



Netfeed Technologies Corporation

User Guide

Visual Intelligence Portal

**SmartList™, SmartAlerts™, SoftStop™,
webHeatmaps®, Nasdaq Level 2 Quotes**

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Acknowledgements

- The server software is based on products licensed from DataCode, Inc.
- The Exchange Data Feeds are provided by Marketfeed, Inc.
- The webHeatmaps® is a product of NeoVision Hypersystems where NTC is an authorized reseller.

TABLE OF CONTENTS

1. INTRODUCTION.....	4
2. VIP DESCRIPTION.....	4
2.1 PREREQUISITES.....	5
2.2 LOGGING ON TO VIP SMARTLIST.....	5
3. SMARTLIST AND SMARTALERTS	8
3.1 QUOTE LIST DISPLAY.....	9
3.2 PORTFOLIO.....	12
3.3 SMARTALERTS.....	13
3.3.1 <i>Limit Alerts</i>	13
3.3.2 <i>SoftStopAlerts</i>	13
3.4 LAUNCH WEBHEATMAPS, NASDAQ LEVEL 2 QUOTE VIEWER, AND HELP.....	14
4. WEBHEATMAPS	15
5. NASDAQ LEVEL II QUOTES.....	19
6. FUTURE APPLICATIONS.....	21
ATTACHMENT A - SECURITY.....	22

RELEASE NOTES

V1.0	Initial release.
V2.0	SmartList version

1. Introduction

Visual Intelligence Portal (VIP) provides integrated web tools for individual investors and institutional traders. The VIP browser applets include SmartList™, SmartAlerts™, SoftStop™, webHeatmaps® (visual representation of stock prices), and Nasdaq Level II Quotes (detailed stock transaction information).

Mission Statement: Netfeed Technologies Corporation (NTC) is a unique association of industry leading subsidiaries, affiliates and partners that bring together highly skilled and experienced technical staff, industry leading state-of-the-art data integration, retrieval products and real-time market data. This unique blend of products, data and highly experienced development staff provides our customers with a wide variety of products and services for the financial community.

Major Products and Services: NTC licenses its own products as well as products from affiliated companies. NTC is dedicated to providing a wide range of real-time and delayed products at competitive prices to the financial community requiring timely and accurate data. Our products include Exchange Data, Web Hosting, Portals, Nasdaq Level 2 Data/Web Viewer, webHeatmaps®, Portfolio, Charting and other system components. Complete Financial Data Distribution and Client Presentation Systems are also available. Our services include Custom Application Development, System Integration, and Support.
Markets Served: Individual investors and institutional traders.

2. VIP Description

Netfeed Technologies Corporation (NTC) is proud to offer the Visual Intelligence Portal (VIP). VIP provides integrated web tools for individual investors and institutional traders. The Visual Intelligence Portal (VIP) truly offers tremendous flexibility and insight into the financial marketplace for today's active investor.

The VIP browser applets include SmartList™, SmartAlerts™, SoftStop™, webHeatmaps® (visual representation of stock prices), and Nasdaq Level II Quotes (detailed stock transaction information). Future releases of the product will include charting and analytics applications.

Users of the Visual Intelligence Portal (VIP) can log on from any PC in the world with an Internet connection to gain access to their quote list with portfolio management, webHeatmaps and Level II Quotes. No downloads are required. Simply log onto the Visual Intelligence Portal (VIP) from a browser and access the real-time VIP program.

Markets

VIP provides real time access to the following U.S. markets,

- NYSE
- AMEX
- NASDAQ
- CBOE Options

Product Support and Documentation

This VIP User Guide is online. You can view this document by,

- Selecting the information button (i) on the SmartList Menu or anywhere else Help is provided on a menu bar.
- Visit the NTC Support web site at <http://www.netfeedtech.com/support> and select the VIP User Guide menu selection.

