

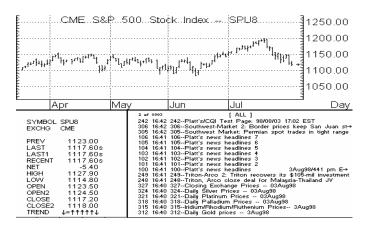
Aspen Graphics for Network Support

I. Windows & Pages

In your use of Aspen Graphics you will hear the terms "Windows" and "Pages". What are they?

A **window** is one area of information on your screen. In the example below, a chart window, a quote window and a news window are displayed. Each of those is a unique & separate window. You can have as many windows on your screen at one time as you would like. When a window is retrieved from memory, it will overlay what is already on the screen when it is recalled.

A **page** represents the entire contents of the screen. A page is made up of one or more windows. The example **page** below has 3 components: the chart window, the quote window and the news window. When a page is retrieved from memory, it first clears the screen and then displays the retrieved page.



II. Menus

Menus in Aspen Graphics are context sensitive, which means the program is smart enough to know what menu you need based on the active window on your screen. To display a menu, press and hold the right mouse button and click left. If no window is displayed on the screen (you just have the blue background with black gridlines), the Main Menu will be displayed. If there is a window displayed on the screen, placing the mouse arrow anywhere on the window and holding the right mouse button & clicking left will display the application menu specific to the active window. Select from the menu by highlighting your choice and clicking left or tapping Enter.

III. Troubleshooting From A Workstation

There are two special types of windows on a workstation that can aid in troubleshooting. These are the Network Access and Status windows.

The Network Access Window (keyboard command is .ACCESS Enter)

This window is used to answer several important questions:

User: What is the login name for the user? Server: To which server is the user attempting to connect? Data Feed: Which datafeed is being used? (this helps with symbology) Security: Are the user's entitlements feed controlled or Admin controlled Session: Is the session Open or Closed? Error Tag: What is the ERROR TAG message? (TCP broken or abandoned; User Not Authorized; etc...)

Data Feed: Security: Session: Error Tag:	Aspen Session Access NYARG6@NY.K48422.BRIDGE.COM (bound to profile "135744") 200.200.200.4 BridgeFeed ARES, Datafeed-controlled OPEN
Error Tag: Notes:	

To remove the access window from the screen, tap the Esci key.

The Status Window (keyboard command is .STAT Enter)

On the client level, the status window is used to identify the software version and entitlements for the user. The Aspen Graphics version number appears in the lower portion of the window, displayed in yellow text. The version number is critical in troubleshooting any problems with Aspen Graphics workstation software.

An alpha-numeric code at the bottom left corner of the window specifies the Aspen Graphics features to which the user is entitled: C - Charting, P - Market Profile, M - Mesa Studies, O - Advanced Options or o - Basic Options, 7 - DeMark Studies, 1 - One Screen.

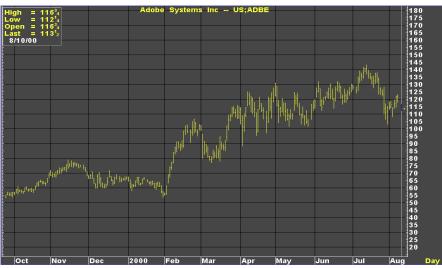
Tue, Aug 8, 2000 87 12:44:30 PM EDT
D-Cache C-Cache 81408 0/50
Static Dynamic 81:0,451 0:0,0
Block Sizes Used/Blks 184,0,269 836/26488
Aspen WORKSTATION V3.70b, May 16 2000 Build: OFFICIAL 2634
CPM071 2E36DC1D NYARG6@NY.K48422.BRIDGE.
ASPEN (bf)

To remove the status window from the screen, type **.STAT** again.

IV. Important Troubleshooting Pages

A list of defined pages on the workstation can be displayed by left clicking on File\Retrieve Page. Some of these pages are unique to the workstation, and others are default pages loaded with the software. Some of these pages are particularly helpful in troubleshooting problems with the software.

Cht_1 – Left click on Cht_1 from the List of Pages; this will bring up a full screen *daily* bar chart for your troubleshooting purposes. *When troubleshooting charting problems, it is critical to determine both the time frame of the chart and the symbol being charted.* To change the charted symbol, simply type in the new symbol, for example, IBM Enter. To change the chart to an intraday time frame, type in the amount of minutes and Enter. For example, to change to a 60 minute chart, type 60 Enter. Any number between 0 and 1439 minutes can be used as the time frame of the chart. For historical charts, type in .day, .week, .month, .quarter or .year. Note the use of the period preceding the commands for historical charts. The period is necessary to distinguish these as commands, and not symbols.



