Genium INET®

Trading Workstation (TW) User's Guide

BIST

Version: 4.0.1014

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1 Summary of Changes

Changes between this version and version a1600 (4.0.1012).

No	Changes	Comment
1	In Chapter "Preferences," added new screenshot of "Windows Tab" and description of "Button Colors" section in that tab on page 132.	
2	Subchapter "Hotkeys" added to Chapter "General Features," see page 32.	
3	In Chapter "Preferences," added new screenshot of "General Tab" and description of "Show prices as tool tip on Enter Order window" and "Use hotkeys" in Miscellaneous section in that tab on page 127.	
4	In Chapter "Instrument Explorer," added a number of posts to the table on page 112.	

2 Getting Started

2.1 About the Application

The Trading Workstation (TW) application enables you to trade in Genium INET.

2.2 About the Manual

2.2.1 Purpose

This user's guide provides support for daily work with Trading Workstation.

2.2.2 Audience

This manual is intended as a self-tutorial with brief explanations of all available functions. It describes functionality for the trader, which means that all functions may not be relevant for your specific tasks.

It is assumed that you have basic knowledge about your workstation and its operating system.

2.2.3 References

For information about software recommendations, please refer to *Trading Workstation Installation Guide.*

2.2.4 Screenshots and Trading Workstation Functionality

This manual covers all available functionality in the Trading Workstation application. Depending on your user account and how it is set up by your systems administrators, some windows and functions described here may not be available to you. Likewise, screenshots illustrate sample windows which may not be 100% accurate with your configuration.

3 General Features

With Genium INET Trading Workstation (TW) you can, for instance, display the real-time price information on your screen, click a bid or ask price, and then execute your order. You are connected through OMnet, the Nasdaq network, to the central marketplace where you have direct access to the entire market.
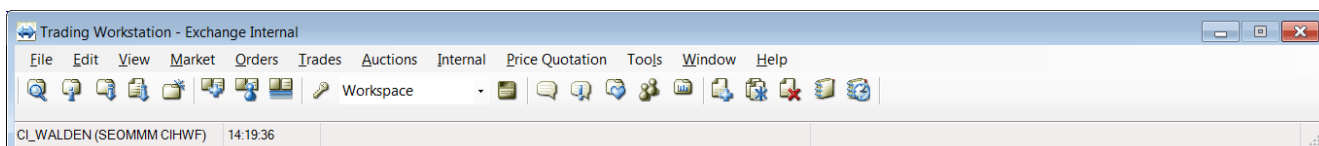
Figure 1: Example of a Trading Workstation Main Menu

3.1 Starting and Exiting Trading Workstation

3.1.1 Prerequisites

- Your workstation must be set up at the central Marketplace as a valid OMnet node. If it is not, contact your system administrator.
- You must be set up as a user with a log-in name and password. If you are not, contact your system administrator.
- The application must be configured to connect to a valid OMnet gateway and socket.
- You must have basic knowledge about your workstation and its operating system.

3.1.2 Starting Trading Workstation

To start Trading Workstation and log on, follow these steps:

1. Install the program.

2. Choose **Trading Workstation** on the **Start** menu.
   Result:
   The Trading Workstation splash screen appears.

Figure 2: Trading Workstation Splash-Screen

The log-on window opens.
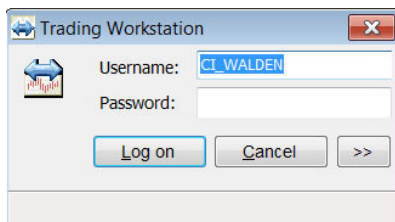
Figure 3: Log-On Window

3. Enter your user name and password in the log-on window.

   Comment: If your connection details have been set up previously, you can now log on by clicking the **Log on** button.

4. Click **Log on**.

   Result: The Trading Workstation opens.

3.1.2.1   Log-On Expanded View

If your connection details have not been set up before, the arrow button at the bottom, if clicked, will reveal additional fields that contain technical information necessary for the communication between the PC and the marketplace.
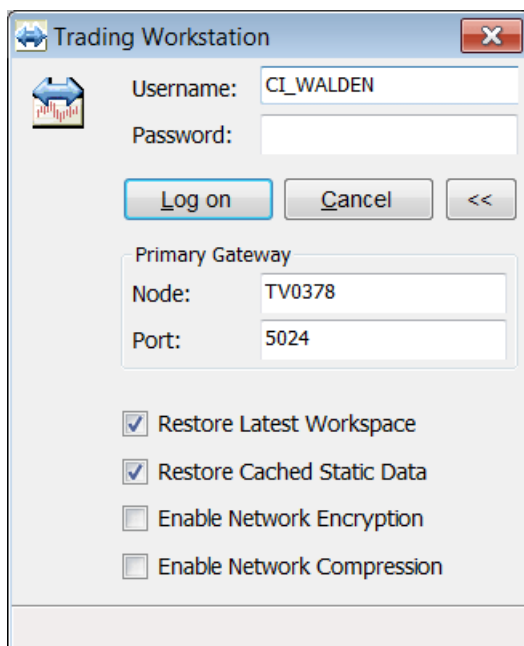
Figure 4: Log-On Window: Expanded View

1. Enter a node name and a port number.

   The **Restore Latest Workspace** check box is selected by default. Clear the check box if you do not want to restore your latest workspace.

2. Make sure the **Restore Cached Static Data** check box is selected, unless you have received other instructions from you system administrator or the exchange.

   When this check box is selected, stored data in the application will be verified to be correct and then used at logon instead of the system being queried for the same information. This is to reduce the log-on time. When the check box is cleared, by contrast, the application will query the central system, asking for complete information regarding, for example, securities information. This will bring about a prolonged log-on time.

   > **Note:** This check box is selected by default.

   Comment: Selecting the **Enable Network Encryption** check box means that the network traffic between the application and the gateway will be encrypted.

   Comment: Selecting the **Enable Network Compression** check box means the network traffic between the application and the gateway will be compressed.

3.1.3   Exiting Trading Workstation

1. Select **Exit** on the **File** menu, or click the **Close** button in the **Toolbar**.

2. Click **Yes** or **No** in the dialog box that appears.
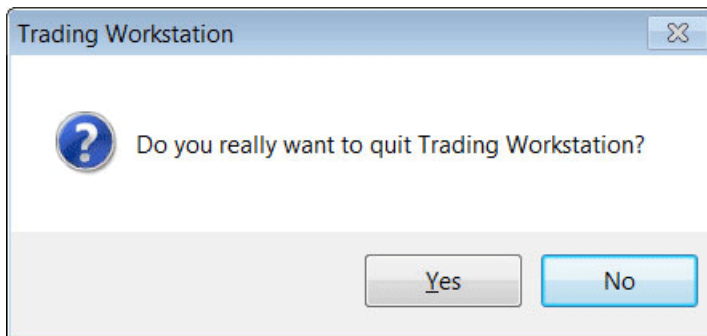
3.1.4 Changing Your Password

On the **View** menu click **Session Information** and then **Set New Password**.
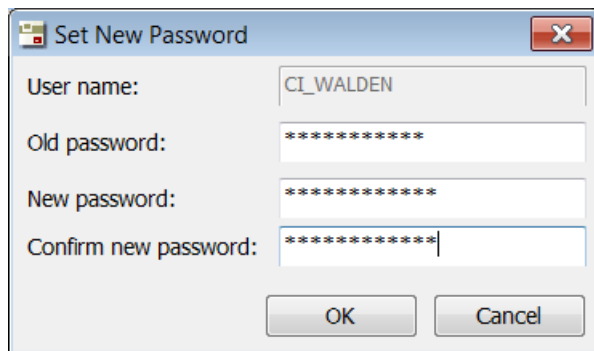
Figure 5: Set New Password

You can change your password when you have logged on to the application, and if you are asked to do so during logon. The expiration time of the password is set up in the Central Database by authorized personnel.

Do as follows to change the password:

1. Enter your old password in the **Old Password** field.

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

3. Confirm your new password by typing it in again in the **Confirm** field, and then click **OK**.

If you log on when your password has expired, a dialog window will appear requesting you to change passwords.
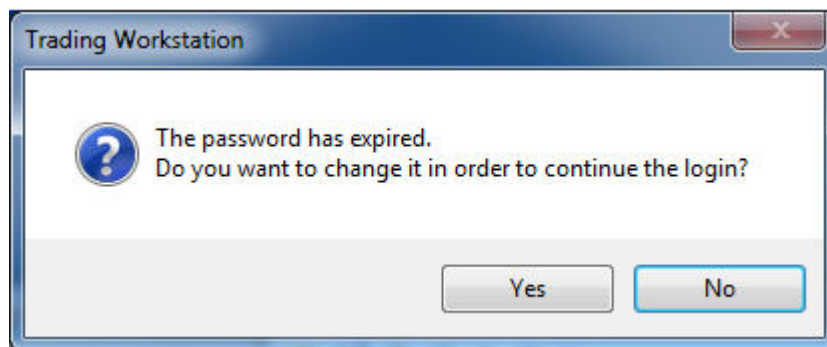
Figure 6: Password Expired Dialog Box

When this dialog window appears, you need to change your password.

3.2 Working with the Application

3.2.1 Working with Windows

Trading Workstation is an application based on Microsoft Windows .NET technology.

In order to use a window, you must activate it first by clicking it. A window is active when the title bar in the window becomes highlighted. Only one window can be active at a time.

To enter information in a window, you normally click in a field and use the keyboard to type the information. You can also press TAB to move to the next field in the window. The selected field is then automatically highlighted. You can use SHIFT+TAB to move to the previous field.

> **Note:** You do not need to use BACKSPACE to delete information in a highlighted field. The new information you enter replaces the old information.

3.2.1.1 Always on Top

Use the Always on Top function if you always want the entire application, or a specific window, to appear on top of other open windows.

Setting Trading Workstation to Always Appear on Top

1. Select **Preferences** from the **Tools** menu.

2. Select the **Always on top** check box from the **Window Settings group** in the **Window** tab.

3. Click **OK** or **Apply**.

4. All the open Trading Workstation windows will stay on top of all other application windows, also when one of the other application windows is in focus.

Clear the **Always on top** check box in the **Preferences** window to undo the selection.

> **Note:** When you have set the application to always appear on top, you can exclude specific Trading Workstation windows by right-clicking from within the window title bar and unchecking the Always on top command.

Setting a Window to Always Appear on Top

Right-click from within the title bar of the window you want to always appear on top and select Always on Top.

The window will stay on top of other windows until you uncheck the setting.

3.2.1.2 Essential Only

Some of the windows in the application have the Essential Only function. This enables you to hide certain "non-essential" fields from the window.

