

ASPEN GRAPHICS® 4.0

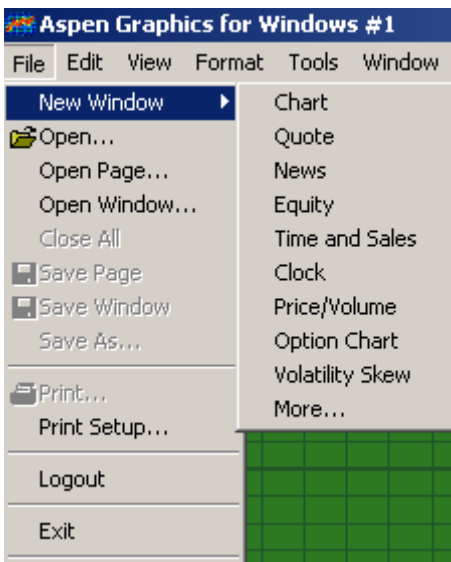
TRADE WITH CONFIDENCE

Getting Started with Aspen Graphics

We encourage all new users to take advantage of our free New User Tutorial.

This one-on-one session with an Aspen Trainer helps ensure that you'll get the most out of Aspen Graphics. If you haven't done so already, please schedule your New User Tutorial through your local Aspen Research office. To find out more, or for the location of the Aspen Research office nearest you, contact Training@AspenRes.com.

Begin viewing data in Aspen Graphics by selecting **File / New Window** and choosing the window you need.



Charts show how live data relates to historical values, and are used to graph indicators.

Quote windows show the most recent numerical values.

News windows allow you to view headlines, filter for key words and read news stories.

Equity windows allow you to keep track of your portfolio in real-time.

Time and Sales allows you to follow every price as it comes in from the data provider.

Clocks monitor the time in various parts of the world.



Price/Volume displays the volume at different prices in the familiar Market Profile® histogram.

Option Charts and **Volatility Skews** are available by subscription to one our Optionalysis packages.

More... takes you to windows you have already customized and saved.

Windows are the templates you use to build a custom screen layout, or **Page**.

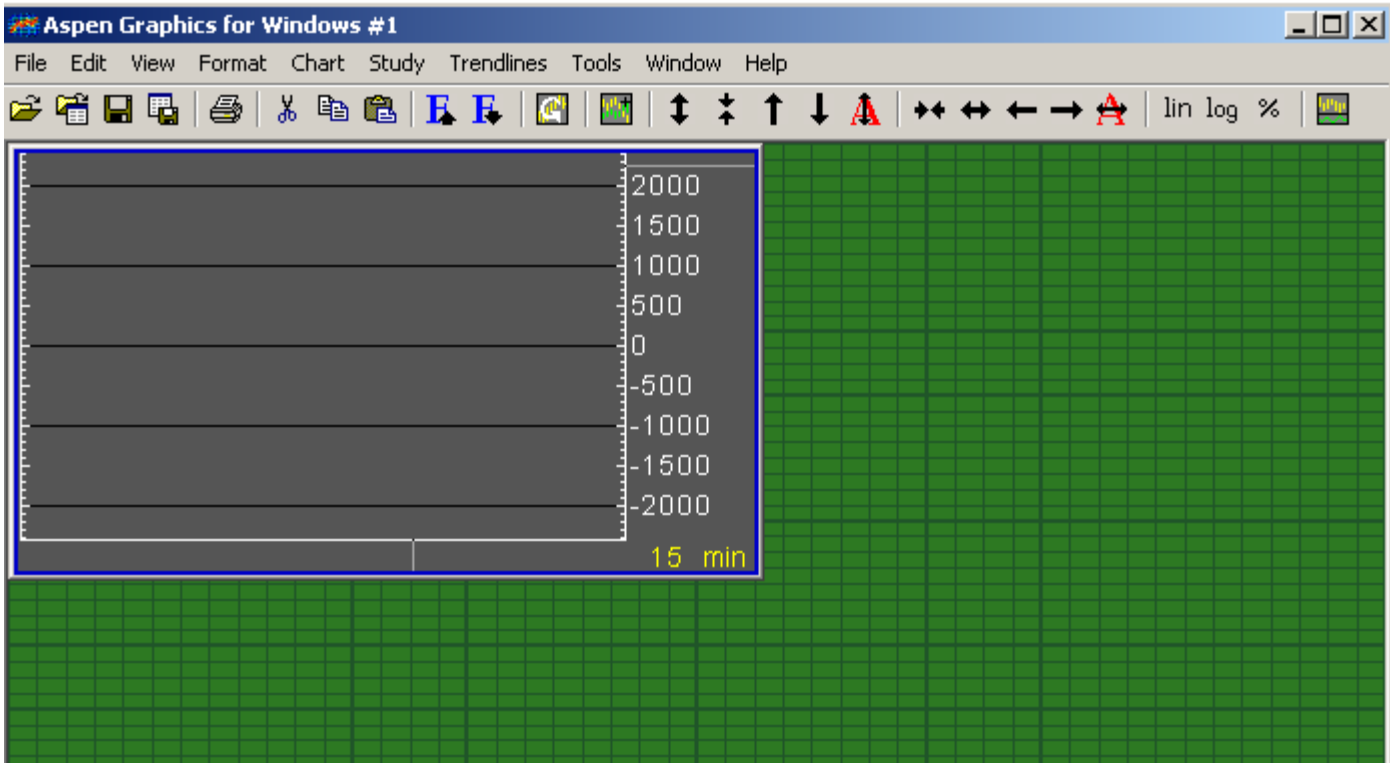
Windows **overlay** whatever you have in your Aspen workspace; Pages **clear the workspace** before displaying your customized screen layout.


Tip! Use the  icon to **increase the font size** in the window in which you're working;  decreases the font size.


The rest of the toolbar is dynamic; the icons change with the type of window in which you are working.

