

Townsend Analytics, Ltd.
architects of real time financial software



REALTICK®
BY TOWNSEND ANALYTICS, LTD.

User Manual
Version 7.6

Townsend Analytics, Ltd.

100 South Wacker Drive Suite 2040
Chicago, Illinois 60606-4004 USA
800.827.0141 main office
800.997.9630 tech support

This **RealTick User Manual** and the software described in it are copyrighted with all rights reserved. Under the copyright laws, neither the documentation nor the software may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine readable form in whole or in part, without the prior written consent of Townsend Analytics, Ltd. The information contained in this manual is subject to change without notice. No title or ownership of intellectual property rights in and to the software and/or documentation or any copy, translation, compilation or other derivative works are transferred to the end user or any third party hereunder.

The software and documentation are provided "as is" and without any express or implied warranties including, without limitation, any warranties as to accuracy, functionality, performance, or merchantability. Townsend Analytics makes no representation, warranty or covenant concerning the accuracy, completeness, sequence, timeliness or availability of the software and/or documentation or any other information or the likelihood of profitable trading using the software and/or documentation. The user assumes the entire risk of using the software and/or documentation and accepts full responsibility for any investment decisions or stock transactions made by the user using the software and/or documentation. Townsend Analytics shall have no liability for any loss or expense whatsoever relating to the accuracy of the information furnished herein or for the use thereof or for omissions therein. The user agrees to hold Townsend Analytics harmless from and against any such losses or expenses arising from provision or use of the software and/or documentation, regardless of cause or form of action, whether in contract, tort, strict liability, statutory liability or otherwise.

© 2002 Townsend Analytics, Ltd. All rights reserved. RealTick, RealTrade and TA_SRV are registered trademarks and NewsSrv, TradeSrv, PermSrv, and RealTrade are trademarks of Townsend Analytics, Ltd.

Microsoft[®], Windows[®] NT, 95[®], 98[®], and 2000[®] names and logos are registered trademarks of the Microsoft Corporation. All other product names and logos are either trademarks or registered trademarks of their respective owners.

This manual was last revised December 5, 2002.

Contents

ABOUT THIS MANUAL	1
<i>Sections in this Manual.....</i>	<i>1</i>
<i>Conventions in the Manual.....</i>	<i>2</i>
RECOMMENDED READING	3
GETTING ADDITIONAL HELP FOR REALTICK	3
<i>Manual.....</i>	<i>4</i>
<i>Online Help.....</i>	<i>4</i>
<i>Context Sensitive Help.....</i>	<i>5</i>
<i>Technical Support.....</i>	<i>5</i>
CHAPTER 1: INTRODUCTION	6
WELCOME TO REALTICK	6
<i>Who Uses RealTick?</i>	<i>6</i>
<i>How Does RealTick Work?</i>	<i>6</i>
<i>What Can I Do With RealTick?</i>	<i>7</i>
PERMISSIONS	10
CHAPTER 2: REALTICK INSTALLATION	11
SYSTEM REQUIREMENTS	11
<i>Hardware Requirements</i>	<i>11</i>
<i>Internet Requirements.....</i>	<i>12</i>
<i>Screen Display Requirements</i>	<i>12</i>
<i>Software.....</i>	<i>12</i>
INSTALLATION PROCEDURES	13
Download Installation from RealTick.com	13
Install RealTick	16
Files Installed	17
CHAPTER 3: GETTING AROUND IN REALTICK	20
WINDOWS® FEATURES IN REALTICK	20
<i>Column Widths</i>	<i>20</i>
Change the Width of a Column	21
<i>Right Mouse Button</i>	<i>21</i>
<i>Drop-Down Lists</i>	<i>24</i>
<i>Option Buttons.....</i>	<i>24</i>
<i>RealTick Control Menu.....</i>	<i>25</i>
REALTICK MENU BAR.....	25
REALTICK TOOLBAR	46
REALTICK STATUS BAR	48

CHAPTER 4: BASIC FEATURES.....	50
STARTING REALTICK.....	50
Log On to RealTick	50
Change Your Password	51
<i>RealTick Pages</i>	52
<i>Create a Page</i>	53
Open a Page	53
View Next or Previous Page	54
Save a New Page.....	54
Save an Existing Page.....	54
Drag and Drop a Page	55
<i>Using the Page Manager</i>	55
Open the Page Manager Dialog Box	55
Add a New Page	56
Rename a Page.....	56
Delete a Page	57
Create a Page Hotkey.....	58
Moving a Page in the Page Manager Dialog Box	58
TAL MAIL.....	59
Open TAL Mail	59
Changing Your TAL Mail Password	59
Add a Sound Alert to TAL Mail	60
Add a Mail Alert in the Status Bar.....	60
Open E-mail Message.....	60
Close TAL Mail	60
Delete E-mail Message	60
Print E-Mail Message	61
PRINTING	61
Print the RealTick Page	61
Print RealTick Windows.....	61
Print One RealTick Window.....	62
Print the Windows Desktop	62
Save a RealTick Picture as Graphic File	62
Print a Window	63
Print All the Windows	63
FAVORITES	63
<i>Using RealTick's Favorites</i>	64
Open a Favorite.....	66
Create a Window Using the Chain Symbol Lists.....	66
<i>Using Your Own Favorites</i>	66
Add to Favorites.....	67
Change a Favorite	67
Organize Your Favorites Menu.....	69
Delete a Favorite.....	69
CHILD -> POPUP.....	70
Move a Window Outside of RealTick.....	70
Move a Window Back to RealTick	70
LINKING WINDOWS	70

Link RealTick Windows	70
SERVERS.....	71
<i>Monitoring Servers</i>	71
Change the Server for a RealTick Window.....	72
LOAD AND SEARCH FOR SYMBOLS	72
Load a Symbol File	72
Search for Symbols	73
SYMBOL GUIDE	74
Search for Symbols	74
Symbolology	75
Month Code for Futures	76
Create a RealTick Window with a Symbol in the Symbol Guide	77
SETTING SYSTEM DEFAULTS	77
Change Colors for Up Ticks and Down Ticks.....	77
Set a Startup Page	78
Set Page Hot Keys.....	79
Set the Price Display for RealTick	79
Set Page Defaults	80
Set General RealTick Options.....	80
Set Default Servers.....	80
CHANGING THE DISPLAY OF A WINDOW	81
Change the Window Color of a Window	81
Change the Window Font.....	82
CHAPTER 5: GATHERING MARKET DATA	84
TAL ALARMS.....	84
Create an Alarm	85
Add a Sound Alert to an Alarm.....	88
<i>TAL Alerts</i>	89
Open TAL Alerts	89
Create an Alert	89
Delete an Alert	92
Turn Off a Beeping Alarm	92
Drag and drop a symbol from Tal Alerts.....	92
CORPORATE ACTIONS.....	93
Perform a Corporate Actions Search.....	94
FIXED PAGE NEWS	94
View a Story	95
Search for a News Story.....	95
Copy News Data for Another Application	96
Change the View of the Fixed Page News Window.....	96
FOREX	97
Create a Forex Window	97
<i>Using Currencies</i>	99
Add a Currency	99
<i>Move Around in Forex</i>	99
INDICATIONS	100

Create an Indications Window	100
View Details of a Specific Indication	102
<i>Changing the Display of Indications</i>	102
Change the Color of Indications	102
Add Columns to the IOI Client Window	103
MARKETMAKER	104
Create a MarketMaker Window	104
Set an Alarm for Updates.....	107
<i>Configuring Quote Sources</i>	107
View Data from a Single Source.....	107
View Data from all Sources	108
View NASDAQ Stock Quotes from all Sources.....	108
View NASDAQ Stock Quotes from ECNs only.....	109
View NASDAQ Stock Quotes from all Sources except ECNs	109
View Data from a Single Exchange	109
View Data from all Exchanges	110
Include/Exclude a Market Maker.....	110
<i>Changing the Display of a MarketMaker</i>	111
Adding and Removing Panels.....	111
Change the Color for ECNs	112
Add a Price Tier.....	113
Delete a Price Tier	113
Change the Color of a Price Tier.....	114
MARKETMINDER	114
Create a Standard MarketMinder	115
Create a ChainMinder.....	116
Add a Symbol to an Existing MarketMinder	116
Quickly create a BasketMinder from your Positions.....	116
<i>Using MarketMinder</i>	117
Convert Currency	117
Access the Alerts and Alarms	118
Group Symbols	118
Multiple Selections in a MarketMinder	119
<i>Changing the Display of MarketMinder</i>	119
Change the Column Layout	119
Configure Column Layout	120
Save a Column Layout.....	121
Custom Sort a MarketMinder	121
Additional Settings to Custom Sort your Minder.....	122
Change the Window Font for MarketMinder.....	122
Change the Table Display	123
MULTIQUOTE	124
Create a new MultiQuote	125
Open a MultiQuote Window Layout.....	125
NEWS.....	126
<i>News Stories</i>	126
View News Stories.....	127
Open a Story	127
Search for stories about a symbol	127

Search by Keyword	127
<i>Changing the Display of News</i>	128
Add columns to the News Window	128
Navigate News	128
Copying News	129
<i>Set an Alarm for News</i>	129
<i>Printing News</i>	129
Print Stories Automatically	129
Configure and Print a Story Group	129
Configure and Send a Story Group to a File	131
Add a Story to the Scheduled Print Jobs	131
NEWS ALERT	132
Create a News Alert	132
Close a News Alert	133
STOCKS	133
View Stocks	134
Change the Tab Font in a Stocks Window	135
TABLE	135
Create a Table	135
Add a Symbol	137
Change the Type of Table	137
<i>Using Tables</i>	138
Calculate Volume Weighted Average Price	138
Transferring Data to other Applications	139
<i>Changing the Display of Tables</i>	140
Change the Display of a Table	140
Change a Column in a Table	141
TICKER	142
Display a Ticker	142
<i>Configuring a Quote Source</i>	143
View Data from a Specific Exchange	143
View Composite Data	144
View Data from a Specific Market Maker	144
Remove Data from a Specific Market Maker	145
View a Ticker from a Single Source	146
<i>Changing the Display of a Ticker</i>	146
Change the Window Color of a Ticker	146
TIME & SALES	147
Create a Time and Sales Report	148
<i>Configuring Quote Sources</i>	150
View Data from Selected Exchanges	150
View Composite Exchange Data	150
<i>Using Time & Sales</i>	150
Calculate Volume Weighted Average Price	150
Edit data in a Time & Sales Window	151
Copy Time & Sales Data for Another Application	152
<i>Configuring the Display of Time & Sales</i>	152

Change the Print Color for Times & Sales.....	152
Add or Remove Columns.....	153
TURBOOPTIONS™	153
Create a TurboOptions Window	154
Select an Exchange	154
<i>Using TurboOptions</i>	155
Set Interest Rates	155
Change Calculation Parameters	156
Quickly Change the Fixed Volatility Percent.....	157
Reset Primary Tickers.....	157
View Details in a TurboOptions Window	157
<i>Sizing Columns</i>	157
Change the Width of a Column in TurboOptions	157
WEB BROWSER.....	158
Open a Web Browser Window	158
Navigate in a Web Browser Window.....	159
Links to Web Sites.....	159
Open a Link	159
Zacks Brokerage Research Center	160
Earnings Calendar.....	161
Industry Search	161
<i>Earnings Surprises</i>	162
<i>Market Guide</i>	163
To View Data for a Specific Symbol	163
CHAPTER 6: CHARTS & TECHNICAL ANALYSIS.....	164
USING CHARTS	164
Create a Chart	167
Add a Symbol to an Existing Chart.....	168
Replace a Symbol in a Chart.....	169
Change the Type of Chart	169
Quickly Change the Chart Interval.....	171
<i>Changing the Display of a Chart</i>	171
Change the Display of a Chart	171
Change a Series in a Chart	174
Hide the Chart Title (Legend).....	175
<i>Viewing Data in a Chart</i>	175
Scale a Chart	175
Options to Scale a Chart	176
Quick Scale a Chart	176
Move Around in a Chart	177
Vertical Zooming a Chart	177
<i>Enlarge a Chart Region</i>	177
Restore a Chart to Original Size.....	177
View the Statistics in a Chart.....	177
View a Statistic at a Specific Position on a Chart	178
<i>Using Annotations</i>	178
Add an Annotation.....	178

Change an Annotation.....	179
Delete an Annotation.....	179
<i>Using Trend Lines.....</i>	<i>180</i>
Draw a Trend Line.....	180
Move a Trend Line.....	181
Move a Group of Trend Lines.....	181
Copy a Trend Line.....	181
Resize a Trend Line.....	182
Delete a Trend Line.....	182
<i>Using Pivot Lines.....</i>	<i>182</i>
Adding Pivot Lines.....	183
<i>Spreads.....</i>	<i>183</i>
Create a Chart Multiplier.....	183
TECHNICAL ANALYSIS.....	183
<i>Study Availability Table.....</i>	<i>184</i>
Add a Technical Analysis to a Chart.....	185
Add a Technical Analysis to a Table.....	185
Accessing the Parameters Dialog Box.....	186
<i>Price Studies.....</i>	<i>186</i>
Moving Averages (MA).....	186
Moving Linear Regression (MLR).....	189
Upper Envelope/ Lower Envelope (UP/DN).....	191
<i>Oscillators.....</i>	<i>196</i>
Momentum Oscillator (MOM).....	196
Acceleration (ACC).....	197
Moving Average Oscillator (MAO).....	199
Moving Average Momentum (MAM).....	201
Moving Average Convergence Divergence (MACD).....	202
Signal Line (SIG).....	204
<i>MACD Oscillator (CDO).....</i>	<i>205</i>
Rate of Change in Prices (RCP).....	206
Volatility (VO).....	208
Volatility Ratio (VOR).....	209
<i>Commodity Channel Index (CCI).....</i>	<i>210</i>
<i>Stochastics.....</i>	<i>212</i>
K Fast (%K).....	212
D Fast (%D).....	213
D Slow (%Ds).....	215
D Averaged (%Da).....	215
Stochastics Parameters.....	216
Williams' Percentage Range (%R).....	216
Relative Strength Index (RSI).....	218
<i>Moments.....</i>	<i>219</i>
Mean.....	220
Monthly Average (AVG).....	220
Variance (VAR).....	220
Standard Deviation (SD).....	222
Skew (SKW).....	223

Kurtosis (KUR).....	225
<i>Volume and Open Interest</i>	226
Tick Count (TCT)	226
Volume (VOL).....	226
Open Interest (OI).....	227
On Balance Volume (OBV).....	227
<i>Price and Volume Studies</i>	227
Williams' Accumulation Distribution (WAD)	228
Arms' Ease of Movement (EMV)	229
Money Flow (FLO).....	230
<i>Parabolic Price/Time Study</i>	231
<i>Directional Movement Indicators (PDI, MDI, DX, ADX)</i>	233
CHAPTER 7: PLACING ORDERS	235
ORDER TYPES	235
<i>Market Order</i>	235
<i>Limit Order</i>	235
<i>Stop Market Order</i>	236
<i>Stop Limit Order</i>	237
<i>Trailing Stop</i>	237
<i>PostNoPreference</i>	238
<i>Preference</i>	238
<i>Discretionary (Proactive)</i>	239
<i>Passive Discretionary</i>	239
<i>Discretion Limit</i>	239
<i>Best Bid or Offer (BBO)</i>	240
<i>Midpoint (MID)</i>	240
<i>BID</i>	241
<i>Offer</i>	241
<i>TOP</i>	242
<i>Short</i>	242
<i>Conditional Order</i>	243
<i>Basket Order</i>	243
<i>Reserve Order</i>	244
<i>Random Reserve</i>	244
<i>Staged Order</i>	245
<i>Tracking Order</i>	245
<i>Cross Order</i>	246
<i>Inside Limit</i>	246
<i>Pegging Orders</i>	246
VOLUME	248
<i>All or Nothing (AON)</i>	248
<i>Partial</i>	248
<i>Sweep Reserve</i>	248
EXPIRATIONS	248

<i>Day</i>	248
<i>Day +</i>	249
<i>Good Until Canceled (GTC)</i>	249
<i>Immediate or Cancel (IOC)</i>	249
<i>NOWSM</i>	249
<i>Market Order Auction (MOA)</i>	250
SUITABILITY	250
REALTIME WINDOWS WITH ORDER ENTRY	251
<i>Order Entry Screen (OES)</i>	251
<i>Order Book</i>	251
<i>MarketMaker</i>	252
<i>MarketMinder</i>	253
<i>TurboOptions</i>	254
<i>Stocks</i>	254
PLACING ORDERS	254
Buy from the Order Entry Screen in Order Book	254
Sell from the Order Entry Screen in MarketMaker	256
Place a Deferred Order from the Order Book	257
Place a Conditional Order from MarketMaker	258
Load a Conditional Order	260
Place a Reserve Order	261
Place a Track Bid or a Track Offer	262
Place a Cross Order	263
Place a Market or Limit Order Auction Order	264
Place a Sweep Reserve Order	264
Place an Inside Limit Order	265
Place a Passive Discretionary Order	265
Select a Discretion Limit Range	266
Place a Basic Pegging Order	267
<i>Random Reserve Order</i>	268
Set the Random Reserve	268
Place a Random Reserve Order	269
<i>BasketMinder</i>	270
Setup the Basket Order Entry Window	270
Configure a Standard BasketMinder Order	271
Advanced Nasdaq Configuration	272
Advanced Listed Configuration	273
Customize Order Parameters	274
Basket Quantity/Execution	274
Limit Market Exposure	275
USING ACCOUNTS	276
Show Account Balance	276
Trade with Another Account	276
CANCELING ORDERS	277
Quick Double-Click Cancel	277
Cancel Using Cancel Now!!	278

Cancel Using Cancel Order.....	278
Confirm All Trades	279
SETTING ORDER ENTRY DEFAULTS FOR QUICK TRADING	280
Set General Order Entry Defaults	280
Change the Spin Button Defaults	282
Set Keypad to Configure the Volume	283
Set Reserve Order Defaults.....	283
Set an Alarm for an Order Event.....	284
Set Warnings to Display after a Specific Action.....	285
Setting Button Colors.....	286
Setting Order Status Colors.....	287
SETTING ORDER ALERTS	288
Add a Sound Alert to a Conditional Order.....	288
Set a Price Warning	288
CREATING HOT KEYS	289
Create a Buy Hot Key	289
Create a Sell Hot Key	291
Create a Bid Hot Key.....	292
Create an Offer Hot Key	293
Create a Cancel Orders (Symbol) Hot Key.....	294
Create a Close Position (Symbol) Hot Key.....	294
Create a Cancel Orders (Account) Hot Key.....	295
Create a Close Position (Account) Hot Key.....	296
Interact with Order View	297
Create an Actionless Hot Key	298
Create a Change Order Action Hot Key.....	299
Create a “Bump” Hot Key	299
Clone a Hot Key	300
Edit a Hot Key	300
Delete a Hot Key.....	301
Create the Hot Key Action Bar	301
CHAPTER 8: TRACKING POSITIONS AND ACCOUNT BALANCES	304
POSITIONMINDER™	304
Create a PositionMinder	305
Select an Account	305
Change the Column Layout	306
ORDERMINDER.....	307
Create an OrderMinder	307
Multiple Selections in an OrderMinder.....	308
View the Order Transaction Summary.....	308
Link a MarketMinder to an OrderMinder	310
TICKETMINDER	310
Display Ticketed Orders	310
MULTIQUOTE™.....	311
Configure the MultiQuote Window to View Your Positions	312
Configure the MultiQuote Window to View Your Account Balance.....	312
Select an Account	312

ORDER BOOK	313
View Your Account Balance.....	313
CHAPTER 9: USING ADVANCED FEATURES	315
COMMIT CHANGES	315
Edit & Save Data in a Chart.....	315
Edit & Save Data in a Table.....	316
SCRIPTS	316
<i>Designing</i>	316
Design a Script.....	316
<i>Executing</i>	318
CHAPTER 10: TROUBLESHOOTING.....	319
CONNECTIVITY PROBLEMS	319
Perform a TalTrade Ping Test	319
Perform an Internet Connectivity Test	320
Perform a TraceRoute Test	321
DATA OUTAGES AND DATA INTEGRITY	322
CHAPTER 11: REALTICK ADD-ONS	323
HOTTREND™	323
Display Hottrend.....	323
Access Hottrend through the MarketMinder Favorite	323
Link Hottrend RealTime Radar to another RealTick Window	325
Display a Symbol in the Linked Window	325
Drag and drop a symbol from the Hottrend Favorite.....	325
View the Day Summary	325
HOTTREND SMART ALERTS	326
Access Hottrend Smart Alerts	326
Setup an Alert.....	326
OZ SCANNER	326
<i>Usual Suspects Scan</i>	326
<i>Knock Down Scan</i>	326
<i>Power Trader Scan</i>	327
<i>New Kid on the Block Scan</i>	327
<i>Gapper Scan</i>	327
<i>Bottom Fisher Scan</i>	327
<i>Sky Scraper Screen</i>	327
<i>10 ½ Weeks Scan</i>	327
<i>9 ½ Weeks Scan</i>	327
Access an Oz Scanner	328
MARKETGAUGE	329
Access MarketGauge	329
BARRA RISK FACTOR	330
Access Barra Risk Factor	330
Display Barra Risk Factors for a Stock	330

GLOSSARY 311

<i>Absolute</i>	311
<i>Ask</i>	311
<i>All or None (AON)</i>	311
<i>Annotation</i>	311
<i>Arms' Ease of Movement</i>	311
<i>Basket Order</i>	311
<i>Best Bid or Offer (BBO)</i>	311
<i>Bid</i>	311
<i>Bollinger Bands</i>	312
<i>Broker/Dealer</i>	312
<i>Buy</i>	312
<i>Call</i>	312
<i>Cancel Order</i>	312
<i>Candlestick Charts</i>	312
<i>Commodity</i>	312
<i>Conditional Order</i>	312
<i>Currency</i>	313
<i>Daily</i>	313
<i>D Averaged</i>	313
<i>D Fast</i>	313
<i>D Slow</i>	313
<i>Day</i>	313
<i>Day +</i>	313
<i>Deferred Order</i>	313
<i>Delta</i>	313
<i>Depth of Market</i>	314
<i>Differential</i>	314
<i>Discretionary Order</i>	314
<i>Discretionary Price</i>	314
<i>Dividend</i>	314
<i>DOW</i>	314
<i>Downtick</i>	314
<i>ECN</i>	315
<i>Exchange</i>	315
<i>Expiration</i>	315
<i>Futures</i>	315
<i>Good Til Cancel</i>	315
<i>Grid Lines</i>	315
<i>Interest Rate</i>	315
<i>Intraday</i>	315
<i>Investment</i>	315
<i>Initial Public Offering</i>	316
<i>Immediate or Cancel (IOC)</i>	316

<i>K Fast</i>	316
<i>Kurtosis</i>	316
<i>LAN</i>	316
<i>Level II</i>	316
<i>Limit Order</i>	316
<i>Limit Price</i>	316
<i>Listed</i>	316
<i>MACD Oscillator</i>	316
<i>Market</i>	317
<i>Market Maker</i>	317
<i>Market Order</i>	317
<i>Mean</i>	317
<i>MID</i>	317
<i>Moments</i>	317
<i>Monthly</i>	317
<i>Monthly Average</i>	317
<i>Momentum Oscillator</i>	317
<i>Moving Average</i>	318
<i>Moving Average Convergence Divergence</i>	318
<i>Moving Average Oscillator</i>	318
<i>Moving Linear Regression</i>	318
<i>NASDAQ</i>	318
<i>New York Stock Exchange</i>	318
<i>NOW</i>	318
<i>Offer</i>	318
<i>On Balance Volume</i>	318
<i>Online Trading</i>	319
<i>Open Interest</i>	319
<i>Option</i>	319
<i>Order</i>	319
<i>Oscillators</i>	319
<i>Parabolic Price/Time</i>	319
<i>Partial</i>	319
<i>Percent Offset</i>	319
<i>Position</i>	320
<i>Post No Preference</i>	320
<i>Preference</i>	320
<i>Price</i>	320
<i>Put</i>	320
<i>Quote</i>	320
<i>Rate of Change in Prices</i>	320
<i>Ratio</i>	320
<i>Real Time</i>	321
<i>Relative Strength Index</i>	321

<i>Reserve Order</i>	321
<i>Route</i>	321
<i>Scaling</i>	321
<i>Security</i>	321
<i>Sell</i>	321
<i>Server</i>	321
<i>Short</i>	322
<i>Signal Line</i>	322
<i>Skew</i>	322
<i>Staged Order</i>	322
<i>Standard Deviation</i>	322
<i>Stochastic</i>	322
<i>Stock</i>	322
<i>Stop and Reverse</i>	323
<i>Stop Limit Order</i>	323
<i>Stop Market Order</i>	323
<i>Stop Price</i>	323
<i>Strike Price</i>	323
<i>Symbol</i>	323
<i>Target</i>	323
<i>TA_SRV</i>	324
<i>Ticker</i>	324
<i>Tick Count</i>	324
<i>Tier</i>	324
<i>TOP</i>	324
<i>Trade</i>	324
<i>Trading Session</i>	324
<i>Trailing Stop</i>	324
<i>Trend Lines</i>	324
<i>Uptick</i>	325
<i>Variance</i>	325
<i>Volatility</i>	325
<i>Volatility Ratio</i>	325
<i>Volume</i>	325
<i>Weekly</i>	325
<i>Williams' Accumulation Distribution</i>	325
<i>Williams Percentage Range</i>	325
CONTENTS	III
INDEX	18

About This Manual

This manual is intended to help you learn the features in RealTick® version 7.6.

It describes in detail the functionality of RealTick, including order types and technical analysis. It provides you with the decision support you need to trade effectively.

Sections in this Manual

Chapter	Description
Chapter 1: Introduction	This chapter provides a brief description of RealTick, its users, its capabilities, and permissions.
Chapter 2: Installing RealTick	This chapter provides installation procedures and describes the contents of the Townsend Analytics, Ltd. (TAL) directory.
Chapter 3: Getting Around in RealTick	This chapter describes the RealTick menu bar, toolbar, and status bar.
Chapter 4: Using Basic RealTick Features	This chapter describes basic features in RealTick, including how to log on, change passwords, TAL Mail, print data, load symbols, and set defaults.
Chapter 5: Gathering Market Data	This chapter describes why and how to use certain RealTick features to monitor the market.
Chapter 6: Charts & Technical Analysis	This chapter provides a special emphasis on Charts, including Technical Analysis.
Chapter 7: Placing Orders	This chapter describes order types, and why and how to use certain RealTick features to sell and purchase stock.

Chapter	Description
Chapter 8: Tracking Positions and Account Balances	This chapter describes why and how to use certain RealTick features to track positions and accounts.
Chapter 9: Using Advanced Features	This chapter describes advanced activities, such as how to design and execute a script to automate a variety of tasks.
Chapter 10: Troubleshooting RealTick	This chapter provides troubleshooting procedures concerning any problems connecting to or using RealTick.
Chapter 11: RealTick Add-ons	This chapter provides information concerning Hottrend, OZ Scanner, and MarketGauge.

Conventions in the Manual

The following table describes the text styles used in this manual.

Convention	Description
1. Type the . . .	Numbered text are steps you must follow to perform a certain task.
Click	Click means to press your left mouse button once.
Double-click	Quickly press your left mouse button twice.
Choose	Click an item with your left mouse button.
Choose from a drop-down list	Click the arrow located to the right of a drop-down list field. The system displays the drop-down list. Click the information from the list and release your mouse button.
Bold	The manual lists buttons, fields, and menu commands in bold. You must click the button, type data into the field, or choose the menu that appears in bold.

Convention	Description
<i>Italics</i>	The manual occasionally lists data you must type in italics.

This manual is intended to instruct users in how to use RealTick and its features. It is not intended to teach users how to trade. Any references to particular stock symbols or corporations appear by way of example only and do not represent an endorsement of Townsend Analytics.

Recommended Reading

There are numerous books and web sites available to teach you about the stock market and how to trade. The following table lists reference material you may want to review.

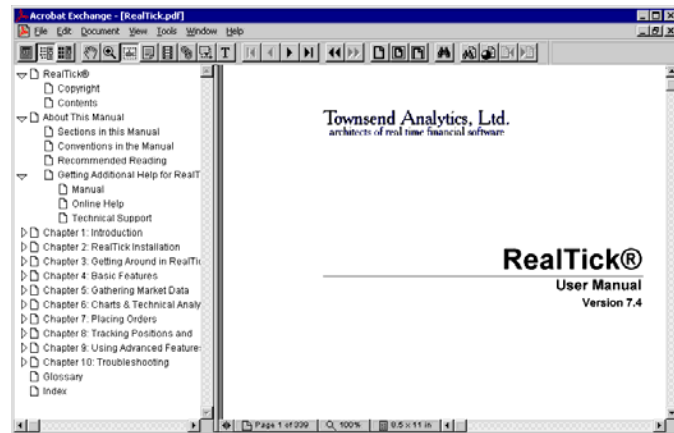
Name of Reference	Author
Rules of the Trade	David Nassar
The Neatest Little Guide to Stock Market Investing	Jason Kelly
How To Take Money from Wall Street – Learn to Profit in Bull and Bear Markets	Tony Oz
Electronic Day Trader: Successful Strategies for On-Line Trading	Marc Freidfertig
The Four Biggest Mistakes In Option Trading	Jay Kaeppel
Getting Started In Futures	Todd Lofton
Getting Started In Stocks	Alvin D. Hall
www.investorwords.com	WebFinance, Inc

Getting Additional Help for RealTick

You can get additional help for RealTick through the online help files, through the www.realtick.com web site, and by calling the Townsend Analytics, Ltd. technical support team.

Manual

The `rtuserman.pdf` file is located on the RealTick web site at www.realtick.com. You can print additional copies of this manual or quickly review a section of the manual. You must have Adobe Acrobat Reader to view the document.

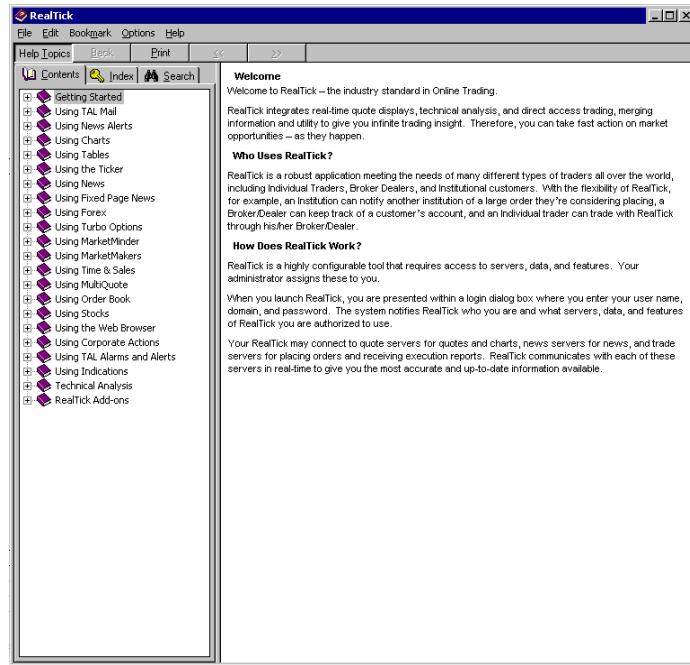


RealTick Manual

With the `rtuserman.pdf` file, you can use the bookmarks on the left side of the window to quickly access a section in the manual. Click the bookmark of the section you want to access, and the section appears on the right side of the window. See the online help for Adobe Acrobat Reader for more information.

Online Help

The fastest way to get assistance while using RealTick is to look in the online help. With the RealTick online help, all the information you need is available right on your window. Simply click *Help Topics* from the Help menu to access the online help.



RealTick Online Help

Context Sensitive Help

RealTick 7.6 includes Context Sensitive Help. Click a Help button on any dialog box in RealTick and a help screen will appear explaining each attribute of the dialog box. Also included in the Help screens are links to further information relative to the dialog box.

Technical Support

You can either contact the vendor that you purchased RealTick from, or contact the Townsend Analytics, Ltd. Technical Support team through the RealTick web site, www.realtick.com. From the web site, you can e-mail the technical support team, or you can call Townsend Analytics, Ltd. Technical Support at 1-800-997-9630.

Chapter 1: Introduction

Welcome to RealTick

Welcome to RealTick – the industry standard in online trading from Townsend Analytics, Ltd.

RealTick integrates real-time quote displays, technical analysis, and direct access trading, merging information and utility to give you infinite trading insight. Therefore, you can take fast action on market opportunities – as they happen.

Who Uses RealTick?

RealTick is a robust application meeting the needs of many different types of traders all over the world, including Individual Traders, Broker/Dealers, and Institutional customers. With the flexibility of RealTick, for example, an Institution can notify another Institution of a large order they're considering placing, a Broker/Dealer can keep track of a customer's account, and an Individual trader can trade with RealTick through his/her Broker/Dealer.

How Does RealTick Work?

RealTick is a highly configurable tool that requires access to servers, data, and features. These are assigned to you by your administrator.

When you launch RealTick, you are presented with a login dialog box where you enter your user name, domain, and password. The system then notifies RealTick who you are and what servers, data, and features of RealTick you are authorized to use.

Your RealTick may connect to quote servers for quotes and charts, news servers for news, and trade servers for placing orders and receiving execution reports. RealTick communicates with each of these servers in real-time to give you the most accurate and up-to-date information available.

What Can I Do With RealTick?

With RealTick, you can monitor the market, place orders, and research companies. If you own stock, you can use RealTick to manage your intraday portfolio. For example, let's pretend you're interested in purchasing Microsoft®.

Step 1: You want to know how Microsoft stock has reacted in the market for the last 5 years.

You can view the history of Microsoft's prices with a chart. By creating a Monthly chart for the last 5 years, you can view the information at a glance.

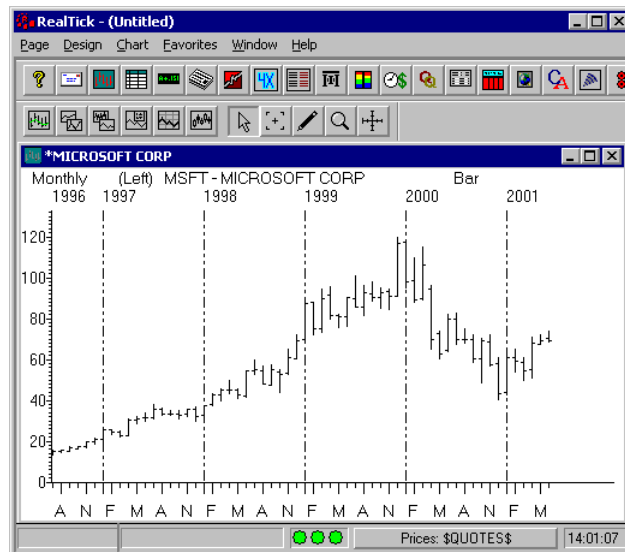
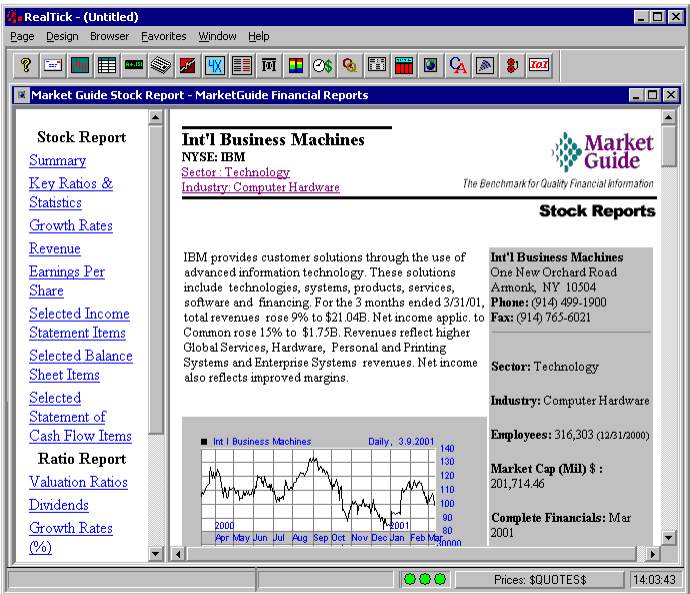


Chart Window

Step 2: You want the industry profile for Microsoft, including when the company was started and the current CEO.

You can gather this information using Market Guide. Market Guide is a corporation that gathers details about publicly traded companies, such as the history of the company, the company's cash flow, revenue, and growth rates. It provides you with 5 years of fundamental history of a company.



Market Guide

Step 3: You want to purchase Microsoft at the best offer.


With the MarketMaker window, you can easily view who is offering the best price for Microsoft and quickly place your order. The MarketMaker displays Level II data and ECN book data, so you can see the depth of the market.



MarketMaker Window

Step 4. You want to track your shares.

With a MarketMinder window, you can create a PositionMinder to track your stocks in the market. The PositionMinder offers many data fields, including Scalped P&L, Net Position, and Total Profit. The PositionMinder tracks your profit and loss on each of your positions.



The screenshot shows the RealTick - (Untitled) window with the PositionMinder tab active. The window title is "RealTick - (Untitled)" and the menu bar includes Page, Design, MarketMinder, Favorites, Window, and Help. The toolbar contains various icons for navigation and analysis. The main area displays a table titled "Position Minder: positionsdefault.bvw <TAL,TEST,BONINI,DEMO>". The table has columns for Symbol, P&L Open Pos, Last, Net Chg, Net Pos, Avg Prc, Scalped P&L, and P&L Total. The data rows are as follows:

Symbol	P&L Open Pos	Last	Net Chg	Net Pos	Avg Prc	Scalped P&L	P&L Total
MSFT	1413.06	69.08	-1.61	400	65.56		1413.06
DELL	35.53	25.57	+ 38	50	24.86		35.53
MOT	-2200.00	13.93	-95	2000	15.01		-2200.00
Totals							-751.41

The status bar at the bottom shows "Prices: \$QUOTES\$ 14.25.10".

PositionMinder Window

As demonstrated with our Microsoft example, RealTick has numerous features to help you make the best decisions, place trades quickly, and monitor events.

Permissions

The feature-rich design of RealTick offers the most comprehensive, dynamic analytics package available, extending itself to many different types of users, including Individual Traders, Broker/Dealers, and Institutions. Its ability to meet the needs of such a broad audience of traders requires customer permissions.

Certain features in RealTick are only available for certain customers. If you do not have a particular feature, you are not permissioned for it. If you have any questions or concerns regarding your RealTick permissions, please contact your RealTick vendor.

Chapter 2: RealTick Installation

This chapter discusses system requirements and installation procedures for RealTick.

System Requirements

The RealTick program requires the proper hardware and operating systems.

Hardware Requirements

A slow connection can hamper RealTick's performance, so please compare your computer's processor, memory (RAM), and operating system as well as the equipment and speed of your Internet connectivity to the suggested specifications listed here. Active users should have the equipment listed in the "Best" column to ensure top performance.

The following table contains the minimum and recommended requirements for your computer to run RealTick.

	Minimum	Recommended	Best
Processor	Pentium Pro 180 MHz	Pentium III 700 MHz	Pentium III 700 MHz or better
RAM	64 MB (Physical)	128 MB (Physical)	256 MB (Physical) or better
Hard Drive	2 GB	4 GB or better	4 GB or better
Operating System	Windows 95, 98, or 2000, ME (Y2K compliant)	Windows NT Workstation 4.0 with Service Pack 4 or greater or Windows 2000	Windows 2000
Modem	56.6 Kbps	ISDN or Broadband	Broadband Or Direct Line

Internet Requirements

The following table contains the minimum and recommended requirements for your Internet connection.

	Minimum	Recommended	Best
Connectivity Provider	Any Internet Service Provider	A Local Online Service Provider	Backbone Provider
Connection Line	Single, Shared Line	ISDN, DSL or Cable modem	Dedicated (leased) line Or Frame Relay
Speed	56K	<250 ms	<100 ms
Services	E-mail	E-mail	E-mail

Screen Display Requirements

The following table lists the minimum and recommended requirements for your computer screen display.

	Minimum	Recommended	Best
Screen Size	15 in.	17 in.	19 in. or better
Video Card	512 KB	2 MB	4 MB or better
Resolution	640 x 480	800 x 600	1024 x 768
Refresh Rate	60 Hz	72 Hz	85 Hz
Color Depth	4-bit/16 colors	8-bit/256 colors	16-bit/65,536 colors

Software

The following table lists the software we recommend you purchase for your web browser, E-mail, and for other RealTick features. These programs are optional.

Program	Use
Microsoft Internet Explorer	It is required you use Microsoft Internet Explorer for your web browser.
Microsoft Outlook	It is recommended you use Microsoft Outlook as your E-mail program.
Adobe Acrobat Reader	It is recommended you install Adobe Acrobat Reader version 4.0. The RealTick web site posts updated versions of manuals and training guides in .pdf format. To review these materials, you must have a copy of Adobe Acrobat Reader which is a free program provided by Adobe.

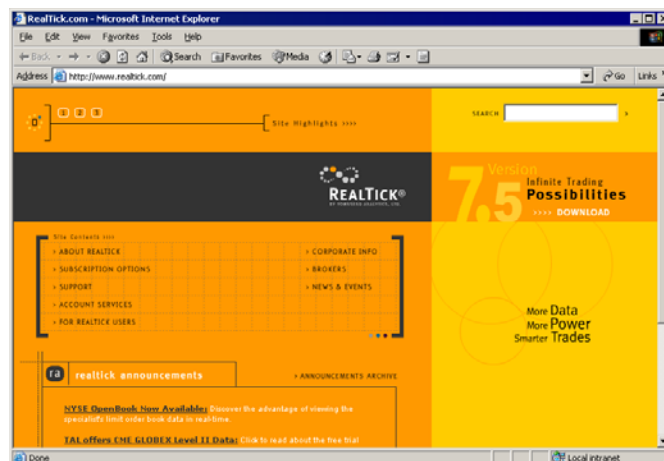
Installation Procedures

You can download the latest version of RealTick from the web site, www.realtick.com.

Download Installation from RealTick.com

1. Start your Internet browser. It is recommended you use Microsoft Internet Explorer.
2. In the **Web Address** field, enter **www.realtick.com**.

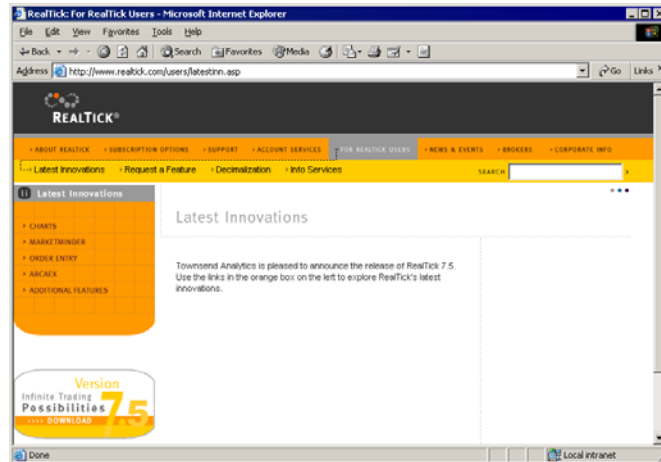
The RealTick web site appears.



RealTick Web Site

3. Click **Download**.

The **Download Center** page will appear.



Download Center

4. Click **Download**.

The **Download Options** page appears.

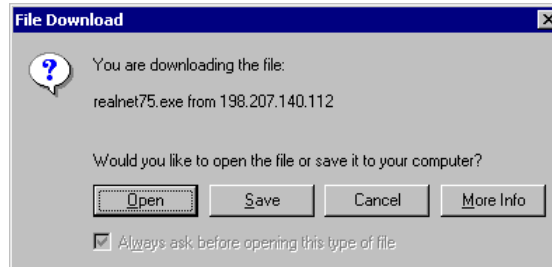
5. Click one of the download options.

Download Option	Description
HTTP	For a standard download, use the HTTP connection.
FTP	If for security reasons you are unable to download files from the web, use the FTP download.
Multiple Files	If you have a slow, intermittent Internet connection, you may prefer to download multiple files. However, the multiple file download is more complicated and will take longer than the standard, single-file download. You will need at least 30 minutes.

Instructions for installing RealTick will appear.

6. Click the **Realnet** link.

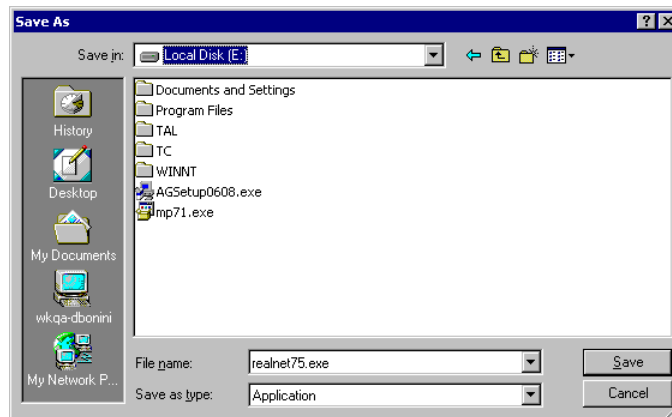
The **File Download** dialog box appears.



File Download Dialog Box

7. Click **Save**.

The **Save File As** dialog box appears.



Save As Dialog Box

8. Choose a directory to download the file to, and click **Save**.

When the download is finished, the **Download complete** dialog box appears.

9. Click **Close**.

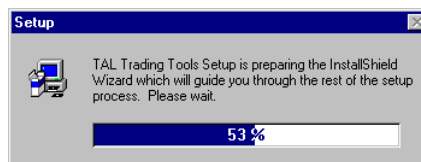
You are now ready to install RealTick.

Install RealTick

Once you are finished downloading the latest version of RealTick, you must install the program.

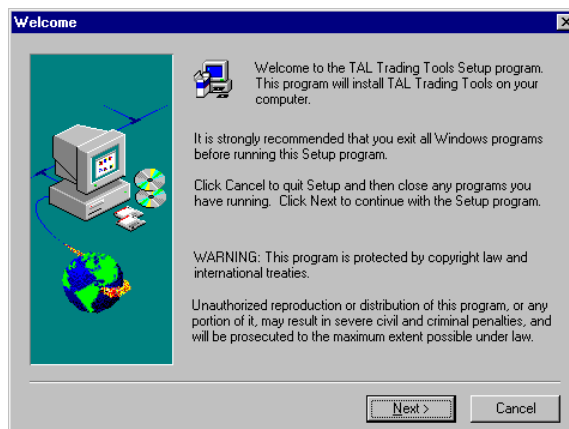
1. Access the directory you downloaded the RealNet.exe file to, and double-click the file.

The system unpacks the installation program and displays the **Setup** dialog box.



Setup Dialog Box

The installer program then displays the **Welcome** dialog box.



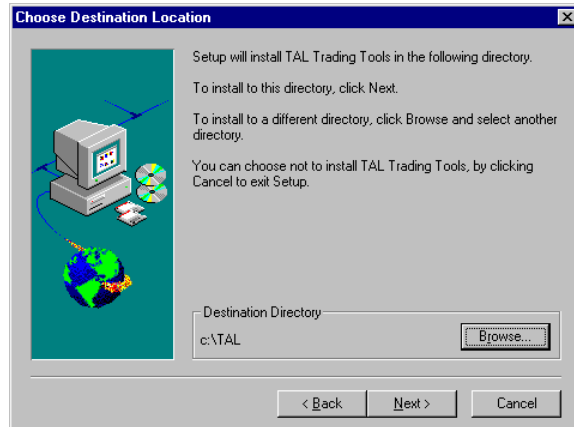
Welcome Dialog Box

2. Click **Next**.

The **Choose Destination Location** dialog box appears.



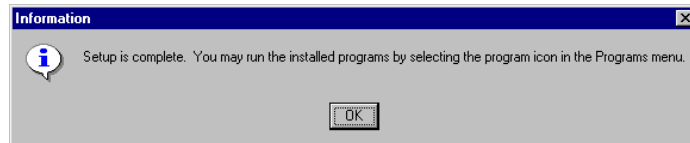
***Note:** You can change the directory by clicking the **Browse** button and searching for a new directory. Once you choose the directory, the installation occurs.*



Choose Destination Location Dialog Box

3. Click **Next** to accept the default installation destination.

The installation occurs and the **Information** dialog box appears.



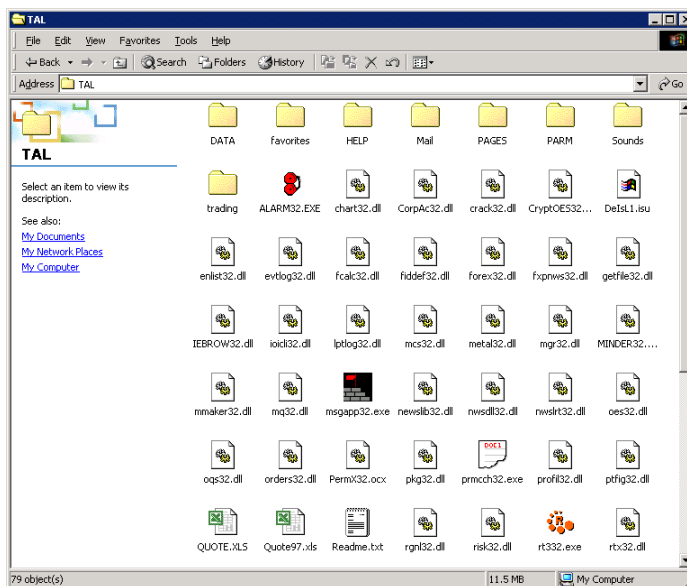
Information Dialog Box

4. Click **OK**.

You have successfully installed RealTick.






Files Installed


When you finish installing RealTick, you will have a new TAL directory on your computer.



TAL Directory

The TAL directory contains .dll files, .exe files, and other files necessary for RealTick to run. The TAL directory also contains sub-directories that are described in the table below.

Sub-Directory	Description
 Data	The Data directory contains your activities for a particular day.
 favorites	The Favorites directory contains your saved favorites – preconfigured windows.
 Help	The Help directory contains the online help system for RealTick.
 Pages	The Pages directory contains all your saved RealTick pages – layouts of preferred window arrangements.
 Parm	The Parm directory contains all the symbol lists, and MarketMinder and MultiQuote layouts.

Sub-Directory	Description
 Sounds	The Sounds directory contains all the sound files to use with RealTick's Alarms and Alerts feature.






Chapter 3: Getting Around in RealTick

This chapter discusses the RealTick Title bar, Menu bar, Toolbar, and standard Microsoft® Windows® operating system features you can use to navigate through RealTick.

Windows® Features in RealTick

RealTick is a Windows-based application. You can resize and navigate through RealTick using standard Microsoft Windows operating system features.

The following table describes the different Windows features you can use in RealTick.

Feature	Functionality
Window Border 	Click and drag the window border to resize the window. When in the correct position, the pointer is a double-headed arrow.
Minimize Button 	Click the Minimize button to minimize RealTick to a button on the Windows Taskbar.
Restore Down 	Click the Restore Down button to decrease the size of the RealTick window.
Maximize Button 	Click the Maximize button to maximize RealTick to fit the entire screen.
Close Button 	Click the Close button to shutdown RealTick.



Note: The *Minimize*, *Restore Down*, *Maximize*, and *Close* buttons are also on the Title bar of the windows within RealTick, so these same features apply to a Chart or a MarketMinder window as well.

Column Widths

Some windows in RealTick resemble spreadsheets. These windows contain both columns and rows for displaying data. You can easily change the size of a column.

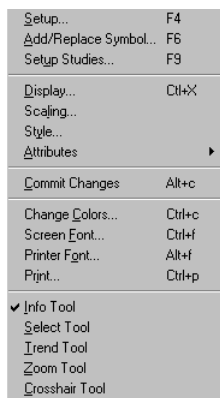
You can resize columns.

You can resize columns.

MarketMinder Window

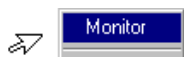
1. Move the cursor to the column line that divides the field.
The cursor changes to a double-arrow.
2. Click and hold the left mouse button down while moving right or left to expand or contract the column.
The system adjusts the column width.

You can use the right button on your mouse to quickly access commands also listed in the menu bar. For example, instead of clicking Setup from the Chart menu on the menu bar to access the Setup window, you can click your right mouse button on the Chart window. The system will display the Chart menu commands. You can choose Setup from this list to display the Setup window.



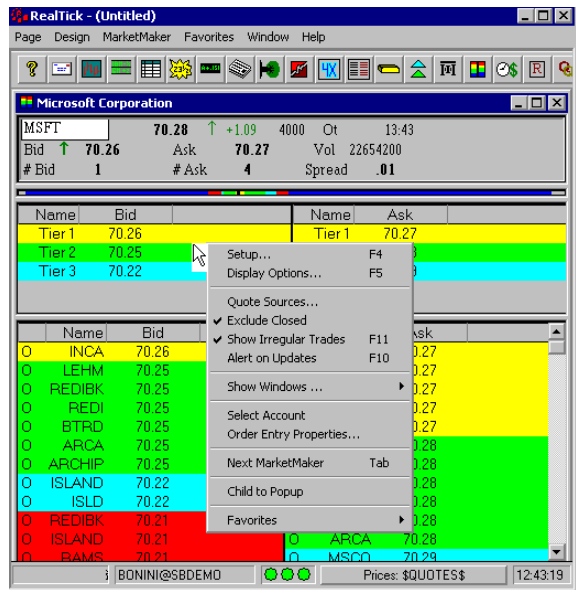
Right-Mouse-Button Menu for the Chart Window

You can access the menu commands much faster by right-clicking a window than by clicking the Menu bar.

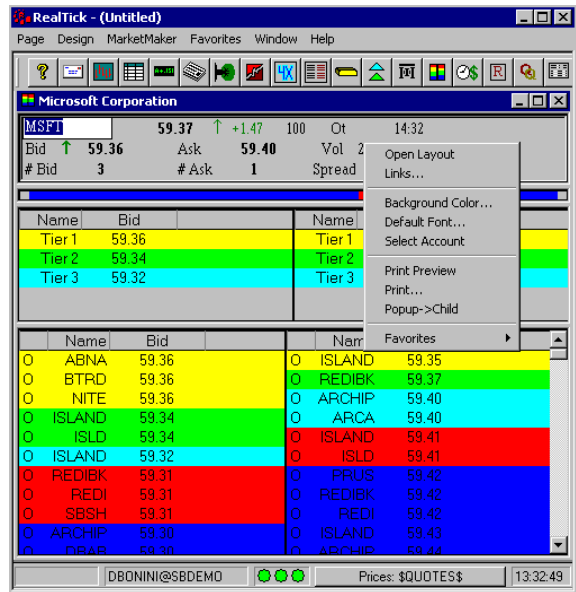


For some RealTick windows, there are certain commands only available on the Menu bar, and other commands only available on the right-mouse-button menu. For example, you can monitor a specific quote by choosing *Monitor* from the right-mouse-button menu in MarketMaker. The monitor feature is only available through the right-mouse-button menu.

On some RealTick windows, when you click your right mouse button on a different area of the window, you access a different menu. For example, when you click your right mouse button on the MarketMontage™ area of the MarketMaker window, you access a different menu than if you click on the MultiQuote™ section of the window.



MarketMontage Right-Mouse-Button Menu



MultiQuote Right-Mouse-Button Menu

Drop-Down Lists

You choose data for many fields from drop-down lists. A drop-down list contains a down arrow to the right of the field.



Drop-Down List for Data Period Field

When you click on the down arrow, a list of choices for the field appears.

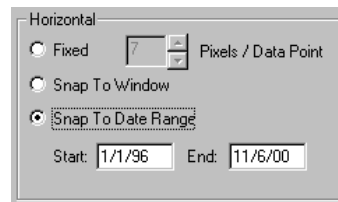


Drop-Down List for Data Period Field

You can only choose the data available in the list for the field. For example, when you create a chart, you must choose the type of chart you want to create from the list of options available.

Option Buttons

Option buttons are either small, round, radio buttons or small, square, check boxes. With the radio buttons, you can only choose one of the options listed. The chosen button contains a black dot.



Radio Button

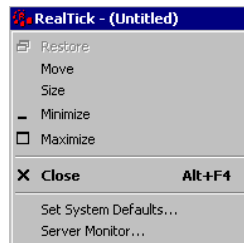
You can choose one, all, or none of the check boxes. The chosen boxes contain black check marks.



Check Box

RealTick Control Menu

The RealTick program contains a control menu in the upper left corner of the Title bar.



RealTick Control Menu

You can resize the program window, set defaults for all RealTick windows, and check server status with the RealTick Control menu.

RealTick Menu Bar

RealTick uses a Windows-based menu bar. The menu commands include Page, Design, Favorites, Window, and Help. Whenever a window is selected, RealTick displays a menu option on the menu bar next to the Design menu that only applies to the selected window. This menu is referred to as the "Function" menu. For example, if you choose Chart from the Design menu, the Chart menu appears.



RealTick Menu Bar without Chart Menu



RealTick Menu Bar with Chart Menu

The following table describes the complete menu bar on the RealTick window.

Menu Command	Functionality
Page Menu	
Open	Displays the Open Page dialog box where you can choose a page to display.
New	Creates a new page.

Menu Command	Functionality
Save As	Displays the Save As dialog box where you can name and save a page not yet saved, or to rename a saved page.
Save	Saves any changes you made to a page.
Page Manager	Displays the Page Manager dialog box where you can rename, re-order, add, delete, and open pages.
Next Page Or Previous Page	Navigates through pages.
Print	Prints the active window.
Print All	Prints all the windows on the RealTick page.
Print Screen	Displays the Print Configuration dialog box where you can configure the print job or save the window capture as a Bitmap.
Design Script	Displays the Script Design dialog box where you can create a script.
Execute Script	Opens a RealTick Script file.
Toolbars	Hides the toolbar.
Design Toolbar	Hides the Design Toolbar buttons.
Function Toolbar	Hides toolbar buttons specific to a window, such as Charts.
Status Bar	Hides the status bar.
Change Password	Displays the Change Password dialog box where you can change your login password.
Display Alerts	Displays the TAL Alerts dialog box where you can configure a price alert.

Menu Command	Functionality
Design Menu	
Show TAL Mail	Displays the TAL Mail window where you can view your mail.

Menu Command	Functionality
Show News Alert	Displays the News Alerts window where you can configure news alerts.
Chart	Displays the Chart Setup dialog box where you can configure the data to display in a graph.
Table	Displays the Table Setup dialog box where you can configure the data to display in a table.
Ticker	Displays the Setup Ticker dialog box where you can configure the real-time price and volume information to display.
News	Displays the Quick Search Criteria dialog box where you can configure the news headlines and stories to display.
Fixed Page News	Click Fixed Page News to read daily updated news stories.
Forex	Displays the Currency Menu dialog box where you can configure currency cash prices to view.
TurboOptions™	Displays the Setup Turbo Options dialog box where you can configure option data to display.
MarketMinder	Displays the Minder Setup dialog box where you can configure virtually any type of quote information to display.
MarketMakers	Displays the MarketMaker / Regional Setup dialog box where you can configure Level II data to display.
Time & Sales	Displays the Setup Time and Sales dialog box where you can select a symbol to display its time and price information.
MultiQuote	Displays the Open dialog box where you can select a layout to display different sets of fundamental data, price data, and account (margin) information.
Order Book	Displays the Order Book window where

Menu Command	Functionality
	you can trade.
Stocks	Displays the Stocks Setup dialog box where you can configure several different RealTick windows in one composite window.
Web Browser	Displays the Browser Setup dialog box where you can view sites on the World Wide Web.
Corporate Actions	Displays the Corporate Actions Setup dialog box where you can configure a search to track a company's activity, such as dividends, stock splits, and initial public offerings.
TAL Alarms	Displays the Alarms Setup dialog box where you can configure a notification for when a certain event occurs.
Indications	Displays the IOI Setup window where you can configure filters to view indications.

Menu Command	Functionality
Chart Menu	
Setup	Displays the Chart Setup dialog box where you can modify a chart window.
Add/Replace Symbol	Displays the New Symbol dialog box where you can add or replace a symbol to the chart.
Setup Studies	Displays the Select Studies dialog box where you can add or remove a technical study.
Display	Displays the Chart Display Options dialog box where you can change the font, color, or layout of the chart.
Scaling	Displays the Chart Scaling dialog box where you can alter the scale of both the horizontal and vertical axis of the chart.
Style	Displays the Chart Type dialog box where you can change the chart's calculation type. Choose between Normal, Ratio, Differential,

Menu Command	Functionality
	or Percent Change.
Attributes	Click Attributes for quick access to options to scale a chart and to change the display.
Auto Scale	Click Auto Scale to scale the chart so the visible data uses all of the available screen space.
Snap to Window	Click Snap to Screen to scale the chart so all the visible data uses the entire screen space.
Display Price Tracking Window	Display a specific point's price information.
Grid	Show grid lines.
Annotation	Displays the Chart Annotation dialog box where you can write a note.
Candlestick	Change to a candlestick chart.
Show Pivot Lines	Show pivot lines.
Calculate VWAP	Displays the Calculate VWAP dialog box where you can calculate the Volume Weighted Average Price for a specified time range.
Commit Changes	Save data changes. Only available for LAN customers.
Change Colors	Change the display colors.
Screen Font	Displays the Screen Font dialog box where you can change the display font.
Printer Font	Displays the Font dialog box where you can change the printer font.
Print	Prints the chart window.
Info Tool	Display a specific point's price information.
Select Tool	Move, copy, size, or delete trend lines.
Trend Tool	Create a trend line.
Zoom Tool	Enlarge a section of a chart.
Crosshair Tool	View the data of one specific point on a

Menu Command	Functionality
	chart.
Favorites	Access the favorites.
Add to Favorites	Displays the Save Favorite dialog box where you can save a chart layout.
List of Favorites	Saved Chart layouts.

Menu Command	Functionality
Table Menu	
Setup	Displays the Table Setup dialog box where you can modify the table display.
Add/Replace Symbol	Displays the New Symbol dialog box where you can add or replace a symbol.
Setup Studies	Displays the Select Studies dialog box where you can add or remove technical studies.
Calculate VWAP	Displays the Calculate VWAP dialog box where you can calculate the Volume Weighted Average Price for a specified time range.
Display	Displays the Table Display Options dialog box where you can change the font, color, or layout.
Style	Displays the Chart Type dialog box where you can configure the calculation type.
Commit Changes	Save data changes. Only available for LAN customers.
Change Colors	Displays the Color Setup dialog box where you can change the display colors.
Screen Font	Displays the Font dialog box where you can change the display font.
Printer Font	Displays the Font dialog box where you can change the printer font.
Print	Displays the Print dialog box where you can print the table window.



Hint: You can choose to view data from all available exchanges (composite data) or from a selected exchange(s).

Menu Command	Functionality
Ticker Menu	
Setup	Displays the Setup Ticker dialog box where you can modify the Ticker window.
Exchanges	Displays the Select Regional Exchanges dialog box where you can select a single exchange or to select composite data.
NASDAQ Quote Sources	Displays the Quote Sources to Display dialog box where you can select quote sources.
Colors	Displays the Ticker Color Selection dialog box where you can change the display colors.
Font	Displays the Font dialog box where you can change the display font.
Cascade	Toggle your Ticker display between Jet (horizontal scrolling) and Cascade (vertical scrolling).
New Line on Top	Display the newest quote information on the first line of the window.
Clear	Clear all the quotes currently displayed on the window.
Child -> Popup	Move the Ticker window outside of RealTick or from one page to another.
Popup -> Child	Return the Ticker window to a RealTick page.

Menu Command	Functionality
News Menu	
Search Criteria	Displays the Quick Search Criteria dialog box where you can modify the search criteria.
Find Headline	Displays the Find dialog box where you can search for keywords amongst the headlines.
Go To	Displays the Go To dialog box where you



***Note:** By default, the previous and next story is selected by number, but you can choose to select it by story or headline.*

Menu Command	Functionality
	can view specific news stories not included in the headline list.
Go To Last Story	Re-open the last viewed news story.
Configure	Displays the Configure dialog box where you can change the display and behavior of the News window.
Copy Headlines	Copy headline(s) to the Windows clipboard.
Copy Story	Copy the current story from the story window to the Windows clipboard.
Toggle Panes	Move among the standard split pane, the headline pane, and the story pane.
Hide Scrollbars	Remove or restore the scroll bars.
Next Story Page	Move from the current story to the next story.
Previous Story Page	Move from the current story to the previous story.
Print	Displays the options to print the headline panel or print the story displayed in the lower panel of the active window.
Setup	Displays the Print dialog box where you can configure the print settings.
Headlines	Prints the headlines.
Story	Prints the story.
Automatically Print Stories	Send every story you request to the printer immediately.
Add Story to Print Scheduler	Create a group of stories you can either print or export to a text file.
Setup Print Scheduler	Displays the Scheduled Story Configuration dialog box where you can add stories to the print list, choose a file name for export, and set the time for printing or exporting of the chosen stories.
Font	Displays the options to change the headline or story font.



***Note:** Alert headlines will appear in red (or whatever color you designated for Alerts in the Colors window). The “HOT” category is an Alert category by default.*

Menu Command	Functionality
Headline	Displays the options to change the screen or print font.
Story	Displays the options to change the story screen or print font.
Screen	Displays the Font dialog box where you can change the display font.
Printer	Displays the Font dialog box where you can change the printer font.
Change Colors	Displays the Select Colors dialog box where you can choose the text and background color for different types of headlines displayed in the headline window.
Set Alert Categories	Displays the Alert Categories dialog box where you can designate a category as an alert.
Newest At Top	Display the newest headline at the top.
Auto Request Stories	Request the story associated with each new headline as it is received from the server.
Alarm	Set an audible alert for the arrival of each new headline.
Child -> Popup	Move the News window outside of RealTick or from one page to another.
Popup -> Child	Return the News window to a RealTick page.