Activating Essential Only

1. Right-click in the title bar and select **Essential only**.
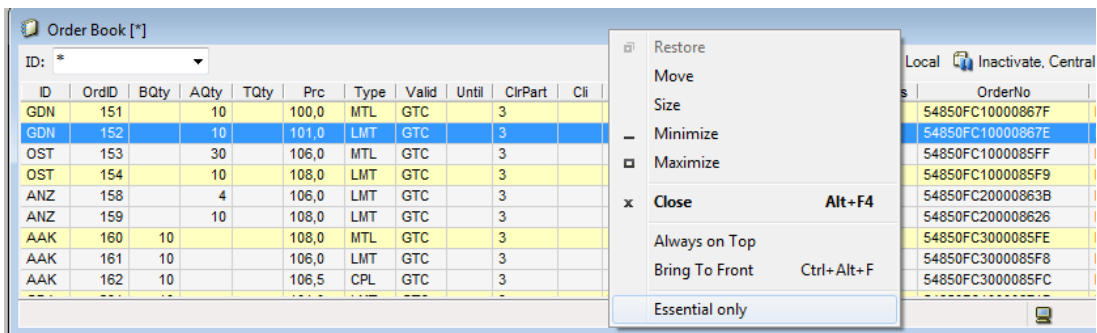
2. When you select **Essential only**, the "non-essential" information is hidden.
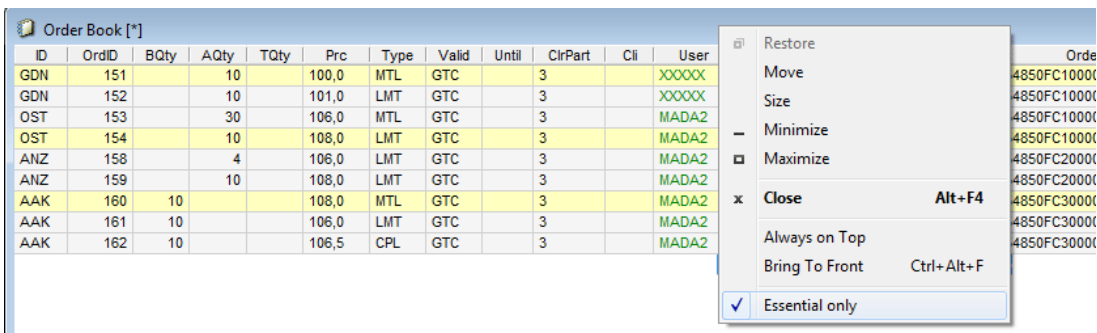
3. Right-click in the title bar and clear the **Essential only** check box to display the hidden fields again.

3.2.2　Toolbar

The functions most often used are available from the toolbar. When you move the cursor over a toolbar icon, a ToolTip describes the icon.
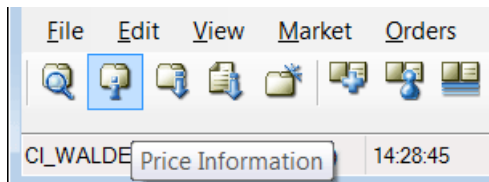
Figure 7: ToolTip

3.2.2.1　Toolbar Buttons

The toolbar buttons are described below.

Note: Depending on your system and user configuration, all buttons described below may not be available in your application.

Item	Description
	Instrument Explorer
	Price Information
	Price Depth
	Order Depth or Mid Point Order Book
	Price Quotation
	Enter Trade Report
	Company Trade
	Ticker
	Pending Trades
	Log Off and Exit

Item	Description
	Save Workspace
	Market Messages
	Market Alerts
	Information Feed Status
	Traders
	Market Statistics
	Enter Order
	Enter Tailor-Made Combination
	Enter Linked Orders
	Cancel Orders Detailed
	Order Book
	Order History

3.2.3 Action Buttons

Action buttons enable you to quickly perform certain routine actions that you do numerous times a day. Some of these buttons appear in many windows in the application while others are window specific and provide actions related to the window.

3.2.4 Shortcut Menu

You can open some windows without selecting an alternative from the main menu. Do as follows:

1. Move the pointer with the mouse to any of the already open windows.

2. Click the right mouse button.

   Result: A shortcut menu is displayed. The shortcut menu contains different alternatives depending on which window the cursor is placed in and if it has been customized, see the last item of the menu.

3. Select one of the alternatives on the menu and click it with the left mouse button.

3.2.5   Column Settings

To show or hide columns in a window, do as follows:

1. Place the cursor in a window, within the grid.

2. Click the right mouse button.

3. Click **Setting** and then on the submenu **Column Settings**.

   Result:

   A Columns window is displayed, one example of which is displayed below.
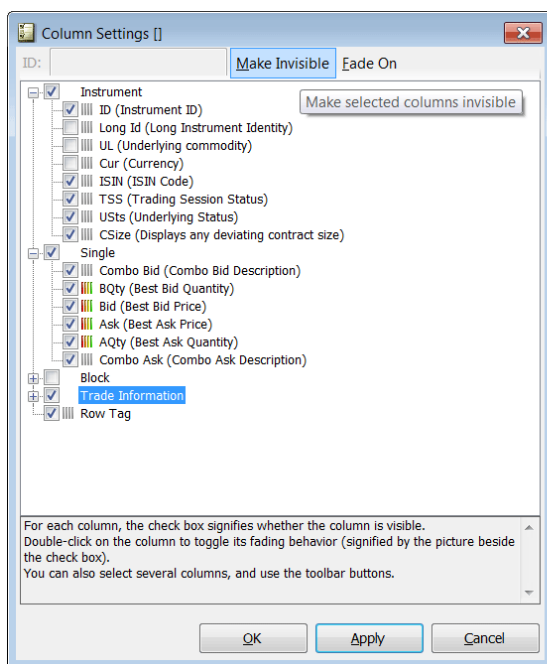
Figure 8: Column Settings Window

4. Decide which columns should be visible in the window by selecting the relevant check boxes.

   A selected check box indicates that the corresponding column is visible.

   If you want to change all the check boxes in a section, such as Instrument in the figure above, select or clear its check box, and all the check boxes in the section will be changed at once.

5. Decide whether you want the data in the columns you have chosen to see to be faded by clicking the stripes icon.

If colorized, recent changes to cell content will be displayed with red, green, or blue text color, depending on data type and change. The text will then slowly fade back to normal text color, usually black.

6. Click the **OK** button.

> **Note:** You can also use the **Make Invisible/Visible** and **Fade On/Off** buttons to make this change for all columns currently selected. The buttons will be named after their functionality, depending on the current state of the columns.

3.2.6 Printing

To print information from a window, do as follows:

1. Open the window from which you want to print information.

2. Right-click the mouse.

   Result: A shortcut menu appears. In the **Actions** option, you can click **Print Preview** and/or **Page Setup** to view how your printed information will look like and choose your layout options.

3. Click **Actions**, then **Print**.

   Result: The **Print** window appears.

4. Click **OK**.

3.2.7 Exporting Data to a File

You are able to export data in a window table to a file of your choice. To do this, follow the steps below:

1. Right-click in a table of your choice. If you right-click in the **Price Information** window, the following shortcut menu appears:
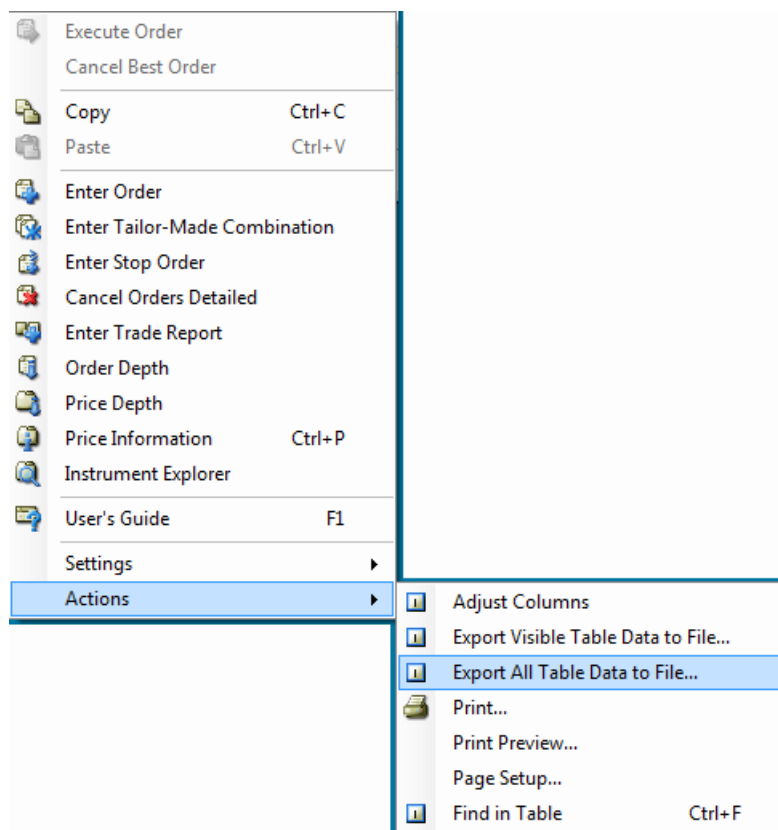
2. In the menu, click **Actions** and either **Export Visible Table Data to File**... or **Export All Table Data to File**...

   The difference between the two choices is that **Export All Table Data to File** also includes data from hidden columns.

3. In the window that appears, select a name for your file and click **Save**.

   The name of the menu item you selected will appear in the title bar of the window that appears.
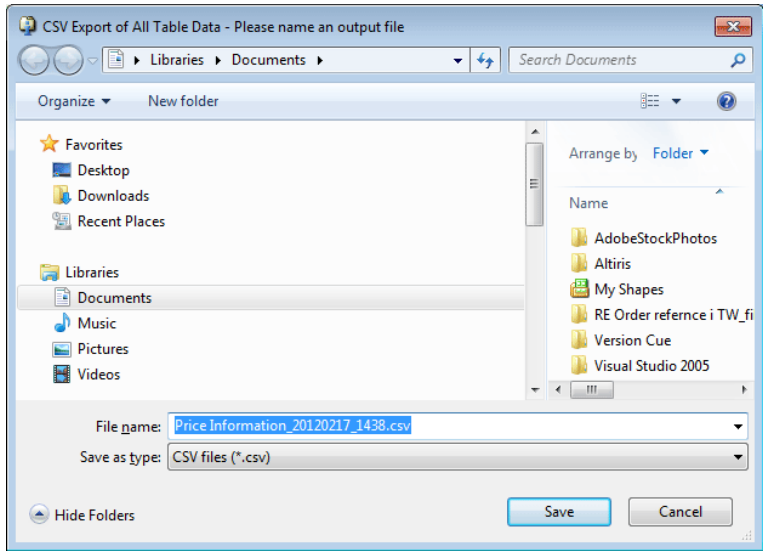
Figure 9: Naming Export Data

The files will be saved in the place you have indicated, and with the name you have given it.

You are also able to specify a default setting in the **Export folder**, see **Preferences**, **General** tab on page . The table data will then be automatically exported to this folder.

> **Note:** If you define a folder in the **Preferences** window that is subsequently deleted, the setting that you have specified will not be automatically removed or changed.

3.2.8   The Filter Inspector

This section describes the filter inspector. When you select **Filter Inspector** from the **View** menu, the following window appears:
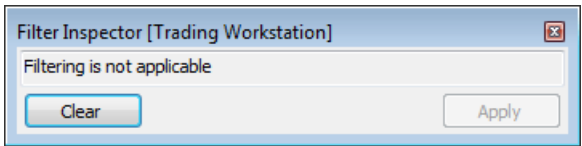
Figure 10: Filter Inspector Window

The filter window reflects the window that is currently in focus. In other words, the layout of the window will change appearances depending on the window that is currently in focus. For a correct description of the **Filter Inspector** window, see the chapters for each separate window.

You can also double-click the **Filter** button in each individual window, where filtering is applicable, to open the filter window for that particular window.

3.3   Workspaces

In the Trading Workstation application, you are able to set up your own, predesigned workspace and with a name of your own choice. This section describes how you can save, load, and delete your workspaces.

