

OTC Dealer Version 7.0 USER GUIDE

Document Version 1.3 March 18, 2024

Change history

- 3/18/23 1.3 Updated as follows:
 - Added OTCN Closing Cross Dissemination Window.
 - Added Default Sells to Short trader preference.
- 2/7/23 1.2.2 Updated as follows:
 - Clarified behavior when OTCN is part of a MAX trade message.
- 12/19/22 1.2.1 Updated as follows:
 - Indicated that the Trades tab will display Irregular trades with an 'I'.
- 11/8/22 1.2 Updated as follows:
 - Added RFQ Send windows features.
- 8/18/22 1.1 Updated as follows:
 - Added flash and beep requirements and mute buttons to RFQ windows.
 - Changed RFQ TIF and Good For Time dropdown options.
- 4/18/22 1.0 Original Publication

Table of Content

1.	Intro	duction	1
2.	Splas	h Screen and Log-in Window	1
	2.1.	Splash Screen Properties	1
	2.2.	Failure to Connect Dialog	1
	2.3.	Log-in Window Properties	2
	2.4.	Duplicate Login Causes Logout	. 4
3.	Conn	ection Setup Window	5
	3.1.	General Window properties	5
	3.2.	Primary Network Area	5
	3.3.	Secondary Network area	6
	3.4.	Control buttons	6
4.	Main	Window	7
	4.1.	Menu Bar	7
	4.2.	Quick Window and Web Toolbar/Window	16
	4.3.	Open Close Buttons and Indicator	18
	4.4.	Security Section	18
	4.5.	Quote and Trade Information Section	21
	4.6.	Quote and Message Management Section	23
	4.7.	Bid Side Quote Management	28
	4.8.	Ask Side Quote Management	32
	4.9.	Montage	35
	4.10.	Scoreboard Section	39
	4.11.	OTC Link Message Section	47
	4.12.	Status and Alerts Section	52
5.	Incor	ning Message Window	53
	5.1.	Security Information Section	54
	5.2.	Message Focus Area	56
	5.3.	Fixed Size Button Area	57
	5.4.	Message Management Area	60
	5.5.	Incoming Message List	64
	5.6.	Expired Trade Messages and Execution List	65
	5.7.	Auto Ignore	65
6.	Mont	age Window	65
	6.1.	Security Input Field	66
	6.2.	Mntg Button	66

	6.3.	Add/Update Button	66
	6.4.	Security Name Area	66
	6.5.	Trade Information Area	66
	6.6.	Montage	67
	6.7.	Trade Report Area	67
7.	Add	Quote Dialog	67
	7.1.	Format of dialog	67
	7.2.	Bid field	67
	7.3.	Ask field	67
	7.4.	Bid Size field	68
	7.5.	Ask Size field	68
	7.6.	Bid QAP field	68
	7.7.	Ask QAP field	68
	7.8.	OW Button	68
	7.9.	Bid Unp Button	68
	7.10.	BW Button	68
	7.11.	Ask Unp Button	68
	7.12.	Bid QAP Size Button Row	68
	7.13.	Ask QAP Size Button Row	69
	7.14.	Default QAP Button	69
	7.15.	Unsolicited Quote checkbox	69
	7.16.	Non-Affiliate checkbox	69
	7.17.	Lock/Cross checkbox	69
	7.18.	ATS Only	69
	7.19.	Add button	69
	7.20.	Cancel button	70
8.	Upda	te Quote Dialog	70
	8.1.	Format of dialog	70
	8.2.	Bid field	70
	8.3.	Ask field	70
	8.4.	Bid Size field	70
	8.5.	Ask Size field	71
	8.6.	Bid QAP field	71
	8.7.	Ask QAP field	71
	8.8.	OW Button	71
	8.9.	Bid Unp Button	71
	8.10.	BW Button.	71

	8.11.	Ask Unp Button	71
	8.12.	Bid QAP Size Button Row	71
	8.13.	Ask QAP Size Button Row	71
	8.14.	Default QAP Button	72
	8.15.	Unsolicited Quote checkbox	72
	8.16.	Non-Affiliate checkbox	72
	8.17.	Lock/Cross checkbox	72
	8.18.	ATS Only	72
	8.19.	Update button	72
	8.20.	Cancel button.	73
9.	Trade	e Message Dialog	73
	9.1.	Common Trade Messages parameters	73
	9.2.	Preset Size buttons	77
	9.3.	Market Maker information	79
	9.4.	Command Buttons	81
10). MAX	K Trade Message Dialog	82
	10.1.	Common Message parameters	83
	10.2.	Preset Size buttons	86
	10.3.	Market Maker information	88
	10.4.	Command Buttons	88
11	. Coun	iter Message Dialog	89
	11.1.	Common Trade Message parameters	89
	11.2.	Command Buttons	91
12	2. Exec	ution Confirmation Window	92
	12.1.	Window properties	92
13	B. OTC	N Open Orders	93
	13.1.	Window properties	93
14	. OTC	N Closing Cross Disseminaiton	94
	14.1.	Window properties	94
15	i. Expii	red L1 Trade Msgs Window	95
	15.1.	Window properties	95
16	5. Send	RFQ (Request For Quote)	96
	16.1.	Send RFQ parameters	97
	16.2.	Previously Sent RFQ parameters	100
17	. Rece	ived RFQ	103
	17.1.	Received RFQ parameters	104
18	8. Mind	ler Windows	107

18.1.	Window properties	107
18.2.	Configure Dialog	108
18.3.	Columns	109
18.4.	Contextual Menu	113
19. Ticl	ker Windows	114
19.1.	Window properties	114
19.2.	Ticker Entries	115
19.3.	Contextual menu	115
20. Spe	ed Keys Window	117
20.1.	Window properties	117
20.2.	Arranging Speed Keys buttons	117
20.3.	Speed Key Button	118
20.4.	Contextual Menu	118
21. Quo	ote Guard Window	118
21.1.	Window Properties	118
21.2.	Configuring Quote Guard Window	120
22. Nev	ws Window	121
22.1.	Window Properties	121
23. Cor	mpliance Data Window	122
23.1.	Window Properties	122
24. Twi	itter Window	123
24.1.	Window Properties	123
25. Blu	e Sky Window	124
25.1.	Window Properties	125
26. Sec	urity Preferences Dialog	125
26.1.	Window Properties	125
27. Tra	der Preferences Dialog	128
27.1.	Window properties	128
27.2.	General Tab	129
27.3.	Outgoing Message Section	133
27.4.	Incoming Message Tab	136
27.5.	Risk Tab	140
27.6.	RFQ Tab	143
28. Ale	rts Window	145
28.1.	Window Properties	145
28.2.	Alerts List area	145
28.3.	Alerts Detail area	146

2	8.4.	Control Button area	146
29.	Mar	age Trader Proxying Dialog	147
2	9.1.	Window Properties	147
2	9.2.	Trader List area	147
2	9.3.	Control Button area	147
30.	Uplo	oad Log File Dialog	148
3	0.1.	Window properties	148
31.	Cha	nge Password Dialog	149
3	1.1.	Window properties	149
32.	Abo	ut Dialog	150
33.	Save	e and Reload Desktop	151

1. Introduction

The OTC Dealer is an application that provides access to OTC Markets Group's OTC LinkATS; a Quotation and Messaging service. The OTC Link Quotation Service allows market participants to publish quotes that are disseminated in real-time over the Firm's proprietary network and through market data vendors. The OTC Link Messaging Service ("trade messaging") allows our broker-dealer customers to send trade negotiation messages and execution messages directly to other market participants.

The OTC Dealer connects to the Firm's servers either through a direct connection or across the public Internet. A dedicated connection is recommended when connecting over the Internet, using either a T1 (or higher), a DSL, or cable modem connection.

This guide describes the OTC Dealer application version 6.16. OTC Dealer is only supported on Windows XP operating systems, and later. Throughout the guide it is expected that users have basic knowledge of how to operate a computer, i.e., point and click, select menu items, and manipulate windows.

2. Splash Screen and Log-in Window

The Splash Screen is shown after launching Dealer. It's visible until Log-in window is shown. Login window is also shown when user has logged out of the application. The log-in window is hidden when user is logged in.

2.1. Splash Screen Properties

Splash Screen shows the version number and progress of startup.



When connection is successful the window is closed or hidden and the Log-in window appears.

2.2. Failure to Connect Dialog

If there is a failure to connect to OTC Markets' servers, the dialog below is shown immediately after opening the Log-in window.



When dialog is dismissed user is returned to Log-in window.

2.3. Log-in Window Properties



2.3.1 Setup Menu

See Setup Menu under Main Window

2.3.2 Help Menu

See Help Menu under main window

2.3.3 Market Maker ID field

Field for typing in a four character market maker ID. It will not allow more than 4 character input. The text in this field is not case sensitive.

2.3.4 User ID field

A field for typing in the user ID. It will not allow more than 10 character input. The text in this field is not case sensitive.

2.3.5 Password field

A field for typing in a password. Password input is hidden by showing any character input as bullets instead of actual characters. It will not allow more than 18 character input. Text in this field is case sensitive.

The minimum number of characters is 12, and there must be at least one uppercase letter, at least one lowercase letter and at least one numeral. An attempt that does not meet these requirements will be rejected.

Dealer encrypts the password before sending to the server.

2.3.6 Sign In button

The Sign In button submits the content of fields Market Maker ID, User ID and Password to the server in order to establish a connection.

While Dealer is attempting to sign in, a blue text "Logging In" is displayed below the Sign In button.

2.3.7 Quit Dealer button

The Quit Dealer button, when clicked it closes the Dealer application immediately, without presenting the user with a dialog to confirm.

2.3.8 Connection Notification Text

If there is a connection problem connecting to OTC Markets servers, an error string will be displayed in black above the user input fields. The string reads:

"There was a failure connecting to the OTC Markets server. Please contact your network administrator, or a OTC Markets support technician at 1-800 LIST-OTC."

The Sign In button will be disabled when Dealer cannot connect to servers. When in this state, Dealer attempts to reach the servers every 30 seconds. If successful, the Connection Notification Text is cleared and Sign In button enabled again.



2.3.9 Bad Username Notification String

Is user enters a bad MarketMakerID, UserID or Password, the message "Invalid TraderID or Passwordis displayed in red below the Sign In button.



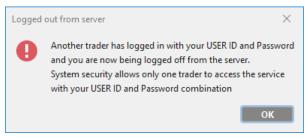
2.3.10 New Version Notification

Depending on the version used, text may show below the OTC Markets logo and optionally a "Download" button may show if user has the option or is required to download a new version. There are 4 types of versions:

- Current version this is the current production release. When attempting to sign in with this version the Sign In window simply states the current version number below the OTC Markets logo.
- Supported version this is an earlier version which can be used to sign in, but will be
 presented with a text announcing a new version available. User is then given the
 option to download this version or continue to use current version.
- Preliminary version this is mainly used for beta releases. When using this version then Sign In window will behave just like when using Current version.
- Unsupported version this is a version that is not listed as a supported version in any
 of the above. If attempting to use this version then login window will not allow logins,
 but will show a message that the version is not supported and a newer version must be
 downloaded.

2.4. Duplicate Login Causes Logout

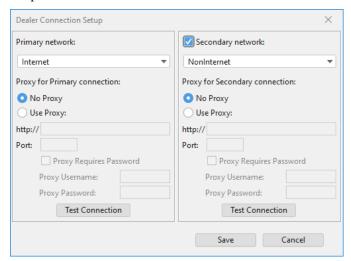
If another user logs in with the same username as another user is currently logged with, the first user is logged out and gets the warning dialog below.



After this the Dealer returns to the login-window.

3. Connection Setup Window

The Connection Setup Window is opened when user selects the <u>Connection Setup...</u> command from the Setup menu.



3.1. General Window properties

Window is opened by selecting the Connection Setup... command. See Connection Setup.

3.2. Primary Network Area

The Primary Network area is used for specifying a primary connection for Dealer to connect to OTC Link. The configuration of setting up different network connections is outside the scope of this chapter.

3.2.1 Primary Connection List pop-up

Enabled and visible: always

Function: This displays all available connections in a pop-up. User selects the preferred connection from this menu.

3.2.2 Proxy settings

3.2.2.0. Proxy radio buttons

Enabled and visible: always

Function: two radio buttons to specify if there is a proxy setting or not

3.2.2.1. Proxy http field

Enabled: only when Proxy radio buttons is set to Use proxy

Function: allows entry of IP or URL to the connecting proxy. Caption is "http://". User types in the URL or IP address without the http:// which will be applied to the text automatically.

3.2.2.2. Proxy port field

Enabled: only when Proxy radio buttons is set to Use proxy

Function: allows entry of a numerical value representing the port the proxy server works on.

3.2.2.3. Proxy Requires Password checkbox

Enabled: only when Proxy radio buttons is set to Use proxy

Function: a checkbox allowing users to specify if the proxy requires a password.

3.2.2.4. Proxy Username field

Enabled: only when Proxy requires a password checkbox is set Function: allows entry of a user name string for proxy username

3.2.2.5. Proxy Password field

Enabled: only when Proxy requires a password checkbox is set Function: allows entry of a password string for proxy password

3.2.3 Test Connection button

Enabled: always

Function: when clicked the connection test verifies that the Dealer can connect to the URL specified in listhost.properties such as http://www.otcquote.com/internet.. It will follow up and try connecting to the URLs specified by the keys files identified in version.properties such as https://216.203.58.26/mds/client

3.3. Secondary Network area

The secondary network section is identical to the primary network section apart from a checkbox as defined below. The secondary network settings are independent of the primary settings and changing primary will have no effect on secondary and vice versa.

3.3.1 Secondary Network checkbox

Visible and enabled: always

Function: when checked, all other buttons and fields in the Secondary network section are enabled. When not checked they are not enabled and cannot be changed.

Setting this checkbox indicates a secondary network is specified. If this checkbox is not checked, Dealer will never attempt to use the secondary network settings even though a secondary network has been specified.

3.4. Control buttons

3.4.1 Save button

Visible and enabled: always

Function: when clicked it will save the Connection settings. If the login-window is currently showing it will also re-validate the validity of the network connection and if the server at the address specified is reachable, will enable input fields on the log-in screen.

3.4.2 Cancel button

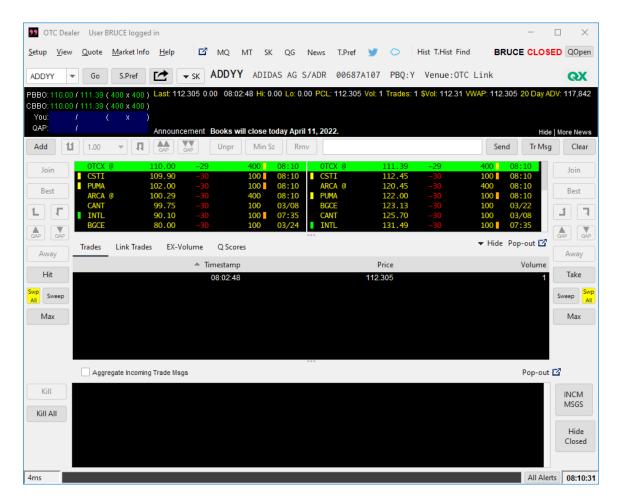
Visible and enabled: always

Function: when clicked it will close the window without saving or asking user to confirm close.

4. Main Window

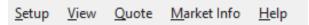
Main window is always visible when user is logged in. It cannot be closed. It can be minimized.

The window has Minimize, Maximize and Exit boxes. If Exit box is clicked it's as if user has issued the Exit Dealer menu command.

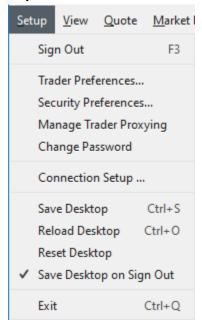


4.1. Menu Bar

The Menu Bar lies at the top of the Main Window.



4.1.1 Setup Menu



4.1.1.1. Sign Out...

Enabled: Only when user is logged in.

Short key: F3

Action: When user selects this command it will present user with a confirmation dialog asking if they would like to sign out. If user declines, then sign out is abandoned. If user confirms, a second dialog will show if user has quotes open, asking if user likes to close their market. If user declines then logout will continue without closing quotes, else if user accepts quotes will be closed prior to logging out. A save desktop will then be done if user has the Save Desktop of Exit item set. When logged out, user is returned to Sign in window and all other windows and dialogs will close.

4.1.1.2. Trader Preferences...

Enabled: Only when user is logged in.

Short key: none

Action: When user selects this command it will open the Trader Preferences dialog. See *Trader Preferences Dialog*

4.1.1.3. Security Preferences...

Enabled: Only when user is logged in.

Short key: none

Action: When user selects this command it will open the Security Preferences dialog. See *Security Preferences Dialog*

4.1.1.4. Manage Trader Proxying...

Enabled: Only when user is logged in.

Short key: none

Action: When user selects this command it will open the Manage Trader Proxying dialog. See *Manage Trader Proxying Dialog*

4.1.1.5. Change Password...

Enabled: Only when user is logged in.

Short key: none

Action: When user selects this command it will open the Change Password dialog. See *Change Password Dialog*

4.1.1.6. Connection Setup...

Enabled: Always

Short key: none

Action: When user selects this command it will open the Connection Setup dialog. See

Connection Setup Dialog

4.1.1.7. Save Desktop

Enabled: Only when user is logged in.

Short key: Ctrl-S

Action: When user selects this command it will Save the Desktop, meaning position, size and in some cases setup of all open windows is recorded to database, to be later retrieved when desktop is reloaded.

4.1.1.8. Reload Desktop

Enabled: Only when user is logged in.

Short key: Ctrl-O

Action: When user selects this command it will reload the Desktop, meaning all windows' size and location will be set as was previously saved with Save Desktop.

4.1.1.9. Reset Desktop

Enabled: Only when user is logged in.

Short key: none

Action: When user selects this command it will reset the Desktop, setting location and size of windows to the default position as for new users.

4.1.1.10. Save Desktop on Sign Out

Enabled: Only when user is logged in.

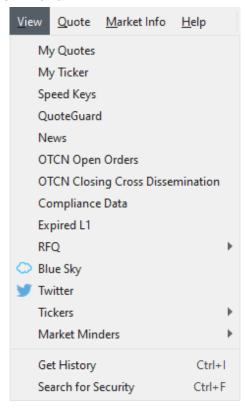
Short key: none

Action: This is a checkbox menu item, selecting this item reverses the setting of the checkbox. On log-out, if this checkbox is set an automatic Save Desktop will be performed. The setting of this checkbox is saved immediately to database whenever user changes the setting.

4.1.1.11. **Exit**

Enabled: Always Short key: Ctrl-Q Action: If user is not logged out it will Quit the OTC Dealer application immediately. If user is logged out, it will first ask user if he wants to Sign out and Exit the application. If user declines, the Exit process ends. If user confirms, a second dialog will show if user has quotes open, asking if user likes to close his market. If user declines then exit will continue without closing quotes, else if user accepts quotes will be closed prior to exiting out. A save desktop will then be done if user has the Save Desktop of Exit item set. All windows will then close.

4.1.2 View Menu



4.1.2.1. My Quotes

Enabled: Only when user is logged in.

Short key: None

Action: Opens up the My Quotes window or brings to front if already open. See *Minder windows*

4.1.2.2. My Ticker

Enabled: Only when user is logged in.

Short key: None

Action: Open up the My Ticker window or brings to front if already open. See <u>Ticker</u> <u>windows</u>

4.1.2.3. **Speed Keys**

Enabled: Only when user is logged in.

Short key: None

Action: Open up the Speed Keys window or brings to front if already open. See <u>Speed</u> Keys Window

4.1.2.4. Quote Guard

Enabled: Only when user is logged in.

Short key: None

Action: Open up the Quote Guard window or brings to front if already open. See Quote Guard Window

4.1.2.5. **News**

Enabled: Only when user is logged in.

Short key: None

Action: Open up the News window or brings to front if already open. See News Window

4.1.2.6. OTCN Open Orders

Enabled: Only when user is logged in.

Short key: None

Action: Opens the OTCN Open Orders window. See OTCN Open Orders window.

4.1.2.7. OTCN Closing Cross Dissemination

Enabled: Only when user is logged in.

Short key: None

Action: Opens the OTCN Closing Cross Dissemination window. See *OTCN Closing Cross Dissemination window*.

4.1.2.8. Compliance Data

Enabled: Only when user is logged in.

Short key: None

Action: Opens the Compliance Data window.

4.1.2.9. Expired L1

Enabled: Only when user is logged in.

Short key: None

Action: Opens up the Expired L1 Trade Msgs window or brings to front if already open. See *Expired L1 Trade Msgs window*.

4.1.2.10. **RFQ**

Enabled: Only when user is logged in.

Short key: None

Action: A menu with 2 submenus, 'Send' and 'Receive'. Each is only enabled, when the trader is enabled to send and/or receiver RFQs, <u>respectively</u>. When the Send submenu is selected, it opens up the Send RFQ window. See <u>Send RFQ</u>. When the Receive submenu is selected, it brings the Receive RFQ menu to the front. See <u>Receive RFQ</u>.

4.1.2.11. Blue Sky

Enabled: Only when user is logged in.

Short key: None

Action: Opens the Blue Sky window.

4.1.2.12. **Twitter**

Enabled: Only when user is logged in.

Short key: None

Action: Opens the **Twitter window**.

4.1.2.13. **Tickers**

Enabled: Only when user is logged in.

Short key: None

Action: A menu with 5 submenus, Titled Ticker 1 through Ticker 5. When these submenus are selected it opens up the corresponding ticker or brings to front if already open. See *Ticker windows*

4.1.2.14. Market Minders

Enabled: Only when user is logged in.

Short key: None

Action: A menu with 4 submenus, Market Minder 1 through Market Minder 5. When these submenus are selected it opens up the corresponding market minder or brings to front if already open. See *Minder windows*

4.1.2.15. **Get History**

Enabled: Only when user is logged in.

Short key: Ctrl-I

Action: Open up the History Server window on the front page in a new browser window.

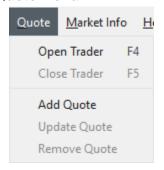
4.1.2.16. Search for Security

Enabled: Only when user is logged in.

Short key: Ctrl-F

Action: Open up the History Server window on the Search Security page in a new browser window.

4.1.3 Quote Menu



4.1.3.1. Open Trader

Enabled: Only when user is logged in and is closed.

Short key: F4

Action: Opens trader by submitting an Open Trader command to OTC Link

4.1.3.2. Close Trader

Enabled: Only when user is logged in and is open.

Short key: F5

Action: Closes trader by submitting an Close Trader command to OTC Link

4.1.3.3. Add Quote

Enabled: Only when user is logged in, a security is loaded on the montage and the market maker currently logged in does not have a quote for the security on montage.

Short key: CTLR-U

Action: Opens Add Quote dialog.

4.1.3.4. Update Quote

Enabled: Only when user is logged in, a security is loaded on the montag and the market maker currently logged in has a quote for the security on montage.

Short key: CTLR-U

Action: Opens Update Quote dialog.

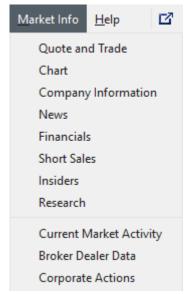
4.1.3.5. Remove Quote

Enabled: Only when user is logged in, a security is loaded on the montage and the market maker has a quote for the security on the montage.

Short key: none

Action: Displays a confirmation dialog asking user to confirm deletion. If user declines then operation is aborted. If user confirms, the quote for the security on montage is withdrawn.

4.1.4 Market Info Menu



4.1.4.1. Quote and Trade

Enabled: Only when user is logged in and a security is loaded on the montage.

Short key: none

Action: Opens up the Quote page on otcmarkets.com in a new browser window specifying the security on the montage to display

http://www.otcmarkets.com/stock/symbol/quote

4.1.4.2. Chart

Enabled: Only when user is logged in and a security is loaded on the montage.

Short key: none

Action: Opens up the Chart page on otcmarkets.com in a new browser window specifying the security on the montage to display

http://www.otcmarkets.com/stock/symbol/chart

4.1.4.3. Company Information

Enabled: Only when user is logged in and a security is loaded on the montage.

Short key: none

Action: Opens up the Company Profile page on otcmarkets.com in a new browser window specifying the security on the montage to display

http://www.otcmarkets.com/stock/symbol/profile

4.1.4.4. **News**

Enabled: Only when user is logged and a security is loaded on the montage.

Short key: none

Action: Opens up the News page on otcmarkets.com in a new browser window specifying the security on the montage to display

http://www.otcmarkets.com/stock/symbol/news

4.1.4.5. Financials

Enabled: Only when user is logged in and a security is loaded on the montage.

Short key: none

Action: Opens up the financials page on otcmarkets.com in a new browser window specifying the security on the montage to display

http://www.otcmarkets.com/stock/symbol/financials

4.1.4.6. **Short Sales**

Enabled: Only when user is logged in

Short key: none

Action: Opens up the short interest page on otcmarkets.com in a new browser window specifying the security on the montage to display

 $\underline{http://www.otcmarkets.com/stock/symbol/short-sales}$

4.1.4.7. Insiders

Enabled: Only when user is logged in

Short key: none

Action: Opens up the insider transactions page on otcmarket.com in a new browser window specifying the security on the montage to display

http://www.otcmarkets.com/stock/symbol/insider-transactions

4.1.4.8. Research

Enabled: Only when user is logged in

Short key: none

Action: Opens up the research reports page on otcmarkets.com in a new browser window specifying the security on the montage to display

http://www.otcmarkets.com/stock/symbol/research

4.1.4.9. Current Market Activity

Enabled: Only when user is logged in

Short key: none

Action: Opens up the Market Activity – Current Market page on otcmarkets.com in a new

browser window

http://www.otcmarkets.com/marketActivity/current-otc-market

4.1.4.10. Market Maker Data

Enabled: Only when user is logged in

Short key: none

Action: Opens up the Market Activity – Market Maker Data page on otcmarkets.com in a new browser window.

http://www.otcmarkets.com/marketActivity/market-maker-info

4.1.4.11. Corporate Actions

Enabled: Only when user is logged in

Short key: none

Action: Opens up the Corporate Actions – Symbol Changes page on otcmarkets.com in a

new browser window.

 $\underline{http://www.otcmarkets.com/marketActivity/symbol-changes}$

4.1.5 Help Menu



4.1.5.1. **On-line Help**

Enabled: Always Short key: none

Action: Opens up the HTML user manual in a new browser window

http://www.otcdealer.com/manuals/

4.1.5.2. Upload Log File

Enabled: Always
Short key: none

Action: Begins Log File packaging and upload to OTC Markets. If a connection cannot be made then manual upload option is presented. See 'Upload Log File'

4.1.5.3. Log Level

Enabled: Always. Display the following three radio buttons:

Debug radio button

Visible and enabled: always

Default for new user: radio button is not set

Function: When this radio button is set, captures all the message traffic between OTC Dealer and OTC Markets' servers. This setting allows for a better understanding of application issues but also affects performance. For this reason, the default setting for 'Debug' is not set.

Info radio button

Visible and enabled: always

Default for new user: radio button is set

Function: When this radio button is set, captures normal event logging.

Warn radio button

Visible and enabled: always

Default for new user: radio button is not set

Function: When this radio button is set, only warnings errors and fatal errors are captured and logged.

4.1.5.4. About OTC Dealer

Enabled: Always
Short key: none

Action: Shows the About dialog, see About dialog.

4.2. Quick Window and Web Toolbar/Window



4.2.1 Window Pop-out button

Visible and enabled: Always when user is logged in



Action: Pops out the Window and Web Toolbar in a new window, leaving the area on main window that used to occupy the buttons as blank. The window can be positioned anywhere on screen while always staying on top of other windows, and minimized or maximized like normal windows. Instead of a close button it has a pop-in button, which pops it back into the main window. The size and position of the toolbar is saved with desktop save.

4.2.2 MQ button

Visible and enabled: Always when user is logged in

Action: Opens up the My Quotes window or brings to front if already open. See *Minder windows*.

4.2.3 MT button

Visible and enabled: Always when user is logged in

Action: Opens up the My Ticker window or brings to front if already open. See <u>Ticker windows</u>.

4.2.4 SK button

Visible and enabled: Always when user is logged in

Action: Opens up the Speed Keys window or brings to front if already open. See <u>Speed Keys Window</u>.

4.2.5 QG button

Visible and enabled: Always when user is logged in

Action: Opens up the Quote Guard window or brings to front if already open. See **Quote Guard** Window.

4.2.6 News button

Visible and enabled: Always when user is logged in

Action: Opens up the News window or brings to front if already open. See News window.

4.2.7 T.Pref button

Visible and enabled: Always when user is logged in

Action: Opens up the Trader Preferences dialog or brings to front if already open

4.2.8 Twitter Icon

Visible and enabled: Always when user is logged in

Action: Opens the Twitter window

4.2.9 Blue Sky Cloud Icon

Visible and enabled: Only when when Market Maker is entitled for the Blue Sky service

Function: Clicking this takes the user to the <u>Blue Sky window</u>.

4.2.10 **Hist button**

Visible and enabled: Always when user is logged in

Action: when clicked, it opens the front page of History Server in a browser window.

4.2.11 T.Hist button

Visible and enabled: Always when user is logged in

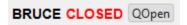
Action: When clicked this button brings up History Server, directs to the OTC Link Messages page and pre enters symbol as the current symbol on Montage and MM as current Market Maker.

4.2.12 Find button

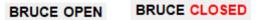
Visible and enabled: Always when user is logged in

Action: when clicked, it opens the History Server in a browser window and automatically opens the *Security Search* tab.

4.3. Open Close Buttons and Indicator



4.3.1 Open/Closed indicator



Visible: Always

Action: Shows the trader ID of the currently logged in user together with "OPEN" in black if user is open or "CLOSED" in red if user is closed.

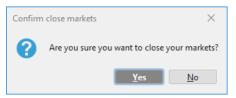
4.3.2 Qopen/Qclose button

Visible and enabled: Always when user is logged in

Action: Depending on the open/closed status of the logged in user, this button will be Qopen if user is closed or Qclosed if user is open.

Clicking the Qopen button submits an Open Trader command to OTC Link.

Clicking the Qclosed button presents the user with a dialog to confirm user wants to close the quotes.



If user clicks No, dialog closes and close quote is aborted. If user clicks Yes, Dealer will submit a Close Trader command to OTC Link.

4.4. Security Section

The Security Section is immediately below the menu bar.



4.4.1 Symbol input box

Enabled: Always

Function: allows input of alphanumeric and digits specifying a security, in any of the formats below:

Symbol: 1 to 5 alphanumerical characters, with optional "." And a symbol suffix appended

Security ID: a numerical value from 1 to 999,999

CUSIP: a 9 character identifier with mixed alphanumerical and digits

TRACE: up to 10-character identifier for bonds

The text in symbol input box is automatically selected/highlighted when user clicks on field.

Tab key while in Symbol input box moves cursor to Message entry box. Down arrow while in box shows the Previous Symbol Drop Down menu, below.

4.4.2 Previous Symbol Drop Down Menu

Visible and enabled: Always

Function: Displays most recent securities viewed in the montage. User can set the number of securities from 0 to 30 in the General tab of the Trader Preference screen. Security can be selected with up and down keys, left and right keys, or with the mouse. If security is selected then it populates the Symbol Input Box and submits the security.