QT_40v or Quote_40 – This quote page can be displayed by left clicking on File\Retrieve Page. Quote Pages display live data as it is received from the data provider. If this page is not updating during trading hours, the first course of action is

SYMBOL	LAST	NET	OPEN	HIGH	LOW	PREV	BID	ASK TIME	TICVOL	TVOL	TREND	
IBM.N	118%a		118³,	1195	118	1191	118 ³ /	118% 11:04	30	585		
DIS.N	39 <u>3 ŭ</u> a		40 5	40 5	3918	40 <u>1 š</u>	39%	39 <u>30</u> 11:04	28	321	=+++++	
MYL.N	2226		<u>221 8</u>	24 <u>1 8</u>	22 ¹ 2	2222	22 ³ 4	22 ⁷ 8 11:03	2000		↓↓↑↑↓↓↓	
MRK.N	71 a		70 <u>30</u>	7110	70 <u>1 4</u>	70 <u>18</u>	70 <u>3 0</u>	71 11:04	20	454	↓↓↑↑↑↑↑	
T.N	29 <u>30</u> ↓		3006	30 ³ e	29 ⁷ 8	30 <u>0 e</u>	<u>2930</u>	30 11:04	200		*****	
GM.N	611 ₈ a		60 ³	61 ¹	60 <u>1</u> Ŭ	6006	6102	61 ¹ a 11:04	55		↑↑↓↓↓↓↓	
F.N	29 <u>1 4</u> a	0	2915	295	<u>2910</u>	29 ³ 8	29 ³	2914 11:04	300		=↓↓↓↑↑↑	
R.N	2118		21 ³ ลี	22	21 ¹ 4	2112 213	21 <u>1 4</u>	2118 10:48	4000	43	↓↑↑↑↑↑↑	
DEL.N	22 ¹ /2		21 ³ ั้ล	23	21 ³ ្តី	21³ ั้	2210	221, 10:34	100	12	↓↑↓↓↓↓↑↑	
INTL.O	13 <u>1 s</u>		13 ¹ /	1322	13 ັ	12%	13 ¹ 2	13 <u>18</u> 11:03	500	139	*****	
GE.N	56 <u>30</u> ↑		55%	57 <u>06</u>	55 <u>18</u>	55 <u>3 0</u>	56 <u>26</u>	56 ⁷ 8 11:04	100		*****	
DELL.O	42 ¹ ₄ a		4130	4214	415	4126	4206	42 🖞 11:04	10	4927	↑↓↑=↓	
WMT.N	51 ¹ /4		531g	53 ¹ /	51 <u>0ē</u>	531 ₈	51 <u>06</u>	51 11:04	1700		$=\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow$	
YELL.O	16		15 <u>26</u>	16 <u>0 2</u>	15 <u>26</u>	15 <u>2 6</u>	15 ⁷ 8	16 10:46	500		↓↑↑↑↑↑↓ ↓	
TOM.N	97 ₈ a		9 ⁵ 8	<u>926</u>	91 ₂	9 ³ 4	9 ³ 4	9 ⁷ 8 11:04	171		= + + + + + + +	
K.N	27 a		26	2702	26	2530	26 ⁷ 8	27 11:04	16		↓↑↑↑↑↑↓ ↓	
HP.N	34 <u>26</u>		34 <u>30</u>	35 <u>96</u>	345	34 <u>30</u>	34 <u>22</u>	34 ⁷ a 11:02	800	71	$\uparrow \uparrow \uparrow \uparrow \uparrow \downarrow \uparrow \uparrow \uparrow$	
Q	49 a		50 ⁷ e	5102	48 <u>18</u>	51 ¹ 4	48 ⁷ 8	49 11:04	10		= 1 = 1 1 1 1	
A.N	39 <u>06</u> a		<u>3902</u>	39 %	3902	3910	391 [°]	3996 11:04	35		↑↓↑↓↑↑↑	
S.N	30 <u>26 a</u>		30 <u>30</u>	31 <u>06</u>	3018	3022	30 ³ 4	30 <u>26</u> 11:04	100		ተተተተተተ	
C.N	71 <u>30</u> ↑		7222	72 <u>26</u>	71 ⁵	72 ⁵ 8	717	7130 11:04	3100	664	1=111	
MMM.N	9422		9230	9426	92 <u>3 0</u>	92 ³ /	<u>9422</u>	94 ³ 4 11:04	500	304	=++++++	
AMC		0				85 483	81 ₂	8 ³ / 16:03		0	Ŷ	
CBS.N	48		48 ¹ 8	4814	47 <u>30</u>	48 ³ 8	47 🕫	48 Aug 9	100	513700		
CCC.N			726		726	7 <u>2 6</u>	7 <u>3 0</u>	8 10:59	6300		↑↑↑↑↓↓↑	
PEP.N	44 <u>26 a</u>		44	44 ⁷ 8	44	44	4422	4426 11:04	100	263		
BUD.N	8378		8414	84 <u>26</u>	83 ³ 4	84 ³ 8	83 <u>26</u>	83 ⁷ 8 11:02	100		ተተተተተተ	
USA.N	12 ³ 4	0	12³₄	1226	12 ³ 4	12 ³ 4	12 ³ 4	12 <u>26</u> 10:47	800		*****	
DOW.N	2910		2910	293 ₈	28 ³ 4	2910	291	2910 11:02	20000		↑↑↓↓↑↓↓	
AAPL.O	48 a		48	4806	47 ³	47 ¹ 2	47 <u>30</u>	48 11:04	10			
JNJ.N	96 <u>06</u>		95 ³ 4	96 ¹ 4	9514	94 <u>2 6</u>	96 <u>'</u> 8	96 ¹ 4 11:04	100		=↓↓↓↓↑	
STC.N	1230		1230	1230	12 <u>3 0</u>	13	12 ⁷ 8	13 10:36	400		===	
MMM.N	9422		9 <u>230</u>	94 <u>26</u>	92 <u>30</u>	92 ³ 4	94 <u>2 ž</u>	94 ³ 4 11:04	500		=↓↑↑↑↑↑	
PPP.N	2102		20 <u>30</u>	21 <u>°</u> 8	<u>2022</u>	21	21	21 🔓 10:57	500		↑↑↓↓↓↑↑↑	
PG.N	561 ₂ a		5618	56 ⁷ 8	5610	5610	5614	56 ¹ / ₂ 11:04	200	311	<u>ተተተቀተተ</u>	
RTC						31 ₈	31 ₈	3 🖞 16:03		0		
LND.N	11 ³ 8		11 ³ 8	11 ³ 8	11 ³ 8	1114	11 ³	11 ¹ / ₂ 10:51	1800	1		
MSFT.O	7318		7326	74 <u>02</u>	72 <u>30</u>	74 ¹ ₄	7318	73 🔓 11:04	400	6681	=== 1==	
TV.N	62 ³ 4		62 ¹ _2	6230	62 ³ 8	6222	62 ³ 4	62 <u>26</u> 10:59	2000	73	↓↑↑↑↑↑↑	
AA.N	335		3378	34	3312	33 <u>22</u>	33 <u>1 ë</u>	33 <u>22</u> 11:02	100	224	↓↓↓↓↓	