3.3.1   Saving Workspaces

You can choose to save your workspace at your own convenience. To do this, follow the steps below:

1. Open the windows that you want to save in the workspace and arrange them to your liking on the screen.

2. Enter the name that you want the workspace to have in the Active Workspace field in the toolbar and click the **Save Workspace** icon.

    Alternatively, click **Menu**, **File**, **Save Workspace As**.... The **Save Workspace** dialog window appears:
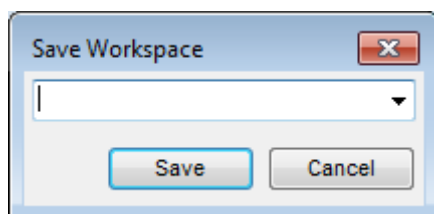
Figure 11: Save Workspace Dialog Window

3. In this window, enter the name of the workspace you want to save, and click **Save**. You can also do this in the workspace combo box on the toolbar.

    Result: A workspace file in the your profile directory will be created, and the workspace combo box will be updated with the new workspace name.

> **Note:** Your latest workspace, saved or not, will be restored by default at log on, unless you clear the Restore latest workspace check box in the Log-On window.

3.3.2   Loading Workspaces

You are able to save more than one workspace in the way described above. The workspaces will be listed.

> **Note:**
> Any user-defined workspaces will appear before any default workspaces in this list.

To open any of the workspaces, select a workspace in **Workspace** list. The windows defined in the workspace open automatically, and all previously open windows are closed.

3.3.3   Deleting Workspaces

If you want to delete a workspace, do as follows:

1. In the **Main** menu, click **File**, then **Delete Workspace**.
    Result:

    The **Delete Workspace** dialog window appears:
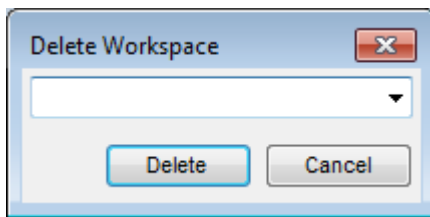
Figure 12: Delete Workspace Dialog Window

2. Enter the name of the workspace you wish to delete. Alternatively, select a name from the **Workspace** list.
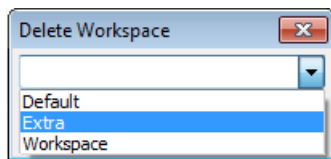
Figure 13: Delete Workspace List

> **Note:** You cannot delete default workspaces. They will therefore not appear in **Workspace** list.

3.4   Session Information

Open the **Session Information** dialog box from the **View** menu.
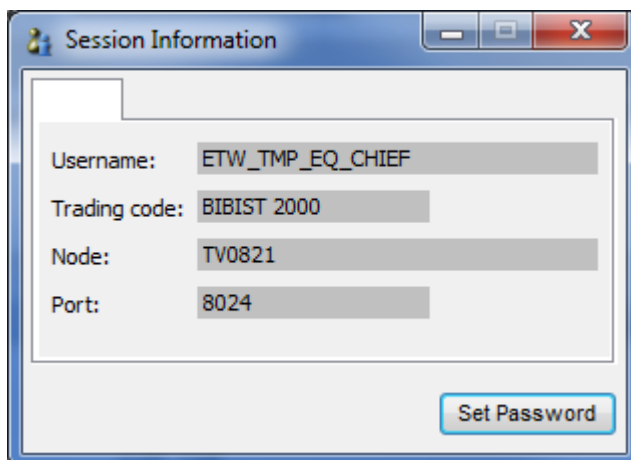
Figure 14: Session Information Window

The **Session Information** window displays information about your user session. It also allows you to change your password (see Changing Your Password on page 20).

3.5   Help Information

The standard help information is located in the **Help** menu:

- User's Guide: the guide you are currently reading.

  You can also press F1 to open the user's guide.

- About Trading Workstation: application version, technical and legal information, including a link to Borsa Istanbul website.

Figure 15: About Window

Technical data about configured exchange connections can be found under Session Information in the View menu.

3.6   Application Log

Logging and error logging information is saved in the working directory which is automatically created in your windows user directory. The easiest way to find this is to click **Open Log File** on the **File** menu in the TW application. The most recent file is called **workstation.log**, and logs from previous sessions are called **workstation.nnn,** see also Log Files on page 159.

3.7   Hotkeys

The following hotkeys apply in Trading Workstation:

Table 1: Hotkeys

Hotkey	Window That Opens
F1	Help
F2	Enter Order
F3	Enter Buy Order (Sell button disabled)
F4	Enter Stop Order
F5	Enter Trade Report
F6	Price Quotation
F7	Order Book
F8	Clearing Trades

Hotkey	Window That Opens
F9	Enter Sell Order (Buy button disabled)
F10	Order Depth
F11	Price Depth
INSERT	Enter Tailor-Made Combination

4   Viewing the Market

4.1   Price Information

4.1.1   The Price Information Window

The **Price Information** window is a central window in the application. In this window you view the current market prices in the selected instrument, that is, the best bids and offers in the market, last trade, and high/low in the market. You can also view information on trades during the day.

The own order book will be checked, for all shown instruments, once per second. If an own order or a company order, with the same price for a certain instrument, is found the price and the aggregated quantity in the Price Information window will be colored. The color is set in the **Preferences** Window, see chapter "Setting Your Preferences > Window" on page 132.

> **Note:**
>
> As the check is done for price level, it will only show that you are at highest price and not that you have the highest priority.

Open the window from the **Market** menu. Several **Price Information** windows can be open at the same time.

Figure 16: Price Information Window

From the window, you select an instrument and open the **Enter Order** window (from the shortcut menu), or the **Execute Order** window (double-click a price) to send an order to the Marketplace.

To decide what information to display in the window, click a tab and select the relevant information from the list that appears. It is possible to search for a group of instruments by using the wildcard *. For example, EC* displays all instruments beginning with EC.

You can "tag" a row, that is, highlight it in a different color, in order to keep track of that specific instrument more easily. Click on the narrow column just to the left of the ID field to tag the row. The row will be displayed in a different color. To remove the tag, click on the left-most column again. These taggings will

be saved intra-session for each tag. Should you want to save your settings over night, you just need to save your workspace. For more information on how to do this, see

You can select specific columns to display by using the shortcut menu. Place the cursor anywhere in the window, right-click and click **Settings**, then **Column Settings**.

> **Note:** The window is divided into several tabs. Each tab can be configured to display specific data. Remember to save your workspace each time you have updated a window.

The table below describes the buttons on the status bar in the **Price Information** window.

Table 2: Price Information Window Buttons

Button	Description
🖥	Open the **Filter Inspector** by double-clicking the **Filter** button in the status bar.
Quote Request	Click this button to ask the Market Maker to quote a price on the selected instrument. **Note:** You must select either a Price or a Quantity field in order for a quote request to be sent to the Market Maker. Check the **Market Messages** window to see quote requests sent or received. TBD. ((New link to Quote Request Chapter))

4.1.1.1   Instrument Section

The table below describes the columns in the **Price Information** window, section **Instrument**.

Table 3: Price Information Window Columns

Column	Description
Instrument	
ID	Instrument identity.
UL	Name of the underlying.
SC	Sector code.
IC	Instrument classification.
MS	Market segment code.
TSS	Specifies the Trading Session State for the instrument. The active state is shown in bold if it has higher priority than the ISS state.
Avail.Qty	Available number of shares in the selected Instrument. Values are only displayed for active extra-ordinary instruments like IPOs, Buy-ins, Wholesales, or Official Auctions.
ISS	Specifies the Instrument Session State for the instrument. The active state is shown in bold if it has higher priority than the TSS state.
CA	Corporate actions.
SN	Status notes.
Binary Code	Binary code.

4.1.1.2 Single Market Section

The table below describes the columns in the **Price Information** window, section **Single Market**.

Table 4: Price Information Window Columns

Column	Description
Single	
Combo Bid	Price of the combination entered on the bid side.
B Orders	Total number of bid orders.
B WAP	Weighted averaged price on the bid side.
BTQty	Total quantity on the bid side.
BQty	Best bid quantity.
Bid	Best bid price.
Ask	Best ask price.
AQty	Best ask quantity.
ATQty	Total quantity on the ask side.
A WAP	Weighted averaged price on the ask side.
A Orders	Total number of ask orders.
Combo Ask	Price of the combination entered on the ask side.

4.1.1.3 Equilibrium Price Section

The table below describes the columns in the **Price Information** window, section **Equilibrium Price**.

Table 5: Price Information Window Columns

Column	Description
EP Information (This whole section is hidden by default.)	
EP	Equilibrium price, that is, the price at which the quantity demanded is equal to the quantity supplied.
EPQ	Equilibrium price quantity.

4.1.1.4 Trade Information Section

The table below describes the columns in the **Price Information** window, section **Trade Information**.

Table 6: Price Information Window Columns

Column	Description
Trade Information	
Last	Latest traded price.
LQty	Latest traded quantity.
Chg%	Change of the price as a percentage.

Column	Description
Chg	Change of the price as an absolute value.
High	Highest traded price during current trading day.
Low	Lowest traded price during current trading day.
Open	Opening price.
ClsAuct	Closing auction price.
VWAP	Volume Weighted Average Price.
VWAP%	Change of the Volume Weighted Average Price as a percentage.
TWAP	Time Weighted Average Price.
Volume	Turnover volume, including reported trades, during current trading day.
Value	Traded value, including reported trades, during current trading day.
Deals	Number of deals.

4.1.1.5 Trade Report Information Section

The table below describes the columns in the **Price Information** window, section **Trade Report Information**.

Table 7: Price Information Window Columns

Column	Description
Trade Report Information	
Prc	Latest trade reported price.
Qty	Latest trade reported quantity.
Volume	Trade reported volume.
Value	Trade reported value.
Deals	Number of trade reported deals.

4.1.1.6 Reference Information Section

The table below describes the columns in the **Price Information** window, section **Reference Information**.

Table 8: Price Information Window Columns

Column	Description
Reference Information	
Base	Base price.
Llim	Lower price limit.
Ulim	Upper price limit.
Close	Closing price, that is, last traded price from the previous day.
Settle	Settlement price from the previous day.
OInt	Open interest from the previous day.
Ref	Reference price provided by the exchange.
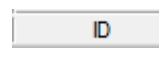
4.1.2 Sorting Your Instruments

You can sort instruments in three different ways in the **Price Information** and **Price Quotation** windows.

You can select the sorting order by double-clicking in the ID column title. Each time you double-click the ID column, a new icon appears until you have double-clicked three times.

The table below describes the three different ways in which you can sort the instruments.

Table 9: Price Information Window ID Column Icons

Icon	Description
ID ■	Indicates that the instruments are sorted on Central Groups, provided a Central Group has been selected.
ID ▲	Indicates that the instruments are sorted in alphabetical order.
ID ▼	Indicates that the instruments are sorted in reverse alphabetical order.

Once the three icons have been displayed in consecutive order, the square icon will be displayed again. This means that in this particular **Price Information** window, you will display one of the three sorting orders.

The default display is the order which is defined in the Central Group.

When you open a **Price Information** window, the square icon is displayed in the ID column title. This means that the default sorting order is used, and that you have not yet changed the sorting order.