Menu Command	Functionality
Fixed Page News Menu	
Choose Server	Displays the Select Server dialog box where you can choose a different server.
Find Headline	Displays the Find Page in \$NEWS\$ - Fixed... dialog box where you can search for a particular headline.
Go To	Displays the Go To dialog box where you can search headlines by Source and Page number rather than by the usual search

Menu Command	Functionality
	criteria.
Go Back	Go back to the previous story visible in the story window.
Configure	Displays the Configure dialog box where you can add columns to the headline tree and set other parameters relating to the Fixed Page News display.
Copy Story	Copy a story to the Windows Clipboard.
Maximize Story Window	Maximize the story window.
Print	Displays the options to print.
Setup	Displays the Print dialog box where you can configure the print settings.
Story	Print a story.
Font	Displays the options to change the fonts and printer fonts for the headline list and the story window.
Headline	Displays the option to change the font for the screen or for print.
Story	Displays the options to change the font for the screen or for print.
Screen	Displays the Font dialog box where you can change the display font.
Print	Displays the Font dialog box where you can change the print font.
Colors	Displays the Select Colors dialog box where you can change the display colors.
Close	Close the Fixed Page News window.
Child ->Popup	Move the Fixed Page News outside of RealTick or from one page to another.
Popup -> Child	Return the Fixed Page News window to a RealTick page.
Toggle Scrollbars	Remove or restore the scroll bars to the



***Note:** The Fonts you choose here apply to the Forex window and will be used by the printer if you select the Print command.*

Menu Command	Functionality
	selected news window.
Split Window	Display the headline tree and the story panel at the same time.

Menu Command	Functionality
Forex Menu	
Setup Fields	Displays the Setup Forex dialog box where you can select the exchange rate information to be displayed.
Setup Currencies	Displays the Currency Menu dialog box where you can select currencies.
Fonts	Displays the Font dialog box where you can change the display font.
Colors	Displays the Select Colors dialog box where you can change the display colors.
Print Preview	View the Forex window, as it will appear when printed.
Print	Print the Forex window.
Toggle Scrollbars	Remove or restore the scroll bars.

Menu Command	Functionality
TurboOptions Menu	
Setup	Displays the Setup TurboOptions window where you can modify the TurboOptions window.
Exchange	Displays the Select Regional Exchange window where you can specify the regional exchange.
Print	Displays the Print dialog box where you can print the TurboOptions window.
Font	Displays the Font dialog box where you can change the display font.
Color	Displays the Select Colors screen where you



***Note:** Normally the data in your TurboOptions window will be updated in real-time. The Refresh command is a manual override that forces an immediate refresh.*

Menu Command	Functionality
	can change the display colors.
Refresh	Request new data from the Server.
Option Root Info	Displays the Option Root Settlement Info dialog box where you can view information about each series available, such as contract size and multiplier (for US Equity Options only).
Select Account	Displays the Select Account dialog box where you can choose a new trading account.
Show Order View	Click Show Order View to display the Order Entry fields.
Show Regional View	Click Show Regional View to display a MarketMaker panel.
Order Entry Properties	Displays the Order Entry Properties dialog box where you can set system wide defaults for the order entry system, including default quantities and routes.
Favorites	Displays the favorites.
Add to Favorites	Displays the Save Favorite dialog box where you can save a TurboOptions layout.
List of Favorites	Saved TurboOptions layouts.

Menu Command	Functionality
MarketMinder Menu	
Setup	Displays the Minder Setup dialog box where you can modify a MarketMinder window.
Quick Setup	Displays the Quick Futures Setup dialog box where you can select a commodity.
Load Symbols	Displays the Load Symbols dialog box where you can choose a symbol file (list of symbols) to replace the list of symbols previously loaded in the MarketMinder window.
Save Symbols	Displays the Save Symbols dialog box



***Note:** Multi-layered sorting can help you to grasp the market situation at one glance. Simple sorts organize the database on one value. The default sort organizes the data by symbol in alphabetical order.*

Menu Command	Functionality
	where you can create a new symbol file from the list of symbols in the MarketMinder.
Links	Displays the Select Window to Link dialog box where you can link other windows to the MarketMinder
Column Layout Choices	Displays column layout options.
Configure Column Layout	Displays the Column Layout dialog box where you can choose columns.
Load Column Layout	Displays the Column Layout dialog box where you can open pre-configured column layouts.
Save Column Layout	Save changes to the column layouts.
Save Column Layout As	Displays the Save Layout dialog box where you can save a new column layout or to rename a column layout.
Set Default Layouts	Displays the Set Default Layouts dialog box where you can change the default layout for each type of MarketMinder window: the Standard MarketMinder, the PositionMinder, or the OrderMinder.
Display Options	Displays the Display Options dialog box where you can configure text, color, and highlighting.
Custom Sort	Displays the Custom Sort dialog box where you can sort or organize data in a column.
Show Ticker	Displays a Ticker.
Select Account	Displays the Select Account dialog box where you can view data or place trades with another account.
Order Entry Properties	Displays the Order Entry Properties dialog box where you can set system wide defaults for the order entry system, including default quantities and routes.
Show Order Entry	Displays the OES.

Menu Command	Functionality
Screen	
Show Market Making Screen	Displays the Market Making order entry panel.
Show Basket Order Screen	Displays the Basket order entry panel.
Load a Basket	Displays the Open dialog box where you can open a BasketMinder.
Save Basket	Displays the Save As dialog box where you can save a BasketMinder.
Copy to Clipboard	Copy information from the MarketMinder window to the Windows Clipboard.
Paste from Clipboard	Copy data from the Windows Clipboard into MarketMinder.
Child -> Popup	Move the MarketMinder window outside of RealTick or from one page to another.
Popup -> Child	Return the MarketMinder window to a RealTick page.
Favorites	Access MarketMinder favorites.
Add to Favorites	Displays the Save Favorite dialog box where you can save a MarketMinder layout as a favorite.

Menu Command	Functionality
MarketMakers Menu	
Setup	Displays the MarketMaker / Regional Setup dialog box where you modify a MarketMaker window.
Display Options	Displays the Display Options dialog box where you change the font, color, and layout.
Quote Sources	Displays the Quote Sources to Display dialog box where you select the quote source.
Exclude Closed	Exclude all closed quotes.



Note: The Market Montage displays the total bids, asks, and sizes of the trades in the same range level.

Menu Command	Functionality
Show Irregular Trades	Display all irregular trades.
Alert on Updates	RealTick will beep every time it receives an update from the server.
Show Windows	Displays the window options you can display.
MultiQuote	Remove or restore the MultiQuote display.
Range Bar	Remove or restore the Range Bar.
Market Montage	Add a Market Montage.
Order Entry Screen	Add the Order Entry fields.
Ticker	Add a Ticker.
Select Account	Displays the Select Account dialog box where you can select an account for trading.
Order Entry Properties	Displays the Order Entry Properties dialog box where you can set system wide defaults for the order entry system, including default quantities and routes.
Next MarketMaker	Move between multiple MarketMaker windows on a RealTick page.
Child to Popup	Move the MarketMaker window outside of RealTick or from one page to another.
Popup to Child	Return the MarketMaker window back to a RealTick page.
Favorites	Access MarketMaker favorites.
Add to Favorites	Displays the Save Favorite dialog box where you can save a MarketMaker layout as a favorite.

Menu Command	Functionality
Time & Sales Menu	
Setup	Displays the Setup Time And Sales dialog box where you can modify a Time & Sales window.
Add/Replace Symbol	Displays the New Symbol dialog box where you can add or replace symbols.
Rgnl Exchanges	Displays the Select Regional Exchanges window where you can select an exchange.
Calculate VWAP	Displays the Calculate VWAP dialog box where you can calculate the volume weighted average price for a specified price range.
Change Colors	Displays the Color Setup dialog box where you can change the display color.
Screen Font	Displays the Font dialog box where you can choose a display font.
Printer Font	Displays the Font dialog box where you can choose a font for print.
Print	Displays the Print dialog box where you can print the Time & Sales window.
Copy to ClipBoard	Copy data from the Time & Sales window to the Windows Clipboard.
Child -> Popup	Move the Time & Sales outside of RealTick or from one page to another.
Popup -> Child	Return the Time & Sales window to a RealTick page.

Menu Command	Functionality
MultiQuote Menu	
Setup	Displays the MultiQuote Setup dialog box where you can modify the MultiQuote window.
Open Layout	Displays the Open dialog box where you can

Menu Command	Functionality
	choose a layout to open.
Save Layout	Save any changes to a layout.
Save Layout As	Displays the Save As dialog box where you can rename an existing layout.
Edit Mode	This option is not available.
Links	Displays the Select Window to Link dialog box where you can link the MultiQuote window to another window in RealTick.
Set Properties	Displays the Properties dialog box where you can enter a description, a title, your name, and additional comments about a particular MultiQuote window.
Toggle Background	Toggle between different backgrounds.
Background Bitmap	Displays the Open dialog box where you can add or change a bitmap picture to the background.
Background Color	Displays the Color dialog box where you can select a background color.
Default Font	Displays the Font dialog box where you can change the font of a MultiQuote window.
Select Account	Displays the Select Account dialog box where you can select a new account.
Print Preview	View how your MultiQuote window will appear on the printed page.
Print	Displays the Print dialog box where you can print the MultiQuote window.
Child -> Popup	Click Child -> Popup to move MultiQuote outside of RealTick or from one page to another.
Popup -> Child	Click Popup -> Child to return the MultiQuote window to a RealTick page.
Favorites	Access MultiQuote favorites.
Add to Favorites	Displays the Save Favorite dialog box

Menu Command	Functionality
	where you can save a MultiQuote layout as a favorite.

Menu Command	Functionality
Order Book Menu	
Setup	Displays the OrderBook Setup dialog box where you can modify the OrderBook window.
Select Account	Displays the Select Account dialog box where you can choose a new account.
Order Entry Properties	Displays the Order Entry Properties dialog box where you can set system wide defaults for the order entry system, including default quantities and routes.
Put Managed Orders in Separate Panel	Displays a separate panel for managed orders, such as Conditional orders and Deferred orders.
Show Account Balance	Displays the account balance.
Show Order Entry Screen	Displays the order entry fields.
Show Order Price Summary	Displays fills aggregated at each price level.
Copy to Clipboard	Copy data from the OrderBook window to the Windows Clipboard.

Menu Command	Functionality
Stocks Menu	
Setup	Displays the Stocks Setup dialog box where you can modify the Stocks window.
Next Window	Scrolls forward through the tabs.
Previous Window	Scrolls backwards through the tabs.
Select Tab Font	Displays the Font dialog box where you can change the style, size, and color of the text

Menu Command	Functionality
	on the window tabs.
Configure Tabs	Displays the Configure Tabs dialog box where you can add or remove tabs to the Stocks window.
Open Tab Layouts	Displays the Open dialog box where you can open a specific type of Stocks window.
Save Tab Layout	Displays the Save As dialog box where you can save the Stocks window.
Configure Active Tab	Displays the Setup dialog box for the particular window where you can configure the tab currently opened.
Select Account	Displays the Select Account dialog box where you can choose a new account.

Menu Command	Functionality
Web Browser Menu	
Back	Displays the previous web page.
Forward	Displays the next page.
Stop	Terminates a downloading web page.
Refresh	Reload the current web page.
Home	Load the home page.
Setup	Displays the Browser Setup dialog box where you can modify the Web Browser.
Toolbar	Toggle the navigational toolbar on and off.
Status Bar	Toggle the status bar on and off.
Favorites	Access Browser favorites.
Child to Popup	Click Child -> Popup to move Web Browser outside of RealTick or from one page to another.
Popup to Child	Click Popup -> Child to return Web Browser to a RealTick page.

Menu Command	Functionality
Corporate Actions Menu	
Setup	Displays the Corporate Actions Setup dialog box where you can modify the Corporate Actions window.
Font	Displays the Font dialog box where you can choose the font.
Background Color	Displays the Color dialog box where you can choose a standard or custom color for the background.

Menu Command	Functionality
TAL Alarms Menu	
Setup	Displays the Alarm Setup dialog box where you can modify TAL Alarms.
Display Alerts	Displays the TAL Alerts dialog box where you can create, change, delete, and turn off an alert.
Font	Displays the Font dialog box where you can change the font.
Clear	Clears all the quotes displayed on the window.

Menu Command	Functionality
Indications Menu	
Setup	Displays the IOI Setup dialog box where you can modify the IOI Client window.
Show Order Entry Screen	Add Order Entry fields.
Detail for IOI	Display the details for a specific indication listed in the IOI Client window.

Menu Command	Functionality
Favorites Menu	
Add to Favorites	Displays the Save Favorite As dialog box, where you can name, configure, save, and add the window to the Favorites list.
Edit Favorites	Displays the Edit Favorites dialog box where you can choose a favorite you would like to edit.
List of Favorites	Chart, MarketMinder, MarketMaker, MultiQuote, Stocks, TurboOptions, Web Browser

Menu Command	Functionality
Window Menu	
Tile	Arrange the windows on the page vertically, side by side in columns.
Tile Horizontally	Arrange the windows on a page horizontally, one on top of the other.
Cascade	Arrange the windows on the page. It will stack windows one on top of another.
Arrange Icons	Align the window icons along the bottom of the RealTick screen.
Close All	Close all the windows open on the RealTick page.
Save Defaults	Saves the font and color settings of your active window for all new windows of the same type.
List of Windows	List of the open windows.

Menu Command	Functionality
Help Menu	
Help Contents	Open the on-line help.
Symbol Guide	Displays the Symbol Search dialog box where you can search for a ticker symbol or a

Menu Command	Functionality
	company's name.
Jump to our Home Page	Display the RealTick home page.
About RealTick	Open the Version dialog box containing the RealTick Module versions.

RealTick Toolbar

You can quickly create any RealTick window by using the RealTick toolbar. Some RealTick windows also have their own toolbar buttons. For example, if you create a Chart window, additional Chart icons (also known as the Function menu) are added to the toolbar.

The RealTick toolbar is dockable. You can configure the toolbar vertically or horizontally.



RealTick Toolbar without the Chart Function Menu



RealTick Toolbar with the Chart Function Menu

The following table describes the complete toolbar on the RealTick window.



















Icon	Description
Show Help Topics 	Click this toolbar button and the help menu will appear.
TAL Mail 	Click this toolbar button and the TAL Mail dialog box will appear.
Chart 	Move the mouse over the toolbar button without clicking and the Chart favorites will appear, or click the button and configure a Chart window.

Table 	Move the mouse over the toolbar without clicking and the Table favorites will appear, or click the button and configure a Table window.
Ticker 	Move the mouse over the toolbar button without clicking and the Ticker favorites will appear, or click the button and configure a Ticker window.
News 	Move the mouse over the toolbar button without clicking and the News favorites will appear, or click the button and configure a search for news.
Fixed Page News 	Move the mouse over the toolbar button without clicking and the Fixed Page News favorites will appear, or click the button and the Fixed Page News window appears.
Forex 	Move the mouse over the toolbar button without clicking and the Forex favorites will appear, or click the button and configure a Forex window.
TurboOptions 	Move the mouse over the toolbar button without clicking and the TurboOptions favorites will appear, or click the button and configure a TurboOptions window.
MarketMinder 	Move the mouse over the toolbar button without clicking and the MarketMinder favorites will appear, or click the button and configure a Minder window.
MarketMaker 	Move the mouse over the toolbar button without clicking and the MarketMaker favorites will appear, or click the button and configure a MarketMaker window.
Time & Sales 	Move the mouse over the toolbar button without clicking and the Time & Sales favorites will appear, or click the button and configure a Time & Sales window.

MultiQuote 	Move the mouse over the toolbar button without clicking and the MultiQuote favorites will appear, or click the button and configure a MultiQuote window.
Stocks 	Move the mouse over the toolbar button without clicking and the Stocks favorites will appear, or click the button to configure a Stocks window.
Web Browser 	Move the mouse over the toolbar without clicking and the Web Browser favorites will appear, or click the button to configure a Web Browser.
Corporate Actions 	Move the mouse button over the toolbar button without clicking and the Corporate Actions favorites will appear, or click the button to configure a Corporate Actions window.
TAL Alarms 	Move the mouse over the toolbar button without clicking and the TAL Alarms favorites will appear, or click the button to configure TAL Alarms.
Indications 	Move the mouse over the toolbar button without clicking and the Indications favorites will appear, or click the button to configure an Indications window.

RealTick Status Bar

The RealTick status bar is displayed on the bottom of the RealTick program window. With this bar, you can view your name and domain, server connection status, and time.

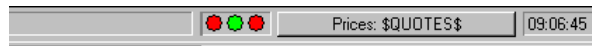
RealTick connects to different servers via the Internet for quote and order data. When you are connected to the servers, the system displays three green lights in the status bar.



RealTick Status Bar

The first light is for the Price Server connection, the middle light is for the News Server, and the light on the right is for the Trade Server connection.

When you lose connections to any of the servers, the system displays a red light on the status bar for the server.



RealTick Status Bar displaying a connection error

A yellow light indicates a potential problem with a server, such as data queuing, or no response from a server.

No light indicates there is no feed or data available.

The following table describes the information displayed on the RealTick status bar.

Feature	Description
Name and Domain	The Name and Domain displays your login name and domain.
Status Lights	The Status Lights displays your connection.
Server Button	The Server Button opens the Select Server dialog box where you can select the server you would like to point to.
Time	The Time displays the time in hours, minutes, and seconds.

Chapter 4: Basic Features

This chapter discusses the basic features of RealTick, including TAL Mail.

Starting RealTick

When you purchased RealTick, your RealTick vendor should have supplied you with a user name, domain name, and password to log on to RealTick. Once you're in RealTick, you can change your password.

RealTick icon.



Log On to RealTick

1. Select **RealTick** from the **Start** menu.

The **Enter Your User Information** dialog box appears.

Enter Your User Information Dialog Box

2. Type your name in the **User Name** field.
3. Type the domain name (supplied to you by your RealTick vendor) in the **Domain Name** field.

NOTE: After the first time you log on to RealTick, you will only need to type your password.



***Note:** Your password is case sensitive.*

4. Type your password (supplied to you by your RealTick vendor) in the **Password** field.
5. Click **OK**.

The **Enter TAL Mail Password** dialog box will appear.

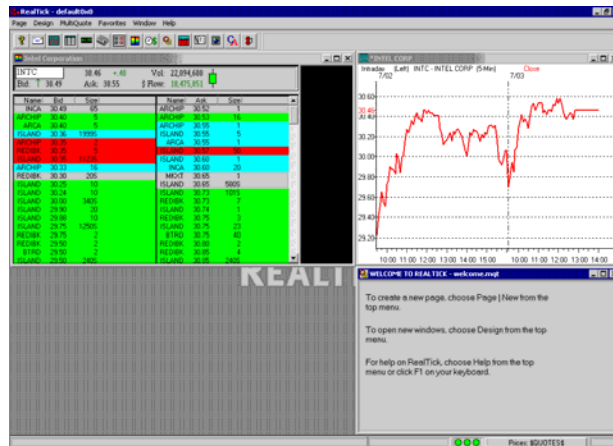


A dialog box titled "Enter TAL Mail Password" with a close button (X) in the top right corner. It contains two input fields: "Username:" with the text "BONINI" and "Password:" which is empty. To the right of the "Username:" field is an "OK" button, and to the right of the "Password:" field is a "Cancel" button.

Enter TAL Mail Password Dialog Box

6. Type your TAL Mail password.
7. Click **OK**.

The RealTick window appears.



RealTick Window

Change Your Password

After you start RealTick, you can change your password.

1. Click **Change Password** on the **Page** menu.
- The program displays the **Change Password** dialog box.



A dialog box titled "Change Password" with a close button (X) in the top right corner. It contains three input fields: "New Password:" with masked text "xxxx", "Confirm new password:" with masked text "xxxx", and "Current Password:" with masked text "xxxx". Below these fields is the text "User requested change". At the bottom are "OK" and "Cancel" buttons.

Change Password Dialog Box

2. Type your new password in the **New Password** field.

3. Type your new password again in the **Confirm new password** field.
4. Type your old password in the **Current Password** field.
5. Click **OK**.

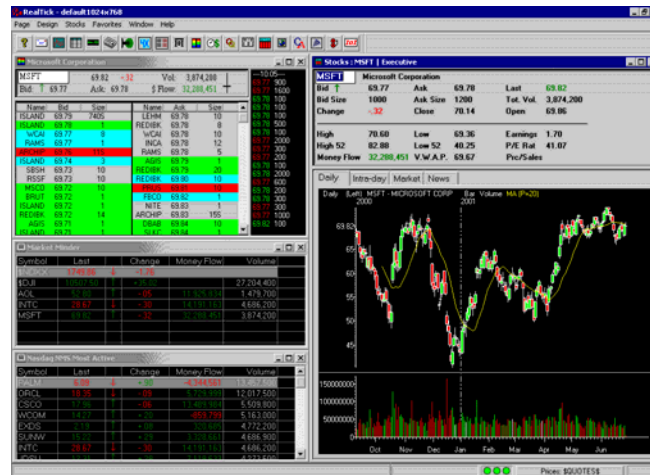
The system changes your password, and closes the window.



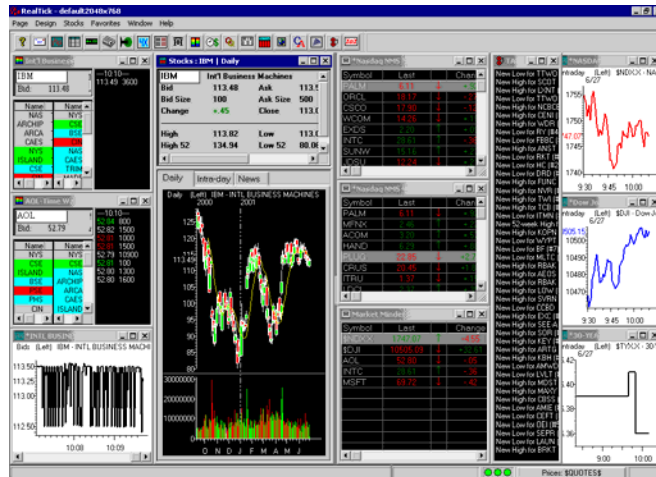
Note: Fixed-page users cannot modify their pages.

RealTick Pages

A Page is a collection of related windows that are opened and closed at the same time. Whenever a new window is created, it is added to the current page. When a window is closed, it is deleted from the current page. Before opening a new page or closing the current page, RealTick gives you the option of saving the changes you have made to the page.



RealTick Page Displaying Data for Microsoft



RealTick Page Displaying Data for IBM

Create a Page

You can create numerous pages for all your trading needs.

- Click **New** on the **Page** menu.

A blank page appears with the word “Untitled” in the title bar.

Open a Page

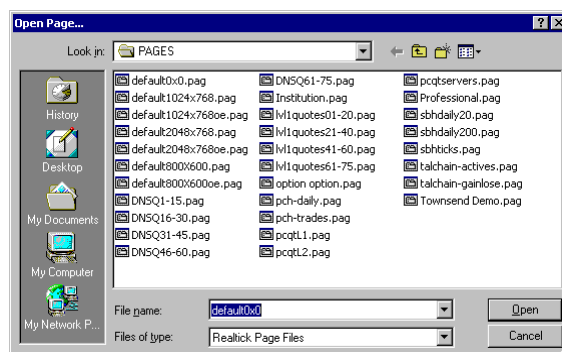
You can open any page you created.

- Click **Open** on the **Page** menu.

The **Open Page** dialog box appears.



Hint: If the page you want to open is saved in a different location than the Pages directory, choose the location from the **Look in** field.



Open Page Dialog Box

- Choose the page you want to open.

3. Click **Open**.
The system displays the page.



Hint: You can also toggle between pages using the plus (+) and minus (-) keys on your number keypad.

View Next or Previous Page

To toggle between different pages, use the Next or Previous Page feature in RealTick.

- To view the last page you displayed, click **Previous Page** on the **Page** menu.
- To view the next page, click **Next Page** on the **Page** menu.

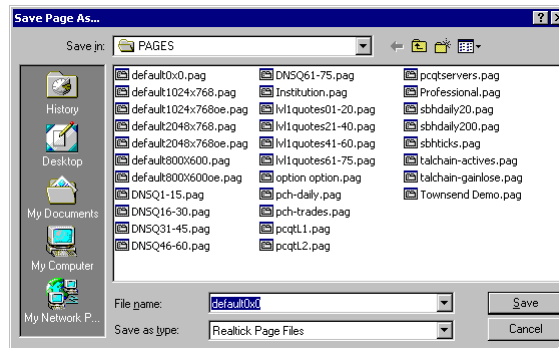
Save a New Page

After you have added data to a page (see chapters 5, 6, and 7), you can save the page.

1. Click **Save As** on the **Page** menu.
The **Save Page As** dialog box appears.



Note: RealTick saves all pages to the TAL/Pages directory, unless you specify another location. You can choose a different location from the **Save in** field.



Save Page As Dialog Box

2. Type a name for the page in the **File name** field.
3. Click **Save**.
The system saves the page and closes the **Save Page As** dialog box.

Save an Existing Page

You can save a page any time you make a change.

- Click **Save** on the **Page** menu.
The system saves the page.

Drag and Drop a Page

You can drag and drop a page into RealTick.

- Click the page and drop it into RealTick.

The page will open.

Using the Page Manager

The Page Manager feature provides you a way to organize and manage your pages. It is an alternative to the Page/Open menu command (which just shows you the page files on your computer's hard drive). Whenever a page is opened, RealTick adds it to the Page Manager, if it is not already present.

Through Page Manager, you can delete, rename, and add pages. For example, if someone e-mails you a page you would like to add to RealTick, all you need to do is save it to your disk, open Page Manager, and click Add Pages. The Page Manager is also useful in LAN environments where users may want to share pages from a network drive in addition to each user's personal pages on his own machine.

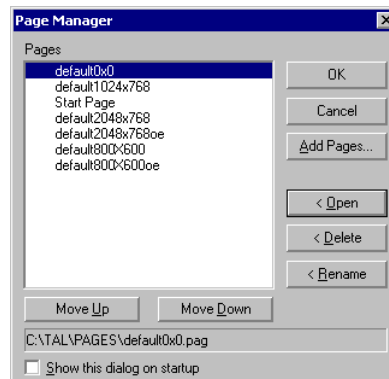
Open the Page Manager Dialog Box

- Click **Page Manager** on the **Page** menu.

The **Page Manager** dialog box appears.



Hint: You can set RealTick to automatically open **Page Manager** after you log on. Check the **Show this dialog on startup** field, and RealTick will open this dialog box after you log on.



Page Manager Dialog Box

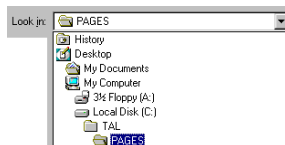
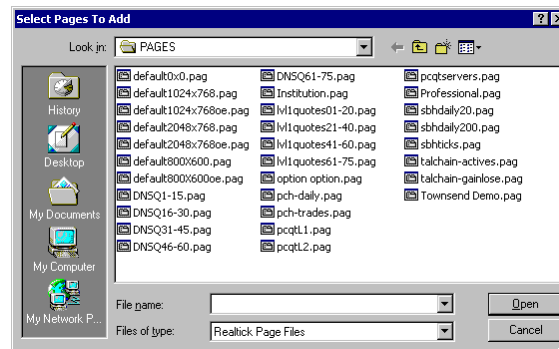


Note: To add a page someone sends you in e-mail, save the page in the **PAGES** directory.

Add a New Page

You can add more pages to your RealTick program. Use this feature if someone sends you a page you want saved to your RealTick.

1. Click **Page Manager** on the **Page** menu.
The **Page Manager** dialog box appears.
2. Click **Add Pages**.
The **Select Pages to Add** dialog box appears.



Select Pages To Add Dialog Box

3. Enter the location of the page in the **Look in** field.
4. Click the drop-down list and double-click the drive and directory of the page.
5. Click the name of the page when it appears in the **Select Pages to Add** dialog box.
6. Click **Open**.
The **Page Manager** window appears with the name of the page added to your list.
7. To view the page, click the name of the page and click **Open**.
The system displays the page.

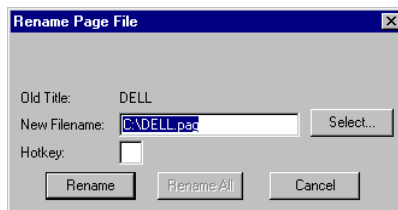
Rename a Page

You can also rename a page without changing any other information on the page.

1. Click **Page Manager** on the **Page** menu.
The **Page Manager** dialog box appears.

2. Click the name of the page you want to rename.
3. Click **Rename**.

The **Rename Page File** dialog box appears.



Rename Page File Dialog Box

4. Type the new name for the page in the **New Filename** field.
5. Click **Rename**.

The program renames the page and displays the **Page Manager** dialog box.

6. Click **OK**.

The program saves all changes and closes the **Page Manager** dialog box.



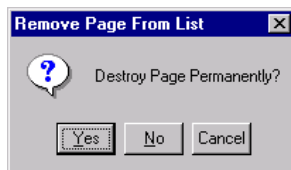
Warning: When you delete a page, it is permanently removed from your computer - not just from RealTick!

Delete a Page

The Delete function allows you to remove a page from the Page Manager's list. When you delete a page, you have the option to delete the page from your drive as well.

1. Click **Page Manager** on the **Page** menu.
The **Page Manager** dialog box appears.
2. Click the name of the page you want to delete.
3. Click **Delete**.

The **Remove Page from List** dialog box appears.



Remove Page From List Dialog Box

4. Click **Yes** to permanently delete the page.
Click **No** if you just want to remove it from **Page Manager**.



***Note:** Once you create a hotkey, you must set the system defaults for hotkeys. See the **Setting System Defaults** section in this chapter.*

Create a Page Hotkey

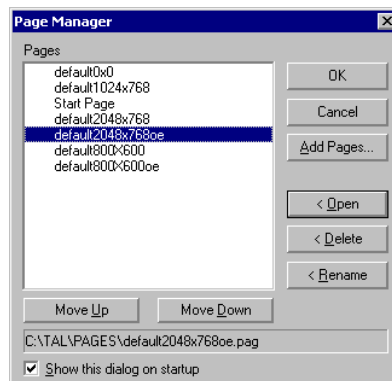
Assign a page a hotkey for quick access. You can type a letter and the page will appear. You must set the system defaults for hotkeys. See **Setting System Defaults** in this chapter.

1. Click **Page Manager** on the **Page** menu.
The **Page Manager** dialog box appears.
2. Click the page you would like to assign a hotkey.
3. Click **Rename**.
The **Rename Page File** dialog box will appear.
4. Type the letter you would like to use for the hotkey in the **Hotkey** field.
5. Click **Rename**.
The **Page Manager** dialog box appears with the hotkey letter next to the page.
6. Click **OK**.
The hotkey is created.

Moving a Page in the Page Manager Dialog Box

You can move a commonly used page up the list of pages in the Page Manager. As a result, you will not have to scroll through a list of pages to the page you most commonly use. You can also move a page down the list.

1. Click **Page Manager** on the **Page** menu.
The **Page Manager** dialog box appears.



Page Manager Dialog Box

2. Click the page you want to move.

3. Click **Move Up** or **Move Down**.
4. Continue clicking **Move Up** or **Move Down** until the page is in the location you want.
5. Click **OK**.

The system saves all changes and closes the **Page Manager** dialog box.

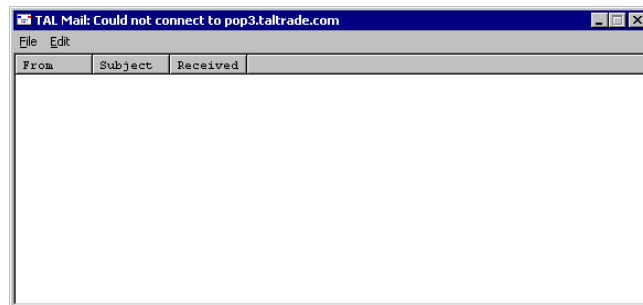
TAL Mail

TAL Mail is RealTick's e-mail program that Townsend Analytics, Ltd. or your broker dealer will use to contact you.

Open TAL Mail

- To open TAL Mail, click **Show TAL Mail** on the **Design** menu.

Your mailbox will appear.



TAL Mail

Changing Your TAL Mail Password

1. Click **Change Mail Password** on the **File** menu of the **TAL Mail** window.

The **TAL Mail: Change Password** box will appear.

2. Type your current password in the **Current Password** field.
3. Type your new password in the **New Password** field.
4. Type it again in the **Re-enter New Password** field.
5. Click **OK**.

The password is changed.

Add a Sound Alert to TAL Mail

1. Click **Sound Alert Properties** on the **File** menu of the **TAL Mail** window.
2. Click the Use Sound when receiving new mail. check box.
3. Click the ellipse (...) button.
4. Select a **.wav** file.
5. Click **Open**.
6. Click **Test**.
7. Click **OK**.
8. The alarm is set.

Add a Mail Alert in the Status Bar

RealTick will display a letter icon in your RealTick status bar to notify you when you receive an e-mail through TAL Mail.

- Select **Alert in Status bar** on the TAL Mail **File** menu.
The alert is set.

Open E-mail Message

When you receive a new message, your mailbox will automatically appear to display the message (only if RealTick is open, and regardless of any other program you may be using at the time you receive the message). You can review these messages as often as you like.

1. In your mailbox, double click the message.
The message will open.
2. After you're finished reading the message, click the **Close** button on the **Title** bar to close the message.

Close TAL Mail

- To close **TAL Mail**, click the **Close** button on the **Title** bar.

Delete E-mail Message

1. In your mailbox, click the message you would like to delete.
2. Click **Delete** on the **Edit** menu.
The message is deleted.

Print E-Mail Message

1. To print an E-mail message, double click the message you would like to print.
The message will open.
2. Click **Print** on the **File** menu.

Printing

You can print a page, a window on a page, or a screen shot of the entire computer screen, including all of RealTick and other open applications.

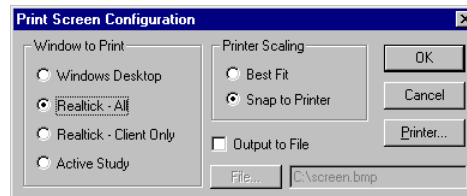
RealTick's Print Screen feature can be used to print the visible contents of any window in RealTick. In addition to this, many windows have their own native printing logic, which allows you to print data that is not currently visible on the screen.

Print the RealTick Page

1. Click **Print Screen** on the **Page** menu.
The **Print Screen Configuration** dialog box appears.



Hint: Best Fit maintains the proportions of the window you are printing. **Snap to Printer** fills the entire page area, changing the proportions of the windows and its contents.



Print Screen Configuration Dialog Box

2. Click **RealTick - All** from the **Window to Print** area.
3. Choose your scaling option from the **Printer Scaling**.
4. Click **OK**.

RealTick prints the entire page.

Print RealTick Windows

Print the RealTick windows without having to print the entire RealTick page. This option will not print the Menu Bar or the Toolbar.

1. Click **Print Screen** on the **Page** menu.
The **Print Screen Configuration** dialog box appears.
2. Click **RealTick - Client Only** from the **Window to Print** area.



Hint: You can scale a window to print on one sheet of paper.

3. Choose your scaling option from the **Printer Scaling** area.
4. Click **OK**.

RealTick prints the windows.

Print One RealTick Window

You can print one of the RealTick windows.

1. Click the window you want to print.
2. Click **Print Screen** on the **Page** menu.

The **Print Screen Configuration** dialog box appears.

3. Click **Active Study** from the **Window to Print** area.
4. Choose your scaling option from the **Printer Scaling** area.
5. Click **OK**.

RealTick prints the window.



Print the Windows Desktop

You can print your entire RealTick page, plus any other Windows applications you have open.

1. Click **Print Screen** on the **Page** menu.

The **Print Screen Configuration** dialog box appears.

2. Click **Windows Desktop** from the **Window to Print** area.
3. Choose your scaling option from the **Printer Scaling** area.
4. Click **OK**.

RealTick prints your Windows desktop.

Save a RealTick Picture as Graphic File

In addition to printing a picture of a RealTick window, you can save the picture as a bitmap.

1. Click **Print Screen** on the **Page** menu.

The **Print Screen Configuration** dialog box appears.

2. Choose what to print from the **Windows to Print** area.
3. Choose your scaling option from the **Printer Scaling** area.
4. Check the **Output to File** field.

The program activates the **File** field.

5. Type the name and location for the bitmap in the **File** field, or choose the location by clicking the **File** button.
6. Click **OK** on the **Print Screen Configuration Dialog** box.

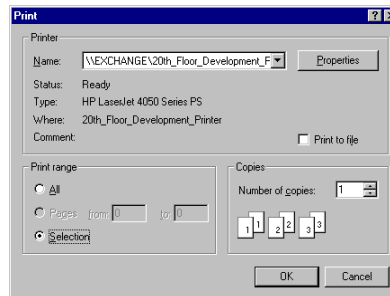
RealTick prints the window and saves the bitmap picture.

Print a Window

You can print ALL the data in a window by using the Print Selection option.

1. Click the window you want to print.
2. Click **Print** on the **Page** menu.

The standard **Windows Print** dialog box appears.



Print Dialog Box

3. Click **Selection** from the **Print range** area.
4. Click **OK**.

The system prints the data from the RealTick window.



Print All the Windows

You can print all the windows on the RealTick page separately. The Print All option will print all the data in each window on separate pages.

- Click **Print All** on the **Page** menu.

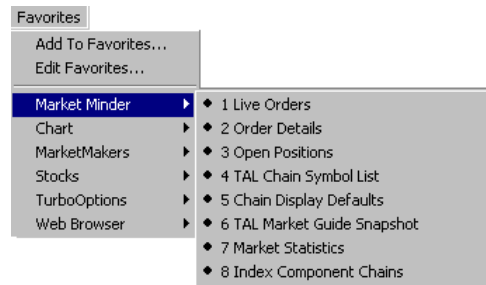
The program prints all the data for each RealTick window on separate pages.

Favorites

Favorites are preconfigured windows saved in RealTick that are available for quick access. RealTick contains favorites of the most commonly used windows.

Using RealTick's Favorites

RealTick comes with pre-configured favorites for five windows: Chart, MarketMinder, Stocks, TurboOptions, and Web Browser.



Pre-Loaded RealTick Favorites

The following table describes each pre-configured RealTick favorite.

Favorite		Description
Chart		
Moving Avg on Volume and Money Flow		Create a Chart displaying moving averages on volume and the money flow.
Line Graph of Close with Volume		Create an Intraday, Candlestick Chart with price tracking and a volume display.
CandleStick with MACD and SP		Create an Intraday, Candlestick Chart with the S & P Index and a MACD study.
MarketMinder		
Live Orders		Create a MarketMinder displaying only live orders.
Order Details		Create a MarketMinder displaying live orders, including the status of the order.
Open Positions		Create a MarketMinder displaying only positions.
TAL Chain Symbol List		Create a MarketMinder displaying a list of all the symbol files available in RealTick.
Chain Display		Create a MarketMinder displaying all of

Favorite	Description
Defaults	the NASDAQ percent gainers.
TAL Market Guide Snapshot	Create a MarketMinder displaying 26 columns of price, volume, and other numeric information.
Market Statistics	Create a MarketMinder displaying a list of all the symbol files available in RealTick, including the last price available for the symbol file.
Index Component Chains	Create a MarketMinder displaying a list of all the index symbol files available in RealTick.
MarketMakers	
Small MarketMaker	Create a mini MarketMaker.
MultiQuote	
MarketIndices	Create a MultiQuote with Market Indices.
Stocks	
Account Info	Create a Stocks window containing two OrderMinders, two PositionMinders, and a Multiquote window displaying live orders, positions, and account balances.
Research	Create a Stocks window displaying a Daily, Intraday, Market, and Monthly chart, and News.
TurboOptions	
Options Watch List	Create a MarketMinder window displaying detailed information about options, including strike and bid prices.
Option Chain	Create a MarketMinder window displaying all the option symbol files available in RealTick.
Web Browser	
Zack's Brokerage Research Center	Create a Web Browser with Zack's web site displaying a company's profile, consensus estimates, annual income statement, and annual balance sheet.

Favorite	Description
Earnings Calendar	Create a Web Browser with Zack's web site displaying the brokerage research data for a period other than the current day, for a future or past date.
Industry Search	Create a Web Browser with Zack's web site displaying the brokerage's research data of a particular industry.
Earnings Surprises	Create a Web Browser with Zack's information displaying the top surprises in the market for the current day.
Market Guide	Create a Web Browser displaying the stock reports and ratio reports for a specific symbol.
TAL TraceRoute	This program tests your connectivity speed. Use when RealTick seems slow.



Open a Favorite

1. Click **Favorites** on the **RealTick** menu bar.
2. Move your mouse to the favorite you want to open.
3. Click the favorite.

The window appears.

Create a Window Using the Chain Symbol Lists

1. Click **TAL Chain Symbol List** on the **MarketMinder** submenu of the **Favorites** menu.

The **TAL Chain Listing** window will appear.

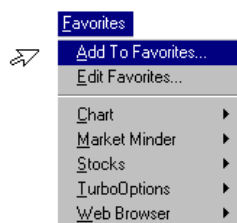
2. Click a symbol list and drag it to a window you would like to create.

The symbols are displayed in the window.

Using Your Own Favorites

Create, change, and delete your own favorites in RealTick. You can save a commonly used layout you create as a favorite.

For example, if you often create a MarketMinder window that displays the 52 week percentage change, the 52 week high, the 52 week low, last price, change last, and volume, you can save the layout as a favorite. Then the next time you create a MarketMinder window, you can just click the favorite.

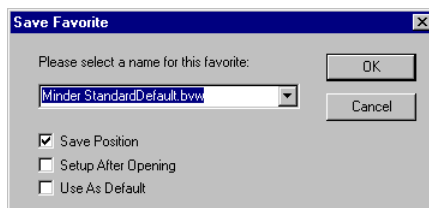


Add to Favorites

After you create a window, you can set the layout as a favorite.

1. Click the window you want to save as a favorite.
2. Click **Add to Favorites** on the **Favorites** menu.

The **Save Favorite** dialog box appears.



Save Favorite Dialog Box

3. Type or choose a name for the favorite in the **Please select a name for this favorite** field.
4. Check **Save Position** if you want your favorite to appear in the same place on any page every time you open it. For example, if you want to see your chart in the lower right hand corner, it will appear there even if you placed it somewhere else the last time you had the favorite opened.
5. Check **Setup After Opening** if you want the window's **Setup** dialog to appear every time you open your favorite. With this option, the favorite acts as a template.
This feature is useful with windows that primary view single-symbols, such as Charts, Tables, and MarketMaker windows.
6. Check **Use As Default** if you want this favorite to be used when you create a new window of this type from the toolbar.
7. Click **OK**.

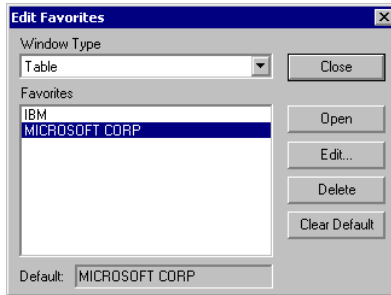
The system saves your favorite.

Change a Favorite

You can change any of the favorites you created.

1. Click **Edit Favorites** on the **Favorites** menu.

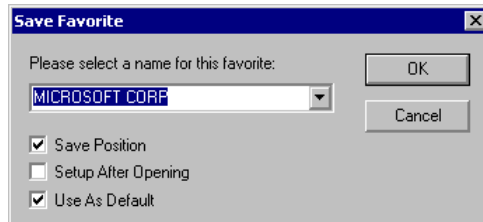
The **Edit Favorites** dialog box appears.



Edit Favorites Dialog Box

2. Select the window from the **Window Type** drop-down list.
3. Click the favorite you want to change in the **Favorites** box.
4. Click **Edit**.

The **Save Favorite** dialog box appears.



Save Favorite Dialog Box

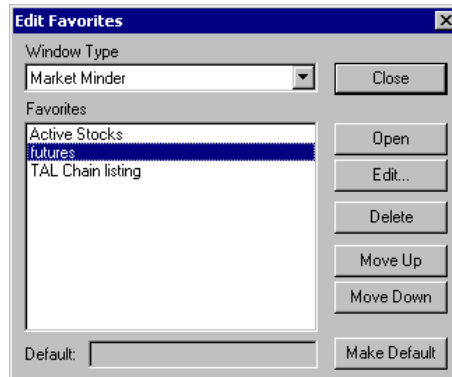
5. Change the name for the favorite in the field labeled **Please select a name for this favorite**. You can type a new name or choose an existing name.
6. Check **Save Position** if you want your favorite to appear in the same place on any page every time you open it. If this option is not selected, RealTick will use its default window-positioning logic.
7. Check **Setup After Opening** if you want the window's **Setup** dialog to appear every time you open your favorite.
8. Check **Use As Default** if you plan to use the window frequently, regardless of the page you're viewing.
9. Click **OK**.
10. Click **Make As Default** if you want to set the favorite as a default for all RealTick pages.
11. Click **OK**.

The system saves the favorite and closes the **Edit Favorites** dialog box.

Organize Your Favorites Menu

1. Select **Edit Favorites** on the **Favorites** menu.

The **Edit Favorites** dialog box appears.



Edit Favorites Dialog Box

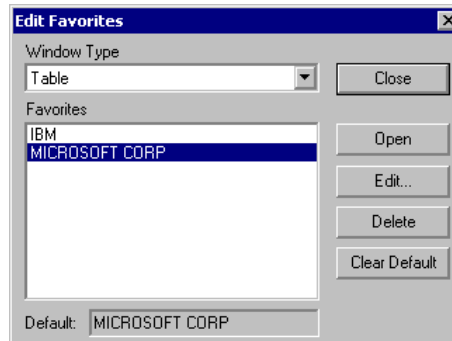
2. Select a favorite.
3. Click **Move Up** or **Move Down** to put your favorite in order.

Delete a Favorite

You can permanently delete any favorite you created.

1. Click **Edit Favorites** on the **Favorites** menu.

The **Edit Favorites** dialog box appears.



Edit Favorites Dialog Box

2. Select the window from the **Window Type** list.
3. Click the favorite you want to delete in the **Favorites** box.
4. Click **Delete**.

The system deletes the favorite.

5. Click **OK**.

The system saves all changes and closes the **Edit Favorites** dialog box.

Child -> Popup

RealTick offers a Child -> Popup command that changes a window to a popup window independent of RealTick. A popup window can move from page to page and/or outside of RealTick. This functionality is included with windows Ticker, News, FixedPage News, MarketMinder, MarketMaker, Time & Sales, MultiQuote, Order Entry, and Web Browser.

Move a Window Outside of RealTick

- Click **Child -> Popup** on the window's function menu.

The window will become independent of RealTick, and the window's function menu will disappear.

Move a Window Back to RealTick

- Click **Popup -> Child** on the window's function menu. You can only access the window's function menu by right-clicking the window.

The window will return to RealTick.

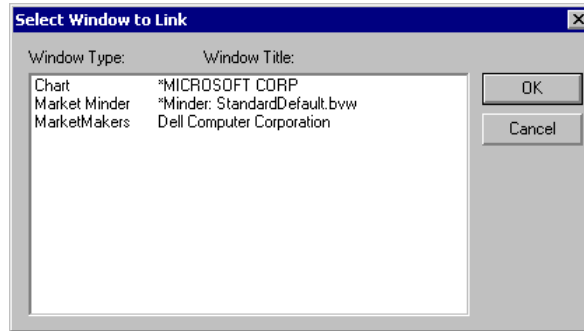
Linking Windows

When you link windows, you can enter a symbol in one window and RealTick will update the linked windows with the same symbol. For example, you might link the MultiQuote window to a Chart window and a News window. When you enter a symbol in the MultiQuote window, the Chart window will build a chart for the symbol, and the News window will show headlines about the same symbol. The Links option is available in MarketMinder and MultiQuote.

Link RealTick Windows

1. Click **Links** on the **MultiQuote** or **MarketMinder** menu.

The **Select Window to Link** dialog box will open, displaying the list of windows available for linking.



Select Window to Link Dialog Box

2. Click the window(s) you would like to link. To choose multiple windows with the mouse, hold down the **CTRL** key.
3. Click **OK**.
The windows are linked.

Servers

Monitoring Servers

The status bar at the bottom of the RealTick window displays the time, the default price server, and your user name and domain. It also contains the status window, which displays the function of a toolbar button.



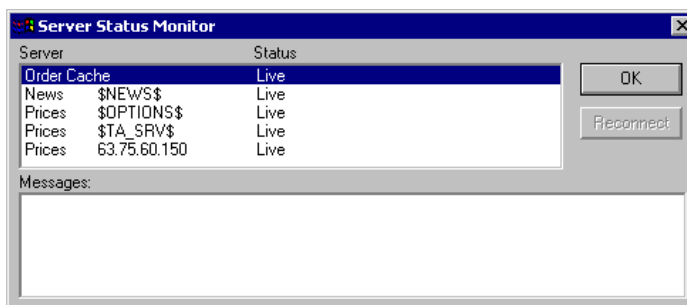
***Note:** See the Set System Defaults section in this chapter to learn how to change a server for all of RealTick.*



Status Bar

The Prices Button, which displays the default price server, allows you to change servers.

The server status lights show the status of your server connection. In order from left to right, the lights represent your connections to the price server (TA_SRV), the news server, and the order server. Hold your mouse pointer over a light to see a popup window with summary information about the relevant server. A green light indicates a working connection. Yellow indicates a possible problem. Red means the connection has been lost, and gray means the service is not in use. Click any server status light to call up the Server Status Monitor screen.



Server Status Monitor Screen

If you do not see the status bar, check your Set Defaults screen. The Show Status Bar function may be turned off.

Change the Server for a RealTick Window

With most of the windows in RealTick, you can change the server they collect their data from. When you change the server from a RealTick window, it affects only that window.

You can change the server from most of the window's Setup Screen.

1. Click the **Server** button on the window's **Setup** screen.
The **Select Server** screen will appear.
2. Select the server.
3. Click **OK**.
The server is selected.



Hint: On some *Setup* windows, the **Server** button is titled **Select Server**.

Load and Search for Symbols

There are several RealTick windows where you can load a symbol file or search for symbols.



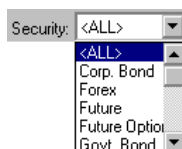
Note: Some setup dialog boxes will not have the command **Select**, but rather **Symbol File** or **Load**.

Load a Symbol File

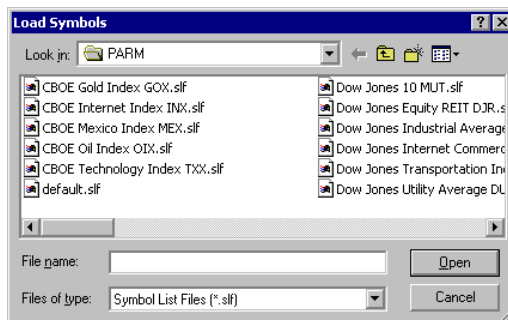
1. In the **Symbol File** box, click **Select**.
The **Load Symbols** dialog box will appear.



Note: Some setup dialog boxes will not have the drop-down list **Type**, but rather **Security**.



Note: Some setup dialog boxes will have a **Search** drop-down list, where you can select the type of pattern you will be searching.



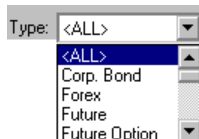
Load Symbols Dialog Box

- Click the symbol file you would like to open.
- Click **Open**.

The symbol file will open.

Search for Symbols

- Select the type of security you are searching for in the **Type** drop down list. For example, you can search for a stock, future, or mutual fund.



Type Drop-Down List

- Select the exchange from the **Exch** drop-down list.



Exch Drop-Down List

- Type a symbol pattern in the **Pattern** field.



Pattern field

- If you are looking for futures or futures options, enter the future root preceded by a forward slash (for example, /NG).

- If you are looking for stock options, enter the stock symbol (for example, IBM).
 - If you are looking for stock symbols, enter the first few letters of the symbol followed by an asterisk (for example, IB*)
4. Click **OK**.
The symbols will load.

Symbol Guide

With RealTick's symbol guide, you can search for an unknown symbol. You can search by symbol name, company name, or type of symbol.

Search for Symbols

You can search for a symbol based on numerous criteria. The more specific your criteria, the fewer the search results.

1. Click **Symbol Guide** on the **Help** menu.
The **Symbol Guide** dialog box appears.



Symbol Search Dialog Box

2. Choose the type of search from the drop-down list in the **Search Type** field. You can choose from six different search types.

Search Type	Description
Name	Search by name or the partial name of a company.
Ticker Symbol	Search for all symbols that match the pattern you have typed.



Hint: You can change the server that provides data to the Symbol Guide window by clicking the **Select** button in the Symbols Search Server area. For example, if you would like to search for an options root, change the server to options.

Commodity Roots	Search for a future based on the product or commodity name.
Root Search	Return all symbols associated with the specified root. This search type can be used for futures, options, and symbol chains.
Futures	List the futures symbols for the commodity root you have entered.
Futures – Night	Search for night session futures symbols.

3. Type the full or partial company name, symbol, commodity root, or future you are searching for in the **Pattern** field. Check **Upper Case** if you want to search for upper case symbols only.

Note: Use Wildcards to help with the search. See the next section for further details.

4. Check **Expand Roots** if you want to search for both daytime and nighttime symbols. This field is available only if you choose *Commodity Roots* from the **Search Type** field.
5. Choose the type of security to search for from the **Security Type** field. This field is available only if you choose *Name* or *Ticker Symbol* from the **Search Type** field.
6. Select an **Exchange**. For example, search for all symbols listed on the New York Stock Exchange.
7. Click **Search**.

The system displays a list of search results.

Symbology

This symbology is specific to RealTick. Use these symbols when performing a symbol search with the Symbol Guide.

Type of Symbol	Root
Index	Preceded by \$ and followed by (usually, not always) .X
Chain Index	Preceded by \$ and followed by .CH
Options	Preceded by + or -
Futures	Preceded by / and followed by the symbol, month code, and year.

There are two wildcards you can use to search: * and ?. Use these wildcards within the root of a symbol. For example, you know the

index root is preceded by a \$ and followed by the symbol and .X, so perform a ticker symbol search using \$*.X. A long list of indices will appear. The * searches for any type or number of characters.



Symbol Search Dialog Box

The ? will search for one particular character. For example, you know the future root is preceded by / and followed by the symbol, month code, and the year, so perform a ticker symbol search using /??1. A list of futures will appear.



Symbol Search Dialog Box

Month Code for Futures

The following table includes the month codes used in a future root.

While the day session codes are the same for both TAL and PCQuote hyperfeeds, the syntax for night, aka Globex, symbols is different. Instead of using a different letter to indicate a Globex symbol, PCQuote symbology adds a "G" to the end of the day symbol.

For example, the TAL day symbol for the June 2001 Nasdaq 100 futures is the same as the PCQuote symbol -- /NDM1. When it comes to the overnight, however, TAL uses /NDI1 while PCQuote uses /NDM1G.

Service Bureau			Hyperfeed	
Month	Day	Globex	Day	Globex
January	F	A	F	F#G
February	G	B	G	G#G
March	H	C	H	H#G
April	J	D	J	J#G
May	K	E	K	K#G
June	M	I	M	M#G

Service Bureau			Hyperfeed	
Month	Day	Globex	Day	Globex
July	N	L	N	N#G
August	Q	O	Q	Q#G
September	U	P	U	U#G
October	V	R	V	V#G
November	X	S	X	X#G
December	Z	T	Z	Z#G

Create a RealTick Window with a Symbol in the Symbol Guide

You can create a window using the symbols in the Symbol Guide.

1. Click and drag a symbol from the **Symbol Guide**.
The system displays a circle with a diagonal slash.
2. Drag the cursor to the toolbar icon of the window you want to create.
3. Drop the symbol.
The system creates the window.

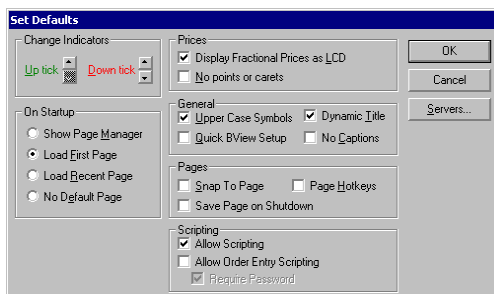
Setting System Defaults

System defaults in RealTick affect all the RealTick Windows, or the behavior of the RealTick framework. You can set your own system defaults. For example, you can select what page will open when you first log on to RealTick.

Change Colors for Up Ticks and Down Ticks

Currently, RealTick displays up tick data in green and down tick data in red. You can change the colors for all the pages and windows in RealTick by changing the System Defaults setting.

1. Click the **Control Menu** on the left corner of the RealTick title bar.
2. Click **Set System Defaults**.
The **Set Defaults** dialog box appears.



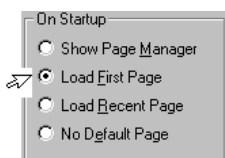
Set Defaults Dialog Box

- Click the up or down **Up tick** arrows to select the up tick color.
The word *Up tick* changes colors.
- Click the up or down **Down tick** arrows to select the down tick color.
The word *Down tick* changes colors.
- Click **OK**.
The system saves the color change and closes the **Set Defaults** dialog box.

Set a Startup Page

You can determine what page RealTick will open after you first startup the program.

- Click the **Control Menu** on the left corner of the RealTick title bar.
- Click **Set System Defaults**.
The **Set Defaults** dialog box appears.
- Select the page in the **On Startup** box. You can choose from four options.



Option	Description
Show Page Manager	Click this option if you want the Page Manager dialog box to appear when you open RealTick.
Load First Page	Click this option to automatically open the first page you have listed in Page Manager when you log on to RealTick.
Load Recent Page	Click this option if you want the last page you used to appear when you open RealTick.

No Default Page	Click this option if you do not want RealTick to load a saved page when you start the program.
-----------------	--

- Click **OK**.
The system saves the startup page setting and closes the **Set Defaults** dialog box.

Set Page Hot Keys

When you assign a hotkey to a page, you must set the system defaults for page hotkeys.

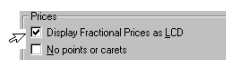
- Click **Set System Defaults** on the **Control** menu.
The **Set Defaults** dialog box appears.
- Click the **Page Hotkeys** check box in the **Pages** box.
- Click **OK**.
The system defaults includes page hotkeys.

Set the Price Display for RealTick

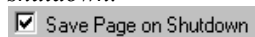
You can choose to display prices as fractions, decimals, or exponentially.

- Click the **Control Menu** on the left corner of the RealTick title bar.
- Click **Set System Defaults**.
The **Set Defaults** dialog box appears.
- Check **Display Fractional Prices as LCD** to reduce fraction prices to the least common denominator. For example, $4/16^{\text{th}}$ becomes $1/4^{\text{th}}$.
- Check **No Points or Carets** if you do not want points or carets in prices. For example, if you choose this option RealTick will display 7865 instead of 78^65.
- Click **OK**.

The system saves the startup page setting, and closes the **Set Defaults** dialog box.



Note: RealTick can automatically save your page before you shutdown.



Set Page Defaults

You can set defaults for all RealTick pages. For example, you can set RealTick to save a page before you exit the program.

1. Click the **Control Menu** on the left corner of the RealTick title bar.
2. Click **Set System Defaults**.
The **Set Defaults** dialog box appears.
3. Check **Snap to page** if you want all windows on a RealTick page to proportionally adjust their size to fit the program window.
4. Check **Save Page on Shutdown** if you want RealTick to automatically save all pages before you exit the program.
5. Click **OK**.
The system saves the page defaults, and closes the **Set Defaults** dialog box.

Set General RealTick Options

Enter symbols in upper case regardless of your keyboard setting and hide the page name from the title bar.

1. Click the **Control Menu** on the left corner of the RealTick title bar.
2. Click **Set System Defaults**.
The **Set Defaults** dialog box appears.
3. Check **Upper Case Symbols** if you want all symbols to be in upper case regardless of how you type them. Do not set this option if you plan to use symbols in lower case.
4. Check **Dynamic Title** if you want the name of the current page to be displayed in the title bar. If this is turned off, the system only displays the word *RealTick* in the caption.
5. Check **No Captions** if you want to remove the names of the studies from each window. By using this option, you can save space on your RealTick page.
6. Click **OK**.
The system saves all changes, and closes the **Set Defaults** dialog box.

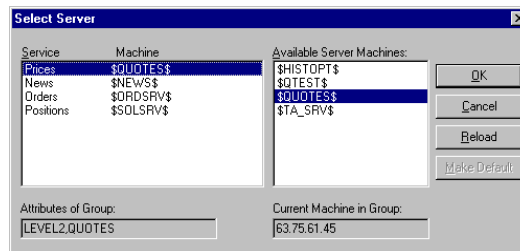


Note: You can change the server that supplies data to an individual window through the window's Setup dialog box. It will only affect that window.

Set Default Servers

Determine what server will supply data to your RealTick program. This will affect all of RealTick.

1. Click the **Control Menu** on the left corner of the RealTick title bar.
2. Click **Set System Defaults**.
The **Set Defaults** dialog box appears.
3. Click **Servers**.
The **Select Servers** dialog box appears.



Select Server Dialog Box

4. Click **Price** from the **Service** list.
The names of the servers appear in the **Available Server Machines** list.
5. Click the machine you want as the default from the **Available Server Machines** list.
6. Click **Make Default**.
The system saves the default.
7. Click **OK**.
The system closes the **Select Server** dialog box.

Changing the Display of a Window

Change the window font and color to help better display data. Most windows contain a standard Windows Font and Color dialog box where you change the display. However, some windows with more complicated graphical displays have their own color configuration screens where multiple colors attributes can be specified at the same time. See Chapter 5 for more information or visit the online help.

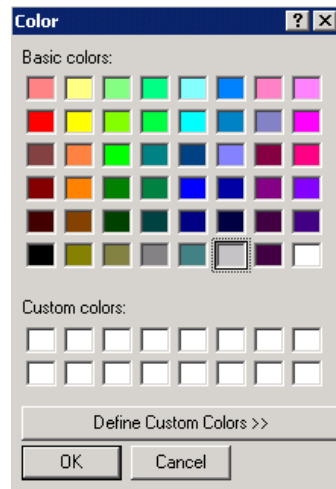
Change the Window Color of a Window

This is the standard procedure for all the windows in RealTick.

1. Click **Colors** on the window menu.
A standard Windows **Color** dialog box will appear.



***Note:** A window menu appears on the Menu bar after you have opened a window from the Design menu. For example, click MultiQuote on the Design menu, and MultiQuote will appear on the Menu Bar. You can access the **Color** command from this window menu.*



Color Dialog Box

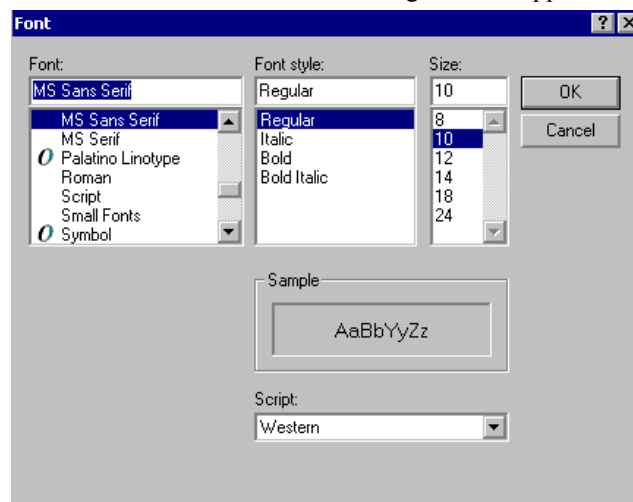
2. Select the color for the window background.
3. Click **OK**.

The window background color will change.

Change the Window Font

1. Click **Font** on the window menu.

A standard Windows **Font** dialog box will appear.



Windows Font Dialog Box

2. Choose the font style.

3. Click **OK**.
The system updates the font style.

Chapter 5: Gathering Market Data

This chapter discusses different windows and tools in RealTick you can use to gather market data. It will tell you the primary function of each window and how to use it.

Note: Charts is discussed in Chapter 6.

TAL Alarms

TAL Alarms displays data for the current day and/or for the past 52 weeks (year). If it displays data for the past 52 weeks, the data will end with the day before the current day. It can display the highs and lows of securities today and/or the high and low of securities of the past 52 weeks. It can also display securities within a specified price range, for either the current day and/or for the past 52 weeks.

You can use TAL Alarms to notify yourself when something occurs in the market. Much like an alarm clock, you can set alarms to alert you when a certain stock reaches or drops to a certain price, or when a certain security's last price, net change, bid, offer, high, low, volume, new high, or new low falls below, falls to, rises to, or rises above a value you specify.