Charts

Select **File / New Window /Chart** for a chart. Your Aspen workspace will now look like this:



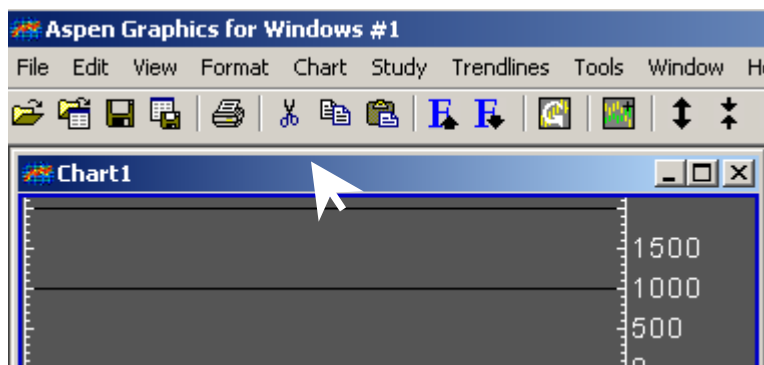
Enter a Symbol Use the  icon, or type the symbol directly into the new chart window. Press the [Enter] key on the keyboard when you're through typing.

Tip! Enter 2 or more symbols by using the  again, or type the next symbol with a comma before it (Example: `,symbol [Enter]`)

Change Timeframes

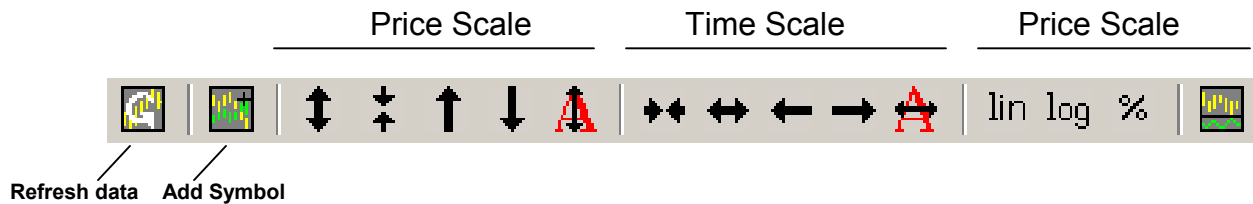
- Type any number from 0 to 1439 and then press the [Enter] key for an intraday chart, or
- Right-click anywhere in the chart, select **Properties**, then **Scale** and select the time frame

Move Place the mouse pointer on the top edge of the chart window. The title bar will automatically appear, allowing you to drag the chart with the left mouse button to a new location.



Rescale

Use the icons on the toolbar:



Price Scale : Use to **zoom-in** (expand) on a narrower range of prices
Use to **zoom-out** (compress) to a wider range of prices
Use and to shift the price scale up or down.
Use to return to the default price scale

Use to change back to linear scaling (this is the default)

Use to change to logarithmic scaling, or to change to percent change scaling

Use to split the chart. This creates a new section of the Y-axis at the bottom of the chart, useful for studies with a range of values differing from those of the price data.

Time Scale: Use to **zoom-out** (compress) the time scale
Use to **zoom-in** (expand) on a narrower range of time
Use to shift the time scale to the left, and use to shift the time scale to the right
Use to shift the time scale so the most recent period is on the right side of the chart.

Tip! Got a wheel mouse? Use it to rescale the chart!

With your mouse pointer in the **price** scale...



Roll the wheel up & down to **shift** the scale

Press & roll the wheel to **zoom-in & zoom-out** on the price scale

With your mouse pointer in the **time** scale...

Roll the wheel up & down to **shift** the scale left and right

Press & roll the wheel to **zoom-in & zoom-out** on the time scale

Indicators

There are two types of indicators: **Overlays** and **Studies**.

