only. Any chart files that do not already exist will not be created and merged. This allows existing chart files to be updated by the merge data, and will not create new chart files for symbols that are not being followed. Uncheck the box to merge all chart files from the 'Source'.

Voice - When checked, a computerized voice will announce when the conversion is finished.

Build Tick/Minute Database Files – Check this box when tick or minute records are being imported to build database files. Uncheck the box to have the imported data build the Target chart file. The example shows data being imported to build tick database files for the EUR/USD symbol. The symbol is associated with a data vendor on the Setup | Feeds form. Thus, the program knows this import is to build files for the FXCM feed, and use the FXCM folders, by having 'EUR/USD' as a symbol on the watch list for the FXCM data feed.

Note: The following web site has tick data for Forex currency pairs for many years back. It is a great resource.


Download a zip file for a month and unzip the contents into the C:\Ensign10\Ascii folder. The Format characters are DTC V. There is a space character between the C and the V. The Date format is YMD as shown in the example.

From Date - Optionally enter a starting date to specify the starting point for merging from the 'Source' file. The date format should be mm-dd-yy.

To Date - Optionally enter an ending date to specify the ending point for merging from the 'Source' file. The 'From' and 'To' entries are used to merge specific date ranges of the 'Source' file into the 'Target' file. The date range is checked in the 'Merge' process, not in the 'Convert' process. The date format should be mm-dd-yy.

Format - The 'Format' combo box identifies the format of the ASCII data file. Alphabet letters are used to identify the data fields that are present in a line of data (ex. SDOHLCV ). The following data fields are supported: S - Symbol, D - Date, T - Time, O - Open, H - High, L - Low, C - Close, V - Volume, I - Open-Interest. You can manually type in your own format if necessary. Place a '-' dash character in the format field if a particular import column should be ignored. Example: SD-OHLCV will ignore the 3rd column of ASCII data.

The following predefined 'Formats' are supported. Select these formats from the 'Import Control File' drop-down box when the ASCII data is copied and pasted from the following Internet web pages. The sites post daily data for stocks or commodities after the markets close.

http://biz.swcp.com/stocks {SP500 stocks for 1 year}
http://www.barchart.com/cme/cmedta.htm {CME exchange for 18 months}
Some of the web sites require that a month, year and day be entered. If the ASCII data records are visible in your internet browser, then select Edit | Select All, then Edit | Copy from the browser menu to ‘Copy’ the ASCII data directly to the Windows clipboard. The clipboard data can then be pasted directly to the import window by clicking the Paste button.

**Symbol** - ‘Default’ is usually selected. Select ‘CME/CBOT Data’ to extract symbols correctly from data obtained from the CME web site. The ‘Stocks’ entry is used to substitute ‘p’ in place of the ‘*’ asterisk character found in some preferred stock symbols.

**Date** - Specify the order of the month, day, and year in the ASCII data (ex. MDY).

**Price** - ‘Default’ is usually selected. Occasionally the ASCII prices need to be adjusted by multiplying or dividing by a constant. Use the drop down box to make a multiplier selection. For Futures ASCII data files that have mixed decimal formats, select ‘Use Scale’. In this case, a scale factor will be determined for each Futures symbol. The ‘x100 > 32nds’ entry will import ASCII data that is already in 32nds but has a decimal in the price. It will multiply the data by 100 and then treat it as 32nds. Example: 101.16 becomes 10116.

**Volume** - ‘Default’ is usually selected. If the Volume and Open Interest values in the ASCII data contain commas, then select the ‘Contain Commas’ entry from the drop down list. If the Volume is provided in two adjacent fields such as ‘Up Tick Volume’ and ‘Down Tick Volume’, then select the ‘Sum 2 Parts’ entry from the drop down list. Occasionally the volumes need to be adjusted by multiplying or dividing by a constant. If necessary, select a multiplier from the drop down list.

The Volume and Open Interest from the ‘CME/CBOT Data’ is Total Volume and Total Open Interest, instead of individual contract volume and open interest. If the Volume and Open Interest from the ‘CME/CBOT Data’ set is desired, then select ‘CME/CBOT Data’ from the drop down list (otherwise it will be skipped).

If the Open, High, or Low prices have a zero value, then they will be merged with the Close value. If the Volume and Open Interest values are zero, then the values will be retained for existing bars, or they will be zero. If the Symbol does not have a time extension (ex. IBM.D for daily), then the merge will assume a Daily file merge. The Default Time Frame can be changed by making an entry in the ‘Default Time Frame’ box. Select the Time Zone that the import will post the time as in the imported data.