4.4.3 **GO** button

Visible and enabled: Always

Function: submits the content of the Symbol input box. If the security is valid it shows what was entered and selects the whole text (for text input to overwrite content of field). If security was not valid it clears the field and places the cursor in the field ready for new input string.

4.4.4 S.Pref button

Visible and enabled: Always

Function: Opens the Security Preferences dialog. If a valid security is on the montage it further sets input of Security Preferences to add or edit the preferences of the security.

4.4.5 Montage Pop-out Button

Visible: Always

Function: Each click of this button opens up a new Montage window.

4.4.6 SK Drop Down Menu

Visible and enabled: Only visable when at least one security has the Speed Keys checkbox checked in the Security Preferences dialog.

Function: Clicking displays a drop down menu of Speed Key securities. Clicking a security loads the corresponding security on the montage.

4.4.7 Security Information

Visible: Always

Function: After logon and before user attempts to display security quotes, this area is blank.

When user has specified a valid security via the Symbol input box, this section will show the following information:

The Status information is only shown when Status is not Active. When status is other than Active, then the status is highlighted by showing it as red text. When the status is Halted, which represents a regulatory halt, the text will be: "Halted – all quotes and IOIs are immediately considered canceled". When the status is Internal Halt, which represents a halt only within OTC Link, the text will be: "OTC Link Halted".

When user has not specified a valid security via the Symbol input box, this section will show the following information:

SYMBOL - Unknown security, or has no market maker quotes.

The valid primary venues are the following:

- OTCQX, when security is quoted on OTCQX
- OTC Link, when security is quoted on OTC Link and not OTCQX
- Yellow Sheets, for bonds in OTC Link
- OTCBB & PQ, when security is dually quoted on OTCBB and OTC Link
- OTCBB, when security is quoted exclusively on the OTCBB
- NASDAQ, when security is primarily quoted on NASDAQ
- NYSE, when security is primarily quoted on NYSE MKT (Amex)
- ARCA, when security is primarily quoted on ARCA

4.4.8 Security Information Tool Tip

CUSIP	67106F108
OTC ID	128054
Tier	OTCQX U.S. Premier
Venue	OTC Link
PBQ	Yes
Penny Stock Exempt	Yes
144A-QIB Only	No

Visible: Only when mouse hovers over Security Information section.

Function: Displays detailed security information

This tool tip will show the following information:

CUSIP security CUSIP, OTC ID OTC security ID, Tier OTC Tier, Venue: Venue name, PBQ: PiggyBack status Yes or No, Penny Stock Exempt: Excempt Yes or No, 144A-QIB Only: Yes or No.

4.4.9 Venue Icons

Visible: Only when a valid security is specified in the Symbol input box.

Function: After logon and before user attempts to display security quotes, this area is blank.

When user has specified a valid security via the Symbol input box that has a primary venue on OTC Link, this section will show an icon depending on the primary venue or tier:

QX	отсох
QB	ОТСОВ
Pink	Pink
	Grey Ma



Expert

All other venues will not show an icon.

These icons and venues can be updated in real-time from OTC Link when a new venue or icon is introduced.

A Caveat Emptor icon is shown when security has been marked as such. The Caveat Emptor will always override any venue icon, i.e. only the Caveat Emptor icon will show if security is identified as Caveat Emptor.



4.5. Quote and Trade Information Section

The Quote and Trade Information Section is below the Security Section.



4.5.1 **NBBO / PBBO**

Visible: Caption is always visible

Function: When a non-NMS security is viewed on the montage, PBBO will show the highest bid and the lowest ask across any market (OTCM or BB), not including ARCA, along with the corresponding sizes. If there is more than one OTCM quote at the inside, the displayed size will be the aggregate. The aggregate will not include BB quotes at the inside. The highest bid and lowest ask across all markets is the NBBO. See *Quote Ranking*.

For NMS securities, NBBO will always show the NMS inside when user is entitled to view it, regardless if there is a better inside on OTC Link. If user is not entitled to view NMS data, this area is blank.

Inside quote is shown as: NBBO or PBBO: bid price / ask price (bidsize x asksize)

The color of quote information is green if quote comes from OTC Link, cyan (light blue) if it comes from the external market (OTCBB) and the quote on inside is OTC Linkable, else it's purple. Each side of PBBO is colored independently.

4.5.2 **CBBO**

Visible: Caption is always visible

Function: CBBO will show the highest bid and the lowest ask across any market (OTCM or BB), but also includes ARCA, along with the corresponding sizes.

4.5.3 Your quote (YOU)

Visible: Caption is always visible

Function: When a security is viewed on the montage, it will show your firm's best quote for the stock on OTC Link or OTCBB. Best quote is the higher of the bid on OTC Link or OTCBB and lower of the ask on OTC Link or OTCBB.

Quote is shown as: You: bid price / ask price (bidsize x asksize). Each side of your quote is colored according to following rule, both price and size: If it's on the OTC Link inside it's

green, OTC Link but not on inside it's yellow, priced on OTCBB and OTC Linkable it's cyan, priced on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Unpriced is not considered in this respect, so price on one venue and unpriced on other would not qualify for this price differential rule. Background is dark blue, unless market maker has quotes both on OTC Link and external market (OTCBB) and the prices don't match, then background is red.

4.5.4 **QAP**

Visible: Caption is always visible when QAP functionality is system enabled

Function: When a security is viewed on the montage, it will show your firm's QAP for the stock on OTC Link.

QAP is shown as: QAP: bid QAP / ask AQP. QAP values range from -30 to +30. Negative values are shown in red, positive in green. If QAP is 0, then the corresponding side(s) are blank and no value shown. Background is dark blue, unless market maker has quotes both on OTC Link and external market (OTCBB) and the prices don't match, then background is red.

4.5.5 Trade information

.ast: 🔺 10.02 -0.17 (-1.67%) 10:47:32 Hi: 10.02 Lo: 9.84 PCL: 10.19 Vol: 347 Trades: 2 \$Vol: 3,432.48 WWAP: 9.89187 20 Day ADV: 3,775,889

Visible: only when a security is on the montage

Function: The content of the Trade information area depends on trader entitlement for NASDAQ trade information, if the security has current trade information or not, and if the stock has been updated with trade information for the day:

- Trader is not entitled for NASDAQ trade information: The following text is shown in white font "You are not entitled for viewing trade information. Call 1 800 LIST OTC to subscribe"
- A separate entitlement is required to view NMS trade information. When not entitled for NMS the following text is shown in white font when viewing NMS security on montage, overriding any text defined below: "You are not entitled to view NMS information. Please call 1 800 LIST OTC to subscribe"
- No security on montage and trader is entitled: area is blank
- Security does not have any trade information and trader is entitled: The following text is shown in gray font "Trade information is currently not available".
- Security does have trade information from previous days and trader is entitled: The following text is shown in yellow caption with white values "Previous Close Price: xxx.xxxx Previous Close Date: mm/dd/yyyy".
- Security does have current trade information and trader is entitled: The following text is shown in yellow caption, color of text is white unless otherwise specified:
- Last: tick arrow, last price, net change (net percentage change), and time of last trade tick is green up arrow if last price is higher than previous trade, red down arrow if lower or blank if no change. Last price formatted with up to 4 decimal places. Net change up to 4 decimal places. Net percentage change two decimal %. Time of last trade is HH:MM:SS. All values are based on the last round or mixed lot execution. Odd lot executions will not change currently displayed values. If only odd lots have traded today, all these fields will be blank.
- Hi: high price of the day show with up to 4 decimal places, 2 decimal places at least Lo: low price of the day show with up to 4 decimal places, 2 decimal places at least PCL: previous day's close price show with up to 4 decimal places, 2 decimal places at least

Vol.: total share volume for the day – integer number, format as #,###

Count: number of trades today – integer number, format as #,###

Total Value: the value of shares traded today – integer number, format as #,###

- VWAP: volume weighted average price for shares traded during current session
- 20 Day ADV: selected security's 20 day Average Daily Volume (ADV). The time period will represent the previous (rolling) 20 market trading days. The volume will be rounded down (truncated) to the next lowest share (i.e., no fractional shares).

4.5.6 News information

Visible: only when a security is on the montage



Function: The content of the News area depends on whether there is News/Financial Reports associated with the specific security for that specific trading day. The first phase of News Alerts will only display news releases and financial reports created in or uploaded to OTCIQ. Users may access the complete release or report by selecting the release/report title link.

4.5.6.1. Title Link

Visible: Only when news alert is available for specific security for that trading day

Action: Opens up the specific news release/financial report page on otcmarkets.com in a new browser window specifying the security on the montage to display

4.5.6.2. **Hide Link**

Visible: Only when news alert is available for specific security for that trading day

Action: Hides news item from trade data window and is replaced by a 'Show' Link

4.5.6.3. Show Link

Visible: Only when news alert is available for specific security for that trading day and user has elected to hide news information

Action: Displays news item in trade data window and is replaced by a 'Hide' Link

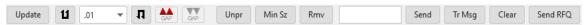
4.5.6.4. More News Link

Visible: Always

Action: Opens up the general news release/financial report page on otcmarkets.com in a new browser window specifying the security on the montage to display

4.6. Quote and Message Management Section

A series of buttons above the montage. These buttons control both sides of the quote. Also a text input field for entering OTC Link trade message strings or quote update strings, with appropriate buttons to send the command strings. Finally, buttons to open up external windows for security searches and historical information.



4.6.1 Add button

Visible: When displaying an invalid security, or when displaying a valid security and the trader's firm does not have a quote for the security. Otherwise it's not visible. The Add button is in the same location as the Update button, only one can be visible at any time.

Enabled: Only when displaying a valid security

Function: When clicked it opens up the Add Quote dialog. See Add Quote Dialog.

4.6.2 Update button

Visible: Only when displaying a valid security and the trader's firm does have a quote for the security. The Update button is in the same location as the Add button, only one can be visible at any time.

Enabled: always when displayed

Function: When clicked it opens up the Update Quote dialog. See *Update Quote Dialog*.

4.6.3 Double Bid/Ask Up button

Visible: always

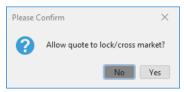
Enabled: Only when displaying a valid security and the trader's firm does have a priced quote on both sides of the market for the security.

Function: for non-unsolicited quotes, submits a quote update, increasing both the bid and the ask side of the trader's quote by the amount of the price pop-up indicator. Size is set to minimum quote size. For unsolicited quotes, clicking this button sets both sides of quote to Unpriced.

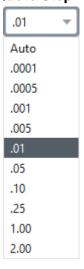
If bid price is outside the best OTC Link ask, i.e. not the NMS NBO, the user is presented with the following dialog: "Allow quote to lock / cross market?" Can answer with No (default) or Yes.

If user clicks No, then warning is dismissed and no update is submitted.

If user clicks Yes, then warning is dismissed and update is submitted.



4.6.4 Quote Step Pop-up



Visible: Always

Enabled: Only when trader is quoting the security currently on montage.

Function: When clicked, it pops up a menu of fixed step sizes. It will have the following steps:

Auto

0.0001

0.0005

0.001

0.005

0.01

0.05

0.10

0.25

1.00

2.00

Default value: value of this item is set every time user specifies to view a new security on montage. If user has specified a default step value for the security in the Security Preferences dialog, the step is set to that value.

Else, the value of pop-up menu is based on the reference price, which is the higher of the highest bid or lowest offer (>0). If there is no priced quote on montage, the reference price is \$0.50 and step is 0.01.

The table below defines what the default step should be set to depending on the reference price.

Reference price between (>=)	and (<)	Default step
0	0.005	0.0001
0.005	0.10	0.0005
0.10	.050	0.001
0.50	1	0.005
1	5	0.01
5	25	0.5
25	50	0.10
50	100	.25
100	200	1.00
200	above	2.00

Selecting Auto from the pop-up menu resets the step indicator to the default value, either a specified in the Security Preferences dialog or the table above. The value of the step indicator is then shown as the step value, not as "Auto".

4.6.5 Double Bid/Ask Down button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote on both sides of the market for the security. Size is set to minimum quote size.

Function: for non-unsolicited quotes, submits a quote update, decreasing both the bid and the ask side of the trader's quote by the amount of the price pop-up indicator. For unsolicited quotes, clicking this button sets both sides of quote to Unpriced.

If ask price is outside the best OTC Link bid, i.e. not the NMS NBB, the user is presented with lock / cross warning dialog described above.

4.6.6 Double QAP Up button

Visible: always when QAP is system wide enabled

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote on both sides of the market for the security and QAP value on both sides is not +30

Color: the color of each arrow is green when QAP on that side can increase, red when QAP on that side can decrease, or gray when QAP on that side is 0 meaning not set

Function: submits a quote update, increasing the QAP value by 1 on both the bid and the ask side of the trader's quote. Does not specify price or size.

4.6.7 **Double QAP Down button**

Visible: always when QAP is system wide enabled

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote on both sides of the market for the security and QAP value on both sides is not -30

Color: the color of each arrow is green when QAP on that side can increase, red when QAP on that side can decrease, or gray when QAP on that side is 0 meaning not set

Function: submits a quote update, decreasing the QAP value by 1 on both the bid and the ask side of the trader's quote. Does not specify price or size.

4.6.8 Unpr button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced or BW/OW quote for the security

Function: When clicked, it will submit a double unpriced quote update for the security on montage, setting the trader's quote to $U\,/\,U.$

4.6.9 Min Sz button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote for the security on at least one side of the market.

Function: When clicked, it will submit a double-sided quote update with size on both sides of the quote set to minimum quote size. Price does not change.

4.6.10 **Rmv button**

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a quote for the security

Function: When clicked it opens up a confirmation dialog asking if user wants to withdraw quote. If user clicks "No", dialog closes and quote is not withdrawn. If user clicks "Yes", Dealer submits a withdraw quote for the security on montage.



4.6.11 Quick Trade Message and Quote input

Visible: Always

Enabled for text input: always when displayed

Function: allows free form text to be entered by user. In conjunction with the Snd button, clicking the button submits the text either as Quote Update or Send Trade Message. No validation or format of text is performed when typing text, only when submitting. Quotes and Trade Messages should be formatted as defined below:

Valid Quote update formats: symbol –space– Bbid Bsbidsize Aask Asasksize

"symbol" is the symbol of the security, what's denoted as bold capital letters above should be typed in as such followed by the price or size. The "-space-" means a single space character between the symbol and the first parameter that follows.

For example: "**TESTS B13.05BS200A13.30AS200**" sets the quote for security "TESTS" to 13.05 / 13.30 (200x200)

All parameters are optional. If no symbol is specified it will submit security on the montage. If B and/or A parameters are omitted the bid and ask prices remain unchanged, and if BS and/or AS are omitted then the size will revert to the minimum quote size as long as the corresponding price was changed. For example: "TESTS B13.05" affects the bid side of the quote, sets the bid to 13.05 and the bid size to the minimum size, but the ask side is left unchanged, both ask bid and size. For minimum quote size rule, see Update button on the Update Quote dialog.

Valid Trade Message formats: **B** / **S** / **SS** *shares symbol price market maker* [.N] [.F] [.I] [.A] [.NA]

String must start with either B, S, or SS, for buy, sell, sell short respectively. Then it's the number of shares as numerical value, symbol as alphanumerical string, price as a numerical value and market maker ID as alphanumerical string. Optional parameters are ".N" for non-counterable, ".F" for AON, ".I" for IOC, ".A" for Advertise or ".NA" for not advertise.

Example Trade Message string: "**B200TESTS13.25ABLE**" means, buy 200 shares of TESTS at 13.25 and direct the trade message to market maker ABLE.

4.6.12 **Send button**

Visible: Always Enabled: Always

Function: checks for text in the Quick Message and Quote input field, parses into a Trade Message or Quote update command according to the syntax defined in the Quick Entry field, and attempts to submit to OTC Link as a Quote Update or OTC Link as a Trade Message.

If format of string does not correspond to a valid syntax, the following dialog will be displayed.



4.6.13 Tr Msg button

Visible: Always Enabled: Always

Function: If a valid security is on the montage, it opens up the Send Trade Message dialog with the security pre set. See <u>Trade Message Dialog</u>.

Alternatively, if a valid trade message string has been entered into the Quick Entry field, the Trade Message dialog will be pre-populated with that trade message information, and could conceivably be for a security different from the security on the montage.

If neither a security is on the montage nor a valid trade message string in the Quick Entry field, it displays the below dialog and waits for user to dismiss it with the "OK" button.



4.6.14 Clear button

Visible: Always Enabled: Always

Function: when clicked, it clears the content of the Quick Message and Quote input field (and places the cursor in the field ready to accept new text input).

4.6.15 **Send RFQ**

Visible: Always Enabled: Always

Function: Opens up the Send RFQ window. See Send RFQ.

4.7. Bid Side Quote Management

A series of button that run vertically along the left hand side of the montage. These buttons control the bid side of the quote or set up sell trade messages on OTC Link.





4.7.1 Bid Join button

Visible: always

Enabled: Only when displaying a valid security with inside bid and the trader's firm does have a quote for the security

Function: for a non-unsolicited quote submits a quote update to set the bid side of the trader's quote to either,

- The inside bid price, if no bid quote is selected (clicked on) on the montage
- Equal to the selected bid quote, if a bid quote is selected (clicked on) on the montage

Size is set to minimum quote size.

For an unsolicited quote it unprices the bid side of the quote.

4.7.2 Bid Best button

Visible: always

Enabled: Only when displaying a valid security with inside bid and the trader's firm does have a quote for the security

Function: for a non-unsolicited quote submits a quote update to set the bid side of the trader's quote to higher than the inside bid, either a penny higher or half the spread if spread is less than a penny

Size is set to minimum quote size.

For an unsolicited quote it unprices the bid side of the quote.

4.7.3 Bid Up button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or OW) for the security

Function: for non-unsolicited quotes, submits a quote update, increasing the bid side of the trader's quote by the amount of the price pop-up indicator. Size is set to minimum quote size. Ask side of quote is unchanged. For unsolicited quotes, clicking this button sets the bid side of quote to Unpriced, ask side remains unchanged.

If bid price is outside the best OTC Link ask, i.e. not the NMS NBO, the user is presented with lock / cross warning dialog described above.

4.7.4 Bid Down button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or OW) for the security

Function: for non-unsolicited quotes, submits a quote update, decreasing the bid side of the trader's quote by the amount of the price pop-up indicator. Size is set to minimum quote size. Ask side of quote is unchanged. For unsolicited quotes, clicking this button sets the bid side of quote to Unpriced.

4.7.5 Bid QAP Up button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or OW) for the security and QAP value on bid side is not +30

Color: the color of arrow is green when QAP on bid side can increase, red when QAP on bid side can decrease, or gray when QAP on bid side is 0 meaning not set

Function: submits a quote update increasing QAP on bid side by 1, leaving price and size unchanged.

4.7.6 Bid QAP Down button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or OW) for the security and QAP value on bid side is not -30

Color: the color of arrow is green when QAP on bid side can decrease, red when QAP on bid side can increase, or gray when QAP on bid side is 0 meaning not set

Function: submits a quote update increasing QAP on bid side by 1, leaving price and size unchanged.

4.7.7 Bid Away button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or OW) for the security

Function: for non-unsolicited quotes, submits a quote update, decreasing the bid side of the trader's quote to move it down two price levels. If there is no second price level below the current bid, then it goes to unpriced. Size is set to minimum quote size. Ask side is left unchanged.

For an unsolicited quote it unprices the ask bid of the quote.

4.7.8 Hit button

Visible: always Shortcut: CTRL-H

Enabled: Only when displaying a valid security and there are quotes (either opened or closed).

Function: If no quote is selected on the bid side of the montage, it opens up the Trade Message dialog, Sell side, pre-populated with the bid and bid size and the MMID of market maker on top of the montage. If there are no open quotes, the Trade Message dialog will not be displayed.

If one or more quotes on the bid side are selected (clicked on), the Trade Message dialog is opened, Sell side, pre-populated with the bid price, combined size of all quotes selected, with each market maker listed and the size of their bid quote.

If user's own firm has the inside bid and user is not set up for broker-preference then clicking the Hit button will be ignored, i.e. Trade dialog will not open. If user is set up for broker-preference then Trade dialog will open with user's own MMID pre filled in as receiver of message.

See Trade Message Dialog.

4.7.9 Sweep Bid button

Visible: always Shortcut: CTRL-J Enabled: Only when displaying a valid security with inside bid

Function: If no quote is selected on the bid side of the montage, it opens up the Trade Message dialog, Sell side, pre-populated with the inside bid and sum of all inside bid sizes and the MMID of each market maker on the inside bid.

If one or more quotes on the bid side are selected (clicked on), the Trade Message dialog is opened, Sell side, pre-populated with the bid price, combined bid size of all quotes of the same bid price as the quote(s) selected, with each market maker listed and the size of their bid quote.

If a saturated quote (see <u>Color of Montage</u>) is included in the group of market makers comprising a Sweep trade message, that market maker will simply not be included in the list of market makers populated on the Sweep trade message window. The market maker's MMID can be manually entered by the trader. If the saturated market maker would have been the only market maker in the window, a blank trade message will be displayed.

Sweep button will always disregard own quote if it falls within the range of quotes being swept, regardless of the user's broker-preference status.

See Trade Message Dialog.

4.7.10 Sweep All Bid button

Visible: only when user has enabled Sweep all functionality in Trader Preference

Shortcut: none

Enabled: Only when displaying a valid security and priced quotes are open

Function: If no quote is selected on the bid side of the montage, it opens up the Trade Message dialog, Sell side, pre-populated with the inside bid and sum of all inside bid sizes and the MMID of each market maker on the inside bid.

If one or more quotes on the bid side are selected (clicked on), the Trade Message dialog is opened, Sell side, pre-populated with the best bid price, combined bid size of all quotes at or above the price of the quote(s) selected, with each market maker listed and the bid price and size of their bid quote.

If a saturated quote is included in the group of market makers comprising a Sweep All trade message, that market maker will simply not be included in the list of market makers populated on the Sweep All trade message window. The market maker's MMID can be manually entered by the trader. If the saturated market maker would have been the only market maker in the window, a blank trade message will be displayed.

Sweep All button will always disregard own quote if it falls within the range of quotes being swept, regardless of the user's broker-preference status.

See Trade Message Dialog.

4.7.11 Max Bid button

Visible: always Shortcut: CTRL-K

Enabled: Only when displaying a valid security

Function: If no quote is selected on the bid side of the montage, it opens up the MAX Trade Message dialog, Sell side, pre-populated with the inside bid, the combined size on the inside bid and the MMID of each market maker on the inside bid.

If one or more quotes on the bid side are selected (clicked on), the Max Trade Message dialog is opened, Sell side, pre-populated with the bid price, combined bid size of all quotes of the same bid price as the quote(s) selected, with each market maker listed.

See MAX Trade Message Dialog.

4.8. Ask Side Quote Management

A series of button that run vertically along the right hand side of the montage. These buttons control the ask side of the quote or set up a buy trade message on OTC Link.



4.8.1 Ask Join button

Visible: always

Enabled: Only when displaying a valid security with inside offer and the trader's firm does have a quote for the security

Function: for a non-unsolicited quote it submits a quote update to set the ask side of the trader's quote to either,

- The inside ask price, if no ask quote is selected (clicked on) on the montage
- Equal to the selected ask quote, if an ask quote is selected (clicked on) on the montage

Size is set to minimum quote size.

For an unsolicited quote it unprices the ask side of the quote.

4.8.2 Ask Best button

Visible: always

Enabled: Only when displaying a valid security with inside offer and the trader's firm does have a quote for the security

Function: for a non-unsolicited quote it submits a quote update to set the ask side of the trader's quote to lower than the inside ask, either a penny lower or half the spread if spread is less than a penny

Size is set to minimum quote size.

For an unsolicited quote it unprices the ask side of the quote.

4.8.3 Ask Up button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or BW) for the security

Function: for non-unsolicited quotes, submits a quote update, increasing the ask side of the trader's quote by the amount of the price pop-up indicator. Size is set to minimum quote size. Bid side of quote is unchanged. For unsolicited quotes, clicking this button sets the ask side of quote to Unpriced.

4.8.4 Ask Down button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or BW) for the security

Function: for non-unsolicited quotes, submits a quote update, decreasing the ask side of the trader's quote by the amount of the price pop-up indicator. Size is set to minimum quote size. Bid side of quote is unchanged. For unsolicited quotes, clicking this button sets the ask side of quote to Unpriced, bid side remains unchanged.

If ask price is outside the best OTC Link bid, i.e. not the NMS NBB, the user is presented with lock / cross warning dialog described above.

4.8.5 Ask QAP Up button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or BW) for the security and QAP value on ask side is not +30

Color: the color of arrow is green when QAP on ask side can increase, red when QAP on ask side can decrease, or gray when QAP on bid side is 0 meaning not set

Function: submits a quote update increasing QAP on ask side by 1, leaving price and size unchanged.

4.8.6 Ask QAP Down button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a priced quote (i.e., not Unpriced or BW) for the security and QAP value on ask side is not -30

Color: the color of arrow is green when QAP on ask side can decrease, red when QAP on ask side can increase, or gray when QAP on ask side is 0 meaning not set

Function: submits a quote update increasing QAP on ask side by 1, leaving price and size unchanged.

4.8.7 Ask Away button

Visible: always

Enabled: Only when displaying a valid security and the trader's firm does have a quote for the security

Function: for non-unsolicited quote submits a quote update, increasing the ask side of the trader's quote to move it down two price levels. If there is no second price level below the current bid, then it goes to unpriced. Size is set to minimum quote size. Bid side is left unchanged.

For an unsolicited quote it unprices the ask ask of the quote.

4.8.8 Take button

Visible: always Shortcut: CTRL-T

Enabled: Only when displaying a valid security and there are quotes (either opened or closed).

Function: If no quote is selected on the ask side of the montage, it opens up the Trade Message dialog, Buy side, pre-populated with the ask and ask size and the MMID of market maker on top of the montage. If there are no open quotes, the Trade Message dialog will not be displayed.

If one or more quotes on the ask side are selected (clicked on), the Trade Message dialog is opened, Buy side, pre-populated with the ask price, combined size of all quotes selected, with each market maker listed and the size of their ask quote.

If user's own firm has the inside ask and user is not set up for broker-preference then clicking the Take button will be ignored, i.e. Trade dialog will not open. If user is set up for self-preference then Trade dialog will open with user's own MMID pre filled in as receiver of message.

See Trade Message Dialog.

4.8.9 Sweep Offer button

Visible: always Shortcut: CTRL-R

Enabled: Only when displaying a valid security with inside offer

Function: If no quote is selected on the ask side of the montage, it opens up the Trade Message dialog, Buy side, pre-populated with the inside ask and sum of all inside ask sizes and the MMID of each market maker on the inside ask.

If one or more quotes on the ask side are selected (clicked on), the Trade Message dialog is opened, Buy side, pre-populated with the ask price, combined ask size of all quotes of the same ask price as the quote(s) selected, with each market maker listed and the size of their ask quote.

If a saturated quote is included in the group of market makers comprising a Sweep trade message, that market maker will simply not be included in the list of market makers populated on the Sweep trade message window. The market maker's MMID can be manually entered by the trader. If the saturated market maker would have been the only market maker in the window, a blank trade message will be displayed.

Sweep button will always disregard own quote if it falls within the range of quotes being swept, regardless of the user's broker-preference status.

See *Trade Message Dialog*.

4.8.10 Sweep All Offer button

Visible: only when user has enabled Sweep all functionality in Trader Preference

Shortcut: none

Enabled: Only when displaying a valid security and priced quotes are open

If no quote is selected on the ask side of the montage, it opens up the Trade Message dialog, Buy side, pre-populated with the inside ask and sum of all inside ask sizes and the MMID of each market maker on the inside ask.

If one or more quotes on the ask side are selected (clicked on), the Trade Message dialog is opened, Bid side, pre-populated with the best ask price, combined ask size of all quotes at or

below the price of the quote(s) selected, with each market maker listed and the ask price and size of their bid quote.

If a saturated quote is included in the group of market makers comprising a Sweep All trade message, that market maker will simply not be included in the list of market makers populated on the Sweep All trade message window. The market maker's MMID can be manually entered by the trader. If the saturated market maker would have been the only market maker in the window, a blank trade message will be displayed.

Sweep All button will always disregard own quote if it falls within the range of quotes being swept, regardless of the user's broker-preference status.

See Trade Message Dialog.

4.8.11 Max Offer button

Visible: always Shortcut: CTRL-E

Enabled: Only when displaying a valid security

Function: If no quote is selected on the ask side of the montage, it opens up the MAX Trade Message dialog, Buy side, pre-populated with the inside ask, the combined size on the inside ask and the MMID of each market maker on the inside ask.

If one or more quotes on the ask side are selected (clicked on), the Max Trade Message dialog is opened, Buy side, pre-populated with the ask price, combined ask size of all quotes of the same ask price as the quote(s) selected, with each market maker listed.

See MAX Trade Message Dialog.

4.9. Montage

TEST	60.20	-18	100	07/30	TEST	60.21	-18	100	07/29
RAFF	60.20		100	>year	CSTI	60.21		100	>year
■ARCA@	60.20		100	07/29	■ARCA@	60.21		100	07/29
MACM	60.17		100	>year	CANT	60.24		100	>year
INTL	60.17		100	>year	INTL	60.24		100	>year
CSTI	59.95		100	>year	NITE	60.50		100	>year
CDEL	59.85		100	>year	MACM	60.55		100	>year
NITE@	59.80		100	>year	BARD	61.00		100	>year
PUMA	59.50		100	>year	ETRF@	61.80		100	>year
BARD	58.95		100	>year	PUMA	62.00		100	>year
GUGS	58.21		100	>year	RAFF	62.27		100	>year
ETRF@	58.20		100	>year	CDEL	62.27		100	>year
MAXM	56.81		100	>year	MAXM	62.68		100	>year
CANT	55.26		900	>year	GUGS	64.32		100	>year
VNDM	41.88		100	>year	VFIN	77.91		100	>year
VFIN	41.84	-30	100	>year	VNDM	77.98		100	>year

4.9.1 General Format of Montage

The montage shows all quotes from all market makers for the security currently being viewed. It is split into two sides, the bid and the ask side. Each side shows the part of each quote known as the bid (willingness to buy) and the ask (indication of sell interest). The bid and the ask are independent of each other, it is possible that one side was updated while the other side remained unchanged. When no valid security is specified, the montage is blank.

Each line of the montage has 5 columns: The market maker ID, the price (bid or ask), the QAP, the size (bid or ask size) and the time of update.

Market maker ID is always 4 character ID issued by the NASDAQ. In addition, some market makers may have a fifth character defined as the NASD_LOC variable. In this case, the 5th character is appended to the end of the market maker ID for display purposes, otherwise this location ID is always ignored.

A bid and/or ask quote that has been indicated by the market maker as Auto-Ex will be shown with an asterisk '@' following the market maker ID. A space will be added between the MPID and '@' for saliency.

The 4 characters of the market maker ID should be aligned, whether or not the montage is mirrored. The closed character 'c', if present, should stick out on the left. The Auto-Ex character '@', if present, should stick out on the right.

If a market maker is displayed in the Q Scores tab of the Scoreboard Section (see Q Scores Tab), they currently have a quote on the montage, and the user has enabled Q Score indicators in Trader Preferences, a small rectangular box will be displayed to the left of their MMID in the montage. The color of this box will match the color of their L1 Avg R time in the Q Scores Tab.