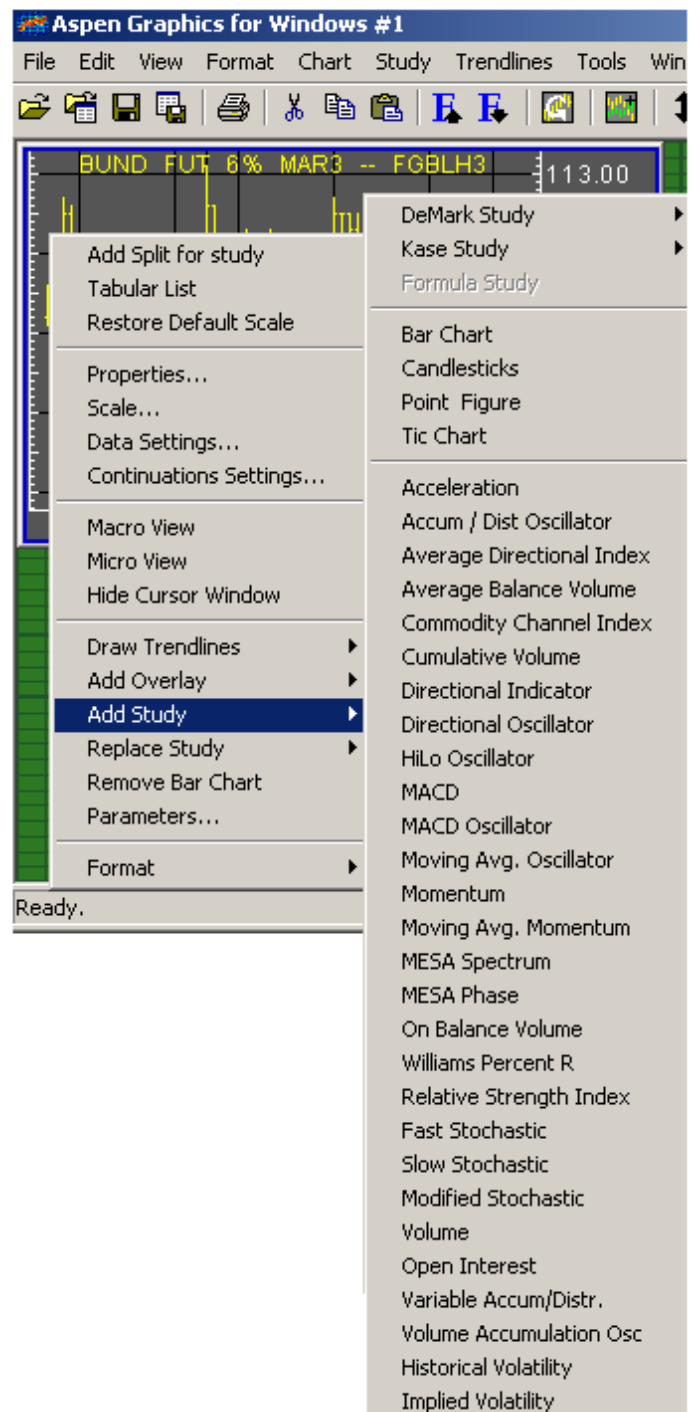
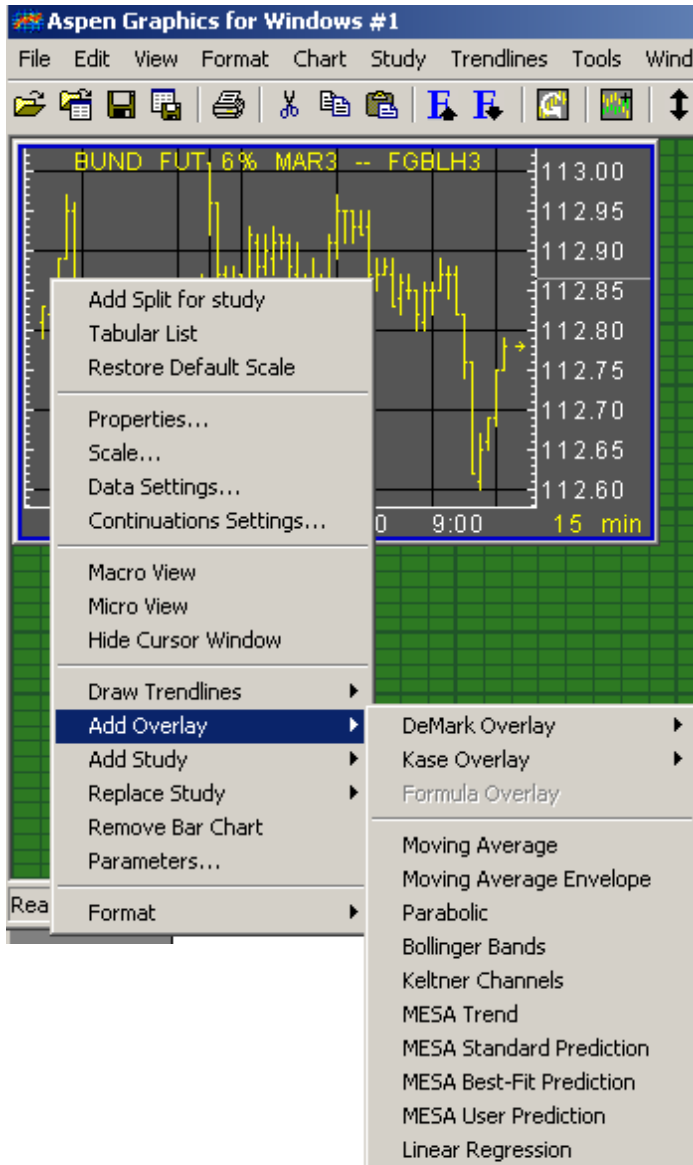
Overlays are usually displayed over the price data because their values are in the same range as the prices.

Studies are usually displayed below the price data (i.e. the lower section of a split window) because their values can be in a very different range from the prices.

Split the chart using the  icon before applying a Study.

Add an Overlay by right-clicking in a chart, and from the pop-up menu select **Add Overlay**

Add a Study by right-clicking in a chart, and from the pop-up menu select **Add Study**



Candlestick Charts Change a bar chart to a candlestick chart by:

- Right-clicking in a chart and selecting **Add Study / Candlesticks**, or
- Select **Study** from the menubar and then select **Add Study / Candlesticks**

Continuation Charts Continuation charts show the continuous history of a futures contract.

There are two types of continuation charts – those created by Aspen and those supplied by the data provider.

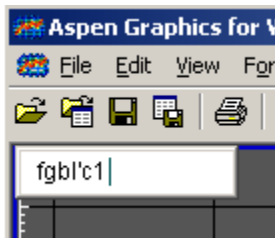
Aspen Continuations: You can create two different default methods for Aspen continuations, each of which can be customized to roll contracts in a different manner. To set up the rollover methods, right-click in a chart and choose **Continuation Settings...** This allows you to set the rollover rules for Method 1 and Method 2.

For an Aspen continuation your chart must be in a daily time frame or longer (i.e. weekly, monthly, etc.), because Aspen synthesizes continuations from our daily historical database.

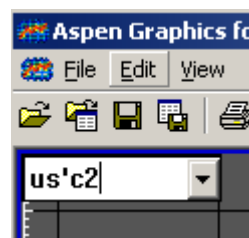
Type the contract root, followed by an apostrophe (') and then a **c1** to invoke Method 1 or **c2** for Method 2.

Examples:

Method 1
(Bond futures on Reuters)



Method 2
(Bond futures on ComStock)



With Aspen continuations you can also specify which contracts are used in the continuation chart. There are two ways to do this: you can use the delivery month code after the continuation symbols as shown above, or a number specifying the number of months out from the prompt month.

For example, ED'c1HMUZ will build a CME Eurodollar continuation chart using only the March, June, September and December contracts. FGBM'c2-FGBM'c21 will chart a continuous spread of the prompt month of the BOBL minus the first month out.

Continuations from the data provider: Reuters, BridgeFeed (and to a limited extent Platts) provide their own synthetic continuation symbols. These have the advantage of being able to be used on intraday charts and being slightly quicker to display. The rollover criteria may differ from that of Aspen continuations; for example, the decision of when to roll contracts may be based on a shift in volume rather than related to the contract's expiration. The disadvantage of these continuations is that you will not be able to tailor the display in terms of the rollover date, historic price adjustment, front month specifications, and contract exclusions as with the Aspen continuations.