to check the status window at the Aspen SERVER and determine whether the number in the BYTES IN field is incrementing. If not, this indicates a problem with data being written to the server and Aspen Graphics technical support should be contacted immediately for further troubleshooting.

Full_News – This is a full screen news window, which should contain scrolling headlines. In troubleshooting news problems, it is important to note the time and/or date of the current headline (the one at the top of the list) and also note any news categories selected. The category selected is displayed in yellow at the top of the window. To read a story, left click on the headline. To return to the list of headlines, left click again.

1 of 2259	Index of Futures World News (FWN) Stories
566 16:18	WRAP: Semiconductor stocks fall for second day on analyst downgrade
	NY Natural Gas: Soars above \$5 after low storage injection
	BRIDGE: GLOBAL STOCK MARKET LEVELS AT 16:11 ET -Sep 6
	USDA opening livestock market summary-Sep 6
	South Africa 10-Day Weather: Central areas wet
	Lexington, Kentucky livestock auction-Sep 6
	USDA Texas Panhandle/W. Oklahoma direct cattle sales-Sept. 6
	USDA W. Cornbelt opening direct hog/hot carcass value-Sep 6
558 16:15	USDA Meat price report: 1115 national carlot beef-Sep 6
557 16:14	USDA Illinois direct cattle sales-Sep 6
	USDA Delmarva broiler/fryer market-Sep 6
	USDA Estimated daily livestock slaughter-Sep 6
	USDA lowa S. Minnesota Weekly Avg Hog Wts-Sep 6
	USDA Meat Price Report: 1500 National Carlot Pork-Sep 6
	USDA Meat Price Report: 1500 National Carlot Pork-Sep 6
	USDA national broiler market-Sep 6
	PM_CBT_grain/soybean/rice_receipts/certificates-Sep_6
	USDA W. Cornbelt_closing direct hog/hot carcass value-Sep 6
	Global Commodity/Financial Futures Snapshot
	Global Commodity/Financial Futures Snapshot
	USDA E. Cornbelt closing direct hog/hot carcass value-Sep 6
	US DEBT FUTURES ALERT: Bonds feel weight of corporate supply
	US DEBT FUTURES ALERT: Bonds feel weight of corporate supply
	USDA Iowa S. Minnesota Early Direct Cattle Sales-Sep 6
542 16:09	US DEBT FUTURES ALERT: Bonds feel weight of corporate supply
	US DEBT FUTURES ALERT: Bonds feel weight of corporate supply
	USDA daily midwest livestock summary-Sep 6
	USDA Minneapolis cash grain close-Sep 6
	USDA Minnesota wheat protein/premium/to arrive bids-Sep 6
537 16:06	USDA Texas cash grain prices-Sep 6