Price can be up to 4 decimal places. It should be displayed in format #.##. Commas will be used for prices greater than \$999.99. A minimum of 2 decimal places should always be displayed. Prices are aligned at the decimal point. Special cases of price can be Unpriced, that is no price. This is shown as "Unpr" on the montage. Also, bid could be Offer Wanted, shown as "OW", and ask could be Bid Wanted, shown as "BW".

QAP can be up to 3 characters. QAP values range from -30 to +30. It will show with the preceding "-" when negative but not show the "+" when positive. Negative values are red, positive are green. QAP of 0 (zero) is shown as blank. QAP should be right aligned, whether or not the montage is mirrored. However, for single digit negative QAPs, a space will be inserted between the "-" sign and the digit so the "-" signs line up.

Size, should be formatted as ####, right aligned, whether or not the montage is mirrored. It is always a whole integer number. When the quote is from the external source (OTCBB), the size parameter coming off the feed needs to be multiplied by 100 before displaying if the price is \$200 or lower. This adjusted size should be used throughout the Dealer application to ensure all sizes work off actual number of shares, not multiples of 100 shares.

If a market maker is displayed in the Q Scores tab of the Scoreboard Section (see Q Scores Tab), they currently have a quote on the montage and the user has enabled Q Score indicators in Trader Preferences, a small rectangular box will be displayed to the right of their quote size in the montage. The color of this box will match the color of their Q⁺ Score value in the Q Scores Tab.

Time should be shown either as HH:MM, when the update time of quote is today, or MM/YY, when update time is not today. If last time of update is over a year ago (that is same day last year or earlier), it should display ">year" in place of the time or date.

Font is fixed-width. Font size can be increased or decreased using the Context menu on the Montage.

4.9.2 Color of Montage

Background of montage is black. User's own firm quote is shown on a blue background.

In <u>Trader Preferences</u>, a user can select to display each price level on the montage in a different color:



Text on montage (excluding the QAP column which has its own color rule) is colored according to the following rule:

Green:	The highest open bid and the lowest open ask of OTC Link proprietary quotes. Can be multiple rows if all share the same price, regardless of other parameters of quotes. Note, this is not the same as NBBO/PBBO.
Yellow:	Other priced open bid and ask of OTC Link proprietary quotes.
Cyan:	An external market (OTCBB) quote that is OTC Linkable. This means there exists a proprietary OTC Link quote for the same security by the same market maker.
Purple:	An external market (OTCBB) quote that is not OTC Linkable. This means there does not exist a proprietary OTC Link quote for the same security by the same market maker.
Orange:	All closed proprietary OTC Link quotes.
Gray:	All quotes are colored gray when connection is lost to servers, indicating that quote may not be up to date.
White:	A particular market maker's quote will be displayed as white when it is considered Saturated (a special attribute assigned to a quote for a maker maker that is not responding to liability trade messages).

4.9.3 Quote Ranking

Quotes are ranked on the montage, each side is ranked separately, according to the following rule (from top to bottom). The following ranking is the system default. It can be changed by the user via Trader Preferences:

- Highest bid, Lowest ask
- If two quotes have the same price, EQS quotes resident on OTC Link are ranked above non-EQS quotes on other markets (e.g., ECNs).
- If two quotes have the same price and market, unsaturated quotes are ranked above saturated quotes.
- If two quotes have the same price, market and saturation status, the quote with the largest size is ranked above.
- If two quotes have the same price, market, saturation status and size, the quote with the highest Q⁺ Score valueis ranked above. No Q⁺ Score is ranked below 0 Q⁺ Score.
- If two quotes have the same price, market, saturation status, size and Q⁺ Score, a quote with the Auto-Ex flag set is ranked above a quote without the Auto-Ex flag set.

- If two quotes have the same price, market, saturation status, suze, Q⁺ Score, and Auto-Ex flag, the quote with the lowest L1 Avg R value is ranked above. No L1 Avg R is ranked below the highest value L1 Avg R.
- If two quotes have the same price, market, saturation status, size, Q⁺ Score, Auto-Ex flag and L1 Avg R, the quote with the oldest update time is ranked above.
- If two quotes have the same price, market, saturation status, size, Q⁺ Score, Auto-Ex flag, L1 Avg R, and timestamp, the quote with the greatest OAP is ranked above.
- Any OW/BW quote is ranked after the priced quotes in time order, oldest time of update at top
- Any unpriced quote is ranked after OW/BW quotes in time order, oldest time of update at top
- If a quote is unsolicited and has one side Unpriced, the unpriced side of the montage will show only the market maker's MMID. All other fields on the row will be blank. In the below example MMID OTCL and PINK have unsolicited unpriced offer quotes.



All open quotes are shown above closed quotes.

This rule is further overridden with the OTC Link has priority rule:

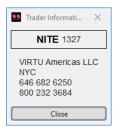
- When a OTC Link quote has an equal price to an external (OTCBB) quote, it shall always be ranked above any external quote, although it may be ranked below another OTC Link quote of same price on the above ranking rule.
- When a Market Participant is quoting the same security on both OTC Link and an
 external venue (OTCBB) and the price and size matches, then only the OTC Link is
 shown.
- When a Market Participant is quoting the same security on both OTC Link and an
 external venue (OTCBB) and one quote is priced and the other is Unpriced or OW/BW,
 then only the priced quote is shown and the other is hidden. The only exception to this
 rule is when the quote is Unpriced on the OTCBB. In this case both the OTC Link and
 BB quote will appear in the montage.

The highest bid and lowest ask, with above ordering taken into account is the NBBO/PBBO. Two priced quotes must exist on both sides for a complete NBBO/PBBO to exist.

The OTC Link inside is the highest unsaturated bid and lowest unsaturated ask, with above ordering taken into account from OTC Link proprietary quotes only. Two priced quotes must exist on a side for an Inside to be created. An OTC Link inside may exist for one side only (i.e. Bid Inside or Ask Inside)

4.9.4 Clicking on Montage

Left double clicking an item on the MMID column on the montage opens up a dialog with Market Participant information. This information is based on the OTC Link information, regardless whether clicking on a OTC Link or OTCBB quote. If the Market Participant does not have a OTC Link for the security, then no dialog opens.



Double clicking on any other column of the montage opens up the Trade Message dialog, and pre populates it with the corresponding side, price, size and market maker of the quote being clicked on. This is effectively the same as clicking the Hit or Take buttons. See <u>Hit</u>, <u>Take</u> and <u>Trade Message dialog</u>. Double clicking own quote is ignored unless user is set up for broker-preference.

A single click on Montage is used for selecting a quote. When user clicks on a populated montage, each line is selected according to the following rules:

- Only open quotes can be clicked on (clicking on a closed quote is ignored)
- When a quote is clicked on, it is considered selected
- Own quote cannot be selected unless user is set up for broker-preference
- If a quote was previously selected, then if the side and price of the previously selected quote(s) is equal to the quote being selected, both (or multiple) quotes can be selected at the same time
- If one or more quote was previously selected, then if the side and price of the previously selected quote(s) are not equal to the quote being selected now, the previously selected quote(s) are un-selected and the quote being clicked on is selected
- Clicking on a single quote, then dragging up or down while mouse button is still down, selects all quotes above or below quote clicked on that have the same price
- Clicking on a quote that was previously selected, un-selects the quote

Right double clicking on any other column of the montage opens up the Send an ECN Orderge dialog, and pre populates it with the corresponding side, price, size and market maker of the quote being clicked on.

4.9.5 Mouse-Over on Montage

Moving the mouse and leaving it to hover over a quote.

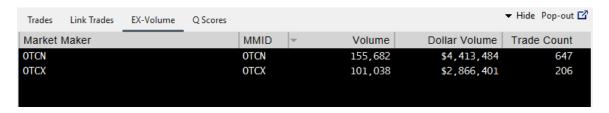
4.9.6 Context Menu

Right clicking on the montage brings up a Context menu with following commands:

- Show MM in Directory opens up History Server on the MM directory page, looking up the MMID of the quote that was right clicked on
- Increase Font Size increases the font size of the montage by one point
- Decrease Font Size decreases the font size of the montage by one point

4.10. Scoreboard Section

This Section shows the Trades and Ex-Volume, and Q Score tabs.



4.10.1 Entitlement of Trade Data

In order to view trade data a user must be entitled to the NASDAQ trade/quote information service.

When user is not entitled for trade information no data is displayed and the following message appears: You are not entitled to view trade information. Please call 1 800 LIST OTC to subscribe.'

All OTC Dealer users will see Ex-Volume (a.k.a. Advertisement) and Q Scores data. OTC Link is the source for Ex-Volume and Q Scores ata.

4.10.2 Hide / Show Trade Area

The Trade and Advertisement area can be hidden from the main window by clicking on "down arrow Hide" on the right hand side of the Scoreboard area.

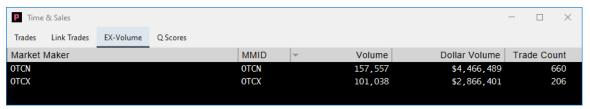


If in the hidden state the entire section may be shown again by clicking on the "up arrow Show Trades & Ex-Volume" on the right hand side of the Scoreboard area.



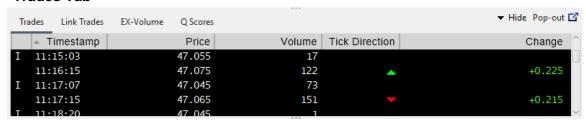
4.10.3 Window Pop-out button

Visible and enabled: Always when user is logged in



Action: Pops out the Scoreboard area in a new window, removing the space on the main window where the Scoreboard used to be. The window can be positioned anywhere on screen while always staying on top of other windows, and minimized or maximized like normal windows. Instead of a close button it has a pop-in button, which pops it back into the main window. The size and position of the toolbar is saved with desktop save.

4.10.4 Trades Tab



The Trade tab includes Nasdaq trade data only. If the user is not entitled then default message will be shown.

Tick direction is based on previous trade while change is based on previous close. If the trade price is the same as the previous trade, the tick direction and change will be the same as the previous trade.

Tick direction and change values will ONLY be shown on rows for round and mixed lot executions. The tick direction and change values will NOT be shown (i.e., left blank) for odd lot executions.

Cancellations are noted with an 'X' in the far left (Trade type) column. Corrections are noted with a 'C' in the same column. Irregular trades are noted with an 'I' in the same column.

4.10.4.1. Format of Trades Area

The Trade area has the following column headings, in this default order:

Trade Type (not labeled) Timestamp Price Volume Tick Direction Change

The order of the columns can be changed by clicking a column heading and move to another position. Except for the Trade Type column, each column can be expanded or shrunk by moving the divider line between the column headings left or right.

Clicking on any heading sorts the list on that column, clicking a second time reverses the sort order. The column being sorted on will show an up or down arrow indicating the current sorting.

The background is black with white characters except for the change value which is red or green depending on the tick movement (arrow) or change from previous close (Change value) Red equals negative tick movement or change and green equals positive tick movement or change.

List can be expanded or shrunk by moving the divider line between the list and the montage up or down. The maximum size is controlled so that the montage cannot shrink below a fixed size (approx 8 lines of regular sized montage font). The minimum size of the list is about 1 line of trade data.

New trade information for the security on montage is placed at the bottom of the list as a default. Users may select how to order trades by using the trade area preference window. This contextual menu is accessible by right-clicking in the trade area. See <u>Trade Section Contextual Menu.</u>

4.10.4.2. **Trade Type**

Trade Type is not shown as a column label

Trade type is only displayed on the Trades tab if the trade message is a cancel or correction. A cancellation is noted with an "X" while a correction is noted with a "C" and an irregular treade is noted with an "I".

4.10.4.3. **Timestamp**

Time is shown as HH:MM:SS

4.10.4.4. **Price**

Price is shown with up to 4 decimal point accuracy, so that the comma is always in the same place even though price is shown with 2 or 4 decimals, i.e. 1.22 and 1.2222 are aligned with the "." in same place.

4.10.4.5. **Volume**

Volume is right adjusted (this should really be changed to right adjusted)

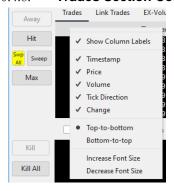
4.10.4.6. Tick Direction

Tick Direction is a direction indicator. If this trade is higher than previous trade it shows as a green upward arrow. If this trade is lower than previous trade is shows with a red down arrow. If there is no change this is blank.

4.10.4.7. **Change**

Change is the change in dollars from previous close. If change is positive then color is green. If change is negative the color is red. If there is no change this is blank.

4.10.4.8. Trades Section Contextual Menu



If right click anywhere on the content area, including the heading, it brings up a contextual menu with following actions:

Show Column Labels

Default: Checked

Function: Displays Column labels within the Trades section

Timestamp Checkbox

Default: Checked

Function: Shows/Hides the Timestamp column in the Trades section

Price Checkbox

Default: Checked

Function: Shows/Hides the Price column in the Trades section

Volume Checkbox

Default: Checked

Function: Shows/Hides the Volumne column in the Trades section

Tick Direction Checkbox

Default: Checked

Function: Shows/Hides the Tick Direction column in the Trades section

Change Checkbox

Default: Checked

Function: Shows/Hides the Change column in the Trades section

Data Sort Radio Buttons

Caption: Top-to-bottom and Bottom-to-top

Default: Top to Bottom

Function: If setting is top to bottom then most recent trade is shown at top while if setting is

bottom to top then most recent trade is shown at bottom of section

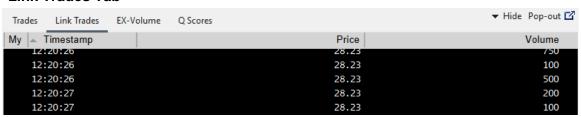
Increase Font Size

If this command is selected, the font size of the content is increase by 1 point size.

Decrease Font Size

If this command is selected, the font size of the content is decreased by 1 point size.

4.10.5 Link Trades Tab



The Link Trades tab includes trade data that occurred on OTC Link ATS only. A check in the 'My" column indicates the trade was from user's own market maker. If the user is not entitled then default message will be shown.

4.10.5.0. Format of Link Trades Area

The Link Trade area has the following column headings, in this default order:

My Timestamp Price Volume

The order of the columns can be changed by clicking a column heading and move to another position. Each column can be expanded or shrunk by moving the divider line between the column headings left or right.

Clicking on any heading sorts the list on that column, clicking a second time reverses the sort order. The column being sorted on will show an up or down arrow indicating the current sorting.

The background is black with white characters.

List can be expanded or shrunk by moving the divider line between the list and the montage up or down. The maximum size is controlled so that the montage cannot shrink below a fixed size (approx 8 lines of regular sized montage font). The minimum size of the list is about 1 line of trade data.

New trade information for the security on montage is placed at the bottom of the list as a default.

There are a maximum number of lines in the list. When maximum number of lines is reached, the line at the top of the list is removed when a new line is inserted at the bottom.

4.10.5.1. **My**

Check indicates user's own trades, where they are either the liquidity provider or remover.

4.10.5.2. **Timestamp**

Time is shown as HH:MM:SS

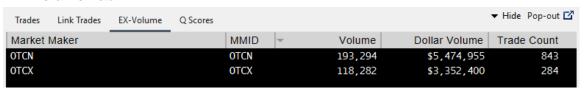
4.10.5.3. **Price**

Price is shown with up to 4 decimal point accuracy, so that the comma is always in the same place even though price is shown with 2 or 4 decimals, i.e. 1.22 and 1.2222 are aligned with the "." in same place.

4.10.5.4. **Volume**

Volume is right adjusted (this should really be changed to right adjusted)

4.10.6 Ex-Volume Tab



The Ex-Volume Tab displays only OTC Link trades where at least one market maker elected to advertise. If no market maker elects to advertise then no data will appear for the respective trade.

4.10.6.1. Format of Ex-Volume Area

The Ex-Volume area shows trade submissions by market makers to the Volume Feed service. This does not show individual transaction but a summary of total volume and number of trades reported by each market maker. Thus when a new trade is reported, the record for the market maker is updated, not a new added.

The Ex-Volume area has the following column headings, in this default order:

Market Maker MMID Volume Dollar Volume Trade Count

The order of the columns can be changed by clicking a column heading and move to another position. Each column can be expanded or shrunk by moving the divider line between the column headings left or right.

Clicking on any heading sorts the list on that column, clicking a second time reverses the sort order. The column being sorted on will show an up or down arrow indicating the current sorting.

The background is black with white characters.

List can be expanded or shrunk by moving the divider line between the list and the montage up or down. The maximum size is controlled so that the montage cannot shrink below a fixed size (approx. 8 lines of regular sized montage font). The minimum size of the list is about 1 line of trade data.

4.10.6.2. Market Maker

Name of market maker reporting trades

4.10.6.3. **MMID**

4 character MMID

4.10.6.4. **Volume**

Total share volume reported by market maker

4.10.6.5. **Dollar Volume**

Total dollar volume reported by market maker

4.10.6.6. **Trade Count**

Number of trades reported by market maker

4.10.7 **Q Scores Tab**



The Q Scores Tab displays OTC Link market maker statistics relating to trade message response time, number of oversized trades that are overfilled, and a measure of the average overfill quantity relative to the Quote Minimum per tier size.

4.10.7.1. Format of Response Stats Area

The Q Scores area has the following column headings, in this default order:

MMID
$$Q^+$$
 Score Q^+ % Fill Q^+ Size L1 Avg R Last 10% Liq-Today Liq-Avg

The order of the columns can be changed by clicking a column heading and move to another position. Each column can be expanded or shrunk by moving the divider line between the column headings left or right.

Clicking on any heading sorts the list on that column, clicking a second time reverses the sort order. The column being sorted on will show an up or down arrow indicating the current sorting. Liq-Today will be the default sort column; highest to lowest. Secondary and tertiary sort columns will be Liq-Avg (highest to lowest) and MMID (alphabetical), respectively.

The background is black with white characters, except where describe below for Avg Response Time.

List can be expanded or shrunk by moving the divider line between the list and the montage up or down. The maximum size is controlled so that the montage cannot shrink below a fixed size (approx. 8 lines of regular sized montage font). The minimum size of the list is about 1 line of trade data.

4.10.7.2. **MMID**

4 character MMID

Only market makers who are currently quoting (i.e., currently on the montage) will have Quote Score data displayed. If they are not quoting, their MMID will not be shown.

4.10.7.3. **Q**⁺ **Score**

This field is simply the multiplication of Q^+ % Fill and Q^+ Size. The following calculation will be performed:

Q⁺ Score = Q⁺ % Fill (in decimal format, not percentage) * Q⁺ Size

Similar to above, if the market maker received no L1 liability trade messages for more than their displayed quote during the previous 20 trading days, this field will be blank. If the market maker did receive L1 liability trade messages for more than their displayed quote during the previous 20 trading days, but did not overfill any, this field will be 0.00.

Similar to L1 Avg R, the color in which the Q⁺ Score is displayed will be based on the following value grouping. The value ranges must be system configurable so they can be changed for the next trading day:

Color	Q⁺ Score Range
Green	>= 10
Yellow	>= 5 and < 10
Qrange	> 0 and < 5
Red	= 0

4.10.7.4. **Q**⁺ % **Fill**

The number of times over the previous 20 trading days the market maker executed a liability trade message for more than their displayed quote, divided by the total number of liability trade messages received with size greater than the market maker's displayed quote. The display will multiple this ratio by 100, and round to the nearest %.

If the market maker received no L1 liability trade messages for more than their displayed quote during the previous 20 trading days, this field will be blank. If the market maker did receive L1 liability trade messages for more than their displayed quote during the previous 20 trading days, but did not overfill any, this field will be 0%.

4.10.7.5. **Q**⁺ % **Size**

Average quantity overfilled over the previous 20 trading days, divided by the Quote Minimum per tier size, rounded to two decimals.

If the market maker received no L1 liability trade messages for more than their displayed quote during the previous 20 trading days, this field will be blank. If the market maker did receive L1 liability trade messages for more than their displayed quote during the previous 20 trading days, but did not overfill any, this field will be 0.00.

4.10.7.6. **L1 Avg R**

Average number of seconds to respond to L1 liability trade messages during the previous 20 trading days. If a market maker has not responded to ANY L1 liability trade messages in the previous 20 trading days, this field will be blank.

With the exception of responses < 1s, the displayed average will be rounded UP to the next highest second. Averages less than 1 second will be displayed as '< 1s'. The color in which the average is displayed will be based on the following time grouping The value ranges must be system configurable so they can be changed for the next trading day:

Color	Time Range
Green	< 5 seconds
Yellow	>= 5 and < 10 seconds
Qrange	>= 10 and < 20 seconds
Red	> = 20 seconds

4.10.7.7. **Last 10%**

A subset of the data used to calculate the above L1 Avg R response times will be displayed in white. This data will only include the worst 10th percentile response values.

4.10.7.8. **Liq-Today**

For each market maker and for each security, the currently published advertised volume will be displayed in units of shares. This is the same value as the Volume column on the Ex-Volume tab. If the market maker currently does not have any advertised volume (i.e., their first delay interval hasn't occurred yet or the market maker chose not to advertise during market hours), this will be blank. Values will be right justified. If a value >= 1 million shares, but < 1 billion shares, the value will be represented as x.xx M, right justified to the second decimal. If a value >= 1 billion shares, the value will be represented as x.xx B.

4.10.7.9. **Liq-AVG**

For each market maker and for each security, the system will calculate and display, also in units of shares, the average published advertised volume for the previous 20 trading days. This is a true average of all data points over the period, and not an average of each day's average. If the market maker does not have any advertised volume for the previous 20 trading days, this will be blank. Values will be right justified. If a value >= 1 million shares, but < 1 billion shares, the value will be represented as x.xx M, right justified to the second decimal. If a value >= 1 billion shares, the value will be represented as x.xx B.

4.11. OTC Link Message Section

4.11.1 Trade Message area

The Trade Message area is black background and lists all incoming trade messages and executions in the order they come in with newest item on bottom. Area is scrolled down when a new item arrives if necessary so that the new item is visible at the bottom.

Incoming trade messages and executions are either directed directly at the trader, or the trader receives a copy as an assistant to the receiving trader or has set up Trader Proxying to receive copies of trade messages sent to a specific trader. Trader proxies will receive trade messages so long as the traders they are proxying are open, even if they themselves are closed.

The trade message and execution strings are formatted according to the Trade Message and Execution formatting rules defined below. See *Trade Message and Execution formatting*.

Single clicking on a live trade message in the message or trade message aggregate area select the trade message by highlighting the background. This is used by the Kill button on sender's Dealer. Selection automatically resets itself after 10 seconds to de-select the trade message or trade message aggregate. See *Kill button*.

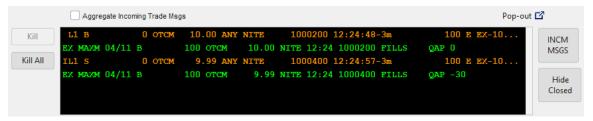
Double clicking on the Message Area brings up the Incoming Message Window. If double clicking on a live incoming trade message, that trade message or trade message aggregate is automatically moved to the focus area of the IMW. See *Incoming Message Window*.

4.11.2 Trade Message and Execution formatting

4.11.2.1. Trade Messages with Aggregate Incoming Trade Msgs checkbox not selected

Outgoing and Incoming Trade Messages are formatted identically. Each trade message is only shown once in the list and is updated as it gets executed, times out etc. The color of the trade message sting represents the state of the trade message:

- Cyan live outgoing
- Yellow live incoming
- Orange expired trade message



Format of the trade message sting is the following:

- The first column is 3 characters wide. First character is always "I" in incoming trade messages and blank on outgoing trade messages. Second character is either "L" if trade message is potential liability or blank if not. Third character is the message order position number, from "1" to "9".
- The second column shows "B" for buy or "S" for sell. Optionally for outgoing trade messages only, it can be "SS" for short sell from sender's perspective. 2 characters, left adjusted.
- Third column is the number of shares that can be executed. This originally equals
 the number of shares in the trade message sent, but will decrease as shares in trade
 message are executed to reflect how many shares are left for execution. 9 characters
 format #,###,###, right adjusted
- The fourth column is the Symbol. 6 characters, left adjusted.
- Fifth column is the price of the trade message. 6 characters format #.##, right adjusted, but can increase in width to 11 characters if price requires, resulting in right of the price field shifting to the right. Additionally, if trade message is executed with price improve then price has a leading "+" character. See price improvement.
- Sixth column shows whether the receiver can execute "ANY" amount of the trade message or "AON" (all or nothing).
- Seventh column is the market maker ID of the receiver. 4 characters.
- Eighth column shows "MAX" when message is part of of a MAX message group, else this column is empty.
- Ninth column is the message order number. 7 characters, right adjusted. Format #, with optional #a if trade message has been countered.
- Tenth column is the time the trade message was submitted and time in force (TIF).
 14 characters, left adjusted, but can increase to 16 characters if format requires.
 Format HH:MM:SS-duration. Duration is formatted "DY" for day trade messages, or MI:SS for trade messages with specific duration.
- Eleventh column shows the number of shares in the original trade message before any execution. 9 characters format #,###, right adjusted
- Twelfth column shows the status of the trade message. Status is "P" for partially executed trade message, "E" for fully executed trade message, "D" for declined trade message, "X" for killed trade message, "T" for timed out trade message and "C" for countered trade message. Optionally, if trade message received an

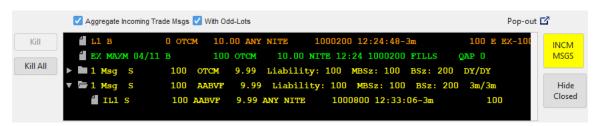
execution, then text "EX-executed shares" is shown after the status character. *Executed shares* is the accumulated number of shares executed for the trade message.

- Thirteenth column is only displayed on outgoing trade messages, or incoming counter messages according to the original parameters of the trade message that was countered. This field is blank for principal trade messages, "AY" for agency or "RP" for riskless principal trade message if specified as parameter when trade message was sent. 2 characters.
- The thirteenth column shows the OAP value as "OAP n"
- The fourteenth column shows "ISO" or "BestEx" text if the BestEx/ISO flag was set when message was submitted. ISO shows for NMS securities, other securities show BestEx.

4.11.2.2. Trade Messages with Aggregate Incoming Trade Msgs checkbox selected

When the 'Aggregate Incoming Trade Msgs' checkbox is not checked, incoming trade messages will be displayed as described above (i.e., not aggregated). When the 'Aggregate Incoming Trade Msgs' checkbox is checked, incoming trade messages will be displayed in single line items that will aggregate all open liability and non-liability trade messages with the same security, side and price.

If the user clicks the plus sign to the left of the line item, below the line item will be displayed all its constituent trade messages, as well as indications of any executions. Clicking again will collapse them.



Format of the aggregate trade message string is the following:

- The message count will be the number of constituent trade messages in the aggregate.
- The Size field will sum the remaining open quantity for all the open liability and non-liability messages for that security, side and price; i.e., sum of trade message size minus sum of executed quantity. In the above ZURVY example, the sum of the three trade messages is 1,550. A total of 150 has already been executed. Therefore, Size is 1,400 (1,000 + 500 + 50 100 50).
- The Liability field will be the lesser of the L1 trade message size and the subscriber's own quote size, at time of trade message receipt, minus any executed quantity of the L1 trade message for that security, side and price. In the above ZURVY example, the L1 trade message size is 1,000, but the quote at time of entry was 300. A total of 100 has already been executed. Therefore, Liability is 200 (300 100). Although unlikely, it is possible to have more than one L1 message for a security, side and price. In that case, Liability will be calculated for each L1 and summed). Due to oversizing, it is possible that the Liability calculation is negative. In that case, it will be set to zero.

- The MASz/MBSz field will display the subscriber's quote size (on the opposite side of the trade message) for that security at the time of the most recent liability trade message. For users entitled to receive the CBBO, the ASz/BSz field will display the CBBO size (on the opposite side of the trade message) for that security at the time of the most recent liability trade message. For users not entitled to receive the CBBO, the ASz/BSz field will display the PBBO size (on the opposite side of the trade message) for that security at the time of the most recent liability trade message.
- To the right of ASz/BSz will be remaining duration of the oldest L1 and the shortest remaining duration of all the liability trade messages. These times will be as of the last update to the aggregate information (e.g., new trade message added, execution of trade message, etc.). In the above ZURVY example, the L1 trade message duration was 40s. Its remaining time is 35s. The L2 trade message duration was 50s. Its remaining time is 15s. If the oldest L1 remaining duration is the shortest of all liability remaining durations, then the two numbers will be the same. If the TIF of the oldest L1 is DAY, the first number will be DY. If all the liability trade messages have a TIF of DAY, both numbers will be DY. If there are no remaining L1s, '-' will be displayed in the first position.

The default for the 'Aggregate Incoming Trade Msgs' checkbox will be set on the Trader Preferences Incoming Msg tab.

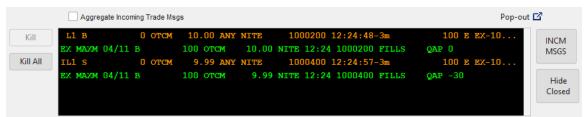
The 'With Odd-Lots' checkbox will only be enabled if the 'Aggregate Incoming Trade Msgs' checkbox is checked AND the subscriber selected the 'Only Odd-Lots not at quote price' radio button on the Trader Preferences Incoming Msg tab. If the subscriber did not select the 'Only Odd-Lots not at quote price' radio button on the Trader Preferences Incoming Msg tab, the 'With Odd-Lots' checkbox will be completely hidden.

If the 'With Odd-Lots' checkbox is checked, odd lots will be included in the Size field and displayed as a constituent trade message. If the 'With Odd-Lots' checkbox is not checked, odd lots will not be included in the Size field and will not be displayed as a constituent trade message.

Double clicking on an aggregate line item or a constituent trade message will display the Incoming Trade Message window.

4.11.2.3. **Executions**

Executions are colored green. Each execution, whether partial or full execution, is shown as a separate record in the message list.



The format of the execution string is as follows:

- The first column is always "EX". 2 characters.
- The second column shows the market maker ID of the viewer. 4 characters.
- The third column shows the date. 5 characters, format MM/DD.
- The fourth column show whether the viewer "B" bought, "S" sold or "SS" sold short. 2 characters, left aligned.

- The fifth column shows the number of shares this execution is for. 9 characters format #,###, #ight adjusted
- The sixth column shows the security symbol, 6 characters.
- Seventh column is the price. 6 characters format #.##, right adjusted, but can increase in width to 11 characters if price requires, resulting in right of the price field shifting to the right.
- Eighth column is the market maker ID of the counter party. 4 characters.
- Ninth column is the time of the execution. 5 characters, format HH:MM.
- Tenth column shows the serial number of the trade message executed against. 7 characters, right adjusted. Format #, with optional #a if trade message has been countered.
- The eleventh column shows a status text. The text is either "FILLS" if the trade message has been fully filled, or "LVS #number of shares" if this was a partial fill.
- Optionally, the twelfth column may show "AY" if viewing firm executed the trade message as agency or "RP" if executed as riskless principal.
- The thirteenth column shows the QAP value as "QAP n"

4.11.3 Kill button

Visible: always

Enabled: only when user has single clicked on a live outgoing trade message and trade message remains selected.

Function: when clicked it will submit a kill request to EMS for the trade message that is selected.

4.11.4 Kill All button

Visible: always

Enabled: always.

Function: when clicked it will submit a kill request to EMS for all outgoing trade messages

- for the security on the montage when no trade message is selected, or
- for the security of the trade message that is selected.

