

# Erlanger 2000 (E2K) Research and Analytics Platform Initial Installation and Quick Start User Guide

## I. Installation

Phil Erlanger Research Co., Inc. (PER) or Quantitative Partners, Inc. (QPI) will guide you through the installation and setup of E2K. The installation process should take less than ten minutes barring any firewall issues. If you are aware of firewall issues that commonly occur, then we will need to speak with your information technology department. You may also direct the information technology group to <http://www.erlanger2000.com/Firewall.htm> to get the information to enable E2K to work behind a firewall.

Contact Information is as follows:

**Phil Erlanger Research-** Phil Erlanger 978-263-2536 [phil@erlanger.com](mailto:phil@erlanger.com)

**Quantitative Partners, Inc. - Geoff Garbacz** 212-446-2476 [ggarbacz@quantpartners.com](mailto:ggarbacz@quantpartners.com)

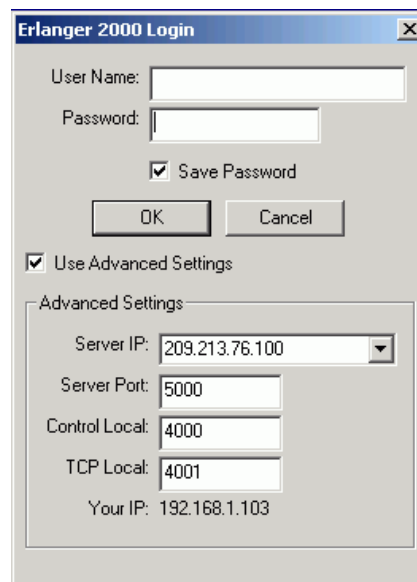
**Quantitative Partners, Inc. - Jack Bahrenburg** 760-603-0275 [jbahrenburg@quantpartners.com](mailto:jbahrenburg@quantpartners.com)

## II. Opening E2K Software and Login Process



After installation, **double mouse click on E2K icon** located on your desktop.

You will be asked to login into the E2K server (as shown on the right). Enter your user name and password provided (if you do not have one contact either PER or QPI @ the numbers listed above). **Please make sure the Server IP address is 209.213.76.100.** To change the server IP, click on the Use Advanced Settings box and then pull down the arrow on the Server IP address line. **Mouse click okay.**