**Importing to Weekly and Monthly Charts**

The import file feature can be used to create a weekly chart or monthly chart from daily data. Enter the daily chart import file name in the ‘Source’ box (example: IBM.TXT), and the corresponding weekly chart name in the ‘Target’ box (example: IBM.W). The daily ASCII data will be merged into weekly bars. Enter IBM.M in the ‘Target’ box to create a monthly chart from the imported daily data. Weekly data can also be imported into a monthly chart.
Rollover Symbols
Click the Main ribbon tab, then select Database | Rollover Symbols from the menu to run the rollover symbols feature. Futures markets expire on a regular basis. This feature is helpful in maintaining current symbols as the futures markets expire. When activated, this feature will scan through all of your symbol market lists and move out the expired (or expiring symbols) to the next contract month. You can also run this feature while a custom quote page is open, and it will rollover any expiring symbols on the quote page. The software will prompt you to approve each rollover. You can also run this feature after displaying several charts (perhaps in a Layout), and it will rollover all the charts that have expiring symbols.

Reset Variables
Click the Main ribbon tab, then select Database | Reset Variables from the menu to reset variables used by DYO and ESPL studies. This is a quick way to reset all 1,000 variables to a value of 99999999. In addition, an open chart that has focus will reset its private variables. This feature is useful for a developer of DYO and/or ESPL studies who wants to make sure that all the variables have been initialized and do not contain a prior value.

The boundaries for the private variables are set on the Setup | System | ESPL & DYO form.
ESPL

This feature is documented in the ESPL.PDF manual.

Run ESPL

This feature is documented in the ESPL.PDF manual.

Output Window

The Output Window is used by ESPL 'Writeln' statements to output text. See the Writeln and Output statements in the ESPL.PDF manual for more information.

The Output Window can also show variable values and show text from DYO Output statements. See Programming Tips in the the DYO.PDF manual for more information and examples.

The Output Window can be helpful to the Ensign staff to display a program log or show program activity using certain keywords such as 'Refresh'. The form will post activity information to the Output Window while the 1st box is checked. Check the Log check box to write the same information to an ASCII file named with today's date in the C:\Ensign10\OutputLog folder.

Ensign's staff may use of the Output Window as a convenient place to type comments during a remote support session with a customer.

| Refresh | Log | Post activity information to the Output Window for the keyword entered. | Append the text when received to today's dated log file in the \OutputLog folder. | Display today's log file in the Output Window. | Clear the Output Window. Show a blank form. | Delete today's log file in the \OutputLog folder. |
Appendix

License Agreement

The following is the License Agreement for all Ensign users:

This is a legal agreement between you, the end user (Licensee), and Ensign Software, Inc. ("Ensign Software"). Ensign (the "Software") is licensed by Ensign Software to the original Licensee for use only on the terms set forth here. If you do not agree with the terms, promptly delete the Software from your computer and return all materials to Ensign Software.

1. Materials. This license applies to the computer readable information contained in the Ensign installation, including the Software, Data, Documentation, and all updates to the Software, Data, and Documentation, all of which constitutes the Materials. Ensign Software retains title and ownership of the Materials. The Materials are protected by United States copyright laws and International treaty provisions.

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3. Fee Changes and Billing Charges. Licensee acknowledges that the Software use fees are subject to change at any time without advance notice and that such fees may be charged based on applicable transactions. Licensee agrees to pay any such increases in fees. Licensee also agrees to pay any billing collection fees and penalties that may be levied against Licensee if collection efforts are necessitated by Licensee's failure to pay owed fees.

4. Restrictions. Licensee may not:

(a) transfer the Software to other parties by assignment, rental, sale, or other disposition;
(b) remove or obscure the Ensign Software copyright and trademark notices;
(c) decompile, disassemble, reverse engineer, or modify the Software code;
(d) devise or use any method that disables or defeats the software security and authorization.

5. A one-time trial period of 7 days is granted to first-time users of the Software. Any use of the Software past the original 7 days, without a valid and paid software subscription, is a breach of this license and of copyright law and will be prosecuted to the full extent of the law.