Kill all submits only one Kill Message for a MAX trade message group as EMS automatically kills any other trade messages in the MAX trade message group.

4.11.5 **INCM MSGS button**

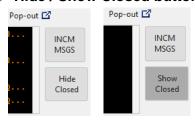
Visible: always

Enabled: always

Function: when clicked it will bring up the Incoming Message Window (IMW). See <u>Incoming Message Window</u>.

Special feature: the button is colored gray/pink with black characters. However, when the user has at least one live incoming trade message pending it flashes yellow.

4.11.6 Hide / Show Closed button



Visible: 'Hide Closed' displayed when trade messages that are no longer open are not currently hidden, 'Show Closed' displayed when trade messages that are no longer open are currently hidden

Enabled: always

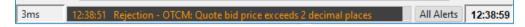
Function: When 'Hide Closed' clicked, all the trade messages that are no longer open will be hidden from the display. When 'Show Closed' clicked, all the trade messages that are no longer open will be included on the display.

4.11.7 Window Pop-out button

Visible and enabled: Always when user is logged in

Action: Pops out the OTC Link message section in a new window, removing the space on the main window where the OTC Link area used to be. The window can be positioned anywhere on screen, and minimized or maximized like normal windows. Instead of a close button it has a pop-in button, which pops it back into the main window. The size and position of the toolbar is saved with desktop save.

4.12. Status and Alerts Section



4.12.1 Response time indicator

Visible: always, except when Activity indicator is showing in its place

Enabled: always

Function: Shows the latest latency indicator from OTC Link as M.SSs. When double clicked it brings up the About dialog. See *About dialog*.

4.12.2 Activity indicator

Visible: always, except when response time indicator is showing in its place

Enabled: always

Function: A graphical "wave" moving back and forth to indicate Dealer has submitted to OTC Link and is waiting for reply. When double clicked it brings up the About dialog. See *About dialog*.

4.12.3 Latest alert

Visible: always Enabled: always

Function: shows the latest alert received by Dealer. If double clicked it opens up the Alerts window and positions highlight on the last alert. See <u>Alerts window</u>.

4.12.4 All Alerts button

Visible: always Enabled: always

Function: if clicked it opens up the Alerts window. See *Alerts window*.

4.12.5 Time indicator

Visible: always Enabled: NA

Function: shows the OTC Link system time as received by OTC Link. The time is always adjusted to EST using the time zone of the computer.

5. Incoming Message Window

The Incoming Message Window (IMW) is always visible when user is logged in. It cannot be closed, although it can be minimized.

The window has Minimize, Maximize and Exit boxes. If Exit box is clicked it is just ignored.

IMW should always restore upon login, that is, it should not open up in a minimized state.



Screenshot above is of an open IMW with no data. The background color of the main area is gray/pink by default. The background color changes to yellow when there is a live incoming trade message in the Focus area.

IMW has a setting to specify if user wants the window to move to the front whenever a trade message comes in as set by the <u>Trader Preferences</u> dialog. User can also specify to have the dialog give an audible beep whenever there is an active trade message in the Focus area. See the <u>Incoming Message Window section</u> of the Trader Preferences Dialog.

IMW can perform auto ignore on incoming non-liability messages. See Auto Ignore section.

Trader proxies will receive trade messages so long as the traders they are proxying are open, even if they themselves are closed.

Subchapters below describe each section of the window in detail.

5.1. Security Information Section



5.1.1 Security Symbol

Visible: only when a security is in the Message Focus Area

Function: shows the trading symbol for the security of the trade message that is currently in the Message Focus Area. If security has no trading symbol, the Security ID for the security will be shown. In blue font color.

5.1.2 Tier Information

Visible: only when a security is in the Message Focus Area

Function: shows the tier of the security of the trade message that is currently in the Message Focus Area. This is identical to the tier information in the Security Information area of the main window. See <u>Security Information</u>.

5.1.3 NBBO/PBBO Inside Market

Visible: Caption is always visible

Caption: Always NBBO for NMS securities or PBBO for OTC securities.

Function: When a trade message is in the Message Focus Area, it will show the highest bid and the lowest ask for the security of the trade message across any market, along with the corresponding sizes. If there is more than one OTCM quote at the inside, the displayed size will be the aggregate. The aggregate will not include BB quotes at the inside. The highest bid and lowest ask across all markets is the NBBO. See *Quote Ranking*.

Inside quote is shown as: NBBO for NMS securities or PBBO for OTC securities: bid price / ask price (bidsize x asksize)

The color of quote information is green if quote comes from OTC Link, cyan (light blue) if it comes from the external market (OTCBB) and the quote on inside is OTC Linkable, else it's purple. Each side of NBBO/PBBO is colored independently. Background color is black.

5.1.4 **CBBO**

Visible: Caption is always visible

Caption: Always "CBBO".

Function: CBBO will show the highest bid and the lowest ask across any market (OTCM or BB), but also includes ARCA, along with the corresponding sizes.

5.1.5 You

Visible: Caption is always visible

Caption: Always "You".

Function: Shows your firm's quote for the security, if it has one. This shows the best quote from OTC Link and/or OTCBB for each side.

Quote is shown as: You: bid / ask (bid size x as size). The color takes the normal color from the montage, i.e. is green if you have the best price on OTC Link, yellow if priced but not on the inside, etc.

5.1.6 **QAP**

Visible: Caption is only visible when QAP functionality is system enabled

Caption: Always "QAP".

Function: When a trade message is in the Message Focus Area, it will show the QAP of your firm's quote on OTC Link for the security of the trade message. If your firm does not have a quote for the stock on OTC Link then the information is blank.

QAP is shown as: QAP: bid QAP / ask AQP. QAP values range from -30 to +30. Negative values are shown in red, positive in green. If QAP is 0, then the corresponding side(s) are blank and no value shown. Background is dark blue, unless market maker has quotes both on OTC Link and external market (OTCBB) and the prices don't match, then background is red.

5.1.7 Away Button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will issue an Away command for the security, see <u>Away Button</u> on the Side Quote Management section of main window. If the trade message is a sell trade message, the Away button will work as the Away button on the bid side of Side Quote Management. If the trade message is a buy trade massage, the Away button will work as the Away button on the ask side of Side Quote Management.

5.1.8 Unpr Button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will issue a single sided Unprice command for the security, see <u>Unprice Button</u> on the Quote and Message Management section of main window. If the trade message is a sell trade message, the Unpr button will unprice the bid side of the quote only. If the trade message is a sell trade message, the Unpr button will unprice the ask side of the quote only.

5.1.9 Mntg Button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will bring up the main window and load the montage with the security of the trade message in the focus area.

5.1.10 Mute button

A mute button shows the current setting of <u>Trader Preferences</u> to beep on incoming messages. Clicking the button reverses the setting and saves the setting automatically.





5.1.11 Next button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this button moves the trade message in the Incoming Message list immediately below the trade message currently in Message Focus area to the Message Focus area.

5.1.12 Ignore button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this button sets the state of the trade message in the Message Focus area as ignored. The trade message is then moved from focus and next trade message, if any, is moved to focus.

The Ignored state is stored with the trade message and a trade message that has been set as Ignored will never move automatically back into focus. The Ignore status is reset if user moves trade message manually to focus.

5.2. Message Focus Area

P-Liab L1 Sell 100 OTCM 1.00 TEST 3m

The Focus Area shows one incoming message or aggregated message that user can then act upon using buttons in other areas. Message can move to focus either automatically or manually by user clicking on a message in the Incoming Message List.

Messages are moved to Focus Area automatically based on following rules:

- No partially executed or Ignored (whether manually or auto) message ever moves automatically to focus, such messages override any rule below.
- If Focus is empty when a new message comes in, it will move to focus
- When focus becomes empty following an Execution, Decline, Kill, Time Out or Counter, the message in the Incoming Message list that is next after (based on time of arrival) the message that was previously in the focus moves to focus. If there is no message after previous message then the first message in list moves to focus.

5.2.1 Liability Indicator

P-Liab L1 Sell 500 NS No-Liab 2 Sell 1,000 NSF

Visible: only when a trade message is in the Message Focus Area. Not displayed when an aggregated trade message is in Message Focus Area.

Function: depending on the liability flag of the trade message, it will show the following information:

- OTC Link primarily quoted security, liable: P-Liab in black font on a red background
- OTC Link primarily quoted security, non-liable: No-Liab in black font on a cyan background
- FINRA BB primarily quoted security, liable: BB-Liab in black font on a red background
- FINRA BB primarily quoted security, non-liable: No-Liab in black font on a cyan background
- Dual quoted security, liable: P/BB-Liab in black font on a red background
- Dual quoted security, non-liable: No-Liab in black font on a cyan background
- All other securities: Show P-Liab or No-Liab depending on the liability status of trade message

5.2.2 Trade Message String

Visible: only when a trade message is in the Message Focus Area

Function: Trade Message is formatted identical to Incoming Trade Message string as defined in the Trade Message section of the Trade Messages and Execution formatting chapter, with following exceptions:

- Liability number, sending market maker and message duration not displayed when an aggregated trade message is in Message Focus Area.
- Font is not mono spaced.
- Each field uses the exact number of characters needed to display the information.
- Each item of the trade message sting is separated with a single space character.
- Trade Message string is always blue
- The "I" at the front of the text is omitted
- The "ANY" / "AON" part is omitted
- The trade message number is omitted
- The send time information is omitted, only showing the TIF
- If the BestEx/ISO flag was set when message was submitted, then "ISO" (NMS securities) or "BestEx" (non-NMS securities) are shown at the end of the string.

See Trade Messages and Execution formatting

5.3. Fixed Size Button Area



5.3.1 **QS button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with the size of the Market Maker's targeted quote for the security of the trade message in the focus area. See *Execution Size field*.

5.3.2 MS button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with the size of the trade message balance of the trade message in the focus area. See *Execution Size field*.

5.3.3 All button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with the cumulative remaining size of all incoming trade messages for the security in focus area, that have the same side and price as the trade message in focus area. See *Execution Size field*.

5.3.4 Improve/ResetPx Button

Visible: always

Enabled: "Improve" is only enabled when the security for the trade message in the Message Focus Area has an NBBO/PBBO. "ResetPx" is enabled when price in price execution field differs from trade message price, either immediately after use clicks Improve or user enters a price into the Price field which differs from trade message price.

Caption:

- Improve if price of price execution field matches trade message price
- ResetPx if price of price execution field does not match trade message price

Function: when "Improve" button is clicked, it will populate the execution price field with a price that improves the trade message according to the Price Improvement rule:

- If trade message is Buy trade message, price is reduced by the lesser of 1 cent of half the spread of NBBO/PBBO. If spread of NBBO/PBBO is negative then price is not changed.
- If trade message is Sell trade message, price is increased by the lesser of 1 cent of half the spread of NBBO/PBBO. If spread of NBBO/PBBO is negative then price is not changed.

The caption of the button changes to "ResetPx" after user clicks "Improve". If price of execution price field differs from the trade message price the caption of this button also changes to "ResetPx". Clicking the "ResetPx" button populates the execution price field with the trade message price and changes caption back to "Improve".

5.3.5 **500 button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with 500 shares. See *Execution Size field*.

5.3.6 **1k button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with 1,000 shares. See *Execution Size field*.

5.3.7 **2.5k button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with 2,500 shares. See *Execution Size field*.

5.3.8 **5k button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with 5,000 shares. See *Execution Size field*.

5.3.9 **10k button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with 10,000 shares. See *Execution Size field*

5.3.10 **50k button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will populate the Trade Message Execution Size field with 50,000 shares. See *Execution Size field*.

5.3.11 **x2 button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will multiply the value of Trade Message Execution Size field by 2 and place new value in field. See *Execution Size field*.

5.3.12 /2 button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will divide the value of Trade Message Execution Size field by 2 and place new value in field. See *Execution Size field*.

5.3.13 **x5 button**

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will multiply the value of Trade Message Execution Size field by 5 and place new value in field. See *Execution Size field*.

5.3.14 /5 button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: when clicked it will divide the value of Trade Message Execution Size field by 5 and place new value in field. See *Execution Size field*.

5.3.15 Dcl Msg button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this checkbox submits a Decline Message for the trade message in the Message Focus Area.

5.3.16 Dcl All button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this checkbox submits a Decline Message for the trade message in the Message Focus Area and any trade message in the Incoming Message List that is for the same security, price and side as the trade message in the Message Focus Area.

5.3.17 Counter button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this checkbox opens the Counter Message dialog. See *Counter Message*

<u>Dialog</u>.

5.4. Message Management Area

sh/m: Exc	sg 100/1 100	sh @	10.00	✓ Advertise No Partial		Sell	Sell+Away	Sell MS	Sell MS+Away	Sell MS+Decr
	sg 100/1 100	sh @	9.99	✓ Advertise No Partial		Buy	Buy+Away	Buy MS	Buy MS+Away	Buy MS+Decr

5.4.1 Shares/Msgs remaining

Enabled: only when a trade message is in the Message Focus Area

Function: Sums up the shares remaining and number of trade messages in Incoming Message List that are for the same security, side and price as the security of the trade message in the Message Focus Area. Format: sh/msg shares_remaining/number_msgs

5.4.2 Execution Size Field

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: text field that allows input of shares to execute. Valid type of input:

• Number, minimum 1 and maximum 2 billion shares

When the Execution Size Field is in focus (i.e., clicked on), the user will be able to use their mouse scroll wheel, as well as the keyboard up and down arrows, to increase and decrease the share value as follows:

- Each scroll increment will be the minimum quote size for OTC securities and odd lot size for NMS securities.
- The maximum scroll limit will be the highlighted incoming message size.
- The minimum scroll limit will be the minimum quote size.
- If the size is currently not a multiple of minimum quote size or odd lot size (e.g., 150, where minimum quote size or odd lot size is 100), scrolling will go to closest multiple of minimum quote size or odd lot size (e.g., down to 100 or up to 200).

5.4.3 Execution Price field

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: text field that allows input of price to execute. The field is pre-populated with the trade message price when a trade message moves to focus area. Valid type of input is same as the price field of Trade Message dialog. If the price of this field differs from the trade message price, then the "Improve" button changes to "ResetPx" button.

5.4.4 Advertise checkbox

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking the checkbox reverses the value of the checkbox. If set when trade message is executed it will 'advertise' the Execution on OTC Dealer and on the Trade Feed.

Default Status: state of button should be set to checked if the 'Advertise on Incoming Trade Message checkbox is set to checked in Trader Preferences, else unchecked. See <u>Trader Preferences dialog</u>.

5.4.5 No Partial checkbox

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this checkbox reverses the value of the checkbox. If set when trade message is executed it will set the No Partial option, i.e. not allow a partial execution (mainly used with MAX trade messages). The checkbox is always set to unchecked when a trade message is moved to the Message Focus area.

5.4.6 Short checkbox

Visible: always

Enabled: only when a trade message is in the Message Focus Area and the trade message is of type Buy

Function: clicking this checkbox reverses the value of the checkbox. If set when trade message is executed it will set sell to sell short. The checkbox is always set to unchecked when a trade message is moved to the Message Focus area, except if the incoming trade message is a counter buy trade message and the corresponding sell trade message that was countered has been sent with the Short option.

5.4.7 Agency checkbox

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this checkbox reverses the value of the checkbox. Setting this checkbox resets the RsklPr checkbox. If set when trade message is executed it will execute trade message as Agency. The checkbox is always set to unchecked when a trade message is moved to the Message Focus area, except if the incoming trade message is a counter trade message and the corresponding sent trade message that was countered has been sent with the Agency option.

5.4.8 RsklPr checkbox

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Function: clicking this checkbox reverses the value of the checkbox. Setting this checkbox resets the Agency checkbox. If set when trade message is executed it will execute trade message as Riskless principal. The checkbox is always set to unchecked when a trade message is moved to the Message Focus area, except if the incoming trade message is a counter trade message and the corresponding sent trade message that was countered has been sent with the Riskless Principal option.

5.4.9 No QAP

Visible: always

Enabled: only when a trade message is in the Message Focus Area and user can waive QAP, i.e. when QAP rate in message is negative

Function: clicking this checkbox reverses the value of the checkbox. Setting this checkbox sets waives QAP when one of the Buy or Sell buttons is selected.

5.4.10 Buy/Sell button

Visible: always

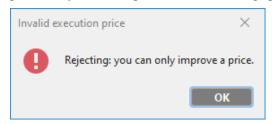
Enabled: only when the quantity in the Execution Size Field is greater than or equal to the sum of remaining quantity of all the open liability trade messages at the quoted price level. The Buy /Sell + Away button (see below) will still be available.

Caption

- "Buy" if trade message in focus area is a sell trade message
- "Sell" if trade message in focus area is a buy trade message

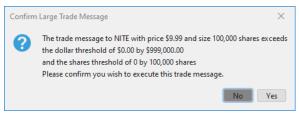
Function: when clicked, it executes trade message by submitting a buy or sell command, corresponding to the caption of the button, for the number of shares as specified in the Execution Size field, applying Sell and Agency/Riskless Pr parameters, as specified by those checkboxes.

Prior to submitting the trade message a check is performed on the execution price. Execution price must be specified, else an error is displayed. If user attempts to execute at a price that goes the wrong direction from price improvement, i.e. sell at a higher price than trade message price or buy at a lower price than trade message price, the following dialog is shown to user:



User can only dismiss the dialog and is returned to unchanged IMW.

Also prior to submitting message, checks for large message value and too many shares are performed. If the value of the message, based in execute price, is greater than specified in the Large Trade Message area of the Trader Preference dialog, a warning dialog is displayed. Only if user acknowledges this the message is submitted.



If the size of the execution in the message is larger than available (e.g., the user entered a larger value than in the trade message, the trade message was updated to a smaller size before the execution was submitted, etc.), a warning dialog is displayed. Only if user acknowledges this the message is submitted. An exception to this is if the incoming trade message is part of a MAX trade message, and the user has set their <u>Trader Preferences</u> to override this warning. If it is set, this warning will not be displayed, and the execution will be submitted.



5.4.11 Buy /Sell + Away button

Visible: always

Enabled: only when a trade message is in the Message Focus Area

Caption

- Buy+Away if trade message in focus area is a sell trade message
- Sell+Away if trade message in focus area is a buy trade message

Function: when clicked, it submits a buy or sell command, corresponding to the caption of the button, for the number of shares as specified in the Execution Size field, applying Sell and Agency/Riskless Pr parameters, as specified by those checkboxes. The command is followed by an Away command, as specified in the Away button of the IMW. See *Away button*.

For an NMS security, if the execution quantity is less than the quote size of the respondent, the Away command will not be sent.

If user has set <u>Execute and Away</u> in the Trader Preferences window then remaining messages having same side and price, either all or only messages with lower liability depending on setting, will be rejected automatically.

Same checks on execution price are performed as for the Buy/Sell button.

5.4.12 Buy/Sell MS button

Visible: always.

Enabled: only when a trade message is in the Message Focus Area

Caption:

- "Buy MS" on first line, if trade message in focus area is a sell trade message
- "Sell MS" on first line, if trade message in focus area is a buy trade message

Function: copies function of Buy/Sell button except it should fully execute the remaining quantity of the trade message in the Message Focus Area.

5.4.13 Buy/ Sell MS + Away button

Visible: always.

Enabled: only when a trade message is in the Message Focus Area

Caption:

- "Buy MS + Away" on first line, if trade message in focus area is a sell trade message
- "Sell MS + Away" on first line, if trade message in focus area is a buy trade message

Function: copies function of Buy/Sell + Away button except it should fully execute the remaining quantity of the trade message in the Message Focus Area.

For an NMS security, if the execution quantity is less than the quote size of each respondant, the Away command will not be sent.

5.4.14 Buy/ Sell MS + Decr button

Visible: always.

Enabled: only when a trade message is in the Message Focus Area

Caption:

- "Buy MS + Decr" on first line, if trade message in focus area is a sell trade message
- "Sell MS + Decr" on first line, if trade message in focus area is a buy trade message

Function: copies function of Buy/Sell MS + Away button except instead of executing and then updating the user's quote to a new price, the quote price will remain the same, but the quote size will be decremented by the amount of the selected trade message (or aggregate) executed.

5.5. Incoming Message List

Aggregate Trade Msgs									
IL1 S	100 отсм	9.99 ANY NITE	1002600 12:54:33-3m	100	QAP -30				
IL1 B	100 OTCM	10.00 ANY NITE	1002800 12:54:36-3m	100	QAP -30				

5.5.1 Format of Trade Messages

The list will only show the same trade messages and aggregated trade messages that are live and can be acted upon as described above in Trade Message and Execution formatting. It shows oldest trade message on top. Trade messages are always displayed at the bottom of the list. List is not scrolled if a trade message comes in that would show below the visible area of the list.

Trade messages are updated in real time. When a trade message is partially executed the trade message will be updated to reflect remaining shares and show how many trade messages have been executed.

Trade messages in the lists are formatted identical to Incoming Message Sting as defined in the Trade Messages section of the Trade Messages and Execution formatting chapter. Trade messages in the list are normally colored yellow in line with color convention on the main window, the exception being if a message has been manually or automatically ignored, then it will be colored white. See *Trade Messages and Execution formatting* and *Auto Ignore*.

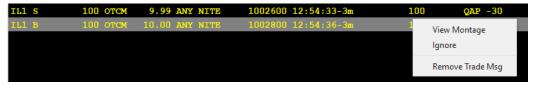
If there exists at least one trade message in this list that has not been acted upon, the whole Incoming Message window is colored with yellow background.

5.5.2 Clicking on Messages

When a Trade Message is clicked on, it is moved to the Message Focus area, regardless of whether it's been partially executed or Ignored.

5.5.3 Context Menu

When right clicking on a trade message in the list, a context menu is shown.



The commands in the list are the following:

5.5.3.0. View Montage

This is identical to clicking the Mntg button, it opens up the main window and loads the security in the clicked trade message to the montage. See *Mntg button*.

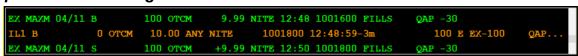
5.5.3.1. Ignore

This is identical to clicking the Ignore button, it sets the state of the selected trade message to ignore state. See *Ignore button*.

5.5.3.2. Remove Trade Message

This command is only available in the context menu. It removes the trade message from the list. This command is not reversible.

5.6. Expired Trade Messages and Execution List



This section lists all expired trade massages and executions. New entries are shown on the bottom of list. List is scrolled down to show the last entry if it would otherwise be shown off the visible list.

Trade Messages and Executions are formatted as defined in the Trade Messages and Execution formatting chapter. Trade Messages in the list are always colored orange because they are always expired. See *Trade Messages and Execution formatting*

5.7. Auto Ignore

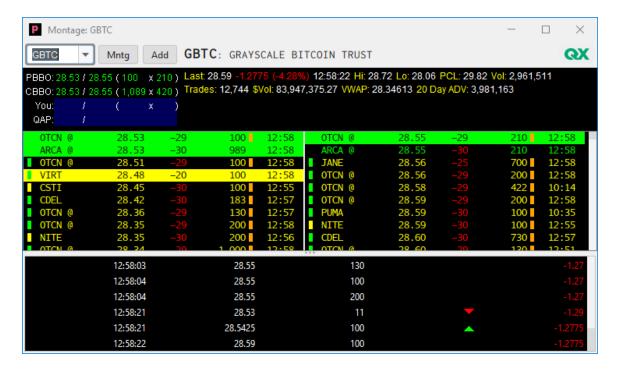
The Incoming Message Window performs checks on incoming non-liability messages to decide if message should be Auto Ignore based on user preferences. This works similar to manual Ignore (see Ignore button) except Dealer automatically ignores the message based on 3 different criteria that can be turned on or off individually by user in the Trader Preferences dialog. If at least one criteria has been turned on, then any incoming non-liability message is checked against all turned on criteria and if the message matches at least one of them, then message is Auto Ignored. The criteria for non-liability messages are, in same order as checkboxes are presented on the Trader Preference dialog:

- price deviates more than x% from quote, i.e. sell then price x% higher than bid, buy then price x% lower than bid, where x% is set by user in the Trader Preference dialog deviation box.
- message is odd lot, i.e. the size of message is less than the lower of 100 or the quote tier size for the message order price
- message cannot be countered

Ignored messages are shown with other incoming messages, but differentiated with white color instead of yellow. Ignored messages also will never move automatically to the focus area, and an incoming message that was auto ignored, will never bring dialog to the front.

6. Montage Window

A Montage window is a window containing a Montage that can be viewed independently from the montage on the main window. It contains it's own security input field, security information area and trade report area. It also has a Prints section showing recent trades in the security.



6.1. Security Input Field

Visible: always Enabled: always

Function: same as the <u>symbol input box</u> on the main window.

6.2. Mntg Button

Visible: always Enabled: always

Function: Clicking this button takes user to the main window and loads the security that is currently visible on the Montage window to the Main window's montage.

6.3. Add/Update Button

Visible: always Enabled: always

Function: Opens the Add or Update quote dialogs.

6.4. Security Name Area

Visible: always Enabled: always

Function: shows the security name of the security currently being viewed on window

6.5. Trade Information Area

Visible: always Enabled: always

Function: same as the <u>Trade information area</u> on the main window.

6.6. Montage

Visible: always Enabled: always

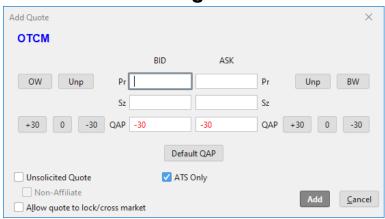
Function: same as Montage on the main window.

6.7. Trade Report Area

Visible: always Enabled: always

Function: Shows recent trade reports with newest on top. The list can be scrolled up or down.

7. Add Quote Dialog



7.1. Format of dialog

The Add Quote dialog is used for adding quotes to a security. Dialog is opened from the montage by clicking the Add button. See *Add button*.

The symbol of the security currently on the main window is shown at the top. If security does not have a trading symbol the security name will be shown instead. Color is blue.

7.2. Bid field

Visible: always

Enabled: only when OW and bid Unp buttons are not selected

Function: allows input of numerical characters and decimal point only, up to 9 characters long, excluding the decimal point. Price precision is always limited to 6 decimal points though.

7.3. Ask field

Visible: always

Enabled: only when BW and ask Unp buttons are not selected

Function: allows input of numerical characters and decimal point only, up to 9 characters long, excluding the decimal point. Price precision is always limited to 6 decimal points though.

7.4. Bid Size field

Visible: always

Enabled: only when OW and bid Unp buttons are not selected

Function: allows input of numerical characters only, up to 9 characters long.

7.5. Ask Size field

Visible: always

Enabled: only when BW and ask Unp buttons are not selected

Function: allows input of numerical characters only, up to 9 characters long.

7.6. Bid QAP field

Visible: always

Enabled: only when OW and bid Unp buttons are not selected

Function: allows input of numerical characters and "-" only, up to 9 characters long. Color of text is black when content is "0", green when number is positive and red when negative.

7.7. Ask QAP field

Visible: always

Enabled: only when BW and ask Unp buttons are not selected

Function: allows input of numerical characters and "-" only, up to 9 characters long. Color of text is black when content is "0", green when number is positive and red when negative.

7.8. OW Button

Visible: always

Enabled: only for OTC securities (i.e., disabled for NMS securities) Function: state button allows user to specify bid as Offer Wanted

7.9. Bid Unp Button

Visible and enabled: always

Function: state button allows user to specify bid as Unpriced

7.10. BW Button

Visible: always

Enabled: only for OTC securities (i.e., disabled for NMS securities) Function: state button allows user to specify ask as Offer Wanted

7.11. Ask Unp Button

Visible and enabled: always

Function: state button allows user to specify ask as Unpriced

7.12. Bid QAP Size Button Row

Visible and enabled: always

Function: when OW and bid Unp buttons are not selected, populates the bid QAP field with the value stated on the clicked button.

7.13. Ask QAP Size Button Row

Visible and enabled: always

Function: when BW and ask Unp buttons are not selected, populates the ask QAP field with the value stated on the clicked button.

7.14. Default QAP Button

Visible and enabled: always

Function: populates fields bid and ask QAP with Market Maker's default QAP value, taken from the Trader message.

7.15. Unsolicited Quote checkbox

Visible and enabled: always

Function: clicking the checkbox reverses the selection of the checkbox. Allows user to set the unsolicited flag of a new quote.

7.16. Non-Affiliate checkbox

Visible: always

Enabled: Only when Unsolicited Quote checkbox is checked

Function: clicking the checkbox reverses the selection of the checkbox. Allows user to set the non-affiliate flag for a new unsolicited quote.

7.17. Lock/Cross checkbox

Visible and enabled: always

Function: clicking the checkbox reverses the selection of the checkbox. Allows user to set the Lock/Cross flag of a new quote.

7.18. ATS Only

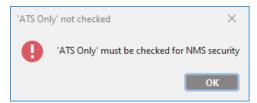
Visible and enabled: always

Function: clicking the checkbox reverses the selection of the checkbox. Allows user to indicate the quote is only to be displayed on the ATS.

7.19. Add button

Visible and enabled: always

Function: clicking this button submits the Add Quote command to OTC Link, with parameters as specified by fields and buttons on the dialog. If either bid or ask fields are not specified, quote will be submitted with corresponding price type of unpriced. If either bid size or ask size is not specified, size is set to minimum quote size, unless quote is unsolicited, then side is always submitted as unpriced if not both price and size are specified. If QAP values are specified then the specific QAP is set for the related side. If parameters are only specified for one side, then a single sided update will be submitted. It then closes the dialog. If the quote is for an NMS security and the ATS Only checkbox is not checked, it shows a dialog



User must dismiss dialog before returning to the Add Quote dialog.

7.20. Cancel button

Visible and enabled: always

Function: closes the dialog without submitting a new quote.

8. Update Quote Dialog



8.1. Format of dialog

The Update Quote dialog is used for updating an existing quote to a security. Dialog is opened from the montage by clicking the Update button. See *Update Button*.

The symbol of the security currently on the main window is shown at the top. If security does not have a trading symbol the security name will be shown instead. Color is blue.

The current quote on OTC Link for the market maker for the security is shown right of the symbol. The format of the quote is *bid / ask (bid_price* x *ask_price)*. Color is blue.

8.2. Bid field

Visible: always

Enabled: only when OW and bid Unp buttons are not selected

Function: allows input of numerical characters only, up to 9 characters long.

8.3. Ask field

Visible: always

Enabled: only when BW and ask Unp buttons are not selected

Function: allows input of numerical characters only, up to 9 characters long.

8.4. Bid Size field

Visible: always

Enabled: only when OW and bid Unp buttons are not selected

Function: allows input of numerical characters only, up to 9 characters long.

8.5. Ask Size field

Visible: always

Enabled: only when BW and ask Unp buttons are not selected

Function: allows input of numerical characters only, up to 9 characters long.

8.6. Bid QAP field

Visible: always

Enabled: only when OW and bid Unp buttons are not selected

Function: allows input of numerical characters and "-" only, up to 9 characters long. Color of text is black when content is "0", green when number is positive and red when negative.

8.7. Ask QAP field

Visible: always

Enabled: only when BW and ask Unp buttons are not selected

Function: allows input of numerical characters and "-" only, up to 9 characters long. Color of text is black when content is "0", green when number is positive and red when negative.

8.8. OW Button

Visible: always

Enabled: only for OTC securities (i.e., disabled for NMS securities) Function: state button allows user to specify bid as Offer Wanted.