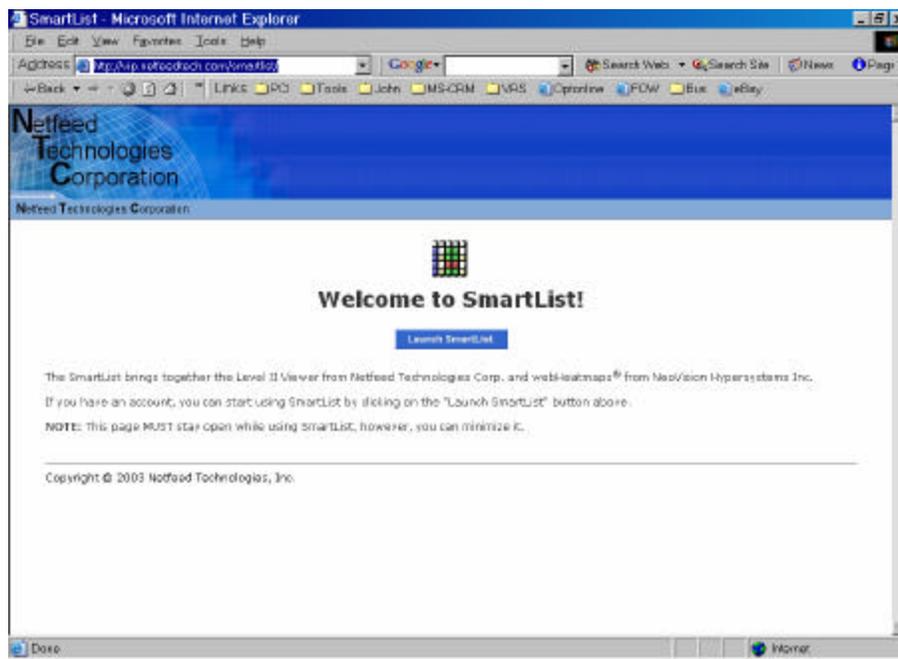
2.1 Prerequisites

Before you can start using VIP you must have the following,

- A valid VIP account with NTC. You will need your assigned User Id and Password to log onto the system.
- Workstation running either IE 5.5 (or higher) or Netscape 6.0 (or higher).
- Internet access. We highly recommended a DSL, Cable Modem or T1 connection for the satisfactory performance for real time updates.
- Email address for SoftStop Alerts (if you have this option).

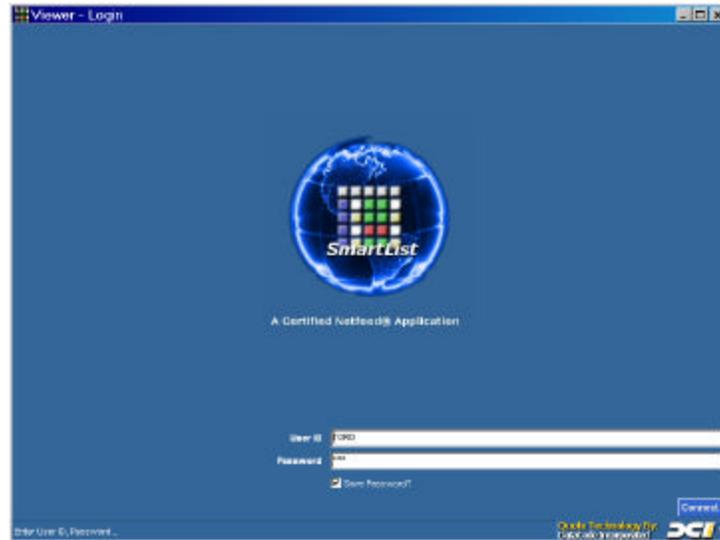
2.2 Logging On to VIP SmartList

To start VIP SmartList, from your browser enter <http://vip.netfeedtech.com/smartlist/>. The following window is displayed.



Select **Launch SmartList**. A screen for a secure web application may appear. Select **Yes**.

The following logon screen is displayed.



Log into VIP using your assigned User Id and Password. Then select the **Connect** button. The SmartList screen will be displayed as shown below.



First time users:

Setup your portfolio first by entering a few securities. This is a good way to start understanding how VIP works before entering all the securities in all of your portfolios.