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11. Order Entry and Online Trading. The Order Entry and online trading services that can be accessed through the integrated trading features of the Software are provided by TransAct Futures. In order to use these services Licensee must have an existing account with TransAct Futures or one of its affiliate Introducing Brokers. Ensign Software is not a registered broker-dealer, is not affiliated with TransAct Futures nor its affiliate Introducing Brokers and does not endorse nor recommend the services of any broker-dealer. The broker dealer that Licensee uses for trading services is solely responsible for its services to Licensee, and Licensee agrees that Ensign Software shall not be liable for any damages or costs of any type whatsoever arising out of or in any way connected with Licensee's use of such trading services, and Licensee agrees that Ensign Software shall not be liable for any damages or costs of any type whatsoever arising out of or in any way connected to the use of the Software and its connection and interface to such trading services. ENSIGN SOFTWARE MAKES NO WARRANTIES REGARDING THE USE OF THE ORDER ENTRY AND ONLINE TRADING INTERFACE AND LICENSEE ACCEPTS ALL RISKS INHERENT IN USING THE SOFTWARE. LICENSEE FURTHER ACKNOWLEDGES THAT TRADING FUTURES INVOLVES SUBSTANTIAL RISK OF LOSS AND IS NOT SUITABLE FOR ALL INVESTORS AND THAT LICENSEE MAY LOSE ALL OR MORE OF LICENSEE'S INITIAL INVESTMENT.
Software Subscription

A monthly software subscription fee of $49.95 must be paid in order to use Ensign. An annual, non-refundable subscription of $499 is available on request. The software will expire and shut-off if the subscription is not current. The subscription fees are collected by Ensign Billing.

Contact Ensign Billing for all billing questions:

- Phone: 208-552-2230
- Skype: ensign.billing
- Email: billing@ensignsoftware.net

To start your Ensign subscription, first download and install the software. A 7 day trial period is provided for new users. Near the end of the trial period, submit the Order Form on the Ensign web site. The Order Form is found at the following web site:

https://www.ensignsoftware.net/order.php

A welcome email will be sent to you when the account has been setup and verified. A prorated charge will be made to your credit card for the balance of the first month. A charge of $49.95 will be made to your credit card at the beginning of each subsequent month. You must notify Ensign of your intentions to cancel the software subscription before the 1st day of the up-coming month in order to avoid a charge for the next month. For example, if you submit a request to cancel your subscription on the 7th day of a month, then the cancellation will be effective on the last day of the current month, and you will not be charged for the up-coming (next) month. Cancellation months are not prorated nor refunded.

System Requirements

- All version of the Windows Operating System are supported (2000, XP, Vista, 7, etc.)
- 17" monitor with 1024x768 resolution minimum. Ensign can be used with multiple monitors. Larger monitors are preferable and allow you to view more at the same time.
- 2 Gigabytes RAM memory or more
- 50 Megabytes of hard disk space available
- Intel® Core™ 2 Duo, 2.0 GHz or faster
- Broadband Internet access is required
Data Vendors

Ensign can receive data from several sources at the same time. Some data sources are free, and some require a separate data feed subscription with the vendor.

- **Forex**: Ensign Software provides free real-time Forex currency data and chart history with your Ensign subscription. The data is obtained from FXCM.

- **Stocks, Futures, and Index Symbols**: These data vendors provide real-time data for many different exchanges and world markets. Click the links to view information and to subscribe to their data services.

  - Traderbytes
  - DTN IQFeed
  - eSignal
  - Interactive Brokers
  - TransAct Futures
  - Cannon Trading
  - TradePortal Futures

Visit the following web site for more details:

http://www.ensignsoftware.com/features/datavendors.php

To watch training videos on selecting a data feed click here.
To configure your data connection in Ensign click the ribbon Setup | Feeds button.
Testimonials

'It seems that we never take the time to thank the people that have had a positive impact on our lives. I wanted to take this opportunity to tell me how much your 'Ensign' has meant to me. I am in my seventies now. In looking back over the years (28 from when I first purchased your program) I am amazed at how fast the time has gone by. I have found your 'Ensign' to have given me the most service of anything I have ever used. I never could take advantage of all that it could do, but I used it to the best of my limited ability which accomplished all that I have ever hoped for. Even today all of my templates and charts are setup using "Howard's Average". Even though I don't know how to compute it, I use it for all my longer term bottoms and tops. I just love 'Ensign'. I have long recognized that the most important thing in life is character and integrity. After all these years you, Kimball, Paul and Sheldon have exemplified this every day. Thank you all your years of service. Your character and integrity have always shone through in your day to day actions. It must be a wonderful feeling to have created such a wonderful contribution to traders.' - L. Dozier