Superquote – This page is one of the most helpful diagnostic tools when troubleshooting. Superquote gives you a lot of details about one symbol, including: a description of the symbol in question, the exchange on which it trades, opening and closing times, time zone in which it trades and the trading units.

	SUPEROUNTE . This	page shows all quote	fields available
		page shows all quote	neida avaliable.
			Sext
		t'l Business Mach /SE	
		New York Stock Ex	
	Expire >	(month	Strike
PREV OPEN OPEN2	131 <u>06</u> NET 130 ⁷ 8HIGH LOW	006 LAST 13478 CLOSE 13088 CLOSE	
BID BIDSIZE BIDTIME	1311₄ m ASK 100 ASKSIZE 16:13 ASKTIME	13158 m TRADE 100 TRADE 16:18 CONDIT	SOURCE t
BBID BBIDSIZE BBIDTIME	13114 m BASK 100 BASKSIZE 16:13 BASKTIME		N INTEREST
BATE a TYPE DOLLARS OTYPE	a UNITS 2 OPEN/CLO: 1.000 1 9:30 - 2 -	32	VOLUME 6457100 TVOL 6457100 UVOL 2012200 DVOL 1714800
LAST1 LAST2 LAST3 LAST4 LAST5 LAST6	1315 a TICVOL 1313 TICVOL2 1313 TICVOL2 1313 TICVOL3 1313 TICVOL4 1313 TICVOL5 1313 ↓ TICVOL6	100 TIME 16: 3000 TIME2 16: 1900 TIME3 16: 100 TIME4 16: 1400 TIME5 16: 600 TIME6 16:	15 PCHG 0.143 15 RANGE 15 Moneyflo 14

V. Efficiency Tips

Saving Pages_ - To save a page, left click on File/Save Page and type in a unique name for the page, following the rules below. The page will now be listed on the List of Pages (File/Retrieve Page). Aspen does not automatically save changes made to the user's page, but an AutoSave feature can be toggled on and off from the List of Pages. AutoSave on will create drafts of the screen layout, about once a minute, named Autosave1 – Autosave5. It is strongly recommended to turn AutoSave off once the custom page has been built.

THREE things that CAN NOT be used as a name for a Page (a message will appear that says "Reserved"):

A Symbol: do not use a symbol (such as cz7, sph8, ibm, indu, etc.) as the name of your page, although symbols can be used as *part* of a name (ex: ibmchart2) A Number: do not use a number as the name of your page, although numbers can be used as *part* of a name (see previous example).

An Aspen command, or the name of a previously saved page that you don't want overwritten.

Once you save a page, you will find it by left clicking on **File/Retrieve Page**. This will display the List of Pages. Your custom page name should appear on this menu in alphabetical order.

Saving Windows – Any window on the screen can be saved for future use by typing in **.WSAVE** Enter. The rules for saving windows are identical to the rules listed above for saving a page. Your window will be listed on the Window Selection Menu (File/New) under the corresponding heading.

Drag & Drop Feature -- A quick way to display a symbol in a window without typing:

- 1) Place the mouse pointer on the symbol
- 2) Press and 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. You may drag & drop from a quote window to a chart, chart to quote, quote to time and sales, etc....

Function Keys -- Assigning a page or command to a function key bypasses menu clicking for quick recall of commonly used functions in the program. To assign a page or command to a function key, type <u>Ctrl</u> **F** or **.keys** <u>Enter</u>. **PgUp** or **PgDn** on the keyboard to scroll through functions assigned to keys, or left click on **Next** or **Previous** at the bottom of the key menu.