8.9. Bid Unp Button

Visible and enabled: always

Function: state button allows user to specify bid as Unpriced

8.10. BW Button

Visible: always

Enabled: only for OTC securities (i.e., disabled for NMS securities) Function: state button allows user to specify ask as Bid Wanted

8.11. Ask Unp Button

Visible and enabled: always

Function: state button allows user to specify ask as Unpriced

8.12. Bid QAP Size Button Row

Visible and enabled: always

Function: when OW and bid Unp buttons are not selected, populates the bid QAP field with the value stated on the clicked button.

8.13. Ask QAP Size Button Row

Visible and enabled: always

Function: when BW and ask Unp buttons are not selected, populates the ask QAP field with the value stated on the clicked button.

8.14. Default QAP Button

Visible and enabled: always

Function: populates fields bid and ask QAP with Market Maker's default QAP value, taken from the Trader message.

8.15. Unsolicited Quote checkbox

Visible: always Enabled: never

Function: the checkbox is used to show the current unsolicited status of the quote, i.e. checked if the quote is unsolicited, else not checked. It can never be changed on quote update.

8.16. Non-Affiliate checkbox

Visible: always Enabled: never

Function: the checkbox is used to show the current non-affiliate status of an unsolicited quote, i.e. checked if the quote unsolicited quote is non-affiliate, else not checked. It can never be changed on quote update.

8.17. Lock/Cross checkbox

Visible and enabled: always

Function: clicking the checkbox reverses the selection of the checkbox. Allows user to set the Lock/Cross flag of a quote update.

8.18. ATS Only

Visible and enabled: always

Function: clicking the checkbox reverses the selection of the checkbox. Allows user to indicate the quote is only to be displayed on the ATS.

8.19. Update button

Visible and enabled: always

Function: clicking this button submits the update quote command, single sided or double sided, with parameters as specified by other fields and buttons on the dialog. Each side is handled separately.

If a bid/ask price is specified, the price is submitted along with size as specified in the corresponding size field. If no size is specified then size is set to minimum quote size, unless quote is unsolicited, then side is always submitted as unpriced unless both price and size are specified.

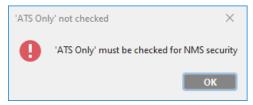
If no bid/ask price is specified but corresponding size field is populated, then only the size value is submitted for the corresponding side, unless quote is unsolicited, then side is always submitted as unpriced unless both price and size are specified.

If neither bid/ask price nor size is specified, then the corresponding side is not submitted unless the QAP value for the side has been specified.

QAP values are only submitted if they are explicitly entered in the QAP fields. QAP values can be submitted even though corresponding price and size fields are empty.

It then closes the dialog.

If the quote is for an NMS security and the ATS Only checkbox is not checked, it shows a dialog



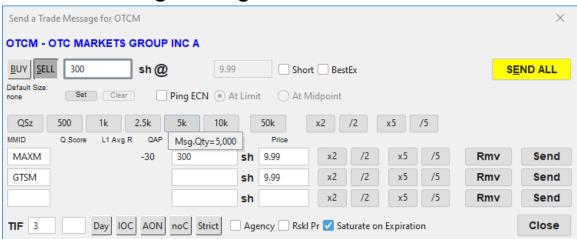
User must dismiss dialog before returning to the Update Quote dialog.

8.20. Cancel button

Visible and enabled: always

Function: closes the dialog without submitting a quote update.

9. Trade Message Dialog



Dialog has caption "Send a Trade Message for *symbol*". The symbol is preset based on the security currently on the main window.

The dialog has an X box in the title bar for closing the dialog without submitting a trade message.

All items below are always visible on the dialog. Some may not always be enabled, as specified for each item.

9.1. Common Trade Messages parameters

9.1.1 Security Information

Shows the security symbol – security name of the security the trade message is for. Blue color.

9.1.2 Buy button

Visible and enabled: always

A state button, can be either in up or down state. When button is in down state it means the trade message sent will be a buy trade message.

Clicking this button when button is not selected sets the state to down and the state of Sell button to up.

Default value: If dialog was opened by double clicking on the ask side of the montage or from Ord button based on an existing buy trade message string to set up a buy trade message, then the Buy button will be in down state initially.

9.1.3 Sell button

Visible and enabled: always

A state button, can be either in up or down state. When button is in down state it means the trade message sent will be a sell trade message.

Clicking this button when button is not selected sets the state to down and the state of Buy button to up.

Default value: If dialog was opened by double clicking on the bid side of the montage or from Ord button based on an existing sell trade message string to set up a sell trade message, then the Sell button will be in down state initially.

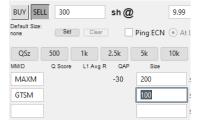
9.1.4 Size field

Function: text field that allows input of shares for the trade message(s). Valid type of input:

- Number, minimum 1 and maximum 2 billion shares
- A number followed by "k" character, meaning 1,000 times the value of the number
- A number followed by "m" character, meaning 1,000 times the value of the number
- A number followed by "mm" characters, meaning 1,000,000 times the value of the number. 100mm is the maximum.

While a number is entered into this field, it will be replicated in the MM Size field. If there are multiple MM Size field, then the number will be allocated among all MM Size fields such that an even multiple of 100 shares is allocated to each field, with any balance allocated to the last MM Size field.

Default value: when dialog opens this field will be the sum of all individual market maker size fields. See MM Size field.



When the Size field is in focus (i.e., clicked on), the user will be able to use their mouse scroll wheel, as well as the keyboard up and down arrows, to increase and decrease the share value as follows:

- Each scroll increment will be the minimum quote size for OTC securities and odd lot size for NMS securities.
- The minimum scroll limit will be zero.
- There is no maximum scroll limit.

• If the size is currently not a multiple of minimum quote size or odd lot size (e.g., 150, where minimum quote size or odd lot size is 100), scrolling will go to closest multiple of minimum quote size or odd lot size (e.g., down to 100 or up to 200).

9.1.5 Price field

Enabled: always except when doing a Sweep all

Function: text field for input of price. Only numerical characters allowed. 8 characters maximum.

Default value: on a single message or regular sweep, price from corresponding side of quote used to base trade message on. On a sweep all it displays the weighted average price of all message that will be sent.

9.1.6 Short checkbox

Visible: always

Enabled: only when sell state button is down

Function: clicking the short button reverses the state of the checkbox. If this checkbox is set when trade message(s) is submitted then the trade message will be sent as short sell.

Default value: always unchecked when dialog is opened

9.1.7 BestEx / ISO checkbox

Visible: always. Enabled: always

Function: Legend of checkbox is BestEx when security is non-NMS and ISO when NMS. Allows user to set BestEx flag for non-NMS securities and ISO flag for NMS securities

Default value: takes the user defined preference from Best Execution Instruction section of the Trader Preferences dialog, using the BestEx when security is not NMS, else the ISO preference

9.1.8 Ping ECN checkbox

Visible: always

Enabled: only when user and security have been enabled for pinging the OTC Link ECN

Function: before a trade message is sent to the selected MPID (or multiple MPIDs, if a MAX or Sweep is selected), an IOC ECN ping order will first be sent to OTC Link ECN for the total quantity indicated in the message.

Default value: field should be populated with the value specified in the Ping ECN field of Trader Preferences. See *Trader Preferences dialog*.

9.1.9 At Limit radio button

Visible: always

Enabled: only when Ping ECN checkbox is checked

Function: when set, the price of the ping order will be the limit price entered by the subscriber

Default value: field should be populated with the value specified in the At Limit field of Trader Preferences. See *Trader Preferences dialog*.

9.1.10 At MidPoint radio button

Visible: always

Enabled: only when Ping ECN checkbox is checked

Function: when set, the price of the ping order will be the less aggressive of the limit price entered by the subscriber and the current midpoint of the CBBO

Default value: field should be populated with the value specified in the At MidPoint field of Trader Preferences. See *Trader Preferences dialog*.

9.1.11 **TIF fields**

Visible: always

Enabled: only when Day state button is not selected

Function: allows user to specify the time in force duration of the trade message. Two fields allow for specifying the minute and second part separately. Minute part takes 3 numerical characters, second part takes 2 numerical characters.

Default value: field should be populated with the value specified in the TIF field of Trader Preferences. See *Trader Preferences dialog*.

9.1.12 Day button

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify a Day Trade Message when trade message is submitted. When the button is in down state the TIF fields are disabled.

Default value: always not selected

9.1.13 **IOC button**

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify an IOC trade message when trade message is submitted.

Default value: state of button should be set according to the IOC checkbox of Trader Preferences. See *Trader Preferences dialog*.

9.1.14 **AON** button

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify an AON trade message when trade message is submitted.

Default value: state of button should be set according to the AON checkbox of Trader Preferences. See *Trader Preferences dialog*.

9.1.15 **noC button**

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify the trade message as non counter-able when trade message is submitted.

Default value: state of button should be set according to the value specified in the Cannot be Countered checkbox of Trader Preferences. See <u>Trader Preferences dialog</u>.

9.1.16 Strict button

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify the trade message as cannot be price improved when trade message is submitted.

Default value: button should always be not selected when dialog opens. There is no default value for this button in the Trader Preferences dialog.

9.1.17 Agency checkbox

Visible and enabled: always

Clicking the Agency checkbox reverses the state of the checkbox. When this checkbox is set it will reset the Rskl Pr checkbox. When this checkbox is set, it will specify the trade message as Agency when it is submitted.

Default value: state of button should be set to checked if the Agency radio button of Default Trade Message Capacity parameter of Trader Preferences is selected, else unchecked. See *Trader Preferences dialog*.

9.1.18 Rskl Pr checkbox

Visible and enabled: always

Clicking the Rskl Pr checkbox reverses the state of the checkbox. When this checkbox is set it will reset the Agency Pr checkbox. When this checkbox is set, it will specify the trade message as Agency when it is submitted.

Default value: state of button should be set to checked if the RsklPr radio button of Default Trade Message Capacity parameter of Trader Preferences is selected, else unchecked. See *Trader Preferences dialog*.

9.1.19 Saturate on Expiration checkbox

Visible and enabled: always

Clicking the Saturate on Expiration checkbox reverses the state of the checkbox. When this checkbox is set, the trade message will trigger saturation when the trade message is declined or expires due to TIF.

Default value: field should be populated with the value specified in the Saturate on Expiration field of Trader Preferences. See <u>Trader Preferences dialog</u>.

9.2. Preset Size buttons

9.2.1 QSz button

Visible and enabled: always

Function: when clicked it will populate each MM Size field with the size of the corresponding side of quote from that market maker, taking bid side when trade message is Sell and ask side when trade message is Buy. It will also sum up the total number of shares and put into the Size field of the Common Message parameters.

9.2.2 **500** button

Visible and enabled: always

Function: when clicked it will populate each MM Size field with 500 shares. It will also sum up the total number of shares and put into the Size field of the Common Message parameters.

9.2.3 1k button

Visible and enabled: always

Function: when clicked it will populate each MM Size field with 1,000 shares. It will also sum up the total number of shares and put into the Size field of the Common Message parameters.

9.2.4 **2.5k** button

Visible and enabled: always

Function: when clicked it will populate each MM Size field with 2,500 shares. It will also sum up the total number of shares and put into the Size field of the Common Message parameters.

9.2.5 **5k button**

Visible and enabled: always

Function: when clicked it will populate each MM Size field with 5,000 shares. It will also sum up the total number of shares and put into the Size field of the Common Message parameters.

9.2.6 10k button

Visible and enabled: always

Function: when clicked it will populate each MM Size field with 10,000 shares. It will also sum up the total number of shares and put into the Size field of the Common Message parameters.

9.2.7 50k button

Visible and enabled: always

Function: when clicked it will populate each MM Size field with 50,000 shares. It will also sum up the total number of shares and put into the Size field of the Common Message parameters.

9.2.8 x2 button

Visible and enabled: always

Clicking this button multiplies all size fields by 2. That is, both the Size field of the Common Message parameters and each individual market maker size are affected equally.

9.2.9 **/2 button**

Visible and enabled: always

Clicking this button divides all size fields by 2. That is, both the Size field of the Common Message parameters and each individual market maker size are affected equally.

9.2.10 **x5 button**

Visible and enabled: always

Clicking this button multiplies all size fields by 5. That is, both the Size field of the Common Message parameters and each individual market maker size are affected equally.

9.2.11 /5 button

Visible and enabled: always

Clicking this button divides all size fields by 5. That is, both the Size field of the Common Message parameters and each individual market maker size are affected equally.

9.2.12 **Default Size Information**

Visible: always

Function: shows the default execution size for the security if one has been set by user. See Set Button and Security Preferences.

9.2.13 **Set Button**

Visible and enabled: always

Function: when clicked this button will set the security preference for the security to specify the default trade message size as the size of the Size Field.

9.2.14 Clear Button

Visible: always

Enabled: only when a default size has been set for the security

Function: when clicked this button will reset the security preference for the security to clear the default trade message size.

9.3. Market Maker information



This section shows one line for each market maker to receive a trade message. When dialog is opened, if no market maker is specified then it will open with one empty MM line. If one or more market makers are specified when opening, then the corresponding number of lines are shown each with pre filled in information.

Typing in a 4 character market maker ID in the last line will create a new empty line below it.



9.3.1 MMID field

4 character alphanumerical field to specify a market maker. No validation is done on the field to enforce a valid MMID value.

Default value: when trade message(s) is set up from montage, it will be pre populated with the MMID.

9.3.2 MM QAP information

Shows the QAP value from the quote of the specified Market Maker receiver. This value is pre populated when dialog opens with IDs of specific market maker receivers. When a new Market Maker ID is typed into the MMID field, the corresponding QAP value is shown in this space.

9.3.3 MM Size field

Function: text field that allows input of shares to be sent to this market maker. Valid type of input:

- Number, minimum 1 and maximum 2 billion shares
- A number followed by "k" character, meaning 1,000 times the value of the number
- A number followed by "m" character, meaning 1,000 times the value of the number
- A number followed by "mm" characters, meaning 1,000,000 times the value of the number. 100mm is the maximum.

While a number is entered into this field, the total sum of all MM Size fields will be calculated and placed in the Size field of the Common Message parameters section.

Default value: if a default trade message size has been set for the security in the Security Preferences Dialog then that size is put into each market maker trade message size. Else the quote size of the corresponding side of quote for each market maker

When the MM Size field is in focus (i.e., clicked on), the user will be able to use their mouse scroll wheel, as well as the keyboard up and down arrows, to increase and decrease the share value as follows:

- Each scroll increment will be the minimum quote size.
- The minimum scroll limit will be zero.
- There is no maximum scroll limit.
- If the size is currently not a multiple of minimum quote size (e.g., 150, where minimum quote size is 100), scrolling will go to closest multiple of minimum quote size (e.g., down to 100 or up to 200).

9.3.4 MM Price field

Visible: only when user is sending a sweep on multiple price level

Function: text field for input of price. Only numerical characters allowed. 8 characters maximum.

Default value: price from corresponding side of quote belonging to the market maker

9.3.5 x2 button

Visible: each line has it's own set of buttons. When line is removed the button is removed with it.

Enabled: always when visible

Clicking this button multiplies the value of the corresponding MM Size field by 2. It also updates the Size field of the Common Message parameters section with the total sum of all MM Size fields.

9.3.6 /2 button

Visible: each line has it's own set of buttons. When line is removed the button is removed with it

Enabled: always when visible

Clicking this button divides the value of the corresponding MM Size field by 2. It also updates the Size field of the Common Message parameters section with the total sum of all MM Size fields.

9.3.7 x5 button

Visible: each line has it's own set of buttons. When line is removed the button is removed with it.

Enabled: always when visible

Clicking this button multiplies the value of the corresponding MM Size field by 5. It also updates the Size field of the Common Message parameters section with the total sum of all MM Size fields.

9.3.8 /5 button

Visible: each line has it's own set of buttons. When line is removed the button is removed with it

Enabled: always when visible

Clicking this button divides the value of the corresponding MM Size field by 5. It also updates the Size field of the Common Message parameters section with the total sum of all MM Size fields.

9.3.9 Remove button

Visible: each line has its own set of buttons. When line is removed the button is removed with it.

Enabled: always when visible

Clicking this button removes the corresponding MM line. Remove button on an empty MMID line will not remove the line, enforcing that at least one line is always visible.

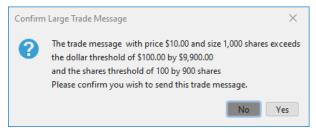
9.3.10 Send button

Visible: each line has its own set of buttons. When line is removed the button is removed with it.

Enabled: always when visible

Color: default color is yellow. It turns red when the corresponding price deviates more from the best price than user has set in the Trader preference dialog.

Clicking this button submits a single trade message based on Common Message parameters with the market maker information coming from the corresponding line of the Send button clicked. Validations are preformed, such as large message size validation, and warning dialogs displayed if required. The large message warning when turned on calculates if value of message is greater than limit set by user for the price in message. If it is, then user must confirm before message can be sent.



If no dialog is displayed and/or after user acknowledges warnings, trade message is submitted, line is deleted from the dialog, but dialog remains open. See also *Send All button*.

9.4. Command Buttons

9.4.1 SEND ALL button

Visible and enabled: always

Color: default color is yellow. It turns red when sending a Sweep All and at least one recipient's price deviates more from the best price than user has set in the Trader preference dialog.

Clicking this button submits one or multiple trade messages based on common Message parameters and market maker ID and size as specified in each market maker line of information. Validations are preformed, such as large message size validation, and warning

dialogs displayed if required. If no dialog is displayed and/or after user acknowledges warnings, trade message is submitted and dialog then closed.

9.4.1.1. Market Maker validation

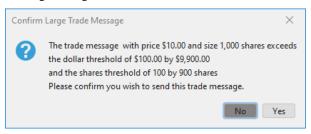
If no market maker is specified on Trade Message dialog, the following warning is displayed: "At least one market maker must be specified". User can dismiss this warning and is then returned to Trade Message dialog.

9.4.1.2. Trade Message size validation

If user has specified a dollar amount warning on the Trader Preferences screen and the dollar amount of trade message (sum of price x shares across all trade messages), the user is presented with the following dialog: "The value of your trade message to *MPID* is \$dollar_amount. Please confirm you with to send this trade message?" Can answer with No (default) or Yes.

If user clicks No, then warning is dismissed and user returned to Trade Message dialog.

If user clicks Yes, then warning is dismissed and trade message is submitted. Trade Message dialog is closed.



9.4.2 Close button

Visible and enabled: always

Clicking this button closes the dialog without sending any trade messages or asking for a user confirmation.

10. MAX Trade Message Dialog

The MAX Trade Message Dialog is similar to the Trade Message dialog, except it is used for sending MAX trade message to multiple market makers. There are no individual size fields as the same size is sent to all market makers.

Note: When a MAX message is sent to OTCN, this process works differently because OTCN is a separate IDQS and not an OTC Link ATS quoting participant. When OTCN is included as a MAX recipient, an IOC order is first sent to OTCN, and any remaining quantity is sent as a traditional MAX trade message to the other intended MAX recipients



Dialog has caption "Send a Trade Message for *symbol*". The symbol is preset based on the security currently on the main window.

The dialog has a X box in the title bar for closing the dialog without submitting a trade message.

All items below are always visible on the dialog. Some may not always be enabled, as specified for each item.

10.1. Common Message parameters

10.1.1 Security Information

Shows the security symbol – security name of the security the trade message is for. Blue color.

10.1.2 Buy button

Visible and enabled: always

A state button, can be either in up or down state. When button is in down state it means the trade message sent will be a buy trade message.

Clicking this button when button is not selected sets the state to down and the state of Sell button to up.

Default value: If dialog was opened by double clicking on the ask side of the montage or from Ord button based on an existing buy trade message string to set up a buy trade message, then the Buy button will be in down state initially.

10.1.3 Sell button

Visible and enabled: always

A state button, can be either in up or down state. When button is in down state it means the trade message sent will be a sell trade message.

Clicking this button when button is not selected sets the state to down and the state of Buy button to up.

Default value: If dialog was opened by double clicking on the bid side of the montage or from Ord button based on an existing sell trade message string to set up a sell trade message, then the Sell button will be in down state initially.

10.1.4 Size field

Function: text field that allows input of shares for the trade message(s). Valid type of input:

- Number, minimum 1 and maximum 2 billion shares
- A number followed by "k" character, meaning 1,000 times the value of the number

- A number followed by "m" character, meaning 1,000 times the value of the number
- A number followed by "mm" characters, meaning 1,000,000 times the value of the number. 100mm is the maximum.

Default value: when dialog opens this field will be populated with the default trade message size for the security if set in the Security Preferences. If no default trade message size is set, this field will be populated with the largest quote size of selected quotes on the montage.

10.1.5 Price field

Function: text field for input of price. Only numerical characters allowed. 8 characters maximum.

Default value: price from corresponding side of quote used to base trade message on

10.1.6 Short checkbox

Visible: always

Enabled: only when sell state button is down

Function: clicking the short button reverses the state of the checkbox. If this checkbox is set when trade message(s) is submitted then the trade message will be sent as short sell.

Default value: always unchecked when dialog is opened

10.1.7 BestEx / ISO checkbox

Visible: always. Enabled: always

Function: Legend of checkbox is BestEx when security is non-NMS and ISO when NMS. Allows user to set BestEx flag for non-NMS securities and ISO flag for NMS securities

Default value: takes the user defined preference from Best Execution Instruction section of the Trader Preferences dialog, using the BestEx when security is not NMS, else the ISO preference

10.1.8 Ping ECN checkbox

Visible: always

Enabled: only when user and security have been enabled for pinging the OTC Link ECN

Function: before a trade message is sent to the selected MPID (or multiple MPIDs, if a MAX or Sweep is selected), an IOC ECN ping order will first be sent to OTC Link ECN for the total quantity indicated in the message.

Default value: field should be populated with the value specified in the TIF field of Trader Preferences. See <u>Trader Preferences dialog</u>.

10.1.9 At Limit radio button

Visible: always

Enabled: only when Ping ECN checkbox is checked

Default for new user: radio button is set

When set, the price of the ping order will be the limit price entered by the subscriber

10.1.10 At MidPoint radio button

Visible: always

Enabled: only when Ping ECN checkbox is checked

Default for new user: radio button is not set

When set, the price of the ping order will be the less aggressive of the limit price entered by the subscriber and the current midpoint of the CBBO

10.1.11 **TIF** fields

Visible: always

Enabled: only when Day state button is not selected

Function: allows user to specify the time in force duration of the trade message. Two fields allow for specifying the minute and second part separately. Minute part takes 3 numerical characters, second part takes 2 numerical characters.

Default value: field should be populated with the value specified in the TIF field of Trader Preferences. See *Trader Preferences dialog*.

10.1.12 **Day button**

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify a Day Trade Message when trade message is submitted. When the button is in down state the TIF fields are disabled.

Default value: always not selected

10.1.13 **IOC** button

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify an IOC Trade Message when trade message is submitted.

Default value: state of button should be set according to the IOC checkbox of Trader Preferences. See <u>Trader Preferences dialog</u>.

10.1.14 **AON** button

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify an AON Trade Message when trade message is submitted.

Default value: state of button should be set according to the AON checkbox of Trader Preferences. See *Trader Preferences dialog*.

10.1.15 **noC** button

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify the Trade Message as non counter-able when trade message is submitted.

Default value: state of button should be set according to the value specified in the Cannot be Countered checkbox of Trader Preferences. See *Trader Preferences dialog*.

10.1.16 Strict button

Visible and enabled: always

A state button. Clicking this button reverses the stat of the button. When this button is in down state it will specify the Trade Message as cannot be price improved when trade message is submitted.

Default value: button should always be not selected when dialog opens. There is no default value for this button in the Trader Preferences dialog.

10.1.17 Agency checkbox

Visible and enabled: always

Clicking the Agency checkbox reverses the state of the checkbox. When this checkbox is set it will reset the Rskl Pr checkbox. When this checkbox is set, it will specify the Trade Message as Agency when it is submitted.

Default value: state of button should be set to checked if the Agency radio button of Default Trade Message Capacity parameter of Trader Preferences is selected, else unchecked. See *Trader Preferences dialog*.

10.1.18 Rskl Pr checkbox

Visible and enabled: always

Clicking the Rskl Pr checkbox reverses the state of the checkbox. When this checkbox is set it will reset the Agency Pr checkbox. When this checkbox is set, it will specify the Trade Message as Agency when it is submitted.

Default value: state of button should be set to checked if the RsklPr radio button of Default Trade Message Capacity parameter of Trader Preferences is selected, else unchecked. See *Trader Preferences dialog*.

10.1.19 Saturate on Expiration checkbox

Visible and enabled: always

Clicking the Saturate on Expiration checkbox reverses the state of the checkbox. When this checkbox is set, the trade message will trigger saturation when the trade message is declined or expires due to TIF.

Default value: field should be populated with the value specified in the Saturate on Expiration field of Trader Preferences. See <u>Trader Preferences dialog</u>.

10.2. Preset Size buttons

10.2.1 QSz button

Visible and enabled: always

Function: when clicked it will populate the Size field of the Common Trade Message parameters with the largest size of the corresponding side of quote from that market maker, taking bid side when Trade Message is Sell and ask side when Trade Message is Buy.

10.2.2 **500 button**

Visible and enabled: always

Function: when clicked it will populate the Size field of the Common Trade Message parameters with 500 shares.

10.2.3 **1k button**

Visible and enabled: always

Function: when clicked it will populate the Size field of the Common Trade Message parameters with 1,000 shares.

10.2.4 **2.5k button**

Visible and enabled: always

Function: when clicked it will populate the Size field of the Common Trade Message parameters with 2,500 shares.

10.2.5 **5k button**

Visible and enabled: always

Function: when clicked it will populate the Size field of the Common Trade Message parameters with 5,000 shares.

10.2.6 **10k button**

Visible and enabled: always

Function: when clicked it will populate the Size field of the Common Trade Message parameters with 10,000 shares.

10.2.7 **50k button**

Visible and enabled: always

Function: when clicked it will populate the Size field of the Common Trade Message parameters with 50,000 shares.

10.2.8 **x2 button**

Visible and enabled: always

Clicking this button multiplies the size field by 2.

10.2.9 /2 button

Visible and enabled: always

Clicking this button divides the size field by 2.

10.2.10 **x5** button

Visible and enabled: always

Clicking this button multiplies the size field by 5.

10.2.11 /5 button

Visible and enabled: always

Clicking this button divides the size field by 5.

10.2.12 Default Size Information

Visible: always

Function: shows the default execution size for the security if one has been set by user. See Set Button and Security Preferences.

10.2.13 **Set Button**

Visible and enabled: always

Function: when clicked this button will set the security preference for the security to specify the default Trade Message size as the size of the Size Field.

10.2.14 Clear Button

Visible: always

Enabled: only when a default size has been set for the security

Function: when clicked this button will reset the security preference for the security to clear the default Trade Message size.

10.3. Market Maker information

This section shows one line for each market maker to receive the MAX Trade Message. When dialog is opened, if no market maker is specified then it will open with one empty MM line. If one or more market makers are specified when opening, then the corresponding number of lines are shown each with pre filled in information.

Typing in a 4 character market maker ID in the last line will create a new empty line below it.

10.3.1 **MMID** field

4 character alphanumerical field to specify a market maker. No validation is done on the field to enforce a valid MMID value.

Default value: when Trade Message(s) is set up from montage, it will be pre populated with the MMID.

10.3.2 MM QAP information

Shows the QAP value from the quote of the specified Market Maker receiver. This value is pre populated when dialog opens with IDs of specific market maker receivers. When a new Market Maker ID is typed into the MMID field, the corresponding QAP value is shown in this space.

10.3.3 Remove button

Visible: each line has its own set of buttons. When line is removed the button is removed with it.

Enabled: always when visible

Clicking this button removes the corresponding MM line. Remove button on an empty MMID line will not remove the line, enforcing that at least one line is always visible.

10.4. Command Buttons

10.4.1 SEND MAX button

Visible and enabled: always

Clicking this button submits a MAX Trade Message with price and size as specified to the market makers listed in the MM Information area. Validations are preformed, such as large message size check, and warning dialogs displayed if required. If no dialog is displayed and/or after user acknowledges warnings, Trade Message is submitted and dialog then closed.

See Send All button on Trade Message dialog for detail of validations and dialog warning.

10.4.2 Close button

Visible and enabled: always

Clicking this button closes the dialog without sending a MAX Trade Message or asking for a user confirmation.

11. Counter Message Dialog



Dialog has caption "Counter Message – Trade Message #trademsgnumber", where trademsgnumber is the number of the Trade Message being countered.

The dialog has an X box in the title bar for closing the dialog without submitting a trade message.

All items below are always visible on the dialog. Some may not always be enabled, as specified for each item.

11.1. Common Trade Message parameters

11.1.1 Security Information

Shows the security symbol – security name of the security the Counter Message is for. Blue color.

11.1.2 Counter Message String

This string shows the original Trade Message that is being countered. The format of the Trade Message is identical to the Incoming Trade Message format of the Trade Message and Execution formatting section, except it doesn't use mono-spaced fonts and separates each item with a single space character. See *Trade Message and Execution formatting*.

11.1.3 Buy radio button

Enabled: never

Function: the Buy radio button will be set if the Counter Trade Message is a buy trade message, that is if the Trade Message being countered is a sell trade message.

11.1.4 Sell radio button

Enabled: never

Function: the Sell radio button will be set if the Counter Trade Message is a sell trade message, that is if the Trade Message being countered is a buy trade message.

11.1.5 Size field

Function: text field that allows input of shares for the Counter Trade Message. It can only be a number of digits, minimum 1 and maximum 2 billion shares. Number is auto formatted to show a "," thousand separator.

Default value: size of the Trade Message being countered

11.1.6 Price field

Function: text field for input of price. Only numerical characters and "." allowed. 7 characters maximum, or 8 if "." used.

Default value: price of the Trade Message being countered

11.1.7 No QAP Label

This label will inform the user that QAP will automatically be set to zero for all counter messages.

11.1.8 Send to Market Maker

Function: shows the identity of who will receiver the counter message

11.1.9 Short checkbox

Enabled: only when Counter Trade Message is a sell trade message

Function: clicking the short button reverses the state of the checkbox. If this checkbox is set when Trade Message is submitted then the Trade Message will be sent as short sell.

Default value: always unchecked

11.1.10 Agency checkbox

Enabled: always

Clicking the Agency checkbox reverses the state of the checkbox. When this checkbox is set it will reset the Rskl Pr checkbox. When this checkbox is set, it will specify the Trade Message as Agency when it is submitted.

Default value: state of button should be set to checked if the Agency radio button of Default Trade Message Capacity parameter of Trader Preferences is selected, else unchecked. See *Trader Preferences dialog*.

11.1.11 Rskl Pr checkbox

Enabled: always

Clicking the Rskl Pr checkbox reverses the state of the checkbox. When this checkbox is set it will reset the Agency Pr checkbox. When this checkbox is set, it will specify the Trade Message as Agency when it is submitted.

Default value: state of button should be set to checked if the RsklPr radio button of Default Trade Message Capacity parameter of Trader Preferences is selected, else unchecked. See *Trader Preferences dialog*.

11.1.12 TIF radio button and fields

Enabled: only when Day trade message radio button is not set

Function: allows user to specify the time in force duration of the trade message. If radio button is selected the specific TIF value is used, it also deselects the Day Trade Message radio button. Two fields allow for specifying the minute and second part separately. Minute part takes 3 numerical characters, second part takes 2 numerical characters.