"Ensign has top quality software. No other software can match Ensign in price or in possibilities!" - B. Wouter

"Some vendors just don't get it. Ensign Software gets it big time! Support is great, too. I am totally pleased with Ensign Software." - R. Jackson

"After almost 50 years in this crazy business Ensign has been the greatest program in that 50 years!" - D. Harrison

"I have promoted Ensign charting and I know of over 20 traders that have converted to you from other companies!" - J. Boese

"Seriously, Ensign Support is the best I have ever seen! A week does not go by without me praising how great Ensign is and how excellent the support staff is." - Rayban 123

"I have been using Ensign software for a long time and consider them to be the best hands down. The owner, Howard, is dedicated to making them the standard for others to follow. Give Ensign Software a look--you won't be disappointed." - D. Harrison

"Ensign's charting software is so addictive that I would not consider switching to another charting software. I can't imagine trading without Ensign!" - C. Czimich

"I use Ensign for Forex for several reasons: Ensign has free data feed and there is a Playback feature which I use almost daily. Comparable feed from a data feed supplier would probably cost $100 per month, and there is no way I would want to do without the Playback!!" - D. Mackay

"After seven years, I still find Ensign to be in a class by itself for in depth analytic research. Nothing compares to the analytic freedom and creativity that ESPL brings to the table. It seems others simply don't expect their customers to generate questions and hypotheses that fall outside the narrow, and somewhat arbitrary boundaries of technical analysis orthodoxy. Thank you for producing Ensign." - B. Manning

"I absolutely love Ensign. It is very light on resources and amazing with accuracy and speed. The tick Playback feature has improved my trading tremendously. I can't thank you enough for this valuable feature. Keep up the awesome job of updating and improving the best charting software I have ever seen." - F. Sharif

"The features in Ensign are truly fantastic!" - Ong

"I'm truly amazed at how quickly Ensign support responds when a problem comes up. I guess that's why I recommend Ensign to so many traders!" - M. Holstius

"The Ensign team provides exemplary service levels seldom provided by other software vendors. Their responsiveness is amazing, greatly appreciated, and a major strength of the product." - D. Smith

"I've been a subscriber for over a year now and I have to say Ensign is something else. I really appreciate how easy it is to manipulate charts and customize them to suit my trading ideas." - L. Chen
Disclaimer

Unique experiences and past performances do not guarantee future results! Testimonials herein are unsolicited and are non-representative of all clients; certain accounts may have worse performance than that indicated. Trading involves substantial risk and there is always the potential for loss. Your trading results may vary. No 'safe' trading system has ever been devised, and no one can guarantee profits or freedom from loss.

Quote Fields

The following column titles are available for quote display (if the vendor feed contains them):

%Change, % Off High, % Off Low, % Off Open, %Range, 52 Week High, 52 Week Low, Arrows, Ask, Ask Size, Ask Time, Ask Yield, Bid, Bid Size, Bid Time, Bid Yield, Clear, Dividend, Down, EPS, Expiration, Gap, High, Interval, Last, Low, Market, MidBidAsk, Name, Net, Net Bid, Net High, Net Low, Net Open, Open, Open Interest, PE Ratio, Range, Scale, Spread, Strike, T-Counter, Total, T-Time, T-volume, Unchanged, Up, Volume, Xdiv Date, Yesterday, Yield. Note: The Up, Down, Unchanged, and Total price fields display 'Statistic' quotes.

In addition, the IQFeed feed will have the following fields: Assets, Liability, Volatility, Capitalize, Long Term Debt, Shares Outstanding.