NOTE: * keys are reserved as integral functions of the software, so don't assign other uses to them or software performance could be affected.

Highlight the key for assignment (e.g. F1), left-click to open an edit box, type name of page, window or command, Enter, then **Done.**

Ctrl K displays a key assignment template along screen's bottom (and toggles it off.) Holding down Shift, Ctrl or Ctrl / Shift keys display assignments to those key combination.

Click & Hold NewsWord Scan -- Here's a *great* way to scan the headlines of a news window for a particular word:

- 1. Find a word in the headlines of a news window that you're interested in;
- 2. Click and hold the left mouse button on that word (similar to above) until the rectangle appears;
- 3. When you release the left mouse button, the headlines will be scanned for the chosen word.

News Search - you can scan the headlines of news stories for any keyword or combination of keywords. For example, in a news window, type:

/drought for all stories with the word "drought" in the headline

/corn&oil for all stories with the words "corn" <u>and</u> "oil" in the headline

/corn,oats for all stories with the words "corn" or "oats" in the headline

/(soybean&oil)%crude for all stories with the words "soybean" and "oil" <u>but not</u> the word "crude" in the headline

Tables -- For a tabular readout of the values on a chart, just bring up a Graph Menu and select **Table**. Tables have their own menu to make them easy to navigate.

and @ Macros -- Using these macros instead of the specific contract, like hun0, will make your charts and quote pages update (rollover) automatically when the front month expires.

brings up the **front month** of a futures contract **Ex: ng**# is the front month of natural gas

#1 is the **first month out** of a futures contract; **ng#1** is the first month out of natural gas (any number can be used in place of the 1 in the above example)

(*a*) brings up all currently trading contracts; **cl**(*a*) will display all crude contracts currently trading

(a)6 brings up the front six trading contracts; **cl**(a)6 will display the front 6 months of crude (any number can be used in place of the 6 in the above example)

F-12 key – You can recall commands previously typed in by tapping the $\boxed{F12}$ key. Each command will be recalled starting with the most recent and going back to the oldest. If you tap the $\boxed{F12}$ too many times and need to scroll forward, press \boxed{Shift} $\boxed{F12}$. This is a great way to clone Formulas and Alarms, and saves lots of time whenever there is a need to repeat previously typed information.

Keyboard Shortcuts

Note: these will not work unless you have an MKEY file in the user's directory.

What You Would Like to Do

MENUS

Display the Main Menu Display the menu for the active window Display the List of Pages Display the Window Selection Menu Display the Formula Listing Display the Alarm menu

CLEARING

Clear a Menu off the screen Clear a Window off the screen Clear the Status Window off the screen (the little window in the lower *right* corner of the screen) Clear the Console Window off the screen (the little window in the lower *left* corner of the screen) Clear the Open/High/Low/Close box off of a chart Clear everything off the screen

<u>SAVING</u>

Save as a Page Save as a Window

CHARTING

Bring up a half-screen chart
Bring up a full-screen chart
Change to Candlesticks
Change back to Bar Chart (also removes overlays)
Change to Point & Figure
Change to a tick chart
Clear the cursor & the Open/High/Low/Close box

QUOTES

Clear data in a Quote Page

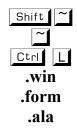
<u>PRINTING</u>

Print the active window

COMMANDS

Display the last command Repeat the last command

An Easy Way To Do It

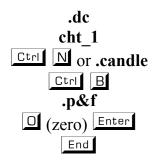




.cons



Ctrl	Vor .save
Ctrl	U or .wsave









VI. Other Aspen Graphics features

Once you have mastered the basic navigation skills of Aspen Graphics, you may want to check out these other features:

- **a.** Alarms—set an alarm on price levels, study values or custom formulas.
- **b.** Color Rules—Act as a visual alert on a chart by coloring bars a specific color when your condition is met.
- **c. DDE**—Export data from Aspen Graphics into Excel OR create a symbol for custom data you have databased in Excel.
- **d.** Formulas—Aspen Graphics' Formula Writer allows you to create virtually any custom indicator to display in charts, quote windows or to export via DDE.
- e. Aspen Optionalysis—Basic and Advanced Aspen Optionalysis are special subscription packages tailored to options analysis. Advanced Aspen Optionalysis includes Option Books, an incredibly flexible organizational tool to keep track of your portfolio.

Consult your Aspen Graphics User's Manual for specifics on these features or ask any Customer Support representative or Trainer for more information on these features.