3. SmartList and SmartAlerts

SmartList is a real time portfolio viewer that allows each subscriber to create one or more portfolios and to define what parameters associated with each symbol should be displayed. For example, the screen snapshot on the previous page is from a SmartList of securities in your current recommendation list. During market hours, this list will dynamically update on any change to price, volume, high, low, or percent gain/loss as it occurs in real time. Current up-to-the-minute market data is feed into the servers that operate the VIP service so as to keep the data accurate up to the second.

SmartList provides the following functions,

- Display real time security information for a user portfolio.
- Create and maintain user portfolios.
- SmartAlerts for limit checking and user notification.
- Launch webHeatmaps and Level 2 Quote Viewer – if these optional services are available.
- Launch the Help service that provides VIP Support Services: contact form, FAQ, and User Guide.

SmartAlerts is the monitoring service for SmartList. SmartAlerts allows the subscriber to set optional parameters on one, several or all of the symbols of any portfolios managed by SmartList. There are two types of SmartAlerts provided,

- Limit Alerts
- SoftStop Alerts (option)

Limit Alerts allow the user to set upper and lower price limits for each security in the user's portfolio.

SoftStop Alerts (if option is available) capability is activated by specifying the percentage stop-loss desired, and the original purchase price of the security being monitored. An alert is generated at the end of day when the stop-loss limit is reached.

3.1 Quote List Display

The Quote List service displays a list view of stocks in a portfolio. The fields associated for a stock includes Last Sale, Net Change, % Change, Previous Close, Number of Shares Held, Cost per Share, Total Profit (Loss), Today's Profit (Loss). Fields may be added and removed. The following SmartList screen shows the quote display services available. **Note:** only one active SmartList window may be displayed at a time.

Annotations for the screenshot:

- Show or Hide Row Headers
- Show or Hide Summary Rows
- Snap Columns to Fit Window
- Preferences
- Save Changes
- Show or Hide Cells (Rows of Securities)
- Row Headers
- Display Chart
- Options
- Display News
- Launch L2
- Edit Parameters
- Remove Entry
- Summary Rows

Symbol	Name	Price	Close	% Change	Low	High	Volume	Intraday
QQQ	Nasd...	33.94	33.49	1.34%	33.00	34.00	44,135,600	
MSFT	Micr...	28.48	28.36	0.42%	28.32	28.62	23,750,903	
INTC	Intel ...	28.42	27.99	1.54%	28.02	28.50	22,043,103	
CSCO	Cisc...	21.03	20.39	3.14%	20.31	21.1...	32,967,978	
IBM	Int'l B...	89.10	88.49	0.68%	88.49	89.38	3,265,400	
SUNW	Sun ...	4.94	3.859	4.88%	3.91	4.06	29,098,860	
AETH	Aeth...	5.65	5.50	2.73%	5.51	5.68	99,686	
REFR	Rese...	14.23	14.22	-1.48%	14.00	15.00	41,050	
TVII	TVI ...	1.20	1.19	0.84%	1.19	1.21	143,500	
QCOM	QUA...	44.11	43.45	1.52%	42.38	44.3...	13,007,597	
BZU	Beaz...	83.98	83.65	1.11%	83.20	85.11	232,500	
EZU	iShar...	51.81	52.04	-0.43%	51.50	52.08	17,800	
RIMM	Rese...	32.15	31.70	1.42%	31.86	32.25	1,216,367	
MOT	Moto...	10.85	10.70	1.4%	10.68	10.87	5,187,500	
GLW	Corn...	9.02	8.72	3.44%	8.71	9.03	4,998,200	
JDSU	JDS ...	4.07	3.966	2.82%	4.00	4.10	18,853,110	
LU	Luce...	2.30	2.26	1.77%	2.26	2.34	54,932,100	

Additional Display Features

Rearrange Columns - The columns of the display may be moved by dragging the column name cell to the left or right.

Resize Column - A column may be resized (narrower or wider) by dragging the side of column name cell.

Adding and Deleting Fields – A new field may be added and a field may be removed. Right click any of the column name cells and select the fields to be added and removed. The choice of fields include,



Chart Display – Charts may be displayed at the top of the SmartList window as show in the following figure.