Calculations

\[
\begin{align*}
\% \text{ Off High} &= \frac{\text{High} - \text{Last}}{\text{Last}} \\
\% \text{ Off Low} &= \frac{\text{Last} - \text{Low}}{\text{Low}} \\
\% \text{ Off Open} &= \frac{\text{Last} - \text{Open}}{\text{Open}} \\
\% \text{ Range} &= \frac{\text{Last} - \text{Low}}{\text{High} - \text{Low}}, \text{this is a raw Stochastic for Today's range} \\
\text{Gap} &= \text{Open} - \text{Yesterday's Close} \\
\text{Mid Bid/Ask} &= \frac{\text{Bid} + \text{Ask}}{2} \\
\text{Net Bid} &= \text{Bid} - \text{Yesterday's Close} \\
\text{Net High} &= \text{High} - \text{Last} \\
\text{Net Low} &= \text{Last} - \text{Low} \\
\text{Net Open} &= \text{Last} - \text{Open} \\
\text{Range} &= \text{High} - \text{Low} \\
\text{Spread} &= \text{Ask} - \text{Bid} \\
\text{Yesterday} &= \text{Yesterday's Close}
\end{align*}
\]
Top 100 Selections

- Alphabetical - Resets a vendor page back to an alphabetical listing
- Up% - Lists symbols with the highest Up Percent Change
- Up Net Change - Lists symbols with the highest Up Net Change
- Down% - Greatest Down Percent Change
- Down Net Change - Greatest Down Net Change
- Net High - Greatest distance from High to current price (High - Last)
- Net Low - Greatest distance from Low to current price (Last - Low)
- Volume - Most Total Volume
- Tick Volume - Most Tick Volume
- Open Interest - Most Open Interest
- High P/E Ratio - Highest Price to Earnings Ratios
- Low P/E Ratio - Lowest Price to Earnings Ratios
- Dividends% - Highest Dividends as a percent of the price
- Dividends - Highest Dividends paid
- 52 Week High/Low - Symbols currently on their yearly high or low
- Daily High/Low - Symbols that are on or within 2 % their daily high or low
- Up% Open - Lists symbols with the highest Up Percent Change from the Open
- Up Net Open - Lists symbols with the highest Up Net Change from the Open
- Down% Open - Greatest Down Percent Change from the Open Price
- Down Net Open - Greatest Down Net Change from the Open Price
- % Off High - Lists the percent that the Last is from the High
- % Off Low - Lists the percent that the Last is from the Low
- Earnings per Share% - Highest EPS as a percent of the price
- Earnings per Share - Highest Earnings per Share
- Bid Size Ratio - Lists the Ratio between the Bid and the Bid size
- Ask Size Ratio - Lists the Ratio between the Ask and the Ask Size
- Ask-Bid Spread - Lists the difference between the Ask and Bid prices
- Large Range % - Symbols with greatest Range as a percent of price
- Small Range % - Symbols with smallest Range as a percent of price
Save to File

• Excel Columns - This format exports the symbol and several columns of quote data from the quote page. If necessary, rearrange the columns before saving the data. This will insure that the desired columns are saved. Rearrange columns by dragging the column title with the mouse to a different column location. The file name will use .TXT as the file extension (ex. NASDAQ.TXT ). The first row of the ASCII file will contain the column titles for the data. Each column of quote data will be 10 characters wide. Select Set-Up | Computer from the menu to specify how many columns to save.

• Excel Commas - This format is exactly the same as the 'Excel Columns' except that each column of data is separated with a comma, instead of being 10 characters wide. This is called a comma delimited ASCII file.

• MetaStock 5 - This format will create ASCII files that can be imported into the MetaStock program. The Ticker Symbol, Date, High, Low, Close, and Volume are exported for each symbol. The name of the ASCII file will be the market group name, with .PRN as the file extension. The Dates are formatted as MM/DD/YY.

• MetaStock 7 - This format is the same as the 'MetaStock 5' format along with 2 additional price fields. The Ticker Symbol, Date, High, Low, Close, Volume, Open, and Open Interest are exported for each symbol.

• AIQ - This format is similar to MetaStock 7, less one price field. The Ticker Symbol, Date, High, Low, Close, Volume, and Open are exported for each symbol.
## Ensign Windows vs. Ensign 10