***Note:** This window displays the highs and lows of intraday, the current day.*

TAL Alarms	
New High for TWE (#18)	10.51
New Low for PTZ (#3)	52.89
New High for WIND (#53)	21.20
New Low for AVB (#8)	43.94
New Low for PET-D	52.50
New High for WIND (#52)	21.15
New High for FRC (#7)	21.30
New Low for HYBN (#3)	.4700
New High for WIND (#51)	21.10
New High for THFZ (#7)	.1125
New Low for PIAM (#3)	.2800
New High for AER (#4)	10.40
New Low for RWT-B	28.00
New Low for TNO (#5)	39.21
New High for S (#21)	35.18
New High for VV (#2)	5.96
New Low for NEXL (#3)	1.27
New Low for CW (#7)	48.48
New Low for SFF (#2)	22.19
New Low for MEDI (#10)	36.37
New High for FE (#19)	29.10
New High for MTB (#16)	69.44
New Low for EPR (#3)	13.95
New High for TLB (#25)	41.64
New Low for AK (#2)	11.76

TAL Alarms Window

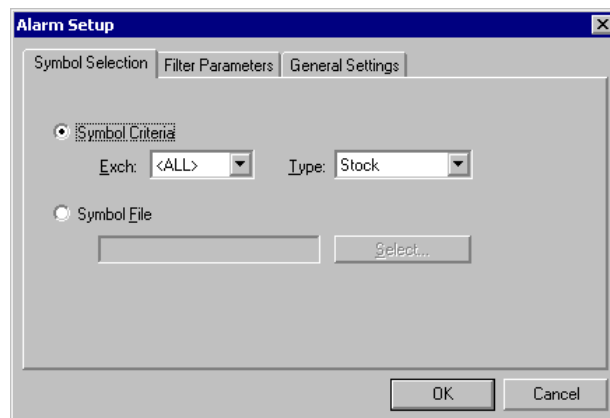
The TAL Alarms window features numerous colors. Each color has a different meaning. This is the default setting:

Color	Description
White	Symbol name, and what is displayed (New High, New Low) for either intraday or 52 weeks
Red	Intraday new low
Green	Intraday new high
Yellow	52 week high
Blue	52 week low

Create an Alarm

1. Click **TAL Alarms** on the **Design** menu.

The **Alarm Setup** dialog box appears.

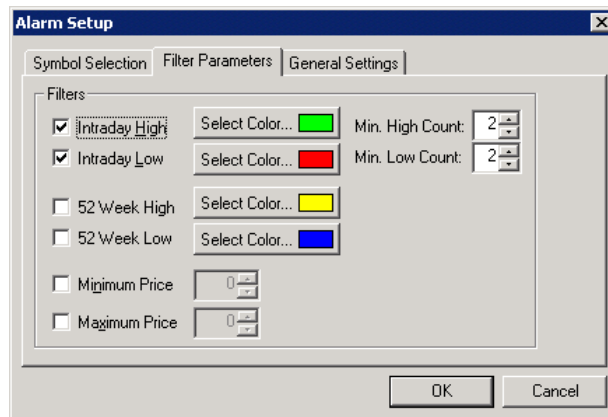


Alarms Setup Dialog Box

2. Click **Symbol Criteria** to choose the symbols to monitor.
3. Click the **Exch** arrow and select an exchange.
4. Click the **Type** arrow and select a security, or load a **Symbol File**.

See **Chapter 4** for more information on how to load a symbol file.

5. Click the **Filter Parameters** tab.

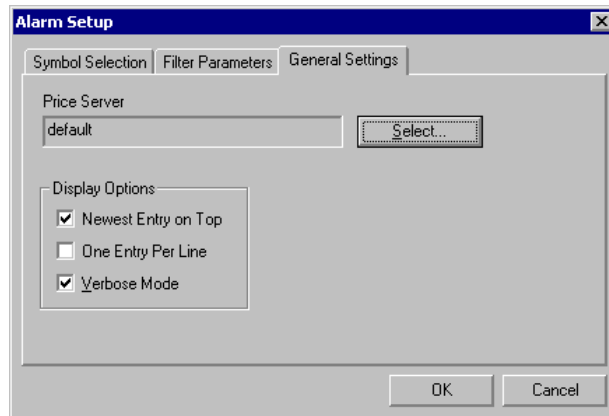


Alarm Setup Dialog Box

6. Select the **Intraday High** check box to display today's new high value.
7. Select the **Intraday Low** check box to display today's new low value.
8. Select the **52 Week High** check box to display the new high value of the past 52 weeks.
9. Select the **52 Week Low** check box to display the new low value of the past 52 weeks.
10. Select the **Minimum Price** check box to limit the values displayed on the TAL Alarms window.
This will enable the **Minimum Price** box to the right.
11. Type the minimum value you want to display in the **Minimum Price** box, or use the arrows. The window will only display the equities that are equal to or higher than the value you enter.
12. Select the **Maximum Price** check box to limit the values displayed on the TAL Alarms window.
This will enable the **Maximum Price** box to the right.
13. Type the maximum value you want to display in the **Maximum Price** box, or use the arrows. The window will only display the equities that are equal to or lower than the value you enter.

14. Type the minimum value you want to display in the **Min High Count** box, or use the arrows. It displays only the equities that are equal to or higher than the value you enter.
15. Enter the minimum value you want to display in the **Min Low Count** box, or use the arrows. It displays only the equities that are equal to or lower than the value you enter.
16. Click the **General Settings** tab.

The **General Settings** tab appears.



Alarm Setup Dialog Box

17. Select the **Newest Entry on Top** check box to display the values for the newest data on the first line on the top of the TAL Alarms window. If you do not choose this option, the system displays the newest data on the bottom of the window.
18. Select the **One Entry Per Line** check box to display the values for each symbol on a separate line. If you do not choose this option, the system displays two symbols per line.
19. Select the **Verbose Mode** check box to display the filter data you choose from the **Filter** tab. It will display words like "New High for," or "New Low for," before each entry. If you do not choose this option, the system displays only the symbol name and the color-coded price.
20. Click **OK**.

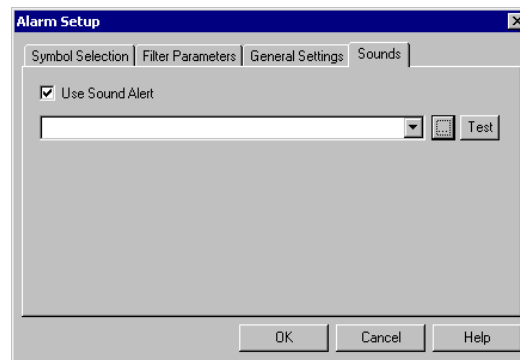
The system closes the **Alarm Setup** dialog box and displays the **TAL Alarms** window.

Add a Sound Alert to an Alarm

Use a sound alert to notify yourself when something occurs in the market.

1. Click **Setup** on the **Alarms** menu.
2. Click the **Sounds** tab on the **Alarm Setup** dialog box.

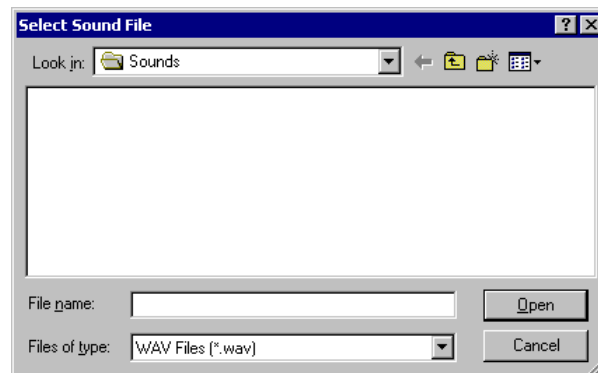
The **Sounds** tab will appear.



Alarm Setup Dialog Box

3. Click the **Use Sound Alert** check box.
4. Click the ellipse button (...).

The **Select Sound File** dialog box will appear.



Select Sound File Dialog Box

5. Select the **.wav** file.
6. Click **Open**.

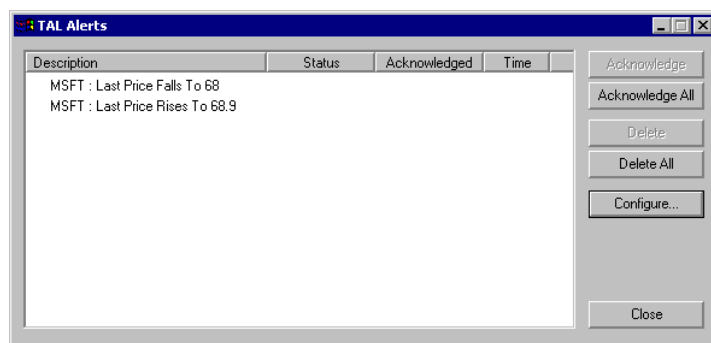
The **.wav** file path will appear in the field.

7. Click the **Test** button to test the sound of the alarm.
8. Click **OK**.

The alarm is set.

TAL Alerts

Use TAL Alerts to create an alarm. You can access TAL Alerts from the Alarms menu, Page menu, and from MarketMinder.



TAL Alerts Window

Open TAL Alerts

- To open TAL Alerts, click **Display Alerts** on the **Page** menu. The **TAL Alerts** window will open.

Create an Alert

1. If you have a TAL Alarms window open, choose **Display Alerts** on the **Alarms** menu. If you do not have a TAL Alarms window open, choose **Display Alerts** on the **Page** menu.

The **TAL Alerts** window will open.

2. Click **Configure**.

The **TAL Alerts Configuration** dialog box will open.



Note: See Chapter 4 for more information concerning how to load a symbol file.

TAL Alerts Configuration Dialog Box

3. Type the symbol you want to monitor in the **Symbols** field or load a **SLF File**.

4. Click **Add**.

The symbol will add to the **Symbols** list.

5. Select the **Link Upper and Lower Ranges** check box to link the values in the **Upper** and **Lower Range** fields.
6. Select the **Upper Range** check box to limit the value ranges to their percentage points.

This will enable the **Upper Range** box to the right.

7. Type the upper range value in the **Upper Range** box, or use the arrows. The system notifies you when the symbol rises within the percentage of the current value. For example, if you enter 2 in the **Upper Range** box, the system will notify you when the symbol reaches two points more than the current value.

8. Select the **Lower Range** check box to limit the value ranges to their percentage points.

This will enable the **Lower Range** box to the right.

9. Type the lower range value in the **Lower Range** box, or use the arrows. The system notifies you when the symbol falls within the percentage of the current value. For example, if you enter three in the **Lower Range** box, the system will notify you when the symbol falls three points under the current value.

10. Click **Apply to Selected Symbols**. The system applies the ranges you entered in the **Upper Range** and **Lower Range** fields, and lists the configuration in the **Alerts for Selected Symbol** field.
11. Choose the value for the alert from the first drop-down list available in the **Alerts for Selected Symbol** box. You can place alerts on the Last Price, Net Change, Bid, Offer, High, or Low values of a symbol. For example, if you want to monitor a bid for a particular symbol, choose *Bid*.
12. Choose the action for the alert from the second drop-down list available in the **Alerts for Selected Symbol** box. You can place an alert when a value falls below, falls to, rises above, or rises to a specific amount. For example, if you want to monitor a symbol to see if it falls to a specific amount, choose *Falls To*.
13. Type the amount that will start the alert in the numeric field available in the **Alerts for Selected Symbol** box.
14. Click **Add/Change**.
The system lists the alert configuration in the **Alerts for Selected Symbol** field.
15. Select the **Sound** check box to sound an alarm.
16. Choose the sound from the drop-down list available in the **Sound** field.

Note: Test the sound by clicking Test Sound .

17. Select the **Show all Alerts** check box to display all the alerts you configured on the **TAL Alerts** window.
18. Select the **Show Acknowledged Alerts** check box to display only the alerts you turned off.
19. Click **OK**.
The system redisplay the **TAL Alerts** window.
20. Click **Close**.
The alert is set.

Delete an Alert

1. If you have a TAL Alarms window open, choose **Display Alerts** on the **Alarms** menu. If you do not have a TAL Alarms window open, choose **Display Alerts** on the **Page** menu.

The system displays the **TAL Alerts** dialog box.

2. Click the alert you want to delete from the list of alerts.
3. Click **Delete** button.
4. Click **Close**.

The system deletes the alert.

Turn Off a Beeping Alarm

When an alarm sounds, the system displays the TAL Alerts window. If you do not see the TAL Alerts window, you can open it.

1. If you do not have a TAL Alarms window opened, choose **Display Alerts** from the **Page** menu.

The **TAL Alarms** window opens.

2. Click **Display Alerts** on the **Alarms** menu.

The **TAL Alerts** dialog box opens.

3. Click the alert that contains a *No* in the **Acknowledged** field.
4. Click **Acknowledge**.

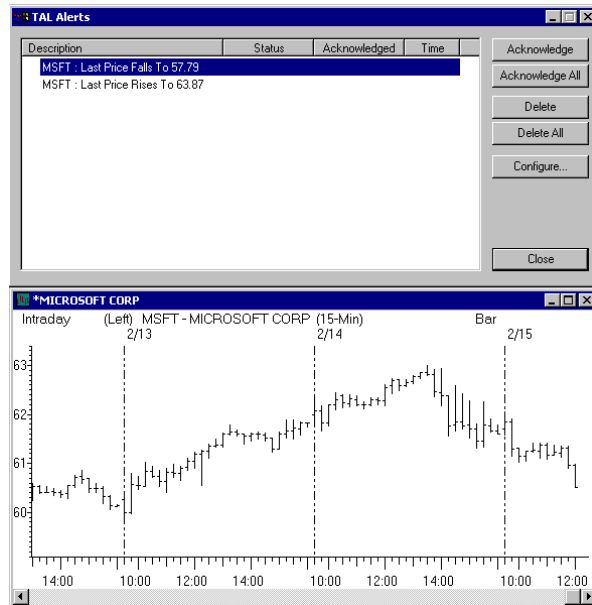
The system stops the alarm.

5. Click **Close**.

The window closes.

Drag and drop a symbol from Tal Alerts

1. Click a symbol in the TAL Alerts window.
2. Drag and drop the symbol into a MarketMinder, MultiQuote, News, MarketMaker, TurboOptions, Order Book, Chart, or Enlist window.



TAL Alerts Drag & Drop
The symbol displays.

Corporate Actions

Use Corporate Actions to track stock activity, such as dividends, stock splits, and initial public offerings. The Corporate Actions window displays the symbol, the date of the action, and the description of the action.

Corporate Actions		
Symbol	Date	Info
FITB	06/28/2000	Dividend set to 0.27.
FITB	07/17/2000	Split with factor 0.666667.
FITB	09/27/2000	Dividend set to 0.18.
FITB	12/27/2000	Dividend set to 0.18.
FITB	03/28/2001	Dividend set to 0.2.

Corporate Actions Window



***Note:** There are three different dates you can choose: **Today**, **All available dates**, or **From and to**. The **Today** option will search the current day. The **All available dates** option will search from today back through the system's memory, and the **From and to** option will search a specified time period.*

Perform a Corporate Actions Search

1. Click **Corporate Actions** on the **Design** menu.

The **Corporate Actions Setup** dialog box appears.

Corporate Actions Setup Dialog box

2. Type a symbol in the **Symbol** field.
3. Click a **Type of Action** you would like to search.
4. In the **Select Dates** box on the **Corporate Actions Setup** dialog box, click the button for the appropriate date criteria.
5. If you select **From** and **to**, type the time period you would like the system to search. Be sure to use the proper format MM/DD/YYYY.
6. Click **Search**.

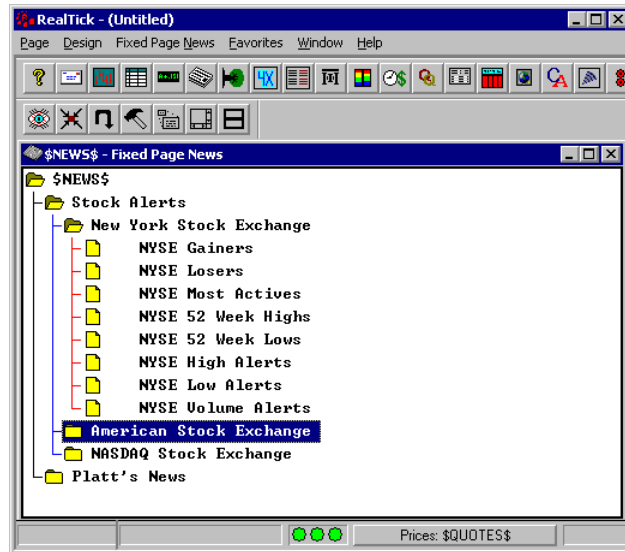
The server will search for the action.

- If the server does not contain a record of any actions matching your search parameters, you will see the message, "**No matching records found. Ready.**"
- If your search found information, click **Close** to close the **Corporate Actions Setup** dialog box and view the information.

Fixed Page News

The Fixed Page News window offers news stories, such as the most active stocks, gainers and losers, and the historical news headlines from the News Server's database with the current story in the story window.

The headline panel of a Fixed Page News window contains a nested series of folder and paper icons with various news sources, news subjects, and actual fixed-page news stories called a headline tree. The structure and content of the headline tree is defined according to the standard stories distributed by your news sources.



Fixed Page News Window

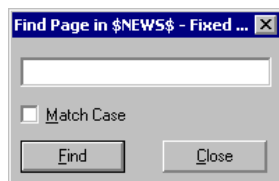
View a Story

1. Click Fixed Paged News on the RealTick Design menu.
The **Fixed Paged News** window appears.
2. Open the folders in the headline tree by double-clicking until you reach the lowest level.
Actual stories will be displayed with page icons instead of folder icons.
3. Double-click the story headline or the page icon.
The story will replace the headline tree in the window.

Search for a News Story

You cannot search the whole heading structure at one time. Before searching, you must choose a news source in the headline tree. The Find Headline command will then search the individual stories available from this source.

1. Choose the news source you wish to search (one of the second level headings).
2. Click **Find Headline** on the **Fixed Page News** menu.



Find Page in \$NEWS\$ - fixed Dialog Box

3. Type the search keyword in the **Find Headline** dialog box.
4. Click **Match Case** if you would like the search to be case-sensitive.
5. Click **Find**.
Every headline containing the keyword will be displayed in the headline tree.
6. Click the **Close** button to close the **Find Headline** dialog box.

Copy News Data for Another Application

- Click **Copy Story** on the **News** menu.

The story is copied to the clipboard.

Change the View of the Fixed Page News Window

Use these commands on the Fixed Page News menu to change the Fixed Page News window display.

Option	Description
Maximize Story Window	Enlarge a story
Split Window when the Maximize Story Window is not selected	Change the screen into a split window
Go Back	View a previous story

Forex

The Forex command gathers and displays detailed information about foreign exchange rates. You can choose the currencies to track and the fields to display, such as Bid, Ask, and Symbol.



The screenshot shows a window titled 'Forex' with a table of exchange rates. The table has three main columns for JPY, SGD, and USD. Each of these columns has three sub-columns: Last, High, and Low. The data is as follows:

	JPY			SGD			USD		
	Last	High	Low	Last	High	Low	Last	High	Low
JPY				1.4722	1.4785	1.4604	.00875	.00872	.00861
SGD	67.94	68.09	67.64				.5956	.5937	.5979
USD	114.24	114.69	113.50	1.6789	1.6843	1.6725			

Forex Window

When a symbol is not available for the reverse exchange rate, RealTick calculates the value and inserts the original symbol preceded by a caret ("^").

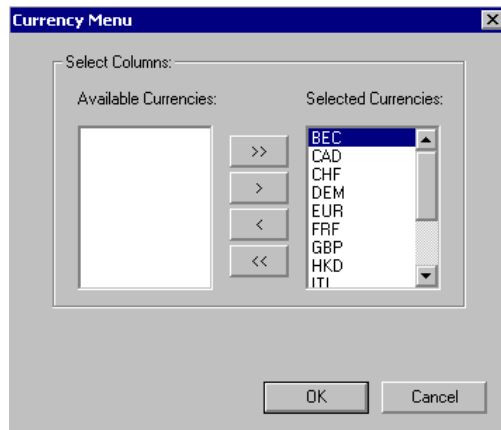
Forex information is displayed in primary and secondary columns. Each row represents one currency. Each primary column also represents one currency.

Within each primary column are secondary columns, representing different information fields (Ask, Bid, Close, High, Low, Open, Settle, and/or Symbol). Each cell in the Forex table contains exchange rate information corresponding to the currencies in the row and primary column, for the information field in the secondary column.

Create a Forex Window

1. Click **Forex** on the RealTick **Design** menu.

The **Currency Menu** dialog box will appear.



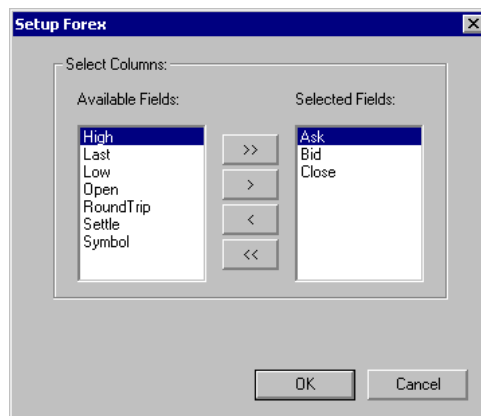
Currency Menu Dialog Box

2. Accept or remove the currencies in the **Selected Currencies** field.
3. Click **OK**.

A **Forex** window with all available currencies will appear. Each currency pair will display only one column, **Last** (the most recent price).

4. Click **Setup Fields** on the **Forex** menu.

The **Setup Forex** dialog box will appear.



Setup Forex Dialog Box

5. Choose the secondary columns.
6. Click **OK**.

The **Forex** window appears with the currency rates.

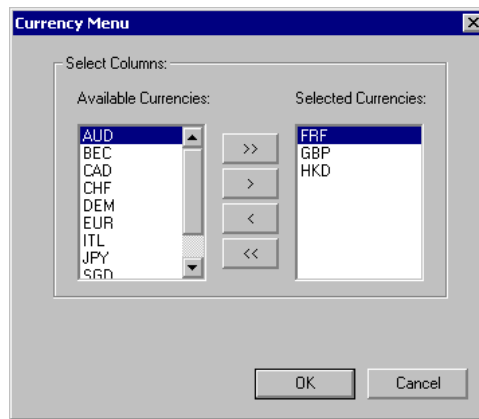
Using Currencies

Convert a currency and monitor another currency you are using to trade.

Add a Currency

1. Click **Setup Currencies** on the **Forex** menu.

The system displays the **Currency Menu** dialog box.



Currency Menu Dialog Box

2. Click the currency from the **Available Currencies** field you want to add.
3. Click the **add (>)** button.

The system moves the name of the currency to the **Selected Currencies** field.

4. Click **OK**.

The system updates the **Forex** window.

Move Around in Forex

The following table describes how to navigate a Forex window.

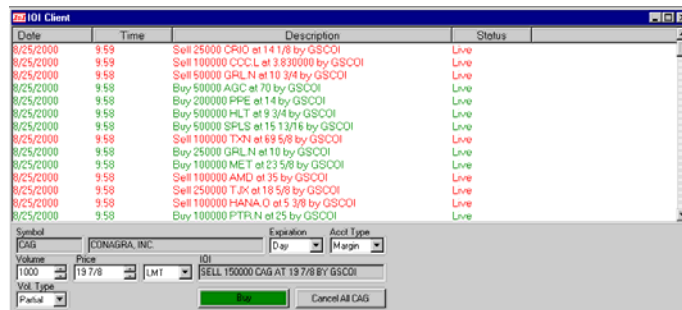
To	Then
Scroll through the primary column	Move your mouse to the right or left of a table heading, depending the

To	Then
	direction you would like to move, and click.
Scroll through the secondary column	Click the appropriate side of a secondary title until the desired column position is reached.
Scroll through fields	Hold down the CTRL key and click the appropriate side of the secondary column.

Indications

The Indications server handles a FIX-type message called *Indication of Interest*. These messages enable institutions to notify each other when they are considering placing a large order. Some larger institutions may want to notify other institutions when they are going to buy or sell a large quantity of stock before they place the order. The Indications window requires special permissions from the industry sending the message. Townsend Analytics, Ltd. cannot give permissions for the Indications option without the consent of participating industries.

The RealTick application contains an Indications Client window. This window enables users to view and search for indication messages sent to their institution.



Date	Time	Description	Status
8/25/2000	9:59	Sell 25000 CRIQ at 14 1/8 by GSCOI	Live
8/25/2000	9:59	Sell 100000 CCCL at 3 3/32000 by GSCOI	Live
8/25/2000	9:59	Sell 50000 GRLN at 10 3/4 by GSCOI	Live
8/25/2000	9:59	Buy 50000 AGC at 70 by GSCOI	Live
8/25/2000	9:59	Buy 200000 PPE at 14 by GSCOI	Live
8/25/2000	9:59	Buy 500000 HLT at 9 3/4 by GSCOI	Live
8/25/2000	9:59	Buy 50000 SPLS at 15 1/16 by GSCOI	Live
8/25/2000	9:59	Sell 100000 TON at 69 5/8 by GSCOI	Live
8/25/2000	9:59	Buy 25000 GRLN at 10 by GSCOI	Live
8/25/2000	9:59	Buy 100000 MET at 23 5/8 by GSCOI	Live
8/25/2000	9:59	Sell 100000 AMD at 35 by GSCOI	Live
8/25/2000	9:59	Sell 250000 TJK at 18 5/8 by GSCOI	Live
8/25/2000	9:59	Sell 1000000 HANA.O at 5 3/8 by GSCOI	Live
8/25/2000	9:59	Buy 100000 PTRN at 25 by GSCOI	Live

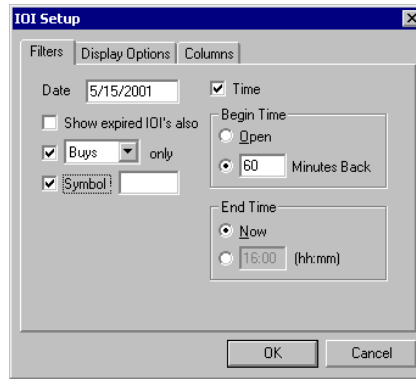
Symbol	CONAGRA, INC.	Expiration	Acc'd Type
CAG		Day	Margin
Volume	Price	IOI	
1000	19 7/8	LMT	SELL 150000 CAG AT 19 7/8 BY GSCOI
Vol. Type			
Partial			

IOI Client Window

Create an Indications Window

1. Click **Indications** on the **Design** menu.

The system displays the **IOI Setup** dialog box.



IOI Setup Dialog Box

2. Enter the date for the indications in the **Date** field. You can enter any past date.
3. Check the **Time** option button.
The system activates the **Time** frame.
4. Click either the **Open** option button or the **Minutes Back** option button in the **Begin Time** field.
 - If you choose **Open**, the system displays all the information from the opening of the specific date.
 - If you choose **Minutes Back**, the system activates the numeric field to the right. You can enter when to start viewing data.
5. Click either the **Now** option button or the **hh:mm** option button in the **End Time** field.
 - If you choose **Now**, the system displays all the information to the current time.
 - If you choose **hh:mm**, the system activates the numeric field to the right. You can enter when to stop viewing data.
6. To view expired IOI's, check the **Show expired IOI's also** option button.
7. To view buy or sell IOI's, check the **Only** option button.
The system activates the drop-down list field to the left.
8. Choose **Buys** or **Sells** from the drop-down list.
9. To view by symbol, check the **Symbol** option button.
The system activates the text field to the right.

10. Type the name of the symbol in the text field.
11. Click **OK**.

The system closes the dialog box and redisplay the **IOI Client** window.

View Details of a Specific Indication

You can view the details of any indication listed on the IOI Client window.

1. Right-click an indication you want further details about in the **IOI Client** window.

The **Indications** menu will appear.

2. Click **Details for IOI**.

The system displays the dialog box with **Indication of Interest Details**.

Changing the Display of Indications

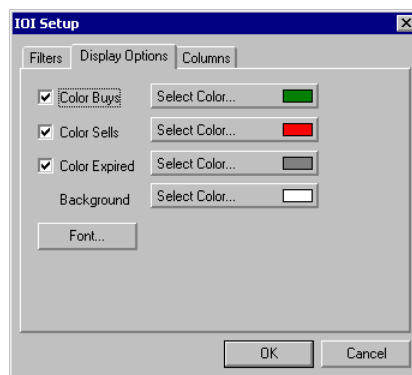
Change the Color of Indications

1. Click **Setup** on the **Indications** menu.

The system displays the **IOI Setup** dialog box.

2. Click the **Display Options** tab.

The system displays the **Display Options** dialog box.



IOI Display Options Tab

3. Click **Color Buys**, **Color Sells**, or **Color Expired** to change the color of the buy, sell, or expired information, respectively.

4. Click the **Select Color** button.

A standard **Windows Color** dialog box appears.

5. Select a color.

6. Click **OK**.

The system returns to the **Display Options** dialog box.

7. Click **OK**.

The system updates the IOI window.

Add Columns to the IOI Client Window

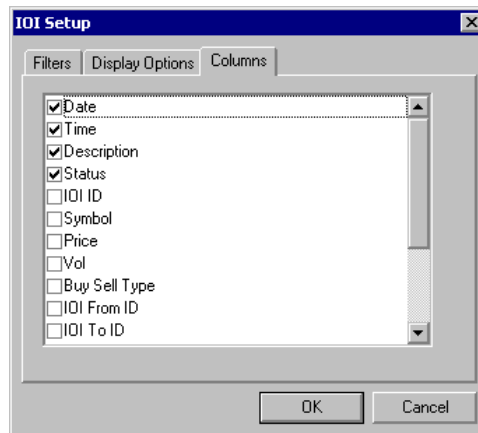
You can view additional information about each indication by adding columns to the IOI Client window.

1. Click **Setup** on the **Indications** menu.

The system displays the **IOI Setup** dialog box.

2. Click the **Columns** tab.

The system displays the **Columns** tab.



IOI Setup Dialog Box

3. Check the option buttons of each column you want to add to the window.

4. Click **OK**.

The system updates the IOI window.

MarketMaker

The MarketMaker window displays each market maker's bid and ask price, either NASDAQ or regional (OTC). It sorts and color-codes each price to indicate each price level according to their placement in the inside market.



MarketMaker Window

The top panel contains a MultiQuote window showing fundamental data on the stock being tracked. The middle panel is a Range Bar showing the relative sizes of the bid/ask ranges. The side panel contains the ticker, showing the trade prices for the stock being tracked. The bottom panel displays an abbreviated Order Entry window to allow quick and easy trading access.

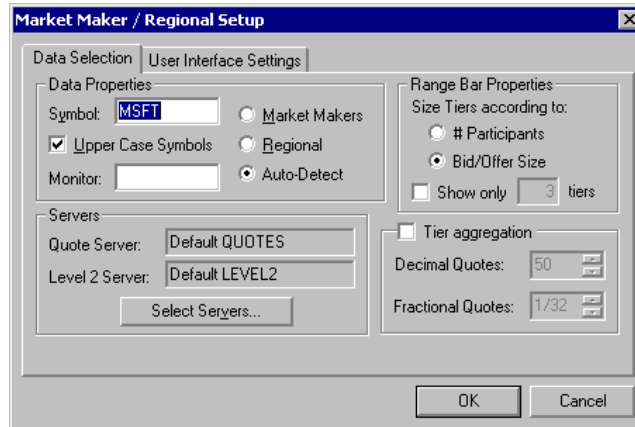


Hint: To create a new MarketMaker, drag and drop a symbol into the MarketMaker window.

Create a MarketMaker Window

1. Click **MarketMakers** on the RealTick **Design** menu.

The system displays the **MarketMakers/Regional Setup** dialog box.



Market Maker / Regional Setup Dialog Box

2. Type a symbol in the **Symbol** field.
3. Select **Market Makers**, **Regional**, or **Auto-Detect**.

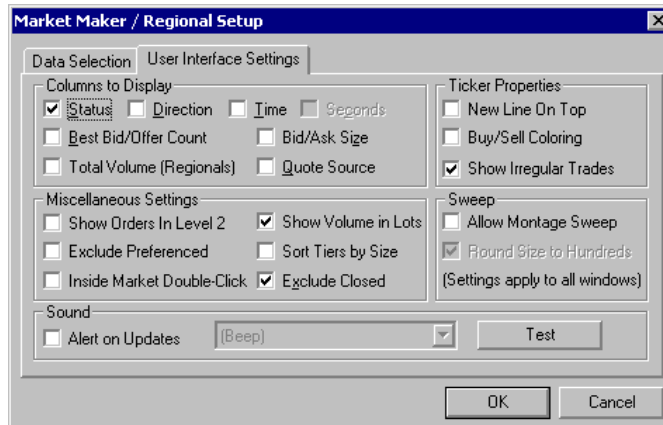
Data Properties	Description
Market Makers	Receive data from all market makers.
Regional	Receive regional bid/ask data only.
Auto-Detect	Determines whether to choose a MarketMaker display with NASDAQ data or a display of the regional exchanges, based on the symbol you enter.

4. Enter an exchange to monitor in the **Monitor** field. You can highlight a specific broker in a MarketMaker window.
5. If you want the width of the range bar according to the number of participants, click the **# Participants** option button.
6. If you want the width of the range bar according to the size of the bid, click the **Bid/Offer Size** option button.
7. Click the **Show only tiers** checkbox and enter the number of tiers you want to view in the **Show only tiers** field.
8. Click the **Tier aggregation** option button.

The system activates the **Tier aggregation** frame.

9. Change the aggregation size in the **Decimal Quotes and Fractional Quotes** spin boxes.
10. Click the **User Interface Settings** tab.

The system displays the **User Interface Settings** tab.



MarketMaker / Regional Setup Dialog Box

11. Check the names of the columns you want on the MarketMaker window in the **Columns to Display** field.
12. Check any additional settings you want to add from the **Miscellaneous Settings** field.



Note: When the **Show Orders in Level 2** check box is selected, your live order will appear in the Level 2 panel as

Miscellaneous Settings	Description
Show Orders in Level 2	Display your live orders in the Level 2 panel as My Order .
Exclude Preferred	Exclude all preferred Market Makers.
Inside Market Double-Click	Double-click inside the MarketMaker window to access OES.
Show Volume in Lots	Display the bid/ask sizes in lots.
Sort Tiers by Size	Sort bids and asks with the same price by volume, with the largest bids and asks at each price level at the top.

Set Route from ECN ID	Double-click a quote in the Level 2 panel and the route will display in the Route field.
Exclude Closed	Exclude closed quotes.

13. Choose the properties for the ticker from the **Ticker Properties** field.

Ticker Properties	Description
New Line on Top	Display the latest tick on the top of the Ticker as opposed to the bottom.
Buy/Sell Coloring	Use RealTick's color-coding for the prices.
Show Irregular Trades	View irregular trades.

14. Click **OK**.

The system displays your MarketMaker window.

Set an Alarm for Updates

You can have the MarketMakers window alert you when the quote data changes for a stock.

- Click the **Alert on Updates** option on the **MarketMaker** menu.

The system displays a check mark next to the option. When the quote data changes, the system will sound an alarm.

Configuring Quote Sources

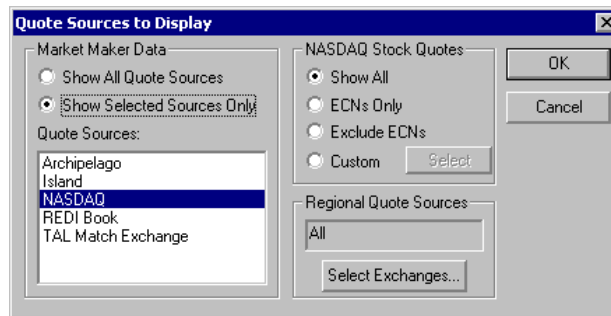
You can include or exclude ECNs and Market Makers to focus on who is influencing the price movement, or as part of your trading preference.

View Data from a Single Source

Remove the ECN books to help reduce the amount of data you are receiving.

1. Click **Quote Sources** on the **MarketMaker** menu.

The system displays the **Quote Sources to Display** dialog box.



Quote Sources to Display Dialog Box

2. Click the **Show Selected Sources Only** option button.
3. Choose a source from the **Quote Source** list.
4. Click **OK**.

The system updates the MarketMaker window.

View Data from all Sources

View all the markets.

1. Click **Quote Sources** on the **MarketMaker** menu.
The system displays the **Quote Sources to Display** dialog box.
2. Click the **Show All Quote Sources** option button.
3. Click **OK**.

The system updates the MarketMaker window.

View NASDAQ Stock Quotes from all Sources

1. Click **Quote Sources** on the **MarketMaker** menu.
The system displays the **Quote Sources to Display** dialog box.
2. Click the **Show All** option button under the **NASDAQ Stock Quotes** frame.
3. Click **OK**.

The system updates the MarketMaker window.

View NASDAQ Stock Quotes from ECNs only

Remove Nasdaq quote sources and view ECN data during pre and post market.

1. Click **Quote Sources** on the **MarketMaker** menu.
The system displays the **Quote Sources to Display** dialog box.
2. Click the **ECNs Only** option button under the **NASDAQ Stock Quotes** frame.
3. Click **OK**.

The system updates the MarketMaker window.

View NASDAQ Stock Quotes from all Sources except ECNs

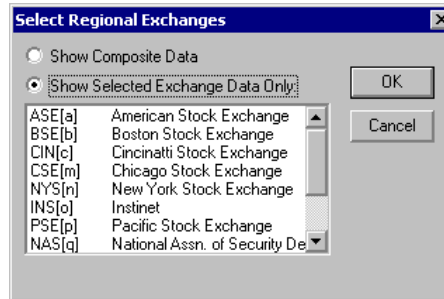
Exclude ECNs if you would like to view just the market participants who are influencing the price movement.

1. Click **Quote Sources** on the **MarketMaker** menu.
The system displays the **Quote Sources to Display** dialog box.
2. Click the **Exclude ECNs** option button under the **NASDAQ Stock Quotes** frame.
3. Click **OK**.

The system updates the MarketMaker window.

View Data from a Single Exchange

1. Click **Quote Sources** on the **MarketMaker** menu.
The system displays the **Quote Sources to Display** dialog box.
2. Click the **Select Exchanges** button.
The system displays the **Select Regional Exchanges** dialog box.



Select Regional Exchanges Dialog Box

3. Click the **Show Selected Exchange Data Only** option button.
4. Click the name of the exchange from the **Exchange** list.
5. Click the **OK** button.

The system redisplay the **Quote Sources to Display** dialog box.

6. Click **OK**.

The system updates the MarketMaker window.

View Data from all Exchanges

1. Click **Quote Sources** from the **MarketMaker** menu.

The system displays the **Quote Sources to Display** dialog box.

2. Click the **Select Exchanges** button.

The system displays the **Select Regional Exchanges** dialog box.

3. Click the **Show Composite Data** option button.
4. Click the **OK** button.

The system redisplay the **Quote Sources to Display** dialog box.

5. Click **OK**.

The system updates the MarketMaker window.

Include/Exclude a Market Maker

1. Click **Quote Sources** on the **MarketMaker** menu.

The **Quote Sources to Display** box will appear.

2. Click **Custom**.

The **Select** button will activate.

3. Click **Select**.

The **Include/Exclude MarketMakers** dialog box will appear.



Include/Exclude Market Makers Dialog Box

4. To include only certain Market Makers, click **Include only these Market Makers**.
5. To exclude certain Market Makers, click **Exclude these Market Makers**.
6. Type the Market Makers you want to include or exclude in the **Market Makers to Include/Exclude** box.
7. Click **Add**.
8. Click **OK**.

The system includes or excludes the Market Makers.

Changing the Display of a MarketMaker

Adding and Removing Panels

Add or remove different panels to include or exclude market information. Just click any of the following options on the MarketMaker menu to include or exclude the information described in the table below.

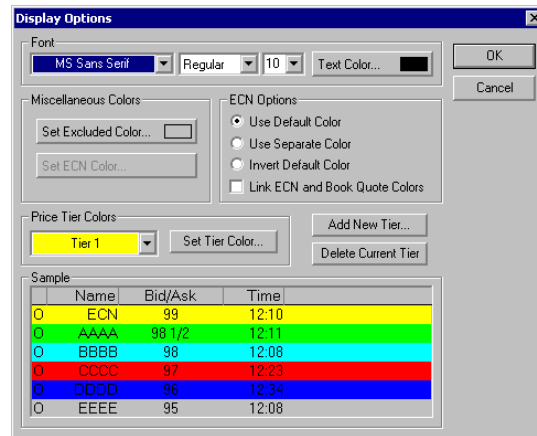
Option	Description
MultiQuote	Add or remove the MultiQuote panel where you can enter a new symbol.

Option	Description
Range Bar	Add or remove the Range Bar, which displays the sizes of the Bid/Ask ranges.
Market Montage	Add or remove the Market Montage, which displays the total bids, asks, and sizes of the trades.
Order Entry Screen	Add or remove the Order Entry panel where you can place a trade.
Ticker	Add or remove the Ticker panel, which shows the price/sizes associated with the symbol you have chosen.

Change the Color for ECNs

1. Click **Display Options** on the **MarketMaker** menu.

The system displays the **Display Options** dialog box.



Display Options Dialog Box

2. Click the **Use Separate Color** option button available in the **ECN Options** frame.

This will enable the **Set ECN Color** button.

3. Click the **Set ECN Color** button in the **Miscellaneous Colors** frame.

The system displays the standard **Windows Color** dialog box.

4. Click the color.
5. Click **OK**.

The system closes the **Color** dialog box. You can view the new color of the **ECNs** in the **Sample** frame in the **Display Options** dialog box. The system only changes the color of the text, not the row.

6. Click **OK**.

The system updates the MarketMaker window.

Add a Price Tier

Add a price tier to view the depth of the market.

1. Click **Display Options** on the **MarketMaker** menu.

The system displays the **Display Options** dialog box.

2. Click the **Add New Tier** button available in the **Price Tier Colors** frame.

The system adds the name of the new tier in the **Price Tier Colors** frame. The system also displays the standard **Windows Color** dialog box.

3. Click a color.
4. Click the **OK** button.

The system closes the **Color** dialog box. You can view the new tier in the **Sample** frame in the **Display Options** dialog box.

5. Click **OK**.

The system updates the MarketMaker window.

Delete a Price Tier

1. Click **Display Options** on the **MarketMaker** menu.

The system displays the **Display Options** dialog box.

2. Choose the tier you want to delete from the drop-down list available in the **Price Tier Colors** field.
3. Click the **Delete Current Tier** button available in the **Price Tier Colors** frame.

The system removes the name of the tier from the **Price Tier Colors** frame. The system also removes the name of the tier from the **Sample** frame.

4. Click **OK**.

The system updates the MarketMaker window.

Change the Color of a Price Tier

1. Click **Display Options** on the **MarketMaker** menu.

The system displays the **Display Options** dialog box.

2. Choose the tier you want to change from the drop-down list available in the **Price Tier Colors** field.

3. Click the **Set Tier Color** button.

The system displays the standard **Windows Color** dialog box.

4. Click the color.

5. Click the **OK** button.

The system closes the **Color** dialog box. You can view the new color of the tier in the **Sample** frame in the **Display Options** dialog box.

6. Click **OK**.

The system updates the MarketMaker window.

MarketMinder



***Note:** See chapter 7 for information concerning OrderMinder, BasketMinder, and trading with MarketMinder. See chapter 8 for information concerning PositionMinder.*

There are several different types of MarketMinders:

StandardMinder, PositionMinder, OrderMinder, BasketMinder, and ChainMinder. See **chapter 7** for more information concerning a BasketMinder and **chapter 8** for more information concerning a PositionMinder.

The StandardMinder displays any symbol's numeric or price data in a table. You can choose to display many different data fields, including Last Price, Dir. Last, Net Change, and Total Volume.

The OrderMinder displays your live, completed, canceled or deleted, and completed managed orders for the current trading day. You can also sell from the MarketMinder. For more information concerning MarketMinder and trading, please see **chapter 7**.

The ChainMinder displays symbol lists.

Symbol	Last		Change	Volume
AMZN	15.68	↓	-.52	6911700
AOL	47.25	↑	-.35	13108900
ATHM	3.89	↓	+.02	3564400
CMGI	2.50	↓	-.03	3292600
CSCO	16.26	↓	-1.07	82868600
DCLK	11.18	↑	+.42	2944000
EBAY	44.56	↓	-2.39	6566700
ELNK	11.55	↑	+.65	2622600
EXDS	9.70	↓	-.17	15546300
INKT	6.52	↑	-.23	4972700
INSP	3.55	↓	-.39	6656100
RNWK	8.64	↓	+.10	1095700
YHOO	18.01	↓	+.05	10260000

StandardMinder Window

Create a Standard MarketMinder

1. Click **MarketMinder** on the RealTick **Design** menu.

The system displays the **Minder Setup** dialog box.

The Minder Setup dialog box is shown with the 'Symbols' tab selected. It includes sections for Minder Type, Symbol Chain, and a list of Selected Symbols. The 'Selected Symbols' list contains 'MSFT'. There are buttons for 'Add', 'Delete', 'Clear', 'Move Up', and 'Move Dn'. A checkbox for 'Upper Case Symbols' is checked. The 'Load Symbols From Server' section includes search and security options.

Minder Setup Dialog Box

2. Type the symbol or symbols you want to monitor in the **Selected Symbols** field.
3. Click **Add**.

The system adds the symbol(s) to the **Selected Symbols** list.



***Hint:** You can also load symbols or search for symbols. See chapter 4 for information concerning loading and searching for symbols.*



***Note:** A root is a currency, commodity, or stock that is common to a range of related derivatives symbols.*

4. Click **OK** to enter your symbols into the **MarketMinder** quote window.

The StandardMinder window appears.

Create a ChainMinder

Use a ChainMinder to create other RealTick windows.

1. Click **MarketMinder** on the **Design** menu.
The **Minder Setup** dialog box appears.
2. Select the chain type from the **Chain Type** drop-down list.
3. Type the root in the **Root** field.
4. Select the session in the **Session** drop-down list.
5. Click **OK**.

The ChainMinder window appears with a symbol chain.

Note: Click the favorite **Market Statistics** under **MarketMinder** on the **Favorites** menu to quickly display a ChainMinder.

Add a Symbol to an Existing MarketMinder

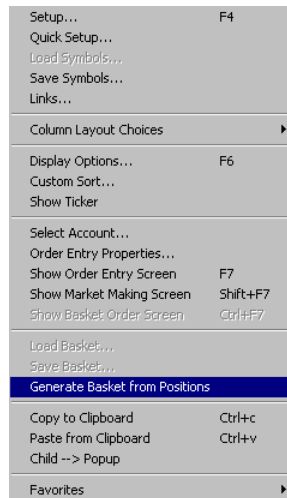
You can add more symbols to a StandardMinder or a PositionMinder.

1. Double-click a field in the **Symbol** column.
The field will activate.
2. Type the symbol.
3. Press **Enter**.

The symbol is added to the Minder.

Quickly create a BasketMinder from your Positions

1. Right-click a **BasketMinder**.
The **Minder** function menu appears.



MarketMinder Function Menu

2. Select **Generate Basket from Positions**.

Your positions appear in the BasketMinder.

Using MarketMinder

Convert Currency

Trade securities in a foreign currency.

1. Click **Set Default Currency** on the MarketMinder window.
The **Select Currency** dialog box will open.
2. Select a currency from the **Currency** drop-down list.
3. Click **OK**.
4. Click **Column Layout** on the **MarketMinder** menu.
The **Column Layout** dialog box will appear.
5. Select a price column in the **Column** list box.
The **Convert Currency** check box will activate.
6. Click **Convert Currency**.
7. Click **OK**.

The system converts the currency.



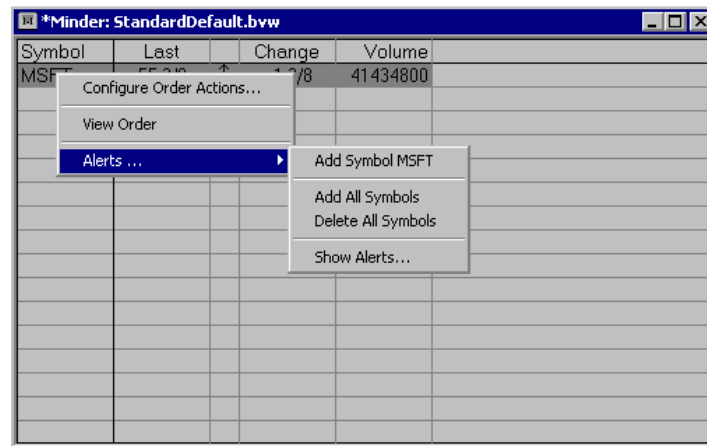
***Note:** If you don't have the convert currency option, but would like to, contact your RealTick Vendor.*

Access the Alerts and Alarms

Configure your alerts directly from the MarketMinder. Right-click a symbol to add it to your alert list or set a global alert for all the symbols in your watch list.

1. Right-click a symbol in the symbol column.
A pop-up menu will appear.
2. Click **Show Alerts** from the **Alerts** menu option.

The **TAL Alerts** window will appear.



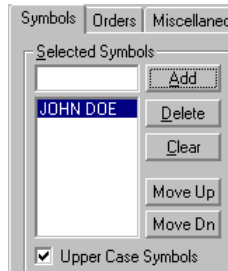
Alerts Menu in MarketMinder

- **Add Symbol MSFT** will add your symbol in the **TAL Alerts Configuration** dialog box
- **Add All Symbols** will add all the symbols to the **TAL Alerts Configuration** dialog box.
- **Delete All Symbols** will delete all the symbols from the **TAL Alerts Configuration** dialog box.

Group Symbols

Separate symbols on a page by entering customer's names and inserting blank rows. As a result, you'll be able to display multiple customer's information neatly on one window.

1. Click **Setup** on the **MarketMinder** menu.
The **MarketMinder Setup** dialog box will open.
2. Type a customer's name in the **Selected Symbols** field. For example, type *John Doe*.



3. Click **Add**.
The name will appear in the **Selected Symbols** list.
4. Type the symbol you want in the **Selected Symbols** field.
5. Click **Add**.
The symbol will appear in the **Selected Symbols** list.
6. Enter a single space in the **Selected Symbols** field and press the **Enter** key.
7. You can continue entering more customer names and spaces.
When ready, click **OK**.
The system will display the MarketMinder window.

Multiple Selections in a MarketMinder

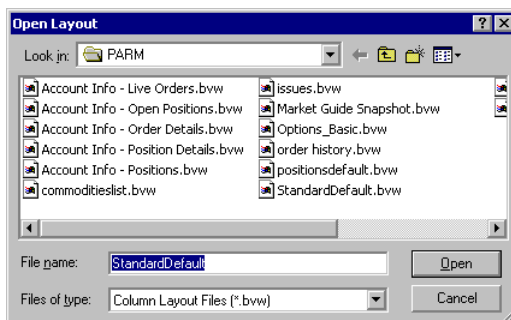
You can delete several symbols at one time.

1. Click Display Options on the MarketMinder menu.
The **Display Options** dialog box will appear.
2. Click the **Allow Multiple Selection** check box.
3. Click **OK**.
4. Left-click a row and drag the mouse until all the symbol rows are selected.
5. Click **Delete**.
The symbols are deleted.

Changing the Display of MarketMinder

Change the Column Layout

1. Click **Load Column Layout** on the **MarketMinder** menu.
A standard Windows **Open Layout** dialog box will appear listing the available layouts.



Open Layout Dialog Box

2. Click a layout.
3. Click **Open**.

Your **MarketMinder** window will display the new layout.



Note: Please contact Technical Support to find out more information concerning the Column Layout Choices (FID – Field Identification Code).

Configure Column Layout

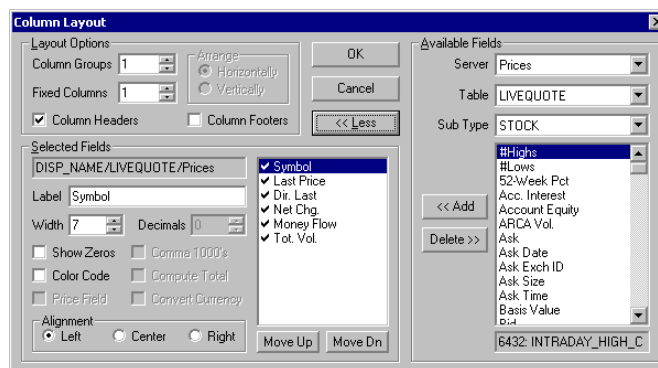
Create a column layout.

1. Click Configure Column Layout on the Column Layout Choices submenu of the MarketMinder menu.

The **Column Layout** dialog box appears.

2. Click the **More >>** button.

The dialog box expands.



Column Layout Dialog Box

3. Add columns from the **Available Fields** and/or delete columns from the **Selected Fields** using the **<<Add** and **Delete>>** buttons.

4. Click **OK**.

The system configures the column layout.

Save a Column Layout

Create a layout in the MarketMinder and save it.

1. After you have made the changes to your **MarketMinder** columns, choose **Save Column Layout As** on the **MarketMinder** menu.

The **Save Layout** dialog box will appear.

2. Give your column layout a name and attach a “.bvwm” extension. For example, save Order History as OrderHistory.bvwm for the column layout name.
3. Click **Save**.

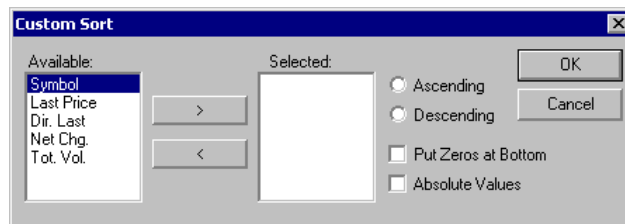
You can now load your custom column layout.

Custom Sort a MarketMinder

Sort the data in a MarketMinder.

1. Right-click **Symbol** on the **Minder** window and select **Custom Sort**.

The **Custom Sort** dialog box will appear.

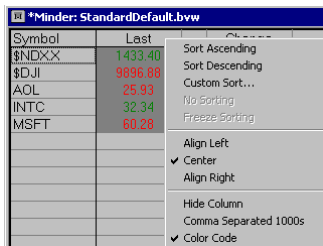


Custom Sort Dialog Box

2. Add the columns you would like to sort to the **Selected** field list using the > button.
3. Click the **Ascending** option button if you'd like to sort the data from high to low.
4. Click the **Descending** option button if you'd like to sort the data from low to high.
5. Click the **Put Zeros at Bottom** check box if you'd like to put zeros at the bottom of the column regardless if you sort the column ascending or descending.

- Click the **Absolute Values** check box if you want to ignore the sign of the values being sorted.
- Click **OK**.

The **Minder** will sort.



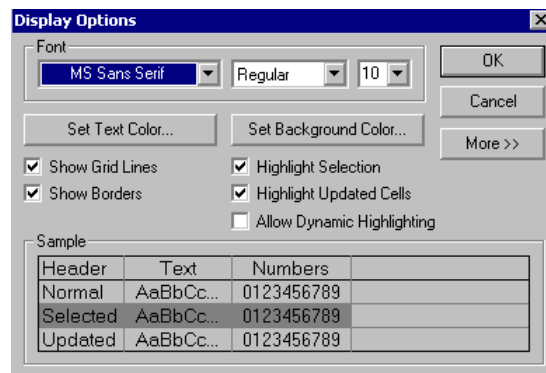
Additional Settings to Custom Sort your Minder

- Right-click a column title on the **Minder** window.
- Select **Hide Column** to hide the column.
- Select **Comma Separated 1000s** to display the commas.
- Select **Color Code** to add the up-tick and down-tick colors.

Change the Window Font for MarketMinder

- Click **Display Options** on the **MarketMinder** menu.

The system displays the **Display Options** dialog box.



Display Options Dialog Box

- Choose a font from the drop-down list available in the **Font** field.
 - Choose a font style from the drop-down list available in the **Font Style** field. For example, you can choose bold or *italic*.
 - Choose a size from the drop-down list available in the **Size** field.
 - Click the **Set Text Color** button to change the color.
- The system displays a standard **Windows Color** dialog box.
- Select the color and click **OK**.

The standard **Windows Color** dialog box will close.

7. Click **OK** on the **Display Options** dialog box.

The system updates the **MarketMinder** window.

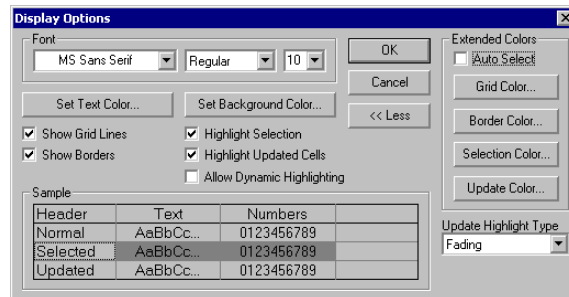
Change the Table Display

You can change the grid lines, the borders, the colors, and the highlight feature in the MarketMinder window.

1. Click **Display Options** on the **MarketMinder** menu.

The system displays the **Display Options** dialog box.

2. Click **More>>** to expand the **Display Options** dialog box.



Display Options Dialog Box

3. Uncheck the **Show Grid Lines** option button to hide the grid line(s).

The default option is to show the grid line(s).

4. Uncheck the **Show Borders** option button to hide the border lines for the name of the columns and rows.

The default option is to show the borders.

5. Uncheck the **Highlight Selection** option button to not highlight a line you click.

The default option is to highlight the line.

6. Uncheck the **Highlight Updated Cells** option button to not highlight data that has been updated.

The default option is to highlight updated information.

7. Click **More**.

The system expands the **Display Options** dialog box.

8. If you want to change the colors in the table, uncheck the **Auto Select** option button.

The system activates the **Grid Color**, **Border Color**, **Selection Color**, and **Update Color** buttons.

9. If you want to change any of the colors, click one of the **Color** buttons.

The system displays a standard **Windows Color** dialog box.

10. Click the color, and click **OK**.

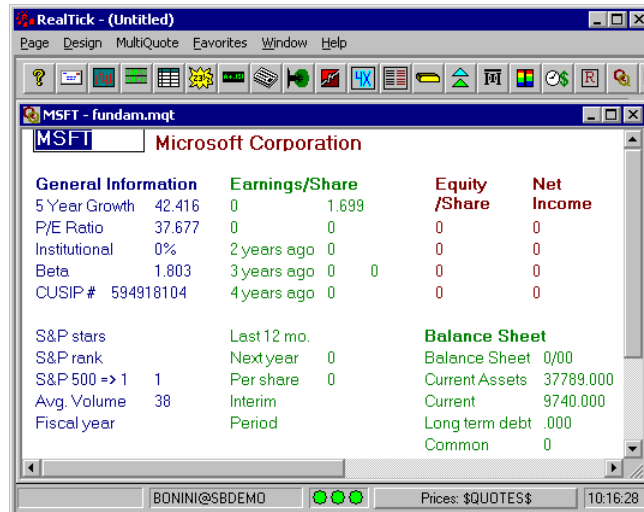
11. To change the highlighting feature, choose the feature from the drop-down list available in the **Update Highlight Type** field.

12. Click **OK**.

The system updates the **MarketMinder** window.

MultiQuote

The MultiQuote window is a versatile quote window for one or more instruments or a single trading account. Different layouts for the MultiQuote offer a wide range of sets of information, including fundamental data, price data, and account (margin) information. The layout of the MultiQuote window determines what information is included in the display. Fundamental layouts include information such as profit/earnings ratio, Standard & Poor's rank, revenue, and earnings per share. Simpler quote layouts include price information like the 52-week high and low, volume, earnings, and bid and ask prices. You can choose among many different layouts.



MultiQuote Window

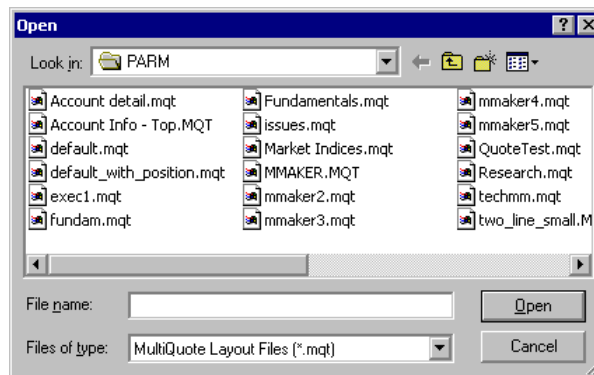


Hint: Drag and drop a new symbol in MultiQuote to replace a symbol.

Create a new MultiQuote

1. Click **MultiQuote** on the **Design** menu.

The **Open** dialog box will appear.



Open Dialog Box

2. Select the **MultiQuote** layout you would like to open.
3. Click **Open**.

The MultiQuote window will appear.

Open a MultiQuote Window Layout

1. Click **Open Layout** on the **MultiQuote** menu.

The system displays the Windows standard **Open** dialog box.

2. Double-click the column layout file.
3. Click **Open**.

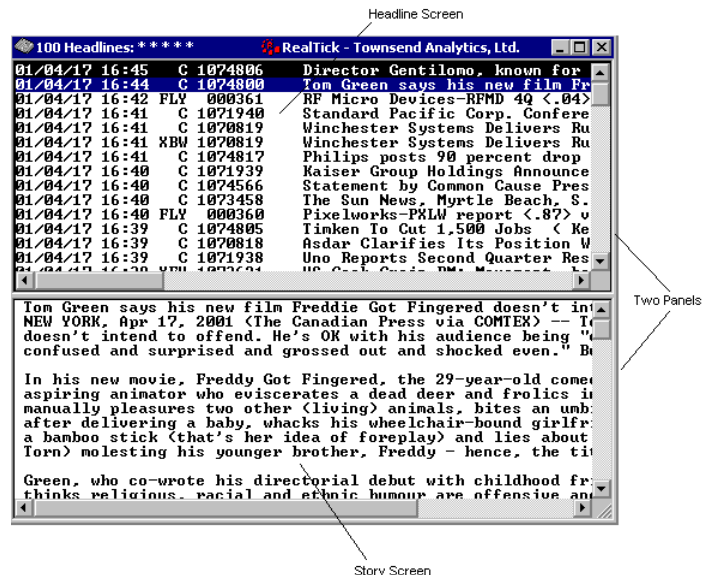
The system opens the layout.

News

With the News window, you can include news headlines and stories in your RealTick window. You can follow market movements as well as a wide variety of press releases and announcements that may affect prices.



Note: You can view headline stories as they reach the market.



News Window

News Headlines

The headline panel of a news window contains a scrolling list of news headlines. The title bar of the headline window shows the number of headlines displayed in the window and the search criteria used to choose them.

News Stories

Most headlines refer to a news story or a statistical report.



Hint: You can enter multiple **Source** criteria. Type in the sources directly, separated by commas.

View News Stories

1. Click **News** on the RealTick **Design** menu.

The **Quick Search Criteria** dialog box will open.

Quick Search Criteria Dialog Box

2. Enter the desired selection criteria, or accept the defaults to return all news stories for the current day.
3. Click **OK**.

The **News** window opens.

Open a Story

- Double-click the headline in the upper panel of the **News** window.

Search for stories about a symbol

- Drag the symbol from another RealTick window, or from the symbol search window, and drop the symbol onto the **News** toolbar button.

The **News** window will appear.

Search by Keyword

1. Click **Find Headline** on the **News** menu.

The **Find** dialog box will appear.

Find Dialog Box

2. Type the keyword into the **Find What** field (for example, Mexico).

3. Click **Up** in the **Direction** section to search from the bottom up.
4. Click **Down** in the **Direction** section from the top down.
5. Click **OK**.

The system will search.

Changing the Display of News

Add columns to the News Window

1. Click **Configure** on the **News** menu.

The **Configure** dialog box will open.

Configure Dialog Box

2. Click the check boxes in the **Headline Display** frame of the columns you want to add.
3. Click **OK**.

The system closes the **Configure** dialog box and redispays the **News** window.

Navigate News

Use the following options on the **News** menu to navigate through news stories.

Option	Description
Auto Request Stories	Automatically display new stories in the second panel of the News window.

Option	Description
Newest at Top	Add the newest stories to the top of the News window.
Double-click a page number in an open news story. Confirm the source and page number in the Go To dialog box.	Jump to a story.
View Last Story	View the last story.
Page Down	View the next story.
Page Up	View the previous story.

Copying News

Use the following options to copy news to other applications.

Option	Description
Copy Headlines	Copy headlines from the headline window to the clipboard.
Copy Story	Copy a story to the clipboard

Set an Alarm for News

- Click **Alarm** on the **News** menu to sound an alarm when a news story is sent to the **News** screen.

Printing News

Print Stories Automatically

1. Click Automatically Print Stories on the News menu.
2. Double-click the headline of the story you would like to print.
The story will print.

Configure and Print a Story Group

1. Click Setup Print Schedule on the News menu.
The **Scheduled Story Configuration** dialog box appears.



Hint: To delete a **Story Group**, click the group you would like to delete. Click **Remove**. The group is deleted.

To delete a story in a group, click the **Group** that contains the story you would like to delete. Click the **Story** in the **Selected** field. Click **Remove**. The story is deleted.

Scheduled Story Configuration Dialog Box

2. Click **New** to add **Group 2** or to create a new group. **Group 1** is already available by default.

The new group number will appear in the **Story Groups** field.

3. Type the source code of the story in the **Source** field.
4. Type the page number of the story in the **Page** field.
5. Click **Add**.

The **Source Code** and **Page** number will appear in the **Selected** field.

6. Repeat steps 3, 4, and 5 for every story you would like to add to the group.
7. Click **Move Up** or **Move Down** to organize the order of the stories.
8. Click **Page Break After Each Story** if you'd like each story to print on it's own page.
9. Type the hours and minutes in the **Start Printing at** field of when you would like to print the group.

Note: RealTick must be running at this time in order for these stories to print.

10. Click **OK**.

The system saves the group configuration and schedules the printing.