To display data provider continuations, use the follow syntax:

Reuters
symbol root c 1

BridgeFeed
symbol root .1

Platts
varies; see www.platts.com

Examples: FGBMc1
(BOBL)

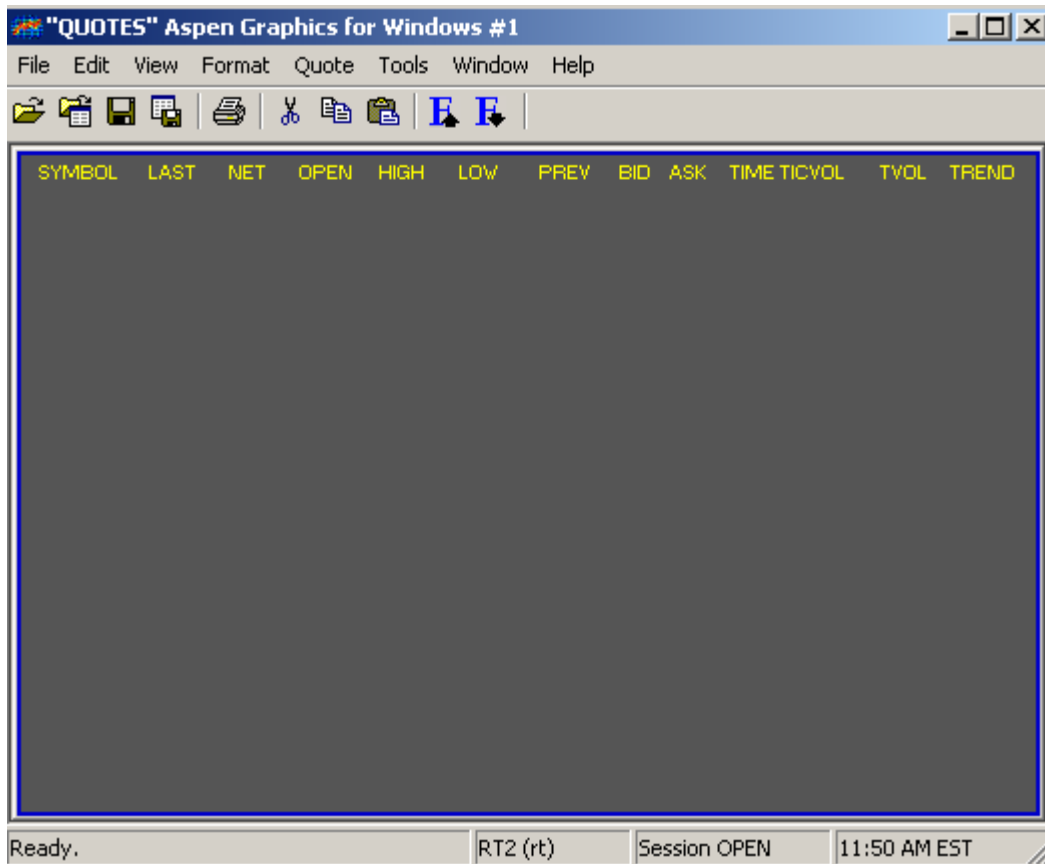
SG\TW.1
(Taiwan Stock Index, SIMEX)

XNNG001
(NYMEX Nat Gas, nearby)

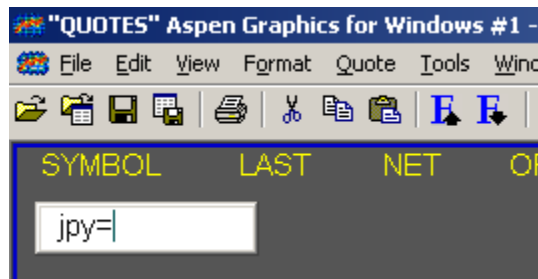
Quotes

You can customize Aspen quote windows to display a wide variety of data, including study values and the values of your own custom indicators. To begin with, however, it easiest to start with one of our pre-formatted quote windows or quote pages.

For a quoteboard, select **File** from the menubar, then select **Open Page...**, choose the **Templates** tab and select the page called **Quotes**. This is what the quoteboard looks like:



Enter a Symbol Left-click under the Symbol, type a symbol and press [Enter].



Once you type in a symbol and press the [Enter] key, the symbol entry box will move down to the next row. Sometimes it's preferable to skip a line when entering symbol, as when you want a visual break between indices and specific contracts or equities.

You can press the down arrow on your keyboard to skip a row, or press the [Enter] key again.

Tip!

Use the **#** and **@ Macros** to make your charts and quote pages maintenance-free!

The advantage of using macros over the full contract symbols is that *macros rollover at expiration*; specific symbols do not.

symbol root # specifies a **particular contract month**

Example:

- **CL#** will always show front (prompt) month of NYMEX crude oil; rollover is at expiration.
- **CL#1** will show the first month out of crude oil

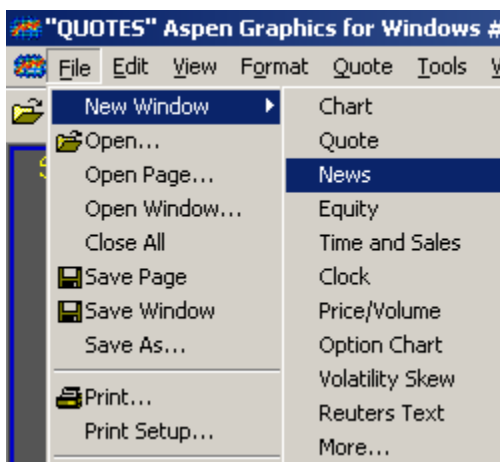
symbol root@ returns **all currently trading contracts**

Example:

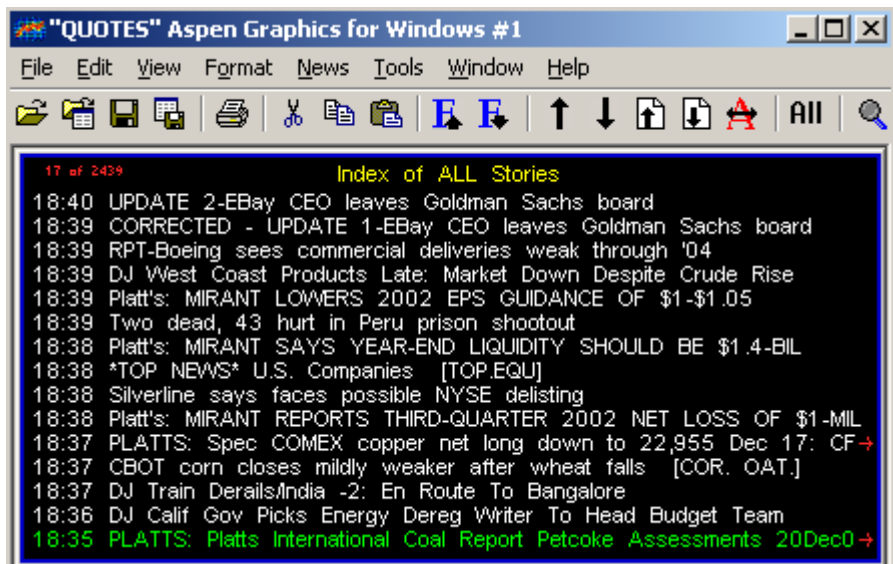
- **CL@** will show all crude oil contracts currently trading.
- **CL@12** will show the front 12 months of crude oil (i.e. a “rolling” 12 months)

News

Bring up a new window by selecting File / New Window / News.



The News window looks like this:






To read a news story, left-click on a headline from the Index of ALL Stories; this “opens” the news story.

When you are done reading the article, left-click again to return to the Index.


Select a news category by selecting **News** on the menubar and then selecting **Category**.

Use  and  to move the highlight up or down one line at a time

Use  and  to page up or page down through the headlines or within a news story

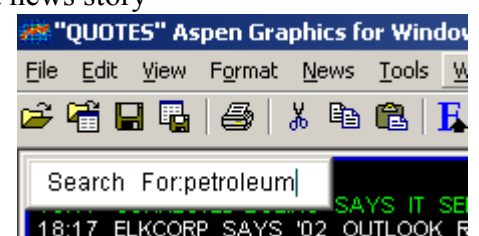
Use  to return to the top of the Index or news story

Use **All** to return to the Index of ALL Stories

Use  to search the headlines for a keyword(s)


Example:


(For more about keyword searches, see “News Queries” in the Help files.)



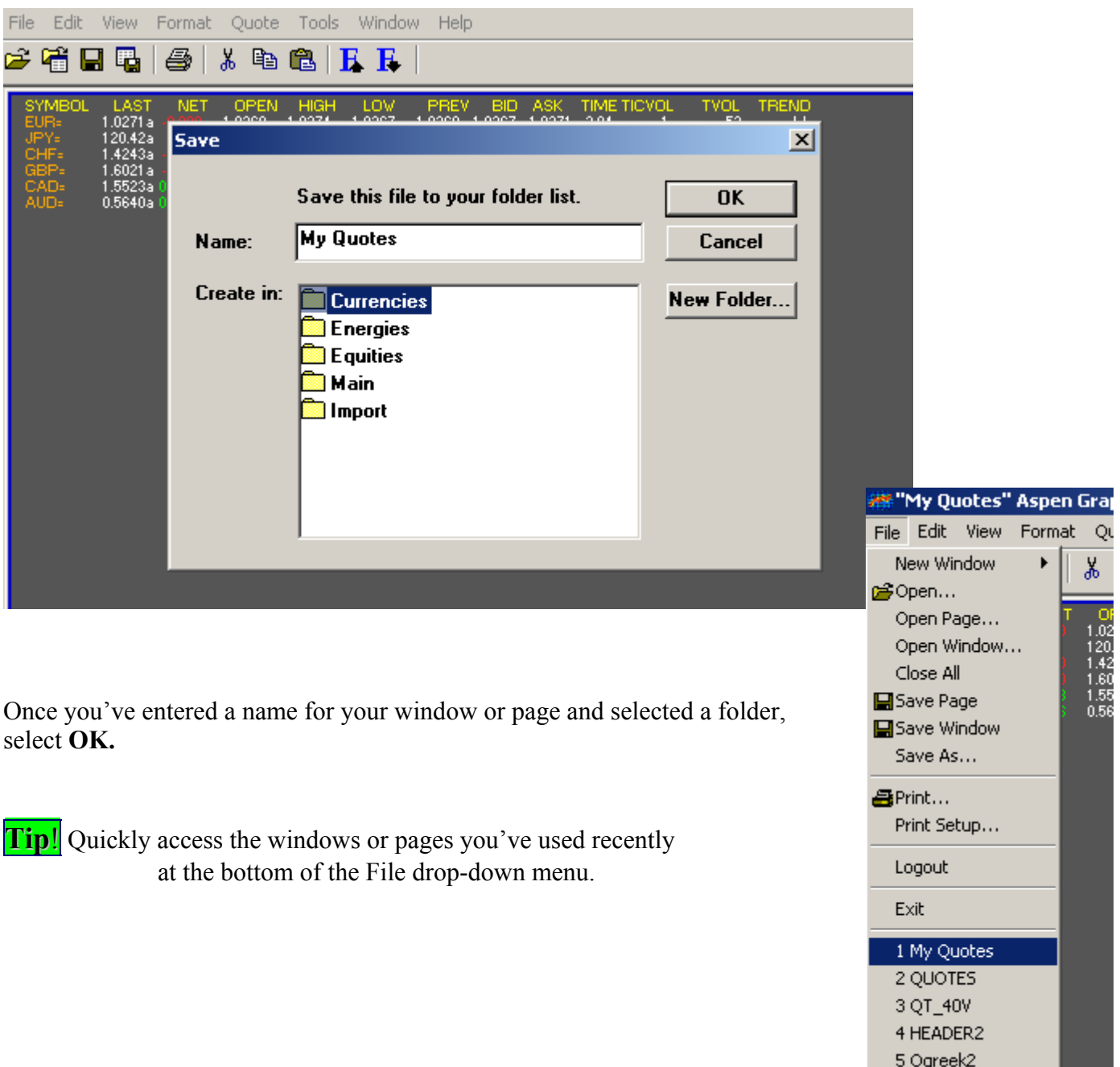
Saving Your Work

When you want to save something you've created, you have two choices: save it as a **window** or as a **page**. How do you know which format you should choose?