Charts

Right Click Chart to display chart options.

Right Click icon bar to display “Add Quote” to display a new chart.

Symbol	Name	Price	Change	% Change	Low	High	Volume	Info
IBM	International Business Machines Corp.	90.33	0.44	0.5%	89.89	90.77	5,181,000	
CSCO	Cisco Systems Inc.	26.14	-0.79	-3.0%	26.93	26.93	45,775,023	
LU	Lucent Technologies	2.20	0%	0%	2.10	2.20	25,403,730	
QQQ	Invesco IQD Trust Ser 1	83.58	0.80	1.0%	82.78	83.78	35,781,150	

Charting Options :

Right Click icon bar to display “Add Quote” to display a chart.

Right click a chart to select options:

Add Quote	display new chart
Edit	edit this securities SmartList parameters
Remove	deletes Chart
Chart	displays analytic charts
Options	displays options for security
News	displays news for security
Level II	for NASDAQ securities displays Level II view

3.2 Portfolio

The services for creating, editing and removing portfolios and portfolio entries are shown in the following figure. **Note:** A maximum of 10 portfolio lists may be defined.



Right clicking a row for a security displays the following options:

- Add Entry** add a new entry (security) to the list
- Edit** edit this securities SmartList parameters
- Remove** deletes Chart
- Chart** displays analytic charts
- Options** displays options for security
- News** displays news for security
- Level II** for NASDAQ securities displays Level II view

3.3 SmartAlerts

SmartAlerts is the monitoring service for SmartList. SmartAlerts allows the subscriber to set optional parameters on one, several or all of the symbols of any portfolios managed by SmartList. There are two types of SmartAlerts provided,

- Limit Alerts
- SoftStop Alerts (option)

3.3.1 Limit Alerts

Limit Alerts allow the user to set upper and lower price limits for each security in the user's portfolio. The limits are set by selecting the Edit button on the entry row. The Preference window is displayed with fields for entering the upper and lower limits.

The "Symbol Field" change text color to green if the upper limit is reached and red if the lower limit is reached.

3.3.2 SoftStopAlerts

SoftStop Alerts (if option is available) capability is activated by specifying the percentage stop-loss desired, and the original purchase price of the security being monitored. An alert is generated at the end of day when the stop-loss limit is reached.

The service requires that the subscriber specify the Email address (or addresses) where alerts should be sent. This may be a real Email account, the address of a wireless device such as a one-way or two-way pager, text messaging cell phone, Blackberry device, wireless Palm, or similar type of device. The subscriber may further select to have their portfolio Emailed to them each day, at the end of the week, or never. If the portfolio is Emailed, it will contain the current stop-loss point of each security being monitored, based upon the rise in price above the purchase price or the fall below the original price. Regardless of the Emailing of the full portfolio, on the evening after the market closes below a stop-loss point, a SmartAlert is Emailed to the subscriber to indicate that they may wish to put in a market or limit order the next trading day.

The SoftStop parameters for all securities are set by selecting the Preference button. The Preference window is displayed with fields for,

- Email message type: HTML or Text. Default is HTML.
- Email Addresses to send Alert and Reports: up to 5 email addresses may be entered
- Test Email address – sends a test Email to ensure address is operational.
- SoftStop Default Percentage (Stop-Loss) for all securities unless changed for a security.
- SoftStop Alert Summary Report: Daily, Weekly, None

The SoftStop parameters for each securities are set by selecting the Edit button for the security. The Preference window is displayed with fields for,

- Set alert type: SoftStop Alert enabled or disabled. Default is disabled.
- SoftStop percentage (Stop-Loss) for this security.
- Original purchase price.
- Enable/disable triggering SoftStop Alert Notification
- View / Hide SoftStop Price on entry display

3.4 Launch webHeatmaps, Nasdaq Level 2 Quote Viewer, and Help

The buttons for launching webHeatmaps, Nasdaq Level 2 Quote Viewer, and Help are shown in the following figure,