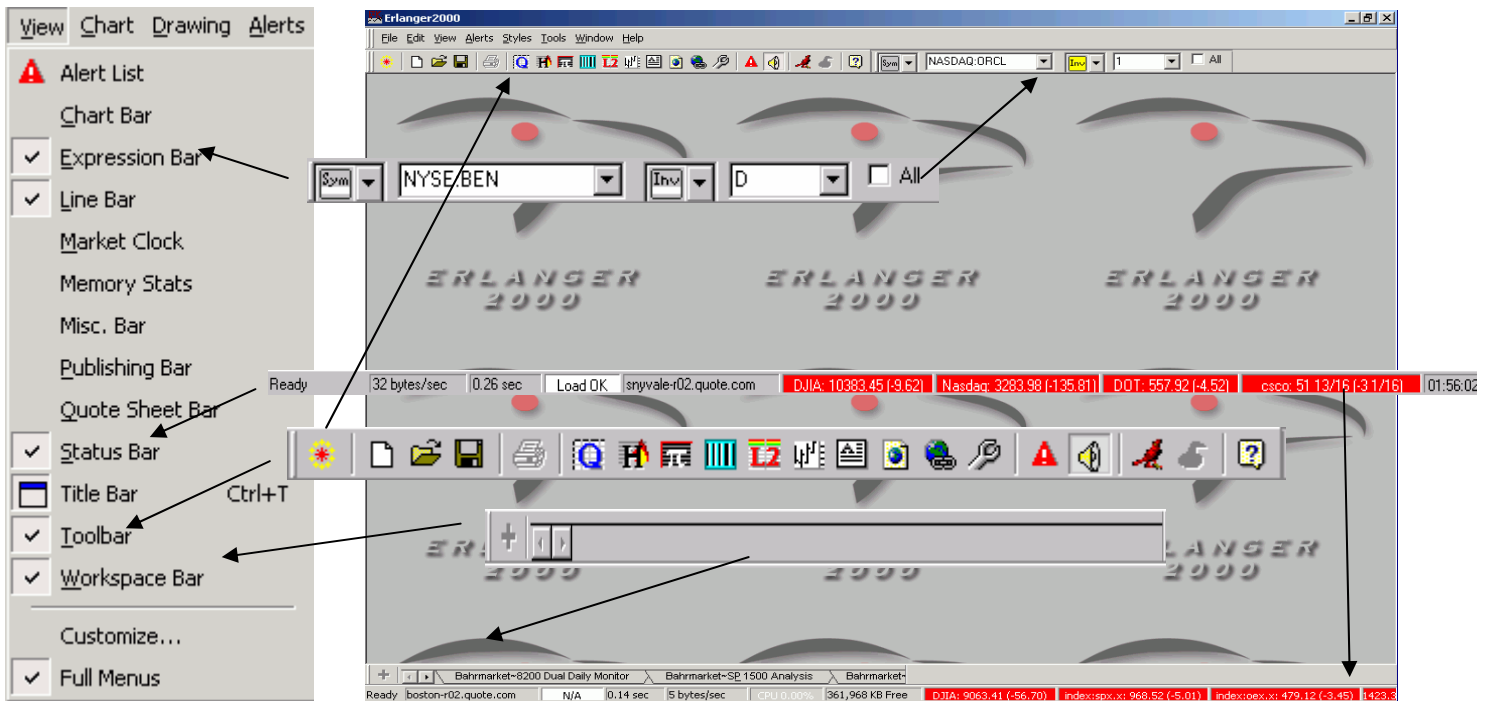
A screenshot of the 'Erlanger 2000 Login' dialog box. It contains fields for 'User Name' and 'Password', a checked 'Save Password' checkbox, and 'OK' and 'Cancel' buttons. Below these is a checked 'Use Advanced Settings' checkbox. Under 'Advanced Settings', there is a dropdown menu for 'Server IP' set to '209.213.76.100', and input fields for 'Server Port' (5000), 'Control Local' (4000), and 'TCP Local' (4001). At the bottom, it displays 'Your IP: 192.168.1.103'.A screenshot of the 'Quote.Com Logon' dialog box. It features a header with several green circular icons. Below are fields for 'Quote.com UserName' and 'Quote.com Password', a 'Server' dropdown menu set to '<Default (Refresh)!', and checked 'Auto Logon' and 'Save Password' checkboxes. 'OK' and 'Cancel' buttons are at the bottom. A note at the bottom states: 'Note: Holding down the CTRL key during startup will prevent Auto Logon.'

Next you will be asked to log into the quote.com server as E2K runs its proprietary data over Quote.com's charting and quote service. This username and password is assigned by Phil Erlanger Research automatically so you want to make sure the Auto Login and Save Password is checked **Mouse click okay.** When the connection is established with both servers a screen will pop up on the monitor entitled Erlanger 2000. You are now connected to E2K. If you overwrite the username and password, then contact Phil Erlanger at 978-263-2536.

### III. Setting up the Working Environment for E2K

After the initial login, it is necessary to customize the peripheral items of the E2K software to maximize the space needed for the use of our research and analytics. The following setup should be used initially (which can be changed later when you are more comfortable with your own style of use for E2K):

- *Customize Toolbars and Rearrange* - From the **View Menu - Check** Expression Bar, Status Bar, Toolbar and Workspace Bar, all others should be unchecked. Arrange (drag and drop like Excel or Word toolbars) the Expression and Toolbar adjacent on the top, with the Workspace and Status bar on the bottom as shown in the picture below. Under the View Menu, the “Full Menus” allows a user to see all menu options versus the Microsoft abbreviated pull down.
- *Market Clock and Memory Stats* – The market clock and memory stats dialogue boxes can be closed out. The next time you log into E2K, they will not display.



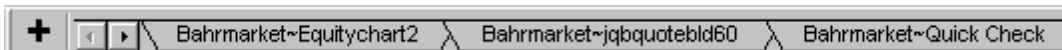
## IV. The Workspace (WKF Files)

The heart of the E2K system lies in the “workspace”. Workspaces may be accessed by either opening workspaces on the gate or your hard drive. More detailed analysis of the gate may be found on the gate in Section 5. Within a workspace, a user can populate their screen with multiple dialogue boxes containing charts, quotes, and screening capabilities. Once a workspace is created, it can be saved for future retrieval.