Configure and Send a Story Group to a File

Note: RealTick must be running at this time in order for these stories to be sent to the file.

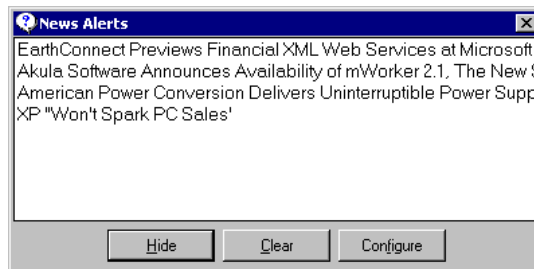
1. Click Setup Print Schedule on the News menu.
The **Scheduled Story Configuration** dialog box appears.
2. Click **New** to add **Group 2** or to create a new group. **Group 1** is already available by default.
The new group number will appear in the **Story Groups** field.
3. Type the source code of the story in the **Source** field.
4. Type the page number of the story in the **Page** field.
5. Click **Add**.
The **Source Code** and **Page** number will appear in the **Selected** field.
6. Repeat steps 3, 4, and 5 for every story you would like to add to the group.
7. Click **Move Up** or **Move Down** to organize the order of the stories.
8. Click **Print to File** to send the **Group** to a file instead of to the printer.
The **Print to File** field will enable.
9. Type the file path in the **Print to File** field.
10. Type the hours and minutes in the **Start Printing at** field of when you would like the stories sent to the file.
11. Click **OK**.
The system saves the group configuration and schedules to send it to the file.

Add a Story to the Scheduled Print Jobs

1. Double-click the headline text to request the story.
2. Click **Add Story to Print Scheduler** on the **News** menu.
The system will print the story during the time you set in the print configuration.

News Alert

News Alerts are provided in a separately permissioned window in RealTick that pop up when news stories arrive from the News Server. The News Alerts window is independent of the RealTick page. Enter the keywords, symbols, or categories you would like to search in the News Alerts Configure window. Headlines will appear as soon as they are received. You may also set the type of headline information, fonts, sound, and a special time out feature.



News Alert Window

Create a News Alert

1. Click **Show News Alerts** on the RealTick **Design** menu.
2. Click **Configure** and enter the desired search parameters in the **Criteria** section.

The system displays the **Configure News Alerts** dialog box.



Hint: You can load a symbol file. See Chapter 4 for information concerning loading a symbol file.



Configure News Alerts Dialog Box

3. Enter keywords, categories, or the symbol in the text fields in the **Keywords**, **Categories**, and **Symbols** frame.

4. Click **Add**.
5. Click **OK**.

The system displays the news alert.

Close a News Alert

- Click the **Hide** button (all headlines currently in the window will remain, no Configure settings will be changed.)
- Double-click the control box (all headings currently in the window and all Configure settings will be cleared.)

Note: When you use the Windows control box to close a News Alerts window, you will clear out all the keywords you have previously entered, or any other changes you made in the Configure dialog box. The next time you want to set an alert, you will have to re-enter keywords and change any other settings that you wish to customize. In contrast, the Hide button instructs RealTick to keep collecting News headlines, adding them to the ones already in the News Alerts window.

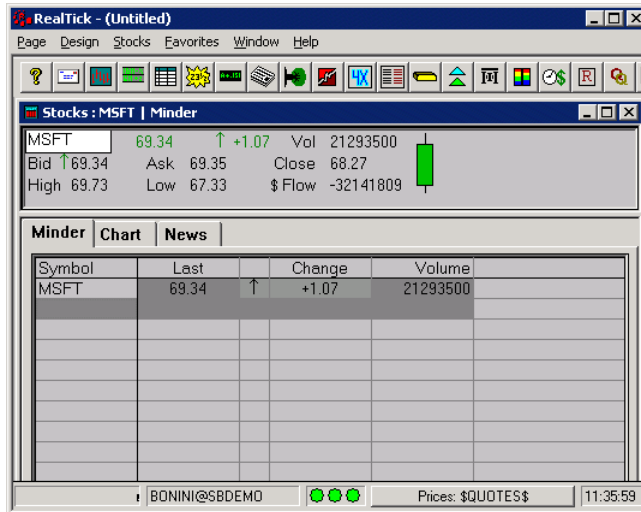


Stocks

The Stocks window is a composite window containing other RealTick windows. Its purpose is to provide a simple, easy configurable layout for viewing RealTick windows. It is possible to view your windows in any order by clicking the appropriate tab in the window display area. Stocks windows are frequently part of fixed-page installations of RealTick. If you are using a fixed-page installation, you may have limited capabilities.



Hint: Right-click a window in Stocks to access its function



MultiQuote Window

View Stocks

1. Click **Stocks** on the **Design** menu.

The system displays the **Stocks Setup** dialog box.

Stocks Setup

General

Symbol: ☒ Upper Case ☐ Vertical Tabs

Tab Layout: Load File...

Account: Select Account...

OK Cancel

Stocks Setup Dialog Box

2. Type the symbol in the **Symbol** field.
3. Click the **Vertical Tabs** check box if you would like the tabs to display vertically as opposed to horizontally.
4. Click the **Load File** button if you would like to open a preconfigured tab layout.
5. Click the **Select Account** button to select an account.
6. Click **OK**.

The system closes the dialog box and displays the **Stocks** window.

Change the Tab Font in a Stocks Window

1. Click Select Tab Font on the Stocks menu.

The **Font** dialog box will appear.

2. Select a type of font.
3. Click **OK**.

The tabs in the **Stocks** window display the new tab font.

Table

The Table window displays its data numerically, in rows and columns, versus in a graph, like Charts. However, just like Charts, Tables can display its data for a specific time period, such as Intraday, Daily, Weekly, or Monthly. Volume, open interest, and exchange information can also be displayed, along with technical studies.

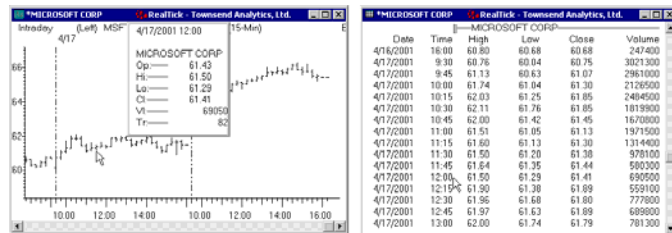


Chart and Table Windows

Tables contain the same data as Charts. However, it's in numeric format.

Users choose to use Tables to follow a certain symbols trend in the market and to study that trend with a particular technical study. However, Technical Analysis is used mostly in Charts.

Create a Table

There are several different types of Tables you can create. Tables can display data daily, weekly, and monthly. These type of charts will give you price information for the duration of a particular time period and at a specific time during that time period.

1. Click **Table** on the RealTick **Design** menu.

The **Table Setup** dialog box will appear.



Hint: You can also create a table by dragging a symbol from the Symbol Guide or another RealTick window and dropping it on the Table toolbar button. The system will create a new table with the symbol.



Hint: Click the **More>>** button. The system expands the **Table Setup** dialog box and displays the **Symbol File** field.

Table Setup Dialog Box

2. Type the symbol in the **Symbols** field and click the **Add** button.
3. Choose the type of table from the drop-down list available in the **Data Period** field.
4. Enter a time frame for the information in the table. Enter the end date in the **Date** field, and enter the beginning date in the **Days, Weeks, or Months** field. The system searches for data within the time frame.
5. If you create an Intraday table, enter the minute time interval for the table in the **Intraday Bar Interval** field.
The system updates the information at each interval.
6. Choose the time frame for your table.
 - For a table that contains data starting from the market's open, check the **Start Bars at Open** field.
 - For a table that excludes any data before a specific time, check the **Exclude data before** field. The system enables the time field to the right. Enter the beginning time for your table.
 - For a table that excludes any data after a specific time, check the **Exclude data after** field. The time field to the right activates. Enter the end time for the table.
 - For a table that displays data during pre and post market hours, click **Show Irregular Trades**.
7. Enter a title for the table in the **Chart Title** field.

- Click the **Show Volume** option button to display the volume values on your table.

Note: The following steps are available for the tables Trades, Time & Sales, and Trades & Quotes.

- Click the **Show Exchange** option button to display the exchanges on your table.
- Click the **Exch Contributor** option button to display the exchange contributions on your table. This field is available only if you choose to show the exchange. When you choose the **Exch Contributor** option, the table will not display the exchange handler's name.
- Click **OK**.

The system displays your table in the **Table** window.

Add a Symbol

- Click Add/Replace Symbol on the Table menu.
The **New Symbol** dialog box will appear.
- Type a symbol in the **New Symbol** field.
- Click the **Add** option button.
- Click **OK**.

The symbol is added to the Table.

Change the Type of Table

Absolute: This style displays the price series.

Percent Change: This calculation shows the change over time for the value of each symbol. The value of each symbol when it first appears in the chart is the reference value. The remainder for each symbol is a percentage of the reference value.

Ratio: This calculation displays the value of one or more symbols relative to the value of another. You must choose the symbol the other symbols will be measured against.

Differential: This calculation displays the difference between the values of two or more symbols. You must choose the symbol the others will be measured against.

- Click **Style** on the **Table** menu.



Hint: Use Ratio and Differential to compare two symbols. If you only have one symbol in your table, see Add a Symbol.

The **Chart Type** dialog box will appear.

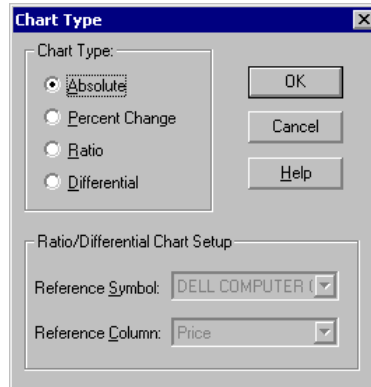


Chart Type Dialog Box

2. Select the calculation type.
3. If you choose either **Ratio** or **Differential**, choose a symbol from the drop-down list available in the **Reference Symbol** drop-down list.
4. Also, choose a column from the drop-down list available in the **Reference Column** field.
5. Click **OK**.

The system changes the price display.

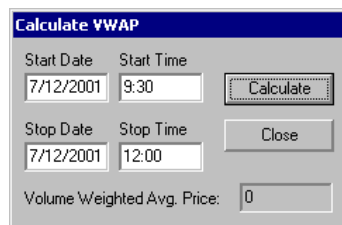
Using Tables

Calculate Volume Weighted Average Price

This option is only available for certain charts, for example, Time & Sales, Trades & Quotes, or Daily.

1. Click **Calculate VWAP** on the **Table** menu.

The system displays the **Calculate VWAP** dialog box.



Calculate VWAP Dialog Box

2. Type the start date in the **Start Date** field.
3. Type the start time in the **Start Time** field.
4. Type the stop date in the **Stop Date** field.
5. Type the stop time you want as the end time for the calculation in the **Stop Time** field.
6. Click the **Calculate** button.

Volume Weighted Avg. Price:

The system displays the average in the **Volume Weighted Avg. Price** field.

7. Click **Close**.



Hint: To move vertically and horizontally in a table, use the up and down arrow keys and the left and right arrow keys on your keyboard.

Transferring Data to other Applications

You can copy RealTick tables and paste them into Windows applications like Microsoft Excel. The values below were copied from a RealTick table into a Microsoft Word document.

11/22/93 13:00	51 7/8	52	51 3/4	51 3/4	22400
11/22/93 13:15	51 7/8	52 1/8	51 3/4	52	45800
11/22/93 13:30	52 1/8	52 1/4	52	52 1/4	68700
11/22/93 13:45	52 1/4	52 3/8	52 1/8	52 1/4	61300
11/22/93 14:00	52 1/8	52 3/8	52 1/8	52 1/4	44400
11/22/93 14:15	52 1/4	52 3/8	51 7/8	52	85500
11/22/93 14:30	52 1/8	52 1/8	51 7/8	52	28900
11/22/93 14:45	52	52 1/8	51 7/8	52 1/8	24700
11/22/93 15:00	52 1/8	52 1/8	52	52 1/8	41700

8. Click the **Table** window in RealTick, then press **Ctrl + Insert** on your keyboard.

The system copies the data.

9. Open the Windows application and move your mouse where you want to insert the data.

10. Click **Paste** on the **Edit** menu of the Windows application or press **Ctrl + V**.

The system pastes the data.

Changing the Display of Tables

Change the Display of a Table

1. Click **Display** on the **Table** menu.

The system displays the **Table Display Options** dialog box.

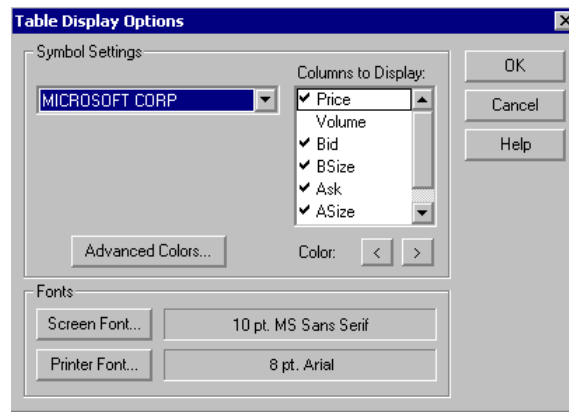


Table Display Options Dialog box

2. If the table includes multiple symbols, choose the appropriate symbol from the drop-down list available in the **Symbol Settings** box.
3. To add a column to your table, double-click the column name in the **Columns to Display** list.
A check mark appears.
4. To change the color of the column name, click the column name in the **Columns to Display** list, and then click the **Color** arrow buttons (< or >).
5. To change the color of the font on the window or when you print your table, click the **Advanced Colors** button.
The system displays the **Color Setup** dialog box.
6. Enter any changes and click the **OK** button. For more information, see the **Change Colors** section.
7. To change the font display of the **Table** window, click the **Screen Font** button.
The system displays the **Font** dialog box.
8. Enter any changes and click the **OK** button.

9. To change the font of the **Table** window when you print the window, click the **Printer Font** button.

The system displays the **Font** dialog box.

10. Enter any changes and click the **OK** button.
11. Click **OK**.

The system updates the **Table** window.

Change a Column in a Table

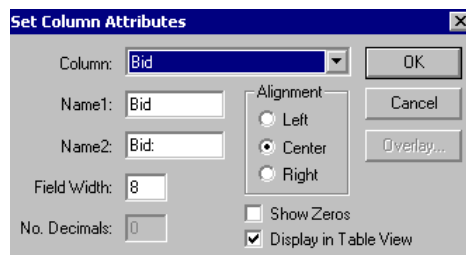
1. Move your mouse to any of the column label names in the **Table** window.

2. Click the right mouse button.

The system displays the **Column Settings** option.

3. Click the **Column Settings** option.

The system displays the **Set Column Attributes** dialog box.



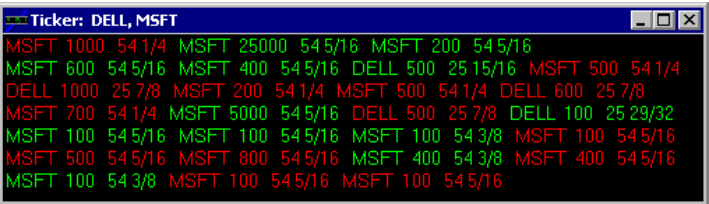
Set Column Attributes Dialog Box

4. Choose the column you want to change from the drop-down list available in the **Column** field.
5. Change the name of the column for the first row in the **Name1** field.
6. Change the name of the column for the second row in the **Name2** field.
7. Enter the width of the field in the **Field Width** field.
8. Choose the alignment for the column by clicking the **Left**, **Center**, or **Right** option buttons.
9. Click the **Show Zeros** field if you want to have zeros placed in numeric fields with no data.
10. Click the **Display in Table View** if you would like the field to display in the table view of the charts.

11. Click **OK**.
- The system updates the **Table** window.

Ticker

Ticker displays real-time price and volume information.



Cascade Display

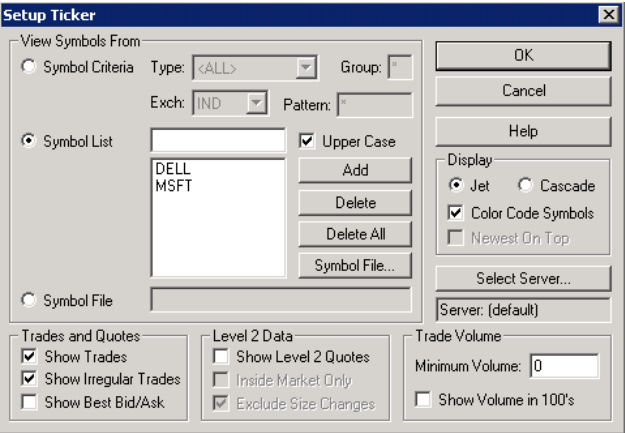
In Cascade tickers, the quotes appear vertically, top to bottom. You can choose to display the newest price at the top or the bottom. In Jet tickers, the quotes scroll horizontally, and the newest quotes appear on the right



Jet Display

Display a Ticker

1. Click **Ticker** on the **Design** menu.
- The **Setup Ticker** dialog box will appear.



Setup Ticker Dialog Box



Hint: From another *RealTick* window or from the **Symbol Guide**, move the mouse over the symbol you want to add to the ticker. Hold the **CTRL** key and the left mouse button. Move the mouse to the *Ticker* window. Release the **Ctrl** key and mouse button simultaneously. The symbol is added to the window.

2. Click the **Symbol Criteria**, **Symbol List**, or **Symbol File** option button and select or add symbols.
3. Choose the types of trades and quotes you want to view. You can check the **Show Trades**, **Show Irregular Trades**, and/or **Show Best Bid/Ask** check boxes.
4. If you have selected **Symbol List** or **Symbol File**, choose the Level II data you want to see. You can check the **Show Level 2 Quotes**, **Inside Market Only**, and/or **Exclude Size Changes** fields.
5. If you want, modify the volume of shares to be displayed in the **Trade Volume** area of the window. Enter the minimum volume you want to view in the **Minimum Volume** field. Or, you can check the **Show Volume in 100's** to view volumes that are 100 or more.
6. In the display area of the window, choose **Jet** (horizontal flow) or **Cascade** (vertical flow). If you choose **Cascade**, consider choosing **Newest on Top**.
7. Click **OK**.

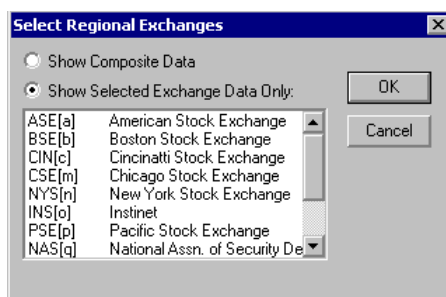
The system displays the **Ticker** window.

Configuring a Quote Source

View Data from a Specific Exchange

1. Click **Exchanges** on the **Ticker** menu.

The system displays the **Select Regional Exchanges** dialog box.



Select Regional Exchanges Dialog Box

2. Click the **Show Selected Exchanges Data** option button.
3. The system activates the list field.

4. Click the exchanges from which you would like to see data displayed. Hold down the **CTRL** key to choose more than one exchange.
5. Click **OK**.

The system closes the dialog box and redisplay the **Ticker** window.

View Composite Data

1. Click **Exchanges** on the **Ticker** menu.

The system displays the **Select Regional Exchanges** dialog box.

2. Click the **Show Composite Data** option button.
3. Click **OK**.

The system closes the dialog box and redisplay the **Ticker** window.

View Data from a Specific Market Maker

1. Click **Setup** on the **Ticker** menu.

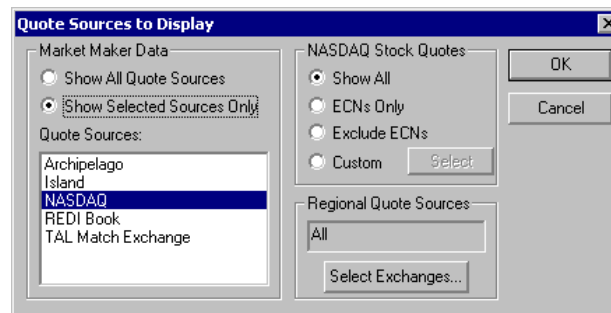
The **Setup Ticker** dialog box will appear.

2. Click **Show Level 2 Quotes** in the **Level 2 Data** box.

The **Exclude Size Changes** check box will activate.

3. Click **Exclude Size Changes**.
4. Click **OK**.
5. Click **NASDAQ Quote Sources** on the **Ticker** menu.

The **Quote Sources to Display** dialog box will appear.



Quote Sources to Display Dialog Box

6. Click the **Custom** option button in the **NASDAQ Stock Quotes** box.

The **Select** button will activate.

7. Click **Select**.

The **Include/Exclude Market Makers** dialog box will appear.



Include/Exclude Market Makers Dialog Box

8. Type a Market Maker(s) in the field.
9. Click **Add**.
10. Click the **Include only these Market Makers** option button.
11. Click **OK**.

The system closes and redisplay the **Ticker** window.

Remove Data from a Specific Market Maker

1. Click NASDAQ Quote Sources on the Ticker menu.
- The **Quote Sources to Display** dialog box will appear.

2. Click **Custom** in the **NASDAQ Stock Quotes** box.

The **Select** button will activate.

3. Click **Select**.

The **Include/Exclude Market Makers** dialog box will appear.

4. Click **Exclude these Market Makers**.
5. Click **OK**.

The system closes the dialog box and redisplay the **Ticker** window.

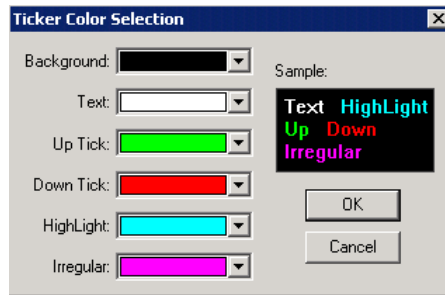
View a Ticker from a Single Source

1. Click **NASDAQ Quote Sources** on the **Ticker** menu.
The **Quote Sources to Display** dialog box will appear.
2. Click **Show Selected Sources Only**.
The **Quote Sources List** activates.
3. Select the **NASDAQ Quote Sources**. Press **CTRL** and click a **Quote Source** to select multiple quote sources.
4. Click the **Show All**, **ECNs Only**, or **Exclude ECNs** option button. If you choose **Show All**, the system displays the data from both ECN and Exchanges. If you choose **ECNs Only**, the system displays the data from ECNs only. If you choose **Exclude ECNs**, the system displays the data from exchanges only.
5. Choose an exchange for regional quote sources.
6. Click the **Select Exchanges** button.
The system displays the **Select Regional Exchanges** dialog box.
7. Choose either **Show Composite Data** for all exchanges, or **Show Selected Exchange Data Only** for specific exchanges.
8. Click the **OK** button when finished.
9. Click the **OK** button on the **Quote Sources to Display** dialog box.
The system closes the dialog box and redisplay the **Ticker** window.

Changing the Display of a Ticker

Change the Window Color of a Ticker

1. Click **Colors** on the **Ticker** menu or from the right-click popup menu.
The **Ticker Color Selection** dialog box will appear.



Ticker Color Selection Dialog Box

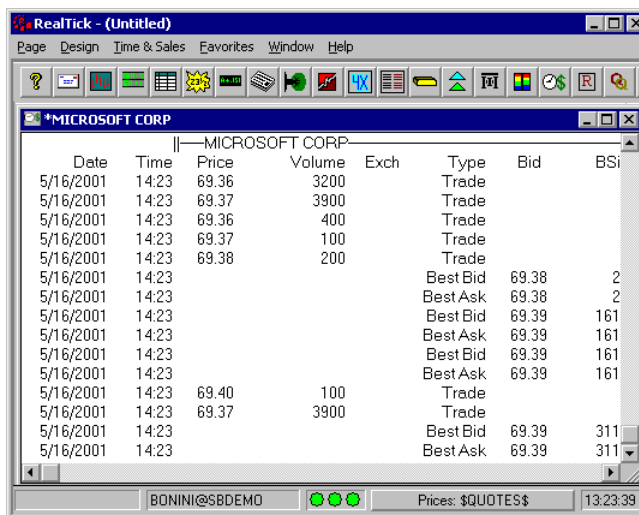
2. Click the drop-down arrows and select the **Background**, **Text**, **Up Tick**, **Down Tick**, and **Irregular Tick** colors.
3. Click **OK**.

The system updates the **Ticker** window.

Time & Sales

The Time & Sales window displays all the transactions of a symbol during a particular trading day.

The Time & Sales window displays one row for each transaction. The eleven columns represent different types of data: Price, Volume, Exchange, Type, Bid, Bid Size, Bid Exchange, Ask, Ask Size, Ask Exchange, and Condition. The selection and order of these columns do not change. Each major column displays the information for one symbol, and each secondary column displays a type of information for that symbol, such as last price, previous close, or time of last trade.



Time & Sales Window

The Time & Sales window features numerous colors. If you use the default setting for your color scheme, each color has a different meaning.

Color	Description
Red	The trade was based on the bid price.
Green	The trade was based on the ask price.
Yellow	The trade was between the bid and ask price.



Hint: To create a new Time & Sales window, drag and drop a symbol in the window.

Create a Time and Sales Report

1. Click **Time & Sales** on the RealTick **Design** menu, or click the **Time & Sales** button on the RealTick toolbar.

The system displays the **Setup Time and Sales** dialog box.



Note: You can also create a Time & Sales window by dragging a symbol from the Symbol Guide or another RealTick window and dropping it on the Time & Sales toolbar button. The system displays a new Time & Sales with that symbol.

Setup Time And Sales Dialog Box

2. Type the symbol in the **Symbol** field.
3. Type a date in the **Date** field.

The **Time & Sales** window can only display one day's data at a time.

4. Type the start time for the data in the **Begin Time** frame.
5. Click the **Open** option button to list trades from the time the market opens.
6. Type the stop time for the data in the **End Time** frame.
7. Click the **Now** option button to include the most recent trade data in the **Time & Sales** window.
8. Click the **Upper Case Symbols Only** check box to enter symbols in all upper case regardless of your keyboard setting. If your symbol uses any lower case characters, make sure this field is not checked.
9. Click the **Show Regional Bid/Ask** check box to view the regional bid and ask amounts for the symbol.
10. Click the **Add New Lines at Top** check box to display the most recent trade data on the top of the list.
11. Uncheck the **Add New Lines at Top** box to display the trade data in chronological order.
12. Click the **Color Code Prices** check box to display the RealTick color codes for the prices.

13. To display the seconds in the **Time** column, click the **Show Seconds** field.
14. To view only the trades that are of a specific volume or higher, type the beginning volume in the **Minimum Volume** field.
15. Click **OK**.

The system displays the **Time & Sales** window.

Configuring Quote Sources

View Data from Selected Exchanges

1. Click **Rgnl Exchanges** on the **Time & Sales** menu.
2. Click the **Show Selected Exchange Data Only** option button.
3. Click the exchange you want from the list. Hold the **CTRL** key down to choose any other exchanges you want from the list.
4. Click **OK**.

The system updates the **Time & Sales** window.

View Composite Exchange Data

1. Click **Rgnl Exchanges** on the **Time & Sales** menu.
The system displays the **Select Regional Exchanges** dialog box.
2. Click the **Show Composite Data** option button.
3. Click **OK**.

The system updates the **Time & Sales** window.

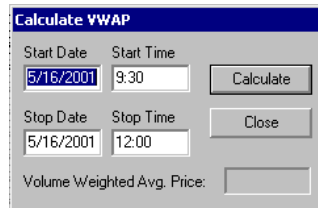
Using Time & Sales

Calculate Volume Weighted Average Price

You can calculate the volume weighted average price for a symbol during a specific time frame.

1. Click **Calculate VWAP** on the **Time & Sales** menu.

The system displays the **Calculate VWAP** dialog box.



Calculate VWAP

Start Date: 5/16/2001 Start Time: 9:30 Calculate

Stop Date: 5/16/2001 Stop Time: 12:00 Close

Volume Weighted Avg. Price:

Calculate VWAP Dialog Box

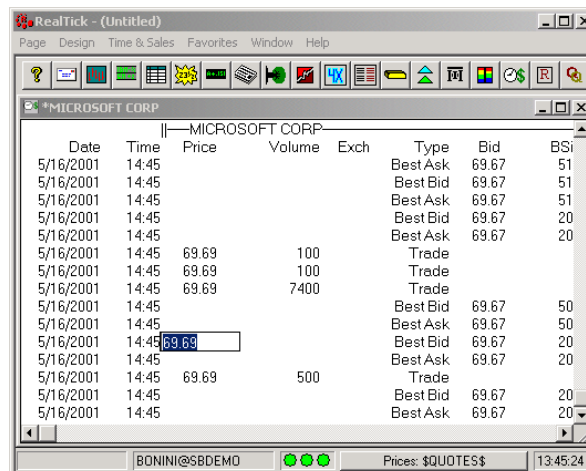
2. Type the start date you want to use for the average in the **Start Date** field.
3. Type the start time you want to use for the average in the **Start Time** field.
4. Type the stop date you want to use for the average in the **Stop Date** field.
5. Type the stop time you want to use for the average in the **Stop Time** field.
6. Click the **Calculate** button.

The system calculates the volume average price.

Edit data in a Time & Sales Window

1. Double-click the data you want to change. For example, you can change a time, price, or volume value.

The system displays the **Edit** field.



Date	Time	Price	Volume	Exch	Type	Bid	BSi
5/16/2001	14:45				Best Ask	69.67	51
5/16/2001	14:45				Best Bid	69.67	51
5/16/2001	14:45				Best Ask	69.67	51
5/16/2001	14:45				Best Bid	69.67	20
5/16/2001	14:45				Best Ask	69.67	20
5/16/2001	14:45	69.69	100		Trade		
5/16/2001	14:45	69.69	100		Trade		
5/16/2001	14:45	69.69	7400		Trade		
5/16/2001	14:45				Best Bid	69.67	50
5/16/2001	14:45				Best Ask	69.67	50
5/16/2001	14:45	69.69			Best Bid	69.67	20
5/16/2001	14:45				Best Ask	69.67	20
5/16/2001	14:45	69.69	500		Trade		
5/16/2001	14:45				Best Bid	69.67	20
5/16/2001	14:45				Best Ask	69.67	20

BONINI@SBDEMO Prices: \$QUOTES\$ 13:45:24

Edit Field

2. Type the new value and press the **Enter** key from your keyboard.

The system updates the **Time & Sales** window with the new value.

Note: To cancel, press the *Esc* key.



Hint: To move around in the **Time & Sales** window, use the **Page Up** and **Page Down** keys on your keyboard.

Copy Time & Sales Data for Another Application

1. Click **Copy to the ClipBoard** on the **Time & Sales** menu.
The system copies the window.
2. Open the program you want to use.
3. Press **CTRL + V**.
The system pastes the **Time & Sales** data.

Configuring the Display of Time & Sales

Change the Print Color for Times & Sales

1. Click **Change Colors** on the **Time & Sales** menu.
The system displays the **Color Setup** dialog box.
2. Click the **Printer Colors** option button.
3. Choose the background color you want from the drop-down list available in the **Background Color** field. The default color is white.
4. Click the column you want to change from the list available in the **Series** field.
5. Choose the color for the column from the drop-down list available in the **Color** field.
6. Choose the line style for the column from the drop-down list available in the **Line Style** field.
7. Repeat steps **5** and **6** for each series whose color and line style you want to change.
8. Click **OK**.

The system displays the changes only when you print the **Time & Sales** window.

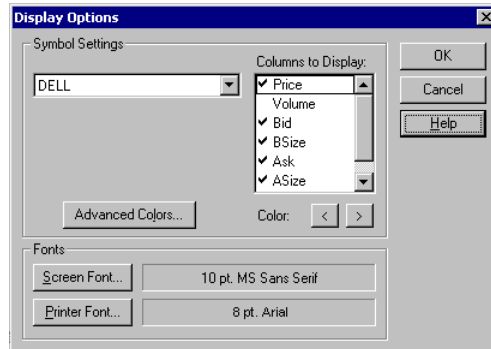


Hint: To replace a symbol, click **Add/Replace Symbol** on the **Time & Sales** menu. Enter the new symbol in the **New Symbol** field. Click **OK**.

Add or Remove Columns

1. Select **Display** on the **Time & Sales** menu.

The **Display Options** dialog box appears.



Display Options Dialog Box

2. Check or uncheck the columns to display.
3. Click **OK**.

TurboOptions™

The TurboOptions window is a flexible, easy-to-read option quote window. It's divided into two halves: one for Calls and the other for Puts. Each column of data will appear on both sides of this Calls/Puts divide.

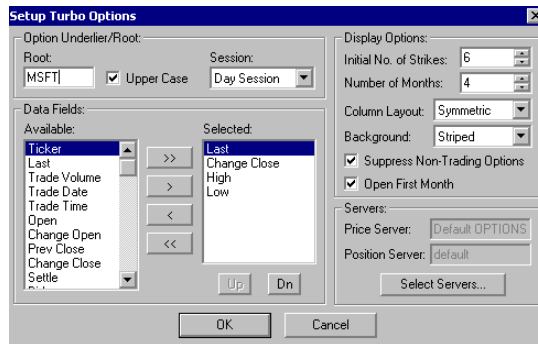
Turbo Options - FIFTH THIRD BANCORP						
Calls			FITB	Puts		
High	Change Close	Last		Last	Change Close	High
52.20	-.65	51.55				
May '01						
0	.00	10.00	40	.15	.00	0
0	.00	8.38	45	.25	.00	0
0	.00	3.40	50	1.00	.00	0
0	.00	.95	55	3.30	.00	0
0	.00	.20	60	9.50	.00	0
0	.00	.19	65	1.81	.00	0
Jun '01						
0	0	0	45	0	0	0
0	0	0	50	0	0	0
0	.00	1.80	55	0	0	0
0	.00	.55	60	0	0	0
0	0	0	65	0	0	0
Jul '01						

TurboOptions Window

Create a TurboOptions Window

1. Click **TurboOptions** on the RealTick **Design** menu or click the **TurboOptions** toolbar button.

The **Setup TurboOptions** dialog box will open.



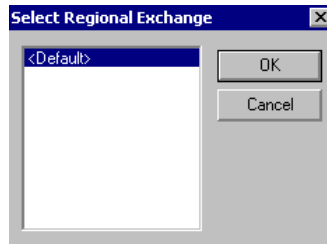
Setup TurboOptions Dialog Box

2. Enter the option root or underlier symbol in the **Symbol** text box of the **TurboOptions** window (for example, IBM or /SP).
3. If the option root or underlier requires lower case letters, uncheck the **Upper Case** check box.
4. Choose the session you want to display data from the **Session** drop-down list. Choose **Day Session**, **Night Session**, or **Both Sessions**.
5. Move the data fields from the **Available** list to the **Selected** list by using the **Move (>)**, **Move All (>>)**, **Remove (<)**, and **Remove All (<<)** buttons.
6. Ensure the chosen fields appear in the **Selected** list field in the desired order by using the **Up** and **Dn** buttons.
7. Choose the order in which the columns will be organized from the drop-down list. Your choices are **Symmetric** or **Left to Right**.
8. Click **OK** to accept the parameters and open the **Turbo Options** window.
9. Click the squares with minus signs in them to expand the display for each expiration you are interested in.

Select an Exchange

1. Click **Exchange** on the **TurboOptions** menu.

The **Select Regional Exchange** dialog box will appear.



Select Regional Exchange Dialog Box

2. Click the exchange you'd like to receive data from, or press **CTRL** and click more than one exchange.
3. Click **OK**.

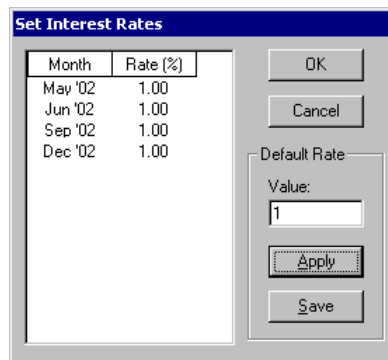
The system updates the **TurboOptions** window.

Using TurboOptions

Set Interest Rates

1. Click **Set Interest Rates** on the **Turbo Options** menu.

The **Set Interest Rates** dialog box will appear.



Set Interest Rates Dialog Box

2. Enter the value of the rate in the **Value** field.
3. Click the **Apply** button.

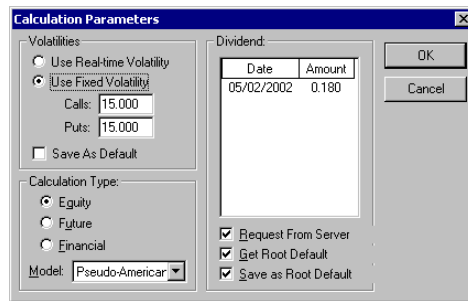
The **Rate %** field will change.
4. Click the **OK** button.

Change Calculation Parameters

Change the parameters for the *greeks* calculations. There are two inputs that affect the *greeks*, Volatilities and the Option Pricing model. Select both the Volatilities and the Option Pricing model in the Calculation Parameters dialog box.

1. Click **Calculation Parameters** on the **Turbo Options** menu.

The **Calculation Parameters** dialog box appears.



Calculation Parameters Dialog Box

2. Click either **Use Real-time Volatility** or the **Use Fixed Volatility** option button. If you use the real time volatility, the system will calculate the value. If you want to fix the volatility, you can enter the value.

If you click **Use Fixed Volatility**, the system activates the **Calls** and **Puts** field.

3. Type the value in these fields.
4. Choose the calculation type by clicking the **Equity**, **Future**, or **Financial** fields.
5. Choose the calculation model from the drop-down list in the **Model** field.
6. If you want to refresh the Turbo Options window with data from the server, click the **Request From Server** option button.
7. If you want to view the root default, click the **Get Root Default** option button.
8. If you want to save the root default, click the **Save as Root Default** option button.
9. Click **OK**.

Quickly Change the Fixed Volatility Percent

Adjust the fixed volatility percent.




- Right-click the **Vlty** column and select the percent you would like to change the fixed volatility, **+2%**, **+1%**, **+0.5%**, **-0.5%**, **-1%**, and **-2%**.

Reset Primary Tickers

Use this menu option to return to the primary ticker. If there are duplicate options with the same expiration and strike price, RealTick will display an * next to the symbol. Click the symbol, and the ticker will display the different options.

- To return the symbol to the primary Ticker, click **Reset Primary Tickers**.

View Details in a TurboOptions Window

To	Click
Set the number of strike prices displayed at this level in the Turbo Options Setup dialog box	
To collapse an underlier row so that only the expiration and (if applicable) the futures contract is visible	
To collapse the row	

Sizing Columns

Because of the unique column layout of Turbo Options windows, it is always better to size the columns from the right side of the window. As you size a column on the right side, the equivalent columns on the left side will also be sized.

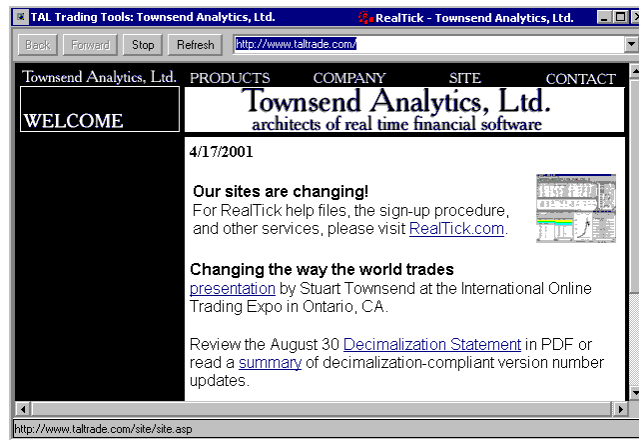
Change the Width of a Column in TurboOptions

1. Choose the column you would like to size on the right side of the **TurboOptions** window.
2. Place the mouse pointer to the right of the column until the column sizing cursor appears.
3. Drag the column border to the desired size, either smaller or larger.

Web Browser

The Web Browser window enables you to view sites on the World Wide Web. You can view stock tips, web news stories, and more.

To run Web Browser, you must have a copy of Internet Explorer installed on your computer. However, Internet Explorer does not have to be your default browser.



Web Browser Window

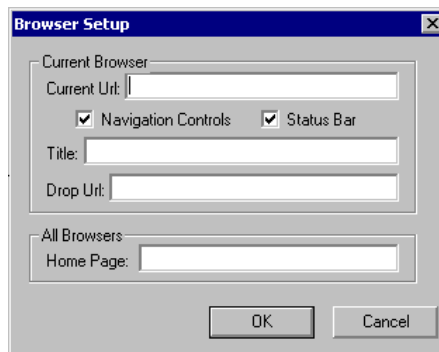
Open a Web Browser Window

1. Click **Web Browser** on the **Design** menu.

The **Browser Setup** dialog box will appear.



Note: You can also enter a home page in the **Home Page** field. The **Home Page** will become your default web page whenever you create a **Web Browser**



Browser Setup Dialog Box

2. Type the web address you want to open in the **Current Url** field.

3. Click **OK**.

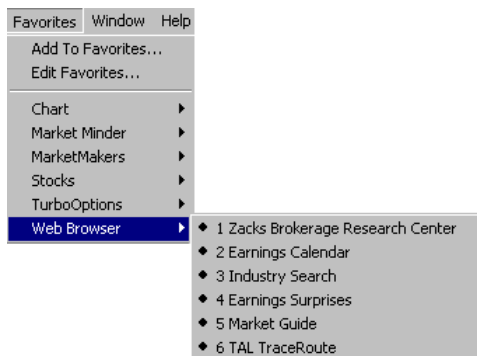
The system displays your **Web Browser** window.

Navigate in a Web Browser Window

Option	Description
Back, Forward, Stop, & Refresh	Navigate in the Web Browser window
Toolbar	Remove or restore the Toolbar
Status Bar	Remove or restore the Status Bar

Links to Web Sites

RealTick contains links to five web sites that provide industry details. Hold the mouse over the Web Browser toolbar button (do not click) and the web browser links will appear. You can research symbols, view recommendations of brokers, look through an earnings calendar, see the industry's top surprises, and view stock and ratio reports.



Web Browser Links

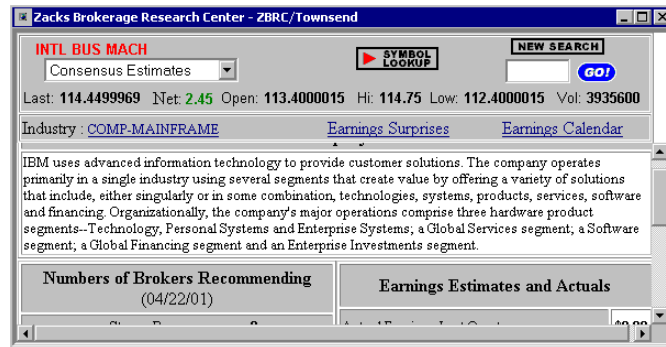
You can choose one of the following web links:

Open a Link

1. Move your mouse to the **Web Browser Toolbar** button.
2. DO NOT CLICK THE BUTTON.
The system displays the five links.
3. Click the link to the site you would like to open.
The system will open the browser and display the site.

Zacks Brokerage Research Center

Zacks Brokerage Research Center - This page contains details about a company. You can view the recommendations of brokers, the annual income, balance sheets, and the company profile.



Zacks Brokerage Research Center

1. Enter the symbol in the **New Search** field.
2. Click **Go**.

The system updates the **Zacks Brokerage Research Center** window.

Note: You can also drag and drop a symbol from another RealTick window.

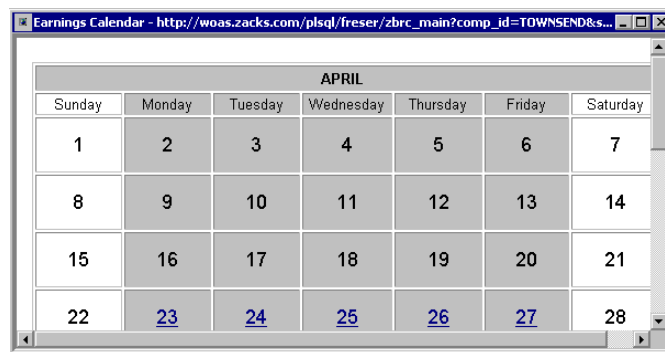
3. Choose the type of report you want to view from the drop-down list available in the upper left corner. You can choose five different reports.

Option	Description
Company Profile	This report contains a graph of the stock's volume, highs, and lows.
Consensus Estimates	This report contains the recommendations of brokers in the industry. This report is the default.
Annual Income Statement	This report contains the details of the company's income for the previous year.
Annual Balance Sheet	This report contains the details of the company's assets and liabilities

	for the previous year.
Snapshot	This report contains a graph of the stock's volume, highs, and lows.

Earnings Calendar

Earnings Calendar - This page enables you to view past data from the brokerage research. (Part of Zacks Brokerage Research Center)



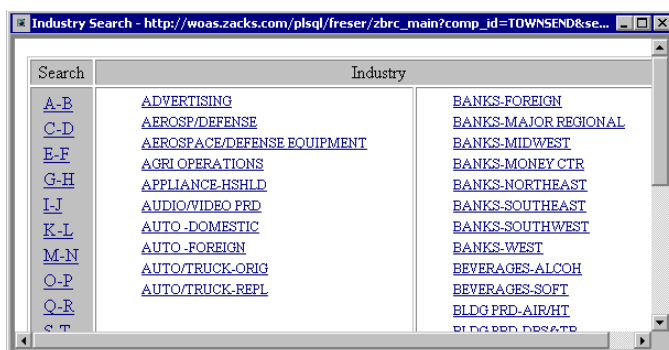
APRIL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

Earnings Calendar

1. Click the date you want to view.
The system displays the **Earnings Calendar Results** list.
2. Click a symbol in the **Zacks Ticker** field.
The system displays the **Zacks Brokerage Research Center** window.

Industry Search

Industry Search - This page enables you to view the brokerage research data by a particular industry. As a result, you can easily compare the different stocks from the same industry. (Part of Zacks Brokerage Research Center)



Industry Search

1. Click the alphabet letter in the **Search** field for the industry names that start with that specific letter in the alphabet.
The system displays the industries starting with that letter.
2. Click the industry name in the **Industry** field.
The system displays a list of all the companies that are listed under the chosen industry.
3. Click the symbol name from the **Symbol** field.
The system displays the **Zacks Brokerage Research Center** window.

Earnings Surprises

Earnings Surprises - This page enables you to view the top surprises in the market. You can view both the positive and negative surprises in the industry. (Part of Zacks Brokerage Research Center)

Last updated on Apr 25, 2001 at 10:20 A.M.

Positive Surprises

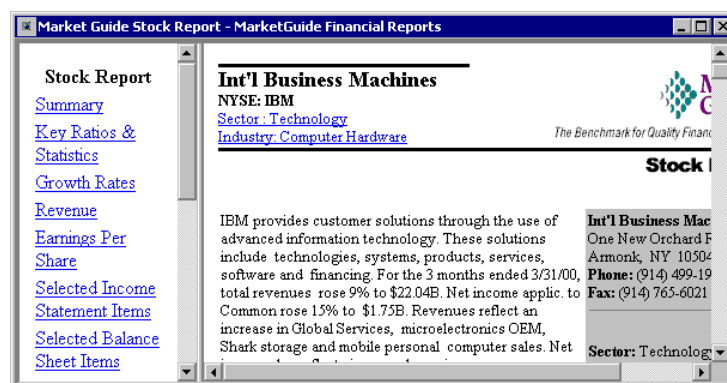
Ticker	Company Name	Time	Expected EPS	Reported EPS	% Surprise
SCAI	SANCHEZ COMPUTR	08:41	0.01	0.03	200.00
KFORC	KFORCE.COM INC	08:19	0.06	0.09	50.00
WBSN	WEBSense INC	09:30	-0.02	-0.01	50.00
IVX	IVAX CORP	07:53	0.25	0.32	28.00
ETR	ENTERGY CORP	07:49	0.60	0.75	25.00
MENT	MENTOR GRAPHICS	09:03	0.22	0.27	22.73
BDC	BLACER DOMESTIC	08:18	0.00	0.11	11.11

Earnings Surprises

- Click **Earning Surprises** on the drop-down list from the toolbar button.
The **Earning Surprises** window will appear.

Market Guide

Market Guide - This page displays two types of reports - stock reports and ratio reports. The stock report contains data such as a summary about the company behind the stock, the growth rates, and the cash flow. The ratio report contains data such as dividends, financial strength, and efficiency of the company.



Market Guide Stock Report

To View Data for a Specific Symbol

1. To access this page, move your mouse on the web browser toolbar button. DO NOT CLICK ON THE BUTTON. Select the Market Guide option. The system displays the web site.
2. Drag and drop a symbol from another RealTick window to the Market Guide.
3. Click the section of the report you want to view from the list in the left frame of the page.

The system displays the information in the right frame of the page.

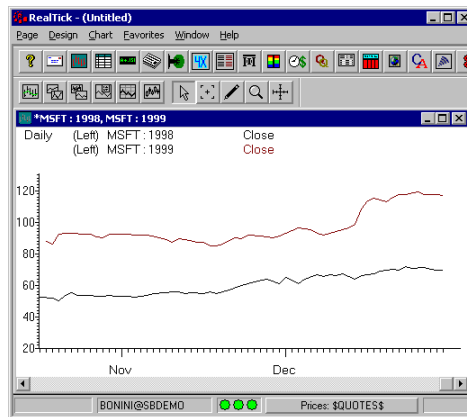
Chapter 6: Charts & Technical Analysis

This chapter discusses Charts and Technical Analysis.

Using Charts

Using Charts, you can create a graph to easily view market data. Charts display the upward and downward trends in the market in a picture format. Unlike some of the other windows in RealTick, Charts allow you to view lengthier time periods of data easier. As a result, you can compare a stock's historical value over time.

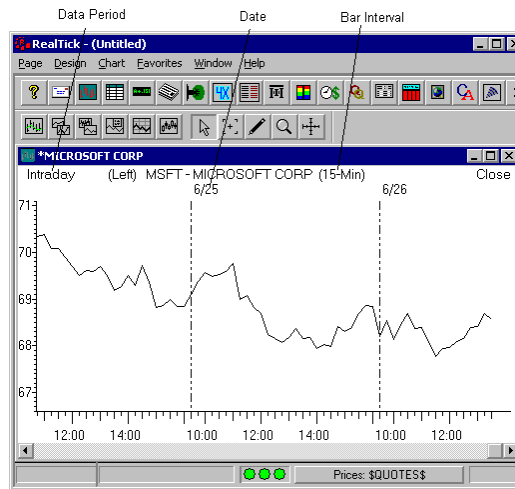
The following window displays the market trend for Microsoft during the years 1998 and 1999.



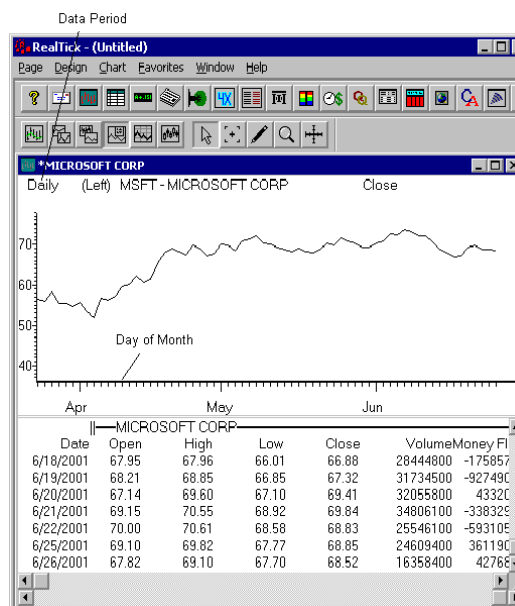
Seasonal Chart Window

You can view data in historical and/or real time, depending on the data criteria. The data criteria include time intervals: Intraday, Daily, Weekly, Monthly, Seasonal, and Time and Sales. The data criteria also include price criteria: Bids Only, Asks Only, and Bids & Asks.

The following Intraday chart displays data at 15-minute intervals for a five-day period.

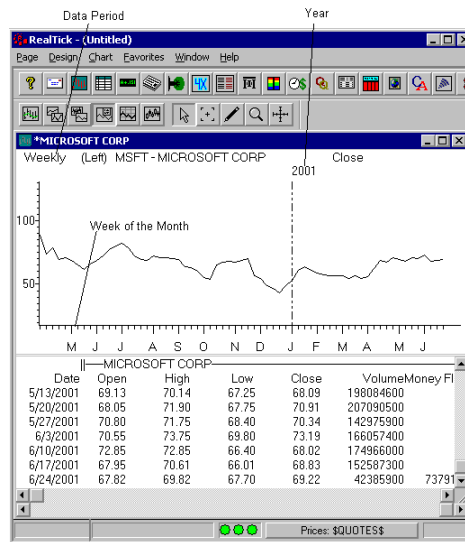


Intraday Chart



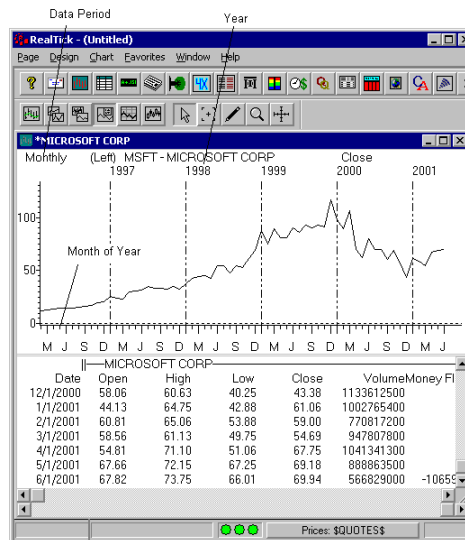
Daily Chart

In a Daily Chart, the time is displayed on the horizontal axis, and the price is displayed on the vertical axis. It displays data at day intervals for a particular time period.



Weekly Chart

In a Weekly Chart, the time is displayed on the horizontal axis, and the price is displayed on the vertical axis. It displays data at week intervals for a particular time period.



Monthly Chart

In a Monthly chart, the time is displayed on the horizontal axis, and the price is displayed on the vertical axis. It displays the data at month intervals for a particular time period.



Hint: You can also create a chart by dragging a symbol from the Symbol Guide or another RealTick window and dropping it on the Chart toolbar button. The system displays a new Chart window with that symbol.

Create a Chart

You can create a Chart to display data daily, weekly, or monthly. These types of charts will give you price information for the duration of a particular time period. You can also create a Chart to display data for a season. This is most useful for commodities, to compare a certain season between two different commodities, or to compare two different seasons for one commodity. Other types of Charts focus mostly on price, including Trades, Bids, Asks, or Bids and Asks. Lastly, you can create a Chart that focuses on both Time & Sales. You can also compare tick and volume bars more accurately by defining the number of trades per bar, instead of just comparing bars based on time.

1. Click **Chart** on the **Design** menu.

The **Chart Setup** dialog box appears.

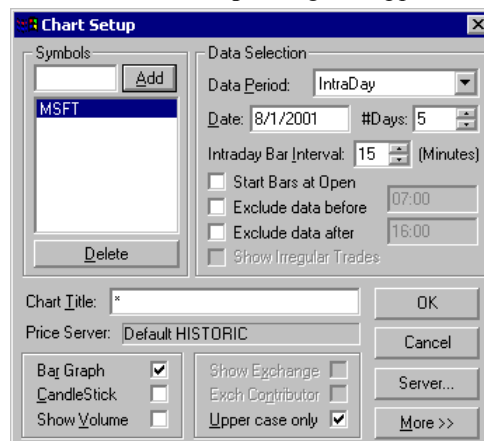


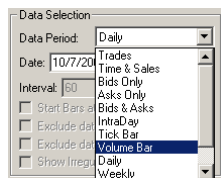
Chart Setup Dialog Box

2. Enter one or more symbols in the **Symbols** field.

-OR-

Click the **More** button to load a symbol file.

3. Choose the type of chart from the drop-down list available in the **Data Period** field.
4. Enter a date frame for the information in the chart.





Hint: You can later change the minute interval of an Intraday chart by typing **p** and the minute interval. For example, for a five-minute chart, type **p5**.

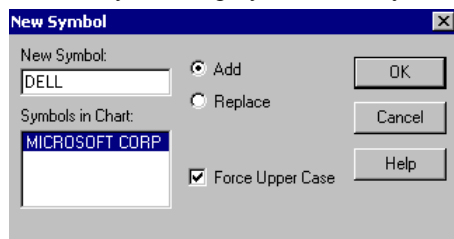
5. Type the end date in the **Date** field. The system will not gather data after this date.
6. Type the days you want to go back in the **Days** field.
The system searches for data within the time frame.
7. If you create an Intraday chart, type the minute time interval for the chart in the **Intraday Bar Interval** field, or use the arrows.
The system updates the information at each interval.
8. Choose the time frame for your chart.

Time Frame	Description
Start Bars at Open	Displays data starting from the market's open.
Exclude data before	Excludes any data before a specific time.
Exclude data after	Excludes any data after a specific time.
Irregular Trades	Displays data during non-market hours.

9. Type a title for the chart in the **Chart Title** field.
10. Click the **Bar Graph** check box to display the chart data in a bar graph.
The **Candlestick** check box will activate.
11. Click the **Candlestick** check box to display a candlestick interval chart.
12. Click **Show Volume** to display the volume bar graph.
13. Click **OK**.
The system displays your chart in the **Chart** window.

Add a Symbol to an Existing Chart

1. Click **Add/Replace Symbol** on the **Chart** menu.
The system displays the **New Symbol** dialog box.



New Symbol Dialog Box

2. Type the new symbol into the **New Symbol** field.
3. Click the **Add** option button.

4. Click **OK**.

The system updates the **Chart** window.

Replace a Symbol in a Chart

1. Click **Add/Replace Symbol** on the **Chart** menu or press **F6**.
The system displays the **New Symbol** dialog box.
2. Enter the new symbol into the **New Symbol** field.
3. Click the **Replace** option button.
4. Choose the symbol you want to remove from the **Symbols in Chart** field.
5. Click **OK**.

The system updates the **Chart** window.

Note: When you replace a symbol, the new symbol will retain the technical analysis that was attached to the original symbol.

Change the Type of Chart

There are four different calculation types for a chart.

Absolute: This chart type displays the price series. You can chart several symbols, using both axes, with this calculation.

Percent Change: This calculation shows the change over time for the value of each symbol. The value of each symbol when it first appears in the chart is the reference value. The remainder for each symbol is a percentage of the reference value.

Ratio: This calculation displays the value of one or more symbols relative to the value of another. You must choose the symbol the other symbols will be measured against.

Differential: This calculation displays the difference between the values of two or more symbols. You must choose the symbol the others will be measured against.

1. Click **Style** on the **Chart** menu.

The system displays the **Chart Type** dialog box.

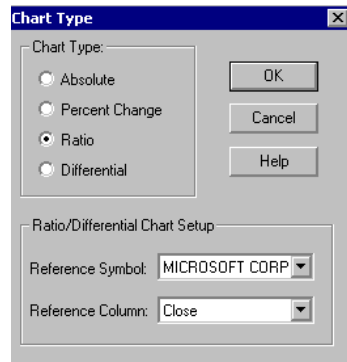
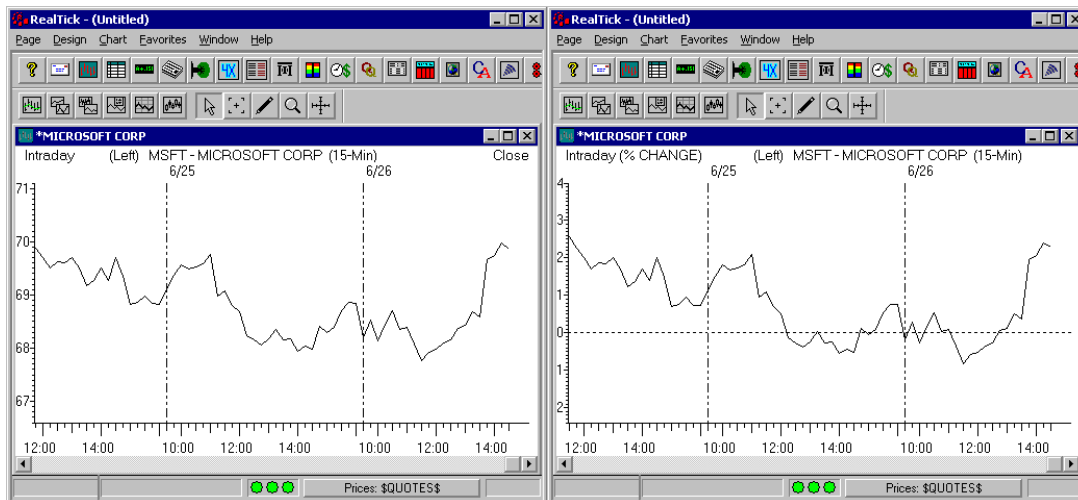


Chart Type Dialog Box

2. Click the option button of the calculation style from the **Chart Type** frame.
3. If you chose either **Ratio** or **Differential**, choose a symbol from the drop-down list available in the **Reference Symbol** field.
4. Choose a column from the drop-down list available in the **Reference Column** field.
5. Click **OK**.

The system updates the **Chart** window.



Percent Chart Type

Absolute Chart Type

Quickly Change the Chart Interval

You can change the chart interval with new macro keystrokes. Change the chart from an intraday to a daily, weekly, or monthly.

1. Click the chart.
2. Press the **period** key on your keyboard and then press **I**, **D**, **W**, or **M** for Intraday, Daily, Weekly, or Monthly, respectively.
3. For Day, Weekly, or Monthly charts, you can specify the number of days, weeks, or months by typing the number after you press **D**, **W**, or **M**. For example, for a 30-day Day chart, type **.D30**.
4. For an Intraday chart, type the minute interval after you type **I**. For example, for a 30-minute Intraday chart, type **.I30**.

The chart updates.

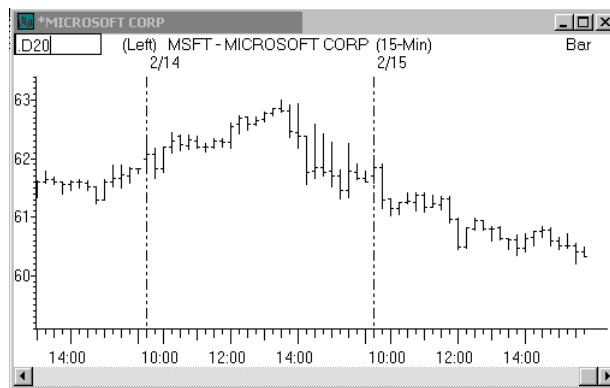


Chart Macro Keystrokes

Changing the Display of a Chart

Configure your chart to display different information or information differently. This feature helps you view data more clearly in a chart.

Change the Display of a Chart

1. Click **Display** on the **Chart** menu.

The system displays the **Chart Display Options** dialog box.

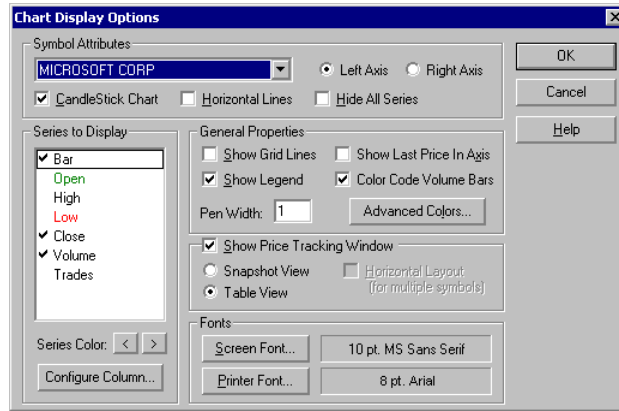
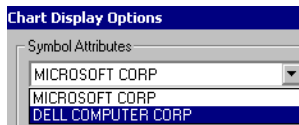
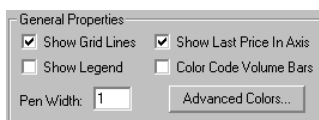


Chart Display Options Dialog Box

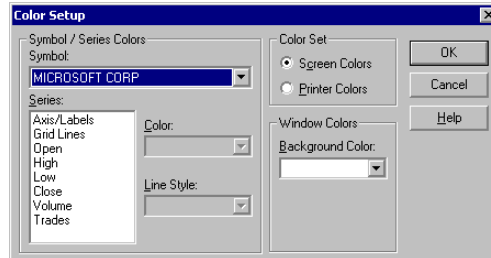


Hint: To toggle between a Candlestick chart and a Bar chart, press **Ctrl S**.

To scroll up, down, left, or right in a Chart, use the arrow keys on your keyboard.

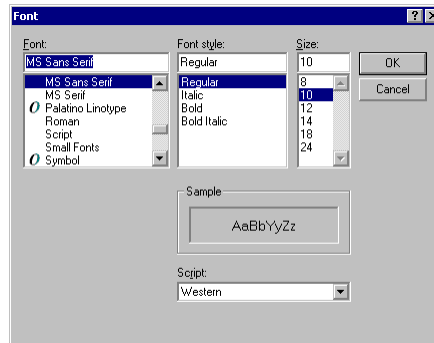


2. If the panel includes multiple symbols, choose the appropriate symbol from the drop-down list available in the **Symbol Attributes** box.
3. Double-click the column name in the **Series to Display** list if you would like to add data.
A checkmark appears.
4. Choose the axis by clicking the **Left** or **Right** option buttons in the **Vertical Axis** frame.
5. To create a candlestick chart, click the **Candlestick** check box.
6. To hide all the data about a specific symbol, click the **Hide All Series** check box. The symbol will be hidden (not removed) from the view on the Chart window.
7. To display horizontal lines, click the **Horizontal Lines** check box.
8. To change the color of the column name, click the column name in the **Series to Display** list.
9. Click the arrow buttons (< or >) in the **Color** field.
10. To add grid lines to the chart, click the **Grid Lines** check box.
11. To add the last price to the X axis in the chart, click the **Show Last Price In Axis** check box.
12. To change the width of the line, change the value in the **Pen Width** field. The width must be at least 1.
13. To change the color of the font on the window or when you print your chart, click the **Advanced Colors** button.
The system displays the **Color Setup** dialog box.