Select  or **File / Save Window** if you've created/modified a single window like a chart or quote window, possibly for use in future screen layouts.

Select  or **File / Save Page** if you've created/modified a screen layout. If you have been working with multiple windows and would like to retrieve them together as a complete screen layout, choose to save your work as a page.

When you save a window or page you will be prompted to give it a Name and select a folder in which this file will be stored.



The screenshot shows a software interface with a menu bar (File, Edit, View, Format, Quote, Tools, Window, Help) and a toolbar. A data table is visible in the background with columns: SYMBOL, LAST, NET, OPEN, HIGH, LOW, PREV, BID, ASK, TIME, TICVOL, TVOL, TREND. The data rows are: EUR= 1.0271a, JPY= 120.42a, CHF= 1.4243a, GBP= 1.6021a, CAD= 1.5523a, AUD= 0.5640a.

A "Save" dialog box is open, prompting the user to "Save this file to your folder list." The "Name:" field contains "My Quotes". The "Create in:" field shows a folder tree with "Currencies" selected. Other folders listed are "Energies", "Equities", "Main", and "Import". Buttons for "OK", "Cancel", and "New Folder..." are present.

A "File" menu is open, showing options: "New Window", "Open...", "Open Page...", "Open Window...", "Close All", "Save Page", "Save Window", "Save As...", "Print...", "Print Setup...", "Logout", and "Exit". At the bottom of the menu, a list of recent files is shown: "1 My Quotes", "2 QUOTES", "3 QT_40V", "4 HEADER2", and "5 Ogreek2".

Once you've entered a name for your window or page and selected a folder, select **OK**.

Tip! Quickly access the windows or pages you've used recently at the bottom of the File drop-down menu.

Tip! Save time retyping symbols! “**Drag-&-drop**” symbols from one Aspen window to another.

Suppose you have a quote window with a chart below it, and you would like to chart one of the quoted instruments.



1) Place the mouse pointer on the symbol or any of the data related to that symbol;



2) **Hold down the left mouse button** until a rectangle attaches to the pointer;



3) Drag the rectangle into the chart;



4) Release the mouse button.

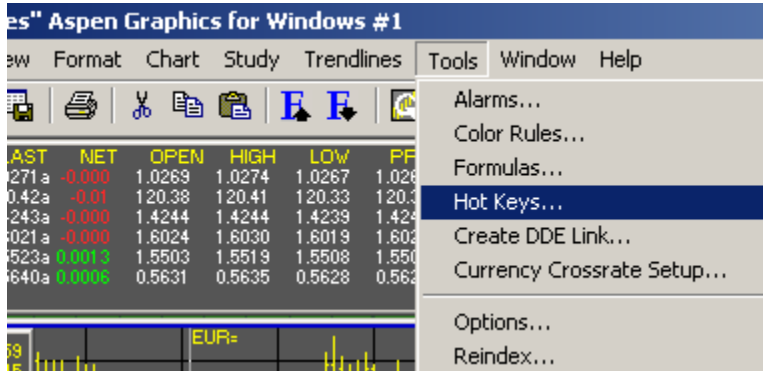
The selected symbol will now appear in the chart.



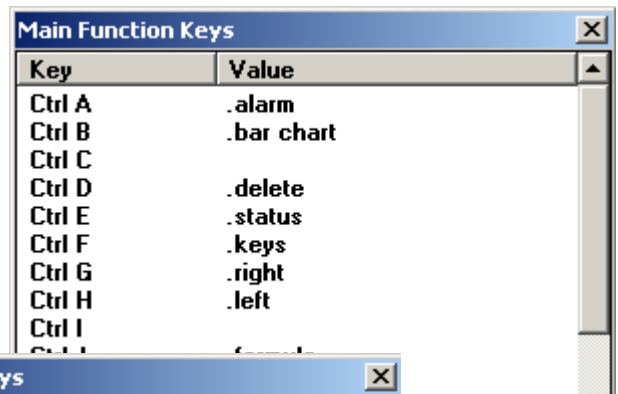
Hot Keys

Assign the windows, pages or commands that you use frequently to Hot Keys to make them easier to use. (Hot Keys are sometimes also referred to as Function- or F-Keys)

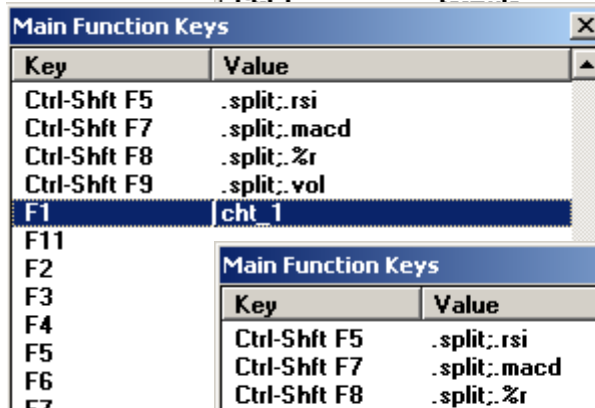
Select **Tools** from the menubar, and then **Hot Keys...**



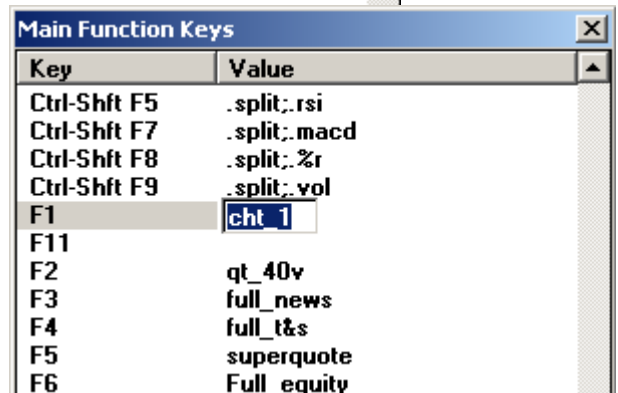
This will display the following menu:



Highlight a [Ctrl] + letter, F-key or F-key combo to which you'd like to assign a window, page or command.