4.1.3 The Filter Function

Open the **Filter Inspector** dialog box by double-clicking the **Filter** button.
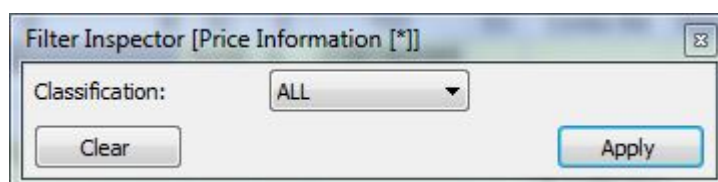
Figure 17: Price Information Filter Inspector Dialog Box

The filtering can be done based on **Instrument Classification**.

Click **Apply** to activate your filter criteria.

4.1.4 Reloading Prices

On rare occasions, the connection between your workstation and the Marketplace may be interrupted (for example, during a network failure when a market feed info has gone OFF for a short period of time). You will then need to update your prices, which you do in the following way:

1. Select the **Reload Prices** option from the **Market** menu.

    The following dialog box appears:
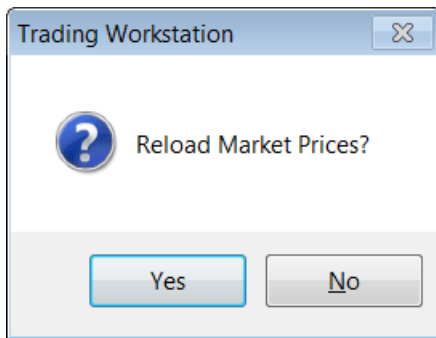
2. Click **Yes**.

 Result: All prices from the Marketplace will be reloaded to your PC.

4.1.5 Reloading Settlement Prices

Perform this procedure to reload settlement prices:

1. Click **Reload Settlement Prices** on the **Market** menu.

2. Click **Yes** when prompted by the confirmation message.

3. All settlement prices from the Marketplace will be reloaded to your PC.

4.1.6 Quote Requests

In the lower left corner of the **Price Information** window, you can click the **Quote Request** button to open the **Send Directed Quote Request** window, which allows you to send quote requests to market makers.

The **Send Directed Quote Request** window will be pre-filled with any instrument selected in the **Price Information** window.

For more information on the **Send Directed Quote Request** window and the Price Quotation functionality, please see <u>Price Quotation</u> on page 47.

4.2 Price Depth

4.2.1 The Price Depth Window

The **Price Depth** window displays the five best bid and offer price levels and their respective aggregated volume for the instrument specified in the ID field.

Open the window from the **Market** menu, the shortcut menu, or the toolbar. Any instrument selected in the **Price Information** window will be displayed automatically, provided that the padlock is open.

Figure 18: Price Depth Window

The table below describes the fields and buttons in the **Price Depth** window.

Table 10: Price Depth Input Fields and Buttons

Item	Description
ID	Specifies the instrument identity.
Padlock	The **Padlock** button is used for locking the view of the selected instrument. When it is locked, the ID and the displayed price depth will not change if another instrument is selected in, for example, the **Price Information** window. The ID field will also be disabled to show that the instrument cannot be changed.
	If the ID field is unlocked and you change the currently selected instrument in the **Price Information** window, this window will be updated with this instrument.
	When the ID field is enabled, you can also enter another series manually and press **ENTER**.
Qty for Calc	Used to calculate average prices of a specified quantity.

The table below describes the columns in the **Price Depth** window.

Table 11: Price Depth Window Columns

Item	Description
P/Q/O	Specifies which information the row displays:
	• P – Price level
	• Q – Aggregated quantity for the price level displayed on the preceding row
	• O – Number of orders that are aggregated to constitute the quantity displayed on the preceding row.
B1	B1 specifies the best bid price. (B2: Second Best Bid Price, and so on.)
A1	Specifies the best ask price. (A2: Second Best Ask Price, and so on.)
Status Bar Columns	
Ranking	Specifies the ranking of the level you are currently selecting.
Quantity	Specifies the quantity you have entered in the Qty field and for which an average price has been calculated.
Average	Specifies the average price (bid or ask) for the level you are currently highlighting.

4.2.2   Viewing the Price Depth of a Specific Instrument

Perform this procedure to view the price depth of a specific instrument:

1. Select an instrument in the **Price Information**, or the **Price Quotation** window, to display the information in the **Price Depth** window.

2. Open the **Price Depth** window, if it is not already open.

   Comment: You will see the price depth for the instruments you selected in hte Price Information window.

3. Click the **Padlock** button to enable the ID field.

   Comment: To switch to another instrument, click the **Padlock** button.

4. When the ID field is enabled, you can also enter another series manually, and then press ENTER.

   > **Note:** The **Padlock** is locked by default, which means that the ID field is disabled and the displayed price depth will not change if another instrument is selected in, for example, the **Price Information** window.

4.2.3   Trading in the Price Depth Window

Perform this procedure to trade in the **Price Depth** window:

1. Double-click any of the prices in the window.

2. The **Execute Order** window will then appear, displaying the amount of units you can buy/sell if you execute at the price on which you have clicked. The status bar in the **Price Depth** window also shows the average price you will get if you hit more than one bid/offer price level.

4.2.4   Calculating the Average Price of a Deal

The **Price Depth** window can also be used for calculating the average price of a given quantity.

1. Select the Bid or Ask column.

2. Specify a quantity in the Qty for Calc field.

   Result: The average price of this quantity will be displayed in the status bar.

4.3 Order Depth

4.3.1 The Order Depth Window

In the **Order Depth** window you can view the full order book for a particular instrument, order by order.

> **Note:**
>
> The exchange may limit the available order depth to, for example, five levels.

Open the window from the **Market** menu, the shortcut menu, or the toolbar. Any instrument selected in the **Price Information** window will be displayed automatically, provided that the padlock is open.
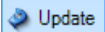
Figure 19: Order Depth Window

The table below describes the boxes and check boxes in the **Order Depth** window.

Table 12: Order Depth Window Input Fields and Buttons

Item	Description
ID	Specifies the instrument identity.
Padlock	The **Padlock** button is used for locking the view of the selected instrument. When it is locked, the ID and the displayed price depth will not change if another instrument is selected in, for example, the **Price Information** window. The ID field will also be disabled to show that the instrument cannot be changed.
	If the ID field is unlocked and you change the currently selected instrument in the **Price Information** window, this window will be updated with this instrument.
	When the ID field is enabled, you can also enter another series manually and press **ENTER**.
Qty for Calc	Displays the total quantity in the queue with a higher priority than the selected order, plus the selected order's own quantity.
Update	This button updates the information in the **Order Depth** window. Depending on the system setup, the window is either updated automatically or manually. If the information is updated manually, you need to click **Update** each time you like to update the order depth information.
Status Bar Columns	
Ranking	Specifies the ranking of the order you are currently highlighting.
Quantity	Specifies the quantity you have entered in the Qty field and for which an average price has been calculated.

Item	Description
Average (Bid/Ask)	Specifies the average price (bid or ask) for the order you are currently highlighting.

The table below describes the columns in the **Order Depth** window.

Table 13: Order Depth Window Columns

Column	Description
Bid Orders	
BTrd	Specifies the bid trader (only if the order was placed by your own firm).
BCmp	Specifies the bid customer (only if the order was placed by your own firm).
Type	Specifies the order type.
BQty	Specifies the bid quantity.
Bid	Specifies the bid price.
Ask Orders	
Ask	Specifies the ask price.
AQty	Specifies the ask quantity.
Type	Specifies the order type.
ACmp	Specifies the ask customer (only if the order was placed by your own firm).
ATrd	Specifies the ask trader (only if the order was placed by your own firm).

Note that the Order Depth window does not display Midpoint orders.

4.3.2 Viewing the Order Depth

Perform this procedure to view the order depth:

1. Select an instrument in the **Price Information** window.

2. Open the **Order Depth** window by right-clicking and selecting **Order Depth** from the shortcut menu in the **Price Information** window, from the **Market** menu, or from the toolbar.

   Result: The identity of the selected instrument is displayed in the ID field in the **Order Depth** window.

4.3.3 Calculating the Average Price of a Quantity

Perform this procedure to calculate the average price

1. In the **Order Depth** window, enter an instrument in the ID field.

   > **Note:** If the **Padlock** is locked, you will not be able to edit the ID field.

2. Select either the Bid or Ask side by highlighting either a Bid or Ask column. Enter the quantity that you want to calculate in the Qty field.

Result: The average price for the stated quantity will be calculated and appear in the status bar.

4.3.4 Trading in the Order Depth Window

Perform this procedure to execute an order in the **Order Depth** window.

1. Double-click an order in the window.

2. The **Execute Order** window will appear, displaying a price and volume that reflects the order's price, volume, and ranking. The average contract price will display the average price of your potential trade. For a full description of the **Execute Order** window, please refer to Chapter Executing Orders on page 62.

4.3.5 Changing an Order in the Order Depth Window

Perform this procedure to change an order in the **Order Depth** window:

1. Double-click any order in the **Order Depth** window.
   Result: The **Change Order** window will appear.

2. Change the information of your choice in the fields and click either **Buy** or **Sell**.

   > **Note:** Depending on what you have double-clicked in the **Order Depth** window, either the **Buy** or the **Sell** button will be enabled.

   For a full description of the **Change Order** window, please refer to Chapter Changing an Order on page 64.

4.3.6 Changing the Order Depth to View a Specific Instrument

Perform this procedure to change the order depth:

1. Click the **Padlock** button to enable the ID field.

2. Enter an instrument in the ID field.

3. Press **ENTER**.
   Result: If not locked, the window will be updated when you select another instrument in the **Price Information** window.

4.4 Ticker

4.4.1 The Ticker Window

In the **Ticker** window you can view all deals made during the day.

Open the window from the **Trades** menu.
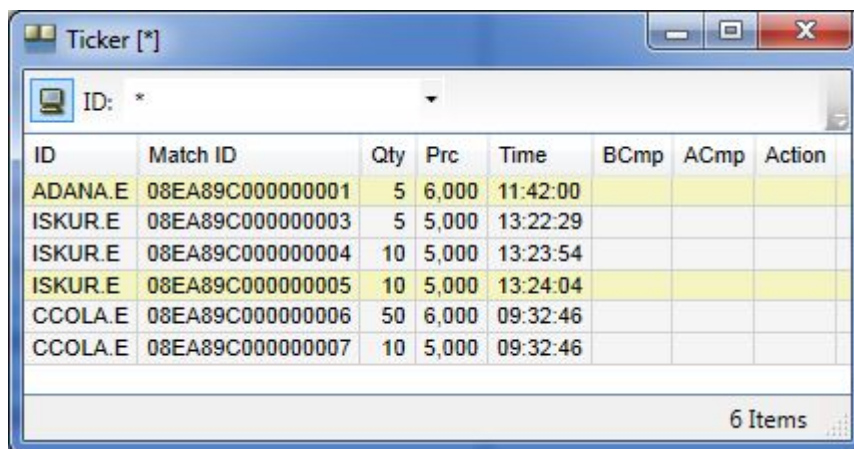
Figure 20: Ticker Window

The table below describes the columns in the **Ticker** window.

Table 14: Ticker Window Columns

Column	Description
ID	Instrument identity.
Match ID	Unique identification of the trade.
Qty	Quantity of the trade.
Prc	Price at which the trade was done.
Time	Time at which the trade was registered.
BCust	Buying customer.
ACust	Selling customer.
TR Type	Trade-report type.
Action	Cancel or replace, if applicable.