Color Setup Dialog Box

14. Select a symbol in the symbol field you would like to change its colors. Once you select an item in the **Series** box, the Color and Line Style drop-down boxes will activate. Choose a color and a line style. You can also change the background color from the **Background Color** drop-down box. Click **OK**.
15. To change the display font, click **Screen Font** button.
The system displays the **Font** dialog box.



Font Dialog Box

16. Enter any changes and click the **OK** button.
17. To change the print font, click the **Printer Font** button.
The system displays the **Font** dialog box.
18. Enter any changes and click the **OK** button.
19. Click **OK**.
The system updates the **Chart** window.

Change a Series in a Chart

Change a column to display different data.

1. Click **Display** on the **Chart** menu.

The system displays the **Chart Display Options** dialog box.

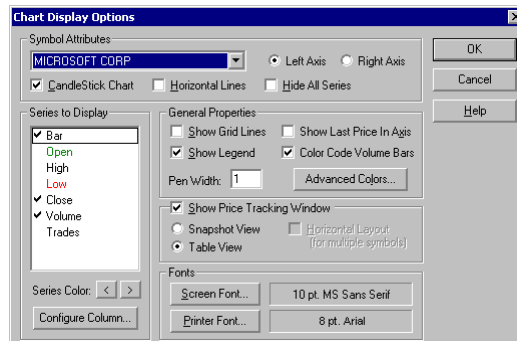


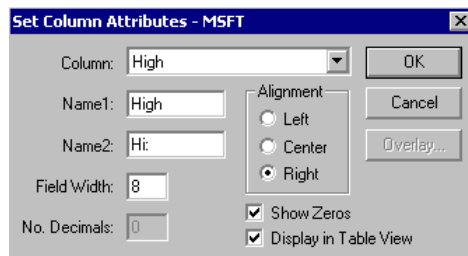
Chart Display Options Dialog Box

2. Click the **Configure Column** button.

The system displays the **Set Column Attributes** dialog box.



Hint: To dock the Time & Sales window, click and drag it to the bottom of the Chart window.



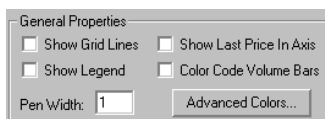
Set Column Attributes Dialog Box

3. Choose the column you want to change from the drop-down list available in the **Column** field.
4. Change the name of the column as it appears in the **Edit Chart** dialog box in the **Name1** field.
5. Change the name of the column as it appears in the statistics pop-up window in the **Name2** field.
6. Type the width of the field in the **Field Width** field.
7. Choose the alignment for the column by clicking the **Left**, **Center**, or **Right** buttons.
8. Click the **Show Zeros** field if you want to have zeros placed in numeric fields that do not have data.

9. Click **OK**.
The system displays the **Chart Display Options** dialog box.
10. Click **OK**.
The system updates the **Chart** window.

Hide the Chart Title (Legend)

Choose this option to hide the title on the chart window and save window space.



1. Click **Display** on the **Chart** menu.
The **Chart Display** dialog box will appear.
2. In the **General Properties** box, make sure the **Show Legends** check box is unchecked.
3. Click **OK**.
The **Chart** window will appear without the **Legend**.

Viewing Data in a Chart

Scale a Chart

1. Click **Scaling** on the **Chart** menu.
The system displays the **Chart Scaling** dialog box.

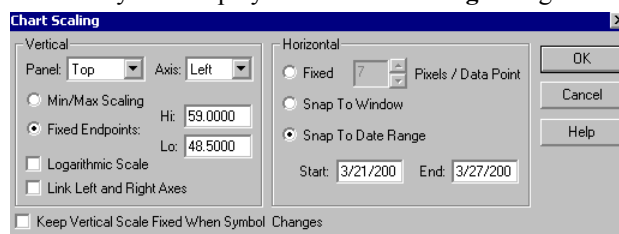


Chart Scaling Dialog Box

2. If the chart contains multiple panels, choose the appropriate axis from the drop-down list available in the **Panel** field.
3. If the chart contains multiple axes, choose the appropriate panel from the drop-down list available in the **Axis** field.
4. Choose the scaling option for the Vertical axis:

Option	Description
Min/Max Scaling	Adjust the vertical scale to accommodate the entire page values in the chosen part of the Chart

	window.
Fixed Endpoints	Manually scale the vertical axis. Choose the High and Low values that you want to focus on when scaling.
Link Left and Right Axes	Link the left and right vertical axes.
Logarithmic Scale	Scale the chart based on logarithmic scale.

5. Choose the scaling option for the Horizontal axis:

Option	Description
Fixed	Specify pixels per data point. Increase or decrease the number of pixels with the control arrows available in the Pixel/Data Point field.
Snap to Window	Scale the graph to fit the entire Chart window.
Snap to Date Range	Scale the window horizontally so that only data from a specific time frame appears in the Chart window.

6. To set the scaling as the standard for the chart, check the **Keep Vertical Scale Fixed When Symbol Changes** option button. When you change the symbol, the scaling will remain unchanged.

7. Click **OK**.

The system updates the **Chart** window.

Options to Scale a Chart

The following table describes menu options you can use to scale the data in a chart.

Option	Description
Auto Scale	Scale the price axis so all the information is displayed with the greatest possible detail.
Snap to Window	Scale the chart so all the data appears in the chart window without a horizontal scroll bar.

Quick Scale a Chart

1. Press **Ctrl** and click the chart.
2. Move up or down and left or right using the mouse.

The chart will scale accordingly.

Move Around in a Chart

1. Press **Shift** and click the chart.
2. Move up or down and left or right using the mouse.

The chart will move.

Vertical Zooming a Chart

Vertical Zooming on a chart expands the vertical scale.

1. To expand the vertical scale, press the **Page Up** key from your keyboard repeatedly.
2. To contract the vertical scale, press the **Page Down** key from your keyboard repeatedly.

Enlarge a Chart Region

The Zoom Tool enables you to zoom in on a specific region of your chart. The system magnifies this area to fill the entire Chart window. You can restore the chart to its original size by changing the scale in the **Chart Scaling** dialog box.

1. Click **Zoom Tool** on the **Chart** menu.
2. Hold down the left mouse button and draw around the area you want to enlarge.
3. Release the left mouse button.

The system fills the **Chart** window with the selected area.

Restore a Chart to Original Size

- Press **F7**.

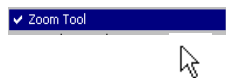
The Chart will restore to its normal size.



***Note:** If you hold down the left mouse button and drag the mouse across the chart, the price and study values change as you move to different time intervals.*

View the Statistics in a Chart

The Info Tool is the default tool for charts. This arrow-shaped tool enables you to see the numeric details of your chart. When you choose the Info Tool, the system displays a statistics window in the Chart window when you hold down the left mouse button. On an intraday or daily chart, the statistics box displays the price data (open, high, low, and close), the active studies corresponding to



each symbol, and their respective colors and line styles for the time interval you select. On a trade chart, the statistics box displays the time and price of each tick.



1. Click **Info Tool** on the **Chart** menu.
The system enables the **Info Tool** with a check mark.
2. Move the mouse to the interval bar to view price and study values.
3. Click with the left mouse button.
The system displays the **statistics** box.

View a Statistic at a Specific Position on a Chart

The Crosshair Tool performs the same function as the Info Tool, except that it displays a large crosshair on the Chart window to show the exact position of the cursor. You can find the exact vertical and horizontal axis data for a particular point on the chart.

1. Click **Crosshair Tool** on the **Chart** menu.
2. Click your left mouse button on the area of the chart you want exact vertical and horizontal axis data.
The system displays the large cross shape.

Using Annotations



Annotation icon



Hint: To display an annotation, move the mouse over the annotation and click it.

You can add annotation notes to your charts. Post-it note icons in the Chart window will mark each of your annotations. When you click the post-it note with the mouse, the annotation text appears in the chart label at the top of the chart window. Use annotations to make a note for yourself.

Note: The system saves annotations and records the date and time corresponding to the position of the icon. When the date corresponding to the annotation no longer appears in the Chart window, the annotation is removed from the chart. For example, annotations on an intraday chart showing two days of data will be removed once they are more than two days old.

Add an Annotation

1. Click **Annotation** on the **Attributes** sub-menu of the **Chart** menu.
The system displays the **Chart Annotation** dialog box.



Note: There is a 10 annotation limit to each chart.

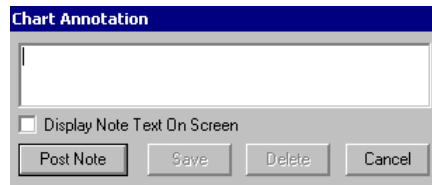


Chart Annotation Dialog Box

2. Enter your message in the **Chart Annotation** dialog box.
3. Click the **Post Note** button to post your annotation to the chart.
The mouse changes to a post icon.
4. Move the mouse to the point on the **Chart** window where you want to place the annotation, and click with the mouse button.
A post-it note icon appears in the **Chart** window.

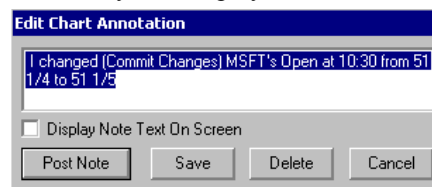
Change an Annotation

1. Double-click the annotation.

The system displays the **Edit Chart Annotation** dialog box.



Hint: To move an annotation, drag and drop it to a new location.



Edit Chart Annotation Dialog Box

2. Change the text of the annotation message in the **Edit Chart Annotation** dialog box.
3. Click the **Save** button.
The system updates the annotation.

Delete an Annotation

1. Move the mouse over the annotation.
The cursor changes into a post icon.
2. Double-click the left mouse button.
The system displays the **Edit Chart Annotation** dialog box.
3. Click the **Delete** button.
The system deletes the annotation.

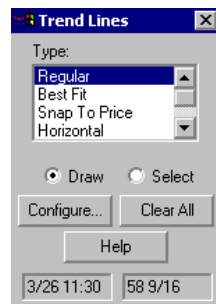
Using Trend Lines

Draw trend lines to draw support and resistance levels or break out points that help technical analysts determine entry and exits in the market.

Draw a Trend Line

1. Click **Trend Tool** on the **Chart** menu.

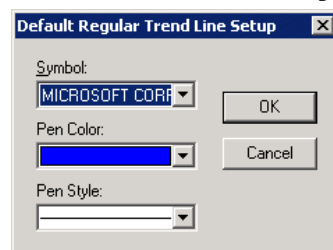
The system displays the **Trend Lines** box.



Trend Lines Dialog Box

2. Click **Draw**.
3. Choose the line style you want from the list in the **Type** field.
4. Click **Configure**.

The **Default Lines Setup** box will appear.



Default Regular Trend Line Setup

5. Select the appropriate option(s).
6. Click **OK**.
7. On the Chart, click the left mouse button and hold it down.
8. Drag the mouse until you are finished drawing the trend line.

9. Click the close button on the upper right corner of the **Trend Lines** box.

Move a Trend Line

1. Click **Select Tool** on the **Chart** menu.
The cursor changes to a target crosshair.
2. Move the mouse to the middle of the trend line. **Do not select an end point.**
The cursor changes from a target crosshair to a plus sign (+).
3. Click the line with the left mouse button.
4. Hold down the left mouse button and drag the trend line to its new location. The size and slope will remain unchanged.

Move a Group of Trend Lines

1. Click **Select Tool** on the **Chart** menu.
The cursor changes to a target crosshair.
2. Move the mouse to the middle of the first trend line. **Do not select an end point.**
The cursor changes from a target crosshair to a plus sign (+).
3. Click the line with the left mouse button while holding down the **Ctrl** key. Continue holding the **Ctrl** key while selecting the other lines.
4. Still holding down the **Ctrl** key and the left mouse button, drag the group of trend lines to a new location. The size of each line will not change.

Copy a Trend Line

1. Click **Select Tool** on the **Chart** menu.
The cursor changes to a target crosshair.
2. Move the mouse to the middle of the trend line while holding down the **Shift** key. **Do not select an end point.**
The cursor changes from a target crosshair to a plus sign (+).
3. Still holding down the **Shift** key and the left mouse button, drag the trend line to its new location.
The system copies the line to the new location.

Resize a Trend Line

1. Click **Select Tool** on the **Chart** menu.
The cursor changes to a target crosshair.
2. Move the mouse to one of the ends of the trend line.
The cursor changes from a target crosshair to a sloped cross (**X**).
3. Click the left mouse button and move the mouse to resize the line.

Delete a Trend Line

1. Click **Select Tool** on the **Chart** menu.
The cursor changes to a target crosshair.
2. Move the mouse to the trend line and click the left mouse button.
3. Press the **Delete** key from your keyboard to delete the trend line.

Using Pivot Lines

The Pivot Point study works best in futures markets with a wide daily trading range (high volatility). The study uses the previous day high, low, close, and open price to generate a pivot, two support levels, and resistance levels.

Today's Pivots are a function of yesterday's high, low, and close for a specific contract.

H – Yesterday's High

L – Yesterday's Low

C – Yesterday's Close

The five equations for the Pivot Lines are

$$\text{Red Line: } P = (H + L + C) / 3$$

$$\text{Blue Line: } R1 = 2 * P - L$$

$$\text{Green Line: } S1 = 2 * P - H$$

$$\text{Yellow Line: } R2 = P + (R1 - S1)$$

$$\text{Yellow Line: } S2 = P - (R1 - S1)$$

Adding Pivot Lines

- Click **Pivot Lines** from the **Attributes** sub-menu on the **Chart** menu.

The **Pivot Lines** will appear.

Spreads

With a chart multiplier you can compare stocks or futures spreads more accurately by using simple arithmetic equations. For example, $=.6325*HWP-CPQ$ shows the spread between a potential M&A between HWP and CPQ. Also, it may be necessary to delimit a ticker symbols with single quotes, for example, the symbol /SPU1 would need to be delimited as '/SPU1' when used in a formula.

Create a Chart Multiplier

1. Click **Setup** on the **Chart** menu.
The **Chart Setup** dialog box will appear.
2. Type the equation in the **Symbols** field.
3. Click **Add**.
4. Click **OK**.

The chart will graph the multiplier.

<p>Note: Charts supports the ticker symbols +, -, /, * in the formula. Always precede the formula with an equals sign.</p>

Technical Analysis

Technical analysis studies can be added to a chart or a table window. However, charts are used mostly with Technical Analysis. RealTick offers a wide variety of price studies, oscillators, stochastics, moments, volume and open interest studies, price and volume studies, and directional movement indicators. This section contains detailed information about each study. Formulae and references are provided where relevant, along with the default parameters for each study. You can adjust the parameters on most studies. The type of chart (intraday, daily, time and sales) and type of symbol (stock, future, index) determine what studies are available.

Study Availability Table

The following table lists the availability of various studies by chart or table type.

Study Type	Study	Tick	Intraday	Daily
Moving Averages	Simple, Exp, Linear, Autoreg.	Y	Y	Y
Envelopes & Bands	Percent Offset	Y	Y	Y
	Average Range	Y	Y	Y
	Total Range	Y	Y	Y
	Bollinger	Y	Y	Y
Oscillators	Momentum	Y	Y	Y
	Acceleration	Y	Y	Y
	Moving Average Momentum	Y	Y	Y
	Moving Average Oscillator	Y	Y	Y
	MACD Oscillator	Y	Y	Y
	MACD & Signal Line	Y	Y	Y
	Commodity Channel Index	N	Y	Y
	Volatility	N	Y	Y
	Rate of change	N	Y	Y
Statistical Moments	Monthly Average	N	N	Y
	Variance	Y	Y	Y
	Standard Deviation	Y	Y	Y
	Kurtosis	Y	Y	Y
	Skew	Y	Y	Y
Other	%R & RSI	N	Y	Y
	Stochastics (4:fast to slow)	N	Y	Y
	Directional Movement Indicator	N	Y	Y
Volume & Price	Arms' Ease of Movement	N	Y	Y
	Variable Accumulation Dist.	N	Y	Y
Volume	Money Flow	Y	N	N
	On Balance Volume	N	Y	Y
	Total Volume	N	N	Y
	Trade Volume	Y	Y	N
	Tick Count	N	Y	N
	Open Interest	N	N	Y

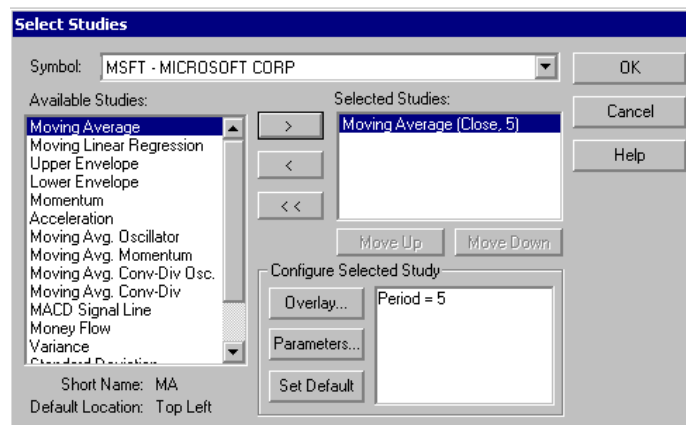


***Note:** Only certain types of charts allow for more than one symbol, for example, intraday, daily, or weekly.*

Add a Technical Analysis to a Chart

1. Click **Setup Studies** on the **Chart** menu.

The system displays the **Select Studies** dialog box.



Select Studies Dialog Box

2. If the chart includes multiple symbols, choose the appropriate symbol from the drop-down list available in the **Symbol** field.
3. Choose the study you want to add in the **Selected Studies** field.
4. Click the **Add (>)** button.
The system displays the name of the study in the **Selected Studies** field.
5. Click the **Parameters** button to modify the parameters of the selected study.
The system displays the **Parameters** dialog box where you can set additional options for your chart.
6. Click **OK**.
The system updates the chart in the **Chart** window.

Add a Technical Analysis to a Table

1. Click **Set Up Studies** on the **Table** menu.
The system displays the **Select Studies** dialog box.
2. If the table includes multiple symbols, choose the appropriate symbol from the drop-down list available in the **Symbol** field.
3. Click a study in the **Available Studies** list.
4. Click the **Add (>)** button.

The system displays the name of the study in the **Selected Studies** field.

5. To change the order of the columns in your **Table** window, choose the study in the **Selected Studies** field then click either the **Move Up** or **Move Down** button.
6. Click **OK**.

The system updates the **Table** window.

Accessing the Parameters Dialog Box

With each study, you can change the parameters of the study. The parameters will change depending the study. However, how to access the parameters dialog box for each study is the same.

1. Click **Setup Studies** on the **Chart** menu.
The **Setup Studies** dialog box appears.
2. Select a study.
3. Click **Parameters**.

The study's **Parameters** dialog box will appear.

Note: Some parameter dialog boxes contain a button to access another parameter dialog box for further configuration.

Price Studies

Price studies are studies that values are in the same units as the price of the asset. The price studies offered in RealTick are Moving Averages, Moving Linear Regression, Upper Envelope, and Lower Envelope.

Moving Averages (MA)

A moving average is a smoothing technique used to isolate the trend from short-term price fluctuations. RealTick displays four types of moving averages: simple, autoregressive, linear weighted, and exponential. The types differ primarily in how they treat older data. Simple moving averages weight each of the terms in the average equally. The linear weighted moving average gives more importance to more recent prices. Both the simple and the linear weighted moving averages limit the price effect to the number of periods in the average. The autoregressive moving average is based on the inputs and outputs in the system.

The exponential gives more weight to recent prices but allows all data in the window to influence the average. Instead of a number of periods, the exponential uses a smoothing factor, which can have any value between zero and one. The larger the smoothing factor the more influenced the average will be by more recent prices. If you want to relate the smoothing factor to the periods used in the standard moving average, set the factor equal to two divided by one plus the number of periods. Moving averages are usually based upon the close but can be based on other price series such as the midpoint.

Formulae:

The mathematical definitions for the different moving averages follow.

Simple MA:

$$SMA_t = \frac{1}{n} \sum_{i=1}^n P_{t-n+i}$$

Autoregressive MA:

$$ARMA_t = (1 - \%AR)SMA_t + (\%AR)ARMA_{t-1}$$

Note: If AR=0 then ARMA=SMA.

Linear MA:

$$LMA_t = \frac{\sum_{i=1}^n i P_{t-n+i}}{\sum_{i=1}^n i}$$

Exponential MA:

$$EMA_t = EMA_{t-1} + SF(P_t - EMA_{t-1})$$

$$EMA_1 = P_1$$

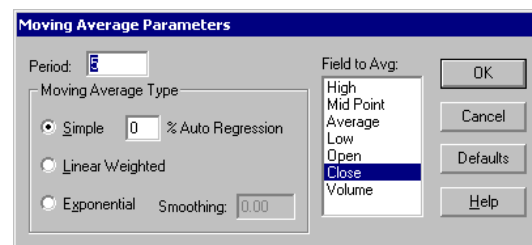
Variable	Description
N	The number of periods.
P _t	The price for the current period.

P_{t-1}	The price for the previous period.
T	The number of the position of the period being studied in the total number of periods in the data base.
SF	The exponential smoothing factor = $2/(n+1)$.

Reference: Colby, Thomas & Robert Meyers, The Encyclopedia of Technical Market Indicators, Dow Jones Irwin, Homewood, 1988.

Moving Average Parameters

The type of moving average, number of periods and price series can be changed from the default settings in the Moving Average Parameters dialog box.

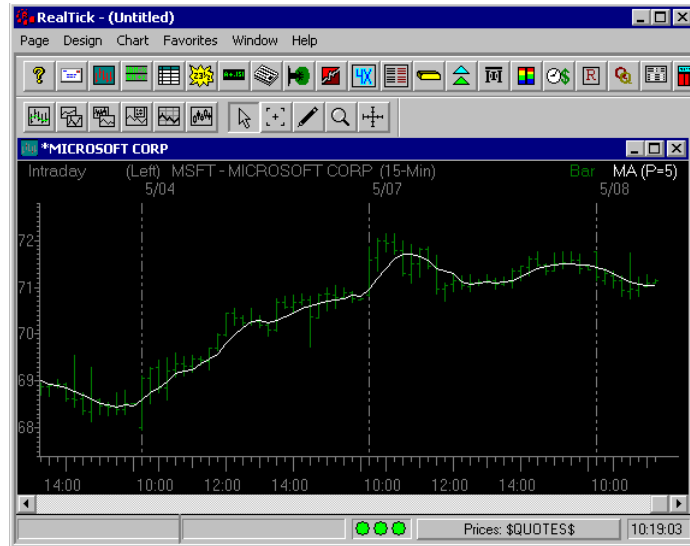


Moving Average Parameters Box

The following table lists the Moving Average parameter defaults.

Value	Defaults
Moving Average Type	Simple
Period	5
Field to Avg	Close

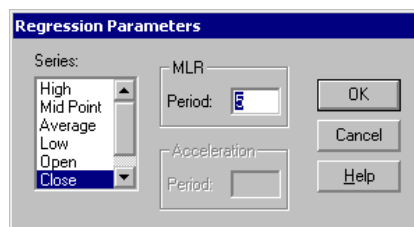
The following picture displays a chart with a moving average.



Intraday Chart with a Moving Average Study

Moving Linear Regression (MLR)

Moving linear regression is the fitted value of price, estimated from a linear regression of price on time. You can select the price series to use in the regression and the number of periods to include in the linear regression. The number of periods in the regression and the price definition can be changed in the regression dialog box.



Regression Parameters Box

The following table lists the Moving Linear Regression parameter defaults.

Value	Default
Period	5
Series	Close

Formula: $MLR = a + b t$

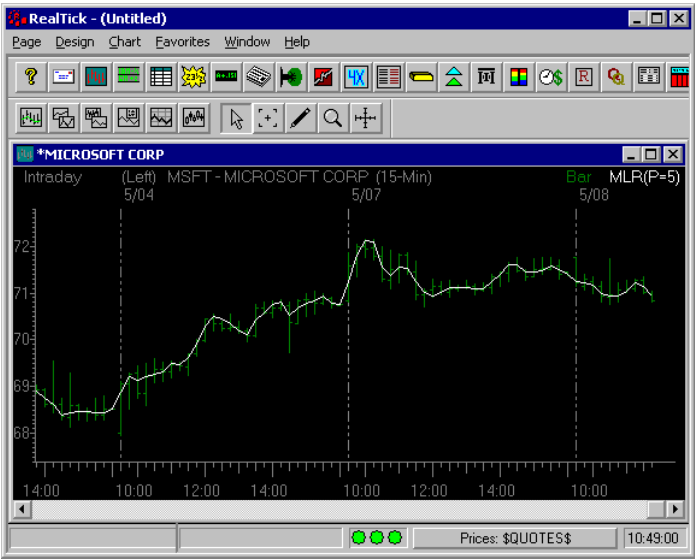
Where:

$$a = \frac{1}{n} \left(\sum_{t=1}^n P_t - b \sum_{t=1}^n t \right)$$
$$b = \frac{n \sum_{t=1}^n P_t t - \sum_{t=1}^n P_t \sum_{t=1}^n t}{n \sum_{t=1}^n t^2 - \left(\sum_{t=1}^n P_t \right)^2}$$

Variable	Description
n	The number of periods in the summation.
t	The position of the current time in the database.
P _t	The price for the current period.

Reference: Colby, Robert & Thomas Meyers, Encyclopedia of Technical Market Indicators, Dow Jones Irwin, Homewood, 1988.

The following picture is a chart with a moving linear regression.

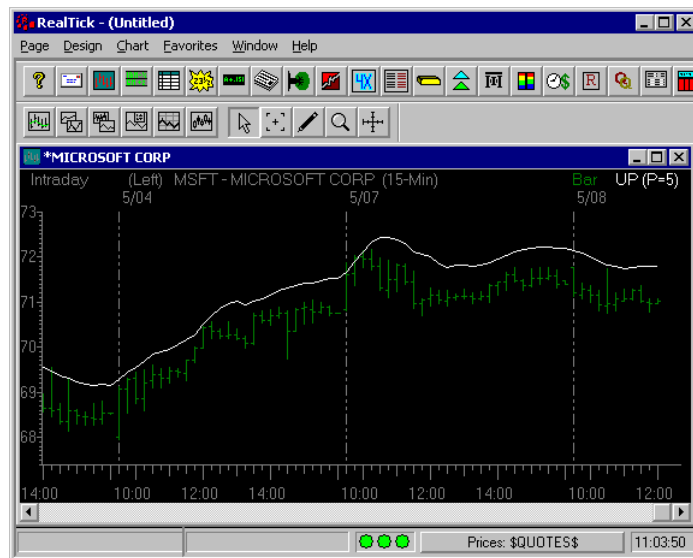


Moving Linear Regression Study

Upper Envelope/ Lower Envelope (UP/DN)

Several types of envelopes based upon a moving average can be displayed simultaneously. The upper and lower envelopes are selected as separate studies. The upper envelope (or lower envelope) parameter dialog box allows you to choose among different types of envelopes, and to configure the moving average on which the envelopes are based. The moving average itself is not displayed unless selected as a separate study. You can choose from Percentage Offset, Average Range, Bollinger Bands, or Range Channel.

The following picture displays a chart with an upper envelope study.



Intraday Chart with an Upper Envelope Study

Percentage Offset

Percentage offset envelopes are simple offset bands to the moving average itself. If you select % Offset, you can select the percentage to add (for upper bands) or subtract (for lower bands) from the moving average.

Formula: The formulae for offset envelopes are:

$$UP_t = MA_t + (\%)MA_t$$

$$DN_t = MA_t - (\%)MA_t$$

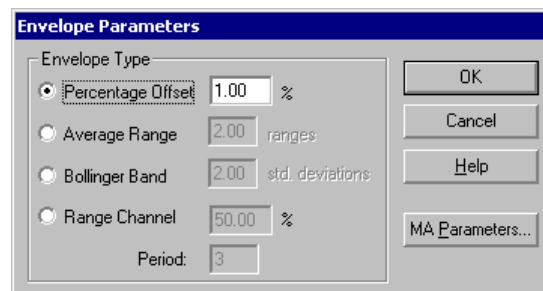
Where: MA is an n period moving average.

Reference: Kaufman, Perry, The New Commodity Trading Systems & Methods, John Irwin, 1988

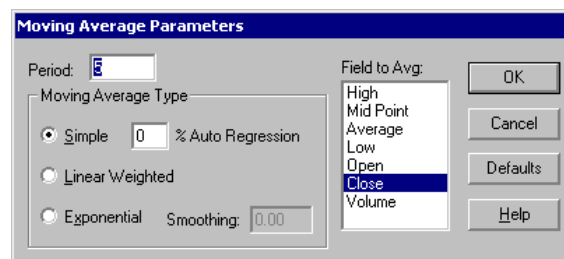
Parameters: You can set the % Offset Envelope value in the Envelope dialog box. You can enter integers or fractions in decimal form (e.g., .1). You can also change the type and parameters of the moving average on which the envelope is based.

The following table lists the Percentage Offset and Moving Average default parameters.

Value	Default
Percentage Offset	1
Moving Avg Type	Simple
Period	5
Field to Avg	Close



Envelope Parameters Box



Moving Average Parameters Dialog Box

Average Range

Envelopes based on the range can be displayed. The average envelope adds (upper) or subtracts (lower) a measure of the range to the moving average. The range is calculated as the largest absolute value of either today's high minus today's low, today's high minus yesterday's close, or today's low minus yesterday's close. The simple moving average of the range is then added or subtracted to the moving average of the price to produce either envelope.

Formulae:

$$UP_t = MA_t + aV_t$$

$$DN_t = MA_t - aV_t$$

$$V_t = (1/n) \sum_{i=1}^n D_{t-i+1}$$

Variable	Description
a	Decimal multiplier supplied by the user
D	The maximum of $ H_i - C_{i-1} $, $ H_i - L_i $ or $ L_i - C_{i-1} $
H _i	The high on day i.
C _i	The close on day i.
L _i	The low on day i

Reference: Kaufman, Perry, The New Commodity Trading Systems & Methods, John Wiley, 1987.

Parameters: The Average Range moving average uses the same period as the moving average, which is set through the Moving Average Parameters dialog box.

The following table lists the default parameters for the average range and the Moving Average.

Value	Default
Average Range	2
Period	5
Type	Simple
Field to Average	Close

Bollinger Bands

Bollinger Bands are based on the standard deviation of price added or subtracted to a simple moving average. The standard deviation error is added to the moving average for an upper envelope and subtracted for a lower envelope.

Formula:

$$UP_t = MA_t + a \cdot \sigma_t$$

$$DN_t = MA_t - a \cdot \sigma_t$$

Variable	Description
MA_t	An n period moving average.
a	The number of standard deviations to add or subtract for the moving average. Integers or fractions are permissible
σ	The standard deviation $\left(\sigma^2 = \frac{\sum_{t=1}^n (P_t - \bar{P})^2}{n} \right)$

Reference: John Bollinger, Bollinger Capital Management, Manhattan Beach, CA.

Parameters: The Price Series, the multiplier a, and the Period n are configurable parameters. The Period n is used in computing both the moving average and the standard deviation.

The following table lists the Bollinger Band and Moving Average parameter defaults.

Value	Defaults
Bollinger Bands	2
Period	5
Series	Close

Range Channel

Range channels are channels based on the difference between the highest high and the lowest low for a given period. A percentage of the range is then added and subtracted to a simple moving average.

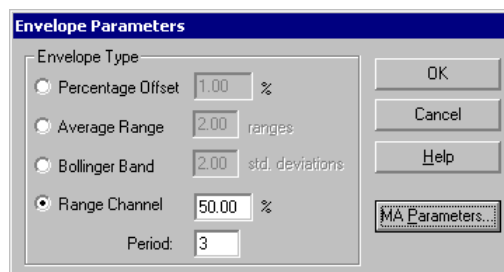
Formula:

$$UP_t = MA_t + (\%)(H - L)$$

$$DN_t = MA_t - (\%)(H - L)$$

Variable	Description
H	The highest high and L is the lowest low for period n.
MA _t	An x period moving average.

Parameters: The period used for calculating the range, the percentage of the range to include, and the moving average period is adjustable.



Envelope Parameters Box

This table lists the Range Channel and Moving Average parameter defaults.

Value	Default
Range Channel	50%
Range Period	3
MA Period	5
Series	Close

Oscillators

Oscillators represent different ways of measuring change in prices rather than measurements of prices themselves. RealTick offers eleven oscillators for use in charts and tables. Momentum Oscillator, Acceleration, Moving Average Oscillator, Moving Average Momentum, Moving Average Convergence Divergence, Signal Line, MACD Oscillator, Rate of Change in Prices, Volatility, Volatility Ratio, and Commodity Channel Index.

Momentum Oscillator (MOM)

The momentum oscillator is the most basic oscillator. It is the difference between two prices at a fixed time interval from one another. Momentum is analogous to the slope of price relative to time. A positive value of momentum indicates that prices are increasing. A positive but negatively sloped momentum shows that prices are increasing but less rapidly.

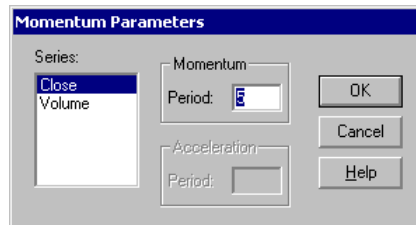
Formula:

$$MOM_t = P_t - P_{t-n}$$

Variable	Description
P_t	The price for the current period.
P_{t-n}	The price n periods ago.

Reference: Kaufman, Perry, [The New Commodity Trading Systems & Methods](#), John Wiley & Sons, New York, 1987.

Parameters: The parameters for the momentum calculation can be changed in the momentum parameter box.



Momentum Parameters Box

The following table lists the Momentum Oscillator parameters.

Value	Default
Period	5
Series	Close

The following picture displays a chart with a momentum oscillator study.



Momentum Oscillator Study

Acceleration (ACC)

Acceleration is the difference between two momentum indicators. Acceleration is analogous to rate of change. If values of the momentum are positive and acceleration is positive, prices are

increasing and the difference is increasing. For small changes in prices this means that rate of change in prices is increasing, for example, price increases are accelerating.

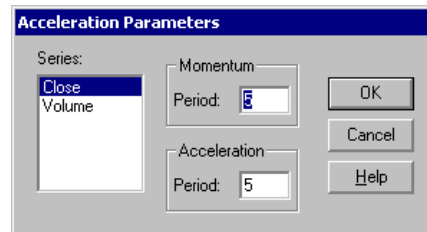
Formula:

$$ACC_t = MOM_t - MOM_{t-x}$$

Variable	Description
MOM_t	The value of an n period momentum for the current period.
MOM_{t-x}	The value of momentum for x periods ago.

Reference: Kaufman, Perry, The New Commodity Trading Systems & Methods, John Wiley & Sons, New York, 1987.

Parameters: Both the underlying momentum calculations and the number of periods between the two momentum estimates can be changed in the acceleration parameter box. The price series is also selected in the acceleration parameter box.



Acceleration Parameters Box

The following table lists the Acceleration and Moving Average parameter defaults.

Value	Default
Acceleration Period	5
Momentum Period	5
Series	Close

The following picture displays a chart with an acceleration study.



Acceleration Study

Moving Average Oscillator (MAO)

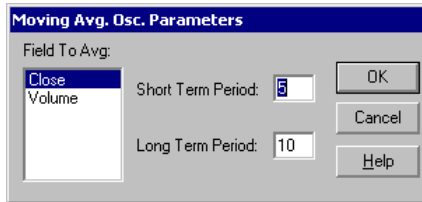
The moving average oscillator is the difference between two moving averages. The moving average oscillator shows you crossovers of moving averages.

Formula: The moving average oscillator for period t is:

$$MAO_t = MA_t(a) - MA_t(b)$$

Variable	Description
$MA_t(a)$	The simple moving average based on a intervals.
$MA_t(b)$	The simple moving average based on b intervals.

Parameters: The default values for the moving averages are two simple moving averages on the close: the first with 5 periods and the other with 10 periods. The periods used in the moving averages and the series can be changed in the moving average oscillator dialog box.

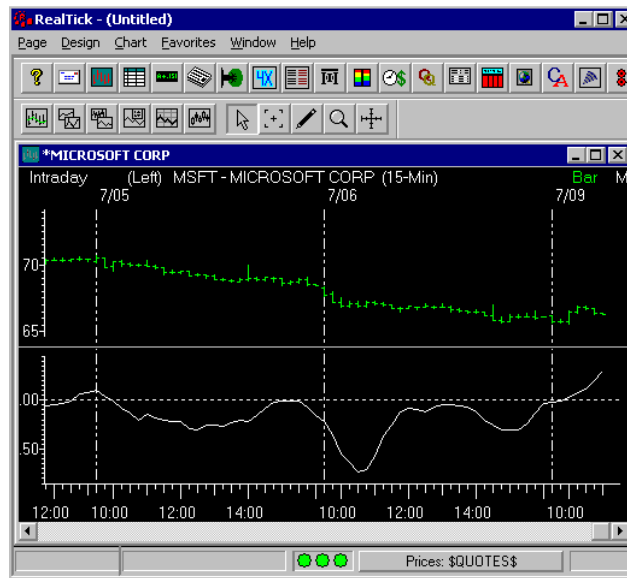


Moving Average Oscillator Parameters Box

The following table lists the Moving Average Oscillator parameter defaults.

Value	Default
Short Term Period	5
Long Term Period	10
Field to Avg.	Close

The following picture displays a chart with a moving average oscillator study.



Moving Average Oscillator Study

Moving Average Momentum (MAM)

Moving average momentum is a momentum based on the difference between two values of the same moving average rather than two prices.

Formula:

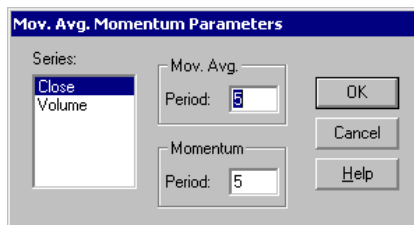
$$MAM_t = MA(a)_t - MA(a)_{t-n}$$

Variable	Description
a	The number of periods in the values of the moving averages
n	The length of the momentum

Reference: Kaufman, P.J., The New Commodity Trading Systems and Methods, John Wiley & Sons, New York, 1987.

Parameters: The momentum period (the number of periods between the two moving averages) is an adjustable parameter. The number of periods used in calculating the moving averages can be changed as well as the price series.

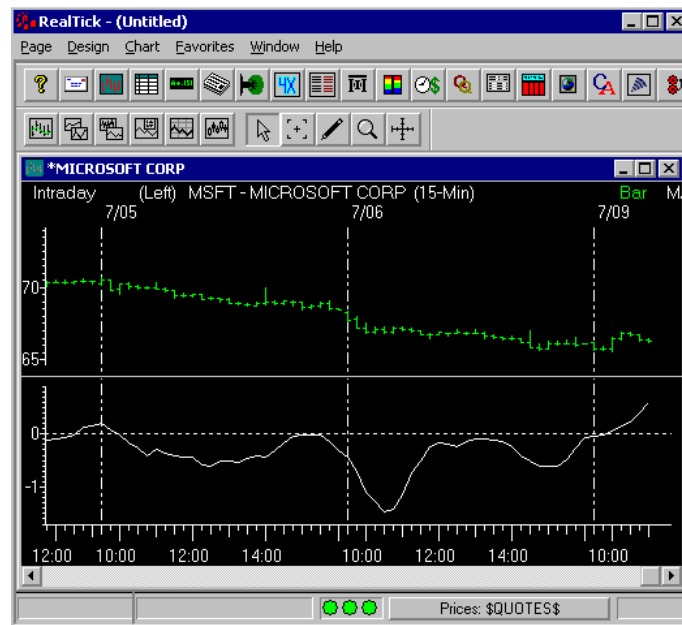
The following table lists the default values for the Moving Average Momentum.



Moving Average Momentum Parameters Box

Value	Default
Mov. Avg. Period	5
Momentum Period	5

The following picture displays a chart with a moving average momentum study.



Moving Average Momentum Study

Moving Average Convergence Divergence (MACD)

The MACD indicator (Appel, Gerald, The Moving Average Convergence Divergence Trading Method, Signalert Corp, 150 Great Neck Rd; Great Neck, NY 11021) is the difference between two exponential moving averages, a long term and a short term moving average. It is usually used in conjunction with a signal line which is a short term exponential moving average of the MACD indicator.

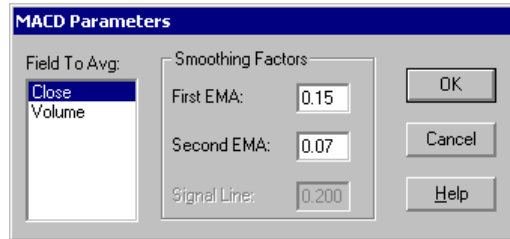
Formula:

$$MACD_t = EMA_1 - EMA_2$$

EMA₁ and EMA₂ are exponential moving averages at period t with different smoothing factors.

Parameters: The parameters are the respective smoothing factors and the price series. The default smoothing factor value for the first moving average is .15, and the default smoothing factor value for the second moving average is .07. The default values are a

smoothing factor of .07 (approximately equal to 26 periods) for the second moving average, and .15 for the first (12 periods). The SLSF (Signal line smoothing factor) choice is grayed in the MACD parameters box.



MACD Parameters Box

The following table lists the default values for the Moving Average Convergence Divergence parameters.

Value	Default
EMA ₁ SF	.15
EMA ₂ SF	.07
Series	Close

The following picture displays a chart with a moving average convergence divergence study.



Moving Average Convergence Divergence Study

Signal Line (SIG)

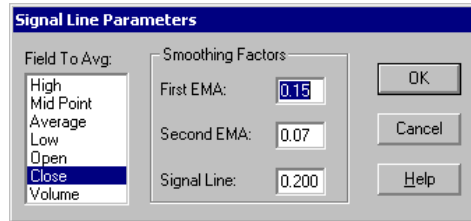
The Signal line is an exponential moving average of the MACD. The Signal line usually uses a smoothing factor comparable to a short term moving average.

Formula:

$$SIG_t = EMA_3(EMA_1 - EMA_2) = EMA_3(MACD)$$

Reference: Colby, Thomas and Robert Meyers, The Encyclopedia of Technical Market Indicators, Dow Jones Irwin, 1989.

Parameters: The parameters are the respective smoothing factors and the price series. The default values are a smoothing factor of .07 (approximately equal to 26 periods) for the second moving average; .15 for the first (12 periods) and a smoothing factor of .20 for the signal line (9 periods).



Signal Line Parameters

The following table lists the MACD Signal Line parameter defaults.

Variable	Defaults
Field to Avg	Close
EMA₁	.15
EMA₂	.07
EMA₃	.20

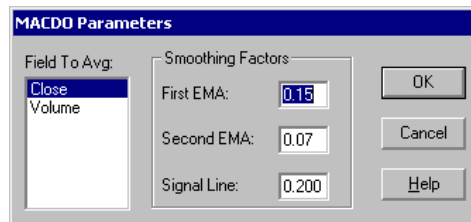
MACD Oscillator (CDO)

The MACD is frequently used with the Signal line to generate trading signals based on crossovers. The MACD Oscillator shows these crossovers directly. The MACD Oscillator is the difference between the MACD line and the Signal line.

Formula:

$MACDO = MACD - SIG$

Parameters: The parameters are the respective smoothing factors and the price series. The default values are a smoothing factor of .07 (approximately equal to 26 periods) for the second moving average; of .15 for the first (12 periods) and a smoothing factor of .20 for the signal line (9 periods).

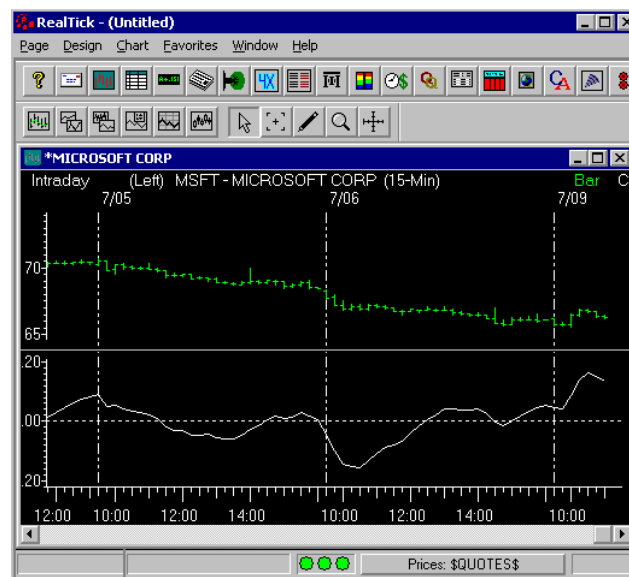


MACDO Parameters Box

The following table lists the default values for MACD Oscillator parameters.

Value	Default
EMA ₁	.15
EMA ₂	.07
EMA ₃	.200
Series	Close

The following picture displays a chart with a MACD Oscillator study.



MACD Oscillator Study

Rate of Change in Prices (RCP)

Rate of change in prices is a price momentum indicator. It is the change in price between the current period and n periods ago, divided by the price n periods ago. Unlike momentum it is a relative measure and therefore not biased by changes in the overall level of prices. It can take positive or negative values.

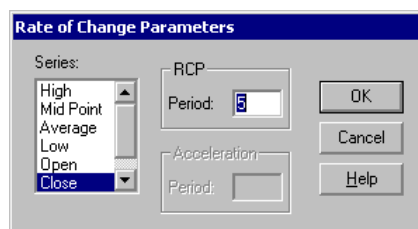
Formula:

$$RCP = \frac{P_t - P_{t-n}}{P_{t-n}}$$

Variable	Description
n	The number of periods.
P_t	The current price.
P_{t-n}	The price n periods ago.

Reference: Colby, Thomas & Robert Meyers, Encyclopedia of Technical Market Indicators, Dow Jones Irwin, 1988.

Parameters: The number of periods and the price series are adjustable.

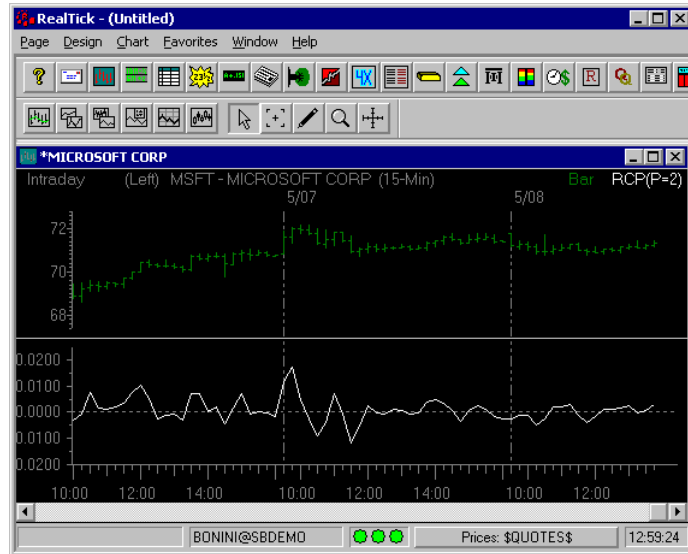


Rate of Change Parameters Box

The following table lists the Rate of Change in Prices parameter defaults.

Value	Default
Period	5
Series	Close

The following picture displays a chart with a rate of change in prices study.



Rate of Change in Prices Study

Volatility (VO)

Volatility as used in technical analysis is a momentum type measure of the range of prices over a given time period. The maximum price change experienced is a measure of risk. (For statistical measure of variance and standard deviation, see Moments.) RealTick displays volatility and volatility ratio. Volatility is the difference between the highest price and the lowest price experienced over period n.

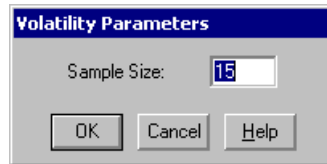
Formula:

$$VO_t = H - L$$

Variable	Description
H	Highest price occurring over period n.
L	The lowest price occurring over period n.

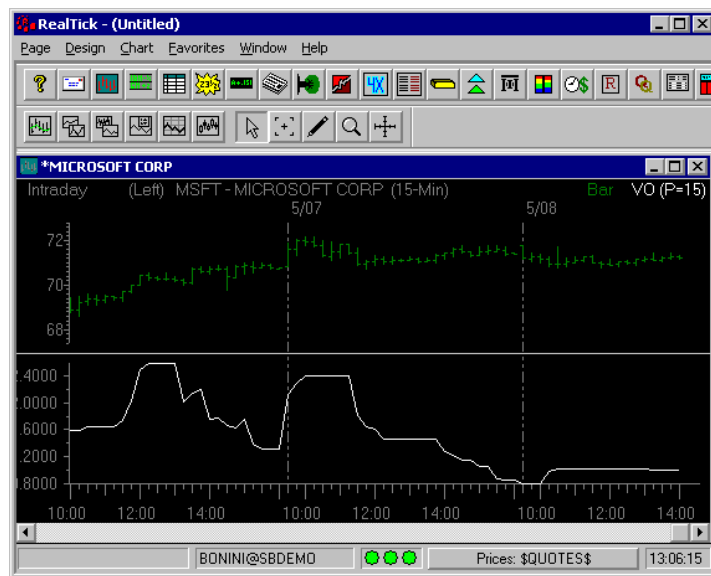
Reference: Kaufman, Perry, The New Commodity Trading Systems & Methods, Irwin, 1987.

Parameters: The only parameter in the volatility indicator is the period. The period length can be changed in the volatility parameters dialog box.



Volatility Parameters Box

Defaults: Period = 15



Volatility Study

Volatility Ratio (VOR)

Volatility ratio is measure of volatility or maximum price fluctuation presented in relative terms. Unlike volatility, it is not affected by the overall level of prices. Volatility ratio is the difference between the highest high for a given time interval and the lowest low for the same interval, divided by the lowest low for the same interval.

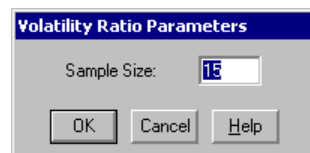
Formula:

$$VOR_t = (H - L) / L$$

Variable	Description
H	The highest price occurring over period n.
L	The lowest price occurring over period n.

Reference: Colby, Thomas & Robert Meyers, The Encyclopedia of Technical Market Indicators, Dow Jones Irwin, 1989

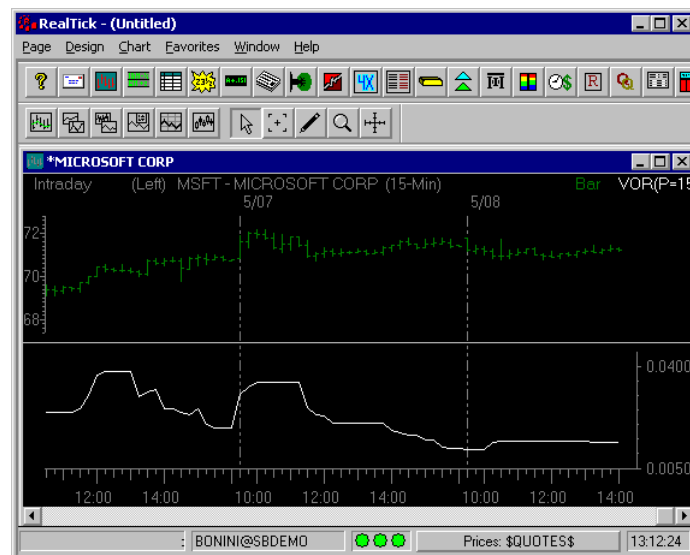
Parameters: The only parameter for volatility ratio is the period. The period can be changed in the volatility ratio parameter box.



Volatility Ratio Parameters Box

Default: Period=15

The following picture displays a chart with a volatility ratio study.



Volatility Ratio Study

Commodity Channel Index (CCI)

The Commodity Channel Index is a momentum indicator developed by Donald R. Lambert.

Formula:

$$CCI = (M - M_a) / (0.015 D_a)$$

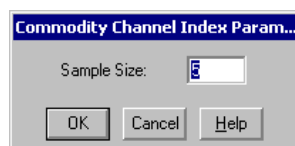
Variable	Description
M	(1/3)(H+L+C) for a period n.
H	The highest price for a period n.
L	The lowest price for a period n.
C	The closing price for a period n.
M_a	The n - period simple moving average of M.

$$D_a = (1/n) \sum_{t=1}^n |M_t - M_a|$$

D_a = the mean deviation of the absolute value of the difference between the mean price and the simple moving average of mean prices.

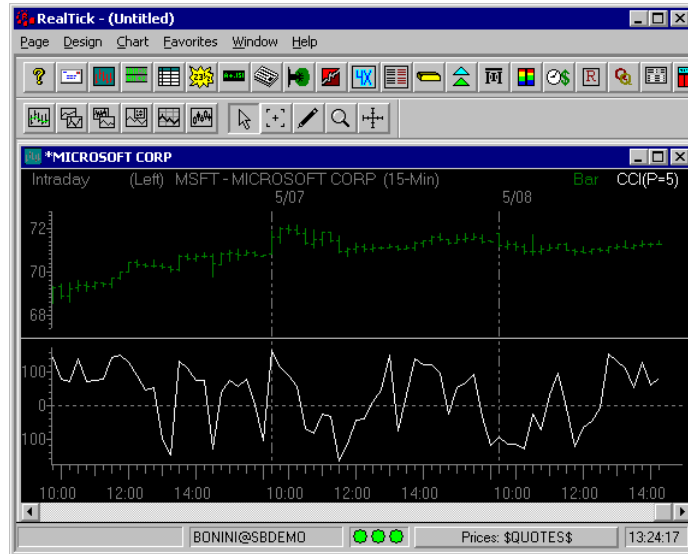
Reference: Colby, Thomas & Robert Meyers, The Encyclopedia of Technical Market Indicators, Dow Jones Irwin, 1989.

Parameters: The only parameter to the Commodity Channel Index is the period n, also referred to as the sample size, which can be changed through the CCI parameter dialog box.



Commodity Channel Index Parameter Box

Defaults: Period=5



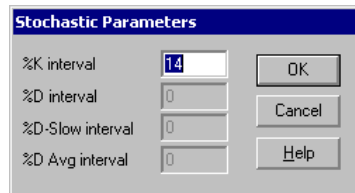
Commodity Channel Index Study

Stochastics

A stochastic is an oscillator based on the position of the closing price for a certain time period relative to the range over the same time. This measure and smoothed expressions of it make up the family of stochastics. This indicator was developed by George Lane (Investment Educators, P.O. Box 2354, Des Plaines, IL). Lane's four stochastics are selected as separate studies: %K, %D, %D Slow, and %D Averaged. These four stochastics share parameters. In addition, RealTick offers Williams' Percentage Range and the Relative Strength Index.

K Fast (%K)

Fast %K measures the relative position of the close as the difference between the lowest price for the period and the close of the period. This number is expressed as a percentage of the range for the period. When creating %K you must select the time period, i.e. the number of intervals to include in the period.



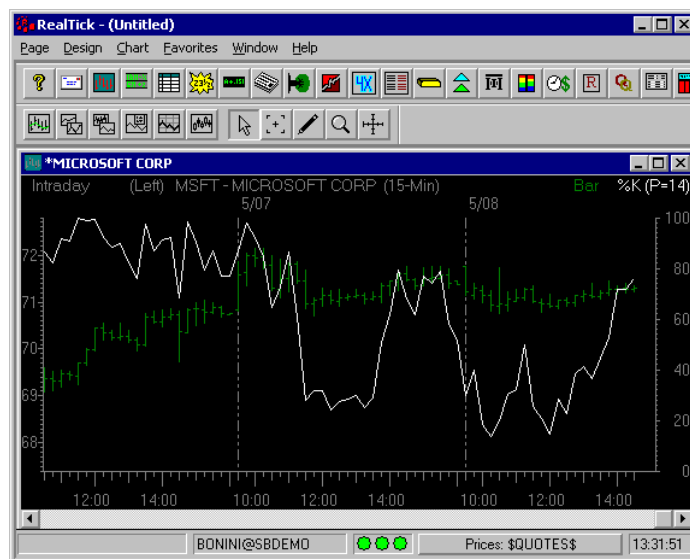
Stochastic Parameters Box

Formula:

$$\%K = ((C-L)/(H-L)) * 100$$

Variable	Description
C	The closing price for period n.
L	The lowest price over period n.
H	The highest price over period n.
n	The period length.

The following picture displays a chart with a %K study.

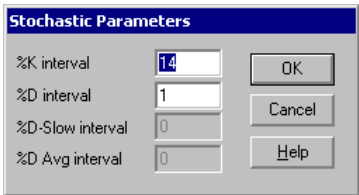


%K Study

D Fast (%D)

A simple moving average of %K is called %D (or Fast %D). When creating %D, you must select both the number of intervals in

the %K upon which %D is based and the number of terms to include in the average. Lane uses a three term moving average.



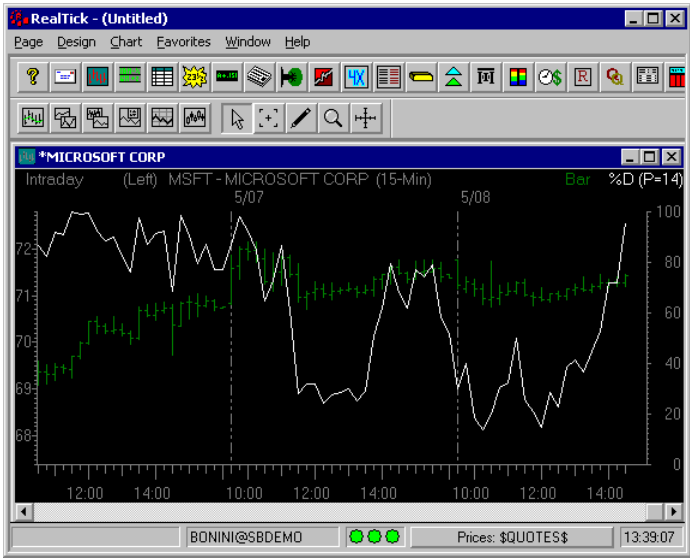
Stochastic Parameters Box

Formula:

%D = MA(%K) over period x.

Value	Description
%K interval	14
%D interval	1

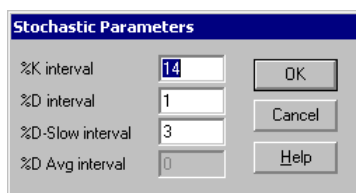
The following picture displays a chart with a %D study.



%D Study

D Slow (%Ds)

Fast stochastics can be very choppy. To reduce the choppiness, increase the number of periods or use the further smoothed form, %D Slow. %D Slow is a moving average of %D. To create %D Slow you must select the number of intervals to include in the average as well as the parameters used to create %K and %D. Lane uses three periods to calculate %D Slow.



The image shows a 'Stochastic Parameters' dialog box. It contains four input fields: '%K interval' with the value 14, '%D interval' with the value 1, '%D-Slow interval' with the value 3, and '%D Avg interval' with the value 0. To the right of these fields are three buttons: 'OK', 'Cancel', and 'Help'.

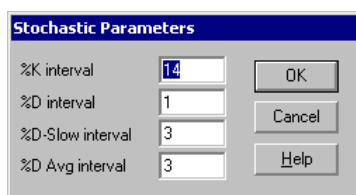
Stochastic Parameters Box

Formula: %D Slow = MA(%D) for period y.

Value	Descriptions
% K interval	14
%D interval	1
%D Slow interval	3

D Averaged (%Da)

%D Average is the moving average of %D Slow. To create % D Average you must select the number of intervals to include in the average as well as the parameters used to create %K, %D and %D Slow.



The image shows a 'Stochastic Parameters' dialog box. It contains four input fields: '%K interval' with the value 14, '%D interval' with the value 1, '%D-Slow interval' with the value 3, and '%D Avg interval' with the value 3. To the right of these fields are three buttons: 'OK', 'Cancel', and 'Help'.

Stochastic Parameters Box

Formula:

%D Average = MA(%D Slow) for period z.

Reference: Eng, William. The Technical Analysis of Stocks, Options and Futures, Probus, 1988.

Value	Description
%K interval	14
%D interval	1
%D Slow interval	3
%D Avg. interval	3

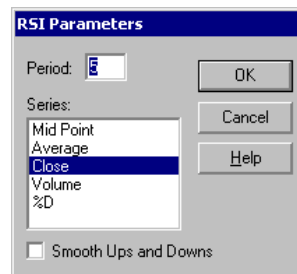
Stochastics Parameters

Parameters are set for stochastics through the Stochastic Parameters dialog box. The dialog box is identical for each stochastic because the measures are derivatives of the level above. You need to enter parameters for the levels above but not for those below.

Defaults: % K=5 intervals, % D=5 intervals , % D Slow=5 intervals, % D Slow Average=3 intervals.

Williams' Percentage Range (%R)

Williams' Percentage Range measures the position of the current period's close to the range of prices over a time period. The number is expressed in percentage terms. It is the similar to Lane's Stochastic except it uses the low rather than the high in the numerator. Percent R can take values between zero and 100.



RSI Parameters Dialog Box

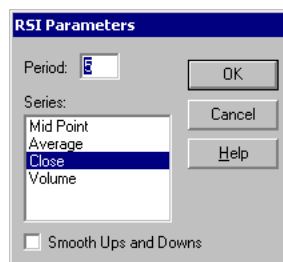
Formula:

$$\%R = ((H-C)/(H-L)) * 100$$

Variable	Description
C	The closing price for period n.
L	The lowest price over period n.
H	The highest price over period n.
n	The period length.

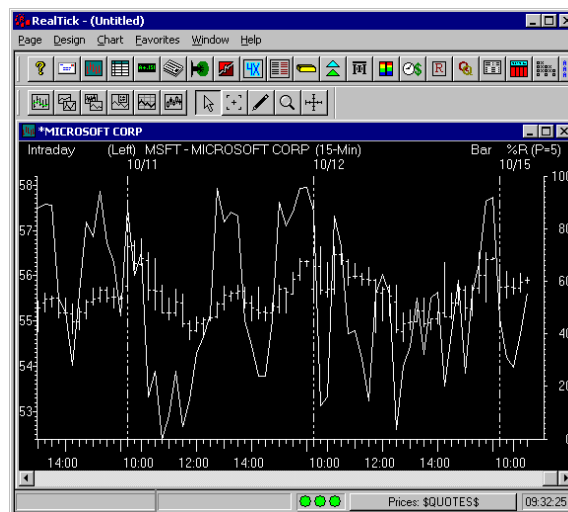
Reference: Kaufman, Perry, The New Commodity Trading Systems & Methods, John Wiley, 1988.

Parameters: The period, that is number of time intervals to include in the calculation of the range, is a user defined parameter.



RSI Parameters Dialog Box

Default: Period=5



%R Study

Relative Strength Index (RSI)

The Relative Strength Index, developed by J. Welles Wilder ([New Concepts in Technical Trading Systems](#), Trend Research, Greensboro, NC, 1978) is an overbought/oversold indicator expressed on a scale of 0 to 100. It is the ratio of the average up closes for a certain number of time intervals divided by the sum of the average up closes and the average down closes for the same period. This ratio is multiplied by 100.

Formula:

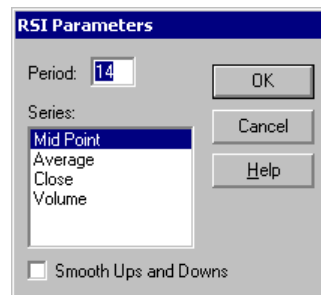
$$RSI = 100 * (RS / (1 + RS))$$

Where:

RS = the ratio of the average of n period gains divided by the absolute value of the n period losses.

Reference: Kaufman, Perry, [The New Commodity Trading Systems & Methods](#), John Irwin, 1988.

Parameters: The number of time intervals is a user defined parameter.

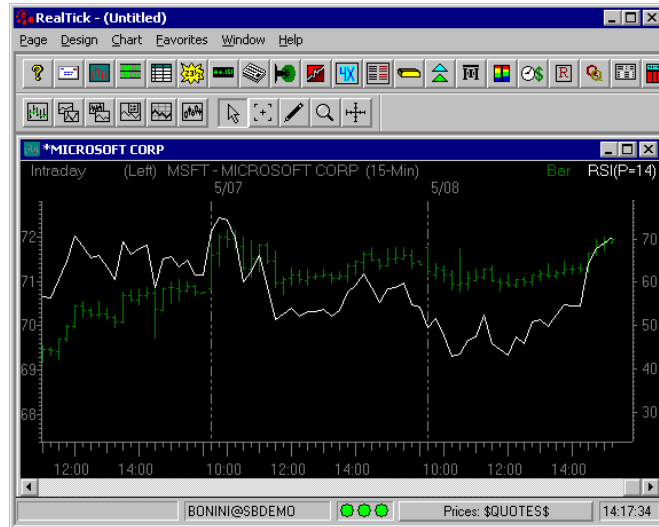


RSI Parameters Box

Default: Period=14

Smooth Ups and Downs: $RSI [X] = U [X] / (U[X] + D[X])$

This picture displays a chart with a RSI study.