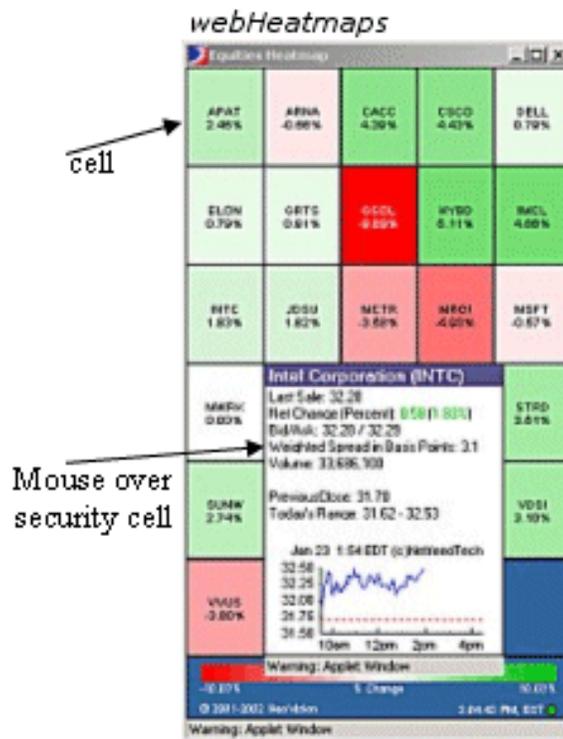


4. webHeatmaps

“A picture is worth a thousand words”. Never has that saying had more meaning than with webHeatmaps. In a single glance, the user can differentiate market movement like never before. The Visual Intelligence Portal (VIP) translates your individual portfolios into colorful webHeatmaps automatically.

The VIP webHeatmaps are live “pictures” of financial information used by leading traders, analysts, and portfolio managers in some of the largest financial institutions in the world. webHeatmaps organize financial instruments or positions into color-coded cells or spots. Using live data, webHeatmaps perform calculations in real-time and display the results as color. They are called “Heatmaps” because they show what is Hot.

Users can set visual alerts to highlight important opportunities, critical information or current results. webHeatmaps focus time and attention on the few pieces of information that webHeatmaps are most important at this moment.



WebHeatmaps enables the user to obtain much more information in a shorter period of time by consolidating available information. The use of visualization allows the user to understand the information presented much quicker than spreadsheets and other traditional methods.

WebHeatmaps is a productivity and management enhancement tool for a portfolio management system (i.e. SmartList). It dynamically extracts real-time portfolio holdings from a database and provides daily changes, P&L and relative performance information via visually intuitive displays.

Benefits of WebHeatmaps

The WebHeatmaps application provides a consolidated map to all the information required by investors in the decision making process. These benefits include:

- Immediately target, analyze and act on market changes.
- Display hundreds of positions or securities simultaneously. The intuitive visual interface makes sense immediately.
- Portfolio or position performance to relative benchmark
- Perform better executions by spotting opportunistic conditions Find financial opportunities that would otherwise be lost in a sea of important data, and reduce your risk.
- Detailed numerical information is available with just one click.
- Easier. Focus only on the few pieces of information that are most important at any given time.