4.4.2   The Filter Function

The filter function allows you to specify which trades to display. For example, you can set filters so that only your own deals are displayed.

You open the **Filter Inspector** dialog box by double-clicking the **Filter** icon.
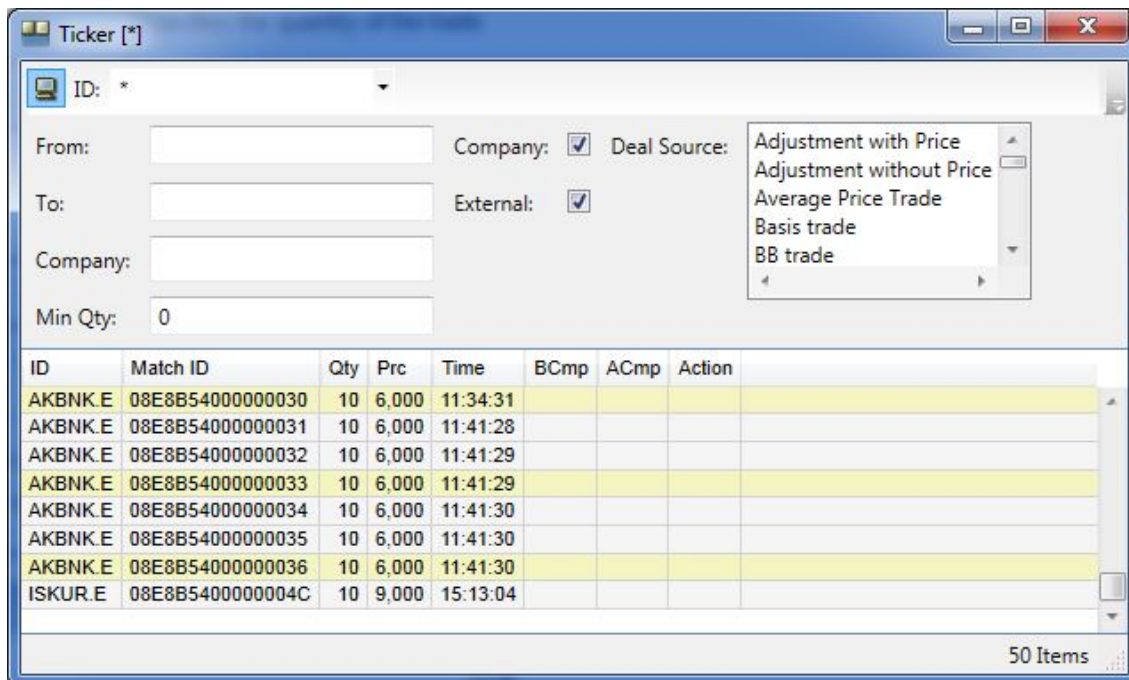
Figure 21: Ticker with Grid Window

Table 15: The Filter Function

Item	Description
ID	Select a market of your choice in the drop-down list box.
From	Specify the date from which you want to filter trades.
To	Specify the date until which you want to filter trades.
Company (text field)	Specify the company on which you want to filter trades.
Min. qty	Specifiy the minimum quantity for a trade to be displayed.
Company (check box)	Select this check box if you want to display all trades completed by your company.
External	Select this check box if you want to display all trades completed by external members.
Deal source	You can filter on one or several deal sources. Simply highlight the one or ones you wish to filter on. • To highlight a number of deal sources that appear in a row in the list, hold down the SHIFT key while clicking on the deal sources of your choice. • To highlight a number of deal sources that appear in differences places in the list, hold down the CTRL key while clicking on the deal sources of your choice.

4.5 Price Quotation

4.5.1 Price Quotation Window

In the **Price Quotation** window Market Makers can enter price quotes.

Open the window from the **Price Quotation** menu.
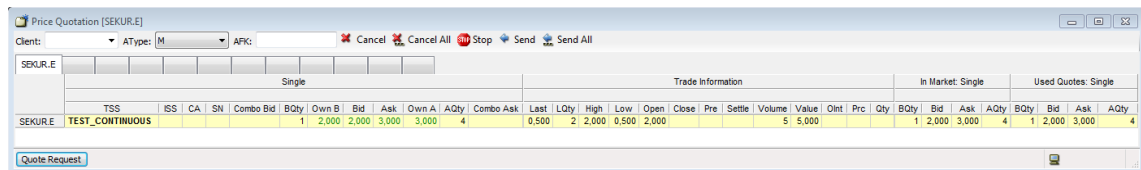
Figure 22: Price Quotation Window

The **Price Quotation** window gives an overview of the orders in the market.

- Market Makers can enter quotes and use the calculated theoretical derivative prices for entering new quotes, or enter prices manually.

- It is possible to work with the application while new quotes are being sent to the market.

- As a trader you may get information on the orders in the window, enter orders by using the shortcut menu (by right- clicking), and execute orders (by double-clicking). Note that the application only maintains the most recent quotes from the current user. It is not possible to requote based on quotes entered by another user.

- You can select information to be displayed or hidden in this window by right-clicking anywhere in the grid and selecting **Settings > Column Settings** in the shortcut menu that appears.

- You can "tag" a row, that is, highlight it in a different color, in order to keep track of that specific instrument more easily. Click on the narrow column just to the left of the InstrName field to tag the row. The row will be displayed in a different color. To remove the tag, click on the left-most column again. These tags will be saved intra-session for each tag. Should you want to save your settings over night, you just need to save your workspace. For more information on how to do this, see Saving Workspaces on page 29.

Table 16: Price Quotation Window Input Fields and Buttons

Button/Field	Description
Client	Client account to which the order belongs. The client can be pre-defined, see **Preferences**, page 135. If nothing is specified, the trade will end up in the daily account.
Atype	Account type. Can be one of the following: - M: for client orders. - P: for house (prop) orders. - F: for mutual fund orders.
AFK	Agency/Fund Code.
Cancel	To remove the sent quote, click **Cancel.**
Cancel All	To remove all sent quotes, click **Cancel All**.
Stop	The **Stop** button interrupts an ongoing background action (cancel or send).
Send	The **Send** button is used by Market Makers to send quotes the market.
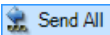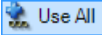
Button/Field	Description
Send All	The **Send All** button is used by Market Makers to send all quotes that have a price and volume to the the market.
Use	The **U̲se** button to move and spread the selected price to the **Used Quotes** section.
Use All	The **Use A̲ll** to move and spread out all the prices to the **Used Quotes** section.
	Click the **Filter** button to open the **Filter Inspector**. Filtering is configured to be disabled for the **Price Quotation** window.
Quote Request	Click the **Quote Request** button to open the **Send Directed Quote Request** window (see 53), which allows you to send quote requests to market makers. The **Send Directed Quote Request** window will be pre-filled with any selected instrument.

Table 17: Price Quotation Window Sections

Section	Description
Single	Displays the same information as in the **Price Information** window.
EP Information	Displays equilibrium-price information.
Trade Information	Displays the statistics of trades during the day (same information as in the **Price Information** window, see page 50.)
In Market	Displays your orders in the Market entered from the **Price Quotation** window, see page 50.
Used Quotes	Enter your quotes here, see page 51.

4.5.1.1   Single Section

Column	Description
TSS	Trading session status. The active state is shown in bold if its stronger than the TSS state.
ISS	Instrument series status. The active state is shown in bold if its stronger than the TSS state. **Note:** Either ISS or TSS is shown in bold indicating the actual state for an individual instrument series.
CA	Corporate actions.
SN	Status notes.
Combo Bid / Ask	Legs of the combination entered on the bid/ask side.
B/A Orders	Total number of bid/ask orders.
BQty / AQty	Call/spot best bid/ask quantity in the market.
Own B/A	Own bid/ask price in the market.
Bid / Ask	Best bid/ask price in the market.

4.5.1.2 EP Information Section

The EP Information section displays equilibrium-price information. It is hidden by default.

Column	Description
EP	Equilibrium price.
EPQ	Equilibrium price quantity.
EPB/AQ	Specifies the best bid quantity.
EPB/A	Specifies the best bid price.

4.5.1.3 Trade Information Section

The **Trade Information** section displays the statistics of trades during the day. It is the same section as the one displayed in the **Price Information** window.

Column	Description
Last	Latest traded price.
LQty	Latest traded quantity.
High	Highest traded price.
Low	Lowest traded price.
Open	First trade price current day.
Close	Last trade price previous day.
Ref	Reference price.
Settle	Settlement price.
Volume	Traded volume.
Value	Turnover value, which is the total value of the traded contracts/shares during the current trading day.
OInt	Open interest from the previous day.
Prc	Last trade-report price.
Qty	Last trade-report quantity.

4.5.1.4 In Market Section

The **In Market** section displays your orders in the Market.

> **Note:** The **In Market** section shows only single or block quotes entered from the **Price Quotation** window while ordinary orders are shown in the order book.

Table 18: Price Quotation Window Columns: In Market Section

Column	Description
BQty / AQty	Bid/Ask quantity.
Bid / Ask	Bid/Ask price.

4.5.1.5 Used Quotes Section

In this section you enter quotes that you want to send to the market.

Table 19: Price Quotation Window Columns: Used Quotes

Column	Description
BQty / AQty	Bid/ask quantity to be sent into the market.
Imp B/A	Bid/ask volatility of the suggested quote.
Bid / Ask	Bid/ask price to be sent into the market.
Instrument	
ID	Instrument ID.

Implied volatility is shown for the adjusted prices.

Enter the new quote by typing it directly in the Bid or Ask column, or use the PLUS SIGN or MINUS SIGN keys on the keyboard to step the price up or down. The implied volatility will be recalculated whenever the price is changed. If **Auto Use** is selected in the **Price Quotation** window shortcut menu, the prices will be changed automatically when the underlying price for the calculation is changed in the market.

You can enter volumes one by one, or you can copy cells. If you choose to do the latter, do as follows:

4.5.1.5.1 Copying Cells

Perform this procedure to enter multiple identical values.

1. Select a cell in the corner of the area of cells you want to copy, click the left mouse button.

2. Drag the mouse over the area you want to fill.

3. Release the mouse button.

4. The area should be highlighted.

5. Press CTRL + DOWN ARROW.

   Result: The value in the first cell is now copied to the other selected cells.

4.5.1.5.2 Sending Quotes to the Market

Perform this procedure to send quotes to the market:

1. Hold down the left mouse button and drag the mouse to select the quotes.

   A quote is selected if the Volume, Implied Volatility, or the Price is within the selection.

2. Click **Send**.

   Result: After confirmation, the quotes are sent to the market, and will appear in the In Market section.

> **Note:** Quotes without a volume will NOT be sent to the market. You can use this functionality to select the series to be quoted. The ones without a volume will be ignored. Note that there is no default volume. The orders sent will appear in the In Market section, as well as in the Order Book window.

You may send all quotes by clicking the **Send All** button, whereby all quotes that have a price and a volume will be sent to the market.

4.5.1.5.3   Entering Linked Orders

Perform this procedure to enter a linked order into the market from the **Price Quotation** window.

Default settings for a specific market are set in **Preferences**, **Order Settings**, **Linked Orders** section on page 135. The settings are available immediately in the **Price Quotation** window.

1. Select market.

2. Enter bid price in the Bid column for the instrument. When leaving the field the bid quantity, ask price and ask quantity is automatically filled in.