Left-click on the highlighted area in the Value column.



Windows and Pages *Make sure you have first saved the window or page* (see “Saving Your Work”, above). Type the name of the window or page exactly as it is saved in its folder, press [Enter] and close the Main Function Keys menu.

Commands Type in the Aspen command or string of Aspen commands. Preface each command with a period and separate multiple commands with a semicolon (;) as in the example for **Ctrl-Shft F5** above. Then press [Enter] and close the Main Function Keys menu.

Symbology

Aspen Graphics works with a variety of data providers, allowing you to choose the right combination of content, news and software for the markets you trade. Different data providers use different symbology; below is a table of some of these differences in symbology. **This is not a comprehensive list of symbols.** See “Symbol Lookup” on our website (www.AspenRes.com) or the data provider’s website for a more comprehensive list of symbols.

Indices	ComStock	Reuters	BridgeFeed	DTN	Gain Capital
CAC40	1XPARI	.FCHI	FR;CAC	“CAC.X”	
DAX	1XDAX	.GDAXI	DE;DAXX	“DAX.IB”	
Dollar Index	DXY0	.DXY	US\DXY	DXY\$Y	
Dow Jones Indust. Avg.	DJI	.DJI	US\DJ	INDU	
E-mini NASDAQ	NQ<Elect.Month Code><yr>	NQ#	US\NQ#	@ES#	
E-mini S&P	ES<Elect.Month Code><yr>	ES#	US\ES#	@NQ#	
FTSE 100	1XUKX	.FTSE	GB;FTSE	FIY	
Hang Seng Index	1XHSI	.HSI	HK;HSI	HKHI	
NASDAQ 100	NDX_X	.NDX	US;NDX	NDX	
NASDAQ Composite	COMPX	.IXQ	US;COMP	COMPX	
Nikkei 225	1XNI225	.N225	JP;NIKI	NIK	
S&P 500	INX	.GSPC	US;SPX	INX	
Singapore Straits Times	2SSTNY	.STI	SG;STII	“STRI.X”	
Sydney All Ordinaries	1XAOI	.AORD	AU;XAO	SYDI	
Futures*					
CBOT - Corn	C#	C#	C#	C#	
Wheat	W#	W#	W#	W#	
Soybeans	S#	S#	S#	S#	
Soybean Meal	SM#	SM#	SM#	SM#	
Soybean Oil	BO#	BO#	BO#	BO#	
Oats	O#	O#	O#	O#	
30 yr U.S. T-Bonds	US#	US#	US#	US#	
10 yr U.S. T-Notes	TY#	TY#	TY#	TY#	
5 yr U.S. T-Notes	FV#	FV#	FV#	FV#	
2 yr U.S. T-Notes	TU#	TU#	TU#	TU#	
Dow Jones	DJ#	DJ#	DJ#	DJ#	
CEC - Cocoa	CC#	CC#	CC#	CC#	
Coffee	KC#	KC#	KC#	KC#	
Cotton	CT#	CT#	CT#	CT#	
Sugar (No.11)	SB#	SB#	SB#	SB#	
Sugar (No.14)	SE#	SE#	SE#	SE#	
Orange Juice	OJ#	OJ#	OJ#	OJ#	
CME - S&P 500	SP#	SP#	SP#	SP#	
E-Mini S&P	ES<Elect.Month Code><yr>	ES#	ES#	@ES#	
Eurodollar	ED#	ED#	ED#	ED#	
NASDAQ	ND#	ND#	ND#	ND#	
Live Cattle	LC#	LC#	LC#	LC#	
Feeder Cattle	FC#	FC#	FC#	FC#	
Lean Hogs	LH#	LH#	LH#	LH#	
Pork Bellies	PB#	PB#	PB#	PB#	

	ComStock	Reuters	BridgeFeed	DTN	Gain Capital
CME- Australian Dollar	AD#	AD#	AD#	AD#	
British Pound	BP#	BP#	BP#	BP#	
Canadian Dollar	CD#	CD#	CD#	CD#	
Euro	EC#	EC#	EC#	EC#	
Japanese Yen	JY#	JY#	JY#	JY#	
Mexican Peso	ZG#	MP#	MX#	PX#	
Swiss Franc	SF#	SF#	SF#	SF#	
COMEX - Gold	GC#	GC#	GC#	GC#	
Silver	SI#	SI#	SI#	SI#	
Copper	HG#	HG#	HG#	HG#	
EUREX - Euro-Bund	1LED#	FGBL#	XE\GBL#		
Euro-Bobl	1LEO#	FGBM#	XE\GBM#		
Euro-Schatz	1LEZ#	FGBS#	XE\GBS#		
DAX	1LDX#	FDX#	XE\DX#		
HKFE - Hang Seng Index	2FHSI#	HIS#	HK\HSI#		
IPE – Brent Crude	1TCO#	LCO#	GB\B#		
Gas Oil	1TS#	LGO#	GB\IP#		
KLOFFE - KLSE Comp Idx		KLI#	MY;KLCI		
LIFFE - Bund	1FB#	FDB#	GB\B#		
Japanese Gov't Bond	1FN#	FYB#	GB\N#		
3-month Euribor	1FI#	FCU#	GB\I#		
3-month Euroyen	1FJ#	FEY#	GB\T#		
3-month Euroswiss	1FS#	FES#	GB\S#		
3-month Sterling	1FL#	FSS#	GB\L#		
Long Gilt	1FR#	FLG#	GB\R#		
FTSE 250 Index	1FZ#	FMC#	GB\Y#		
NYMEX - Crude Oil	CL#	CL#	CL#	CL#	
(Henry Hub) Natural Gas	NG#	NG#	NG#	NG#	
Heating Oil	HO#	HO#	HO#	HO#	
(NY Harbor) Unleaded	HU#	HU#	HU#	HU#	
Propane	PN#	PN#	PN#	PN#	
Platinum	PL#	PL#	PL#	PL#	
Palladium	PA#	PA#	PA#	PA#	
SIMEX - Nikkei 225	2SNK#	SSI#	SG\NI#		
Nikkei 300	2SNT#	SNW#	SG\NC#		
MSCI Taiwan Stock Index	2STW#	STW#	SG\TW#		
Brent crude		SC#			
MSCI Singapore Stock Idx	2SSGN#	SSG#	SG\SG#		
Straits Times Index	2SSTN#	SST#	SG\ST#		
Japanese Govt. Bond	2SJB#	SJB#	SG\JB#		