### Creating Workspaces Within Different Environments

There are two ways users can apply workspaces into their environments depending on your own preferences and current desk set up:

- Multiple Monitors - If you have multiple monitors you may populate it with many individual dialogue boxes (i.e. charts, quotesheets & hotlists) across the various screens. To “stretch” the software display across multiple monitors, make sure E2K is not maximized. Placed the cursor @ the edge of the dialogue box you want to stretch, then drag and drop the border. Add items desired like charts, quotes and hotlists until satisfied with the workspace. Save to either the gate or to your hard disk. **To save to the gate, click on the gate, mouse click on my subscribe, right mouse click on the right side of my subscribe, mouse click on publish current workspace and name the workspace. To save to hard disk, mouse click file save workspace.**
- Single Monitor - Being constrained by space, it might be easier to create several workspaces that you can easily jump to by placing the workspaces on the “Workspace bar” (**when a workspace file \*.wkf is open, click the “+” to add**). This allows you to jump to different workspaces without having to choose File Open each time. It is similar to multiple worksheets in Microsoft Excel.



## V. What Should I place in my Workspace?

As noted above, E2K allows each user to create and customize the workspace for their specific needs. One can create multiple workspaces to be brought up during various market conditions. During a trending market, one might pull up a workspace screening for stock breaking out above their 50 day moving average with a high short intensity level.

The Toolbar is the most effective way to create workspaces. The items below may be familiar to you already, such as the Open File, Disk (for saving a workspace), and Printing Icon. Below I will highlight some of the other icons to get started:



### New Workspace

Start by clicking on the “New Workspace” Icon. This allows you to start with a clean slate. If you had any previous workspaces open before, it will ask you to save changes. Either respond yes or no depending on your desire to save changes. **Always mouse click on new workspace before opening another workspace.**