3. Enter bid price for all instruments that should be included in the linked orders.

4. Select all legs in the linked order.

5. Click **Send Linked Order** button.

6. The **Enter Linked Orders** windows will be filled with the values given in the **Price Quotation** window, for description of the **Enter Linked Order** window see page 69.

7. To send the orders into the market use the **Send** buttons in the **Enter Linked Order** windows.

> **Note:** Linked orders are not quotes. Once entered; change or cancel them via the **Order Book** window.

4.5.1.5.4   Canceling Quotes

Perform this procedure to cancel a quote:

1. Select quotes from the **In Market** section.

2. Click **Cancel** (with intended cells selected). Alternatively, click **Cancel All** to cancel all quotes in the market.

3. The quotes you have selected will be canceled from the market.

4. The result can be viewed in Single Market section and In Market (firms own quotes) sections, and also in the **Order Book** and the **Order History** windows.

> **Note:** Alternatively, the quote can be re-quoted at price 0, quantity 0 to be removed. Also the quote can be cancelled in the **Order Book** window the usual way.

4.5.1.6 The Filter Inspector

Filtering is configured to be disabled for the **Price Quotation** window.

4.5.2 Send Directed Quote Request Window

The Send Directed Quote Request window allows you to send quote requests to market makers. You open it from the Price Quotation menu.
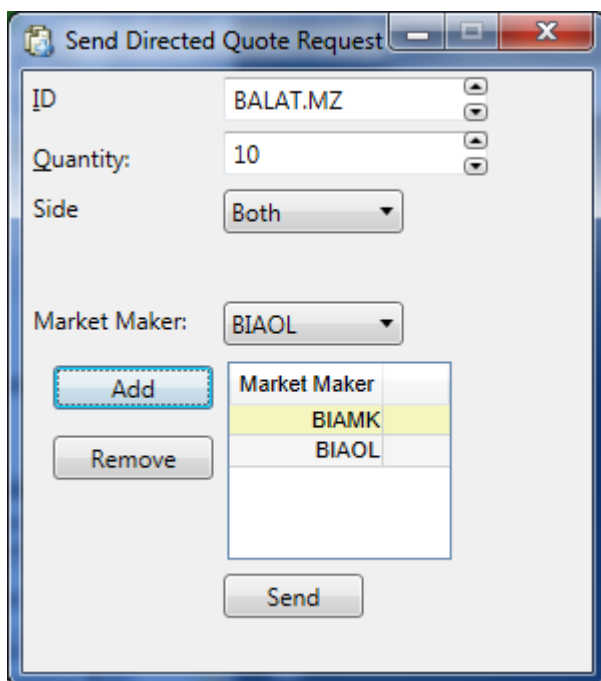
Figure 23: Send Directed Quote Request Window

Table 20: Send Directed Quote Request Window Fields and Buttons

Button/Field	Description
ID	Instrument Series identity.
Quantity	Requested quantity. • May be left empty/zero if you do not want to reveal you intention. • Only one quantity can be provided, which means that it applies for both bid and ask sides.
Side	The side(s) you want prices for.
Market Maker	Allows you to specify one or several targeted market makers. The field can be left empty. • To add a market maker, select it in the drop-down list and then click the **Add** button. • To remove a market maker from the selected list of market makers, select it and click the **Remove** button.

To send a quote request to the market, fill in the required information and click the **Send** button.

- A quote request acknowledgement will be displayed under the **Send** button, indicating if the request was succesfully sent or not.
- Your pending quote requests, and their market maker recipients, are displayed in the **Directed Quote Requests (Requester)** window. For more information, see Directed Quote Request Window - Requester on page 54.

4.5.3 Directed Quote Request Window - Requester

The Directed Quote Request window for requesters shows your and your participants pending quote requests. You open it from the Price Quotation menu.
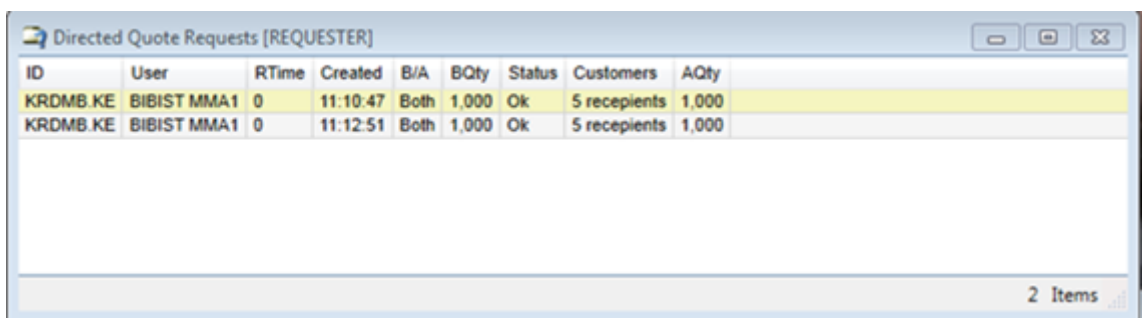
Figure 24: Directed Quote Request (Requester) Window

Directed Quote Request are sent to the market via the **Send Directed Quote Requests** window. For more information, see Send Directed Quote Request Window on page 53.

Table 21: Directed Quote Request (Requester) Window Columns

Columns	Description
ID	Instrument Series identity.
User	User identity of the directed quote requester.
RTime	Time to respond to the directed quote request.
Created	Time stamp when the directed quote request was created.
B/A	Requested side(s).
BQty	Requested bid quantity, if any.
Status	Validation status.
Customers	The targeted market makers.
AQty	Requested ask quantity, if any.

4.5.4 Directed Quote Request Window - Market Maker

The Directed Quote Request window for market makers shows pending quote requests for market makers. You open it from the Price Quotation menu.
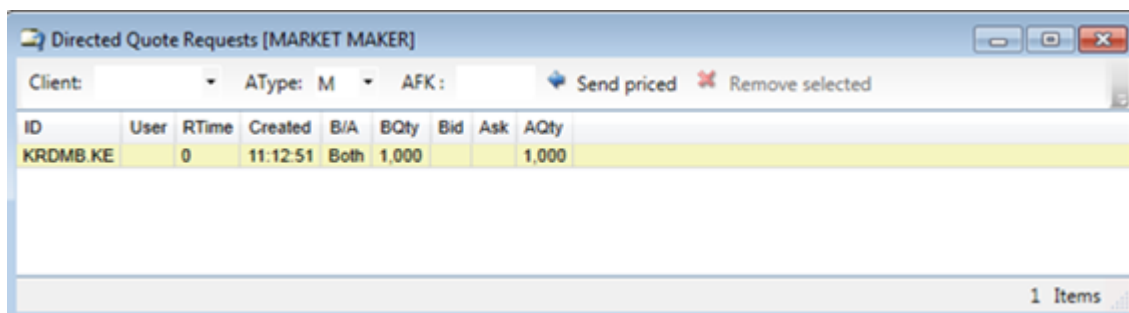
Figure 25: Directed Quote Request (Market Maker) Window

- The window displays your and your participants pending quote requests.
- Directed Quote Request are sent to the market via the **Send Directed Quote Requests** window. For more information, see Send Directed Quote Request Window on page 53.

Table 22: Directed Quote Request Window (Market Maker) Fields/Buttons/Columns

Buttons/Fields	Description
Client	Client account to which the order belongs. The client can be pre-defined, see **Preferences**, page 135.
AType	Account type. Can be one of the following: • M: for client orders. • P: for house (prop) orders. • F: for mutual fund orders.
AFK	Agency/Fund Code.
Send Priced	Click this button to send the quote price(s).
Remove Selected	Click this button to remove selected quote requests that are no longer valid to respond to.
Columns	
ID	Instrument Series identity.
User	User identity of the directed quote requester.
RTime	Time to respond to the directed quote request.
Created	Time stamp when the directed quote request was created.
B/A	Requested side(s).
BQty	This field is populated with the requested bid quantity, if any. This is also where you enter the bid quantity of the quote.
Bid	This is where you enter the bid price of the quote.
Ask	This is where you enter the ask price of the quote.
AQty	This field is populated with the requested ask quantity, if any. This is also where you enter the ask quantity of the quote.

All Directed Quote Request have a predefined time within which they must be responded to (see column **RTime** above). When this time has expired for a request, you can remove the request by selecting it and clicking the **Remove Selected** button.

To respond to a request, enter the price(s) and click the **Send Priced** button. You can also respond to a request via the **Price Quotation** window (see).

4.5.5 Continuous Quoting Fulfillment Window

The Continuous Quoting Fulfillment Window is used to monitor market makers with continuous quoting responsibility. You open it from the Price Quotation menu.

Figure 26: Continuous Quoting Fulfillment Window

You can monitor obligations for your own participant.

Table 23: Continuous Quoting Fulfillment Window Fields/Buttons/Columns

Fields / Buttons	Description
ID	Instrument Identity. Specify one ID or use a wildcard "*" for all series.
Update	The window is not automatically updated. Fill in the desired search criteria and click the **Update** button to populate the window.
Columns	
ID	Instrument Series identity.
Market Maker	Participant id of the Market Maker.
Status	Current status of the monitored Series.
BQty / AQty	Bid/ask quantity set by the Market Maker.
Bid / Ask	Bid/ask price set by the Market Maker.
RQty	Required Quantity. The Required Quantity is the smallest quantity on which the Market Maker may quote.
Req%	Required fulfilled responsibility % for this Price Quotation Responsibility.
Current Fulfillment	If the market maker was assessed to be OK or not for this series.

4.5.6 Directed Quote Request Fulfillment Window

The Directed Quote Request Fulfillment Window is used to monitor market makers with quote request responsibility. You open it from the Price Quotation menu.
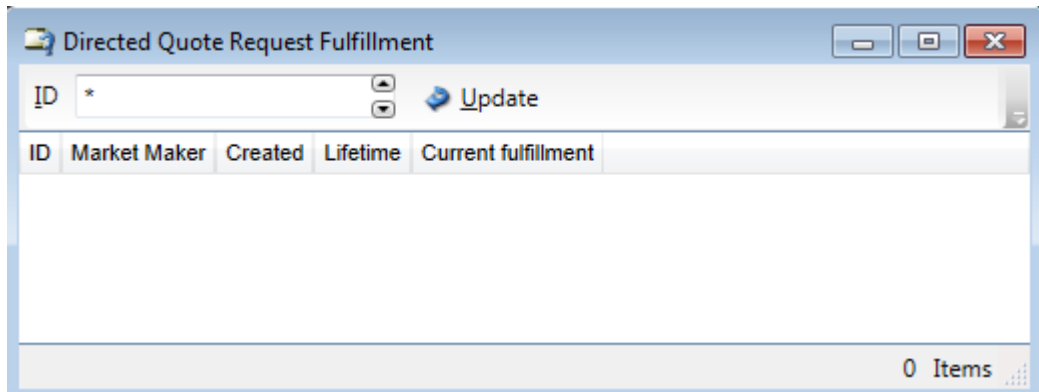
Figure 27: Directed Quote Request Fulfillment Window

You can view quote request statistics for all directed quote requests that your own participant, if any, is obliged to respond to.

Table 24: Directed Quote Request Fulfillment Window Fields/Buttons/Columns

Fields / Buttons	Description
ID	Instrument Identity. Specify one ID or use a wildcard "*" for all series.
Update	The window is not automatically updated. Fill in the desired search criteria and click the **Update** button to populate the window.
Columns	
ID	Instrument Series identity.
Market Maker	Participant id of the Market Maker.
Created	Timestamp when the Directed Quote Request was created.
Lifetime	Lifetime of the Directed Quote Request.
Current Fulfillment	Indicates if the obligations defined in the PD application (Price Quotation Responsibility)are fulfilled for this Directed Quote Request.

