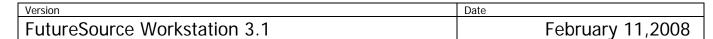
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Release Notes



Charting of External Data Files

Workstation now has the capability to chart data that is outside of eSignal's Data Feed. It allows you to create custom symbols that link to the data files. These symbols can take advantage of the same charting capabilities of a normal eSignal symbol. This includes being able to handle overlays, studies, drawing tools and more.

The data in which you wish to link to Workstation must be in 1 of the following formats:

File Format Options		
.XLS	Microsoft Excel File – All Office Versions 97-2007	
CSV	Text File where the data is Comma Separated	
TAB	Text File where the data is Tab Separated	

These files can reside either directly on the PC that is running Workstation or on any File Server that is accessible within your Computer Network.

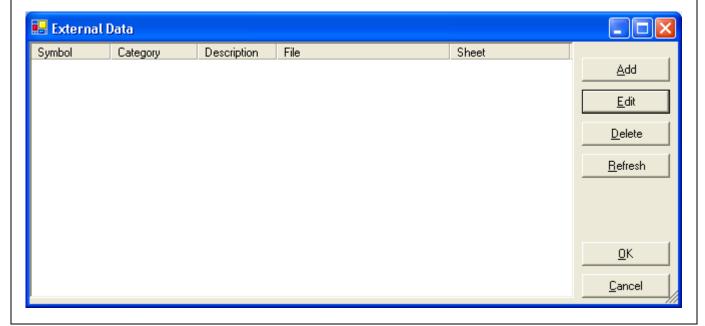
Aggregations

Currently Daily, Weekly and Monthly Data is supported. If your data file contains Daily data it can automatically aggregate the data to Weekly and Monthly for you. Same is the case for weekly.

Establish the Link

Before you can begin using external data within Workstation, you must first establish the link and assign a symbol to the link:

From the **Preferences** Menu, select **External Data** and you will be presented with the following dialog.



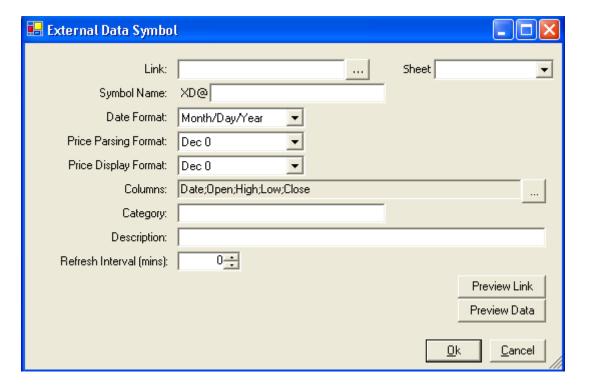
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Dialog Buttons		
Add	Creates new symbol link	
Edit	Edit existing symbol link	
Delete	Delete selected symbol link	
Refresh	Refresh's Data from selected symbol links*	
Ok	Save the symbol links you have created	
Cancel	Do not save the new links or changes that you have made	

^{*} An Auto-Refresh setting is available within symbol link settings

The configuration file that stores these links are contained in a file called ExtData.xml located at UserProfile\Application Data\FutureSource Workstation Data. This file can be shared among Workstation Terminals, as long as the machine has the same directory and network paths.

Creating a Symbol Link



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Dialog Options		
Link	Used to select file in which to link to. Selecting Brings up a Browse Dialog	
Sheet/Separator	Used to select which Sheet within the Excel File contains the Data. Non-Excel files you select the delimiter	
Symbol Name	Custom Symbol to use when viewing the data	
Date Format	Format that your Date is in within your data file	
Price Input Format	The existing format of the data that is in your data file	
Price Display Format	The format in which you want the data displayed inside the Workstation Chart window	
Columns	The order in which the data is inside your data file. Data point available are Date, Open, High, Low, Close Volume, Open Interest**	
Category	Field that can be used to organize your Symbol Links. This is used when you are in the Symbol Search Dialog	
Description	Assign a description to your symbol link. This is used when you are in the Symbol Search Dialog	
Refresh Interval	The time interval in which workstation will check the file and reload any new data that has been added to it	
Preview Link	Used to view the Data File as it is	
Preview Data	Used to view the Data File as Workstation see's it. This is useful to make sure you have set your column fields properly	

^{**} You can override these settings by denoting the field order in line 1 of your file. The abbreviates D, O, H, L, C, V, OI would be used.

Input Format Options		
Formatted Dec	Data that is in Formatted Decimal form, does not matter the number of decimal places	
Classic Dec 0 - 4	Data that is in Classic form, and N Decimals is implied**	
8ths – 64 Halfs	Data that is in Fraction, either in Classic or Formatted	

^{**} Example of Formatted versus Classic

Formatted: 91.77 Classic: 9177

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Using External Data Symbol

Once you have created your symbol links, can you begin charting the data. The symbol will always contain a prefix to denote that it is External Data and not data from the eSignal Data Feed.