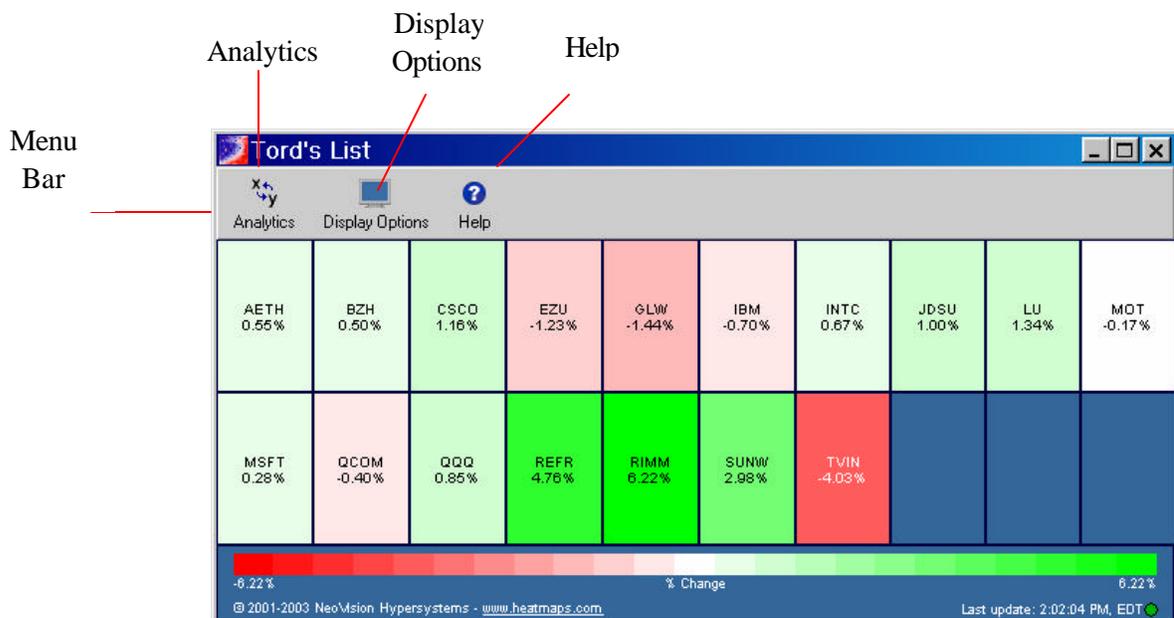
Functionality

Menu Bar Services

The services on the menu bar are,

- Analytics
- Display Options
- Help

Refer to the following figure.



Analytics – The menu selections are:

Resort	Reorganize the cells after market activity changes the order of securities as per the ColorBy value.
Sort Ascending	The ascending order of the cells based on a selected value (see Values)
Sort Descending	The ascending order of the cells based on a selected value (see Values).
Color By	Select the color value (see Values),

Values:

% Change	Open
Close	Price
High	Shares
Low	Trade Volume
Market Value	Volume
Net Change	

Display Options – The menu selections are,

Show Labels	The business segment column is displayed.
Show ColorBar	The gradient color bar is displayed.
Packed	The securities are divided into business sectors. Only valid if the securities are in multiple business sectors



Help – The selections are **Online Help** and **About Us**. **Online Help** causes the support web site to be started. You can then send a query to support, review Frequently Asked Questions, or reference the User Guide. **About Us** presents the current version of the software and vendor attributions.

Mouse Actions

Mouse Over– The users can gain insight into the price movement by viewing important information such as: Last Sale, Net Change, Today’s High, Today’s Low, Volume, Previous Close and a dynamic tick chart on today’s activity.

Right Click Cell– The menu selections are,

- View Company News, Options, Fundamental Data, and Charts.
- Return to SmartList window.
- Set Reference Cell (Color and Value)
- Set Reference Cell (Color)

The ***Set Reference Cell (Color and Value)*** item allows the current cell (the one below the cursor) to be the reference cell that all other cells are relative to. The color is set to “white” and the value in the cell is to a reference value depending on the cell value being displayed. For example, if % Change is being displayed then the reference cell is set to 0%.

The ***Set Reference Cell (Color)*** item allows the current cell (the one below the cursor) to be the reference cell that all other cells are relative to. The color is set to “white”.

Left Click Cell – For Nasdaq listed securities, simply click on the instrument to view real-time Nasdaq Level II data.

Resize Window - webHeatmaps can be reduced to a very small window to monitor your portfolio while other programs are active. The information shrinks to only the color of the cells is visible. A mouse over a cell then displays current information for the security.

5. NASDAQ Level II Quotes

The NASDAQ Level II Viewer brings NASDAQ's Market Maker information alive by displaying all Market Makers (players) for a given security, by color - according to their relative position from the Bid and Offer at any given time during market hours. This information is used by financial institutions worldwide and is a "must-have" for all professional U.S. equity traders, as well as non-professional Day-Traders.

Level II goes a step beyond Level I (a standard quote). It reveals the order book for a NASDAQ stock. It shows the best bid and offer of every market participant who is publicly posting a quote.