5 Trading in the Market

5.1 Entering Orders

5.1.1 The Enter Order Window

In the **Enter Order** window you enter normal orders into the Marketplace.

Open the **Enter Order** window from the **Orders** or shortcut menu.

> **Note:**
>
> You cannot have several **Enter Order** windows open. Trying to open a second one will only bring the previous one to front.

Figure 28: Enter Order Window

The instrument identity can either be manually entered or selected by clicking a price in the **Price Information** window. If a cell in one of the **Price Information** window price or volume columns is selected, the **Enter Order** window price and quantity field will be filled with the selected data.

Table 25: Enter Order Window Items

Item	Description
ID	Instrument for which the order should be entered. To select other instruments, click the arrows to the right of the ID field.
Price/Yield	The field name is depending on instrument type.
	Price The instrument is traded in price. To increase or decrease the price, click the arrows to the right of the **Price** field.

Item	Description
	Yield The instrument is traded in yield. To increase or decrease the yield, click the arrows to the right of the **Yield** field.
Qty	Total number of contracts. You can increase or decrease the quantity by clicking the arrows to the right of the Qty field. This also affects the price and average contract price.
S.Qty	Shown quantity, which is the part of the total quantity that is shown in the market, for example, in the **Price Information** window. If the total quantity is to be shown, leave this field empty. You can increase or decrease the shown quantity by clicking the arrows to the right of the S.Qty field.
	Not applicable if executing order with FoK or FaK.
	Note: This field is only available if the function has been activated in the PD. If it has not, the field is grayed out.
	Note: Entering a quantity in this field is optional. However, if you do choose to use it, the quantity you enter in this field must be lower than the quantity entered in the Qty field.
Type	Type of order. The following types exist:
	Limit
	Market to Limit
	Market
	Midpoint - Limit
	Midpoint - Market
State	Order will be held until selected state type, then entered into the market.
Inactive	Select this check box to prepare an order before the market is opened or before you want to activate your order in the market from the **Order Book** window.
Short Sell	Check this box if the order to be entered is a short sell.
Cmp	Customer on whose behalf the order should be placed.
	The customer can be defined, in advance, see **Preferences**, page 135.
	Note: This field is only visible if the user is allowed to see it.
Trd	The Trader, expressed as a User Signature, on whose behalf the order should be placed.
	Note: This field is only visible if the user is allowed to see it.
Client	Client account to which the order belongs.
	The client can be defined, in advance, see **Preferences**, page 135.
	If nothing is specified, the trade will end up in the daily account.

Item	Description
Info	Any arbitrary information concerning the order. Any information entered is of no logical importance and will not be interpreted in the system.
Position	Requested position, which is either normal or close. "Close" means that the trade will close as many open contracts in the related account as possible.
AType	Account type, which can be of one of the following: • M: for client orders. • P: for house (prop) orders. • F: for mutual fund orders.
AFK Code	Agency/Fund Code. For fund orders (**AType** = F) this field cannot be blank. For client and house orders (**AType** = M or P) the field can be either blank, or contain additional information (the participant code) for the post-trade processing. When blank, the participant's default account (configured in the CDB) will be used as the default value for this field in the trades.
Validity	Defines what order condition to use: GTC — Good till Canceled. The order is valid until canceled. Date — The order is valid until an expiration date, which you yourself can specify in the Date field. Day — The order is valid for the rest of the current business day. FaK — Fill and Kill; fill as much as possible of the order and delete the rest of it. FoK — Fill or Kill; fill the order in its entirety, or delete all of it. Session — Order is valid until the session state type changes from the selected type.
Until	If you entered Date as Validity type in the Validity field, a calendar will appear from which you can select a date.

5.1.2   Entering an Order

Perform this procedure to enter an order:

1. Open the **Enter Order** window from the **Orders** menu, or right-click in a window.

2. Select an instrument by clicking a row in the **Price Information** window or enter an **Instrument ID** in the **ID** field; alternatively, click on a series in the **Price Depth** or **Order Depth** window.

3. Select the price field in the **Enter Order** window and specify or change the price.

4. Select quantity in the **Qty** field and specify or change the quantity.

5. If you only wish to expose part of the quantity specified in the **Qty** field, enter the quantity you wish to be shown in the market in the **S.Qty** field.

> **Note:** The system must be configured in advance to allow the entering of Hidden orders.

6. Enter the appropriate order attributes described above.

7. Enter the order into the market by clicking the **Buy** or **Sell** button.

8. Click **Yes** to confirm the order.
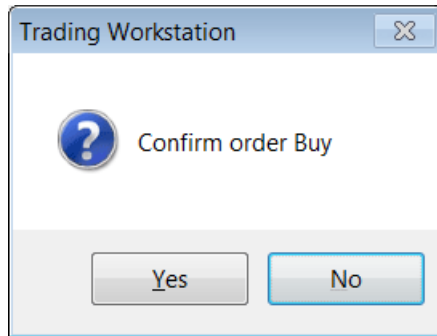
9. The order will be displayed in your order book if the Validity allows it and it is not fully traded immediately.

10. If the trade was matched, the deal will be displayed in the **Clearing Trades**, **Trade History**, and **Ticker** windows.

5.2 Executing Orders

5.2.1 The Execute Order Window

Using the **Execute Order** window is the fastest way to do a trade.

Open the window by double-clicking a price or a quantity of an instrument in the **Price Information**, **Price Quotation**, **Price Depth**, or **Order Depth** window.

The **Execute Order** window is similar to the **Enter Order** window with the following differences:

- The ID field is locked to the instrument that was double-clicked in the previous window.
- Only Fill or Kill, or Fill and Kill orders are allowed.
- The **Buy** or **Sell** button is disabled depending on which side was double-clicked in the previous window.
- The **Clear** button is not applicable.

For a description of **Execute Order** window items, see the description of the **Enter Order** window items, which are the same, on page .

> **Note:** If the **Execute Order** window had been opened from the **Order Depth** window, information from that window would have been used to calculate the **Qty** and **Avg** fields. Depending on the configuration and settings of the user with which you have logged on to the application, a warning message would have been displayed to remind the trader that the information was taken from the **Order Depth** and therefore could be based on old information.

5.2.2   Executing an Order

Perform this procedure to execute an order:

1. Open the **Execute Order** window by double-clicking a price (or a quantity) in the **Price Information**, **Price Quotation**, **Price Depth**, or **Order Depth** window.

2. Change the quantity of the order in the Qty field if you so desire.

3. Enter the appropriate order attributes.

4. Send the order to the Marketplace by clicking the enabled **Buy** or **Sell** button.

5. Click **Yes** in the confirmation dialog box that appears.

If the trade was matched, the deal will be displayed in the **Clearing Trades**, **Trade History**, and **Ticker** windows.

5.2.3   Average Contract Price

The average unit price is displayed in the status bar and is updated when increasing or decreasing the price and quantity fields by means of the arrows. Note that these calculations are based on the locally stored price depth information which is limited to the ten best prices for the bid and ask sides for a particular instrument.

By opening the **Execute Order** window from the **Order Depth** window, you can take more price levels into account. Note, however, that the **Order Depth** window is not updated in real time for all installations.

> *Example 2:*
>
> Let us assume that Ask orders have been placed in the market to create the following price depth for an instrument:
>
> *Table 26: Price Depth Example*
>
> | | Ask 1 | Ask 2 | Ask 3 | Ask 4 | Ask 5 | Ask 6 | Ask 7 |
> |-------|-------|-------|-------|-------|-------|-------|-------|
> | Price | 20 | 21 | 22 | 24 | 25 | 26 | 28 |
> | Qty | 10 | 10 | 10 | 20 | 10 | 10 | 20 |
>
> If the Qty field contains 30 and the Qty up arrow is pressed, the Qty field is changed to 31 and the Price field is changed to 24 and the average contract price will be set to 21.10 = (10*20 + 10*21 + 10*22 + 1*24) / 31.
>
> If the Price field contains 25 and the Price down arrow is pressed, the Price field is changed to 24.75 (assuming a price tick of 0.25), the quantity is set to 50 and the average contract price will be 22.20 (10*20 + 10*21 + 10*22 + 20 * 24) / 50.

> If the Price field contains 25 and the Price up arrow is pressed, the Price field is changed to 25.25, the quantity is unchanged and a warning message is displayed indicating that the price is outside the five price levels stored locally.
>
> If the **Execute Order** window had been opened from the **Order Depth** window, information from that window would have been used to calculate the quantiy and average contract price. A warning message would have been displayed to remind the trader that the information was taken from the **Order Depth** window and therefore could be based on old information (depending on the installation).

5.3 Changing an Order

5.3.1 The Change Order Window

In the **Change Order** window you can change orders in the market.

Open the window by double-clicking an order in the **Order Book**.

The **Change Order** window is similar to the **Enter Order** window with the following differences:

- The ID field is locked to the instrument the order was originally entered into.
- The **Buy** or **Sell** button is locked to the original side of the order.
- The **Clear** button is N/A.

For a full description of **Change Order** window items, see page 59.

5.3.2 Changing an Order

> **Note:** The procedure described below is valid even for linked orders.

Perform this procedure to change an order:

1. Double-click the order you wish to change in the Order Book.

2. The **Change Order** window appears.

3. Change the information in the window.

4. Click the **Buy** or **Sell** button.

   > **Note:** You cannot change a bid order to an ask order or vice versa.

5. Click **Yes** in the confirmation dialog box that appears.

Some changes can be made without losing the priority of the order. Such changes are configurable in the central system.

5.4 Entering Tailor-Made Combinations

5.4.1 The Enter Tailor-Made Combination Window

In the **Enter Tailor-Made Combination** window you enter tailor-made combinations that will be given a name and traded as a new instrument.

Open the window from the **Orders** menu.

Figure 29: Enter Tailor-Made Combination Window

In order to find the Tailor-Made Combination in, for example, the **Price Information** window, you can search on *TMC* if this is part of the series name standard used for TMCs.

The table below describes the fields and check boxes in the **Enter Tailor-Made Combination** window.

Table 27: Enter Tailor-Made Combination Window Fields and Check Boxes

Item	Description
ID	Specifies the instrument ID field. If an instrument is selected in the **Price Information** window, the corresponding ID will be displayed as default in the **Enter Tailor-Made Combination** window. You can enter an instrument manually, or by using the arrows.
Rel	Specifies the relative ratio between the legs in the combination. See also Qty below.
Net Prc	Specifies the price to be entered with the order. Enter a price into this field by either clicking the **Price** button, that is, current market price, or writing a price into the field, or by using the scroll buttons.

Item	Description
Qty	Specifies the quantity in relation to the Rel field. The number of times you want to trade the combination. (Example: If the relation for a leg is 2 and the quantity is 10, this refers to a total of 20 contracts in the leg.)
Client	Specifies the clearing client account to which the order belongs. If nothing is specified, the trade will end up in the daily account.
Info	Specifies any arbitrary information concerning the order. Any information entered is of no logical importance and will not be interpreted in the system. The Cust.Info can be defined, in advance, see **Preferences**, page 135.
Position	Specifies the position of the order, which can be: Default Open Close/Net
Validity	Specifies the validity options: Day FoK FaK
AFK	Specifies the Agency/Fund Code. For fund orders (**AType** = F) this field cannot be blank. For client and house orders (**AType** = M or P) the field can be either blank, or contain additional information (the participant code) for the post-trade processing. When blank, the participant's default account (configured in the CDB) will be used as the default value for this field in the trades.
Atype	Specifies the account type, which can be of one of the following: • M: for client orders • P: for house (prop) orders. • F: for mutual fund orders.