<table>
<thead>
<tr>
<th>Feature</th>
<th>Ensign Windows</th>
<th>Ensign 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menus, Buttons</td>
<td>Windows XP toolbar design</td>
<td>Windows 7 Ribbons with Themes</td>
</tr>
<tr>
<td>Child Windows</td>
<td>MDI design contained in desktop</td>
<td>Windows free floating, no desktop, layers</td>
</tr>
<tr>
<td>Vendor Feeds</td>
<td>Some feeds could be simultaneous</td>
<td>All feeds can be simultaneous. Added feeds.</td>
</tr>
<tr>
<td>Symbol Manager</td>
<td>One list to service all vendors</td>
<td>Each vendor has unique list</td>
</tr>
<tr>
<td>Symbols</td>
<td>Prefix or suffix added for uniqueness</td>
<td>Vendor symbols are unchanged</td>
</tr>
<tr>
<td>Custom Symbols</td>
<td>Fill in custom symbols form</td>
<td>*** Free form using ESPL statements</td>
</tr>
<tr>
<td>Multiple windows</td>
<td>Saved as a Workspace (.mac)</td>
<td>*** Saved as a Layout (.txt)</td>
</tr>
<tr>
<td>Multiple studies</td>
<td>Saved as a Template (.dat)</td>
<td>*** Saved as a Template (.tmp)</td>
</tr>
<tr>
<td>Studies &amp; tools</td>
<td>Structure could limit some text length</td>
<td>*** Larger structure, more text capacity</td>
</tr>
<tr>
<td>Database folders</td>
<td>One set of folders shared by vendors</td>
<td>Each vendor has a set of folders</td>
</tr>
<tr>
<td>Chart files</td>
<td>Stores date, prices, volume</td>
<td>No change, chart files are compatible. New: Renko, Kagi, Point &amp; Figure, Quarter, Year</td>
</tr>
<tr>
<td>Studies and Tools</td>
<td>Several dozen</td>
<td>Same studies and tool available</td>
</tr>
<tr>
<td>DYO Study</td>
<td>Property form confusing, 10 rows</td>
<td>*** Major redesign, 12 rows, alerts, ESPL, Draw lines, rectangles, circles, ellipses Automate relocation of all draw tools</td>
</tr>
<tr>
<td>Study Alerts</td>
<td>2 panel test, sound and message</td>
<td>DYO has absorbed the Study Alerts form</td>
</tr>
<tr>
<td>Global Variables</td>
<td>0..199 public, 200..255 private Reference by [#] where # is index</td>
<td>1000 variables, assignable private range. Reference by name or by the [#] index</td>
</tr>
<tr>
<td>Spreadsheet</td>
<td>Quote page with DDE link to Excel</td>
<td>Major redesign, embedded spreadsheet</td>
</tr>
<tr>
<td>ESPL language</td>
<td>Limited debugging tools, no forms</td>
<td>*** Major redesign, editor, debugger, forms</td>
</tr>
<tr>
<td>Charts</td>
<td>Toolbar buttons could be far away</td>
<td>Toolbar buttons are on the chart's toolbar</td>
</tr>
<tr>
<td>Studies, Color Bars</td>
<td>Lists customized on Setup form</td>
<td>Lists customized on their panels</td>
</tr>
<tr>
<td>Playback</td>
<td>Single symbol played to 'DEMO' symbol</td>
<td>Multi-symbol playback to symbol names</td>
</tr>
<tr>
<td>Stack</td>
<td>Tab display for overlapping charts</td>
<td>Stack is now a form container</td>
</tr>
<tr>
<td>Quotes, Options, T&amp;S</td>
<td>Limited use of color</td>
<td>Major redesign for custom colors</td>
</tr>
<tr>
<td>Variables page</td>
<td>Display 0..199 public variables.</td>
<td>Display all variables, and with their names</td>
</tr>
<tr>
<td>Other forms</td>
<td>News, Alerts, Accounts</td>
<td>Basically the same</td>
</tr>
<tr>
<td>Documentation</td>
<td>Relied on web pages</td>
<td>PDF manuals easier to print, search</td>
</tr>
<tr>
<td>Output Window</td>
<td>Limited debug window for staff</td>
<td>New form for debug, DYO's, and ESPL</td>
</tr>
<tr>
<td>Setup Forms</td>
<td>Topics scattered on different forms</td>
<td>Better organization of form contents</td>
</tr>
<tr>
<td>Cross Reference</td>
<td>Limited and access was buried</td>
<td>Support multiple vendors</td>
</tr>
<tr>
<td>Ensign server</td>
<td>Download upgrades, templates, files</td>
<td>Same downloads plus new packages</td>
</tr>
<tr>
<td>Trade optimization</td>
<td>Manual adjustment of parameters</td>
<td>Optimize 3 parameters simultaneously</td>
</tr>
<tr>
<td>Chart Scanner</td>
<td>Advanced implementation using ESPL</td>
<td>Pick a list, criteria, and design a report</td>
</tr>
</tbody>
</table>

*** These are new Ensign 10 files which are not backward compatible with Ensign Windows.