The Level II Viewer provides the serious trader with unequaled insight into the bid/offer side of the market from every Market Maker on NASDAQ and Small Cap Market issues. With the Level II Viewer, users can gain unprecedented access into the inside marketplace of Nasdaq Market-Makers. With the Nasdaq Level II Viewer, you can view Real-Time supply and demand for any Market Maker-driven equity. You can gain an unprecedented insight into the minds of those controlling the market. You can use it to take advantage of the minor price differences between the bid/offer spread to capture profits or you can use it to time your entry and exit points used in momentum trading strategies.

The Level II Viewer displays a security, by color - according to its relative position from the Bid and Offer at any given time during market hours. This information is used by financial institutions worldwide and is a "must-have" for all professional U.S. equity traders, as well as non-professional Day-Traders as it provides the serious trader with unequaled insight into the bid/offer side of the market from every Market Maker on NASDAQ and Small Cap Market issues.

The Level II Viewer organizes the Nasdaq Level II Market Maker data on Nasdaq Securities into color-coded instruments within the application. Using live data, the Level II Viewer performs calculations in real-time and displays the results as color. Each color represents the "Amount" of Market Makers present relative to the Best Bid and Best Offer as well as the total number of shares being offered at those prices. The Level II Viewer helps to focus time and attention on the few pieces of information that are most important at this moment and help the user to visualize the total breadth of trades and open orders for a particular security.

Features

Price Distribution Bar - The Price Distribution Bar graphically displays the relative number of Market Makers in each price tier compared to all of the outstanding bids or offers. It will help give you an idea of what price dominates the market at the moment and is located just under the Level I price information (1st set of vertical color bars).

Volume Distribution Bar - The Volume Distribution Bar graphically displays the relative number of shares in each price tier compared to all the total volume of all outstanding bids or offers. It will help give you an idea which price tier has the greatest volume and is located at the bottom of the screen (2nd set of vertical color bars).

Price Tier - A price tier is a group of bids or asks that are at the same price. The top 5 price tiers are color coded to group them together. For example on the bid side of the illustration the 2nd tier (in light green) shows all bids at the price of 52.10 for Microsoft. The Price Tier is located in the middle of the screen and is represented by the Horizontal color bars.

Launching the NASDAQ Level II Viewer

With VIP you can launch the VIP NASDAQ Level II Viewer directly from SmartList or webHeatmaps. The following figure shows a typical Level II display.

Enter
NASDAQ
Security

Bids by
Market
Maker

Asking Prices by
Market Makers



6. Future Applications

Future VIP applications are summarized as follows,

- **Charting** – complete online interactive financial charting package.
- **Time and Sales** - View in real time prices and number of shares traded.

Attachment A - Security

VIP utilizes a variety of security measures.

- User Logon with User Id and Password
- Inactivity Timeout
- Digital Signatures

VIP utilizes digital signatures to digitally sign **NTC** Java applets distributed over the Internet. MS-Internet Explorer and Netscape (your browser) use these signed files to determine the privileges granted to Java applets and JavaScript scripts and to authenticate and authorize the automatic installation of them. This is accomplished using a Digital Id (Class 3 for Commercial Software Publishing) licensed from VeriSign (<http://www.verisign.com/>).

Electronic software distribution over networks involves potential security problems. To help address these problems, VeriSign offers a technology called Object Signing. Object Signing allows users to get reliable information about code they download in much the same way they can get reliable information about shrink-wrapped software.

Object Signing™ technology, when used in conjunction with VeriSign's Software Publisher Digital IDs™, lets end users identify who published software and verify that software has not been tampered with or altered since the time it was uploaded. It also informs users if Java applets are requesting special privileges, such as writing to the hard disk. By presenting this information to users, users can then make informed decisions about downloaded software; for example, whether to allow a signed Java applet to access specific system resources.

Object Signing allows developers to digitally sign any type of file that they may wish to distribute over the Internet. IE uses these signed files to determine the privileges granted to Java applets and JavaScript scripts and to authenticate and authorize the automatic installation of IE plug-ins. IE 4 & later versions support Object Signing.

Refer to the VeriSign web site for additional information about our Class 3 Digital Id for Commercial Software Publishing.