## Data/Research Analytics to Populate Workspace

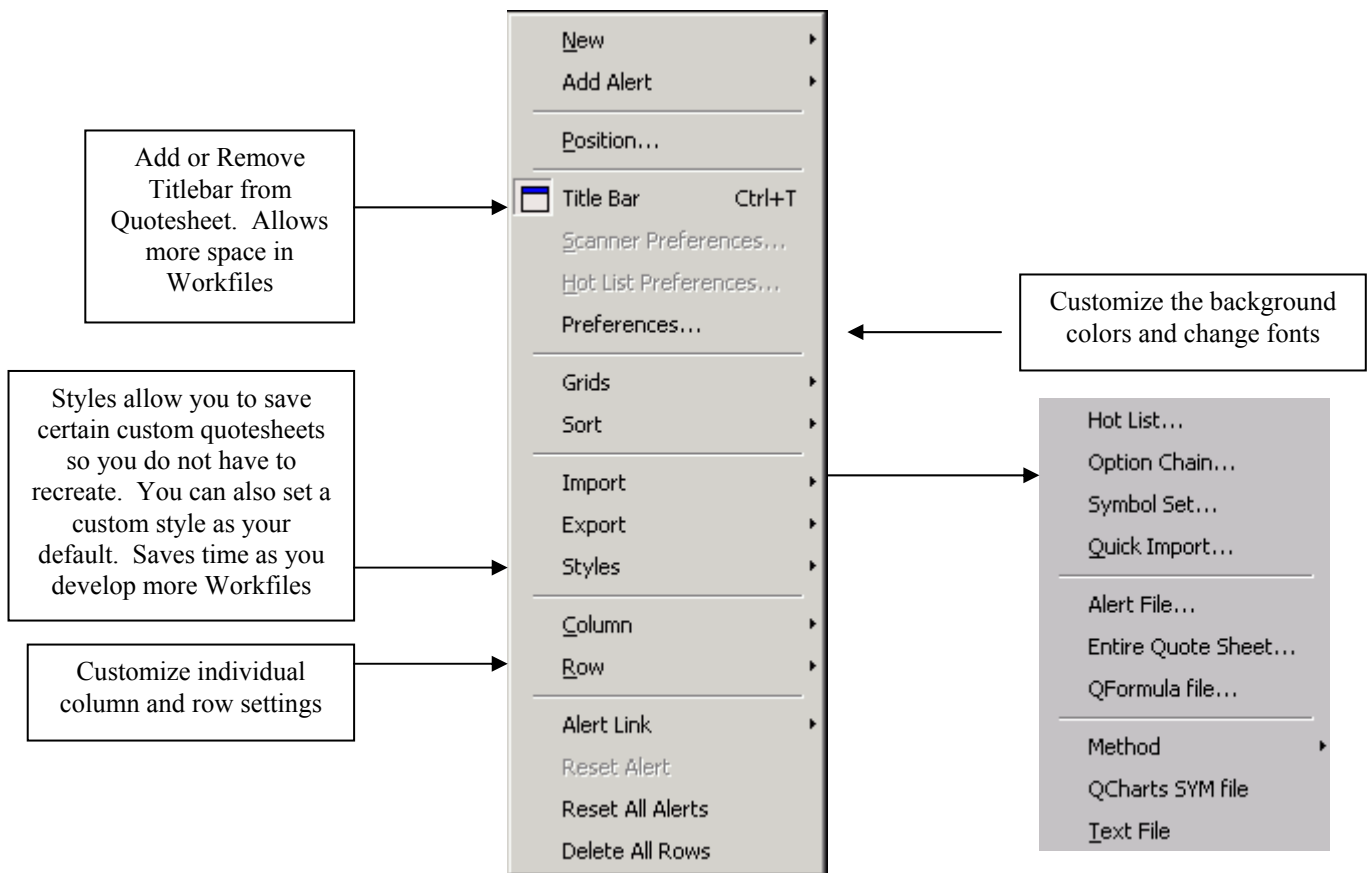


### Quote Sheet

The “New Quote Sheet” is where one loads in lists desired to be viewed in a nongraphic format. The quote sheet allows a user to monitor a list of tickers (imported holdings list, watch list, sector, index, etc.) with variables that the user chooses to see (quote data, fundamental data, proprietary Erlanger data sets like options and short interest). A user can further customize the quote sheet by sorting on a single variable, adding color studies (i.e. Stochastic below 20 highlighted in green for oversold condition and Erlanger Trading Rank greater than 80 green for a potential long opportunity).

To customize the quote sheet, you can right mouse click with in the quotesheet, over the column headers of a quote sheet, and in the initial column of the quotesheet.

Right mouse click with in the quotesheet give you this menu and options:



Right mouse click over the column headers of a quote sheet give you this menu and options:

Column Headers

- Auto Sort
- Sort Lock
- Column Properties...
- Delete Column
- Insert Empty Column
- Insert Formula Column...
- Hide Column(s)
- Unhide Column(s)
- Anchor
- Auto Reset Alerts
- Reset Alerts
- Center
- Left
- Right
- Decimal
- Default
- Fraction
- Override Alert Formatting
- Fields
- Market Guide
- Position
- Erlanger
- Plugins

Column Properties

Formula | Format | Colors | Alerts

Name: Trade Rank

Fields: Paste w/Arguments Wizard... Operators: Paste

e2kErlangerTradingRank

OK Cancel Apply

Formatting commands for the particular column header you right mouse clicked over

Expanding menus to numerous fundamental, technical, short interest and options data variables you can choose to view in your quotesheet

Right mouse click in the initial column of the quotesheet gives you this menu and options:

- Position..
- Row Numbers
- Lock Row Height
- Insert Empty Row
- Insert SubTotal Row
- Insert Grand Total Row
- Delete Row
- Clear Row
- Hide Row(s)
- Unhide Row(s)
- Alert Link
- Reset Alert
- Reset All Alerts
- Delete All Rows

**Sample Quote Sheet (Color Studies and Sorted by Trade Rank):**

To Sort - double-click on column heading (triangle indicates sorted column)

To create a color study, right click on the variables column header and choose Column Properties. The Colors tab allows you to create the rules for that particular column variable. Shown is the rule for the Trade Index Column