Prefix Symbol SomeSymbol

You would enter: XD@SomeSymbol.

If the symbol name assigned had a space in it, you would enclose the symbol in single ticks.

You would enter: XD@'Some Symbol'

These symbols can be used like any other eSignal symbol. They can have studies applied to them, drawing tools, and also used as overlays and as part of an expression containing an eSignal symbol.

Refreshing Your Charts

Since the data is located in a "Flat File" it is not a streaming connection. This means as someone updates the file with additional data it will not automatically reflect in your chart. There are 3 easy ways to handle updates to the data files:

- 1. Use the Refresh Interval property. This is the closest to real-time, especially when set to 1 minute.
- 2. Use the Refresh Button on the Context Menu of the Chart. It is located under View > Refresh
- 3. Use the Refresh Button on the Main External Data Setup Dialog. With this button you can refresh all your external data charts at once, by selecting them all and clicking Refresh.

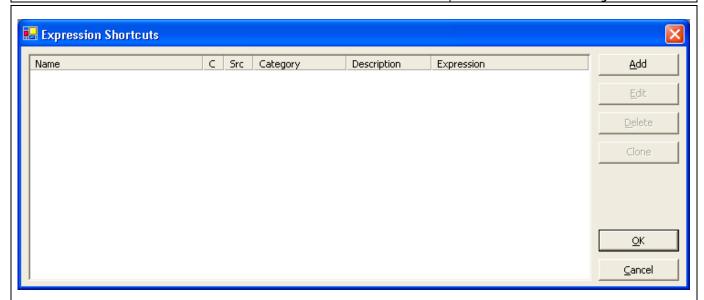
Note: Changes/Additions to the data file must be saved to be reflected in the chart.

Expression Shortcuts

Expression Shortcuts has already been a part of Workstation for a while now. They have been enhanced to support both user defined shortcuts and allow for system default shortcuts. In addition they have been joined with the Symbol Search functionality to allow for easier retrieval and organization.

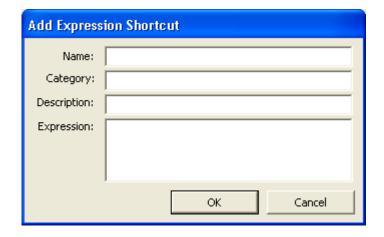
Expression Shortcut Dialog

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Dialog Buttons		
Add	Creates new expression shortcut	
Edit	Edit existing expression shortcut	
Delete	Delete selected expression shortcut	
Clone	Clone a System expression shortcut to make it your own.	

Creating a Expression Shortcut



Dialog Fields		
Name	Custom symbol to assign to the expression	
Category	Field that can be used to organize your shortcuts. This is used when you are in the Symbol Search Dialog	
Description	Assign a description to your expression. This is used when you are in the Symbol Search Dialog	



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Expression The formula or expression you which to use

System Default Expression Shortcuts

Workstation will have predefined expression shortcuts built in. These are expression shortcuts that you do not have to set up to use.

Predefined system shortcuts can not be changed. If you would like to modify a predefined shortcut, you would use the clone feature. You would then assign your own unique name to the modified shortcut.

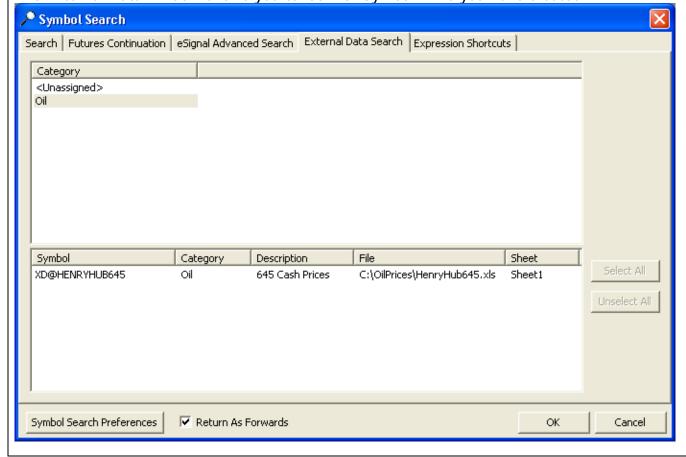
If you create an expression shortcut that is the same name as a predefined one, your custom one will be used and the predefined one will be unavailable. You will know if you have a duplicate when you see a * displayed in the column labeled C.