	ComStock	Reuters	BridgeFeed	DTN	Gain Capital
All Ords.SPI 200	1MAPS#	YAP#	AU\APC#		
10-year T-Bonds	1MXT#	YTC#	AU\XT#		
3-year T-Bonds	1MYT#	YTT#	AU\YT#		
90-day Band Accd. Notes	1MIR#	YBA#	AU\R#		

* Futures shown with the symbol root followed by a # sign designate front (prompt) month. For specific contracts, substitute the # sign for the deliver month code and year code, as shown in the table below:

MONTH CODES			YEAR CODES		
Delivery Month Codes		Night / Electronic Session Codes (ComStock)		Reuters, ComStock DTN	BridgeFeed
January	F	A	1998	8	98
February	G	B	1999	9	99
March	H	C	2000	0	00
April	J	D	2001	1	01
May	K	E	2002	2	02
June	M	I	2003	3	03
July	N	L	2004	4	04
August	Q	O	2005	5	05
September	U	P	2006	6	06
October	V	R	2007	7	07
November	X	S			
December	Z	T			
Syntax for Futures: (Reuters, ComStock & DTN) <symbol root> <month code> <year code> Example: SPZ3 i.e. SP Z 3					
Syntax for Futures: (BridgeFeed) <symbol root> <year code> <month code> Example: SP03Z i.e. SP 03 Z					

Currencies	ComStock	Reuters	BridgeFeed	DTN	Gain Capital
US\$ Spot Rates - Yen	1xjpyus	JPY=	\$\$USDJPY	JY\$Y	GCUSDJPY
Euro	1xeurus	EUR=	\$\$EURUSD	EU\$Y	GCEURUSD
Swiss	1xchfus	CHF=	\$\$USDCHF	SF\$Y	GCUSDCHF
Sterling	1xgbpus	GBP=	\$\$GBPUSD	BP\$Y	GCGBPUSD
Australian	1xaudus	AUD=	\$\$AUDUSD	AD\$Y	GCAUDUSD
Canadian	1xcadus	CAD=	\$\$USDCAD	CD\$Y	GCUSDCAD
Cross Rates	1XJPYVS	EURJPY=R	\$\$EURJPY		GCEURJPY
	1XCHFVS	EURCHF=R	\$\$EURCHF		GCEURCHF
	1XGBPVS	EURGBP=R	\$\$EURGBP		GCEURGBP
Use our Symbol Lookup at www.AspenRes.com for additional Spot Rates and Cross Rates					
Equities	ticker	ticker	<country>*;ticker	ticker	
* For a list of BridgeFeed country codes, Please contact Support@AspenRes.com					

Additional Tools in Aspen Graphics

Aspen Graphics is a comprehensive set of tools to help you make sound trading decisions. Once you have mastered the basic navigational skills of the program, check out these other features:

- ⇒ **Formulas** – Add your own custom indicators and apply them to charts, quote windows or link them to a spreadsheet.
- ⇒ **Color Rules** – change the color of your bars, candlesticks or indicators when your specified market criteria are met.
- ⇒ **Alarms** – set alerts on study values, custom formulas, price, time, volume and other market conditions.
- ⇒ **DDE (Dynamic Data Exchange)** - Export data from Aspen Graphics into Excel, or create a symbol for custom data you have databased in Excel.
- ⇒ **Market Profile[®]** and **Market Profile Plus[®]** (“MP+”) – Use the familiar Market Profile chart to identify patterns in price and volume movement. With Market Profile Plus you can create a basket of instruments and track changes in its net value, having the profile automatically split as new patterns emerge. . Available by subscription; contact your Aspen Graphics salesperson.
- ⇒ **Aspen Optionalysis** - Options traders require special tools with which to analyze and trade options. Aspen’s Basic and Advanced Optionalysis are the industry-standard options toolsets, allowing you to do theoretical pricing (“what-if” scenarios), P&L tracking, risk management, strategy charting and volatility skews. Available by subscription; contact your Aspen Graphics salesperson.
- ⇒ **Studies by Subscription** – DeMark, MESA and Cynthia Kase are available in Aspen Graphics. Available by subscription; contact your Aspen Graphics salesperson.

Where to Go for Help

Our **Help Files** are the best place to start for help using the software. Select **Help** on the menubar.

Our Website is at www.AspenRes.com.

Technical Support is the department to contact if you need technical assistance, in contrast to educational training on the software. Contact Technical Support at **(970) 945-2921** or Support@AspenRes.com

Training on Aspen Graphics is available by contacting Training@AspenRes.com or **(970) 945-2921**

Our **Data Department** will correct gaps in the data or spikes created by bad prices, or work with the data provider to resolve data issues. You can e-mail them at Datadept@AspenRes.com or contact them directly from our website at: <http://www.aspenres.com/index.cfm?fa=Data.Main> and selecting Report Data Issues.

Your Aspen **Salesperson** is available at the toll-free number **(800) 359-1121**

Our on-line **Users Guide** can be found at: <http://www.aspenres.com/Documents/onlinemanual/default.htm>

Our on-line **Symbol Lookup** can be found by going to: <http://www.aspenres.com/index.cfm?fa=Data.Main> and selecting Symbol Lookup on the left side of the page.