Symbc	Last	Net	Net%	% In	Stock	ide Δ	ech	Short	Ratio	P/C Erl	C/P
SAWS	35 7/16	-1 5/8	-4.38	33.33	46.78	100.0	10	100	2.1	3.8	0.34
SUNW	108 5/8	-9 3/16	-7.79	13.17	50.04	100.0	60	50	0.86	0.7	1.85
YHOO	55 9/16	-3 1/16	-5.22	19.10	16.07	100.0	10	81	2.47	16.51	0.05
ADPT	12 15/16	- 7/8	-6.33	18.75	11.53	100.0	10	38	1.69	16.51	0.06
CMB	40	- 1/16	-0.15	14.81	24.80	100.0	10	100	4.62	8.41	0.14
KLAC	32 1/16	-1 1/4	-3.75	57.14	26.78	100.0	10	52	1.27	4.44	0.28

Rule	Blink	FG	BG
Greater Than or Equal 80	No		
Less Than or Equal 20	No		

 **New Chart**

The charting portion of E2K allows users to customize charts allowing them to make timely and educated decisions. Users can select the type of charts they like to look at and the timeframe that suits them best. One can add traditional technical measures from moving averages and stochastics to Bollinger Bands and MACD's. A user can analyze proprietary information like Short Interest or Options data. Data points can be customized with colors or the type of line displayed - bar, line, dots, etc.

To begin creating a chart, **mouse click on the "New Chart" Icon** from the toolbar. A simple OHLC chart appears with a single data variable of Volume. From this point you can resize the dialogue box to fit your needs (maximize if it is the only item in your worksheet, or size it to other items in your worksheet such as quotes or a hotlist).

If you would like to change the chart type to something other than OHLC, **choose the View drop down menu and check**

**Chart Bar.** The Chart



Bar will allow you to switch to other types of charts such as Line and Candlestick.

To enter in a new symbol or change the time interval you are viewing, utilize the Expression Bar. If it is not already part of your toolbars, **choose View from the drop down menu and check Expression Bar.** **To change the ticker,** overwrite the existing exchange and symbol with the new ticker (no exchange needed) and hit enter. **To**

**change the timeframe,** pull down the arrow and select the desired



time interval. E2K does allow you to lock in symbols and intervals if you have numerous charts in your workspace. **Please refer to the full manual for instructions under the section Color Group Buttons** ([www.erlanger2000.com/E2KHelp.htm](http://www.erlanger2000.com/E2KHelp.htm) or from E2K Software drop down menu |Help|Help on the Web...)

If you have a group of stocks that you look at on a daily basis or certain time intervals you like, you can **add the “Symbol/Interval Bar” (right mouse click over chart and choose View and then Symbol/Interval Bar) which will attach itself to the bottom of your chart.** When viewing a ticker

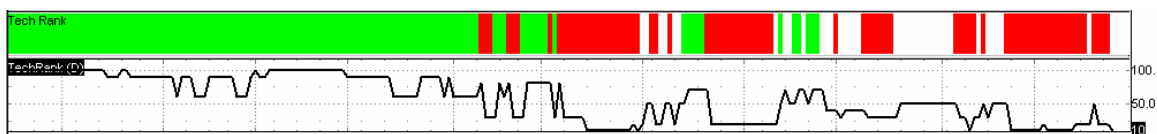


you look at frequently, **mouse click the “Sym +” button to add a tab for that ticker.** To add intervals, just **mouse click the “Inv +” button.** You can see above, a number of tickers with all the intervals just a click away.

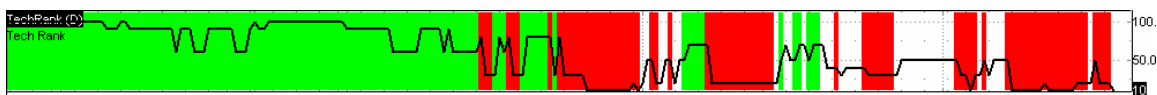
Once you get the general layout and type of chart, **the real customization comes from a simple right mouse click over the chart itself.** This will give you lots of options from picking the variables you want to see to customizing the colors and shapes of those data points displayed. On the next page is a sample menu when you right click over your chart.