Default value: always set. The field should be populated with the value specified in the TIF field of Trader Preferences. See *Trader Preferences dialog*.

11.1.13 Day Trade Message radio button

Enabled: always

A radio button. Clicking this button set the day trade message parameter of Counter Trade Message and deselects the TIF radio button.

Default value: always not selected

11.1.14 BestEx / ISO checkbox

Visible: always. Enabled: always

Function: Legend of checkbox is BestEx when security is non-NMS and ISO when NMS. Allows user to set BestEx flag for non-NMS securities and ISO flag for NMS securities. Counters in NMS securities must have the ISO checkbox checked, or the counter will be rejected.

Default value: takes the user defined preference from Best Execution Instruction section of the Trader Preferences dialog, using the BestEx when security is not NMS, else the ISO preference

11.1.15 All or Nothing (AON) checkbox

Enabled: never

Counters cannot be AON so this cannot be set

11.1.16 Cannot be countered checkbox

Enabled: never

Counters cannot be no-counter so this cannot be set

11.1.17 Immediate or Cancel checkbox

Enabled: always

Clicking this checkbox reverses the stat of the checkbox. When this button is checked it will specify an IOC Trade Message when trade message is submitted.

Default value: state of button should be set according to the IOC checkbox of Trader Preferences. See *Trader Preferences dialog*.

11.1.18 Strict Limit checkbox

Enabled: never

Counters cannot be strict limit so this cannot be set

11.2. Command Buttons

11.2.1 Reset button

Visible and enabled: always

Clicking this button populates the Counter Message dialog with default values.

11.2.2 Clear button

Visible and enabled: always

Clicking this button clears the price and size fields and sets other buttons to the default values.

11.2.3 Send button

Visible and enabled: always

Clicking this button submits the Counter Trade Message based on trade message parameters. Dialog is then closed.

11.2.4 Close button

Visible and enabled: always

Clicking this button closes the dialog without sending the Counter Trade Message or asking for a user confirmation.

12. Execution Confirmation Window



The Execution Confirmation Window is opened whenever a new execution of an outgoing Trade Message comes in, as specified in the Trader Preferences dialog settings. See <u>Executions Window</u> section of the Trader Preferences dialog.

12.1. Window properties

Window content is green. It will always stay on top of the Main Window when open. It has an X close box in the menu bar to close the window.

12.1.1 Symbol identifier

A blue label that shows the symbol of the security that is the subject of the execution sting being displayed.

12.1.2 Execution Detail

An execution string showing the detail of the execution. The format of the execution is identical to what is shown in the Trade Message list area of the OTC Link section of the main window. See Execution formatting.

Only one execution string is shown at a time. When window is first opened it will show the Trade Message coming in. If a second execution comes in while the window is open, instead of showing this string it is placed in a queue behind the current string. The Queue indicator below and Next button are used to view number of items in queue and move to the next item in queue.

12.1.3 Queue indicator

Shows the number of executions in queue. This is the number of executions that have come in while window is open and since the execution currently being viewed was displayed, including the execution currently displayed.

12.1.4 Next button

Visible: always

Enabled: when there are 2 or more items (including the one being displayed in Execution

detail) in the queue

Function: If pressed, it moves the second last item of the queue to the Execution Detail area, decreasing the number of items in the queue by one.

12.1.5 Close button

Visible: always

Enabled: when there is only 1 item (that is the item being displayed in Execution detail) in the

queue

Function: when clicked it closes the window

12.1.6 Mute button

Visible: always

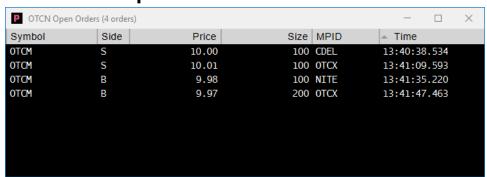
Enabled: when there is only 1 item (that is the item being displayed in Execution detail) in the queue

Function: The icon displayed reflects the current setting of Window/Disable Beep. When clicked it reverses the trader preference setting Execution Window/Disable Beep with immediate effect and saves the new setting.





13. OTCN Open Orders



13.1. Window properties

Displays the published open orders on OTC Link NQB IDQS (OTCN).

The columns will be:

• Symbol: Symbol of order

• Side: Side of order (i.e., Buy, Sell)

Price: Price of order

Size: Currently displayed size. This is the quantity currently displayed on the depth feed.

- MPID: The firm who entered the order
- Time: Time order was entered or last updated

If the user changes the montage symbol while this window is open, the window will display the OTCN open orders for that symbol.

13.1.1 General format

Window has an X close box in the titlebar. Clicking this closes the window.

14. OTCN Closing Cross Disseminaiton

ALL SEC	JRITIES QU	JOTED SECURIT	TIES		SYMBOL			
Symbol	Time	Paired Qty	Imbal Qty	Imbal Side	Curr Ins Pr	MOC Unmatch Side	OC/IO Pr	Full Pr
AAIRF	15:57:19	103,400	10,340	S	10.02	0	10	10
AATGF	15:57:19	1,034,000	10,340	S	10.02	0	10	10
ADBRF	15:57:19	1,000	10,340	В	10.02	0	10	10
ADEVF	15:57:19	100	100	S	10.02	0	10.02	10
ENTEF	15:57:19	100	105,650	В	10.02	В	10.02	10
EPYFF	15:57:19	100	10,650	S	10.02	S	10	10
EUZ0F	15:57:19	1,045,000	10,056	S	10.02	0	10	10
FITGF	15:57:19	100	10,450	S	10.02	S	10	10
FKURF	15:57:19	10,000	10,450	S	10.02	S	10	10
FLLHF	15:57:19	1,054,000	10,540	В	10.02	0	10	10
FMOCF	15:57:19	14,300	100	В	10.02	0	10	10
FNICF	15:57:19	1,030	100	S	10.02	0	10	10
FNMA	15:57:19	103,000	145,400	S	10.02	Ο	10	10
IGXT	15:57:19	10,000	1,040	S	10.02	S	10	10
IIDDY	15:57:19	1,040	100	В	10.02	В	10	10
IMPNF	15:57:19	14,500	104,540	В	10.02	В	10	10
IMPUY	15:57:19	100	145,400	S	10.02	0	10	10
JADA	15:57:19	10,340	10,340	S	10.02	0	10	10
JJATF	15:57:19	100	10,450	S	10.02	0	10	10
LVXFF	15:57:19	10,340	100	В	10.02	В	10	10

14.1. Window properties

Displays the OTC Link NQB IDQS (OTCN) closing cross dissemination feed values.

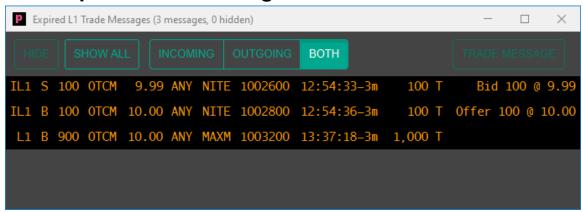
The columns will be:

- Symbol: Symbol for which the values apply
- Time: Time of latest disseminated record
- Paired Qty: Current Inside Paired Shares
- Imbal Qty: Current Inside Imbalance Quantity
- Imbal Side: Current Inside Imbalance Side
- Curr Ins Pr: Current Inside Closing Price
- MOC Unmatch Side: MOC shares unmatched flag
- OC/IO Pr: OC/IO Only Closing Price
- Full Pr: Full Closing Price

14.1.1 **General format**

Window has an X close box in the titlebar. Clicking this closes the window.

15. Expired L1 Trade Msgs Window



15.1. Window properties

Displayed will be each incoming L1 trade messages that have previously expired. The format will be the same as that displayed in the subscriber's Incoming Trade Messages window, when a trade message expires, with one exception. Also displayed will be the subscribers quote (side, size and price) at the time the expired L1 trade message was entered.

The title bar will indicate the total number of expired L1 trade messages, both hidden and displayed, plus just the number of expired L1 trade messages just hidden.

15.1.1 General format

Window has an X close box in the titlebar. Clicking this closes the window.

15.1.2 Hide button

Visible: always

Enabled: expired L1 trade message is highlighed

Function: Clicking this button will remove the highlighted expired L1 trade message from the window.

15.1.3 Show All button

Visible and enabled: always

Function: Clicking this button will re-display all the expired L1 trade messages previously hidden.

15.1.4 Incoming button

Visible and enabled: always

Function: Clicking this button will display only incoming trade messages.

15.1.5 Outgoing button

Visible and enabled: always

Function: Clicking this button will display only outgoing trade messages.

15.1.6 Both button

Visible and enabled: always

Function: Clicking this button will display both incoming and outgoing trade messages.

15.1.7 Tr Msg button

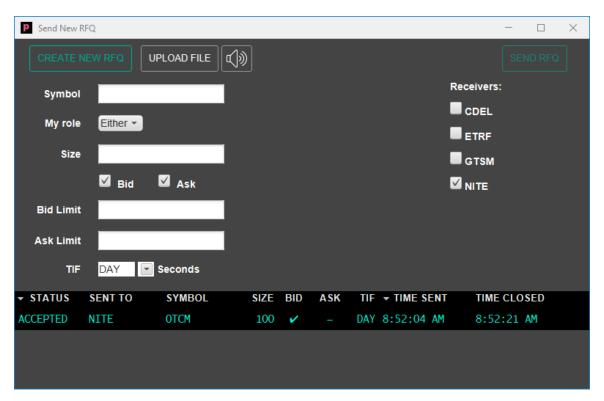
Visible: always

Enabled: expired L1 trade message is highlighed

Function: Clicking the 'Tr Msg' button will open the standard 'Send a Trade Message' window; pre-populated as a function of the highlighted trade message as follows:

- If the expired L1 trade message is a buy, the Sell button will be selected. If the expired L1 trade message is a sell, the Buy button will be selected.
- o The MMID field will be the MMID of the sender of the expired L1 trade message.
- The price will be the subscriber's quote price at the time the expired L1 trade message was first entered.
- The size will be the lesser of the subscriber's quote size at the time the expired L1 trade
 message was first entered and the remaining size (i.e., after any executions and/or
 reductions) of the expired L1 trade message at the time the message expired.
- o All other fields will default to their normal default settings...

16. Send RFQ (Request For Quote)



Dialog has caption "Send RFQ".

The window has Minimize, Maximize and Exit boxes. The X box in the title bar for closing the dialog without sending an RFQ message.

16.1. Send RFQ parameters

16.1.1 Create New RFQ button

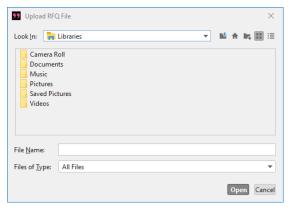
Visible and enabled: always

Function: Clicking this button resets all fields to their default settings.

16.1.2 Upload File button

Visible and enabled: always

Function: Clicking this button opens a window to allow user to select an RFQ upload file.



When Open is clicked, a confirmation dialog shows the details of the RFQ upload file.



16.1.3 Mute button

A mute button shows the current setting of Trader Preferences to beep on incoming RFQ responses. Clicking the button reverses the setting and saves the setting automatically.





16.1.4 Send RFQ button

Visible: always

Enabled: Only when Symbol and Size are populated.

Function: Clicking this button sends new RFQ to selected receivers.

16.1.5 Symbol field

Visible and enabled: always

Function: text field that allows input of RFQ symbol.

16.1.6 My Role pop-up

Visible and enabled: always

Function: When clicked, it pops up a menu of My role values. It will have the following

values:

Either Seller Buyer

Default value: Either.

16.1.7 **Size field**

Visible and enabled: always

Function: text field that allows input of shares for the RFQ.

16.1.8 Bid checkbox

Visible and enabled: always

Function: Clicking the bid checkbox reverses the state of the checkbox. When this checkbox is set, it will specify that a bid quote is requested.

Default value: state of button should be set to checked. At least one of the Bid or Ask checkboxes must be checked.

16.1.9 Ask checkbox

Visible and enabled: always

Function: Clicking the ask checkbox reverses the state of the checkbox. When this checkbox is set, it will specify that a ask quote is requested.

Default value: state of button should be set to checked. At least one of the Bid or Ask checkboxes must be checked.

16.1.10 Bid Limit field

Visible and enabled: always

Function: text field that allows input of Bid limit.

16.1.11 Ask Limit field

Visible and enabled: always

Function: text field that allows input of Ask limit.

16.1.12 TIF textbox

Visible and enabled: always

Function: An editable textbox to enter duration of the RFQ. Value cannot exceed 60 secs.

Default value: 60 seconds

16.1.13 **TIF** pop-up

Visible and enabled: always

Function: When clicked, it pops up a menu of fixed TIF values to be inserted into the TIF textbox. It will have the following values:

30

60

120

180

DAY

16.1.14 Receiver checkboxes

Visible and enabled: always

Function: The number and label of checkboxes is set by configuration. Clicking a checkbox reverses the state of the checkbox. When this checkbox is set, it will specify that receiver to receive the RFQ.

Default value: set by configuration.

16.1.15 Send RFQ table

The Send RFQ table has the following column headings:

Status Sent To Symbol Size Bid Ask TIF Time Sent Time Closed

Clicking on any heading sorts the list on that column, clicking a second time reverses the sort order. The column being sorted on will show an up or down arrow indicating the current sorting.

Any row can be selected and highlighted.

16.1.15.0. **Status**

The status of the selected RFQ. Statuses include Open, Cancelled, Expired, Responded, Declined and Accepted.

16.1.15.1. **Sent to**

The receivers to whom the selected RFQ was sent.

16.1.15.2. **Symbol**

The symbol for the selected RFQ.

16.1.15.3. **Size**

The size for the selected RFQ.

16.1.15.4. **Bid**

Blank, if a bid quote was not requested on the selected RFQ. If it was requested, the display is a function of the selected RFQ status. While it's open, awaiting a response, "?" is displayed. If the bid was accepted, " $\sqrt{}$ " is displayed. In all other cases, "-" is displayed.

16.1.15.5. **Ask**

Blank, if a ask quote was not requested on the selected RFQ. If it was requested, the display is a function of the selected RFQ status. While it's open, awaiting a response, "?" is displayed. If the ask was accepted, " $\sqrt{}$ " is displayed. In all other cases, "-" is displayed.

16.1.15.6. **TIF**

The TIF for the selected RFQ, displayed as *x* Secs or DAY.

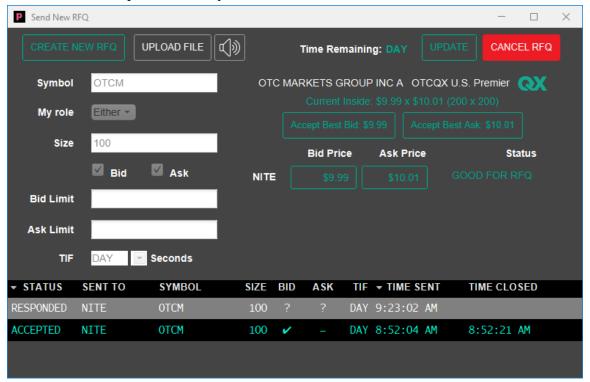
16.1.15.7. **Time Sent**

The time the selected RFQ was sent to the receivers.

16.1.15.8. Time Closed

The time the selected RFQ completely closed.

16.2. Previously Sent RFQ parameters



16.2.1 Create New RFQ button

Visible and enabled: always

Function: Clicking this button resets all fields to their default settings.

16.2.2 Upload File button

Visible and enabled: always

Function: Clicking this button opens a window to allow user to select an RFQ upload file.

16.2.3 Mute button

A mute button shows the current setting of Trader Preferences to beep on incoming RFQ responses. Clicking the button reverses the setting and saves the setting automatically.





16.2.4 Time Remaining

Visible: always

Function: If RFQ is still open, the actively counting down time remaining before the RFQ expires. If the TIF is DAY, 'DAY' will be displayed. If the RFQ is closed, the status of the closed RFQ.

16.2.5 Update button

Visible and Enabled: Only for open RFQs.

Function: Clicking this button updates Bid and/or Ask Limit.

16.2.6 Cancel RFQ button

Visible and Enabled: Only for open RFQs.

Function: Clicking this button cancels the RFQ.

16.2.7 Symbol field

Visible: always Enabled: never

Function: text field shows RFQ symbol.

16.2.8 My Role pop-up

Visible: always Enabled: never

Function: shows My role for the RFQ.

16.2.9 Size field

Visible: always Enabled: never

Function: text field show shares for the RFQ.

16.2.10 Bid checkbox

Visible: always Enabled: never

Function: Shows state of RFQ bid checkbox.

16.2.11 Ask checkbox

Visible: always Enabled: never

Function: Shows state of RFQ ask checkbox..

16.2.12 Bid Limit field

Visible and enabled: always

Function: text field that allows input of Bid limit.

16.2.13 Ask Limit field

Visible and enabled: always

Function: text field that allows input of Ask limit.

16.2.14 TIF textbox

Visible: always Enabled: never Function: Shows duration of the RFQ.

16.2.15 Company Info

Displays company name, tier and tier logo.

16.2.16 Inside

If RFQ is still open, labeled 'Current Inside' and shows the actively updating Link CBBO, if the trader is entitled for the CBBO, or the Link PBBO, if the trader is not entitled for the CBBO.

If RFQ is closed, the label will reflect the reason closed: 'Inside at Expiration', 'Inside at Cancelation', 'Inside at Decline' or 'Inside at Acceptance'. The inside will be the Link CBBO or PBBO at the time of RFQ closure.

16.2.17 Accept Best Bid

Displays the highest received bid price, if received. Otherwise blank. This field will double as a button. Clicking the button accepts the highest received bid response and closes the RFQ.

If the Buyer/Seller option is Buyer and bids are received, the Accept Best Bid button will be greyed out.

If the Bid Limit field contains a price and the accepted bid is below that price, an 'Are you sure?' pop-up will be displayed.

16.2.18 Accept Best Ask

Displays the lowest received ask price, if received. Otherwise blank. This field will double as a button. Clicking the button accepts the lowest received ask response and closes the RFQ.

If the Buyer/Seller option is Seller and asks are received, the Accept Best Ask button will be greyed out.

If the Ask Limit field contains a price and the accepted ask is above that price, an 'Are you sure?' pop-up will be displayed.

16.2.19 Responses table

The response table area has the following column headings:

Receiver Bid Price Ask Price Status

16.2.19.0. Receiver

Receiver is not shown as a column label.

The MPID of each RFQ receiver

16.2.19.1. Bid Price

The receiver's bid price response, if sent. Flashes when first displayed. Otherwise blank. If the RFQ is still open and there is a value in the field, this field will double as a button. Clicking the button accepts the bid response and closes the RFQ.

If the Buyer/Seller option is Buyer and bids are received, the Bid buttons will be greyed out.

If the Bid Limit field contains a price and the accepted bid is below that price, an 'Are you sure?' pop-up will be displayed.

If the RFQ is closed and this bid was not accepted, the bid will be shown without a box around it. If the RFQ is closed and this bid was accepted, the bid will be shown with a box around it.

16.2.19.2. Ask Price

The receiver's ask price response, if sent. Flashes when first displayed. Otherwise blank. If the RFQ is still open and there is a value, this field will double as a button. Clicking the button accepts the ask response and closes the RFQ.

If the Buyer/Seller option is Seller and asks are received, the Ask buttons will be greyed out.

If the Ask Limit field contains a price and the accepted ask is above that price, an 'Are you sure?' pop-up will be displayed.

If the RFQ is closed and this ask was not accepted, the ask will be shown without a box around it. If the RFQ is closed and this ask was accepted, the ask will be shown with a box around it.

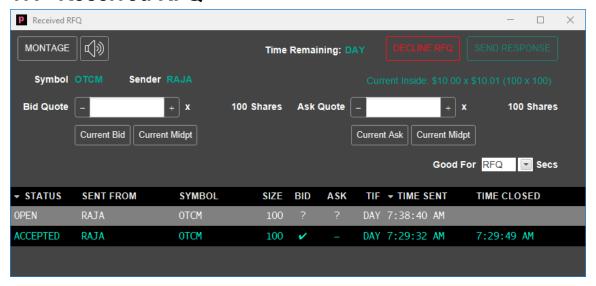
16.2.19.3. Status

Prior to the receiver sending a response for a still open RFQ, this field will display 'WAITING.

If the receiver sends a response and the response is still open, this field will display 'GOOD FOR xxs', where xx is the actively counting down time remaining before the response expires. If the response is good for the full duration of the RFQ, 'RFQ' will be displayed, instead of 'xxs'.

If the RFQ is closed, the status of the response, if sent. Statuses include Cancelled, Expired, Declined and Accepted.

17. Received RFQ



The Received RFQ is always visible when user is logged in. It cannot be closed. It can be minimized.

The window has Minimize, Maximize and Exit boxes. If Exit box is clicked it is just ignored.

17.1. Received RFQ parameters

17.1.1 Montage button

Visible and enabled: always

Function: Clicking this button displays the currently selected RFQ symbol on the Dealer main window, and bring the Dealer main window to the front.

17.1.2 Mute button

A mute button shows the current setting of Trader Preferences to beep on incoming RFQ or a response has been accepted. Clicking the button reverses the setting and saves the setting automatically.





17.1.3 Time Remaining

If RFQ is still open, the actively counting down time remaining before the RFQ expires. If the TIF is DAY, 'DAY' will be displayed. If the RFQ is closed, the status of the closed RFQ will be displayed.

17.1.4 Decline RFQ or Cancel Response button

Visible and Enabled: Labeled 'Decline RFQ', if RFQ is still open and a response has not yet been sent. Labeled 'Cancel Response', if RFQ is still open and a response has been sent and is pending.

Function: Clicking the 'Decline RFQ' button declines the RFQ. Clicking the 'Cancel Response' button cancels the sent response and returns the fields to the new RFQ state.

17.1.5 Send Response or Update Response button

Visible and Enabled: Labeled 'Send Response', if RFQ is still open and a response has not yet been sent or a previously sent response was canceled. Labeled 'Update Response', if RFQ is still open and a response has been sent and is pending.

Function: Clicking the 'Send Response' button sends a new response to the RFQ. Clicking the 'Update Response' button sends an update to the previously sent response.

17.1.6 Symbol field

Text field shows RFQ symbol.

17.1.7 Sender field

Text field shows RFQ sender.

17.1.8 Inside

If RFQ is still open, labeled 'Current Inside' and shows the actively updating Link CBBO, if the trader is entitled for the CBBO, or the Link PBBO, if the trader is not entitled for the CBBO.

If RFQ is closed, the label will reflect the reason closed: 'Inside at Expiration', 'Inside at Cancelation', 'Inside at Decline' or 'Inside at Acceptance'. The inside will be the Link CBBO or PBBO at the time of RFQ closure.

17.1.9 Bid Response Area

Visible: always

OTC Dealer 7.0 User Guide

Enabled: Only if a bid was requested in the RFQ and the RFQ is still open

Label: Bid Quote

17.1.9.0. Bid Price textbox

Textbox for entering bid price.

17.1.9.1. **Bid Price - / + buttons**

Decreases / Increases price entered in textbox by one price increment.

17.1.9.2. Current Bid button

Places the current Link inside bid in the textbox.

17.1.9.3. Current Midpt button

Places the midpoint of the current Link inside in the textbox.

17.1.9.4. **Shares**

Shares requested in the RFQ.

17.1.10 Ask Response Area

Visible: always

Enabled: Only if an ask was requested in the RFQ and the RFQ is still open

Label: Ask Quote

17.1.10.0. Ask Price textbox

Textbox for entering bid price.

17.1.10.1. **Ask Price - / + buttons**

Decreases / Increases price entered in textbox by one price increment.

17.1.10.2. Current Bid button

Places the current Link inside ask in the textbox.

17.1.10.3. Current Midpt button

Places the midpoint of the current Link inside in the textbox.

17.1.10.4. Shares

Shares requested in the RFQ.

17.1.11 Good For textbox

Visible: always

Enabled: Only if the RFQ is still open

Function: An editable textbox to enter duration of the response. Value cannot exceed 60 secs.

Default value: 60 seconds

17.1.12 Good For pop-up

Visible: always

Enabled: Only if the RFQ is still open

Function: When clicked, it pops up a menu of fixed values to be inserted into the Good For textbox. It will have the following values:

30

60

120

180

RFQ

17.1.13 Receive RFQ table

The Receive RFQ table has the following column headings:

Status Sent From Symbol Size Bid Ask TIF Time Sent Time Closed

Clicking on any heading sorts the list on that column, clicking a second time reverses the sort order. The column being sorted on will show an up or down arrow indicating the current sorting.

Any row can be selected and highlighted.

17.1.13.0. Status

The status of the selected RFQ. Statuses include Open, Cancelled, Expired, Responded, Declined and Accepted.

17.1.13.1. **Sent From**

The sender who sent the selected RFQ.

17.1.13.2. **Symbol**

The symbol for the selected RFQ.

17.1.13.3. **Size**

The size for the selected RFQ.

17.1.13.4. **Bid**

Blank, if a bid quote was not requested on the selected RFQ. If it was requested, the display is a function of the selected RFQ status. While it's open, awaiting a response, "?" is displayed. If the bid was accepted, ' $\sqrt{}$ ' is displayed. In all other cases, '-' is displayed.

17.1.13.5. **Ask**

Blank, if a ask quote was not requested on the selected RFQ. If it was requested, the display is a function of the selected RFQ status. While it's open, awaiting a response, "?" is displayed. If the ask was accepted, ' $\sqrt{}$ ' is displayed. In all other cases, '-' is displayed.

17.1.13.6. **TIF**

The TIF for the selected RFQ, displayed as x Secs or DAY.

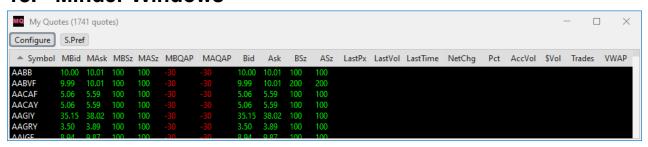
17.1.13.7. **Time Sent**

The time the selected RFQ was sent to the receivers.

17.1.13.8. Time Closed

The time the selected RFQ completely closed.

18. Minder Windows



18.1. Window properties

There are two types of Minder Windows: regular market minder 1 through 5 and My Quotes window. They differ in that the regular market minders are user configurable as to which securities they show, but the My Quotes window always shows securities that are currently quoted by the trader, or the head trader if user is an assistant. See *Security Preferences Dialog*.

Default sorting of minder windows is to sort accenting alphabetically by symbol.

Default font size is x points. The font size can be changed with the Context menu. Font size is saved in Trader Preferences.

18.1.1 General format

Window has an X close box in the titlebar. Clicking this closes the window.

Content of window is gray/pink, except for lines of information, they are black. Columns and rows are separated with light gray colored grid lines.

18.1.2 Configure... button

Visible and enabled: always

Function: Clicking this button opens up the Configure dialog. See *Configure dialog*.

18.1.3 **S-pref button**

Visible and enabled: always

Function: Clicking this button opens up the Security Preferences dialog. See <u>Security</u> <u>Preferences dialog</u>.

18.1.4 Column Heading

Visible: always

Function: The column heading shows the name of the corresponding column and allows user to sort the content of the window by columns, drag to reorder the column order and resize each column width.

18.1.4.1. Sorting by Columns

Clicking any column-heading sorts by that column. Clicking again reverses the sorting. Sorts are not dynamic, but the window gets sorted every time clicked on the heading.

Columns cannot be clicked in order to select lines. Double clicking on a line will bring up the main window and load the security of that line onto the montage.

18.1.4.2. Reorder Column Order

The order of individual columns can be changed by clicking on a column heading and while holding down the mouse button, dragging the column to the desired position. The order of all other columns remains unchanged.

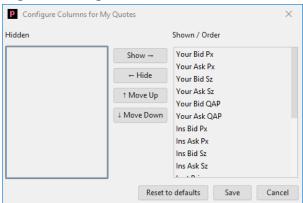
18.1.4.3. Resizing Columns

The column width can be resized by clicking on the divider line between the column heading and moving left to reduce width or right to increase width.

Reducing size of one column does not affect size of the window or other columns, apart from the last column to the right, which increases in size to take up the extra space taken off the column being reduced.

Increasing size of one column increases the width of the window by the same size, thus all other columns retain their size.

18.2. Configure Dialog



The dialog shows all columns that can be configured to show on the Minder windows. Initially, when user has made no settings, all columns are specified as showing in the following order: Your Bid Px, Your Ask Px, Your Bid Sz, Your Ask Sz, Your bid QAP, Your ask QAP, Ins Bid Px, Ins Ask Px, Ins Bid Sz, Ins Ask Sz, Last Price, Last Volume, Last Time, Net Change, Pct Change, Acc Volume, Total Value, Trade Count and Volume Weighted Average Px. Default values for both checkboxes is to have them set.

18.2.1 Hidden column

The Hidden column lists all fields user has selected to hide. User clicks on a line in list to select it, then clicks the > Show > button to move from the hidden column to the Shown column. HSee > Show > button.

18.2.2 Shown / Order column

The Shown / Order column lists all fields user has selected so show and which order they are shown, with the field on top at the left of the minder windows. User clicks on a line in list to select it, then clicks the < Hide < button to hide it. See < *Hide* < *button*.

18.2.3 Show \rightarrow button

Enabled: always

Function: when clicked, it will take the selected line in the Hidden column and move it to the bottom of the list of the Shown column. If no line in Hidden column is selected clicking this button is ignored.

18.2.4 ← Hide button

Enabled: always

Function: when clicked, it will take the selected line in the Shown column and move it to the bottom of the list of the Hidden column. If no line in Shown column is selected clicking this button is ignored.

18.2.5 ↑ **Move Up**

Enabled: always

Function: when clicked, it will take the selected line and move it up one row in the list of the column. If no line in column is selected, or if it is already at the top, clicking this button is ignored.

18.2.6 ↓ Move Down

Enabled: always

Function: when clicked, it will take the selected line and move it down one row in the list of the column. If no line in column is selected, or if it is already at the bottom, clicking this button is ignored.

18.2.7 Reset to defaults button

Enabled: always

If this button is clicked, it will reset the settings to defaults as defined in Configure dialog. See *Configure dialog*.

18.2.8 Save button

Enabled: always

Function: If this button is clicked, it will save the user settings for the minder, apply the changes to the open minder and then close the dialog.

18.2.9 Cancel button

Enabled: always

Function: If this button is clicked it will close the dialog without saving.

18.3. Columns

Columns can be hidden or shown using the Configure dialog, but the order of visible columns is always in the order they are listed below, from left to right.

18.3.1 **Symbol**

This column is always first in each line. It cannot be hidden.

This column shows the trading symbol of the security. If no trading symbol is available it will show the CUSIP of the security, and if CUSIP is not available it will show the Security ID.

Sorting: Clicking the column heading will sort the minder accenting alphabetically by symbol. This is the default sorting of the dialog. Clicking again will sort descending alphabetically by symbol, indicated by italic "Symbol" heading. Sorting is not dynamic.

Color: white. Text is normally white, this indicates security is not Auto Quoted and last quote update was successful. If Auto Quote is enabled and the security is set up for Auto Quote and active, then color is green. Auto Quoted securities with successful quote update are also colored green. If quote update for the security fails then symbol is colored red. This applies

both for auto quoted and non-auto quoted securities. Column reverses color briefly when there is any change to information visible on the monitor for the security.

Background color: Background color of this column is normally black. But if there exist two quotes by the market maker for the security on two different markets, and either bid and/or ask price of the two quotes don't match (excluding unpriced sides) then the background is red to signal the mismatch.