Relative Strength Index Study

Moments

The moment estimators are displayed on the first, second and third panels of the chart window depending on their values. Moments are measures that characterize a distribution. The monthly average is the first moment, the measure of central tendency. The variance is the second moment, the measure of dispersion of the distribution. The skew is the third moment, the measure of departure from symmetry. Kurtosis is the fourth moment, the measure of the departure from normality in the thickness of the tails of the distribution. Although not required, a math coprocessor is highly recommended for calculations of moments. A math coprocessor will speed up display of all studies.

There is also a way to average the data for any study that allows you to set the period. For more information, please see Mean.

RealTick offers five moment estimators: Monthly Average (AVG), Variance (VAR), Standard Deviation (SD), Skew (SKW), and Kurtosis (KUR).

For more information on statistical moments, see any statistics or econometrics reference book.

Mean

For any study that allows you to set the period, you can generate an average over the complete length of available data by setting the period to -1. This generates a single number, which will appear on a chart as a horizontal line.

Moving averages are described separately in this chapter. Simple, autoregressive, linear and exponential moving averages can be selected. The autoregressive moving average allows you to include previous estimates in the current estimate. The %AR gives the weight to the previous period's estimate.

Monthly Average (AVG)

Monthly average is only available for daily, weekly, and monthly charts and tables, which use daily data. This study has no parameters. It is calculated by adding the data for each month, then dividing by the number of days in the month. The resulting numbers are displayed as a step chart.

Variance (VAR)

Variance is displayed in the middle panel with its values shown on the right axis. Variance measures the volatility or dispersion of the series. Variance can never be negative. Low values of variance indicate little dispersion.

Formula:

$$VAR_t = \left(1/(n - 1)\right) \sum_{i=t-n}^t (P_i - P_a)^2$$

Where:

P_a is the simple mean of prices over the period n .

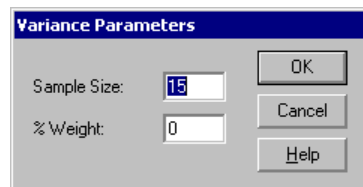
RealTick also allows you to calculate an autoregressive variance:

$$AR - VAR_t = (1 - \%Weight)VAR_t + (\%Weight)AR - VAR_{t-1}$$

Where:

$VAR(t)$ is the simple variance at time t for n periods. If the weight is zero, the formula reduces to the simple variance above.

Parameters: Both the sample size and the autoregressive weight serve as smoothing factors in calculating the variance. You can change the sample size (the period) used in calculating the variance and enter an autoregressive weight (in percentage terms) using the Variance Parameters dialog box.

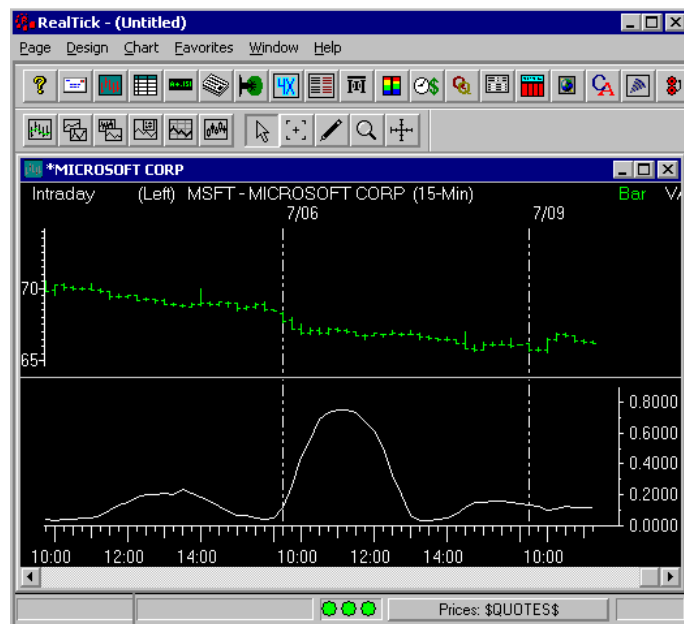


Variance Parameters Box

The following table lists the Variance parameter defaults.

Value	Default
Sample Size	15
% Weight	0

This picture displays a chart with a standard deviation study.



Variance Study

Standard Deviation (SD)

Standard deviation is the square root of variance. Standard deviation is in the same units as the price variable itself. Standard deviation is displayed in the second panel (middle or lower, depending on how many studies are displayed) with its values to the right.

Formula:

$$SD_t = \sqrt{AR_t}$$

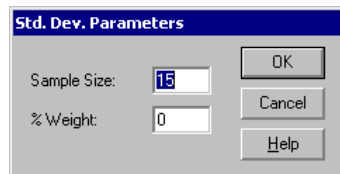
RealTick allows you to calculate an autoregressive standard deviation:

$$AR - SD_t = (1 - \%Weight)SD_t + (\%Weight)AR - SD_{t-1}$$

Where:

SD_t is the simple standard deviation at time t for n periods. If the weight is zero, the formula reduces to the simple standard deviation above.

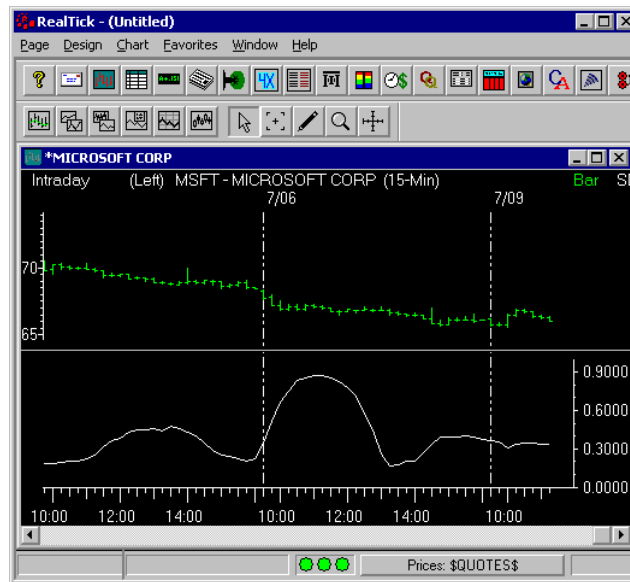
Parameters: The standard deviation parameter box allows you to change the period -- the number of intervals used in calculating the standard deviation, and include a nonzero autoregressive weight.



The following table lists the standard deviation parameter defaults.

Value	Default
Sample Size	15
% Weight	0

The following picture displays a chart with a standard deviation study.



Standard Deviation

Skew (SKW)

Skew is displayed on the third (bottom) panel. Skew can be positive or negative. Positive skew values indicate distributions with long tails to the right whereas negative values indicate distributions with long tails to the left. The parameter box for these studies is similar to that for the variance.

Formula:

$$SKW_t = \frac{\sum_{i=t-n}^t (P_i - P_a)^3}{n * SD^3}$$

Variable	Description
SD	The standard deviation.
P _a	The simple mean of prices over the period t-n to t.

RealTick allows you to calculate an autoregressive skew:

$$AR - Skew(t) = (1 - \%Weight)Skew(t) + (\%Weight)AR - Skew(t - 1)$$

Skew(t) is the simple skew at time t for n periods. If the Weight is zero, the formula reduces to the simple skew above.

Parameters: The skew parameter box allows you to change the sample size (the number of periods) used in calculating the skew and to enter an autoregressive weight (in percentage terms).

Skew Parameters

Sample Size:

15

% Weight:

0

OK

Cancel

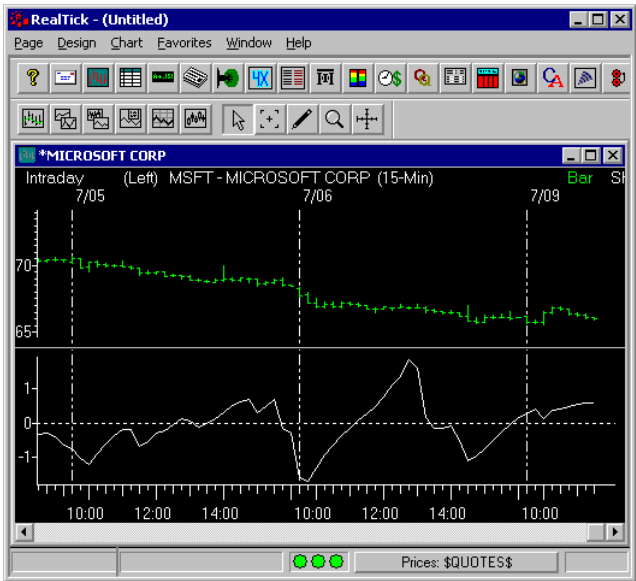
Help

Skew Parameters Box

The following table lists the Skew parameter defaults.

Value	Default
Period	15
% Weight	0

The following picture displays a chart with a skew study.



Skew Study

Kurtosis (KUR)

Kurtosis is displayed on the third (bottom) panel. Kurtosis can be positive or negative. Peaked distributions show positive kurtosis and flat topped distributions show negative kurtosis.

Formula:

$$KUR_t = \sum_{i=1}^t (P_i - P_a)^4 - 3$$

Where:

P_a is the simple mean of prices over the period n .

We subtract 3 to make Kurtosis symmetric around 0.

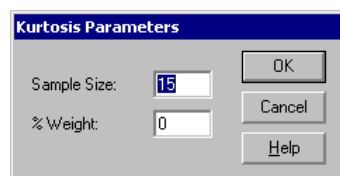
RealTick allows you to calculate an autoregressive kurtosis:

$$AR - KUR_t = (1 - \%Weight)KUR_t + (\%Weight)AR - KUR_{t-1}$$

Where:

KUR_t is the simple kurtosis at time t for period n . If the Weight is zero the formula reduces to the simple kurtosis above.

Parameters: The period and the autoregressive weight can be changed through the kurtosis parameter box.

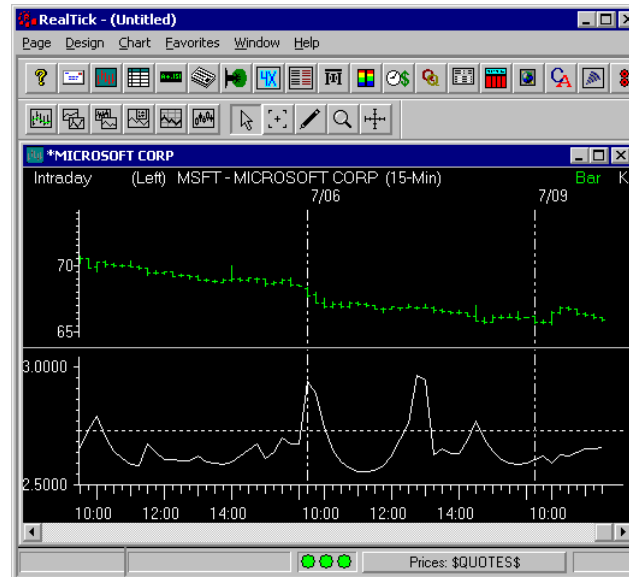


Kurtosis Parameters

The following table lists default parameters for the Kurtosis study.

Value	Default
Period	15
Weight	0

The following picture displays a chart with a kurtosis study.



Kurtosis Study

Volume and Open Interest

The Volume and Open Interest indicators are displayed in the second and third panels. These indicators measure the amount of trades during a time period. The four Volume and Open Interest studies available are: Tick Count (TCT), Volume (VOL), Open Interest (OI), and On Balance Volume (OBV). The Volume and Open Interest indicators have no adjustable parameters.

Tick Count (TCT)

Tick count is available for intraday bars. Tick count is the number of ticks that occurred at each time interval. Technically, a tick occurs whenever the price changes rather than when a trade occurs. Tick count is displayed as a histogram in the second panel.

Volume (VOL)

The number of contracts traded is available for daily charts. Total volume is presented as a histogram in the second panel. For tick charts, trade volume is shown; for intraday and daily charts, the total volume in the interval bar is shown.

Open Interest (OI)

Open interest is also available for daily charts. Open Interest is displayed as a histogram on the second panel. Open Interest can be overlaid on total volume. Select Open Interest before Total Volume.

On Balance Volume (OBV)

On balance volume (Granville, Joseph E., A New Strategy of Daily Stock Market Timing for Maximum Profit, Prentice Hall, 1976) is a simple accumulation process. If a period closes up, its volume is added to a total. If a period closes down, its volume is subtracted from a total. Since on balance volume is an accumulation, it is sensitive to the days included in the measure. There are no adjustable parameters for the measure. On Balance Volume is presented as a graph in the third panel.

Formula:

$$OBV = \sum \left[\left(\frac{C - C_p}{|C - C_p|} \right) * V \right]$$

Variable	Description
C	The current period's closing price.
C _p	The previous period's closing price.
C - C _p	The absolute value of the difference between the two closing prices.
V	The current period's volume.

Reference: Colby, Thomas, and Robert Meyers, The Encyclopedia of Technical Market Indicators, Dow Jones Irwin, Illinois, 1988.

Price and Volume Studies

The following indicators combine price and volume: Williams' Accumulation Distribution, Arm's Ease of Movement, and Money Flow.

Williams' Accumulation Distribution (WAD)

Williams' Accumulation Distribution (Larry Williams, P.O. Box 8162, Ranch Santa Fe, CA 92067) is a price momentum indicator that is weighted by volume.

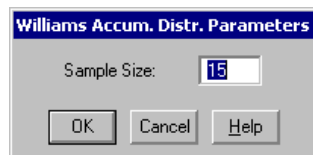
Formula:

$$WAD = \sum_{i=1}^n \left[\left(\frac{C - O}{H - L} \right) * V \right]$$

Variable	Description
C	The current period's closing price.
O	The current period's opening price.
H	The current period's high price.
L	The current period's low price.
V	The current period's volume.

Reference: Colby, Thomas & Robert Meyers, The Encyclopedia of Technical Market Indicators, Homewood, 1988.

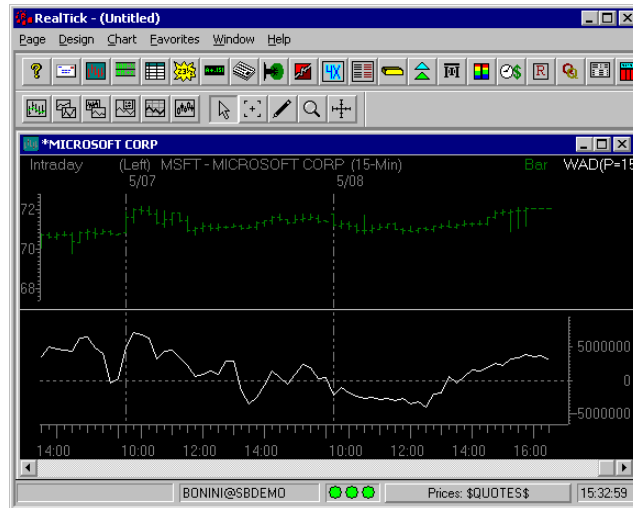
Parameters: The only adjustable parameter is the period.



Williams Accumulation Distribution Parameters Box

Default: Period = 15

The following picture displays a chart with a Williams Accumulation Distribution study.



Williams' Accumulation Distribution Study

Arms' Ease of Movement (EMV)

Arms' Ease of Movement Indicator (Richard J. Arms, Volume Cycles in the Stock Market: Market Timing through Equivolume Charting, Dow Jones Irwin, Homewood, 1983) is another momentum indicator that combines price and volume.

Formula:

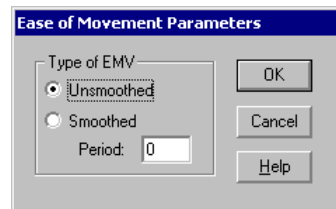
$$EMV = \left[\left(\frac{H + L}{2} \right) - \left(\frac{H_p + L_p}{2} \right) \right] \div \left(\frac{V}{H - L} \right) * 100000$$

Variable	Description
H	The current period's high price.
L	The current period's low price.
H _p	The previous period's high price.
L _p	The previous period's low price.
V	The current period's volume.

The measure is multiplied by 100000.

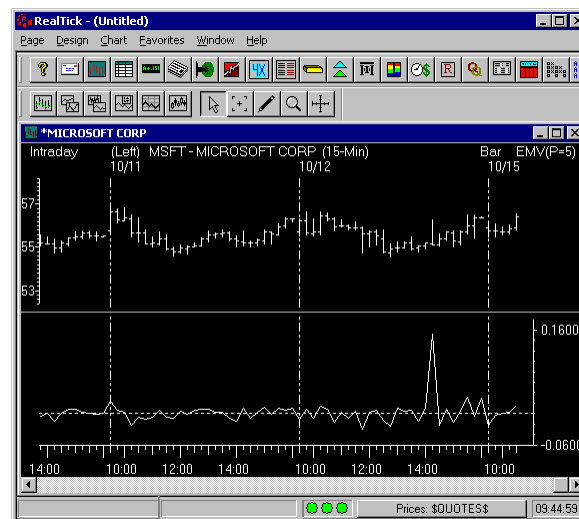
Reference: Colby, Thomas and Robert Meyers, An Encyclopedia of Technical Market Indicators, Dow Jones Irwin, Homewood, Illinois 1988.

Parameters: A smoothed version of the EMV is available. It is calculated as a simple moving average of the EMV. The period length in the smoothed version is an adjustable parameter.



Ease of Movement Parameters Box

Default: Unsmoothed



Arm's Ease of Movement Study

Money Flow (FLO)

The Money Flow study combines price and volume information. RealTick only calculates Money Flow for tick charts. The value of the Money Flow study can be very high, so there is a default multiplier of 1/1000 in the Overlay dialog box.

Formula:

If the last tick is an up tick (i.e., if $P(n) > P(n-1)$), then

$$F(n) = F(n-1) + (P(n) * V(n))$$

If the last tick is a down tick (i.e., if $P(n) < P(n-1)$), then

$$F(n) = F(n-1) - (P(n) * V(n))$$

If the last tick is no change, then

$$F(n) = F(n-1)$$

Variable	Description
F	Money Flow
P	Price
V	Volume

Parabolic Price/Time Study

The Parabolic Time/Price study is best said to be a buy or sell trigger or a “stop and reverse” system. The graph, which resembles a parabola, is made up of stops. The stop is related to time and price. It never backs up. It moves an incremental amount in the direction of the trade. For example, if the trade is short, the stop will move downward. If the trade is long, the stop will move upward. Each time the price reaches a new high or low in price, the stop accelerates. If the price reverts insignificantly, the stop will not accelerate. If the price reverts significantly and crosses over the stop, it's time to trade.

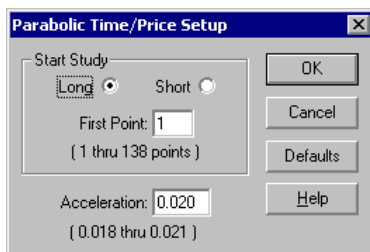
Formula: The bottom formula is a translation of the top (actual) formula.

$$SAR_{\text{tomorrow}} = SAR_{\text{today}} + AF(EP_{\text{Trade}} - SAR_{\text{Trade}})$$

$$Parabolic = \text{Current Parabolic} + [\text{acceleration factor} \times (\text{extreme price} - \text{current parabolic})]$$

Reference: Wilder Jr., J. Welles. New Concepts In Technical Trading Systems. Trend Research, Greensboro, N.C.

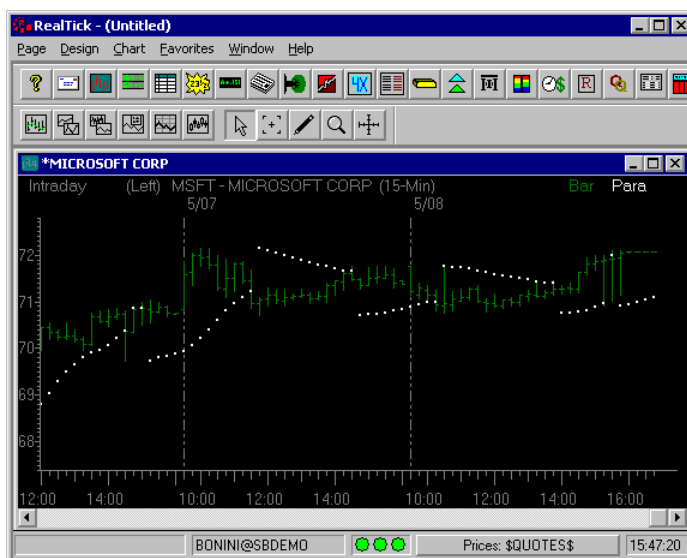
Parameters: Trade Long or Short. Select the starting point for the parabolic. (The entry point is where the study begins its calculations, expressed as an offset from the beginning of the data.) Select the Acceleration.



Parabolic Time/Price Setup Dialog Box

Value	Default
Start Study	Long
First Point	1
Acceleration	.020

The following picture displays a chart with a parabolic study.



Parabolic Study

Directional Movement Indicators (PDI, MDI, DX, ADX)

Wilder's Directional Movement Index (J.W. Wilder, Jr, New Concepts in Technical Trading Systems, Trend Research, P.O Box 128, McLeansville, NC 27301) is a filtering momentum that measures movement in the up direction relative to movement in the down direction.

Four directional movement indicators are available: Plus Directional Movement (PDI); Minus Directional Movement (MDI); Directional Movement Indicator (DX); Average Directional Movement (ADX).

Formulae:

Plus Directional Movement = PDM = $H - H_p$

Minus Directional Movement = MDM = $L - L_p$

Variable	Description
H	The highest price of the current period.
H_p	The highest price of the previous period.
L	The lowest price of the current period.
L_p	The lowest price of the previous period.
C_p	The closing price for the previous period.

If $|H - H_p| > |L - L_p|$ then DM is PDM and MDM is zero.

If $|H - H_p| < |L - L_p|$ then DM is MDM and PDM is zero.

TR = True Range = is the largest of $H - L$; $H - C_p$; or $L - C_p$

The four directional movement indicators are:

Plus Directional Movement

$PDI = EMA(PDM) / EMA(TR)$

Minus Directional Movement

$MDI = EMA(MDM) / EMA(TR)$

Directional Movement Indicator

$DX = (PDI - MDI) / (PDI + MDI)$

Chapter 7: Placing Orders

This chapter discusses the different order types you can place using RealTick. It will instruct you how to use the different windows to place these orders. These windows include Order Book, MarketMaker, MarketMinder, TurboOptions, and Stocks.

Order Types

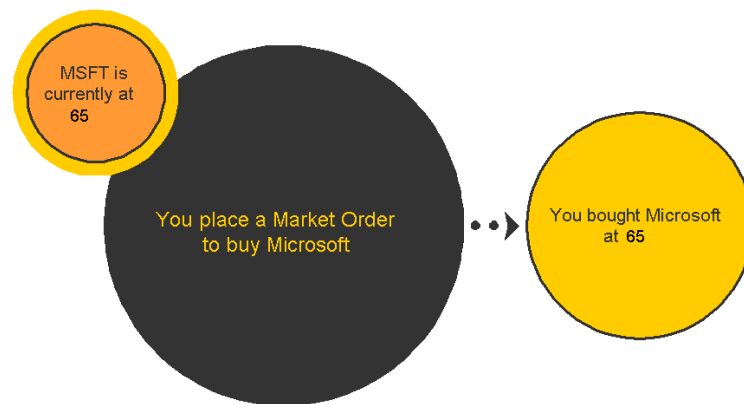


Note: Market orders are currently available on ARCA, ISI, REDI, INCA, and BTRD.

Market Order

With this order type you can place a buy or sell order at the current market price. There may be a price difference between the time you place the order and the confirmation of the order. You will find out the actual trading price when you receive the order confirmation.

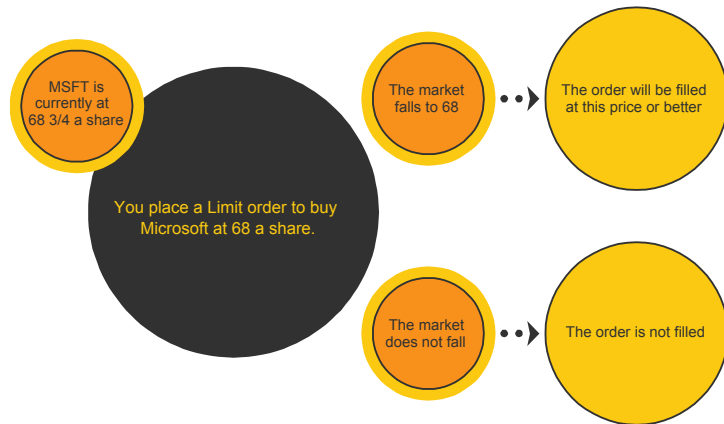
Example: You place an order to Buy 100 shares of Microsoft at Market. The best offer is currently \$ 65. The order may be executed at \$65 or whatever the best offer changes to while your market order is open.



Limit Order

This order type allows you to select a specific price at which you want your order to be executed. The order will be executed at that price or better.

Example: Microsoft is currently at \$69. You place an order to buy Microsoft at \$68 or lower. When the market hits \$68, or falls below \$68, the order will be executed.



Note: Stop Market orders are currently available on ARCA and ISI.

Stop Market Order

With this order type, you can decide a specific price at which you want your order to be triggered. The order then turns into a market order and is executed at the market price.

Example: You own 1000 shares of Microsoft at \$72. The current price is \$70. You place a Sell Stop Market order with a stop price of \$68. A market order will be sent once the current price reaches or passes \$68.



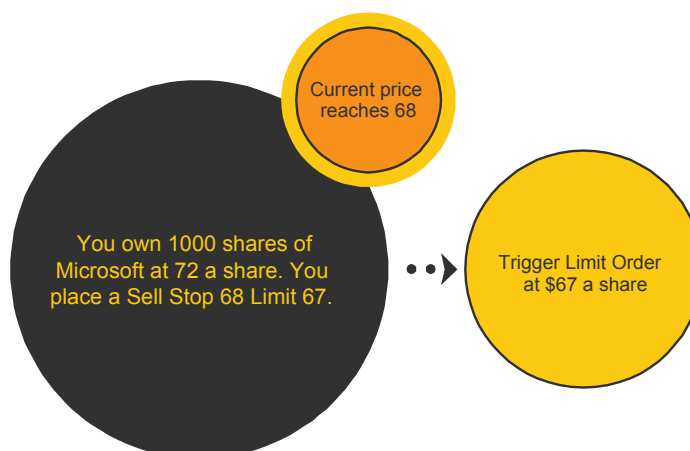


Note: Stop Limit Orders are currently available on ARCA.

Stop Limit Order

This is a limit order to buy or sell at the specified limit price if the specified stop price is reached or passed. The stop price must be below (above) the current price if the order is a sell (buy).

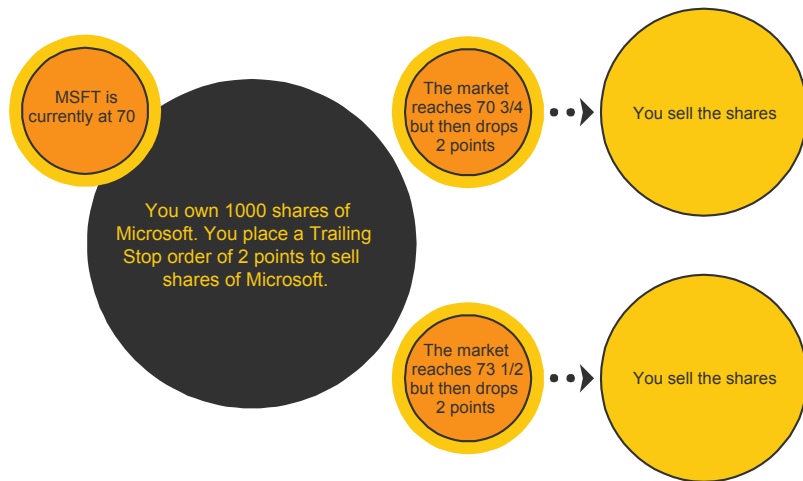
Example: You own 1000 shares of Microsoft at \$72. The current price is \$70. You place a Sell Stop Limit order with a stop price of \$68 and a limit price of \$67. A limit order at the price of \$67 will be sent out once the current price reaches or passes \$68.



Trailing Stop

A stop market order that follows (trails) the current price with a difference of the specified trail amount, creating a new stop market order, as the current price moves away from the original price.

Example: You place a Trailing Stop order of 2 points as the Trail Amount when the current price is \$70, therefore your trigger price is \$68. The price increases to \$71 a share. Your new trigger price will automatically change to \$69. If the price reverses and goes down, the trailing stop will place a market sell order once it reaches \$69 a share.



PostNoPreference

The order is sent to ARCA without being preferenced out to other Market Makers and ECNs. The order will stay on ARCA's internal book until it is filled.

Example: You place an order on ARCA. You check the PostNoPref box and send the order out. It remains on the ARCA internal book for the day.

See the Expiration section.

Preference

An Order Type used with SelectNet to designate what MarketMaker the trader wants to preference. You can also preference ECNs. You can preference using ARCA or SelectNet.

Note: This is not a SelectNet Broadcast.

Example: You choose ARCA or SelectNet as the trading route, click the preference check box, specify a Market Maker or ECN identification, then send the order to preference that participant. You can also click on the Market Maker or ECN identification in the Level II panel to automatically fill in the preference box.

Discretionary (Proactive)

Proactive Discretionary orders are the same as Discretionary orders. They attempt to hit/take any bid/offer that falls within the discretionary range, and accept any preference order coming into it. Discretionary orders do not execute outside the NBBO unless the Show price is preferenced.

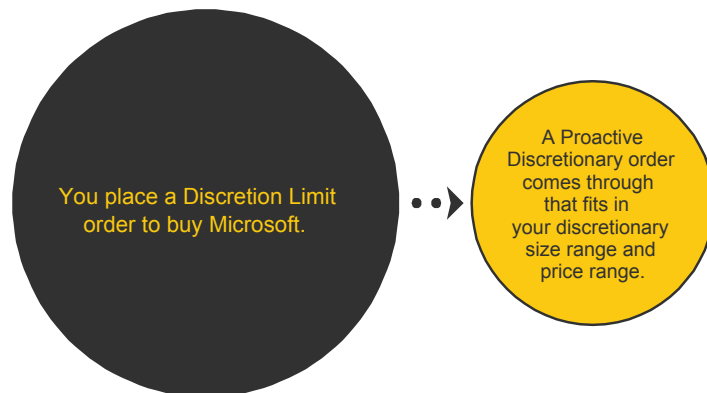
Example: You place an order with a broker to buy 1000 shares of MSFT starting at the limit price of \$71 a share. You set the discretionary price at \$72 a share. The broker buys the first 500 shares at \$71 and has up until \$72 a share to buy the next 500 shares. If the price gets to \$72 a share, the discretionary order turns into a limit order and remains in the book until it can be filled.

Passive Discretionary

Passive discretionary orders execute with the street at the show price and interact with orders within the book at the discretionary price.

Discretion Limit

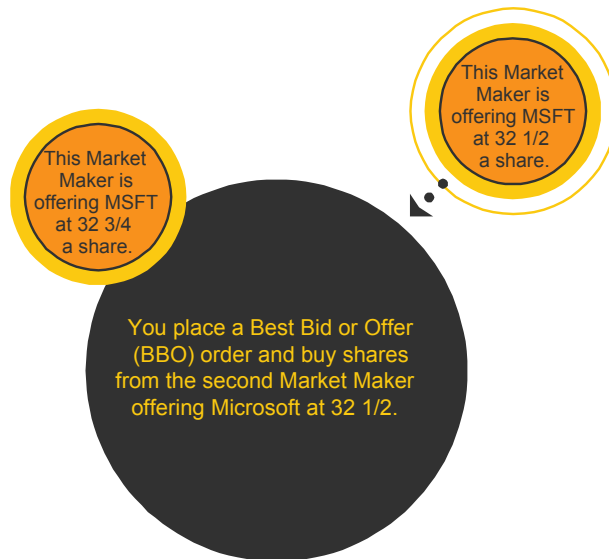
A Discretion Limit order attaches itself to a Discretionary order and only attempts an execution against an order that falls within your discretion range, if it is over a preset share quantity.



Best Bid or Offer (BBO)

This order type sends a limit order with a price that equals the current bid or offer.

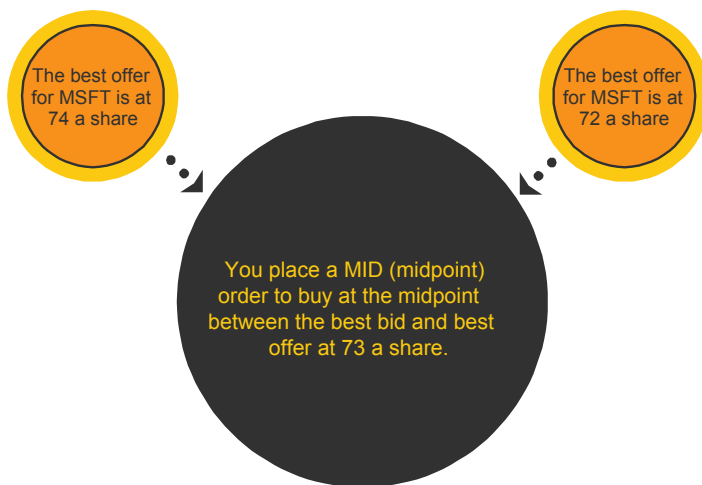
Example: You choose to buy 1000 shares of MSFT. You choose the BBO Order Type to buy at the current offer.



Midpoint (MID)

With this order type you can buy or sell at the midpoint between the best bid and the best offer.

Example: You decide to buy 1000 shares of Microsoft at the Midpoint, and to offset the midpoint by a point, to buy at one point higher or lower than the midpoint.



BID

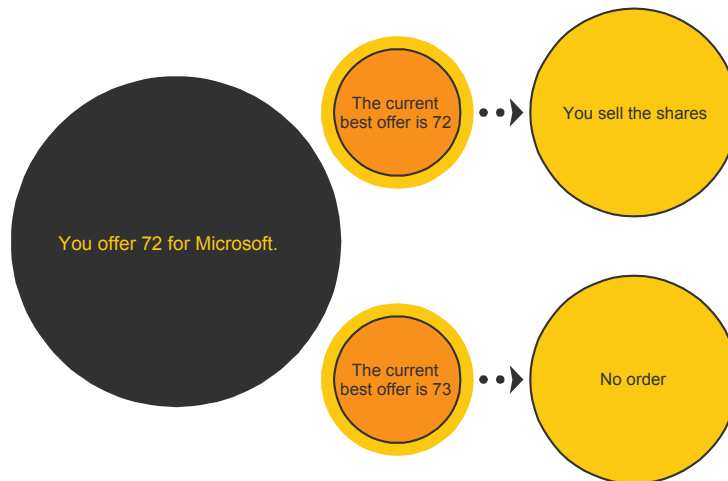
Your order will be sent as a limit order with a price equal to the current best bid.

***Example:** You place an order to buy with the order type BID. If the current best bid is \$72, your order will be sent as a limit order at \$72.*

Offer

Your order will be sent as a limit order with a price equal to the current best offer.

***Example:** You place an order to sell with the order type offer. If the current best offer is \$72, your order will be sent as a limit order at \$72.*



TOP

The TOP price type allows you to join the top of the book quote for the symbol you are trading. With TOP orders, buys are sent as limit orders at the current best bid, and sells are sent as limit orders at the current best offer.

Note: This order type is only available for BasketMinder. See the BasketMinder section in this chapter.

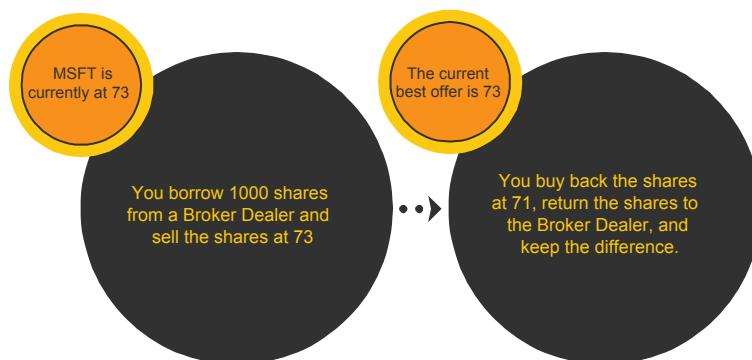


Note: It is not always possible to short sell a stock. Your Broker Dealer has to first have that stock in inventory before you can make the trade. The system may reject your order if it's not currently available to short. In this case, contact your Broker Dealer.

Short

Short is borrowing a security (or commodity futures contract) from a broker and selling it, with the understanding that it must later be bought back (hopefully at a lower price) and returned to the broker.

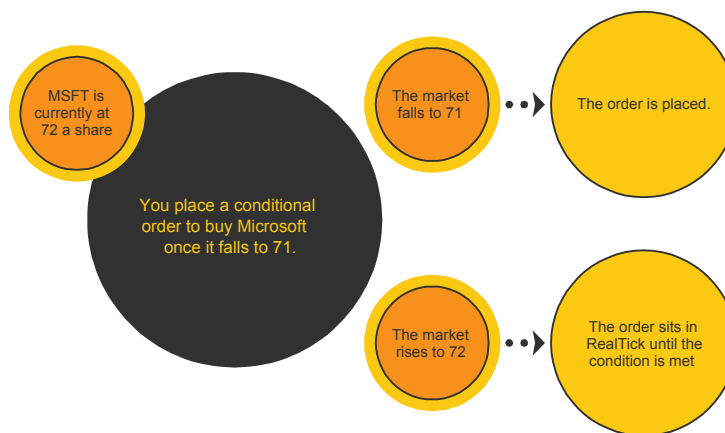
Example: You borrow 1000 shares of Microsoft from a broker dealer. You sell short the shares you borrowed and buy the 1000 shares back at a lower price to profit the difference. You then return the 1000 shares.



Conditional Order

This order will be executed only if certain conditions are met.

Example: You make a conditional order to sell 1,000 shares of Microsoft when it reaches a particular price, if these conditions are not met, the order will not be executed.

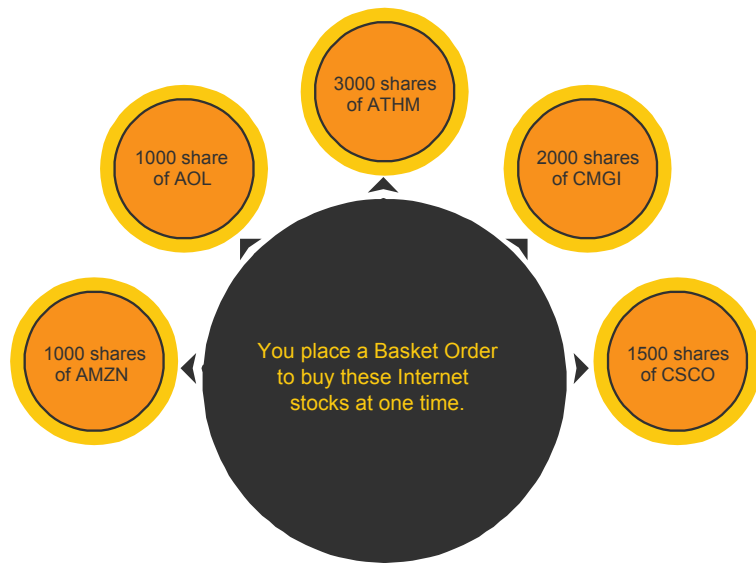


Note: This function is not available to all users. Please contact your Broker Dealer if you have any questions.

Basket Order

A basket order is a group of securities brought together with the intention of being bought or sold all at once.

Example: You decide to buy a group of internet stocks at one time, so you place a basket order.



Note: A reserve order is considered one order.

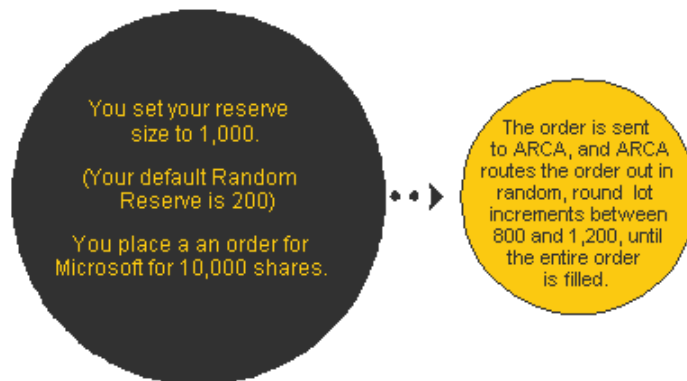
Reserve Order

An order that allows you to buy or sell large quantities of a security in increments, so the whole amount traded is not disclosed to the market at one time. This order type can only be placed on ARCA.

Example: You decide to buy 2,000 shares of MSFT, so you place a reserve order to buy MSFT at 100 shares at a time. This way, the 2,000 shares will not be disclosed to the market at one time.

Random Reserve

Random Reserve orders vary the display size on a Reserve order. For example, a reserve book order with a display quantity of 2000 shares and a random reserve value of 200 sends orders from 1800 to 2200 shares.



Staged Order

Sometimes referred to as an Order ticket, a Staged order is an order that authorizes further trading for a particular symbol up to the quantity specified in the Staged order. The Staged order also provides cumulative statistics on all the fills that are associated with it. When a user is configured to use this feature, no orders may be placed, unless they correspond to a live Staged order in terms of symbol, buy/sell, and quantity. A Staged order may also have a price restriction placed on it. Staged orders are intended for an environment where decisions on what and how much to buy or sell are handled separately from the trade entry itself. Staged orders provide the following features:

- Authorization of all orders entered by the trader to eliminate errors in size or buy/sell side.
- Aggregate statistics show you at a glance the state of the Staged orders so you do not have to sort through all the trade detail.

Note: The Staged order system can be integrated with other Order Management Systems. Please contact your System Administrator for more details.

Tracking Order

With a tracking order, you buy at the bid and sell at the offer, on the NBBO, so it changes as the market moves. Each tracking order uses a trade size and a reserve size. The trade size represents the number of shares eligible to be filled at each price level. The order

is live until the reserve quantity is filled. These orders are never routed outside of ArcaEx and are only valid for the Core session.

Cross Order

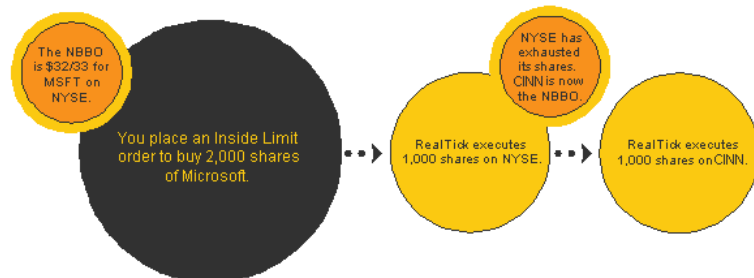
Clean cross: without interaction with standing orders.

A Cross order is a two-sided order with instructions to match a buyer and a seller at a specified price (the cross price). Cross orders are filled internally on ArcaEx. Because of ArcaEx's price-time priority, Cross orders may interact with standing orders on the ArcaEx Book.

For example, if an ETP holder wants to cross 1,000 shares of ABC at 10.15, a Cross order can be submitted to ArcaEx at 10.15. If there is a bid in the ARCA Book for ABC at 10.15 for 500 shares, ArcaEx will include the 500 share Book order in the cross. The ETP holder will sell 500 shares of ABC against the Book order and cross the remaining 500 shares. If the cross price is inside the bid/ask spread, the ETP holder will execute a clean cross without interacting with the Book.

Inside Limit

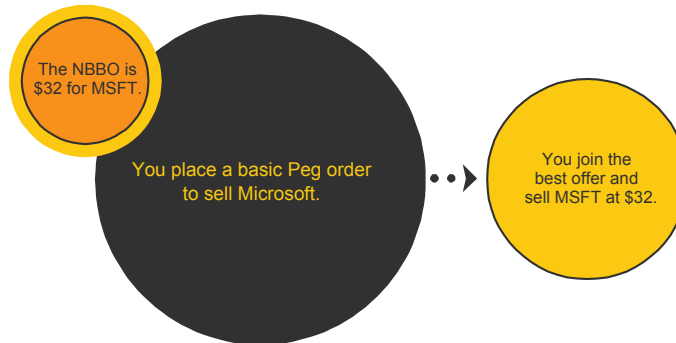
Inside Limit orders follow just the NBBO and will not fill at the next tier until all quotes at the NBBO are exhausted. Inside Limit is available on the combined ARCA/REDI Exchange.



Pegging Orders

Pegging orders follow the NBBO or a target value. You can set the price to match the NBBO or you can offset to trail or lead the NBBO or your target value. There are several different types of pegging orders: Basic Pegging, Reverse Pegging, Mid Pegging, Pegging with a Discretion Component, Pegging with a Discretion Limit, Pegging with Limits, and Pegging with an Offset.

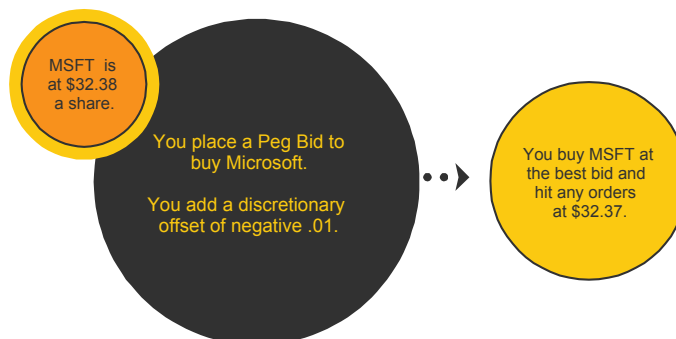
Basic Pegging buys at the bid and sells at the offer. When buying, you will join the best bid. When selling, you will join the best offer. The peg offset is subtracted from the best bid and added to the best offer.



Reverse Pegging buys at the best offer and sells at the best bid. You may also add a Peg value to the order. This Peg value is added to the best offer on buy orders and subtracted from the best bid on sell orders.

Mid Pegging ensures that your bid or offer is halfway between the current NBBO. You may also add a Peg value to the order.

Pegging with a Discretion Component allows you to add a discretionary offset to your pegged order. It participates on the bid side while simultaneously taking certain offers when buying. If selling, you will join the offer and hit bids within the discretion amount.



Pegging with a Discretion Limit Size allows you to add a discretion limit size to a pegged order.

Pegging with Limits allows you to add a limit top or a limit bottom.

Volume

The volume defines how you want the order to be filled.

All or Nothing (AON)

All or Nothing - round-lot market or limit-price orders that must be executed in its entirety or not at all.

***Example:** You place an AON order to buy 100 shares of Microsoft at a particular price. If the order cannot be completely filled, it will sit in the book until it is eligible to become executed, otherwise it will cancel at the end of the trading session.*

Partial

This is an order that can be filled partly instead of in its entirety. Often times there will be several partial orders until the order is completed entirely.

***Example:** You place a Partial order to buy 1000 shares of Microsoft at a particular price. 100 of the shares are filled. The other shares sit in the book until it is eligible to become executed, otherwise they will cancel at the end of the trading session.*

Sweep Reserve

The ARCA Sweep Reserve executes your marketable order using the reserving quantity and posts the balance using the show amount. If multiple market participants are on the inside bid or offer, ARCA splits up the reserve quantity and sweeps the inside market simultaneously. Non-marketable orders display the show quantity.

Expirations

Expiration defines the period when an order is valid.

Day

A buy or sell order that expires at the end of regular market hours, if it is not executed.



Note: Not all trading routes support every expiration type. Contact your Broker Dealer for more information.

Example: You place an order to buy 1000 shares of Microsoft at a particular price. You set the expiration to Day, so if the order is not filled that day, it is canceled.

Day +

A buy or sell order that will expire after extended trading hours on the trading day it was entered, if it is not executed.

Example: You place an order to buy 1000 shares of Microsoft at a particular price. This sets the expiration to Day+, so if the order is not filled that day, including during extended trading hours, the order will be canceled.

Good Until Canceled (GTC)

Good Until Canceled – An order to buy or sell that remains in effect until it is either executed or canceled. This is currently available on ISI.

Example: You place an order for Microsoft at a particular price. The trader sets the expiration to GTC, so that the order will not cancel until you decide to cancel the order.

Immediate or Cancel (IOC)

Immediate or Cancel -- A market or limit-price order executed in whole or in part as soon as it is represented in the market. Any portion not executed is canceled.

Example: You place an order to buy 1000 shares of Microsoft. When the order enters the market, only 100 shares can be filled and the other 900 are canceled.

NOWSM

An order that will be filled immediately or canceled immediately, and can only be placed on ARCA. If ARCA cannot fill the order, the order goes to major ECNs, where it is either filled by one ECN, split up amongst several ECNs in order to be filled, or canceled.

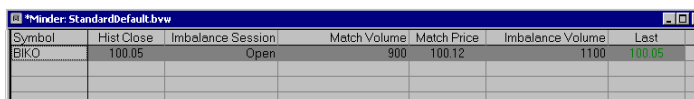
Example: You place an order to buy Microsoft at a particular price. You set the expiration to NOW, so either ARCA, ISLD, REDI, or INCA will fill the order.

Market Order Auction (MOA)

ArcaEx supports both market and limit order auctions. All users who have access to the ArcaEx route can participate in the Auction. Both are single-priced Dutch auctions that match buy and sell orders at the price that maximizes the amount of tradeable stock.

The Limit Order Auction is held at 8:00 AM EST, when limit orders are matched at the Indicative Match Price – the price at which the maximum volume of orders is executable at auction time. Unexecuted limit orders become eligible for the opening session immediately upon conclusion of the Limit Order Auction.

Users may begin entering market and limit orders for the Market Order Auction at 8:00 AM EST. The Market Order Auction takes place at 9:30 AM EST and serves as a bridge between the opening session. Executions resulting from the Market Order Auction are reported at the conclusion of the auction, and the core trading session then commences.



Symbol	Hist Close	Imbalance Session	Match Volume	Match Price	Imbalance Volume	Last
BIKO	100.05	Open	900	100.12	1100	100.05

MarketMinder Column Layout

Suitability

There are six suitability rules that can affect RealTick users. These rules include Transaction Cost, Transaction Size, Trade Frequency, Price Range, Single Item Portfolio Balancing, and Portfolio Balancing. These rules are risk-management tools that restrict your customers from executing an order when violating a rule.

Transaction Cost: Restricts or warns the user if the transaction costs exceeds suitability limit per transaction.

Transaction Size: Restricts or warns a user if transaction size exceeds suitability limit per transaction.

Trade Frequency: Restricts or warns a user if they have exceeded the maximum number of trades per day.

Price Range: Restricts or warns a user if the price on the trade is greater than a percentage or absolute amount from the last sale (market).

Single Item Portfolio Balancing: Restricts or warns the user if a position in his portfolio exceed x% or absolute value of the entire value.

Portfolio Balancing: Restricts or warns the user if a security type in his portfolio exceeds x% or absolute value of the entire value of the portfolio.

RealTick Windows with Order Entry



***Note:** If you would like a description of each order entry field in the OES window, refer to the online help.*

RealTick offers Order Entry with several windows. You can monitor market data and trade from several of the windows.

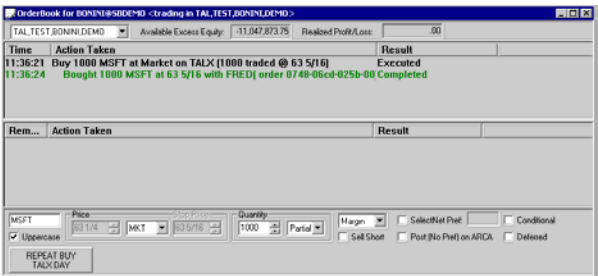
Order Entry Screen (OES)

Send an order using the Order Entry screen. You can send orders by setting the parameters in the Order Entry screen and clicking an order button. If you would like a description of each order entry field in this OES screen, refer to the online help.

Order Book

The Order Book window displays detailed information about each transaction placed in RealTick. You can view an order you placed from any OES screen throughout the day in the Order Book. For example, if you placed an order in a MarketMaker window, you can view the details of the order in Order Book. You can also place orders from this window.

Access the Order Book by selecting Order Book on the Design menu or double-clicking the Level II panel in MarketMaker.



Order Book Window

MarketMaker



Note: Not all the Order Entry layouts are the same.

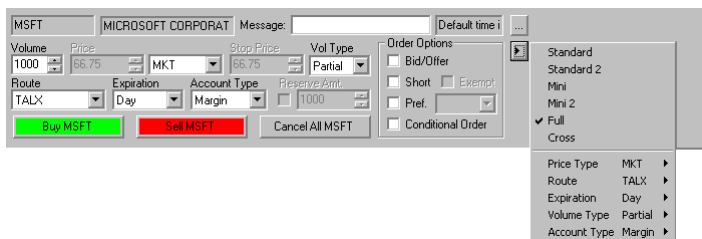
There are several different OES layouts in the MarketMaker Order Entry screen. You can choose from Standard, Standard 2, Mini, Mini 2, and Full. Each layout is setup differently. Some of the layouts include more options than others. Look at the different OES layouts and see which layout you would like to use to trade.

Standard Layout

Standard 2 Layout

Mini Layout

Mini 2 Layout

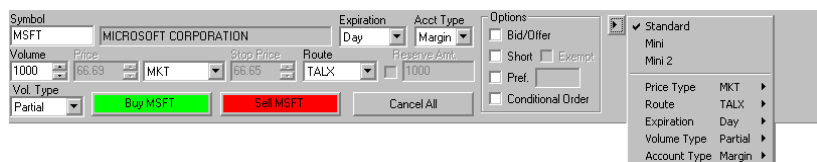


Full Layout

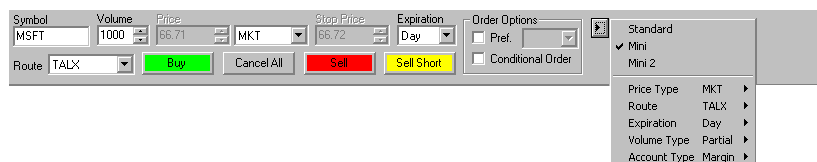
MarketMinder

There are several different OES layouts available in MarketMinder. Each layout is set up differently. Look at the different layouts and see which one you would like to use to trade.

MarketMinder has full trading capabilities.



Standard Layout



Mini Layout



Mini 2 Layout

Symbol	MICROSOFT CORP		Volume	1000	Route	ARCA	Options
Price	\$6.15	Stop Price	\$6.18	Disc. Offset	Disc. Limit	Reserve Amt	<input type="checkbox"/> Short <input type="checkbox"/> Exempt <input type="checkbox"/> Conditional Order
	MKT		0	100	100		
Buy MSFT		Sell MSFT		Cancel All			

PEG Layout

TurboOptions

Buy and sell options from the advanced option's quote window.

This window requires that you have Options Quote data. If you have any questions, please contact your Broker Dealer.

RealTick - (Untitled)									
Page Design TurboOptions Favorites Window Help									
Turbo Options - Corn <TAL,TEST,BONINI,DEMO>									
Calls					Puts				
Low	High	Change	Close	Last	Last	Change	Close	High	Low
215 1/2	218	1	216	215.0	205.0	3	-1 3/8	3	3
0	0	0	0	11 1/2	210.0	5 3/4	-1/2	6	5 1/8
9 1/4	9 1/4	3/8	9 1/4	215.0	8 1/2	-3/8	8 3/4	8	
6 3/4	8	1/8	7	220.0	11	-7/8	11 1/2	10 1/2	
5 1/4	6 1/2	-1/4	5 1/4	225.0					
4	5 1/2	-1/4	4	230.0	0	0	0	0	
223 1/2	224 1/2	1/2	223 1/2						
Symbol: -CU1P2050 /CU1 SEP 01 205.0 PUT Price: 3 Volume: 1 Partial Reserve Amt: 1000 Route: TALX Margin: Buy Sell Cancel All					Open/Close: Auto Expiration: Day Options: <input type="checkbox"/> Bid/Offer <input type="checkbox"/> Short <input type="checkbox"/> Conditional Order				
BONINI@SBDEMO Prices: \$QUOTES\$ 11:31:01									

TurboOptions Window

Stocks

The OES screen in Stocks can be found on the MarketMinder tab. You can buy and sell from this tab just like you can from a Minder. Please see the MarketMinder section in this chapter to learn more about trading from this window.

Placing Orders

Buy from the Order Entry Screen in Order Book

From the Order Book, MarketMaker, MarketMinder, TurboOptions, or Stocks window, you can place a Limit, Market,



***Note:** Trailing Stop, PostNoPref, and Discretionary are currently available on ARCA.*

Stop-Market, Stop-Limit, Trailing Stop, PostNoPref, Discretionary, Best Bid or Offer, MID, Bid, Offer, Conditional, or Deferred order.

This set of instructions uses the Order Book window. Any of the windows that offer Order Entry have a generic Show Order Entry Screen command and can buy.

1. Click **Show Order Entry Screen** on the **Order Book** menu.

The system displays the **Order Entry** fields.

Order Book with Order Entry Fields

2. Type the stock you want to purchase in the **Stock** field.
3. Choose the type of trade you want from the drop-down list available in the **Price** type field. If you choose a Limit Order (**LMT**), you must enter a price in the **Price** field.
4. Type the amount of trade you want to buy in the **Volume** field.
5. Choose the volume type (**partial** or **all or none**) from the drop-down list available in the **Quantity** box.
6. Right-click the **Buy** button and select when you want the order to expire. You can choose **IOC**, **GTC**, or **Day**.
7. Choose the type of payment from the drop-down list in the **Account Type** field. You can choose either **Cash** or **Margin**.

Note: If the command button says **Sell**, right-click the command button and select **Buy**.

8. Click **Buy**.

The system displays the **Select Trade Route** dialog box.

9. Choose the exchange from the drop-down list available in the **Trade Route** field.

10. Click **OK**.

The system places the order.

Sell from the Order Entry Screen in MarketMaker

This set of instructions uses the MarketMaker window. Any of the windows that offer Order Entry have a generic Show Order Entry Screen command.

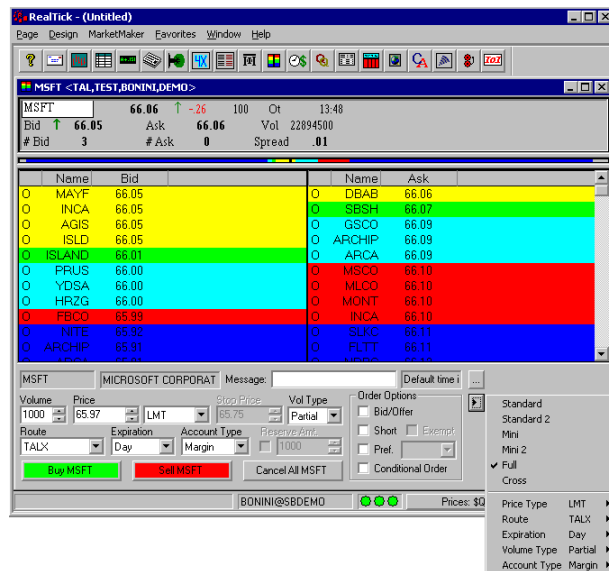


Hint: Click any market participant in the **Level II** panel of the MarketMaker window to automatically preference that participant for routes that support preferencing, such as *SelectNet* and *ARCA*.

Note: Press **F7** on your keyboard to quickly open the Order Entry Screen.

1. Select **Order Entry Screen** from the **Show Windows** sub-menu on the **MarketMakers** menu.

The system displays the **OES** screen.



MarketMaker Window

2. Select an **OES** layout, **Standard**, **Standard 2**, **Mini**, **Mini 2**, or **Full**.

3. Click the **Market Maker** of the price you want to sell.

The price appears in the **Price** field.

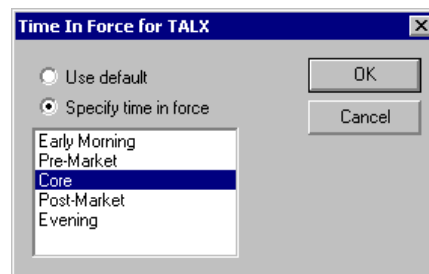
4. Enter the amount of trade you want to sell in the **Volume** field.

5. Choose the type of trade you want from the drop-down list available in the **Order Type** field. If you choose a **Limit Order (LMT)**, you must enter a price in the **Price** field.
6. Choose the volume type (**partial** or **all or none**) from the drop-down list available in the **Vol Type** field.

Note: If you chose the **Mini OES** layout, select the **Volume Type** from the **OES** layout drop-down menu.

7. Choose when you want this order to expire from the drop-down list available in the **Expiration** field.
8. Click the **Time In Force** (ellipse) button.

The **Time In Force** dialog box will appear.



Time In Force Dialog Box



Warning: Selecting the incorrect Trade Route can result in the order being rejected or sent to the wrong destination.

9. Click the **Specify Time In Force** option button and select the session.
10. Click **OK**.
11. Select the trading route from the **Route** field.
12. Choose your account type from the drop-down list available in the **Acct Type** field.

Note: If you chose the **Mini OES** layout, select the **Account Type** from the **OES** layout drop-down menu.



Hint: Trigger the deferred orders in an OrderMinder. Right-click a managed order and select **Activate**.

13. Click the **Sell** button.

The system places the order.

Place a Deferred Order from the Order Book

Deferred orders are orders that sit in the order book until triggered. You must manually trigger the order yourself before it is sent.



***Note:** You can place a Deferred order in Order Book without having to access the **Enter Conditional Order** dialog box. Just click the **Deferred** check box, and click **Buy** or **Sell**, depending on your trade. The order will be placed in the Order Book.*

This set of instructions uses the Order Book window. Any of the windows that offer Order Entry have a generic Show Order Entry Screen command and can place a Deferred Order.

1. Click **Show Order Entry Screen** on the **Order Book** menu.
The system displays the **Order Entry** fields.
2. Click the **Deferred Order** check box.
3. Click the **Buy** button if you'd like to purchase stock. Click the **Sell** button if you'd like to sell stock.

The **Enter Conditional Order** dialog box will appear.

Enter Conditional Order Dialog Box

4. In the **Order to Execute** box, click **Buy** if you are purchasing the stock or **Sell** if you are selling the stock.
5. Click **Place Order**.

The system will place the **Deferred** order in the **Order Book**.

Place a Conditional Order from MarketMaker

See Add a Sound Alert to a Conditional Order in this chapter.

RealTick enables you to place an order that will automatically be sent to the exchange ONLY after specific conditions you set have been met in the market. For example, you can set the condition to sell your shares of Microsoft once the price reaches a specific amount. The exchanges do not receive your order until your conditions have been met. However, if you close RealTick or experience a power outage, the conditional order is erased! As a

result, if RealTick is closed, the conditional order will not be placed, even when the conditions have been met.

This set of instructions uses the MarketMaker window. Any of the windows that offer Order Entry have a generic Show Order Entry Screen command and can place a Conditional Order.

1. Select **Order Entry Screen** from the **Show Windows** sub-menu on the **MarketMaker** menu.

The system displays **Order Entry** screen.

2. Select the **OES** layout, **Standard**, **Standard 2**, **Mini**, **Mini 2**, or **Full**.

3. Click the **MarketMaker** of the price you want to buy or sell.

The price appears in the **Price** field.

4. Click the **Conditional Order** check box in the **Order Options** frame.

5. Click the **Buy** button if you are purchasing the stock, or click the **Sell** button if you are selling the stock.

The system displays the **Enter Conditional Order** dialog box.



 A dialog box titled "Enter Conditional Order". It has a "Price Trigger" section with "If" set to "MSFT", "Data Item" set to "Last Price", "Condition" set to ">=", and "Price" set to "64 11/16". There are "Place Order" and "Cancel" buttons. Below this is a "Time Trigger" section with "Activation Time" and "Expiration Time" both set to "16:00". There are "AND" and "OR" radio buttons. The "Order to Execute" section has a "Buy" button (highlighted in green) and a "Sell" button. It includes fields for "Symbol" (MSFT), "Volume" (1000), "Price" (64 11/16), "Type" (LMT), "Stop Price" (64 11/16), "Route" (TALX), "Expires" (Day), "Size Type" (Partial), and "Pref." (unchecked). At the bottom, there are checkboxes for "Trigger by User (Deferred Order)" (unchecked) and "Request confirmation when conditional orders are triggered" (checked).

Enter Conditional Order Dialog Box

6. Choose the value you want RealTick to monitor from the drop-down list in the **Data Item** field. For example, you can choose **Last Price** or **Bid**.



***Note:** As conditional orders are held in RealTick, closing the application, losing connectivity to the order servers, losing power, and any other situation that prevents RealTick from operating correctly, will result in the conditional order not to be triggered. Contact your Broker Dealer if you have any questions.*

7. Choose the condition (**greater than, less than, equal to**) from the drop-down list in the **Condition** field.
8. Enter the amount you want to monitor in the **Price** field.
9. Enter the amount of trade you want to buy or sell in the **Volume** field.
10. Choose the volume type (**Partial** or **AON**) from the drop-down list available in the **Vol Type** field.
11. Choose the type of trade you want from the drop-down list available in the **Type** field. If you choose a **Limit Order (LMT)**, you must enter a price in the **Price** field.
12. Choose when you want this order to expire from the drop-down list available in the **Expiration** field.
13. Click the **Buy** button if you are purchasing the stock, or click the **Sell** button if you are selling the stock.
14. Click the **Place Order** button.

The system displays the **Confirm Order** dialog box.