When you choose a new variable or study to be displayed in a chart, it will be viewed in its own windowpane. Multiple studies can be overlapped with each other by **clicking on the study, holding the control key and dragging it over the study you want to overlay.** Below is a sample of combining the Erlanger Technical Rank with a custom Erlanger Color Study with rules of greater than 60 is green and below 40 red. To undo the combination, **right mouse click over the combined studies and choose “Separate Charts in Pane”.**

Tech Rank and Tech Rank Color study in individual panes:



Tech Rank overlaid on the Tech Rank color Study:



By placing your mouse over a pane or "study" and holding the **shift key**, this will allow you to drag and drop the pane in a different order or shift the studies.

The next page includes a list of the technical indicators within E2K. To view this list in E2k, **have a chart open and right mouse click then click on studies and the following window will populate the screen. Simply click on a variable and the chart will add that particular variable.**

Also, when you **right mouse click on a chart you may click on the section entitled Erlanger. If you click on this section, then the following window will populate the screen. Simply click on a variable and the chart will add that particular variable.**

Add index or symbol overlays to the chart to view outperformance, underperformance and correlations

**Chart Properties**  
Customize chart type, colors for background, grids, candles, and fonts.

- Auto Scale
- Logarithmic
- Set Scale...
- Invert Scale
- Lock Vertical Scaling
- Session
- Major X
- Minor X&Y
- Major Y
- X-Axis Labels
- X-Axis Major Labels
- Left Y-Axis
- Right Y-Axis
- Invert Y-Axis

- New
- Add Alert
- Chart Preferences...
- Overlays
- Axis & Grids
- Color Groups
- Format
- Separate Charts in Pane
- View
- Styles
- Studies
- Plugins
- Drawing
- Edit
- Remove
- Erlanger

- Title Bar
- Cursor Tracking
- Cursor Window
- Snapshot
- Symbol/Interval Bar

- Issues
- Options
- Short Interest
- Group Ranks
- Group Indicators
- Sector Ranks
- Sector Indicators
- Ford Data
- Other Options
- Sector/Industry...

- TechRank (D)
- ShortRank (M)
- PowerRank (D)
- Type (D)
- GroupRank (D)
- SectorRank (D)

- Erlanger Options Rank (D)
- Erlanger Option Composite (D)
- Put/Call Ratio 10-Day Average (D)
- Call/Put Ratio 10-Day Average (D)
- Put/Call Erlanger Ratio 10-Day Average (D)
- Call/Put Erlanger Ratio 10-Day Average (D)
- Put Open Interest 10-Day Average (D)
- Call Open Interest 10-Day Average (D)
- Put/Call Flow Ratio 10-Day Average (D)

- Short Rank (M)
- Short Ratio (M)
- Shares Short (M)

- Rank (D)
- AvgTechRank (D)
- AvgShortRank (M)
- AvgPowerRank (D)
- Type1Pct (D)
- Type2Pct (D)
- Type3Pct (D)
- Type4Pct (D)

- Moving Average
- Bollinger Bands
- Donchian Channels
- Envelopes
- Color Study
- Formula Study...
- Choppiness
- Directional Movement
- MACD
- Momentum
- ROC
- RSI
- Stochastic
- Volume
- Open Interest
- On Balance Volume

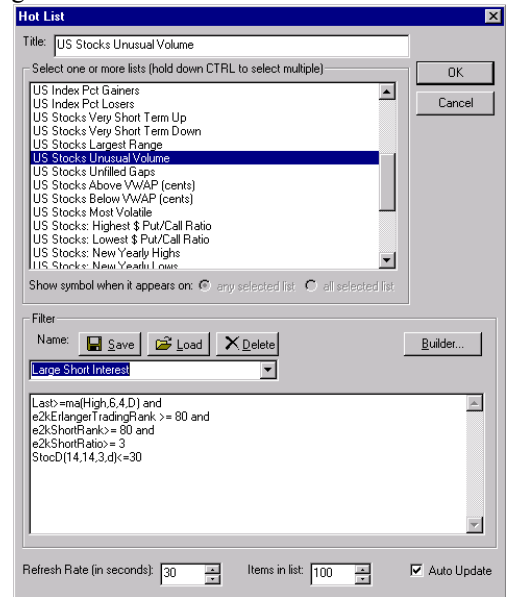
- Erlanger Chart Study Average True Range
- Erlanger Chart Study BOMAR
- Erlanger Chart Study BarLines
- Erlanger Chart Study Chaikin Money Flow
- Erlanger Chart Study Commodity Channel Index (CCI)
- Erlanger Chart Study DMA Osc
- Erlanger Chart Study Directional Movement Histogram
- Erlanger Chart Study HigherHigh/LowerLow
- Erlanger Chart Study Historical Volatility
- Erlanger Chart Study Keltner Channels
- Erlanger Chart Study MACD Trend
- Erlanger Chart Study Money Flow
- Erlanger Chart Study PriceProjections
- Erlanger Chart Study Stochastic RSI
- Erlanger Chart Study Volume