18.3.2 **MBid**

This column shows your firm's best bid on OTC Link or external market (OTCBB).

Sorting: Clicking the column heading will sort the minder by your bid. Highest price on top, unpriced on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic MBid in the column heading. Sorting is not dynamic.

Color: format and color is identical to the Your quote information on the main window. See <u>Your quote</u>. If it's on the OTC Link inside it's green, OTC Link but not on inside it's yellow, priced on OTCBB and OTC Linkable it's cyan, priced on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Background is black, unless market maker has quotes both on OTC Link and external market (OTCBB) and the prices don't match, then background is red. Column reverses color briefly when your quote for the security changes.

18.3.3 **MAsk**

This column shows your firm's best ask on OTC Link or external market (OTCBB).

Sorting: Clicking the column heading will sort the minder by your ask. Lowest price on top, unpriced on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic MAsk in the column heading. Sorting is not dynamic.

Color: format and color is identical to the Your quote information on the main window. See Your quote. If it's on the OTC Link inside it's green, OTC Link but not on inside it's yellow, priced on OTCBB and OTC Linkable it's cyan, priced on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Background is black, unless market maker has quotes both on OTC Link and external market (OTCBB) and the prices don't match, then background is red. Column reverses color briefly when your quote for the security changes.

18.3.4 **MBSz**

This column shows your firm's best bid size on OTC Link or external market (OTCBB). Size is formatted with a comma separating each 1,000.

Sorting: Clicking the column heading will sort the minder by your bid size. Highest size on top, unpriced with not size on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic MBSz in the column heading. Sorting is not dynamic.

Color: format and color is identical to the Your quote information on the main window. See <u>Your quote</u>. If it's on the OTC Link inside it's green, OTC Link but not on inside it's yellow, priced on OTCBB and OTC Linkable it's cyan, priced on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Background is black, unless market maker has quotes both on OTC Link and external market (OTCBB) and the prices don't match, then background is red. Column reverses color briefly when your quote for the security changes.

18.3.5 **MASz**

This column shows your firm's best ask size on OTC Link or external market (OTCBB). Size is formatted with a comma separating each 1,000.

Sorting: Clicking the column heading will sort the minder by your ask size. Highest size on top, unpriced with not size on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic MASz in the column heading. Sorting is not dynamic.

Color: format and color is identical to the Your quote information on the main window. See <u>Your quote</u>. If it's on the OTC Link inside it's green, OTC Link but not on inside it's yellow, priced on OTCBB and OTC Linkable it's cyan, priced on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Background is black, unless market maker has quotes both on OTC Link and external market (OTCBB) and the prices don't match, then background is red. Column reverses color briefly when your quote for the security changes.

18.3.6 **MBQAP**

This column shows the QAP from your quote's bid on OTC Link.

Sorting: Clicking the column heading will sort the minder by bid QAP. Highest QAP on top, lowest QAP on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic MBQAP in the column heading. Sorting is not dynamic.

Color: negative QAP values are shown in red, positive in green. QAP of 0 are shown as blank.

18.3.7 **MAQAP**

This column shows the QAP from your quote's ask on OTC Link.

Sorting: Clicking the column heading will sort the minder by ask QAP. Highest QAP on top, lowest QAP on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic MAQAP in the column heading. Sorting is not dynamic.

Color: negative QAP values are shown in red, positive in green. QAP of 0 are shown as blank.

18.3.8 **Bid**

This column shows the NBBO/PBBO bid across OTC Link or external market (OTCBB).

Sorting: Clicking the column heading will sort the minder by inside bid. Highest price on top, unpriced on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic Bid in the column heading. Sorting is not dynamic.

Color: If it's the inside bid on the OTC Link it's green, inside on OTCBB and OTC Linkable it's cyan, inside on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Column reverses color briefly when there is a change to the inside price for the security.

18.3.9 **Ask**

This column shows the NBBO/PBBO ask across OTC Link or external market (OTCBB).

Sorting: Clicking the column heading will sort the minder by inside bid. Lowest price on top, unpriced on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic Ask in the column heading. Sorting is not dynamic.

Color: If it's the inside ask on the OTC Link it's green, inside on OTCBB and OTC Linkable it's cyan, inside on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Column reverses color briefly when there is a change to the inside price for the security.

18.3.10 **BSz**

This column shows the NBBO/PBBO bid size across OTC Link or external market (OTCBB). Size is formatted with a comma separating each 1,000.

Sorting: Clicking the column heading will sort the minder by inside bid size. Highest bid size on top, unpriced quotes with no size on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic BSz in the column heading. Sorting is not dynamic.

Color: If it's the inside bid on the OTC Link it's green, inside on OTCBB and OTC Linkable it's cyan, inside on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Column reverses color briefly when there is a change to the inside price for the security.

18.3.11 **ASz**

This column shows the NBBO/PBBO ask size across OTC Link or external market (OTCBB). Size is formatted with a comma separating each 1,000.

Sorting: Clicking the column heading will sort the minder by inside ask size. Highest bid size on top, unpriced quotes with no size on bottom. Clicking the column again reverses the order. Reverse order is indicated by an italic ASz in the column heading. Sorting is not dynamic.

Color: If it's the inside bid on the OTC Link it's green, inside on OTCBB and OTC Linkable it's cyan, inside on OTCBB but no OTC Linkable it's purple, and unpriced it's yellow. Column reverses color briefly when there is a change to the inside price for the security.

18.3.12 **LastPx**

This column shows the last trade price for the stock. Precision up to 4 decimal places.

Sorting: Clicking the column heading will sort the minder by the last price. Highest price on top. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic LastPx in the column heading. Sorting is not dynamic.

Color: white Column reverses color briefly when there is a change in last price for the security.

18.3.13 **LastVol**

This column shows the last trade volume for the stock. Format is #,###.

Sorting: Clicking the column heading will sort the minder by the last volume. Highest volume on top. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic LastVol in the column heading. Sorting is not dynamic.

Color: white Column reverses color briefly when there is a change in last vol for the security.

18.3.14 **LastTime**

This column shows the last trade time for the stock. Format is HH:MM:SS or blank if not traded today.

Sorting: Clicking the column heading will sort the minder by the last time. Latest time on top. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic LastTime in the column heading. Sorting is not dynamic.

Color: white Column reverses color briefly when there is a change in last time for the security.

18.3.15 **NetChg**

This column shows the net change for the day for the stock. Up to 4 decimal places.

Sorting: Clicking the column heading will sort the minder by the net change. Biggest increase on top and biggest loser on bottom. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic NetChg in the column heading. Sorting is not dynamic.

Color: green if up from previous day, red if down from previous day, while if unchanged. Column reverses color briefly when there is a change in net change for the security.

18.3.16 Pct

This column shows the percentage change for the day for the stock. Up to 2 decimal places followed by %.

Sorting: Clicking the column heading will sort the minder by the net change. Biggest increase on top and biggest loser on bottom. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic Pct in the column heading. Sorting is not dynamic.

Color: green if up from previous day, red if down from previous day, while if unchanged. Column reverses color briefly when there is a change in percentage change for the security.

18.3.17 **AccVol**

This column shows the accumulated share volume for the day for the stock. Format #,###.

Sorting: Clicking the column heading will sort the minder by the share volume. Biggest volume on top. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic AccVol in the column heading. Sorting is not dynamic.

Color: white. Column reverses color briefly when there is a change in accumulated shares for the security.

18.3.18 Total\$

This column shows the accumulated dollar volume for the day for the stock. Format #,###.

Sorting: Clicking the column heading will sort the minder by the dollar volume. Biggest volume on top. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic Total\$ in the column heading. Sorting is not dynamic.

Color: white Column reverses color briefly when there is a change in total dollar volume for the security.

18.3.19 **Count**

This column shows the trade count for the day for the stock. Integer.

Sorting: Clicking the column heading will sort the minder by the count. Stock with most trades on top. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic Count in the column heading. Sorting is not dynamic.

Color: white Column reverses color briefly when there is a change in trade count for the security.

18.3.20 **VWAP**

This column shows the volume weighted average price for the day for the stock. 5 decimal places.

Sorting: Clicking the column heading will sort the minder by the VWAP. Stock with highest VWAP trades on top. Clicking the column again reverses the order, with the exception that securities that have not traded today are shown below any other securities. Reverse order is indicated by an italic VWAP in the column heading. Sorting is not dynamic.

Color: white Column reverses color briefly when there is a change in VWAP for the security.

18.4. Contextual Menu

If right click on the content of the window, it brings up a contextual menu with following actions:

18.4.1 Increase Font Size

If this command is selected, the font size of the content is increase by 1 point size.

18.4.2 Decrease Font Size

If this command is selected, the font size of the content is decreased by 1 point size.

19. Ticker Windows

```
Ticker 1 - Show MM Inside Trade PQ Otcbb

NSRGY INTL 131.94 / + 133.47 ( 168 x 424 ) ..... NSRGY INTL 131.94 / + 133.47 ( 168 x 424 ) .....

NSRGY MCAP 132.76 / - 132.87 ( 100 x 100 ) .....

NSRGY ARCA 132.76 / 132.87 ( 600 x 398 ) ..... NSRGY 132.76 / 132.87 ( 1,810 x 698 ) .....

NSRGY INTL 131.94 / - 133.46 ( 168 x 424 ) .....

NSRGY MCAP 132.76 / + 132.91 ( 100 x 100 ) ..... NSRGY 132.76 / 132.87 ( 1,810 x 598 ) .....

NSRGY MCAP 132.76 / - 132.87 ( 100 x 100 ) ..... NSRGY 132.76 / 132.87 ( 1,810 x 698 ) .....

NSRGY INTL - 131.93 / 133.46 ( 168 x 424 ) ..... NSRGY INTL 131.93 / - 133.45 ( 168 x 424 ) .....
```

19.1. Window properties

19.1.1 General format

There are two types of Tickers: regular tickers 1 through 5 and My Ticker window. They differ in that the regular tickers are user configurable as to witch securities they show, but the My Ticker window always shows securities that are currently quoted by the trader, or the head trader if user is an assistant. See *Security Preferences Dialog*.

Tickers have an X close box in menu bar. Clicking this closes the ticker.

Background of ticker is black.

Ticker defaults is to show all of Inside quotes, MM quotes and Trade information. Default direction is left-to-right and top-to-bottom.

19.1.2 Title of ticker

The title of ticker is either "Ticker x" or "My Ticker".

Additionally, depending on setup the text "MM Update", Insides" and "Trades" are shown in the title of ticker. For example, Ticker 1 set to show all of MM quote updates for both OTC Link and OTCBB, insides and trades has title

Ticker 1 – MM Inside Trade PS Otcbb

19.1.3 Clicking on Ticker

If double clicked on the ticker, then the main window is brought to front and the security whose entry was double clicked on is shown on montage.

19.1.4 Auto Scrolling

When a new item is added to the Ticker it auto scrolls to show the entry. If direction is "Top to bottom" then new entries are added at bottom and window scrolls to bottom on new entries to window. If direction is "Bottom to top" then new items are added at top and window scrolls to top on new entries to window.

19.2. Ticker Entries

19.2.1 Inside entries

When there is a change in an inside (NBBO/PBBO) for a security that is set up for the ticker, an inside entry is displayed on the ticker. The format is the following:

```
Symbol in bid / in ask (in bid size x in ask size) ...
```

If there is no inside price on either or both of bid and/or ask, the corresponding price and size are left blank.

Color of symbol is green. Bid and Ask, along with corresponding sizes, are either colored green if they are from OTC Link, Cyan if from OTCBB and OTC Linkable, or Purple if from OTCBB and not OTC Linkable.

19.2.2 Quote entries

When there is a change in a market maker quote for a security that is set up for the ticker, a quote entry is displayed on the ticker. The format is the following:

```
Symbol MMID in_bid / in_ask (in_bid_size x in_ask_size) ...
```

If there is no price on either or both of bid and/or ask, the corresponding price is shown as "Unpr" and size is left blank.

Color of symbol and market maker ID is yellow. Bid and Ask, along with corresponding sizes, are either colored green if they are on the OTC Link inside, yellow if priced or unpriced OTC Link not on inside, Orange if closed OTC Link, Cyan if from OTCBB and OTC Linkable, or Purple if from OTCBB and not OTC Linkable.

19.2.3 Trade entries

When there is a trade in a security that is set up for the ticker, a trade entry is displayed on the ticker. The format is the following:

```
Symbol tick indicator shares @ price ...
```

The tick_indicator is an upward pointing arrow for ticks that are up (this trade is higher than previous trade) or downward pointing arrow for ticks that are down (this trade is lower than previous trade). Tick indicator is omitted if there is no change.

Color is white, except tick indicator is green if up or red if down

19.2.4 Withdraw Quote entries

When a market maker withdraws a quote that is set up for the ticker, a withdraw quote entry is displayed on the ticker. The format is the following:

```
Symbol MMID WITHDRAW ...
```

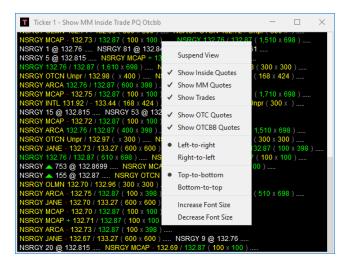
Color of symbol and MMID is yellow, with WITHDRAW text in red

19.2.5 Lost Connection entries

When Dealer loses connection, a text "Lost connection..." in red is shown in all tickers.

19.3. Contextual menu

Right clicking anywhere on the content of the ticker brings up a contextual menu:



19.3.1 Suspend View / Resume View

This is a toggle item. Selecting this item reverses the selection of the item. Suspending view freezes the ticker, allowing users to make a hard copy print of the current status. Resuming brings ticker back to live status, adding all items since ticker was suspended.

19.3.2 Show Inside Quotes

This is a checkbox item. Selecting this item reverses the selection of the item. If this item is checked then the ticker will show Inside Quote entries, else it will not show them. If this item is selected, it adds "Inside" to the title bar of ticker. Checked by default.

19.3.3 Show MM Quotes

This is a checkbox item. Selecting this item reverses the selection of the item. If this item is checked then the ticker will show MM Quote entries, else it will not show them. If this item is selected, it adds "MM" to the title bar of ticker. Checked by default.

19.3.4 Show Trades

This is a checkbox item. Selecting this item reverses the selection of the item. If this item is checked then the ticker will show Trade entries, else it will not show them. If this item is selected, it adds "Trade" to the title bar of ticker. Checked by default.

19.3.5 Show OTC Quotes

This is a checkbox item. Selecting this item reverses the selection of the item. If this item is checked then the ticker will show quote actions (updates, inserts and withdraws) on OTC Link, else it will not show them. If this item is selected, it adds "PQ" to the title bar of ticker. Checked by default.

19.3.6 Show OTCBB Quotes

This is a checkbox item. Selecting this item reverses the selection of the item. If this item is checked then the ticker will show quote actions (updates, inserts and withdraws) on OTCBB, else it will not show them. If this item is selected, it adds "Otcbb" to the title bar of ticker. Checked by default.

19.3.7 **Left-to-right**

This is a radio button item. If this item is selected, then Right-to-left item is de-selected. If this item is selected, then new entries to the ticker appear on the left and move to the right. Set by default.

19.3.8 Right-to-left

This is a radio button item. If this item is selected, then Left-to-right item is de-selected. If this item is selected, then new entries to the ticker appear on the right and move to the left. Not set by default.

19.3.9 **Top-to-bottom**

This is a radio button item. If this item is selected, then Bottom-to-top item is de-selected. If this item is selected, then new entries to the ticker appear on the bottom and move up. Set by default.

19.3.10 Bottom-to-top

This is a radio button item. If this item is selected, then Top-to-bottom item is de-selected. If this item is selected, then new entries to the ticker appear on the top and move down. Not set by default.

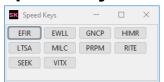
19.3.11 Increase Font Size

If this command is selected, the font size of the content is increase by 1 point size.

19.3.12 Decrease Font Size

If this command is selected, the font size of the content is decreased by 1 point size.

20. Speed Keys Window



20.1. Window properties

The Speed Keys window is a window consisting of buttons with a single security identifier. Clicking on the button brings the main window to the front and loads the corresponding security on the montage.

Size and position of Speed Keys window is saved with desktop.

20.2. Arranging Speed Keys buttons

Speed Keys buttons are defined using the Security Preferences dialog. Any security that has the Speed Keys checkbox checked is shown on the Speed Keys window. See <u>Security Preferences</u> <u>dialog</u>.

Symbol is the default indicator to show on the Speed Keys. If no symbol is available, CUSIP is shown. If neither Symbol nor Cusip are shown, then the internal Security ID is used as indicator.

Buttons are sorted alphabetically by indicator.

Window can be resized. Buttons are arranged on the window with the first button at the top left hand corner, second button to the right, etc. If a button does not fit in the space remaining on the line, it is moved down to the left of the line below, with the next button coming to the right of it. This is repeated until all buttons show. Any button that does not fit on the window will run off the bottom of the window. A scroll bar will then show to allow user to scroll down to see buttons that did not fit on window.

20.3. Speed Key Button

Enabled: always

Caption: the trading symbol of the security this button represents

If a Speed Key button is clicked, the montage is updated with the security that has the trading symbol same as the button caption. Focus is then moved to the main window.

20.4. Contextual Menu



If right click on the content of the window, it brings up a contextual menu with following actions:

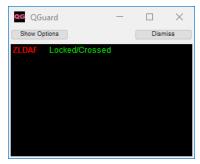
20.4.1 Increase Font Size

If this command is selected, the font size of the content is increase by 1 point size.

20.4.2 **Decrease Font Size**

If this command is selected, the font size of the content is decreased by 1 point size.

21. Quote Guard Window



21.1. Window Properties

21.1.1 General properties

The Quote Guard window show actual and potential warnings and errors for security the trader is quoting.

Window has X box in the title bar. Clicking this closes the dialog without saving or warning user.

21.1.2 Show Options Button

Visible: when configuration area is hidden

Enabled: always

Clicking this button expands the configuration area at the top of the window, moving the content area down. See <u>Configure Quote Guard Window</u>.

21.1.3 Hide Options Button

Visible: when configuration area is visible

Enabled: always

Clicking this button collapses the configuration area at the top of the window, moving the content area upwards to hide the configuration area.

21.1.4 Dismiss Button

Visible and enabled: always

Clicking this button closes the Quote Guard window.

21.1.5 Guard Area

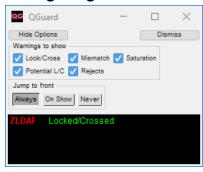
The Guard area is a list of error and warnings the Quote Guard window is set up to show, according to configuration settings.

Each line shows the trading symbol and the error or warning situation. The list is sorted by time of occurance. Double clicking on the line brings the corresponding symbol to the montage and moves focus to the main window. Area has a scroll bar if content does not fit the area.

The 5 situations the window can show are the following:

- Lock/Cross situation, when there exists a lock/cross situation in a security you are quoting. (Not just when your quote is lock/crossing the market.) Displays: Symbol in red followed by "Locked/Crossed" in green.
- Potential L/C, when your quotes are closed and there would be a lock/cross situation in the security if you open your quotes. Displays: Symbol in red followed by "Potential L/C" in amber.
- Mismatch, when you are quoting a security both on OTC Link and OTCBB and your
 quotes on the two venues do not match, i.e. when both are not unpriced and they are
 not the same price or price type (OW/BW, Actual). Displays: Symbol in red followed
 by "Mismatched Quotes" in cyan.
- Rejects, shows when your last quote action in a security was rejected. Displays: Symbol in red followed by "Quote Rejected" in red.
- Saturation, shows when your quote in a security becomes saturation. Removed when
 the quote becomes unsaturated. Displays: Symbol in red followed by "Quote
 Saturated" in red. Unlike other Quote Guard alerts, which are not presented to trader
 assistants or proxies, the saturation alert will also be shown to trader assistants and
 proxies.

21.2. Configuring Quote Guard Window



21.2.1 Lock/Cross checkbox

Visible and enabled: when configuration area is visible.

When checked the Guard area will show securities you are quoting that have a lock/cross situation. Default as checked.

21.2.2 Potential L/C checkbox

Visible and enabled: when configuration area is visible.

When checked the Guard area will show securities you are quoting that have a potential lock/cross situation if you were to open your quotes. Default as checked.

21.2.3 Mismatch checkbox

Visible and enabled: when configuration area is visible.

When checked the Guard area will show securities you are quoting on OTC Link and OTCBB with mismatched quotes . Default as checked.

21.2.4 Rejects checkbox

Visible and enabled: when configuration area is visible.

When checked the Guard area will show quote rejects. Default as checked.

21.2.5 Saturation checkbox

Visible and enabled: when configuration area is visible.

When checked the Guard area will show when a market maker's quote becomes saturated. Default as checked.

21.2.6 Jump to front: Always button

Visible and enabled: when configuration area is visible.

This is a state button. When clicked button is put in a down state. When in down state then On Show and Never buttons are up.

If this button is in down state, then window will jump to the front whenever an action corresponding to the button takes place.

21.2.7 Jump to front: On Show button

Visible and enabled: when configuration area is visible.

This is a state button. When clicked button is put in a down state. When in down state then Always and Never buttons are up.

If this button is in down state, then window will jump to the front only if window was closed when action that put a new item on window took place.

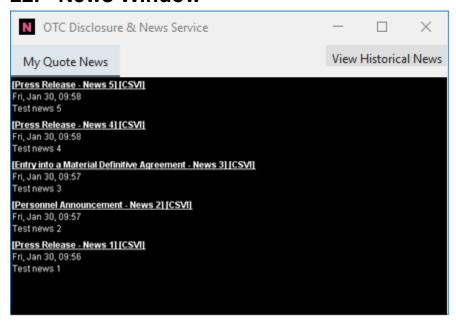
21.2.8 Jump to front: Never button

Visible and enabled: when configuration area is visible.

This is a state button. When clicked button is put in a down state. When in down state then Always and On show buttons are up.

If this button is in down state, then window will never open up or jump to the front when new actions take place.

22. News Window



22.1. Window Properties

22.1.1 General properties

The News window shows all news items for that current day for securities that the trader is quoting. The news/reports are from the OTCIQ Disclosure and News Service.

Window has X box in the title bar. Clicking this closes the dialog without saving or warning user.

22.1.2 My Quote News

Visible: always Enabled: always

Clicking this tab displays all of the news items for securities that the respective trader is quoting for that current day. News and reports are from the OTCIQ Disclosure and News Service.

22.1.3 View Historical News

Visible: always

Action: Opens up historical news detail page http://www.otcmarkets.com/news/otc-news in a new browser window.

23. Compliance Data Window



23.1. Window Properties

23.1.1 General properties

Window has X box in the title bar. Clicking this closes the dialog without saving or warning user.

23.1.2 Window content

The window's content is a compliance report for the security on montage.

If user is not entitled to see compliance data then window will show message "You are not entitled to view penny stock information. Please call 1 800 LIST OTC to subscribe"

24. Twitter Window

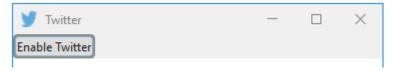


24.1. Window Properties

24.1.1 General properties

Window has X box in the title bar. Clicking this closes the dialog without saving or warning user.

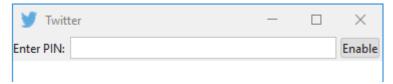
24.1.2 Enable Twitter Button



Visible and enabled: only when user has not enabled Twitter

Function: clicking on button will ask you to log into Twitter and give OTC Markets authorization to receiver your twitter feed. You will need to enter a confirmation code received from Twitter.

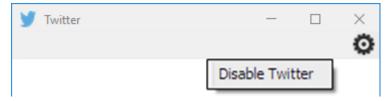
24.1.3 Enter PIN field and Enable button



Visible and enabled: only when waiting for a confirmation by user

Function: field is shown during confirmation from Twitter. User has to log into Twitter in a browser and type in a confirmation number shown on the website. Then click the Enable button.

24.1.4 Disable Twitter wheel button



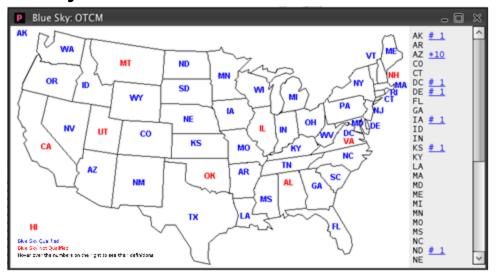
Visible and enabled: only when user has enabled Twitter

Function: Clicking the wheel shows a "Disable Twitter" button. Clicking this button disables Twitter without confirmation.

24.1.5 Tweet Area

Shows Twitter feed for all securities that have been set up for Twitter in the Security Preference.

25. Blue Sky Window



25.1. Window Properties

25.1.1 General properties

Window has X box in the title bar. Clicking this closes the dialog without saving or warning user.

25.1.2 Map Area

Visible: always

The map of the US with the states that are blue sky qualified for the security on montage, shown in blue color and the ones that are not in red.

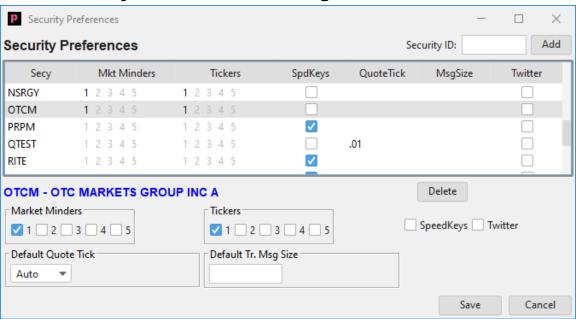
If user is not entitled to view Blue Sky data then following text is shown instead of the map: "You are not entitled to view blue sky information. Please call 1 800 LIST OTC to subscribe"

25.1.3 Blue Sky List

Visible: always

Shows the list of blue sky states with the respective footnote codes for each state (if there are any). Hovering over the footnotes will show the description of the footnote.

26. Security Preferences Dialog



26.1. Window Properties

26.1.1 General properties

Window is not a dialog, it can be open and not blocking access to other windows at the same time.

Window has X box in the title bar. Clicking this closes the dialog without saving or warning user.

26.1.2 Security ID field

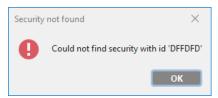
Visible and active: always

Function: The security ID field allows entry of a security identifier, such as Symbol, CUSIP or Security ID. No validation is performed on the input. It's possible to paste an identifier into this field, any spaces will be truncated from the text.

26.1.3 Add button

Visible and active: always

Function: When clicked, the input in Security ID field is validated. If it's a valid security identifier, then a new entry is created for the security in the Security list, focus moved to that entry and details of entry shown below. If the security already existed, then record is not created but located in list and focus moved to it. If it's an invalid identifier, it shows a dialog



User must dismiss dialog before proceeding. Text of Security ID field is not cleared, but text is selected.

26.1.4 Security list

The security list shows a list of all securities that the user has set up to watch in different Minder and/or Ticker windows and Speed Keys.

Clicking anywhere on a line in the lists sets the focus to the line. The line is then highlighted in the list and the Market Minder, Tickers and Speed keys settings are moved to the Detail buttons area below the list. See <u>Detail buttons area</u>.

26.1.4.1. Security column

The security column shows the security identifier. This is primarily Symbol, but CUSIP is shown if Symbol is not available, else Security ID is shown. List is always sorted on this column.

26.1.4.2. Market Minders column

The market minders column is a series of number 1 through 5. Each number is either dimmed or highlighted, depending on if user has chosen to show that particular security in this particular Minder window. The numbers are click-able; clicking the number reverses the selection of it.

26.1.4.3. Tickers column

The tickers column is a series of number 1 through 5. Each number is either dimmed or highlighted, depending on if user has chosen to show that particular security in this particular Ticker window. The numbers are click-able; clicking the number reverses the selection of it.

26.1.4.4. Speed Keys column

The speed keys column is a single checkbox. The checkbox is either checked or not checked, depending on if user has chosen to show that particular security in this Speed keys window. Clicking the checkbox reverses the selection of it.

26.1.4.5. Quote Tick column

The quote tick column is a numerical field. When clicked it shows a pop-up menu where user can select the default quote tick size for the security. The pop-up menu contains the same values as the quote tick size menu on the main window.

26.1.4.6. Msg Size column

The message size column is a numerical field. When column is double clicked it allows user entry of a value, accepting keystrokes of 0 through 9, to set the default trade message size for the security when submitting a trade message.

26.1.4.7. Twitter column

The Twitter column is a single checkbox. The checkbox is either checked or not checked, depending on if user has chosen to receiver Tweet for this security. Clicking the checkbox reverses the selection of it.

26.1.5 Detail buttons area

The Detail buttons area is used to set the preferences for each security.

26.1.5.1. Security information

Identifies the security in the detail area, also the selected security that is highlighted in the security list. It shows the security identifier (symbol, CUSIP or Security ID, in this order of preference) and security name.

26.1.5.2. Market Minder Checkboxes

Enabled: always

Series of checkboxes numbered 1 through 5. Each checkbox is either checked or not checked, depending on if user has chosen to show that particular security in this particular Minder window. Clicking the checkbox reverses the selection of it.

26.1.5.3. Ticker Checkboxes

Enabled: always

Series of checkboxes numbered 1 through 5. Each checkbox is either checked or not checked, depending on if user has chosen to show that particular security in this particular Ticker window. Clicking the checkbox reverses the selection of it.

26.1.5.4. Speed Keys checkbox

Enabled: always

A single checkboxes, it's either checked or not checked, depending on if user has chosen to show that particular security in the Speed keys window. Clicking the checkbox reverses the selection of it.

26.1.5.5. Twitter checkbox

Enabled: always

A single checkboxes, it's either checked or not checked, depending on if user specifies to receive Tweets for the security or not. Clicking the checkbox reverses the selection of it.

26.1.5.6. **Default Quote Tick**

Enabled: always

A pop-up menu where user can select the default quote tick size for the security. The pop-up menu contains the same values as the quote tick size menu on the main window. The default value is "Auto", meaning no fixed default pop-up value for the security.

26.1.5.7. Default Trade Message Size field

Enabled: always

A field accepting keystrokes of 0 through 9, to set the default trade message size for the security when submitting a trade message. The value will override the size value normally displayed when opening a new trade message. The default is empty, meaning there is no default trade message size and user must enter it every time sending a trade message in the security.

26.1.6 **Delete button**

Visible and active: always

Function: clicking the delete button removes the highlighted security from the security list

26.1.7 Save button

Visible and active: always

Function: clicking this button saves the Security preferences and closes the dialog.

26.1.8 Cancel button

Visible and active: always

Function: clicking this button closes Security preferences dialog, discarding changes.

27. Trader Preferences Dialog

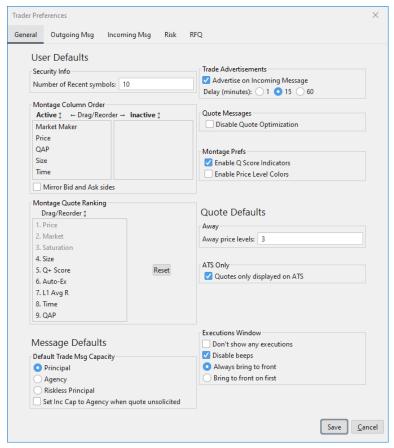
27.1. Window properties

This window is used to set preferences and default Dealer behavior. Dialog has 4 tabs for setting different settings: General, Outgoing Msg, Incoming Msg and Risk.