Note: The Confirm Order dialog box will appear only if you select Confirm All Trades on the Warnings/Confirmations tab on the Order Entry Properties dialog box.

15. Click **OK**.

The system places the order with the exchange only after the conditions have been met.

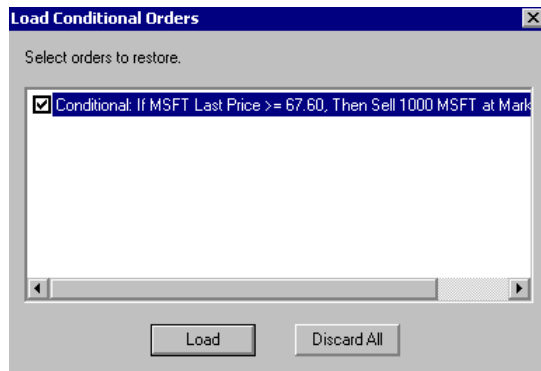
Note: If you close RealTick, you automatically cancel the conditional order. The order will NOT be placed. You will have to load the conditional order when you restart RealTick.

Load a Conditional Order

If you close RealTick while there is a Conditional order that hasn't yet been triggered, you'll have to load the Conditional order when you restart RealTick if you still want to place the order.

1. Login to RealTick.

The **Load Conditional Orders** dialog box will appear.



Load Conditional Orders Dialog Box

2. Click the Conditional order(s) you would like to load.
3. Click **Load**.
4. Open the **Order Book** and the Conditional order(s) will be displayed.

The order(s) will sit in the Order Book until the condition is met.

Place a Reserve Order

Reserve orders allow you to buy or sell large amounts of a security in increments so the whole amount being traded is not disclosed to the market. Reserve orders are only available on ARCA.

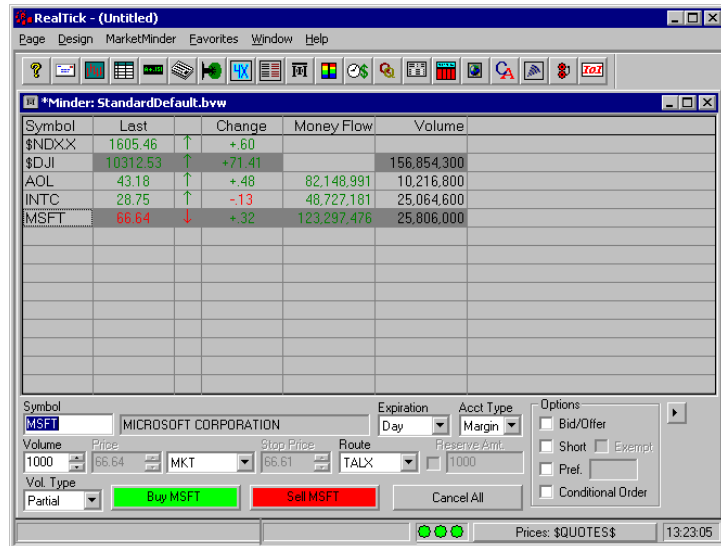
This set of instructions uses the MarketMinder window. Any window that offers Order Entry has a generic Show Order Entry Screen command and can place a Reserve order.

1. Click **Show Order Entry Screen** on the **MarketMinder** menu.

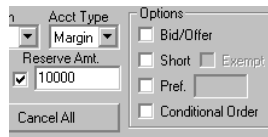
The **Order Entry** screen will appear.



***Note:** By default, the **Show** field and the **Reserve** field have the same volume. Change each field separately or change the defaults in the Order Entry Properties menu.*



MarketMinder Order Entry Screen



2. Select the trade route from the **Route** drop-down list.
The **Reserve Amount** check box will activate.
3. Click the **Reserve Amount** check box.
The **Reserve Amount** field will activate.
4. Type the reserve amount.
5. Type the **Show** amount in the **Show** field.
6. Click **Buy** if you are purchasing the stock or click **Sell** if you are selling the stock.
The system will buy or sell in increments of the **Show** amount up to the **Reserve** amount.



Hint: Use the MarketMaker's **My Order** feature to know where your tracking order stands in relation to the rest of the book.

Place a Track Bid or a Track Offer

This Order Type is only available with ArcaEx.

1. Click **Show Order Entry Screen** on the **MarketMaker** menu.
The system displays the **Order Entry** panel.
2. Select **Track Bid** to buy or **Track Offer** to sell from the **Price Type** field.

The system automatically selects **Core** as your expiration.

The screenshot shows the 'Order Entry Panel' with the following fields and values: Trade Size: 500, Price: (empty), Stop Price: (empty), Vol Type: Partial, Route: TAREX, Expiration: Core, Account Type: Margin, Reserve Amt.: 1000. The 'Order Options' section includes checkboxes for Bid/Offer, Short, Exempt, Pref. (ARCA), and Conditional Order.

Order Entry Panel

3. Click the **Reserve Amt.** check box.
4. Type the total amount you would like to buy or sell in the **Reserve Amt.** field or use the spin buttons.
5. Type the trading amount in the **Show** field or use the arrows.
6. Select the type of payment from the **Account Type** drop-down field.
7. Click **Buy** for track bid or click **Sell** for track offer.

The order is placed.

Place a Cross Order

Cross orders are available in RealTick's MarketMaker and IOI windows.

1. From the **Standard OES** layout in a **MarketMaker**, select a **Price Type**.
2. Select an account type from the **Account Type** drop-down list.
3. Select **Cross** from the **MarketMaker OES** drop-down list.

The **Cross OES** layout will appear.

The screenshot shows a dropdown menu with the following options: Standard (checked), Standard 2, Mini, Mini 2, Full, Cross (highlighted), Price Type, Route, Expiration, Volume Type, Account Type, Capacity.

The screenshot shows the 'Cross OES' layout with the following fields and values: Symbol: MMM, Expiration: Day, Acct Type: Margin, Volume: 900, Price: 100.15, LMT: (empty). The 'Buy' button is highlighted in green.

Order Entry Screen

4. If the **Price** field is activated, select the price.
5. Select the volume in the **Volume** spin box.
6. Select the route from the **Route** drop-down box.
7. Click **Cross**.

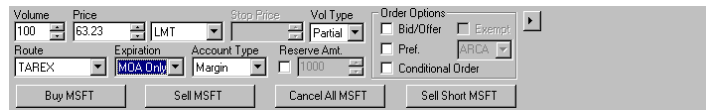
The order is placed.

Place a Market or Limit Order Auction Order

1. Click **Show Order Entry Screen** on the **MarketMinder** menu.

The **Order Entry Screen** will appear.

2. Select **Market** or **Limit** in the **Price Type** field.
3. Select **MOA** from the **Expiration** drop-down list.



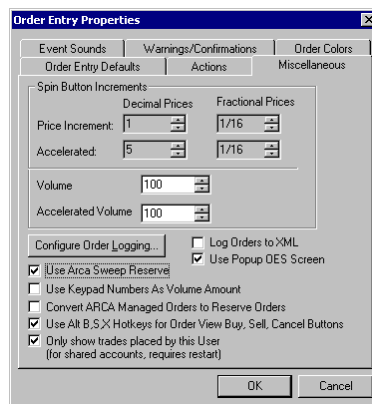
Order Entry Screen

4. Configure the remaining part of the order.
5. Click **Buy** to buy or **Sell** to sell.

The order is placed.

Place a Sweep Reserve Order

1. Select **Order Entry Properties** on the **MarketMaker** menu.
2. Click the **Miscellaneous** tab.
3. Click the **Use Arca Sweep Reserve** check box.
4. Click **OK**.



Order Entry Properties Dialog Box

Place an Inside Limit Order

1. From the OES panel on the MarketMinder window, select **Inside Limit** from the **Price Type** drop-down field.



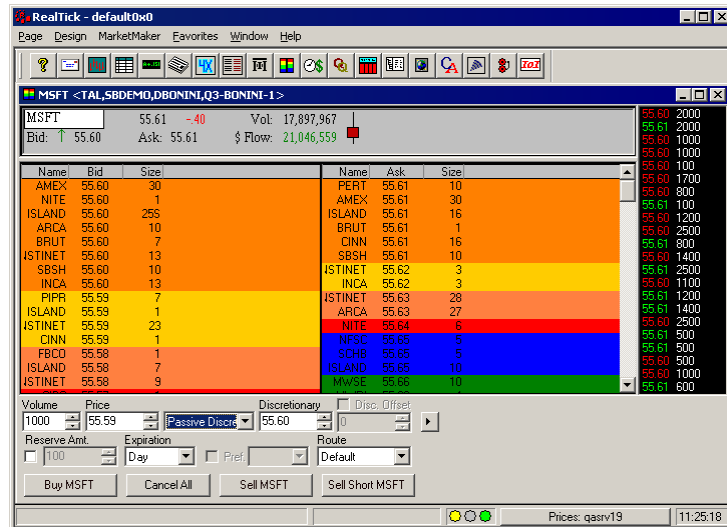
MarketMaker Window

2. Select the **ARCA** route from the **Route** drop-down field.
3. Type the amount of shares you would like to trade in the **Volume** spin box, or use the arrows.
4. Select the expiration from the **Expiration** drop-down field.
5. Click the **Buy** button to buy the stock, or click **Sell** to sell the stock.

The order is placed.

Place a Passive Discretionary Order

1. From the OES panel on the MarketMaker window, select **Passive Discretionary** from the **Price Type** drop-down field.



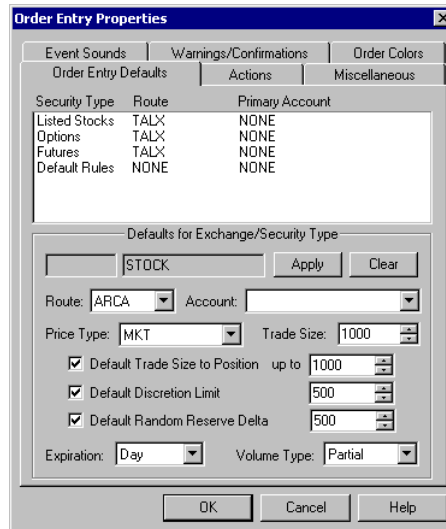
MarketMaker Window

2. Type the discretionary price in the **Discretionary** spin box, or use the arrows.
3. Type the show price in the **Price** field.
4. Select the **ARCA** route from the **Route** drop-down field.
5. Type the amount of shares you would like to trade in the **Volume** spin box, or use the arrows.
6. Select the expiration from the **Expiration** drop-down field.
7. Click the **Buy** button to buy the stock, or click **Sell** to sell the stock.

The order is placed.

Select a Discretion Limit Range

1. Click **Order Entry Properties** on the **MarketMaker** menu.
The **Order Entry Properties** dialog box will appear.



Order Entry Properties Dialog Box

2. Click the **Default Discretion Limit** check box.

The spin box will activate.

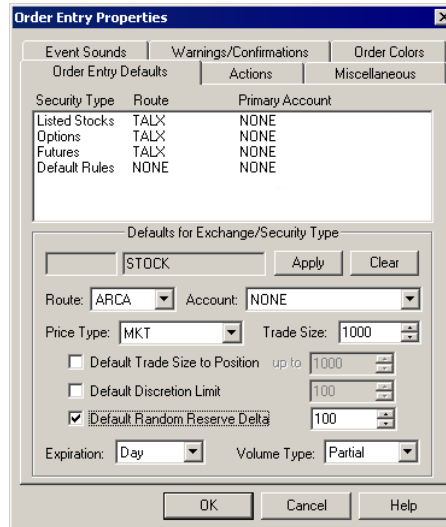
3. Type or select the number of shares in your **Discretionary** range using the spin buttons.
4. Click **OK**.

The discretionary range is set.

Place a Basic Pegging Order

1. Select Peg as the OES layout from the MarketMaker OES panel.

The Peg OES layout will appear.



Order Entry Properties Dialog Box

- Click the **Default Random Reserve Delta** check box.
The spin box will activate.
- Type the random reserve amount or use the spin buttons.
- Click **OK**.
The default **Random Reserve** amount is set.

Place a Random Reserve Order

- On the OES panel of the MarketMaker, click the **Reserve Amt.** check box.
The **Reserve Amt.** field will activate.
- Type the reserve amount in the **Reserve Amt.** field or use the spin buttons.
- Right-click the OES panel and select **Random Reserve Delta** from the right-click menu.

✓ Standard	
Standard 2	
Mini	
Mini 2	
Mini Inst	
Full	
Peg	
Cross	
Price Type	LMT ▶
Route	REDIBOOK ▶
Expiration	Day ▶
Volume Type	Partial ▶
Account Type	Margin ▶
Capacity	I ▶
Discretion Limit	100 ...
✓ Random Reserve Delta	100
Select Account...	
Order Entry Properties...	

OES Right-Click Menu

4. Select the price type from the **Price Type** field. If you choose a **Limit** order, you must specify the price in the **Price** field.
5. Click **Buy** to buy, or click **Sell** to sell.

The order is placed.

BasketMinder

Use Basket orders to trade more than one stock at a time. Trade “baskets” of securities as if you were trading a single instrument or an index.



***Note:** BasketMinder is not available for all users. Please contact your Broker/Dealer if you have any questions.*

Setup the Basket Order Entry Window

1. Click **Setup** on the **MarketMinder** menu.
The **Minder Setup** dialog box will appear.
2. Click the **Baskets** option button.
3. Type the symbols you want to trade in the **Selected Symbols** field, or select a symbol file.
4. Click **OK**.
A **BasketMinder** will appear.



BasketMinder Window

Weight
100

- Double-click each field in the **Weight** column to activate the field and type the number of shares you would like to trade for each symbol.

- Press **Enter**.

The weight is added to the symbol.

Configure a Standard BasketMinder Order

In a standard BasketMinder, all the symbols are configured with the same order parameters.

- Select the type of trade you want from the drop-down list available in the **Price Type** field.
- Select the volume type from the drop-down list available in the **Volume Type** field.
- Select the **Trading Route** from the **Route** field.
- Select when you want this order to expire from the drop-down list available in the **Expiration** field.
- If you'd like to buy or sell at the bid/offer price, select **Bid/Offer** from the **Price Type** drop-down list.

Price Type	BBO
Offset	.00

The **Offset** field will activate.

- Type or select the **Offset** value.
- If you'd like to sell short, click **Short Sells**.
- If this button is checked, all sales will be marked as short sells.
- If you'd like the lots to be rounded to the nearest hundred shares, click the **No Odd Lots** check box.

This will enable the **Round Down** check box.

9. If you'd like to always round the lots down, click **Round Down**.

Advanced Nasdaq Configuration

With Nasdaq stocks, you can use the Basket Order parameters or you can customize Nasdaq orders separately. Use this procedure for more control over Nasdaq orders.

1. Click **Configure** in the **Nasdaq Orders** box.

The **Select NASDAQ Order Parameters** box will appear.

Select NASDAQ Order Parameters

2. Click **Use Basket Order Parameters** if you'd like to use the Basket Order parameters, or click **Customize Order Parameters** if you'd like to configure Nasdaq orders separately.

3. Select the type of trade you want from the drop-down list available in the **Price Type** field.

4. If you'd like to buy or sell at the bid/offer price, select **BBO**.

The **Offset (+in/-out)** field will activate.

5. Select or type a value in the **Offset** field.
6. Select the volume type (**partial**) from the drop-down list available in the **Volume Type** field.
7. Select the **Trading Route**.
8. Select when you want this order to expire from the drop-down list available in the **Expiration** field.
9. If you'd like to sell short, click **Short Sells**.
If this button is checked, all sells will be marked as short sells.
10. Click **OK**.

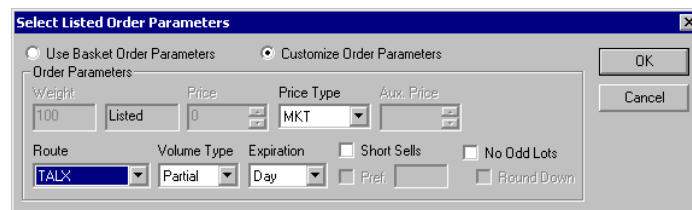
The **Nasdaq BasketMinder** parameters are customized.

Advanced Listed Configuration

With Listed stocks, you can use the Basket Order parameters or you can customize Listed orders separately. Use this procedure for more control over the Listed Stock.

1. Click **Configure** in the **Listed Orders** box.

The **Select Listed Order Parameters** box will appear.



Selected Listed Order Parameters

2. Click **Use Basket Order Parameters** if you'd like to use the Basket Order parameters, or click **Customize Order Parameters** if you'd like to configure Listed orders separately.
3. Select the type of trade you want from the drop-down list available in the **Price Type** field.
4. If you'd like to buy or sell at the bid/offer price, select **BBO**.



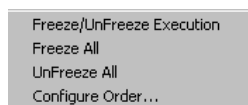
The **Offset (+in/-out)** field will activate.

5. Select or type a value in the **Offset** field.
6. Select a volume type (**partial**) from the drop-down list available in the **Volume Type** field.
7. Select the **Trading Route**.
8. Select when you want this order to expire from the drop-down list available in the **Expiration** field.
9. If you'd like to sell short, click **Short Sells**.
If this button is checked, all sells will be marked as short sells.
10. Click **OK**.

The **Listed BasketMinder** parameters are customized.

Customize Order Parameters

You can configure symbols separately in a BasketMinder.

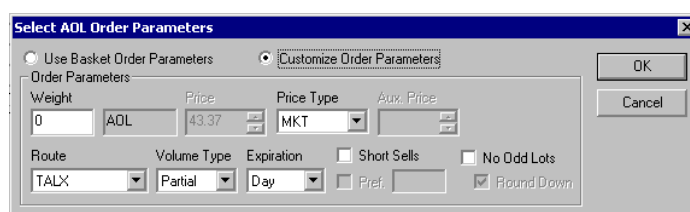


1. Right-click the **Details** field of a symbol you would like to configure its order parameters.

A pop-up menu will appear.

2. Click **Configure Order**.

The **Select Symbol Name Order Parameters** box will appear.



Select Symbol Name Order Parameters Dialog Box

3. Click **Customize Order Parameters**.
4. Select the type of trade you want from the drop-down list available in the **Price Type** field.
5. Select a volume type (**partial**) from the drop-down list available in the **Volume Type** field.
6. Select the **Trading Route**.
7. Select when you want this order to expire from the drop-down list available in the **Expiration** field.
8. If you'd like to buy or sell at the bid/offer price, select **BBO**.

The **Offset (+in/-out)** field will activate.



9. Select or type a value in the **Offset** field.
10. If you'd like to sell short, click **Short Sells**.
If this button is checked, all sells will be marked as short sells.
11. Click **OK**.

Basket Quantity/Execution

Choose how you would like to execute the basket.

1. Type the name of the basket in the **Basket Tag** field.

The **Basket Tag** will be passed along with each order placed, and can be used in the order history window to distinguish orders placed from different baskets.

2. To buy/sell the specified quantity of baskets based purely on the weights, click the **Delta** option button.

The **Delta** text box will activate.

3. Type or select a multiple of the weight. *See note.*

-OR-

4. To use your current position to determine how much to buy/sell, click the **Target** option button.

The **Target** text box will activate.

Note: The Target model targets the number of shares you wish to own of a specific stock. It looks at your current position, and then buys/sells accordingly. For example, your weight is 100 for MSFT, and you currently have 150 shares of MSFT. If you choose a Target of 1, the system will sell 50 shares to equal the 100-share weight for MSFT.

The Delta model is a multiplier of the weight. It purchases or sells based on the weight of a symbol, regardless of your current position.

5. Type or select the number of baskets you wish to own.
6. Click **Recalculate**.

The **Execute Basket** button will activate and the system will calculate the cost of the basket.

7. Click **Execute Basket**.

The system places the basket order.

Limit Market Exposure

You can limit the cost of your basket.

There are two ways you can choose to limit the cost of your basket, Partition Rows or Slice Shares. The Partition Rows feature fills the order starting with the most expensive symbol to the least expensive symbol until the cost of the basket is met. Sometimes not all symbols are needed to meet the cost.

The Slice Shares feature fills the order by evenly distributing the cost of the basket amongst all the symbols.

1. Click **Limit Market Exposure**.

The **Limit Market Exposure** box will activate.

2. Type or select the maximum cost of your basket in the **Max. Cost Buy/Sells** spin box.

3. Click **Partition Rows** or **Slice Shares**.

See **Basket/Quantity Execution** to place the order.

Using Accounts



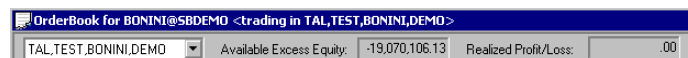
***Note:** Please note that each window within RealTick can be asserted with a separate account when placing an order. Make sure you've selected the correct account.*

Show Account Balance

Keep track of your account balance while you purchase and sell securities.

1. Click **Show Account Balance** on the **Order Book** menu.

The **Account Balance** panel will appear.



Show Account Balance Panel

2. Click the trade you would like to see its balance.

The account balance will appear.

Trade with Another Account

1. Click **Select Account** on the **Order Book** menu.

The system displays the **Select Account** dialog box.

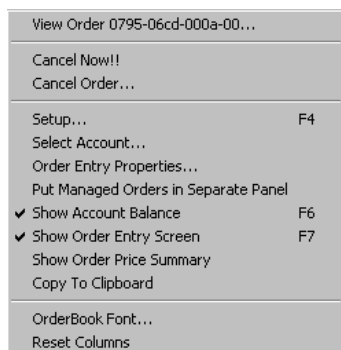
2. Click the appropriate account in the **Available Accounts** list box.

3. Click **OK**.

The system displays the chosen account in the **Order Book** window title bar.

Canceling Orders

You can cancel orders when they are Live, Partially Filled, and Pending.



There are three ways to cancel a pending order from the Order Book window: Cancel Now!!, Cancel Order, and Quick Double-Click Cancels. The Cancel Now!! and Cancel Order features can both be found by a right-click over a pending order. Cancel Now!! cancels the pending order immediately, while Cancel Order opens the Cancel Order dialog box.

The third method of order cancellation is the Quick Double-Click Cancels. If enabled, you can cancel any pending order by double-clicking the order in the upper panel of the Order Book window. This feature is enabled if you have Confirm All Trades enabled in the Options tab of the Order Entry Properties screen.

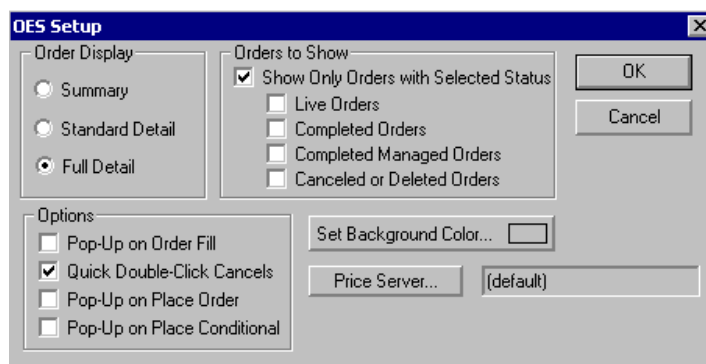
Please understand if you enable Confirm All Trades in the Warnings and Confirmations tab of the Order Entry Properties screen, RealTick will confirm (or reconfirm, if you use Cancel Order) your cancellations as well as all orders.

Quick Double-Click Cancel

You can easily cancel an order by just double-clicking the order in the OrderBook, making canceling orders fast and easy.

1. Click **Setup** on the **Order Book** menu.

The **OES Setup** dialog box will appear.



OES Setup Dialog Box

2. Click **Quick Double-Click Cancels**.
3. Click **OK**.

The **OES Setup** dialog box will close.

4. Double-click a pending order (red text) in the upper panel.

- If **Confirm All Trades** is not enabled, a cancel request will be sent out immediately.
- If **Confirm All Trades** is enabled in the **Warnings/Confirmations** tab of the **Order Entry Properties** dialog box, a confirmation dialog box will appear.

5. Click **OK**.

A cancel request will be sent.

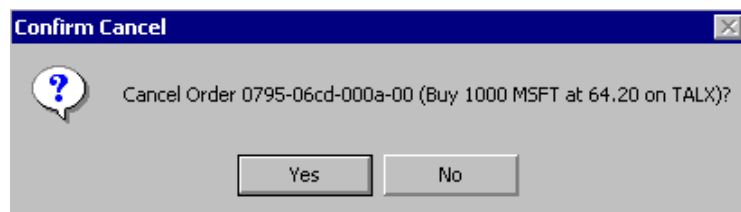
Cancel Using Cancel Now!!

1. Right-click a pending order (red text) in the upper panel.

The system displays the right mouse button menu.

2. Click **Cancel Now!!**

- If **Confirm All Trades** is not enabled, the order will be canceled immediately.
- If **Confirm All Trades** is enabled in the **Warnings/Confirmations** tab of the **Order Book Properties** dialog box, a confirmation dialog box will appear.

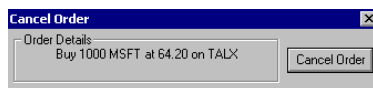


Confirm Cancel Dialog Box

3. Click **OK**.

A cancel request will be sent.

Cancel Using Cancel Order



1. Right-click a pending order (red text) in the upper panel.

The system displays the right mouse button menu.

2. Click **Cancel Order**.

The **Cancel Order** dialog box will appear.

3. Check the parameters quickly, and if it is the correct order, click **Cancel Order**.

- If **Confirm All Trades** is not enabled, a cancel request will be sent.
- If **Confirm All Trades** is enabled in the **Options** tab of the **Order Book Properties** dialog box, a second confirmation dialog box will appear.

4. Click **OK**.

A cancel request will be sent.

Confirm All Trades

RealTick allows you to confirm an order or to confirm a cancel order before the system follows through with the order. This is an extra “are you sure?” confirmation, perhaps if you accidentally click the sell or buy button before you are ready.

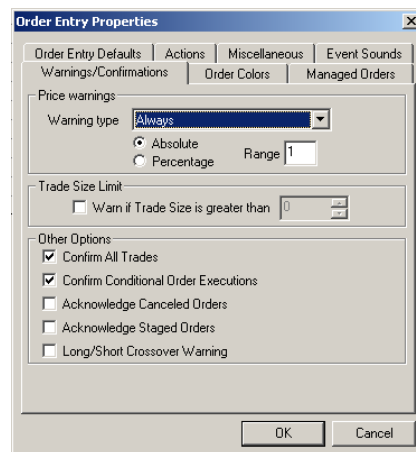
1. Click **Order Entry Properties** on the **Order Book** menu.

The **Order Entry Properties** dialog box will appear.

2. Click the **Warnings/Confirmations** tab.

The **Warnings/Confirmations** tab will appear.

3. Click **Confirm All Trades**.



Order Entry Properties Dialog Box

4. Click **OK**.

Confirm All Trades is activated.

Setting Order Entry Defaults for Quick Trading

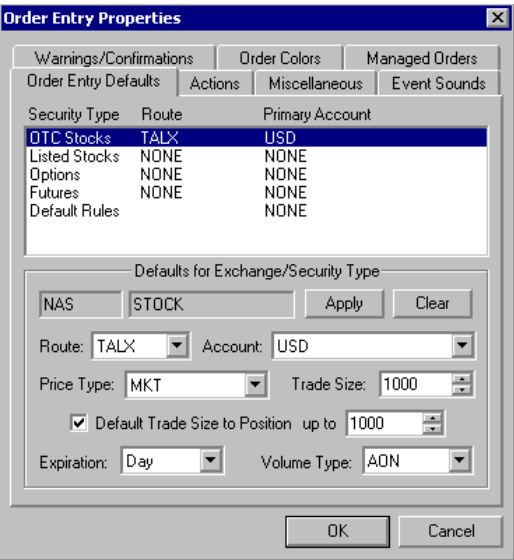
The Order Entry Properties command opens the Order Entry Properties dialog box. The six tabs of this dialog box (Actions, Options, Managed Orders, Routing, Event Sounds, and Warnings/Confirmations) enable you to create and edit Order Actions (also known as Hot Keys); configure order defaults; determine your price and volume increments; configure reserve order defaults; determine the default routing for various types of securities; set sounds to play when trading events occur, and set the warning parameters of RealTick. The options you choose in this dialog box will affect all of the order-entry enabled RealTick windows.

Set General Order Entry Defaults

You can create general default for the Order Entry fields of the Order Entry screen in MarketMaker and MarketMinder windows. For example, you can set one exchange as a default for all orders.

1. Click **Order Entry Properties** on the **MarketMaker** or **MarketMinder** menu.

The **Order Entry Properties** dialog box appears with the **Order Entry Defaults** tab open.



Order Entry Properties Dialog Box

2. Choose the security you would like to set defaults for.
3. Click the **Route** drop-down list to select the route.

The **Select Route** dialog box will no longer appear for the user because this default is set.

4. Click the **Expiration** drop-down list to select an expiration value.
5. Select the **Account** drop-down list to select the account.
The **Select Account** dialog box will no longer appear for the user because this default is set.
6. Select the **Price Type** drop-down list to select the price type for orders.
7. Click the **Volume Type** drop-down list to select the volume type for orders.
8. Click the **Trade Size** drop-down list to select the trade size for orders.
9. If you want the trade volume to default to the position size, check the **Default Trade size to Position**.
10. Enter in the field the maximum share size you want to default up to.
11. Choose a different security type and repeat steps 3 through 10.
12. Click **OK**.

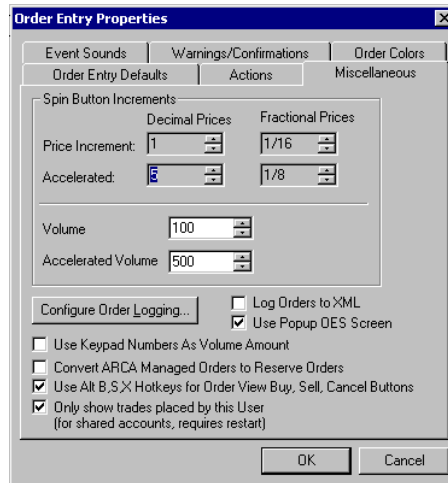
The system saves all changes and closes the dialog box.

Change the Spin Button Defaults

Determine the incremental value you would like to use to quickly change a value when placing an order. You can set the price increment and volume increment.

Note: At the Order View, press the **Shift** key and select the spin button. It will round to the nearest increment before fully incrementing.

1. Click **Order Entry Properties** on the **Order Book** menu.
The **Order Entry Properties** dialog box appears.
2. Click the **Miscellaneous** tab.
The **Miscellaneous** tab appears.



Order Entry Properties Dialog Box



Hint: At the Order View, use the Accelerated spin increment by pressing **CTRL** and selecting the spin button with your mouse.

3. Type or select the increment value for **Price** in the **Decimal Prices** and **Fractional Prices** spin boxes.
4. Enter the amount the increment should increase to if you use the arrow keys in the **Price** field on the **Order Book** window in the **Accelerated Volume** field.
5. Click **OK**.

The system saves all changes and closes the dialog box.

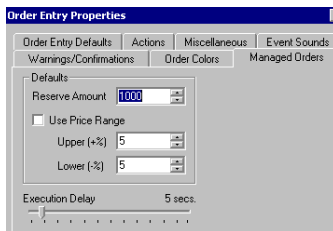
Set Keypad to Configure the Volume

For even faster order execution, use the number keypad to set or change the quantity of your order. Depending on the volume increment, the keypad number will adjust the volume. The numbers in effect become a multiplier. For example, if your volume increment is set to 50 and you press the number 2 on the keypad, the volume will change to 100.

1. Click **Order Entry Properties** on the **Order Book** menu.
The **Order Entry Properties** dialog box appears.
2. Select the **Miscellaneous** tab.
The system displays the **Miscellaneous** tab.
3. Click the **Use Keypad Numbers As Volume Amount**.

4. Click **OK**.
The keypad is set.

Set Reserve Order Defaults

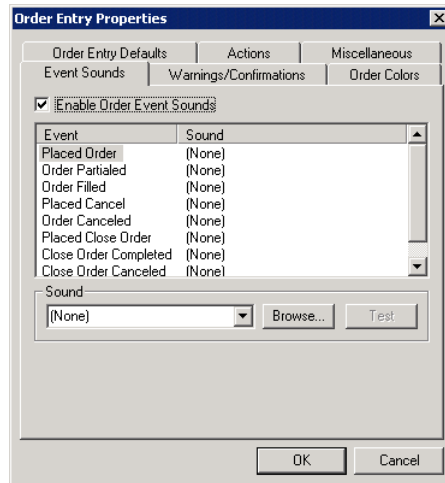


1. Click **Order Entry Properties** on the **Order Book** menu.
The system displays the **Order Entry Properties** dialog box.
2. Click the **Managed Orders** tab.
The system displays the **Managed Orders** tab.
3. Type the amount for reserve order in the **Reserve Amount** field.
4. Check the **Use Price Range** option button if you want to set a range for reserve orders.
The system activates the **Upper** and **Lower** fields.
5. Type the value for the upper range in the **Upper** field, and the lower range in the **Lower** field.
6. Set the **Execution Delay** to the amount of time you want the system to wait before sending out the next order, when using the **Reserve Order** feature.
7. Click **OK**.
The system saves all changes and closes the dialog box.

Set an Alarm for an Order Event

You can set the Order Book to sound an alarm after a specific event occurs. For example, you can set the Order Book window to sound an alarm after you sold your stock.

1. Click **Order Entry Properties** on the **Order Book** menu.
The system displays the **Order Entry Properties** dialog box.



Order Entry Properties Dialog Box

2. Click **Event Sounds** tab.

The system displays the **Event Sounds** tab.

3. Check **Enable Order Event Sounds** option button.

The system activates the other fields in the dialog box.

4. Choose the event you wish to trigger a sound from the list available in the **Event** field.
5. Choose the sound from the drop-down list available in the **Sound** field. If no .wav files are listed there, you can search your hard drive and/or network using the **Browse** button.
6. Click **OK**.

The system closes the **Order Entry Properties** and sets the alarm. Next time the order event occurs the alarm will sound.

Set Warnings to Display after a Specific Action

You can set the Order Book window to display a warning or confirmation after you place an order.

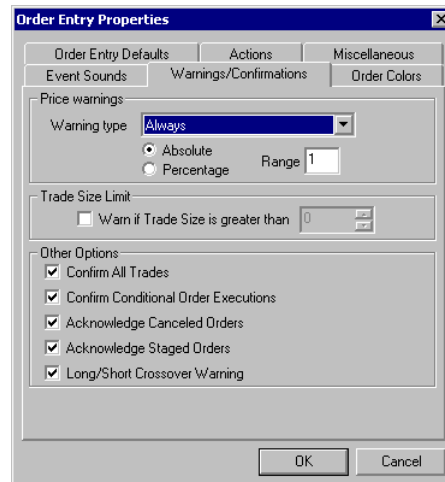
1. Click **Order Entry Properties** on the **Order Book** menu.

The system displays the **Order Entry Properties** dialog box.

2. Click **Warnings/Confirmations** tab.

The system displays the **Warnings/Confirmations** tab.

3. For Price warnings, click the **Warning Type** drop-down list to choose when you would like to be warned.



Order Entry Properties Dialog Box

4. Click either the **Absolute** or **Percentage** option button for the range value. The system will send the warning when the price value is past the range of the market value.
5. Check the **Warn if Trade Size is greater than** field if you want to warn against trades of a certain volume. Enter the value in the numeric field.
6. Check the **Confirm All Trades** field if you want the system to display a confirmation dialog box after you place a trade.
7. Check the **Confirm Conditional Order Executions** field if you want the system to display a confirmation dialog box after you place a conditional order trade.
8. Check the **Acknowledge Canceled Orders** field if you want the system to display a confirmation dialog box after you cancel an order.
9. Check the **Acknowledge Staged Order** field if you want the system to display a confirmation box after you place a staged order.
10. Check the **Long/Short Crossover Warning** field if you want the system to display a confirmation dialog box after a trade is

placed that crosses over zero position. For example, if you are long 1000 shares of XYZ and you place a trade to short sell 2000 shares of XYZ, the system will warn you since you are covering your current position and going short with the same trade.

11. Click **OK**.

The system saves all changes and closes the dialog box.

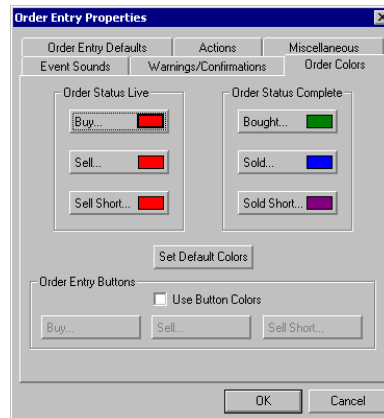
Setting Button Colors

1. Click **Order Entry Properties** on the **Order Book** menu.

The **Order Entry Properties** dialog box will appear.

2. Click the **Order Colors** tab.

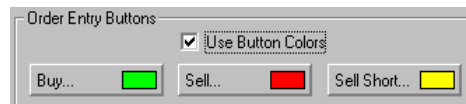
The **Order Colors** tab will appear.



Order Entry Properties Dialog Box

3. Click the **Use Button Colors** check box.

The **Buy**, **Sell**, and **Sell Short** button will activate with their colors.



Default Button Colors

4. Click **Buy**, **Sell**, or **Sell Short** to open the **Color** dialog box and select a different default color.
5. Click **OK**.

The default color will change

Setting Order Status Colors

1. Click **Order Entry Properties** on the **Order Book** menu.
The **Order Entry Properties** dialog box will appear.
2. Click **Order Colors** on the **Order Entry Properties** dialog box.
3. Click **Buy**, **Sell**, or **Sell Short** in the **Order Status Live** box to open the **Color** dialog box and select a different default color.

07/27/2001 10:41:40 07f1-06cd-001eBuy 1000 MSFT at 47.19 on TALX Live
Default Live Order Color

4. Click **Bought**, **Sold**, or **Sold Short** in the **Order Status** completed box to open the **Color** dialog box and select different default colors.
5. Click **OK**.
The default color will change.

Setting Order Alerts

You can set alerts on a Conditional order or on a price.

Add a Sound Alert to a Conditional Order

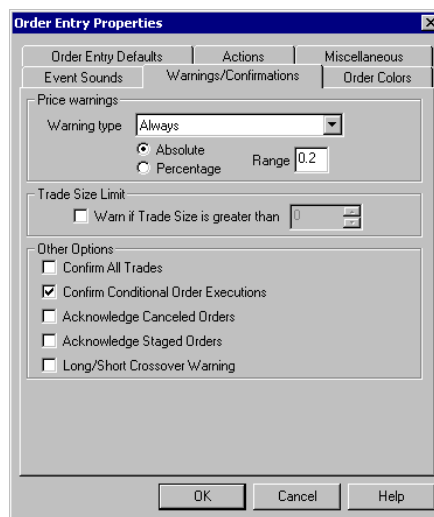
1. From the **MarketMaker** menu, click **Order Entry Properties**.
The **Order Entry Properties** dialog box will appear.
2. Click **Condition Triggered** in the **Event** list.
3. Select **System Beep** from the **Sound** drop-down field, or click **Browse** and select a different **.wav** file.
4. Click **Test** to hear the sound.
5. Click **OK**.

The alert is set.

Set a Price Warning

1. From the **MarketMaker** menu, click **Order Entry Properties**.

The **Order Entry Properties** dialog box.



Order Entry Properties Dialog Box

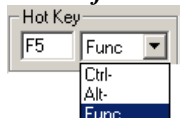
2. Click the **Warnings/Confirmations** tab.
3. Select the warning type from the **Warning Type** drop-down field.
4. Click the **Absolute** option button.
5. Type the increment range in the **Range** field.
6. Click **OK**.

The price warning is set.

Creating Hot Keys



Note: You can use a function key as a hot key. Click **Func** from the **Hot Key** drop-down list and select a **function** key.

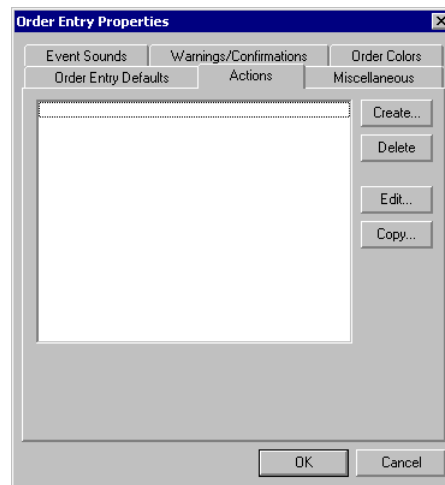


You can assign keyboard combinations to quickly buy or sell stocks. For example, a well-known Windows Hot Key is Ctrl + C for copy. You can create a function key, Ctrl, or Alt + combination for quick buys, sells, or cancels.

Create a Buy Hot Key

You can create a Buy Hot Key to quickly purchase a stock.

1. Click **Order Entry Properties** on the **Order Book** menu.
The **Order Entry Properties** screen appears.
2. Click the **Actions** tab.
The **Actions** tab appears.

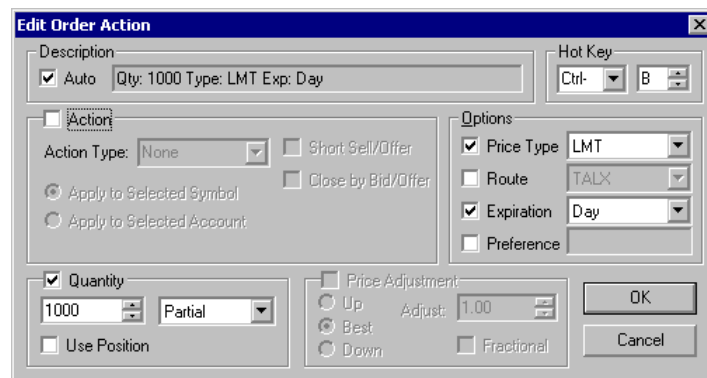


Order Entry Properties Dialog Box

3. Click **Create**.
The **Edit Order Action** dialog box appears.



Hint: To buy at the best bid or offer without a confirmation box appearing, choose **BBO** as your price type. If you choose **Limit** as your price type, a confirmation box will appear to confirm your limit price.



Edit Order Action Dialog Box

4. Click the **Action** checkbox.
The **Action** box will activate.
5. Click **Buy** in the **Actions Type** drop-down list.

6. Click the **Price Type** check box and select the price type from the **Price Type** drop-down list in the **Options** box.
7. Click the **Route** check box and select the route from the **Route** drop-down list in the **Options** box.
8. Click the **Expiration** check box and select the expiration date from the **Expiration** drop-down list in the **Options** box.
9. Click the **Quantity** check box.

The **Quantity** box will activate.

10. Select the volume of stock you would like to buy.
11. Click the **Volume** drop-down list to select a type of volume, **Partial** or **AON**.
12. Click the **Use Position** option button if you'd like the hot key to default to your current position size.

Note: **Use Position** takes your current position into consideration when buying or selling. If your default quantity for a Buy Hot Key is 1000 and you currently own 400 shares, the system will only buy 600. If you own 400 shares and you have a Sell Hot Key with a default quantity of 1000, the system will only sell 400. If you do not have a position, the system will use the default quantity of 1000 when placing the next order.

13. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This is the key combination you press to quickly perform an action. For example, CTRL + A.
14. Click **OK**.

The hot key is created.

Create a Sell Hot Key

You can create a Sell Hot Key to quickly sell a stock.

1. Click **Order Entry Properties** on the **Order Book** menu.

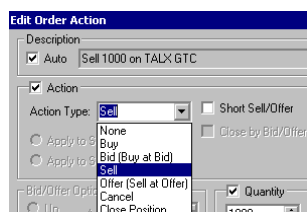
The **Order Entry Properties** dialog box will appear.

2. Click the **Actions** tab.

The **Actions** tab will appear.

3. Click **Create**.

The **Edit Order Action** dialog box will appear.



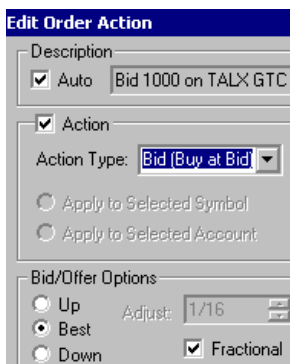
4. Click the **Action** check box.
The **Action** box will activate.
5. Select **Sell** from the **Action Type** drop-down list.
6. Click the **Short Sell/Offer** check box.
7. Click the **Price Type** check box and select the price type from the **Price Type** drop-down list in the **Options** box.
8. Click the **Route** check box and select the route from the **Route** drop-down list in the **Options** box.
9. Click the **Expiration** check box and select the expiration from the **Expiration** drop down list in the **Options** box.
10. Select the volume of stock you would like to sell.
11. Click the **Volume Type** drop-down list to select a type of volume, **Partial** or **AON**.
12. Click the **Use Position** option to if you'd like the hot key to default to your current position size.
13. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This will be the combination of keys you press to quickly perform the action. For example, CTRL + A.
14. Click **OK**.

The hot key is created.

Create a Bid Hot Key

You can create a Bid Hot Key to quickly place a Bid.

1. Click **Order Entry Properties** on the **Order Book** menu.
The **Order Entry Properties** will appear.
2. Click the **Actions** tab.
The **Actions** tab will appear.
3. Click **Create**.
The **Edit Order Action** dialog box will appear.
4. Click the **Action** check box.
The **Action** box will appear.
5. Select **Bid** from the **Action Type** drop-down list.



6. Click the **Route** check box and select the route from the **Route** drop-down list in the **Options** box.
7. Click the **Expiration** check box and select the expiration from the **Expiration** drop-down list in the **Options** box.
8. Select a volume you would like to bid on.
9. Click the **Volume Type** drop-down list to select a type of volume, **Partial** or **AON**.
10. Click the **Use Position** option if you'd like the hot key to default to your current position size.
11. Click the **Best, Up, or Down** option button in the **Bid/Offer** option box.
12. If you selected **Up** or **Down**, select an amount in the **Adjustment** field.
13. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This will be the combination of keys you press to quickly perform the action, for example, CTRL + A.
14. Click **OK**.

The hot key is created.

Create an Offer Hot Key

You can create an Offer Hot Key to quickly place an Offer.

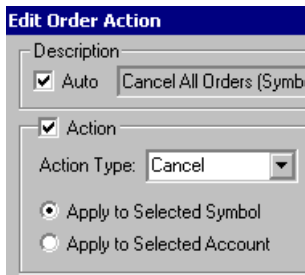
1. Click **Order Entry Properties** on the **Order Book** menu.
The **Order Entry Properties** dialog box will appear.
2. Click the **Actions** tab.
The **Actions** tab appears.
3. Click **Create**.
The **Edit Order Action** dialog box will appear.
4. Click the **Action** check box.
The **Action** box will activate.
5. Select **Offer** from the **Action Type** drop-down list.
6. Click **Short Sell/Offer** in the **Action** box if you'd like to offer short.

7. Click the **Route** check box and select the route from the **Route** drop-down list in the **Options** box.
8. Click the **Expiration** check box and select the expiration from the **Expiration** drop-down list in the **Options** box .
9. Select the volume of the stock you would like to offer.
10. Click the **Volume Type** drop-down list to select the volume type, **Partial** or **AON**.
11. Click the **Use Position** option if you'd like the hot key to default to your current position size.
12. Click the **Best, Up, or Down** option button in the **Bid/Offer Options** box.
13. If you selected **Up** or **Down**, select an amount in the **Adjustment** field.
14. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This will be the combination of keys you press to quickly perform an action, for example, CTRL + A.
15. Click **OK**.

The hot key is created.

Create a Cancel Orders (Symbol) Hot Key

Create Hot Keys to quickly cancel orders by symbol or by account.



1. Click **Order Entry Properties** on the **Order Book** menu.
The **Order Entry Properties** dialog box will appear.
2. Click the **Actions** tab.
The **Actions** tab will appear.
3. Click **Create**.
The **Edit Order Action** dialog box will appear.
4. Click the **Action** check box.
The **Action** box will activate.
5. Select **Cancel Orders (Symbol)** from the **Action Type** box.
6. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This will be the combination of keys you press to quickly perform the action, for example, **CTRL + A**.
7. Click **OK**.

The hot key is created.

Create a Close Position (Symbol) Hot Key

1. Click **Order Entry Properties** on the **Order Book** menu.

The **Order Entry Properties** dialog box will appear.

2. Click the **Actions** tab.

The **Actions** tab will appear.

3. Click **Create**.

The **Edit Order Action** dialog box will appear.

4. Click the **Action** check box.

5. Select **Close Position (Symbol)** from the **Action Type** drop-down list.

6. Click the **Price Type** drop down list in the **Options** box to select a price type.

7. Click the **Route** drop-down list in the **Options** box to select a route

8. Click the **Expiration** drop-down list in the **Options** box to select an expiration date.

9. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This will be the combination of keys you press to quickly perform this action, for example, CTRL + A. You can also choose to use the **Alt** key in combination with letters and numbers.

10. Click **OK**.

The hot key is created.

Create a Cancel Orders (Account) Hot Key

1. Click **Order Entry Properties** on the **Order Book** menu.

The **Order Entry Properties** dialog box will appear.

2. Click the **Actions** tab.

The **Actions** tab will appear.

3. Click **Create**.

The **Edit Order Action** dialog box will appear.

4. Click the **Action** check box.
5. Select **Cancel Orders (Account)** from the **Action Type** drop-down list.
6. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This will be the combination of keys you press to quickly perform the action, for example, CTRL + A.
7. Click **OK**.

The hot key is created.

Create a Close Position (Account) Hot Key

1. Click **Order Entry Properties** on the **Order Book** menu.

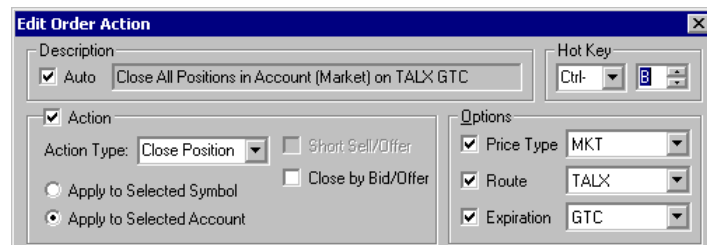
The **Order Entry Properties** dialog box will appear.

2. Click the **Actions** tab.

The **Actions** tab will appear.

3. Click **Create**.

The **Edit Order Action** dialog box will appear.



Edit Order Action Dialog Box

4. Click the **Action** check box.
5. Select **Close Position (Account)** from the **Action Type** drop-down list.
6. Click the **Price Type** drop-down list in the **Options** box to select a type of price.
7. Click the **Route** drop-down list in the **Options** box to select an exchange.
8. Click the **Expiration** drop-down list in the **Options** box to select an expiration date.

9. Select a letter to use as part of your hot key in the **Ctrl** field in the **Hot Key** box. This will be the combination of keys you press to quickly perform this action, for example, CTRL + A.
10. Click **OK**.

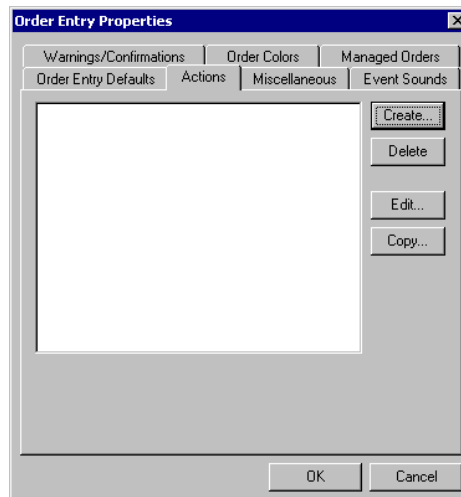
The hot key is created.

Interact with Order View

With this feature, you can partially define an order hot key. Interact with Order View requires an action (buy, sell, cancel, etc...) for the hot key, but the remaining attributes of the order are taken from the active order view. The most common use of this feature is for creating route-specific buy/sell Hot Keys that will use the limit price in the order view.

1. Click **Order Entry Properties** on the **MarketMaker** menu.

The **Order Entry Properties** dialog box will appear.



Order Entry Properties Dialog Box

2. Click **Create** on the **Actions** tab.

The **Edit Order Action** dialog box will appear.

Edit Order Action Dialog Box

3. Click the **Action** check box.
The **Action** box will activate.
4. Click **Interact with Order View**.
5. Configure hot key.
6. Click **OK**.

Create an Actionless Hot Key

An Order Action that does not cause an order to be placed, cancelled, or modified is referred to as “actionless.” The attributes of the Order Action are applied to the current Order View and will be used when you submit an order.

For example, create a hot key to preference orders. Type the Market Maker ID, ECN, or exchange in the Preference field and save it as a hot key. When at the Order View, press the hot key and configure the remaining attributes of the order.

1. Click **Order Entry Properties** on the **MarketMaker** menu.
The **Order Entry Properties** dialog box will appear.
2. Click **Create** on the **Actions** tab.
The **Edit Order Action** dialog box will appear.
3. Click the **Preference** check box and type the Market Maker ID, ECN, or exchange in the **Preference** field.
4. Click **OK**.
The hot key is created.



Note: Any attributes can be applied in this manner, and one Order Action can specify multiple attributes.

Create a Change Order Action Hot Key

Use a Change hot key to change the parameters of a live order without having to right-click an order. You can press the hot key and the Change Order dialog box will appear.

1. Click **Order Entry Properties** on the Order Book menu.

The **Order Entry Properties** dialog box will appear.

2. Click **Create** on the **Actions** tab.

The **Edit Order Actions** dialog box will appear.

3. Click the **Action** check box.

The **Action** box will activate.

4. Select **Change** from the **Action Type** drop-down list.

5. Click **OK**.

The hot key is created.

Create a "Bump" Hot Key

You can create a hot key to change your order, price or volume, in increments. Define the increment.

1. Click **Order Entry Properties** on the **Order Book** menu.

The **Order Entry Properties** dialog box appears.

2. Click **Create** on the **Actions** tab.

The **Edit Order Action** dialog box appears.

3. Click the **Action** check box.

The **Action** box will activate.

4. Select **Bump price/volume** from the **Action** drop-down list.

The **Price Adjustment** box will activate.

5. Select the appropriate price and/or volume increment.

6. For price, click the **Fractional** check box if you would like to increment by fractions.

7. Click **OK**.

The hot key is created.

Clone a Hot Key

You can copy a hot key.

1. Click **Order Entry Properties** on the **MarketMaker** menu.

The **Order Entry Properties** dialog box appears.

2. Click the **Actions** tab.

The **Actions** tab will appear.

3. Select the hot key you would like to copy.

4. Click **Copy**.

The **Edit Order Action** dialog box will appear.

5. Reassign the hot key combination.

6. Click **OK**.

The hot key clone is created.

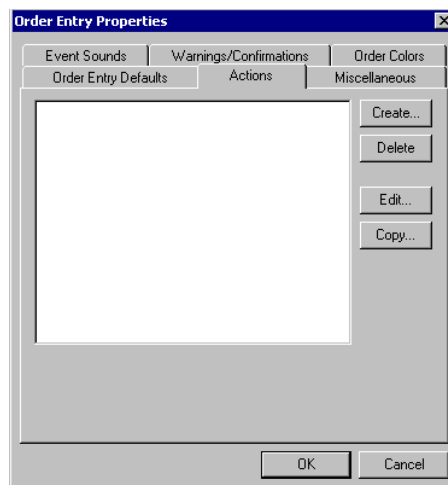
Edit a Hot Key

1. Click **Order Entry Properties** on the **Order Book** menu.

The **Order Entry Properties** dialog box appears.

2. Click the **Actions** tab.

The systems display the **Actions** tab.



Order Entry Properties Dialog Box

3. Click the action you would like to edit from the **Actions** list.

4. Click **Edit**.

The **Edit Action Order** dialog box will appear.

5. Make the appropriate changes.
6. Click **OK**.

The system saves all changes.

Delete a Hot Key

1. Click **Order Entry Properties** on the **Order Book** menu.

The system displays the **Order Entry Properties** dialog box.

2. Click the **Actions** tab.

The system displays the **Actions** tab.

3. Click the action that you want to delete from the **Actions** list.
4. Click **Delete**.

The system deletes the action.

5. Click **OK**.

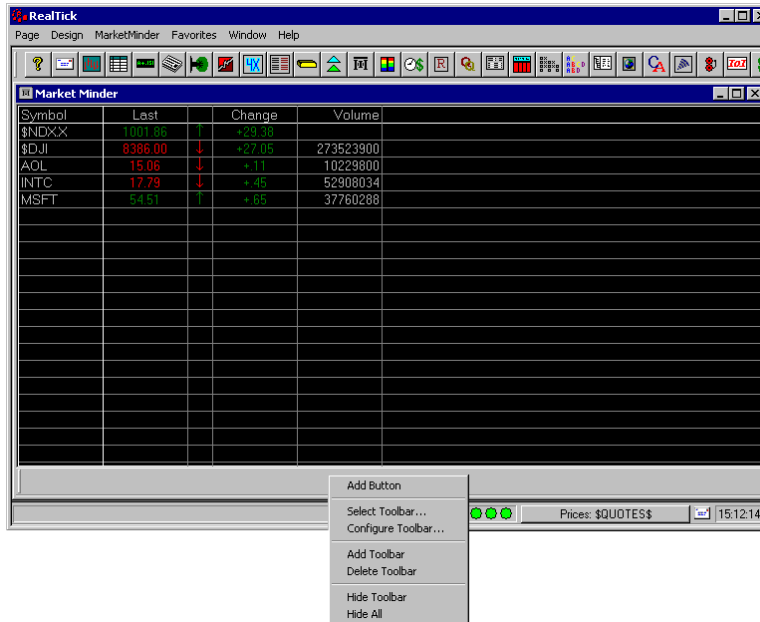
The system saves all changes and closes the dialog box.

Create the Hot Key Action Bar

Create a Hot Key Action Bar that displays your hot keys as buttons. Click in a hot key button and RealTick will execute the action.

1. Click **Show Action Bars** on the **MarketMinder** menu.

The toolbar displays under the MarketMinder window.



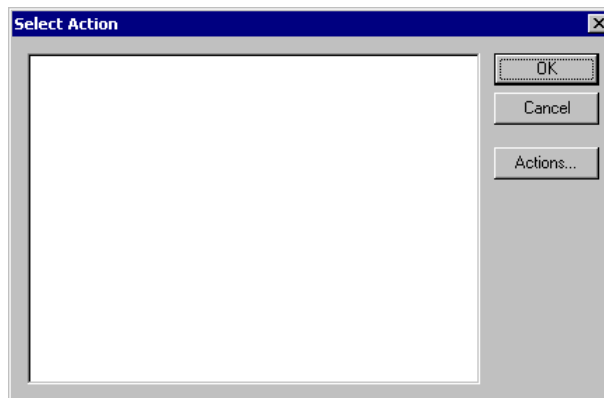
MarketMinder displaying the Action Bar

2. Right-click the **Action bar** and select **Add Button**.

A button appears on the **Action bar**.

3. Right-click the button and select **Select Action**.

The **Select Action** dialog box appears.



Select Action Dialog Box

4. If you do not have any hot keys already created to select, click **Actions**.

The **Actions** tab of the **Order Entry Properties** dialog box will appear.

5. Create a hot key. *See the Create Hot Key section in Chapter 7 of the RealTick manual.*
6. Once the hot key is created, select it in the **Select Account** dialog box and click **OK**.

The hot key is assigned to the button on the **Action bar**.

The **Actions** tab of the **Order Entry Properties** dialog box will appear.

5. Create a hot key. *See the Create Hot Key section in Chapter 7 of the RealTick manual.*
6. Once the hot key is created, select it in the **Select Account** dialog box and click **OK**.

The hot key is assigned to the button on the **Action bar**.

Chapter 8: Tracking Positions and Account Balances

This chapter discusses several different windows you can use to track your positions and account balance. You can track your positions and your account balance using MarketMinder, MultiQuote, and Order Book.

PositionMinder™



Note: You cannot set up the PositionMinder before your first trade. You must have at least one open position to create a PositionMinder.

The PositionMinder tracks all the open positions in an account. It can also track any closed positions you have for the day. You can add columns and configure the display as with any MarketMinder.

Symbol	Last	Net Chg.	Net Pos	Avg Prc	Scalped P&L	P&L Total
MSFT	72.53	-21	400	65.55		2789.06
DELL	27.67	+1.25	51	24.84		143.92
MOT	16.45	+98	2000	15.01		2900.00
Totals						5832.98

PositionMinder Window



***Note:** If you have more than one account, the **Select Account** screen will appear after you click **OK**. Choose an account, and the PositionMinder will open with that account's positions.*

Create a PositionMinder

1. Click **MarketMinder** on the RealTick **Design** menu.

The **Minder Setup** dialog box will appear.

Minder Setup Dialog Box

2. Click the **Positions** option button in the **Minder Type** section.

The **Orders** tab will appear.

3. If you want your PositionMinder to show your closed positions as well as your open positions, click the **Show Closed Positions in PositionMinder** check box. This will allow you to see the closed positions' contribution to P & L.
4. Click **OK** to exit the **Minder Setup** screen and open your new **PositionMinder**.

The information in the screen will update as you trade.



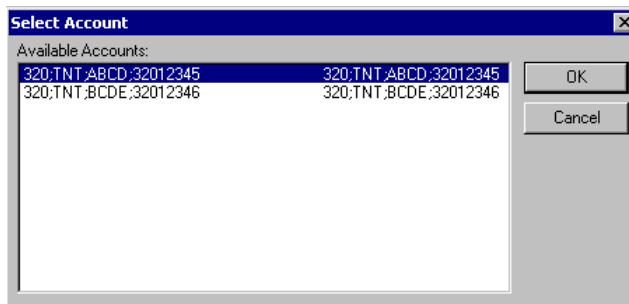
***Note:** Once you have selected a new account, the PositionMinder will automatically update.*

Select an Account

View your positions and your account balance in another account.

1. Click **Select Account** on the **MarketMinder** menu.

The system displays the **Select Account** dialog box.



Select Account Dialog Box

2. Double-click an account in the **Available Accounts** list field.

The system displays the chosen account in the MarketMinder window title bar.



Note: Your account balance appears in the **Totals** row and **P&L Total** column.

Change the Column Layout

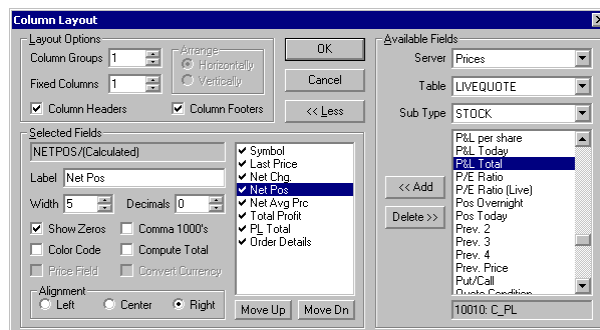
RealTick is shipped with one or more column layout files for viewing positions. You can modify the default layouts if you want to add new fields, remove fields, or change the order of the fields. You can also add column totals to your PositionMinder so you can see your portfolio's net worth and watch it update over time.

3. Click **Configure Column Layout** from the **Column Layout Choices** sub-menu on the **Market Minder** menu.

The **Column Layout** screen will open.



Hint: To delete a column, click the column you would like to delete in the **Selected Fields** list and click **Delete**.



Column Layout Dialog Box

4. Click **More**.

The system expands the **Column Layout** screen.

5. Click the name of the field from the **Available Fields** list.

6. Change the data in the **Server**, **Table**, and **Sub Type** fields to see different fields.
7. Click the field name you want to display and click **Add**.
The system adds the data to the **Selected** fields list.
8. Click **OK**.
The system displays the new field in the PositionMinder.

OrderMinder

The OrderMinder displays your orders for the current trading day.

Create an OrderMinder

1. Click **MarketMinder** on the **Design** menu.
The **Minder Setup** screen appears.
2. Click the **Orders** option button.
The **Orders** tab appears.

The screenshot shows the 'Minder Setup' dialog box with the 'Orders' tab selected. The 'Minder Type' section has four radio buttons: 'Standard', 'Chain', 'Positions', and 'Orders' (which is selected). The 'Symbol Chain' section has a 'Symbol Chain' dropdown menu, a 'Sess:' dropdown menu set to 'All', and an 'OK' button. Below these are 'Root:' and 'Cancel' buttons. The 'Symbols' tab is also visible. The 'Order Display' section has two radio buttons: 'Summary' (selected) and 'Standard Detail'. The 'Standard Orders' section has three checkboxes: 'Live', 'Completed', and 'Deleted'. The 'Managed Orders' section has three checkboxes: 'Live', 'Completed', and 'Deleted'. The 'Other Filters' section has six text input fields: 'Symbol', 'Vol. Type', 'Price Type', 'Route', 'Expiration', and 'Order Tag'. There is also a 'Preference/Opposite Party' text input field. At the bottom, there is a checkbox labeled 'Show Closed Positions in Position Minder'.

Minder Setup Dialog Box

3. Select the order details in the **Order Display** box.
 - Click the **Summary** option button if you'd like to display the symbol, transaction (buy or sell), price, and status (completed or live).
 - Click the **Standard Detail** option button if you'd like to display the symbol, transaction (buy or sell), price, route, and status (completed or live).

4. Click the **Standard Orders** and/or **Managed Orders** check box to filter the orders to display.

Note: Managed Orders are order types controlled by RealTick, such as Conditional or Deferred Orders.

- Click the **Live** check box to display live orders.
 - Click the **Completed** check box to display completed orders.
 - Click the **Deleted** check box to display canceled or deleted orders.
5. Enter additional filters in the **Other Filters** box.
 6. Click **OK**.