## Hot List

The purpose of the hot list is to enable users to be alerted as to anomalies taking place during the current trading day. Traditional measures included point gainers and highest volume levels as well nontraditional measures like US Stocks above VWAP. In total, there are currently 34 lists to choose from that can be further refined by filtering using any of the variables in the E2K system.

To create a hot list, **click on the icon from the toolbar** which will bring up the hot list dialogue box (as shown to the right) to allow you to choose any of the lists and “build” filters. This particular hot list looks for unusual volume and further filters for those stocks trading above a 6 day displaced moving average (DMA), high trading rank, heavily shorted, and in an oversold position based on Stochastics.

Once the list is chosen and the filter parameters are placed, click OK and a quote sheet will start to populate with the data that meet the stated criteria. The quote sheet can also be customized to view variables, add color studies, and/or sort. Review the quote sheet section above for more information.



## Option Sheet

The option sheet allows a user to import an option chain of a particular stock. Once the symbol is chosen then the strike price with both a minimum or maximum, expiration month and type of option (put or call) may be screened or the entire option chain of a stock may be appear if no criteria are screened.

Once the option sheet appears it may be created like a quote sheet. The option sheet is defaulted to include all the Greeks as well as Black Scholes Valuations. Option sheets have the **.OS extension**.



## The Gate

The Gate and specifically My Pubscribe/Pubscribe is a net based storage tool where one can store private workfiles or view public sample workfiles.

Author	Workspace	Date
bahrmarket	NDX - 50 and 200 dma Monitor	2001/04/05 07:51:00
bahrmarket	Single Chart DMA Buy Sell Triggers	2001/03/16 09:33:00
bahrmarket	DMA NDX - Aggressive and Confirmed Buys & Shorts	2001/03/06 07:34:00
bahrmarket	DMA DJ30 - Aggressive and Confirmed Buys & Shorts	2001/03/06 07:32:00
bahrmarket	DMA S&P 100 - Aggressive and Confirmed Buys & Shorts	2001/03/06 07:28:00
bahrmarket	DMA S&P 400 - Aggressive and Confirmed Buys & Shorts	2001/03/06 07:26:00
bahrmarket	DMA S&P 500 - Aggressive and Confirmed Buys & Shorts	2001/03/06 07:23:00
bahrmarket	DMA S&P 600 - Aggressive and Confirmed Buys & Shorts	2001/03/06 07:20:00

### Public Files:

Workfiles under the Pubscribe directory in the gate can be used for idea generation of E2K and also idea generation for stock, industry and/or sector selection. By reviewing the multiple directories and workfiles stored on The Gate's Pubscribe, one can get a sense of the components of E2K (quotes, charts) and different customization options. One can also get a sense of the investment idea generation capabilities by searching the different directories. As Pubscribed is reviewed in the Gate, one will find various workspaces that are separated by various folders in which the multiple workspaces reside. For example, various chart workspaces reside within the **Chart Folder**. Also, the weekly long/short ideas generated each Friday may be found in the **Weekly Folder**.

### Private Files:

Private files can be viewed under "My Pubscribe" and will be accessed when using your individual E2K username/login. Under My Pubscribe, only the individual user will be able to review those private workspaces. If one works on multiple machines, within an office or location (work and home), the same private workfiles can be utilized without transferring the "workfile" file on a disk.