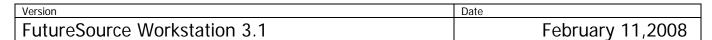
Symbol Search Dialog

Workstation now has 2 additional tabs as part of the symbol search dialog. These tabs are used to search for External Data Symbols and Expression Shortcut Symbols

External Data Tab

The External Data window allows you to look for Symbol Links you have created.

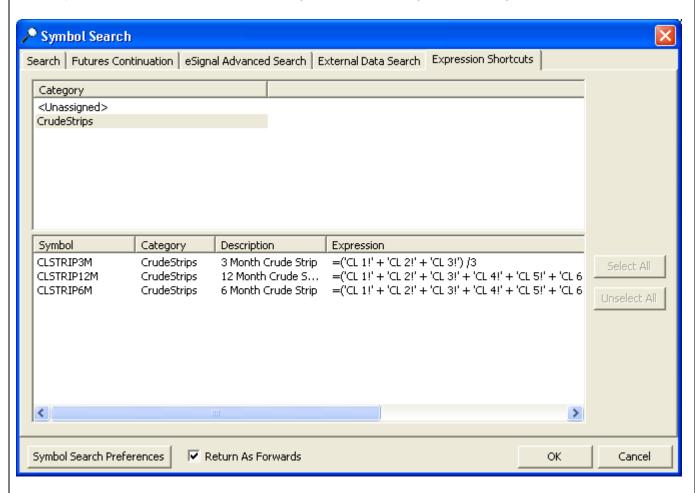




The top window will be a break down of all category groups you have used. Symbols that you have not assigned a Category will be under Unassigned. Clicking on each Category will show you will symbols available.

Expression Shortcut Tab

The Expression Shortcut window allows you to look for Symbol Links you have created.

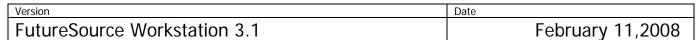


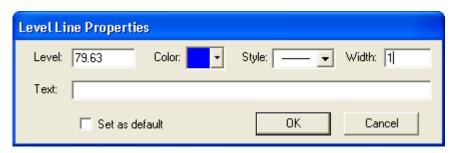
The top window will be a break down of all category groups you have used. Symbols that you have not assigned a Category will be under Unassigned. Clicking on each Category will show you the symbols available.

Chart Drawing Tools

Level Line Enhancement

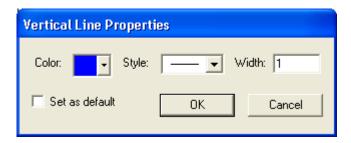
You can now customize the thickness of the Level Line Tool





Vertical Line Enhancement

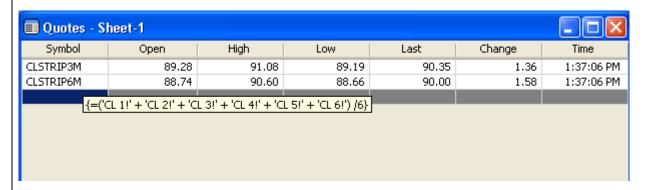
You can now customize the thickness of the Vertical Line Tool

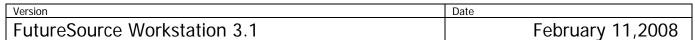


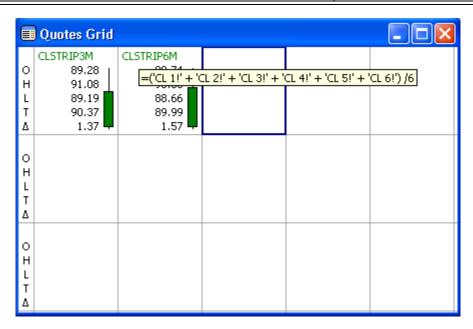
Quote Board & Quote Grid

Tool Tip

A new easier method for retrieving a predefined expression is now available. When you mouse over the Symbol Cell in a Quote Board or Quote Grid a Tool Tip will appear with the complete expression







Additional Fields

Two additional fields are now available within the Quote Board.

- Coupon
- Maturity Date

Dow Jones Energy News Links

Subscribers to Dow Jones Energy News Package now have Reference Pages to view the Dow Jones Fixed Page Content.

Select Fixed Page from the Toolbar. Select DJE Service and enter page number 1 or 2.



Performance Improvements

Numerous performance improvements have been made within Workstation to provide a better user experience.

Workstation 3.1 System Requirements

*Unchanged from previous Version

Minimum

1.2 GHz Pentium IV or greater 1GB of RAM or higher 100MB of hard drive space 1024x768 or higher screen resolution

Recommended

2.0 GHz Pentium IV or greater 1GB of RAM or higher 100MB of hard drive space 1024x768 or higher screen resolution

Power User

2.8 GHz Pentium IV or greater 1GB of RAM or higher 100MB of hard drive space 1024x768 or higher screen resolution