The OrderMinder window appears.

Multiple Selections in an OrderMinder

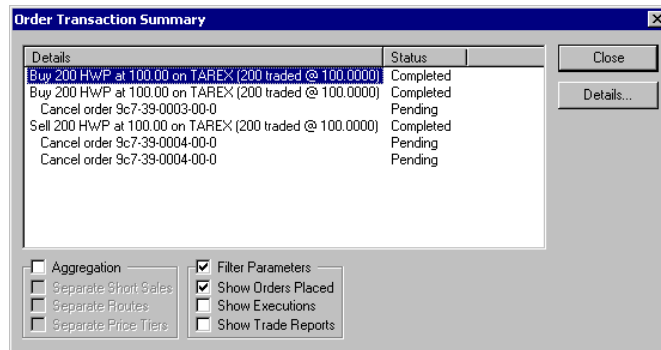
You can highlight multiple rows of orders in an OrderMinder and press the delete key to instantaneously cancel all orders that are highlighted.

1. Click **Display Options** on the **MarketMinder** menu.
The **Display Options** dialog box will appear.
2. Click the **Allow Multiple Selection** check box.
3. Click **OK**.
4. Left-click an order in the **OrderMinder**.
5. Drag the mouse until all the orders are selected.
6. Click **Delete**.

View the Order Transaction Summary

1. Select an order in the **OrderMinder** window. You can select multiple orders by pressing the <**SHIFT**> key and clicking an order and dragging the mouse over the additional orders.
2. Right-click the highlighted order(s), and select **View Order**.

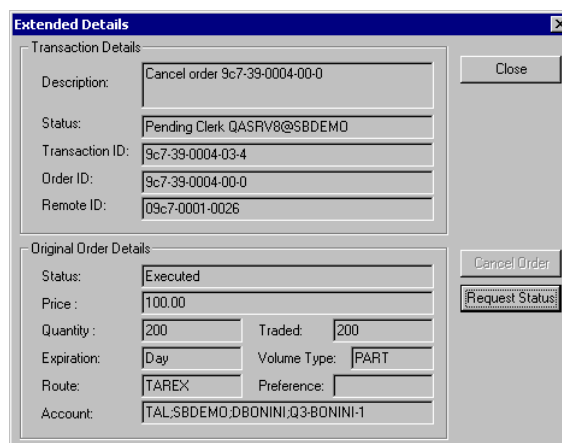
The **Order Transaction Summary** dialog box appears.



Order Transaction Summary Dialog Box

- To display order executions, click the **Show Executions** in the **Filter Parameters** check box.
- To sort by short sales, click the **Separate by Short Sales** check box.
- To sort by routes, click the **Separate by Routes** check box.
- To sort by price tiers, click the **Separate by Price Tiers** check box.
- To display more details of an order, select the order and click **Details**.

The **Extended Details** dialog box appears.



Extended Details Dialog Box



Note: The StandardMinder should display symbols you used to place orders.

Link a MarketMinder to an OrderMinder

Link a MarketMinder window to an OrderMinder window that is filtering on “symbol” to build a stock-specific order history window.

1. Link a StandardMinder to an OrderMinder.

See **Chapter 4** for more information on linking windows.

Note: You MUST link the StandardMinder to the OrderMinder, not vice versa.

2. Type a symbol in the **Symbol** field on the **Orders** tab of the **Minder Setup** dialog box (OrderMinder).
3. Press **Alt** and double-click a symbol in the StandardMinder window.

The symbol's order history will appear in the OrderMinder.

TicketMinder

This is used in conjunction with Staged Order Tickets.

Display Ticketed Orders

Monitor or display ticketed orders in the MarketMinder.

1. Click **MarketMinder** on the **Design** menu.

The **Minder Setup** dialog box appears.

The screenshot shows the 'Minder Setup' dialog box with the 'Orders' tab active. The 'Minder Type' section has radio buttons for Standard, Chain, Positions, Baskets, Orders, and Tickets, with 'Tickets' selected. The 'Symbol Chain' section has a dropdown for 'Symbol Chain' and a 'Gess:' dropdown set to 'All'. The 'Order Display' section has radio buttons for 'Summary' and 'Standard Detail', with 'Summary' selected. The 'Tickets' section has checkboxes for 'Live', 'Completed', and 'Deleted'. The 'Other Filters' section includes text boxes for Symbol, Vol. Type, Price Type, Route, Expiration, Order Tag, and Preference/Opposite Party. At the bottom, there is a checkbox labeled 'Show Closed Positions in Position Minder'.

Minder Setup Dialog Box

2. Click **Tickets**.

The **Orders** tab appears.

3. Click the **Summary** option button in the **Order Display** box if you would like to display the order summary.
4. Click the **Standard Detail** option button in the **Order Display** box if you would like to display standard order details.
5. Click the **Live** check box if you would like to display live ticketed orders.
6. Click the **Completed** check box if you would like to display completed ticketed orders.
7. Click the **Deleted** check box if you would like to display deleted ticketed orders.

The following filters are optional:

8. Type the symbol in the **Symbol** field of the ticketed order(s) you would like to display.
9. Type the volume type in the **Volume Type** field.
10. Type the price type in the **Price Type** field.
11. Type the route in the **Route** field.
12. Type the expiration in the **Expiration** field.
13. Type the order tag in the **Order Tag** field.
14. Type the Market Maker ID, ECN, or exchange in the **Preference/Opposite Party**.
15. Click **OK**.

A TicketMinder displays with the ticketed orders.

MultiQuote™

MultiQuote is shipped with several different layouts you can use to track your positions and account balance. These include the Account Info layouts, Account detail.mqt and Account INFO – TOP.MQT.

Note: The **Account detail.mqt** and the **Account INFO – TOP.MQT** layouts both display your account balance in the **Available Equity** field.



Note: If you have multiple accounts, when you click **MultiQuote** on the **Design** menu, the **Select Account** screen will appear. Select the account you would like to view its positions and balances.

MQ: ACCOUNT INFO - Account detail.mqt <TAL,TEST,BONINI,DEMO>			
Overnight Market Value	10,969.00	Overnight Positions	
Overnight Equity	21,358.00	Symbol	Pos Overnight
Overnight Margin	11,112.70	SUNW	200
Opening Excess Equity	10,245.30	HDI	100
Credits		GPS	200
Temporary credit:	0.00	SEBL	100
Overnight margin	0.00	ORCL	100
Debits		AMGN	100
*Scalped Loss:	0.00	DAKT	-100
Intraday margin:	0.00	NOK	-200
Pending margin:	0.00	AMD	-500
Available Equity**	10,399.30		

* Profits do not get applied to available equity. ** Buying power is twice available equity.

Account detail.mqt Layout

MQ: ACCOUNT INFO - Account Info - Top.MQT <TAL,TEST,BONINI,DEMO>			
Account: 32012346	Available Equity: 10376.30	Closed P_L:	0.00

Account INFO – Top.MQT Layout

Configure the MultiQuote Window to View Your Positions

1. Click **MultiQuote** on the **Design** menu.
The **Open** screen will appear.
2. Click **Account detail.mqt** to view your positions and account balance.

Configure the MultiQuote Window to View Your Account Balance

1. Click **MultiQuote** on the **Design** menu.
The **Open** screen will appear.
2. Click **Account Info – Top.MQT** to view your positions and account balance.

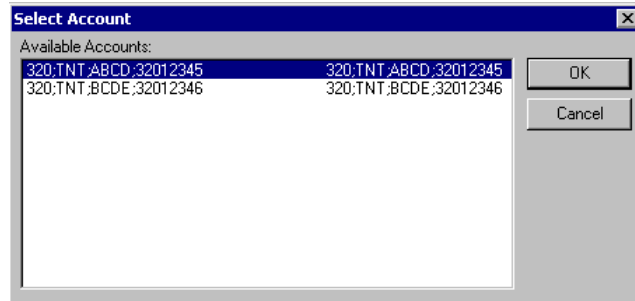
Select an Account

View your positions and account balance in another account.

1. Click **Select Account** on the **MultiQuote** menu.
The system displays the **Select Account** screen.



***Note:** Once you've selected a new account, the MultiQuote layout will automatically update.*



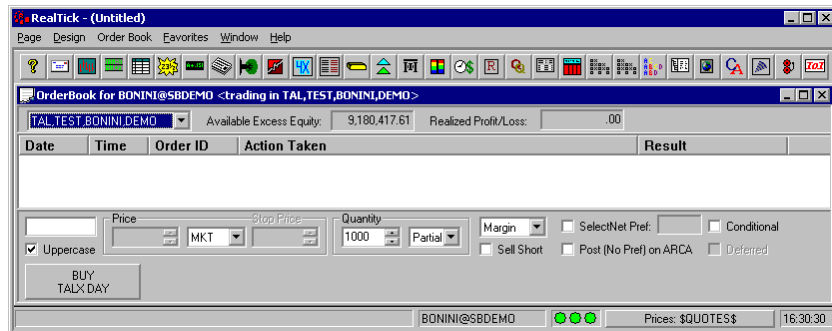
Select Account Dialog Box

2. Double-click an account in the **Available Accounts** list field.

The system displays the chosen account in the MultiQuote screen title bar.

Order Book

The Order Book screen displays detailed information about each transaction connected with every order placed from any window in RealTick. You can view your account balance from the Order Book.



Order Book Screen

View Your Account Balance

1. Click **Order Book** on the **Design** menu.

The **Order Book** window will appear.

2. Click **Show Account Balance** on the **Order Book** menu.

The account will show along with its balance and profit or loss.

3. Select a different account from the account drop-down list to view another account's balance.

Chapter 9: Using Advanced Features

This chapter discusses advanced features in RealTick.

Commit Changes

You can edit data in both a Chart and a Table window. If there is a price that is incorrect, on a Chart or in a Table, you can edit it and send it to the TA_SRV so that it is corrected in the database.

Edit & Save Data in a Chart

The save option is available only for LAN customers who own their own TA_SRV machines.

1. Double-click the **Chart** screen.

The system displays the **Edit Chart** screen.

2. Double-click the data you want to change. For example, you can change the price or volume value.

The system displays a small edit text field.

3. Enter the new value and press the **Enter** key from your keyboard. (To cancel, press the **Esc** key.)
4. Close the **Edit Chart** screen by clicking the **Close** button in the upper right corner of the screen.

The system displays the new values in your chart.

—MICROSOFT CORP—	
Open	High
56 25/64	56 13/16
56 49/64	57
56 5/8	56 15/16
56 5/8	56 7/8
56 7/16	56 13/16
56 11/16	56 3/4
56 3/4	56 7/8



Note: To save the changes you have to use the **Commit Changes**. The system will send your changes to the TA_SRV, and the changes will be recorded in the server's historical database.

Note: The new values you enter appear in the chart for as long as you keep the window open. The changes will not be permanent unless you send them to the TA_SRV. If you send your changes to the TA_SRV, the changes are recorded in the server's historical database.

5. To make the changes permanent, click **Commit Changes** on the **Chart** menu.

The system saves the changes.

Edit & Save Data in a Table

The Save option is available only for LAN clients and for customers who own their own TA_SRV machines.

1. Double-click the data that you want to change. For example, you can change a time, price, or volume value.

The system displays the text field around the information you would like to edit.

2. Type the new value and press the **Enter** key from your keyboard (To cancel, press the **Esc** key).

The system updates the Table screen with the new value.

Note: The new values you enter appear in the table for as long as you keep the window opened. The changes will not be permanent unless you send them to the TA_SRV. If you send your changes to the TA_SRV, the changes are recorded in the server's historical database.

3. To make the changes permanent, choose **Commit Changes** from the **Table** menu.

Scripts



***Note:** RealTick's scripting facility is being phased out and will soon be replaced with a COM automation interface that will provide more extensive scripting capabilities.*

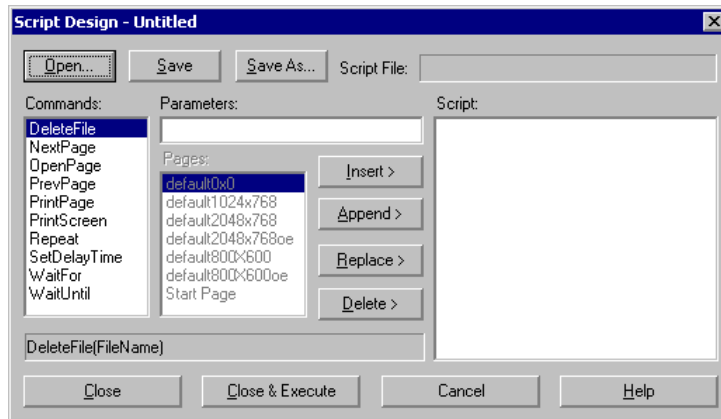
RealTick has a built-in scripting facility that can be used for purposes of printing out Charts at the beginning or end of the day, or for cycling through pages as part of a demo.

Designing

Design a Script

1. Click **Design Script** on the **Page** menu.

The **Script Design** dialog box will appear.



Script Design Dialog Box

2. Select a command from the **Commands** box.
3. Click **Insert**.

The command will appear in the script file.

If you choose **Open Page**, **PrintScreen**, **SetDelayTime**, **WaitFor**, or **WaitUntil**, you will have to enter a parameter in the **Parameters** box before inserting the command into the script.

Note: The **Parameters** box will change to the **Seconds** box or **Time** box depending the command you choose.

4. Select the next command from the **Commands** box.
5. Click the **Append** button.

Note: The **Append** button will enter the command after the last command. The **Insert** command will enter the command first in the **Script** box.

6. Continue selecting the commands from the **Command** box until you have completed your script.
7. Once you have completed your script, click **Save As**.

The **Save As** dialog box will appear.

8. Type the name of the script in the **File Name** field and click **Save**.

The script is saved.

9. Click **Close & Execute**.

The script is created. The command appears in the **Status** bar.

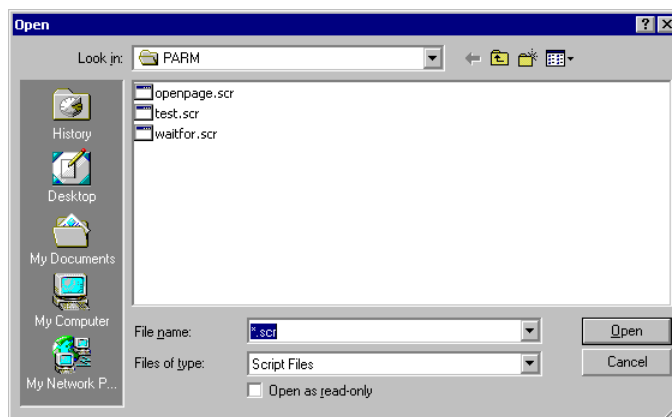
Script: Next Command is OpenPage(default2048x768oe) at 01:00

Status Bar

Executing

1. Click **Execute Script** on the **Page** menu.

The **Open** dialog box will appear.



Open Dialog Box

2. Click the **Script File** you would like to open and click **Open**.

The script is executed.

Chapter 10: Troubleshooting

This chapter discusses the most common problems RealTick users experience and the possible causes and solutions to these problems.

For further help, contact Townsend Analytics, Ltd. Technical Support at 1-800-997-9630 or visit our website at www.realtick.com.

Connectivity Problems

Many problems Internet users experience are due to their Internet connection. Several of these problems include inability to log on to RealTick, slow or incorrect data updates in the Chart and MarketMaker windows, and losing connection to the servers.

Note: The status lights on the status bar will go from green to yellow to red when there is a server connection loss. See Chapter 3 for more information concerning the status lights.

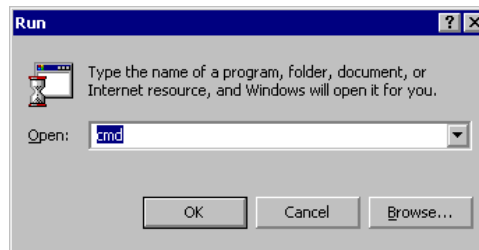
If you are experiencing any of these problems, run a ping test.

Perform a TalTrade Ping Test

Test your RealTick connectivity.

1. Select **Run** on the **Start** menu.

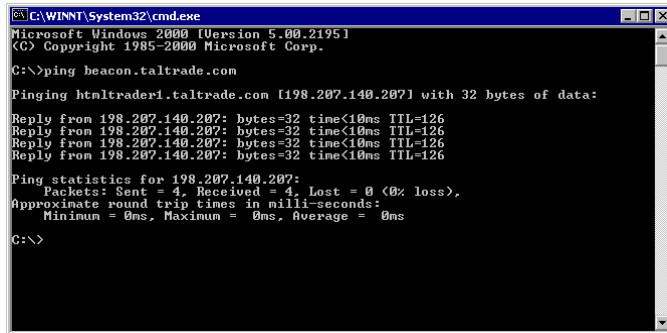
The **Run** dialog box will appear.



Run Dialog Box

2. Type **command** or **cmd** in the **Open** field.
3. Click **OK**.

The **DOS prompt** will appear.



```
C:\WINNT\System32\cmd.exe
Microsoft Windows [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ping beacon.taltrade.com

Pinging htaltrader1.taltrade.com [198.207.140.207] with 32 bytes of data:

Reply from 198.207.140.207: bytes=32 time<10ms TTL=126
Reply from 198.207.140.207: bytes=32 time<10ms TTL=126
Reply from 198.207.140.207: bytes=32 time<10ms TTL=126
Reply from 198.207.140.207: bytes=32 time<10ms TTL=126

Ping statistics for 198.207.140.207:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

DOS Prompt Dialog Box

4. Type **ping beacon.taltrade.com** at the **C:\>** prompt.

You will receive four replies.

The test results are the length of time it takes to receive the four replies.

- If the times are above 250 milliseconds (ms), you will have a problem using RealTick.

Reply from 198.207.140.207: bytes=32 time<10ms TTL=126

Time

Reply Time

- If you do not receive one of the four replies, you will have a problem using RealTick. You should receive a **Request timed out** error message.
- If you do not receive any of the four replies, there may be a firewall, or you may not be connected to the Internet. If this is the case, you will need to perform an Internet connectivity test.

Perform an Internet Connectivity Test

Test your Internet connectivity.

- Open a web page.

If you are unable to open a web page, you are not connected to the Internet. Contact your Internet provider.

If you are able to open a web page, you will need to see if the connection is with TalTrade or with the Internet. You will need to perform a Ping Internet Test.



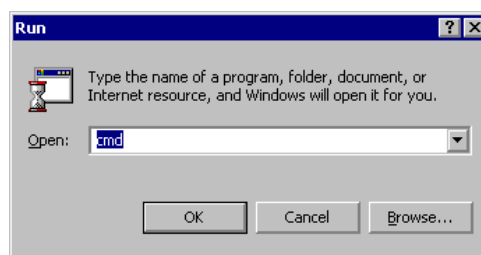
***Note:** A slow response from a later router may be due to a slow response from an early router.*

Perform a TraceRoute Test

Once a problem is established, perform a traceroute test to see where the problem is originating. This test works similar to a ping test, but instead of pinging the end machine, it pings each machine along the line three times.

1. Select **Run** on the **Start** menu.

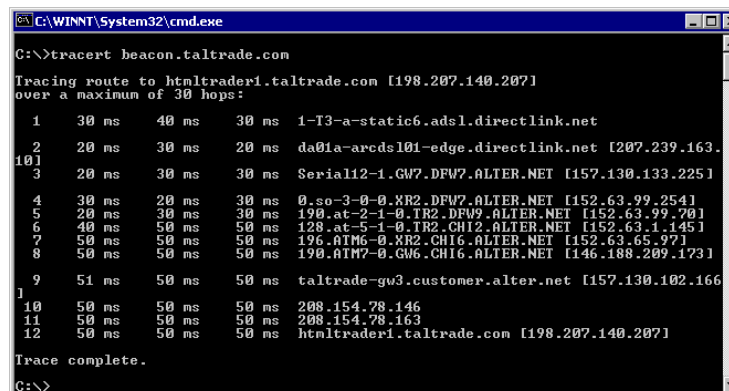
The **Run** dialog box will appear.



Run Dialog Box

2. Type **command** or **cmd** in the **Open** field.
3. Click **OK**.

The **DOS prompt** will appear.



DOS Prompt

4. Type **tracert beacon.taltrade.com** at the **C:\>** prompt.
 - o Several lines will return displaying three times per line. Each line is a router. If one router is consistently displaying high ping times or timed outs, contact Townsend Analytics, Ltd. Technical Support.

- If there are not high ping times or timed outs, some possible problems may include your modem or Ethernet card, poor connection to Internet, bad and loose or tangled cable, or IRQ conflict. In this case, contact a hardware expert before replacing any hardware equipment, and/or contact your Internet Service Provider to check your Internet connection.

Data Outages and Data Integrity



Note: A stuck MarketMaker is a quote (bid or ask) that keeps coming up in the MarketMaker window as the best, even if the market has moved away from that price.

Two common data integrity issues include a bad tick in a Chart or a stuck MarketMaker. A bad tick hampers the scaling of a Chart, and a stuck MarketMaker makes it difficult to trade.

If you are a LAN customer, you must contact your system administrator to correct this problem.

If you are not a LAN customer and access your data from TAL, contact Townsend Analytics, Ltd. Technical Support.

Questions you should ask yourself before calling Technical Support.

- Is there a stop on trading for a period?
- Is the exchange closed?
- Is the symbol spelled correctly?
- Is it a future, and is the contract expired?
- Is your system clock displaying the correct time?

Chapter 11: RealTick Add-ons

This chapter discusses third party applications that are integrated into RealTick, such as Hottrend, Oz Scanner, and MarketGauge.

Hottrend™

This Web Browser favorite displays detailed information on the top 30 Hottrend stocks. The Radar will display from 0 – 30 stocks, depending on overall market activity and the extent to which each individual stock is exceeding its normal trading parameters (“abnormal”). It is recalculated every minute and produced by quantifying all first and second order variables measured against the same period in time for previous trading days.

Hottrend algorithms are based on a sophisticated model that measures the activity levels of multiple variables simultaneously. Besides volume and price, Hottrend also measures trade count, money flow, and other related indicators in order to create a 360-degree view of an emerging liquidity event.

See Hottrend RealTime Radar Web Browser Favorite in RealTick for additional help.

Display Hottrend

- Select Hottrend favorites **7 (NASDAQ)** or **8 (NYSE)** on the **Web Browser** sub-menu of the **Favorites** menu.

The favorite will appear.



Access Hottrend through the MarketMinder Favorite

You can access Hottrend through the MarketMinder TAL Chain Symbol List.

1. Select **TAL Chain Symbol List** from the **MarketMinder** favorites on the **Favorite** menu.

The **TAL Chain listing** window will appear.

Symbol	Company Name
\$GAPUP-S	Nasdaq SmCap Gap Open
\$GAPDN-S	Nasdaq SmCap Gap Open
\$HOTVOL-S	Nasdaq SmCap Hot Vol
\$HOTNTR-S	Nasdaq SmCap Hot Num 1
\$ACTIVE-S	Nasdaq SmCap Most Activ
\$ACTIVE-SR	ARCA Nasdaq SmCap Mo
\$ACTOPT-S	Nas SmCap Most Active O
\$NEARH52-S	Nasdaq SmCap Near 52-w
\$NEARL52-S	Nasdaq SmCap Near 52-w
\$HALT-Q	Nasdaq NMS Halted
\$HALT-S	Nasdaq SmCap Halted
\$BOTFSHR-N	Oz NYSE Bottom Fisher Sc
\$SKYSCR-N	Oz NYSE Sky Scraper Sc
\$SUSPECT-N	Oz NYSE Usual Suspect S
\$KNOCKDN-N	Oz NYSE Knock Down Sc
\$10WEEKS-N	Oz NYSE 10 1/2 Weeks S
\$9WEEKS-N	Oz NYSE 9 1/2 Weeks Sc
\$NEWKID-N	Oz NYSE New Kid Scan
\$PWRTRDR-N	Oz NYSE Power Trader Sc
\$GAPER-N	Oz NYSE Gaper Scan
\$BOTFSHR-Q	Oz Nasdaq NMS Bottom F
\$SKYSCR-Q	Oz Nasdaq NMS Sky Scra
\$SUSPECT-Q	Oz Nasdaq NMS Usual Su
\$KNOCKDN-Q	Oz Nasdaq NMS Knock D
\$10WEEKS-Q	Oz Nasdaq NMS 10 1/2 W
\$9WEEKS-Q	Oz Nasdaq NMS 9 1/2 W
\$NEWKID-Q	Oz Nasdaq NMS New Kid
\$PWRTRDR-Q	Oz Nasdaq NMS Power Tr
\$GAPER-Q	Oz Nasdaq NMS Gaper Sc
\$HOTTREND-N	NYSE Hottrend
\$HOTTREND-S	Nasdaq Hottrend

TAL Chain Listing Window

- Click **\$HOTTREND NYSE** or **\$HOTTREND Nasdaq** and drag and drop into a MarketMinder.

The symbols will appear.

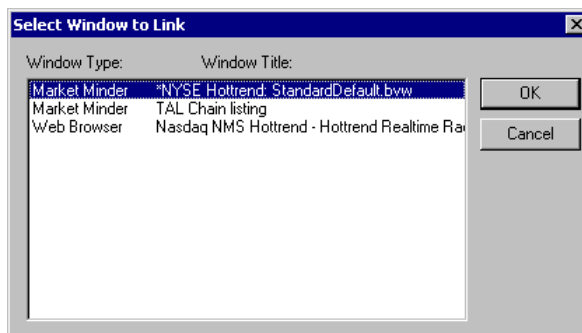
Symbol	Last	Change	Volume
NE	39.74	↓ -1.22	2544600
URI	26.78	↓ +.73	705800
PH	48.15	↓ +1.45	1759600
TOY	16.40	↓ +.22	2190600
ACN	25.00	↓ -1.01	1577500
COX	34.54	↓ -.71	1723600
NOR	18.85	↑ -1.13	901700

MarketMinder Displaying Hottrend NYSE Symbols

Link Hottrend RealTime Radar to another RealTick Window

1. Click **Links...** on the **Hottrend** window.

The **Select Window to Link** dialog box will appear.



Select Window to Link Dialog Box

2. Select the window you would like to link.
3. Click **OK**.

Display a Symbol in the Linked Window

- Click the ticker symbol hyperlink.

The linked window will display the symbol.

Drag and drop a symbol from the Hottrend Favorite

1. Click a symbol in Hottrend.
2. Drag and drop the symbol in a MarketMinder, MultiQuote, News, MarketMaker, Turbo Options, Order Book, Chart, or Enlist window.

The symbol will display.

View the Day Summary

The Day Summary displays all the activity on the RealTime Radar for the day.

- Click the **Day Summary** button.

The window appears.

Rank	Ticker	Number of minutes	Abnormal Index	First Alert	Last Alert	Rank		
						Volume	%Chng	NetChng
1	AYO	338	114244	09:49	15:26	36	10	1
2	BS	151	22801	09:39	12:09	83	1	1010
3	CHS	196	13328	09:40	15:04	213	15	7
4	ENE	163	10473	09:32	14:19	1	6	1237
5	NUE	98	7844	09:50	11:45	207	94	13
6	TEX	81	6561	09:48	11:08	158	13	16
7	SGP	76	5776	11:45	13:00	11	466	242
8	AH	67	4489	09:48	10:54	128	77	123
9	CNF	63	3969	09:54	10:56	265	20	17
10	FBN	61	3721	09:37	10:37	471	76	89
11	CCR	64	3400	10:32	14:13	161	19	5
12	BID	54	2916	14:33	15:26	777	28	169
13	EOT	85	2477	09:38	13:40	271	9	95
14	CLS	49	1961	12:08	14:25	122	153	36

Hottrend Day Summary Window

See Hottrend Day Summary in RealTick for additional help.

Hottrend Smart Alerts

Hottrend Smart Alerts enables RealTick customers to configure and receive stock alerts derived from Hottrend detection of abnormal activity.

Access Hottrend Smart Alerts

- Select **Hottrend Smart Alerts** from the **Web Browser** sub-menu of the **Favorites** menu.

Hottrend Smart Alerts will appear.

Setup an Alert

- Type a symbol in the **Enter Symbol** field.

Oz Scanner

The Oz Scanner is a technical filter that sorts stocks by different sets of criteria. There are nine different scanners.

Usual Suspects Scan

Display stocks that are increasing in price and that may potentially trade higher than their average daily volume. The Usual Suspect Scan will provide you with the stock on day one of its increase.

Knock Down Scan

Display stocks that are decreasing in price and that may potentially trade higher than their average daily volume. Use the Knock Down Scan to sell short.

Power Trader Scan

Display stocks that are increasing in price and that may potentially trade higher than their average daily volume – a similar, but stricter scan than Usual Suspects.

New Kid on the Block Scan

Display stocks that are increasing in price and that may potentially trade higher than their average daily volume. The detection point for the stock's initial volume and price increase is much lower than that of the Power Trade Scan, so it finds stocks that are gaining interest from institutions or investors.

Gapper Scan

Display stocks that are showing strength and momentum for a potential position trade after a major news event.

Bottom Fisher Scan

Display stocks that have traded down for at least three sessions and are currently trading higher and signaling that a potential short-term bottom might have been formed.

Sky Scraper Screen

Display the stocks that have traded up for at least three sessions and are trading down from yesterday's close.

10 ½ Weeks Scan

See which stocks are moving up and making a 53-day high on higher than average volume. Use the 10 ½ Weeks Scan for both long and short positions.

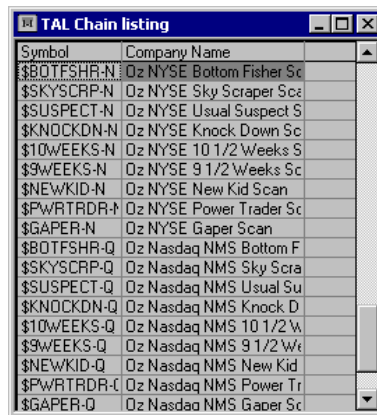
9 ½ Weeks Scan

Identify downward-moving stocks making a 47-day low on higher than average volume. The 9 ½ Weeks Scan can be used for both long and short positions.

Access an Oz Scanner

1. Select the **TAL Chain Symbol List** on the **MarketMinder** favorite of the **Favorites** menu.

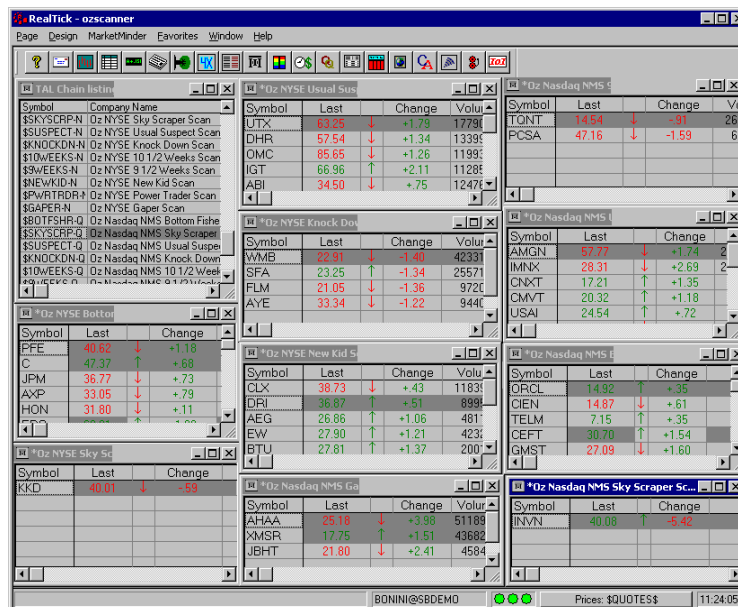
The **TAL Chain Listing** window appears.



TAL Chain Listing Window

2. Select a **Scanner** and drag and drop it into a MarketMinder.

The **Scanner** symbols will appear.



Oz Scanners

For more information regarding Oz Scanner, please visit www.tonyoz.com.

MarketGauge

MarketGauge® is a visual and contextual Web-based indicator of the market. Its features include Hot Spots, HyperQuote, Report View and Multiple Report Views: Price & Volume Views/Fundamental Views, Price and Volume Gauges, and Portfolio.

For more information, please see the MarketGauge help.

Access MarketGauge

- Select **MarketGauge** from the **Web Browser** favorite of the **Favorites** menu.

Barra Risk Factor

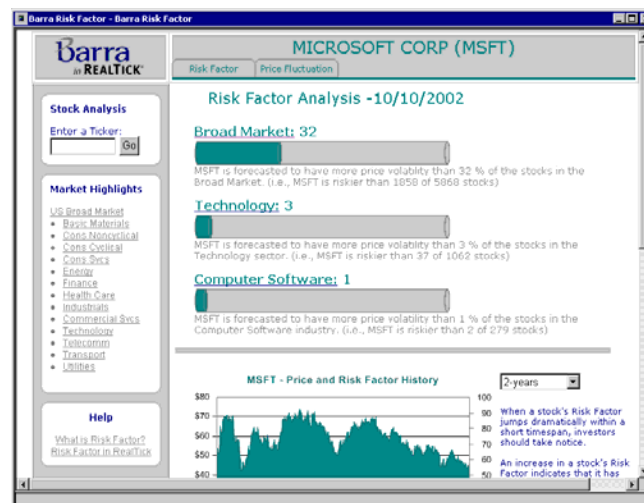
Barra Risk Factor is a risk measurement application

Access Barra Risk Factor

- Select **Barra Risk Factor** from the **Web Browser** sub-menu of the **Favorites** menu.

Display Barra Risk Factors for a Stock

1. Type the ticker symbol in the **Enter a Ticker** field.
2. Click **Go**.



Barra Risk Factor

The **Risk Factor Analysis** will appear.

3. Click the **Price Fluctuation** tab to view the Price Fluctuation chart.
4. Click the **Broad Market** link, **Sector** link (middle cylinder), or **Industry** link (bottom cylinder) to display winners and losers.
5. To return to the Risk Factor page, click the **Risk Factor** tab at the top of the page.

Index

1

10 ½ Weeks Scan, 327

9

9 ½ Weeks Scan, 327

A

Absolute, 137, 169
Acceleration (ACC), 197
Access an Oz Scanner, 328
Access the Alerts and Alarms, 118
Accessing the Parameters Dialog Box, 186
Account Balance, 304
 Order Book, 313
Actionless Hot Key, 296
Add a Currency, 99
Add a Mail Alert in the Status Bar, 60
Add a New Page, 56
Add a Price Tier, 113
Add a Sound Alert to TAL Mail, 60
Add a Symbol, 137
Add a Symbol to an Existing Chart, 168
Add a Symbol to an Existing MarketMinder, 116
Add a Technical Analysis to a Chart, 185
Add a Technical Analysis to a Table, 185
Add Columns to the IOI Client Window, 103
Add columns to the News Window, 128
Add to Favorites, 67
Adding and Removing Panels, 111

Adobe Acrobat Reader, 13
Advanced Features, 315
Advanced Listed Configuration, 272
Advanced Nasdaq Configuration, 271
Alarms. *See* TAL Alarms
Alerts. *See* TAL Alerts
Annotations, 178
 Add an Annotation, 178
 Change an Annotation, 179
 Delete an Annotation, 179
AON, 247
Arms' Ease of Movement (EMV), 229
Auto Scale, 176
Automation. *See* Scripts
Average Price Calculator
 Use the Average Price Calculator, 308
Average Range, 193

B

Basket Order, 242
BasketMinder, 269
 Advanced Listed Configuration, 272
 Advanced Nasdaq Configuration, 271
 Basket Quantity/Execution, 273
 Configure a Standard Basket Minder Order, 270
 Customize Order Parameters, 272
 Limit Market Exposure, 274
 Setup the Basket Order Entry Window, 269
BBO, 239
Best Fit, 61
BID, 240
Bollinger Bands, 194
Bottom Fisher Scan, 327

Bump Hot Key, 297
Buy from the Order Entry Screen in
Order Book, 253

C

Calculate Volume Weighted Average
Price, 138, 150
Canceling Orders, 275
 Cancel Using Cancel Now!!, 277
 Cancel Using Cancel Order, 277
 Confirm All Trades, 278
 Quick Double-Click Cancel, 276
ChainMinder, 116
Change a Column in a Table, 141
Change a Favorite, 67
Change a Series in a Chart, 174
Change Order Action Hot Key, 297
Change the Color of a Price Tier, 114
Change the Color of Indications, 102
Change the Column Layout, 119, 306
Change the Display of a Chart, 171
Change the Display of a Table, 140
Change the Price Display, 137
 Absolute, 137
 Differential, 137
 Percent Change, 137
 Ratio, 137
Change the Server for a RealTick
Window, 72
Change the Spin Button Defaults, 280
Change the Table Display, 123
Change the Type of Chart, 169
Change the View of the Fixed Page
News Window, 96
 Go Back, 96
 Maximize Story Window, 96
 Split Window, 96
Change the Window Color of a
Ticker, 146
Change the Window Font for Market
Minder, 122
Change Your Password, 51
Chart, 164
 Absolute, 169

 Add a Symbol to an Existing
 Chart, 168
 Add a Technical Analysis to a
 Chart. *See* Technical Analysis
 Annotations. *See* Annotations
 Auto Scale, 176
 Change a Series in a Chart, 174
 Change the Display of a Chart,
 171
 Change the Type of Chart, 169
 Chart Menu, 28
 Create a Chart, 167
 Daily, 165
 Differential, 169
 Enlarge a Chart Region, 177
 Fixed, 176
 Fixed Endpoints, 176
 Hide the Chart Title (Legend),
 175
 Intraday, 164
 Intraday Chart Hot Keys, 168
 Link Left and Right Axes, 176
 Logarithmic Scale, 176
 Min/Max Scaling, 175
 Monthly, 167
 Percent Change, 169
 Ratio, 169
 Replace a Symbol in a Chart, 169
 Restore a Chart to Original Size,
 177
 Scale a Chart, 175
 Seasonal, 167
 Snap to Date Range, 176
 Snap to Window, 176
 Spreads, 183
 Trend Lines. *See* Trend Lines
 Vertical Zooming a Chart, 177
 View the Statistics in a Chart,
 177
 Weekly Chart, 166
Chart Multiplier, 183
 Chart, 183
Child → Popup, 70
Clone a Hot Key, 298
Close a News Alert, 133

- Color Depth, 12
- Column Widths, 20
- Columns
 - Add Columns to the IOI Client Window, 103
 - Add Columns to the News Window, 128
 - Change a Column in a Table, 141
 - Change the Column Layout in MarketMinder, 119
 - Change the Width of a Column, 21
 - Change the Width of a Column in Turbo Options, 157
 - Column Widths, 20
 - Configure Column Layout in MarketMinder, 120
 - Custom Sort a MarketMinder, 121
 - Save a Column Layout in MarketMinder, 121
 - Sizing Columns in Turbo Options, 157
- Commit Changes, 315
 - Edit & Save Data in a Chart, 315
 - Edit & Save Data in a Table, 316
- Commodity Channel Index (CCI), 210
- Conditional Order, 242
 - Load a Conditional Order, 259
- Configure a Standard Basket Minder Order, 270
- Configure Column Layout, 120
- Configure the MultiQuote Window to View Your Account Balance, 312
- Configure the MultiQuote Window to View Your Positions, 312
- Configuring a Quote Source, 143
 - Remove Data from a Specific Market Maker, 145
 - View a Ticker from a Single Source, 146
 - View Composite Data, 144
 - View Data from a Specific Exchange, 143
 - View Data from a Specific Market Maker, 144
- Configuring Quote Sources, 150
- Confirm All Trades, 278
- Connection Line, 12
- Connectivity Problems, 319
- Connectivity Provider, 12
- Control Menu, 25
- Convert Currency, 117
- Copy a Trend Line, 181
- Copy News Data for Another Application, 96
- Copy Time & Sales Data for Another Application, 152
- Copying News, 129
- Corporate Actions, 93
 - Corporate Actions Menu, 44
 - Corporate Actions Search, 94
- Create a Bid Hot Key, 290
- Create a Buy Hot Key, 287
- Create a Cancel Orders (Account) Hot Key, 293
- Create a Cancel Orders (Symbol) Hot Key, 292
- Create a ChainMinder, 116
- Create a Chart, 167
- Create a Close Position (Account) Hot Key, 294
- Create a Close Position (Symbol) Hot Key, 293
- Create a Forex Window, 97
- Create a MarketMaker Window, 104
- Create a new MultiQuote, 125
- Create a News Alert, 132
- Create a Page, 53
- Create a Page Hotkey, 58
- Create a Position MarketMinder, 305
- Create a Sell Hot Key, 289
- Create a Standard MarketMinder, 115
- Create a Table, 135
- Create a Time and Sales Report, 148
- Create a Turbo Options Window, 154
- Create an Alarm, 85
- Create an Alert, 89

- Create an Offer Hot Key, 291
- Create an OrderMinder, 307
- Creating Hot Keys, 287
- Cross Order, 245
- Currencies, 99
 - Add a Currency, 99
- Custom Sort a MarketMinder, 121
- Customize Order Parameters, 272

D

- D Averaged (%Da), 215
- D Fast (%D), 213
- D Slow (%Ds), 215
- Data Directory, 18
- Data Outages and Data Integrity, 322
- Day, 247
- Day +, 248
- Day Summary, 325
- Delete a Favorite, 69
- Delete a Hot Key, 299
- Delete a Page, 57
- Delete a Price Tier, 113
- Delete a Trend Line, 182
- Delete an Alert, 92
- Design a Script, 316
- Design Menu, 26
- Differential, 137, 169
- Directional Movement Indicators (PDI, MDI, DX, ADX), 233
- Discretionary, 238
- Display a Ticker, 142
- Display Hottrend, 323
- Display of a Window, 81
- Domain Name, 50
- Download Installation from RealTick.com, 13
- Draw a Trend Line, 180
- Drop-Down Lists, 24

E

- Earnings Calendar, 161
- Earnings Surprises, 162
- Edit & Save Data in a Chart, 315

- Edit & Save Data in a Table, 316
- Edit a Hot Key, 298
- Edit data in a Time & Sales Window, 151
- Enlarge a Chart Region, 177
- Executing, 318
- Expirations, 247
 - Day, 247
 - Day +, 248
 - GTC, 248
 - IOC, 248
 - Now, 248

F

- Favorites, 63
 - Add to Favorites, 67
 - Change a Favorite, 67
 - Chart, 64
 - Delete a Favorite, 69
 - MarketMinder, 64
 - Open a Favorite, 66
 - Stocks, 65
 - Symbols Lists, 66
 - Turbo Options, 65
 - Web Browser, 65
- Favorites Directory, 18
- Favorites Menu, 45
- Files Installed, 17
 - Data Directory, 18
 - Favorites Directory, 18
 - Help Directory, 18
 - Pages Directory, 18
 - Parm Directory, 18
 - Sounds Directory, 19
- Fixed, 176
- Fixed Endpoints, 176
- Fixed Page
 - Fixed Page News Menu, 33
- Fixed Page News, 94
 - Change the View of the Fixed Page News Window, 96
 - Copy News Data for Another Application, 96
 - View a News Story, 95

- View a Story, 95
- Forex, 97
 - Add a Currency, 99
 - Create a Forex Window, 97
 - Forex Menu, 35
 - Move Around in Forex, 99
- Function Hot Keys, 287
- Futures, 73

G

- Gapper Scan, 327
- Go To
 - News, 129
- Group Symbols, 118
- GTC, 248

H

- Hard Drive, 11
- Hardware Requirements, 11
 - Hard Drive, 11
 - Modem, 11
 - Operating System, 11
 - Processor, 11
 - RAM, 11
 - System Requirements, 11
- Help Directory, 18
- Hide the Chart Title (Legend), 175
- Hot Key Action Bar, 299
- Hot Keys
 - Actionless Hot Keys, 296
 - Change Order Action Hot Key, 297
 - Clone a Hot Key, 298
 - Create a “Bump” Hot Key, 297
 - Create a Bid Hot Key, 290
 - Create a Buy Hot Key, 287
 - Create a Cancel Orders (Account) Hot Key, 293
 - Create a Cancel Orders (Symbol) Hot Key, 292
 - Create a Close Position (Account) Hot Key, 294

- Create a Close Position (Symbol) Hot Key, 293
- Create a Page Hotkey, 58
- Create a Sell Hot Key, 289
- Create an Offer Hot Key, 291
- Creating Hot Keys, 287
- Delete a Hot Key, 299
- Edit a Hot Key, 298
- Interact with Order View, 295
- Set Page Hot Keys, 79

- Hottrend, 323
 - Day Summary, 325
 - Display Hottrend, 323
 - Link Hottrend, 325
 - MarketMinder, 323

I

- Include/Exclude a Market Maker, 110
- Indication of Interest*, 100
- Indications, 100
 - Add Columns to the IOI Client Window, 103
 - Change the Color of Indications, 102
 - Indications Menu, 44
 - View Details of a Specific Indications, 102
- Industry Search, 161
- Installation Procedures, 13
 - Install RealTick, 16
- Interact with Order View, 295
- Internet Requirements, 12
 - Connection Line, 12
 - Connectivity Provider, 12
 - Services, 12
 - Speed, 12
- Intraday Chart Hot Keys, 168
- IOC, 248

K

- K Fast (%K), 212
- Knock Down Scan, 326

Kurtosis (KUR), 219, 225

L

Level II. *See* MarketMaker
Limit Market Exposure, 274
Limit Order, 234
Link a MarketMinder to an
OrderMinder, 310
Link Hottrend, 325
Link Left and Right Axes, 176
Linking Windows, 70
Links to Web Sites, 159
Load a Symbol File, 72
Log on to RealTick, 50
Logarithmic Scale, 176

M

MACD Oscillator (CDO), 205
Market Guide, 163
Market Order, 234
MarketGauge, 329
 Access MarketGauge, 329
MarketMaker, 104
 Add a Price Tier, 113
 Adding and Removing Panels,
 111
 Change the Color for ECNs, 112
 Change the Color of a Price Tier,
 114
 Create a MarketMaker Window,
 104
 Delete a Price Tier, 113
 Include/Exclude a Market Maker,
 110
 MarketMakers Menu, 38
 My Order, 106
 Set an Alarm for Updates, 107
 Set Route from ECN ID, 107
 Show Market Montage, 112
 Show MultiQuote, 111
 Show Order Entry Window, 112
 Show Range Bar, 112
 Show Ticker, 112

View Data from a Single
Exchange, 109
View Data from a Single Source,
107
View Data from all Exchanges,
110
View NASDAQ Stock Quotes
from all Sources, 108
View NASDAQ Stock Quotes
from all Sources except ECNs,
109
View NASDAQ Stock Quotes
from ECNs only, 109
MarketMinder, 114
 Access the Alerts and Alarms,
 118
 Add a Symbol to an Existing
 MarketMinder, 116
 Change the Column Layout, 119
 Change the Table Display, 123
 Configure Column Layout, 120
 Convert Currency, 117
 Create a ChainMinder, 116
 Create a Standard MarketMinder,
 115
 Custom Sort a MarketMinder,
 121
 Group Symbols, 118
 MarketMinder Menu, 36
 Multiple Selections in a
 MarketMinder, 119
 Save a Column Layout, 121
Mean, 220
Menu Bar. *See* RealTick Menu Bar
Microsoft Internet Explorer, 13
Microsoft Outlook, 13
MID, 239
Min/Max Scaling, 175
Modem, 11
Moments, 219
Money Flow (FLO), 230
Monthly Average (AVG), 220
Move a Group of Trend Lines, 181
Move a Trend Line, 181
Move Around in Forex, 99

- Moving Average Convergence Divergence (MCD), 202
- Moving Average Momentum (MAM), 201
- Moving Average Oscillator (MAO), 199
- Moving Average Parameters, 188
- Moving Averages, 186
- Moving Linear Regression (MLR), 189
- Multiple Selections in a MarketMinder, 119
- Multiple Selections in an OrderMinder, 308
- MultiQuote, 124, 311
 - Configure the MultiQuote Window to View Your Positions, 312
 - Create a new MultiQuote, 125
 - MultiQuote Menu, 40
 - Save the MultiQuote Window Layout, 125
 - Select an Account, 312
- My Order, 106

N

- NASDAQ Stock Quotes
 - View NASDAQ Stock Quotes from all Sources except ECNs in MarketMaker, 109
 - View NASDAQ Stock Quotes from all Sources in MarketMaker, 108
 - View NASDAQ Stock Quotes from ECNs only in MarketMaker, 109
- Navigate in a Web Browser Window, 159
- Navigate News, 128
- New Kid on the Block Scan, 327
- Newest at Top, 129
- News, 126

- Add columns to the News Window, 128
- Auto Request Stories, 128
- Copy Headlines, 129
- Copy Story, 129
- Newest at Top, 129
- News Headlines, 126
- News Menu, 31
- News Stories, 126
- Open a Story, 127
- Page Down, 129
- Page Up, 129
- Printing News, 129
- Search for stories about a symbol, 127
- Set an Alarm for News, 129
- View Last Story, 129
- View News Stories, 127
- News Alert, 132
 - Close a News Alert, 133
 - Create a News Alert, 132
- News Headlines, 126
- News Stories, 126
- Now, 248

O

- Offer, 240
- On Balance Volume (OBV), 227
- Open a Favorite, 66
- Open a Link, 159
- Open a Page, 53
- Open a Story, 127
- Open a Web Browser Window, 158
- Open Interest (OI), 227
- Open TAL Alerts, 89
- Open the Page Manager Dialog Box, 55
- Operating System, 11
- Option Buttons, 24
- Order Book, 250, 313
- Order Entry Menu, 42
- Order Entry Screen
 - MarketMaker, 250

- Stocks, 253
- Turbo Options, 253
- Order Entry Screen (OES), 250
- Order Types, 234
 - Basket Order, 242
 - BBO, 239
 - BID, 240
 - Conditional Order, 242
 - Cross Order, 245
 - Discretionary, 238
 - Market Order, 234
 - MID, 239
 - Offer, 240
 - Pegging Orders, 245
 - PostNoPref, 237
 - Preference, 237
 - Reserve Order, 243
 - Short, 241
 - Staged Order, 244
 - Stop Limit Order, 236
 - TOP, 241
 - Tracking Order, 244
 - Trailing Stop, 236
- OrderMinder, 307
 - Link a MarketMinder to an OrderMinder, 310
 - Multiple Selections in an OrderMinder, 308
- Oscillators, 196
 - Momentum Oscillator (MOM), 196
- Oz Scanner, 326
 - 10 ½ Weeks Scan, 327
 - 9 ½ Weeks Scan, 327
 - Access an Oz Scanner, 328
 - Bottom Fisher Scan, 327
 - Gapper Scan, 327
 - Knock Down Scan, 326
 - New Kid on the Block Scan, 327
 - Power Trader Scan, 327
 - Sky Scraper Screen, 327
 - Usual Suspects Scan, 326

P

- Page Manager, 55
 - Add a New Page, 56
 - Create a Page Hotkey, 58
 - Delete a Page, 57
 - Open the Page Manager Dialog Box, 55
 - Rename a Page, 56
- Page Menu, 25
- Pages
 - Create a Page, 53
 - Open a Page, 53
 - Save a New Page, 54
 - Save an Existing Page, 54
 - View Next or Previous Page, 54
- Pages Directory, 18
- Parabolic Price/Time Study, 231
- Parameters Dialog Box, 186
- Parm Directory, 18
- Partial, 247
- Pegging Orders, 245
- Percent Change, 137, 169
- Percentage Offset, 191
- Perform a TalTrade Ping Test, 319
- Perform a TraceRoute Test, 321
- Perform an Internet Connectivity Test, 320
- Permissions, 10
- Pivot Lines, 182
 - Adding Pivot Lines, 183
- Place a Conditional Order from MarketMaker, 257
- Place a Deferred Order from the Order Book, 256
- Place a Reserve Order, 260
- Placing Orders, 253
 - Buy from the Order Entry Screen in Order Book, 253
 - Place a Conditional Order from MarketMaker, 257
 - Place a Deferred Order from the Order Book, 256
 - Sell from the Order Entry Screen in MarketMaker, 255

- Portfolio Balancing, 250
- PositionMinder, 304
 - Change the Column Layout, 306
 - Create a Position MarketMinder, 305
 - Select an Account, 305
- Positions, 304
 - PositionMinder, 304
- PostNoPref, 237
- Power Trader Scan, 327
- Preference, 237
- Price and Volume Studies, 227
 - Williams' Accumulation Distribution (WAD), 228
- Price Range, 249
- Price Studies, 186
 - Moving Averages (MA), 186
- Price Tier, 113
 - Add a Price Tier, 113
 - Change the Color of a Price Tier, 114
 - Delete a Price Tier, 113
- Printing, 61
 - Print Screen, 61
- Printing News, 129
- Processor, 11

Q

- Quick Double-Click Cancel, 276
- Quote Sources
 - Include/Exclude a Market Maker, 110
 - Remove Data from a Specific Market Maker in Ticker, 145
 - Select an Exchange in Turbo Options, 154
 - View a Ticker from a Single Source, 146
 - View Composite Data in Ticker, 144
 - View Composite Exchange Data in Time & Sales, 150

- View Data from a Single Exchange in MarketMaker, 109
- View Data from a Single Source in MarketMaker, 107
- View Data from a Specific Exchange in Ticker, 143
- View Data from a Specific Market Maker in Ticker, 144
- View Data from all Exchanges in MarketMaker, 110
- View Data from all Sources in MarketMaker, 108
- View Data from Selected Exchanges in Time & Sales, 150
- View NASDAQ Stock Quotes from all Sources except ECNs in MarketMaker, 109
- View NASDAQ Stock Quotes from all Sources in MarketMaker, 108
- View NASDAQ Stock Quotes from ECNs only in MarketMaker, 109

R

- RAM, 11
- Range Channel, 195
- Rate of Change in Prices (RCP), 206
- Ratio, 137, 169
- RealTick Control Menu, 25
- RealTick Menu Bar, 25
 - Chart Menu, 28
 - Corporate Actions Menu, 44
 - Design Menu, 26
 - Favorites Menu, 45
 - Fixed Page News Menu, 33
 - Forex Menu, 35
 - Indications Menu, 44
 - MarketMakers Menu, 38
 - MarketMinder Menu, 36
 - MultiQuote Menu, 40
 - News Menu, 31
 - Order Entry Menu, 42

- Page Menu, 25
- Stocks Menu, 42
- Table Menu, 30
- TAL Alarms Menu, 44
- Ticker Menu, 31
- Time & Sales Menu, 40
- Turbo Options Menu, 35
- Web Browser Menu, 43
- Window Menu, 45
- RealTick Pages, 52
- RealTick Status Bar
 - Name and Domain, 49
 - Server Button, 49
 - Status Lights, 49
 - Time, 49
- RealTick Toolbar, 46
- Refresh Rate, 12
- Relative Strength Index (RSI), 218
- Remove Data from a Specific Market Maker, 145
- Rename a Page, 56
- Replace a Symbol in a Chart, 169
- Reserve Order, 243
- Resize a Trend Line, 182
- Resolution, 12
- Right Mouse Button, 21
- Root, 116

S

- Save a Column Layout, 121
- Save a New Page, 54
- Save an Existing Page, 54
- Save the MultiQuote Window Layout, 125
- Scale a Chart, 175, 176
- Screen Display Requirements, 12
 - Color Depth, 12
 - Refresh Rate, 12
 - Resolution, 12
 - Screen Size, 12
 - Video Card, 12
- Screen Size, 12
- Scripts
 - Design a Script, 316

- Executing, 318
- Search by Keyword
 - News, 127
- Search for a News Story, 95
- Search for stories about a symbol, 127
- Search for Symbols, 72, 74
- Sell from the Order Entry Screen in MarketMaker, 255
- Server-Connection Lights, 48
- Servers, 71
 - Change the Server for a RealTick Window, 72
 - Monitoring Servers, 71
 - Status Bar, 71
- Services, 12
- Set a Startup Page, 78
- Set an Alarm for an Order Event, 282
- Set an Alarm for News, 129
- Set an Alarm for Updates, 107
- Set Default Servers, 80
- Set General Order Entry Defaults, 279
- Set General RealTick Options, 80
- Set Page Defaults, 80
- Set Page Hot Keys, 79
- Set Reserve Order Defaults, 282
- Set Route from ECN ID, 107
- Set the Price Display for RealTick, 79
- Set Warnings to Display after a Specific Action, 283
- Setting Button Colors, 285
- Setting Order Entry Defaults for Quick Trading, 279
- Setting Order Status Colors, 286
- Setup the Basket Order Entry Window, 269
- Short, 241
- Show Account Balance, 275
- Signal Line (SIG), 204
- Single Item Portfolio Balancing, 250
- Skew (SKW), 223
- Snap to Date Range, 176
- Snap to Printer, 61
- Snap to Window, 176
- Software, 12
 - Adobe Acrobat Reader, 13

- Microsoft Internet Explorer, 13
 - Microsoft Outlook, 13
 - Sounds Directory, 19
 - Speed, 12
 - Spreads, 183
 - Create a Chart Multiplier, 183
 - Staged Order, 244
 - Standard Deviation (SD), 222
 - Status Bar, 48, 71
 - Lights, 48
 - Status Lights, 48
 - Stochastics, 212
 - Stochastics Parameters, 216
 - Stocks, 133
 - Stocks Menu, 42
 - View Stocks, 134
 - Stop Limit Order, 236
 - Stop Market Order, 235
 - Study Availability Table, 184
 - Suitability
 - Portfolio Balancing, 250
 - Price Range, 249
 - Single Item Portfolio Balancing, 250
 - Trade Frequency, 249
 - Transaction Cost, 249
 - Transaction Size, 249
 - Symbol, 137
 - Add a Symbol, 137
 - Add a Symbol to an Existing MarketMinder, 116
 - Load a Symbol File, 72
 - Search for Symbols, 73, 74
 - Symbol Guide, 74
 - Search for Symbols, 74
 - Symbol Lists, 66
 - Create a Window Using the Chain Symbol Lists, 66
 - Symbology, 75
 - Month Code, 76
 - System Defaults, 77
 - Change Colors for Up Ticks and Down Ticks, 77
 - Change the Spin Button Defaults, 280
 - Set a Startup Page, 78
 - Set an Alarm for an Order Event, 282
 - Set Default Servers, 80
 - Set General Order Entry Defaults, 279
 - Set General RealTick Options, 80
 - Set Page Defaults, 80
 - Set Page Hotkeys, 79
 - Set Reserve Order Defaults, 282
 - Set the Price Display for RealTick, 79
 - Set Warnings to Display after a Specific Action, 283
 - Setting Button Colors, 285
 - Setting Order Entry Defaults for Quick Trading, 279
 - Setting Order Status Colors, 286
 - System Requirements, 11
 - Hardware Requirements, 11
- ## T
- Table, 135
 - Absolute, 137
 - Add a Symbol, 137
 - Add a Technical Analysis to a Table. *See* Technical Analysis
 - Calculate Volume Weighted Average Price, 138
 - Change a Column in a Table, 141
 - Change the Display of a Table, 140
 - Change the Price Display, 137
 - Create a Table, 135
 - Daily, 135
 - Differential, 137
 - Intraday, 135
 - Monthly, 135
 - Percent Change, 137
 - Ratio, 137
 - Table Menu, 30

- Transferring Data to other Applications, 139
- Weekly, 135
- TAL Alarms, 84
 - Create an Alarm, 85
 - TAL Alarms Menu, 44
- TAL Alerts, 89
 - Create an Alert, 89
 - Delete an Alert, 92
 - Open TAL Alerts, 89
 - Turn Off a Beeping Alarm, 92
- TAL Mail
 - Add a Mail Alert in the Status Bar, 60
 - Add a Sound Alert to TAL Mail, 60
- Technical Analysis, 183
 - Acceleration (ACC), 197
 - Accessing the Parameters Dialog Box, 186
 - Add a Technical Analysis to a Table, 185
 - Arms' Ease of Movement (EMV), 229
 - Average Range, 193
 - Bollinger Bands, 194
 - Commodity Channel Index (CCI), 210
 - D Averaged, 215
 - D Fast (%D), 213
 - D Slow (%Ds), 215
 - Directional Movement Indicators (PDI, MDI, DX, ADX), 233
 - K Fast (%K), 212
 - Kurtosis, 219
 - Kurtosis (KUR), 225
 - MACD Oscillator (CDO), 205
 - Mean, 220
 - Moments, 219
 - Momentum Oscillator (MOM), 196
 - Money Flow (FLO), 230
 - Monthly Average (AVG), 220
 - Moving Average Convergence Divergence (MCD), 202
 - Moving Average Momentum (MAM), 201
 - Moving Average Oscillator (MAO), 199
 - Moving Average Parameters, 188
 - Moving Averages, 186
 - Moving Linear Regression (MLR), 189
 - On Balance Volume (OBV), 227
 - Open Interest (OI), 227
 - Oscillators, 196
 - Parabolic Price/Time Study, 231
 - Percentage Offset, 191
 - Price and Volume Studies, 227
 - Price Studies, 186
 - Range Channel, 195
 - Rate of Change in Prices (RCP), 206
 - Relative Strength Index (RSI), 218
 - Signal Line (SIG), 204
 - Skew (SKW), 223
 - Standard Deviation (SD), 222
 - Stochastics, 212
 - Stochastics Parameters, 216
 - Study Availability Table, 184
 - Tick Count, 226
 - Upper Envelope/ Lower Envelope (UP/DN), 191
 - Variance (VAR), 220
 - Volatility (VO), 208
 - Volatility Ratio (VOR), 209
 - Volume (VOL), 226
 - Williams' Accumulation Distribution (WAD), 228
 - Williams' Percentage Range (%R), 216
- Tick Count (TCT), 226
- Ticker, 142
 - Change the Window Color of a Ticker, 146
 - Configuring a Quote Source, 143
 - Display a Ticker, 142
 - Ticker Menu, 31
- Time & Sales, 147

- Calculate Volume Weighted Average Price, 150
- Change the Print Color for Times & Sales, 152
- Color Scheme, 148
- Configuring Quote Sources, 150
- Copy Time & Sales Data for Another Application, 152
- Create a Time and Sales Report, 148
- Edit data in a Time & Sales Window, 151
- Time & Sales Menu, 40
- View Composite Exchange Data, 150
- View Data from Selected Exchanges, 150
- To view data for a specific symbol, 163
- TOP, 241
- Tracking Order, 244
- Trade Frequency, 249
- Trade with Another Account, 275
- Trailing Stop, 236
- Transaction Cost, 249
- Transaction Size, 249
- Transferring Data to other Applications, 139
- Trend Lines, 180
 - Copy a Trend Line, 181
 - Delete a Trend Line, 182
 - Draw a Trend Line, 180
 - Move a Group of Trend Lines, 181
 - Move a Trend Line, 181
 - Resize a Trend Line, 182
- Troubleshooting, 319
- Turbo Options, 153
 - Change the Width of a Column in Turbo Options, 157
 - Select an Exchange, 154
 - Sizing Columns, 157
 - Turbo Options Menu, 35

- View Details in a Turbo Options Window, 157
- Turn Off a Beeping Alarm, 92

U

- Upper Envelope/ Lower Envelope (UP/DN), 191
- Using Accounts, 275
 - Show Account Balance, 275
 - Trade with Another Account, 275
- Usual Suspects Scan, 326

V

- Variance (VAR), 220
- Vertical Zooming a Chart, 177
- Video Card, 12
- View a Statistic at a Specific Position on a Chart, 178
- View a Story, 95
- View a Ticker from a Single Source, 146
- View Composite Data, 144
- View Composite Exchange Data, 150
- View Data from a Single Exchange, 109
- View Data from a Single Source, 107
- View Data from a Specific Exchange, 143
- View Data from a Specific Market Maker, 144
- View Data from all Exchanges, 110
- View Data from all Sources
 - MarketMaker, 108
- View Details of a Specific Indication, 102
- View NASDAQ Stock Quotes from all Sources, 108
- View NASDAQ Stock Quotes from all Sources except ECNs, 109
- View NASDAQ Stock Quotes from ECNs only, 109
- View News Stories, 127

- View Next or Previous Page, 54
- View Stocks, 134
- View the Statistics in a Chart, 177
- View Your Account Balance, 313
- Volatility (VO), 208
- Volatility Ratio (VOR), 209
- Volume, 247
 - AON, 247
 - Partial, 247
- Volume (VOL), 226
- Volume and Open Interest Studies
 - On Balance Volume (OBV), 227
 - Open Interest (OI), 227
 - Tick Count, 226
 - Volume (VOL), 226
- Volume Hot Keys, 281

W

- Web Browser, 158
 - Earnings Calendar, 161
 - Earnings Surprises, 162
 - Industry Search, 161
 - Links to Web Sites, 159
 - Market Guide, 163
 - Navigate in a Web Browser Window, 159
 - Open a Link, 159
 - Open a Web Browser Window, 158

- Web Browser Menu, 43
- Zacks Brokerage Research Center, 160
- Weekly Chart, 166
- Williams' Accumulation Distribution (WAD), 228
- Williams' Percentage Range (%R), 216
- Window Menu, 45
- Windows Features
 - Close Button, 20
 - Drop-Down Lists, 24
 - Maximize Button, 20
 - Minimize Button, 20
 - Option Buttons, 24
 - Restore Down, 20
 - Right Mouse Button, 21
 - Window Border, 20
- Windows Features in RealTick, 20

Z

- Zacks Brokerage Research Center, 160
 - Annual Balance Sheet, 160
 - Annual Income Statement, 160
 - Company Profile, 160
 - Consensus Estimates, 160
 - Snapshot, 161