27.1.1 General Properties

Window is a dialog that always stays above the main window when open. It has an X button in the menubar which closes the windows without saving or warning user changes could be lost.

27.2. General Tab



27.2.1 Security Info section

This section consists of one field to specify how many symbols to show in the recent symbols pop-up next to the security input field on the main window.

27.2.1.1. Number of Recent symbols field

Visible and enabled: always

Default for new user: 10

Function: allows input of numerical value. Minimum is 0 and maximum is 30.

27.2.2 Montage Column Order section

This section is for rearranging, showing and hiding columns on the montage.

27.2.2.1. **Column List**

Visible and enabled: always

Default for new user: order is Market Maker, Price, Qap, Size, Time

Function: the list shows all available columns in two sections. The left hand section are the active (visible) columns, the right hand are the inactive (hidden). User can drag columns between the sections. User can also rearrange columns by dragging them up and down above/below other columns.

27.2.2.2. Mirror Bid and Ask sides checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when this option is checked, the bid and ask sides on montage are mirrored, i.e. the order on the bid side is reversed on the ask side.

27.2.3 Montage Quote Ranking section

This section is for rearranging the quote ranking displayed on the montage.

27.2.3.1. Rank List

Visible and enabled: always (Price is gray)

Default for new user: order is Price, Market, Saturation, Size, Q⁺ Score, Auto-Ex, L1 Avg R, Time, OAP

Function: the list shows all available quote rankings. With the exception of Price, Market and Saturation, user can rearrange rankings by dragging them up and down above/below other rankings. The numbers, 1 through 9, will be fixed and will not move when an item is dragged.

27.2.3.2. Reset Button

Visible and enabled: always

Function: when this button is selected, the quote rankings will return to the system default.

27.2.4 Trade Advertisement section

This section consists of a checkbox and three radio buttons which determine the default trade advertisement value for incoming and outgoing trade messages.

27.2.4.1. Advertise on Incoming Trade Messages checkbox

Visible and enabled: always

Default for new user: checkbox is checked

Function: when this checkbox is set, then the default value for trade advertisement on incoming trade messages is set to true (checked)

27.2.4.2. Delay (Minutes) radio buttons

Visible: always

Enabled: only when the Advertise checkbox is checked

Default for new user: 15 minutes

Function: when set, delays publication of advertised messages for selected number of minutes.

27.2.5 Quote Messages section

This section consists of a single checkbox to disable quote optimization.

27.2.5.1. Disable Quote Optimization checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when checked, Dealer will receive all messages for all quotes quoted by or subscribed to by user. Default for a new user is to have this unchecked.

27.2.6 Montage Prefs section

This section consists of a single checkbox to enable best QAP on top of montage.

27.2.6.1. Enable Q Score Indicators checkbox

Visible and enabled: always

Default for new user: checkbox is checked

Function: when checked, the MPID labels and the quote size values on the montage will be accompanied by a graphical indication of the MPIDs' relative response times and measure of overfill, respectively. See <u>Q Scores Tab</u>.

27.2.6.2. Enable Price Levels Colors

Visible and enabled: always

Default for new user: checkbox is not checked

Function: when checked, the each price level on each side of the montage will be highlighted in a different color.

27.2.7 Away section

This section consists of one field to specify how many price levels the Away button moves quote down by.

27.2.7.1. Away Price Levels field

Visible and enabled: always

Default for new user: 2

Function: specifies the number of price levels quote should move down when Away button is clicked. Field cannot be empty on save, produces error dialog and abandons close of window.

27.2.8 ATS Only section

This section consists of a single checkbox to enable ATS Only quote display.

27.2.8.1. Quotes only displayed on ATS checkbox

Visible and enabled: always

Default for new user: checkbox is checked

Function: when checked, the ATS Only checkbox on the Add / Update Quote dialog will default to checked.

27.2.9 Default Message Capacity section

This section consists of 3 radio buttons, which are mutually exclusive, plus a checkbox. Selecting one radio button resets the other two. This section sets the default trade message capacity of the Trade Message dialog and the Incoming Message Window. Whenever a trade message is initiated, or an incoming trade message moved to the focus area of the Incoming Message window, the trade message capacity buttons are set according to the setting of these radio buttons and checkbox. See Agency and RsklPr checkboxes of the Common Trade Message parameters of the Trade Message dialog and the Trade Message Management area of the Incoming Message Window.

27.2.9.1. Principal radio button

Visible and enabled: always

Default for new user: radio button is set

Function: when this radio button is set, it will reset both the Agency and RsklPr checkboxes on the Trade Message dialog when it's opened, or on the Incoming Message Window whenever a trade message moves to the Focus area.

27.2.9.2. Agency radio button

Visible and enabled: always

Default for new user: radio button is not set

Function: when this radio button is set, it will set the Agency checkbox and reset the RsklPr checkbox on the Trade Message dialog when it's opened, or on the Incoming Message Window whenever a trade message moves to the Focus area.

27.2.9.3. Riskless Principal radio button

Visible and enabled: always

Default for new user: radio button is not set

Function: when this radio button is set, it will reset the Agency checkbox and set the RsklPr checkbox on the Trade Message dialog when it's opened, or on the Incoming Message Window whenever a trade message moves to the Focus area.

27.2.9.4. Set Inc Cap to Agency when quote unsolicited checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when this option is checked, and the quote for which the incoming trade message is attempting to access is unsolicited, the Agency checkbox on the Incoming Message Window will be set; overriding the Principal/Agency/Riskless Principal radio button selection.

27.2.10 Executions window section

This section consists of 2 checkboxes and 2 radio buttons to set the behavior of the Execution Confirmation Window when a new execution comes in. Radio buttons are mutually exclusive. Selecting one resets the other two. See the introduction to the Execution Confirmation Window chapter.

27.2.10.1. Don't show any executions checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when this checkbox is set, both the OTC Link ATS and OTC Link ECN Executions Confirmation Window is never shown.

27.2.10.2. Don't show ECN executions checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when this checkbox is set, just OTC Link ECN Executions Confirmation Window is never shown.

27.2.10.3. Disable beeps checkbox

Visible: always

Default for new user: checkbox is enchecked

Enabled: only when Don't show any executions checkbox is not set

Function: when set, an audible beep will be given once a second while the Executions Confirmation Window is open.

27.2.10.4. Always bring to front radio button

Visible: always

Default for new user: radio button is set

Enabled: only when Don't show any executions checkbox is not set

Function: when set, the Executions Confirmation Window is brought to the front whenever a new Executions comes in.

27.2.10.5. Bring to front on first radio button

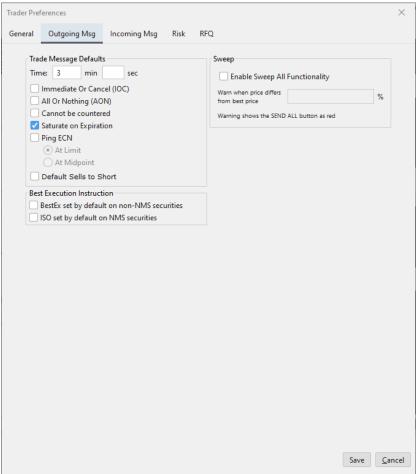
Visible: always

Default for new user: radio button is not set

Enabled: only when Don't show any executions checkbox is not set

Function: when set, the Executions Confirmation Window is brought to the front only when window is not visible when a new Executions comes in.

27.3. Outgoing Message Section



27.3.1 Trade Message Defaults section

This section consists of two time input fields and 3 checkboxes. This section sets the default trade message parameters of a trade message and a counter trade message. See the TIF fields, AON, IOC and NoC of the Common Trade Message parameters of the Trade Message dialog and Common Trade Message parameters of the Counter Message dialog.

27.3.1.1. Time input fields

Visible and enabled: always

Default for new user: 3 minutes 0 seconds

Function: two fields for entering the default duration in minutes and seconds of a trade message and counter message. If no value is entered in field it is assumed to be 0.

27.3.1.2. Immediate or Cancel (IOC) checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, it will set the Immediate or cancel (IOC) checkbox of the Trade Message or Counter Message dialog when opened.

27.3.1.3. All or Nothing (AON) checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, it will set the All of nothing (AON) checkbox of the Trade Message or Counter Message dialog when opened.

27.3.1.4. Cannot be countered checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, it will set the No Counter (noC) checkbox of the Trade Message or Counter Message dialog when opened.

27.3.1.5. Saturate on Expiration

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, it will set the Saturate on Expiration checkbox of the Trade Message dialog when opened.

27.3.1.6. Ping ECN checkbox

Visible: always

Enabled: only when user and security have been enabled for pinging the OTC Link ECN

Default for new user: checkbox is unchecked

Function: when set, it will set the Ping ECN checkbox of the Trade Message dialog when opened.

27.3.1.7. At Limit radio button

Visible: always

Enabled: only when Ping ECN checkbox is checked

Default for new user: radio button is set

Function: when set, it will set the At Limit radio button of the Trade Message dialog when opened.

27.3.1.8. At MidPoint radio button

Visible: always

Enabled: only when Ping ECN checkbox is checked

Default for new user: radio button is not set

Function: when set, it will set the At MidPoint radio button of the Trade Message dialog when opened.

27.3.1.9. **Default Sells to Short**

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, it will set the Short checkbox of the Trade Message or Counter

Message dialog when opened.

27.3.2 Sweep section

This section consists of a checkbox and an input field for turning on sweep all functionality and specifying the warning deviation.

27.3.2.1. Enable Sweep All Functionality checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, sweep all will be enabled. This shows a Sweep All button on the main window next to the Sweep button, and enables new fields on the Outgoing message window.

27.3.2.2. Warn when price differs from best price field

Visible and enabled: only when Enable Sweep All checkbox is checked

Default for new user: 5

Function: allows input of a numerical value. This specifies the % deviation limit from best price user sets. If a price in Sweep all deviates more then this the Send buttons turn red.

27.3.3 Best Execution section

This section consists of two checkboxes for setting default Best Execution instructions on trade messages.

27.3.3.1. BestEx set by default on non-NMS securities checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, the BestEx / ISO checkbox will be pre-checked when Send Message / Send MAX / Send Counter dialogs open on a non-NMS security

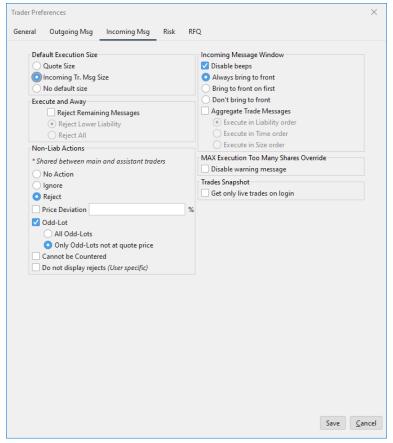
27.3.3.2. ISO set by default on NMS securities checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, the ISO checkbox will be pre-checked when Send Message / MAX / Counter dialogs opens on a NMS security

27.4. Incoming Message Tab



27.4.1 Default Execution Size section

This section consists of 3 radio buttons, which are mutually exclusive. Selecting one resets the other two. This section sets the default execution size as used by the Incoming Message Window to populate the Execution Size field when a trade message is moved to the Focus area. See Execution Size field.

27.4.1.1. Incoming Message Size radio button

Visible and enabled: always

Default for new user: radio button is not set

Function: when this radio button is set, it sets the default execution size to the remaining size of the incoming trade message, the trade message that was just moved to the focus area.

27.4.1.2. Quote Size radio button

Visible and enabled: always

Default for new user: radio button is set

Function: when this radio button is set, it sets the default execution size to the quote size of the security in the trade message currently in the focus area. If the trade message is a buy trade message, it will be set to the ask quote size. If the trade message is a sell trade message, it will be set to the bid quote size.

27.4.1.3. No default Size radio button

Visible and enabled: always

Default for new user: radio button is not set

Function: when this radio button is set, it will set no default execution size.

27.4.2 Incoming Message Window section

This section consists of a checkbox and 3 radio buttons to set the behavior of the Incoming Message window when a trade message comes in or there is an active trade message in the Focus area. Radio buttons are mutually exclusive. Selecting one resets the other two. See the introduction to the Incoming Message Window chapter.

27.4.2.1. Disable beeps checkbox

Visible and enabled: always

Default for new user: checkbox is checked

Function: when set, an audible beep will be given once a second while an active trade message is in the focus area of the Incoming Message Window.

27.4.2.2. Always bring to front radio button

Visible and enabled: always

Default for new user: radio button is set

Function: when set, the Incoming Message Window is brought to the front whenever a trade message moves to the focus area of the IMW.

27.4.2.3. Bring to front on first radio button

Visible and enabled: always

Default for new user: radio button is not set

Function: when set, the Incoming Message Window is brought to the front whenever a trade message moves to the focus area of the IMW and the focus area was empty prior to that.

27.4.2.4. **Don't bring to front radio button**

Visible and enabled: always

Default for new user: radio button is not set

Function: when set, the Incoming Message Window is never brought to the front whenever a trade message moves to the focus area of the IMW.

27.4.2.5. Aggregate Trade Messages checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, enables the followingthree radio buttons.

27.4.2.6. Execute in Liablity Order radio button

Visible: always

Enabled: only when Aggregate Trade Messages checkbox is checked

Default for new user: radio button is set

Function: when set, aggregated trade messages will be executed in liability order.

27.4.2.7. Execute in Liablity Time radio button

Visible: always

Enabled: only when Aggregate Trade Messages checkbox is checked

Default for new user: radio button is not set

Function: when set, aggregated trade messages will be executed in time order.

27.4.2.8. Execute in Liablity Size radio button

Visible: always

Enabled: only when Aggregate Trade Messages checkbox is checked

Default for new user: radio button is not set

Function: when set, aggregated trade messages will be executed in size order.

27.4.3 Execute and Away section

This section consists of 1 checkbox to turn on the Execute and away feature, along with two radio buttons to further define what action to take based on liability.

27.4.3.1. Reject Remaining Messages checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, sets the reject remaining messages to true.

27.4.3.2. Reject Lower Liability radio button

Visible and enabled: only when Reject Remaining Messages checkbox is checked

Default for new user: radio button is set

Function: defines that reject should only reject messages with lower liability

27.4.3.3. Reject All radio button

Visible and enabled: only when Reject Remaining Messages checkbox is checked

Default for new user: radio button is not set

Function: defines that reject should reject all remaining messages regardless of liability

27.4.4 Non-Liability Action section

This section consists of radio buttons to set behavior when receiving a non-liability message.

27.4.4.1. No Action radio button

Visible and enabled: always

Default for new user: radio button is set

When set, no action will be taken on an incoming non-liability message

27.4.4.2. Reject radio button

Visible and enabled: always

Default for new user: radio button is not set

When set, non-liability messages will be automatically rejected if they further fulfill the user defined threshold settings

27.4.4.3. Ignore radio button

Visible and enabled: always

Default for new user: radio button is not set

When set, non-liability messages will be automatically ignored if they further fulfill the user defined threshold settings

27.4.4.4. Price Deviation field

Visible and enabled: only when Reject or Ignore radio buttons are set

Default for new user: no value

Function: requires user to specify the price deviation for automatic reject or ignore.

27.4.4.5. Odd-lot checkbox

Visible and enabled: only when Reject or Ignore radio buttons are set

Default for new user: checkbox is unchecked

Function: when checked, messages will be automatically rejected or ignored only when they are odd lot

27.4.4.6. All Odd-Lots radio button

Visible and enabled: only when Odd-Lot checkbox is checked

Default for new user: radio button is set

When set, messages will be automatically rejected or ignored only when they are an odd lot

27.4.4.7. Only Odd-Lots not at quote price radio button

Visible and enabled: only when Odd-Lot checkbox is checked

Default for new user: radio button is not set

When set, messages will be automatically rejected or ignored only when they are an odd lot that is not at the user's quote price

27.4.4.8. Cannot be countered checkbox

Visible and enabled: only when Reject or Ignore radio buttons are set

Default for new user: checkbox is unchecked

Function: when checked, messages will be automatically rejected or ignored only when it is NoCounter

27.4.4.9. Do not display rejects (User specific)

Visible and enabled: only when Reject radio button is set

Default for new user: checkbox is unchecked

Function: when checked, automatically rejected messages will not be displayed

27.4.5 MAX Execution Too Many Shares Override section

This section consists of a single checkbox to override the Too Many Shares warning for MAX messages. See the introduction to the <u>Incoming Message Window</u> chapter.

27.4.5.1. Disable warning message checkbox

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, the Too Many Shares warning dialog will not be displayed if the user attempts to execute a MAX trade message with more shares than available in the trade message..

27.4.6 Trades Snapshot section

This section consists of a single checkbox to allow users to not load old trade message when reconnecting.

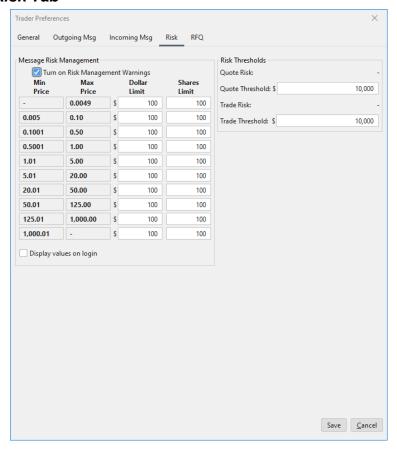
27.4.6.0. Get only live trades on login

Visible and enabled: always

Default for new user: checkbox is unchecked

Function: when set, only live trade messages will be loaded, when user reconnects to Dealer.

27.5. Risk Tab



27.5.1 Message Risk Management Section

This section consists of one checkbox to specify if user should get a warning when submitting a trade message that is greater than or equal to the dollar value than the set limit specified by user.

27.5.1.1. Turn on Risk Management Warnings checkbox

Visible: always

Enabled: Enabled, if a) no Superuser enabled for this market maker or b) one or more Superusers are enabled for this market maker, and this trader is a Superuser. Disabled if one or more Superusers are enabled for this market maker, and this trader is NOT a Superuser.

Default for new user: checkbox is unchecked

Function: turns on risk management warnings on incoming and outgoing messages.

If no Superuser is enabled for this market maker, all traders will be able to turn on/off the Risk Management Warnings. Any changes made by one trader will apply only to that trader the next time they log in (i.e., each trader will have their own setting). Trader assistants and traders are considered separate, in that an assistant and trader will have their own settings.

If one or more Superusers are enabled for this market maker, only a Superuser will be able to turn on/off the Risk Management Warnings. Any changes made by one Superuser will apply to all traders, including other Superusers, the next time they log in.

27.5.1.2. Display values on login

Visible: always

Enabled: Enabled, if a) no Superuser enabled for this market maker or b) one or more Superusers are enabled for this market maker, and this trader is a Superuser. Disabled if one or more Superusers are enabled for this market maker, and this trader is NOT a Superuser.

Default for new user: checkbox is unchecked

Function: When checked, the following dialog will be displayed, when user logs into Dealer.



If the risk settings are disabled, the following dialog will be displayed, when user logs into Dealer.



27.5.1.3. Risk Management Threshold fields

Visible: always

Enabled: Enabled, if a) no Superuser enabled for this market maker or b) one or more Superusers are enabled for this market maker, and this trader is a Superuser. Displayed if one or more Superusers are enabled for this market maker, and this trader is NOT a Superuser.

Function: This is a table of 10 rows of 4 fields. Each row shows a minimum and maximum price, and 2 fields for user to specify the dollar and shares limit for that price range. User will need to confirm when sending a message or executing an incoming message that exceeds the limit either in market value or number of shares set by the price range the message falls under.

If no Superuser is enabled for this market maker, all traders will be able to change the individual limits. Any changes made by one trader will apply to only to that trader the next time they log in (i.e., each trader will have their own thresholds). Trader assistants and traders are considered separate, in that an assistant and trader will have their own thresholds.

If one or more Superusers are enabled for this market maker, only a Superuser will be able to change the individual limits. Any changes made by one Superuser will apply to all traders, including other Superusers, the next time they log in.

27.5.2 Risk Thresholds Section

If Risk Thresholds have not been enabled this section shows text to advise user to call OTC Markets to turn on the Risk Threshold service.

27.5.2.1. Quote Risk

Visible and enabled: when Risk Threshold is set

Function: shows the current quote risk for the firm

27.5.2.2. Quote Threshold field

Visible and enabled: when Risk Threshold is set

Default for new user: no value

Function: allows user to set the quote threshold. Quote risk cannot exceed the threshold. Will be rejected if threshold is set lower than current Quote risk exposure.

27.5.2.3. **Trade Risk**

Visible and enabled: when Risk Threshold is set Function: shows the current trade risk for the firm

27.5.2.4. Trade Threshold field

Visible and enabled: when Risk Threshold is set

Default for new user: no value

Function: allows user to set the trade threshold. Trade risk cannot exceed the threshold. Will be rejected if threshold is set lower than current Trade risk exposure.

27.5.3 Save button

Visible and enabled: always

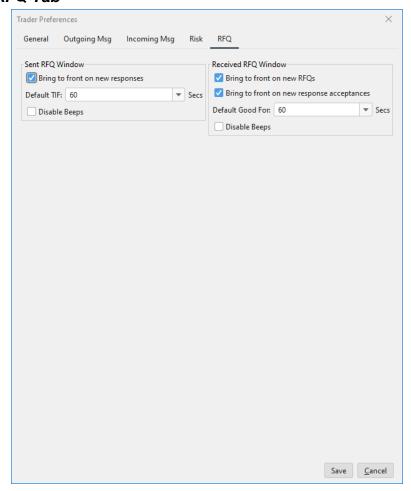
Function: When clicked it saves the settings currently on dialog and closes dialog.

27.5.4 Cancel button

Visible and enabled: always

Function: When clicked it closes the dialog, discarding settings on the dialog without warning the user any changes might be lost.

27.6. RFQ Tab



27.6.1 Send RFQ Window Section

This section consists of one checkbox and an editable drop down listbox.

27.6.1.0. Bring to front on new responses checkbox

Visible and enabled: always

Default for new user: checkbox is checked

Function: when set, the Send RFQ Window is brought to the front whenever an RFQ response is received.

27.6.1.1. Disable beeps checkbox

Visible and enabled: always

Default for new user: checkbox is enchecked

Function: when set, an audible beep will be given once a second while a new RFQ response has been received.

27.6.1.2. **Default TIF textbox**

Visible and enabled: always

Function: An editable textbox to enter the default duration of an RFQ.

Default value: 60 seconds

27.6.1.3. **Default TIF pop-up**

Visible and enabled: always

Function: When clicked, it pops up a menu of fixed TIF values to be inserted into the Default TIF textbox. It will have the following values:

30

60

120

180

DAY

27.6.2 Received RFQ Window Section

This section consists of two checkboxes and an editable drop down listbox.

27.6.2.0. Bring to front on new RFQs checkbox

Visible and enabled: always

Default for new user: checkbox is checked

Function: when set, the Received RFQ Window is brought to the front whenever a new RFQ is received.

27.6.2.1. Bring to front on new response acceptances checkbox

Visible and enabled: always

Default for new user: checkbox is checked

Function: when set, the Received RFQ Window is brought to the front whenever a previously sent RFQ response is accepted.

27.6.2.2. **Default Good For textbox**

Visible and enabled: always

Function: An editable textbox to enter default duration of a response.

Default value: 60 seconds

27.6.2.3. **Default Good For pop-up**

Visible and enabled: always

Function: When clicked, it pops up a menu of fixed values to be inserted into the Default Good For textbox. It will have the following values:

30

60

120

180

RFQ

27.6.2.4. Disable beeps checkbox

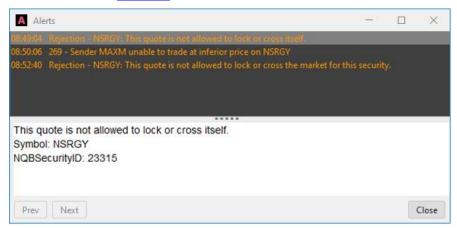
Visible and enabled: always

Default for new user: checkbox is enchecked

Function: when set, an audible beep will be given once a second while a new RFQ has been received or a response has been accepted.

28. Alerts Window

Clicking the All Alerts button in the Status and Alerts section of the Main window opens the Alerts window. See All Alerts button.



28.1. Window Properties

The window's size and position will be saved with the desktop.

It has a Minimize, Restore and X button in the menu bar.

The divider line between the Alert List and Alert Detail areas can be moved up an down. Each area has a minimum size that fits one line of text.

28.2. Alerts List area

The Alerts List area lists all incoming alerts in the order they are received, with oldest on top as a default. The order in which alerts are displayed is configurable by right-clicking within the alerts window. The list is scrollable; scroll arrows will show if there are more items in the list than fit the list.

The list is clickable. If an item in the list is clicked, it's indicated with a gray background and the detail of the item is shown in the Alert Detail area below. The latest alert is automatically highlighted and shown in the Alert Detail area.

There are two types of alerts: quote message alerts and trade message alerts

28.2.1 Formatting quote message alerts

Quote message alerts are formatted as follows:

[time] [subject] - [first line of alert text]

Quote message alerts are colored according to the subject of the alert.

• Green indicate success – if subject is "Acknowledgement"

- Orange indicates failure if subject is "Rejection"
- White indicates notification if subject is "Advisory"

28.2.2 Formatting trade message alerts

Trade message alerts are formatted as follows:

[time] [alert code] - [message]

Trade message alerts are colored according to the alert code:

- Green indicate success alert code is less than 100
- Orange indicates failure if alert code is 100 or greater

28.3. Alerts Detail area

The Alerts Detail area shows the complete alert that is highlighted in the Alerts list. This text is included in the main text field of the alert message.

Text cannot be selected. The area will have scroll arrows if the number of lines in the text does not fit in the space allocated for the alert detail.

28.4. Control Button area

28.4.1 Prev button

Visible and enabled: always

Function: When clicked, it moves the highlighted alert one line up. If the highlighted line is the top line, then button does nothing.

28.4.2 Next button

Visible and enabled: always

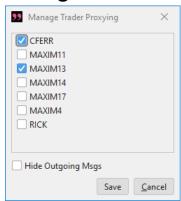
Function: When clicked, it moves the highlighted alert one line down. If the highlighted line is the bottom line, then button does nothing.

28.4.3 Close button

Visible and enabled: always

Function: When clicked, it closes the window.

29. Manage Trader Proxying Dialog



The dialog is opened by selecting Manage Trader Proxying... from the Setup menu. See <u>Manage Trader Proxying</u> command.

The function of this dialog is to set up traders at the same firm to receive a copy of the messages sent to traders they are proxying. User can specify to receive a copy of any incoming and optionally outgoing message received/sent by the trader proxied. Trader proxies will receive trade messages so long as the traders they are proxying are open, even if they themselves are closed.

29.1. Window Properties

The window is a dialog and always stays on top of the main window. It has an X item in the menu bar, which if clicked closes the window. Window can be resized by dragging the corners of the window.

29.2. Trader List area

The Trader List area shows a list of trader IDs of all entitled Dealer traders at the firm of the user, excluding own trader ID.

In front of each trader ID is a checkbox. The checkbox shows the proxy status of the appropriate trader. Checking the checkbox means the user wants to proxy the trader, that is receive a copy of all incoming trade messages and executions for that trader.

See also Trade Message area.

29.3. Control Button area

29.3.1 Hide Outgoing Msgs button

Visible and enabled: always

Function: when checked, the Message Pane will only show incoming messages to the proxying traders, not outgoing messages.

29.3.2 Save button

Visible and enabled: always

Function: when clicked, settings of all proxied traders is saved and then window is closed

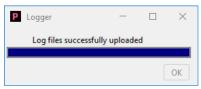
29.3.3 Cancel button

Visible and enabled: always

Function: when clicked, window is closed without saving

30. Upload Log File Dialog

Clicking the Upload Log File command under the Help menu initiates the Upload Log File function. Depending on the users connection to OTC Link, the files will either be sent automatically or the user will have to email the files to OTC Markets.



30.1. Window properties

30.1.1 General properties

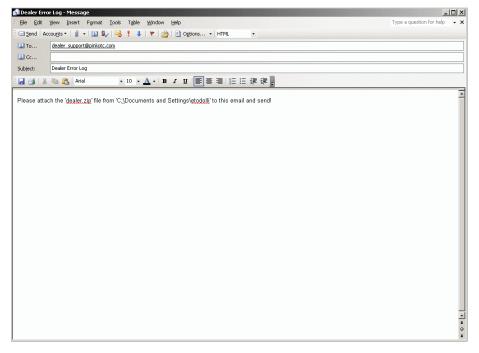
The Upload Log File dialog is opened from the Upload Log File command under the Help menu.

A window will appear asking the user if they would like to upload their log files to the server. If they select 'OK' then Dealer will package the log files and attempt to send them to OTC Markets for analysis.

If the files cannot be sent due to the particular connection type then the user will be prompted to send the file via email.

30.1.2 Email Log Files

Function: If Dealer cannot automatically upload the packaged log files, then dealer will open the default email client with the send to address populated and include a message with instructions on where to find the log files locally within the main message area.



31. Change Password Dialog



31.1. Window properties

31.1.1 General properties

The Change Password dialog is opened from the Change Password... command under the Setup menu. See Change Password command.

It can also open up after user logged in if system administrators have specified to force a password change after login.

The window is a dialog and will not allow any other Dealer window in front of it. It has to be closed in order to access any other window or command of Dealer.

Dialog has an X button in the title bar, which if clicked closes the dialog without saving.

31.1.2 Old password field

Visible and enabled: always

Function: will always come up blank when dialog is opened. Allows input of password string, more specifically, the current user password. This is used to confirm that user changing the password has authority to do so.

31.1.3 New password field

Visible and enabled: always

Function: will always come up blank when dialog is opened. Allows input of password string, more specifically, the password that the user wishes to become the new password.

31.1.4 Confirm new password field

Visible and enabled: always

Function: will always come up blank when dialog is opened. Allows input of password string, more specifically, the password that the user wishes to become the new password again, used to compare with the previous input field.

31.1.5 Save button

Visible and enabled: always

Function: when clicked, Dealer compares the string in the Old password field with the current password. If the password is incorrect, a message

Attempt failed: Incorrect password (color of text is blue)

is displayed above the input fields and the Save process aborted.

If they match, then it compares if the two strings in the New password field and Confirm new password field are identical, case sensitive. If they don't match, a message

New passwords do not match (color of text is blue)

is displayed above the input fields and the Save process aborted.

If correct old password and two identical new passwords have been entered, then a request is sent to OTC Link to change the login password to what was entered in the New password field. Dialog is then closed.

31.1.6 Cancel button

Visible and enabled: always

Function: if clicked, it closes the dialog without changing the password

32. About Dialog



The About dialog is opened when user selects About OTC Dealer... command or double clicks on the Response Time indicator in the Status area of main window. See <u>About OTC Dealer</u> and Response Time Indicator.

The About dialog has 4 sections.

- OTC Markets logo, version indicator and help information: shows the current version number of OTC Dealer and phone number to call for user and technical help.
- Current Network and Proxy indicator: shows the current network connection,
 Primary/Secondary, and proxy settings, the proxy server or text indicating no proxy is used.
- Current server: shows the identity and address of the current OTC Link server Dealer is logged into
- Connection Latency: shows the current connection latency, minimum, maximum and average latency over login session, and time since last login as the sample time. These values are calculated in real time.

33. Save and Reload Desktop

Restore all windows on login