The table below describes the action buttons in the **Enter Tailor-Made Combination** window.

Table 28: Enter Tailor-Made Combination Window Buttons

Item	Description
Buy	Click this button to indicate that you want to buy a leg in a combination.
Sell	Click this button to indicate that you want to sell a leg in a combination.
Delete	Deletes the highlighted leg in the combination.
Price	Click this button to calculate a bid price for the TMC that matches single orders in the market. **Note:** A price can only be generated if there is enough quantity in the market.

Item	Description
Send Bid	Clicking **Send Bid** will, if necessary, create the TMC and an order will be entered to do the strategy defined, while paying the amount defined in the Price field.
Send Ask	Clicking **Send Ask** will, if necessary, create the TMC and an order will be entered to do the strategy defined, while receiving the amount defined in the Price field.
Clear	Click this button if you want to clear all fields in the window.

The table below describes the columns in the **Enter Tailor-Made Combination** window:

Table 29: Enter Tailor-Made Combination Window Columns

Columns	Description
ID	Specifies the instrument ID of the leg.
Rel	The relative ratio between the legs in the combination. The PLUS SIGN and MINUS SIGN keys on the keyboard can be used to increase and/or decrease the relation.
B/S	Specifies the leg type, that is, buy or sell.

5.4.2 Creating a Tailor-Made Combination

Perform this procedure to create a tailor-made combination:

1. Open the **Enter Tailor-Made Combination** window from the **Orders** menu.

2. Specify one of the instruments that should be a part of the combination in the ID field.

   If you have selected an instrument in the **Price Information** window before opening **Enter Tailor-Made Combination** window, this instrument is already displayed in the ID field.

3. Specify the relative ratio in the combination for this leg.

4. Click the **Buy** or **Sell** button depending on which leg to buy or sell in the combination.

5. Repeat steps 2 through 4 for every instrument you want to add to your combination.

   The order in which the legs are added does not make any difference. You may enter up to 4 legs in a TMC.

6. Fill in the quantity of your combination.

   The quantity is the number of times you want to trade the combination.

7. Enter a Net price, or alternatively, click the **Price** button to calculate the absolute net price for the combination traded against single series orders in the order book, or overwrite the displayed price.

   > **Note:**
   >
   > It is not possible to insert a negative price when entering TMC for derivatives.

   The result is shown in the Price field.

8. You can specify a client account. You may also add free text information to the order.

9. Click the **Send Bid**/**Send Pay** or **Send Ask** /**Send Recieve** button, as appropriate.

If possible, the application will reduce the relative ratios of the legs and adjust price and quantity accordingly.

> *Example 3:*
>
> The combination Buy A Sell B, with relative ratios 3 and 9, Price 15 and Qty 10, will have its relative ratios adjusted with the factor 3. This results in relative ratios 1 and 3, a price of 5 (original price divided by the factor 3) and qty 30 (original qty multiplied with the factor 3).

> **Note:** The Tailor-Made Combination will be treated as an instrument. The marketplace controls whether combinations of series with different contract sizes are allowed. Only certain ratios are allowed. The marketplace controls the largest relative ratio between the largest and smallest legs and the maximum absolute ratio for any leg.

You can also enter an order in an existing TMC from the **Enter Order** window, in the same way as orders are entered for single series.

Entering the equivalent, or the inverse, of an existing TMC or a standard combination will result in the order being entered in the existing instrument. If required, the price and Bid/Ask are changed to perform the defined strategy in the existing inverse combination.

When the TMC is displayed in the **Order Book** or **Order History** window, the contents of the TMC is shown as a tool-tip while hovering over the TMC name. The information displayed refers to the strategy performed, that is, Buy and Sell for the legs are displayed switched for an order on the Ask side compared to an order on the Bid side, thus showing what the order actually does.

5.5 Entering Linked Orders

5.5.1 The Enter Linked Orders Window

Figure 30: Enter Linked Orders Window

The **Enter Linked Order** window is opened from the **Order** menu.

The table below describes the items in the **Entering Linked Orders** window.

Table 30: Enter Linked Orders Window Items

Item	Description	
ID	Instrument used for linked order.	
Price/Yield	The field name is depending on instrument type.	
	Price	The instrument is traded in price. To increase or decrease the price, click the arrows to the right of the **Price** field.

Item	Description
	Yield The instrument is traded in yield. To increase or decrease the yield, click the arrows to the right of the **Yield** field.
Quantity	Quantity.
Buy	Used to add leg order as bid order.
Sell	Used to add leg order as ask order.
Linked orders table	Two or more orders needed in the table. The following columns are displayed: ID Instrument this order will enter into Side Buy or Sell. Price Price. Quantity Quantity.
Remove Order	Used to remove selected order leg.
Client	The client can be defined, in advance, see **Preferences**, page 135.
Customer Info	Participant to enter orders on behalf of. Specifies any arbitrary information concerning the order. Any information entered is of no logical importance and will not be interpreted in the system. The Cust.Info can be defined, in advance, see **Preferences**, page 135.
Position	Position of the order, which can be: Default Open Close/Net
Validity	Defines what order condition to use.
Clear	Resets all fields to default.

5.5.2   Entering a Linked Order

Perform this procedure to enter a linked order.

1. Select instrument in the **Price Information** window.

2. Open the **Enter Linked Order** window, the selected instrument in the **Price Information** window appears in the ID field, together with price and quantity, if available.

3. Edit the fields, or enter them directly, until the contents match one order leg you want to send.

4. Click **Buy** or **Sell** button to add the linked order to the table.

5. Repeat adding the wanted number of orders.

6. Click **Send**.

7. A confirmation message appears.

8. Click **OK** to confirm.

9. A confirmation message appears if the order was accepted.

10. The order is shown in **Order History**, **Order Book** and **Order Depth** windows. In the **Order Book** and **Order History** windows they are marked as linked order.

5.5.3   Changing a Linked Order

A linked order is changed from the **Order Book** window, for description see

5.6   Entering Stop Orders

In the **Enter Stop Order** window you send stop orders into the central system.

5.6.1   The Enter Stop Order Window

Open the window from the **Orders** menu.

Figure 31: Enter Stop Order Window

A stop order is an order that is submitted automatically as a market or limit order once a certain price condition of an instrument is met. A stop order will not be shown to the market before it is converted to a market or limit order.

The table below describes the items in the Enter Stop Order window.

Table 31: Enter Stop Order Window Items

Item	Description
Stop Condition	
ID	Stop condition instrument identity. The stop series defines the instrument that the stop price will be compared to.
Price	Defines what price level the price condition must meet to convert the order to a market or limit order.
Condition	Indicates if the stop price must be greater than or equal to (>=) or less than or equal to (<=) the BID, ASK, or Last price to be converted to a market or limit order.
Convert to Order	
ID	Instrument identity of the order you wish to send to the market once the stop condition is met.
Price	Price per contract of the converted order. You can increase or decrease the price by clicking the arrows to the right of the Price field.
Qty	Total quantity, that is, the number of contracts of the converted order. You can increase or decrease the quantity by clicking the arrows to the right of the Qty field.
S.Qty	Shown quantity, that is, the number of contracts that you wish to be shown in the market. You can increase or decrease the quantity by clicking the arrows to the right of the S.Qty field. **Note:** This field is only available if the function has been activated in the central system. If it has not, the field is grayed out. **Note:** Entering a quantity in this field is optional. However, if you do choose to use it, the quantity you enter in this field must be lower than the quantity entered in the Qty field. **Note:** If you enter the value 0 in the S.Qty field, the whole quantity for the order will be displayed in the Qty field.
Type	Type of Stop order you are about to enter.
Inactive	Select this check box to prepare an order before the market is opened or before you want to activate your order in the market from the **Order Book** window.
Short Sell	Ceck this box if the trigger order to be entered is a short sell.
Client	Clearing client account to which the order belongs. If nothing is specified, the trade will end up in the daily account.
Info	Any arbitrary information concerning the order. Any information entered is of no logical importance and will not be interpreted in the system. The Cust.Info can be defined, in advance, see **Preferences**, page 135.
Position	Requested position, which is either normal or close.

Item	Description
	"Close" means that the trade will close as many open contracts in the related account as possible.
Atype	Account type, which can be of one of the following: • M: for client orders • P: for house (prop) orders. • F: for mutual fund orders.
AFK Code	Agency/Fund Code. For fund orders (**AType** = F) this field cannot be blank. For client and house orders (**AType** = M or P) the field can be either blank, or contain additional information (the participant code) for the post-trade processing. When blank, the participant's default account (configured in the CDB) will be used as the default value for this field in the trades.
Validity	Defines what order condition to use:

GTC	Good till Canceled. The order is valid until canceled.
Date	The order is valid until an expiration date, which you yourself can specify in the Date field.
Day	The order is valid for the rest of the current business day.
FaK	Fill and Kill; fill as much as possible of the order and delete the rest of it.
FoK	Fill or Kill; fill the order in its entirety, or delete all of it.
Session	Order is valid until the session state type changes from the selected type.

5.6.2   Entering a Stop Order

Perform this procedure to enter a stop order:

1. Open the **Enter Stop Order** window from the **Orders** menu.

2. Select an instrument by clicking a row in the Price Information window or entering an Instrument ID in the Stop ID field.

   The instrument you compare to does not have to be the same as the one that you will eventually place your order in.

   You may, for example, compare the Stop condition to an index option, and then end up entering it as a limit order on a stock option.

   > **Note:** Both instruments must be traded on the same ME partition. Otherwise, the stop order will be rejected.

3. Enter the stop price in the Price field.

The stop price defines what price level the price condition must meet to convert the order to a market or limit order.

4. Select the stop price condition in the Condition field.

   Specify if the stop price must be greater than or equal to (>=) or less than or equal to (<=) the BID, ASK, or Last price to convert the order to a market or limit order.

5. Select the Convert to Order in the ID field.

   The Convert to Order can be a market order or a limit order. This will indicate if the stop order will be converted to a market order or to a limit order, once the price condition is met.

   > **Note:** If the stop order is to be converted to a limit order, it must also have a defined Limit Order Price.

6. Enter the appropriate order attributes described above.

7. Enter the order into the market by clicking the **Buy** or **Sell** button.

   Result: The order will not be shown to the market, in the order book, until the stop order has been converted to an ordinary order.

In the local order book, the stop order will have a stop flag in the Type column.

5.7 Changing Stop Orders

5.7.1 The Change Stop Order Window

In the **Change Stop Order** window you change orders in the market.

Open the window by double-clicking an order in the local **Order Book** window.

The **Change Stop Order** window is similar to the **Enter Stop Order** window with the following differences:

- The ID field is locked to the instrument the order was originally entered into.
- The **Buy** or **Sell** button is locked to the original side of the order.
- The **Clear** button is N/A.

For full description of the items in the **Change Stop Order** window, see **Enter Stop Order** 71.

5.7.2 Changing a Stop Order

You can change both activated and inactivated orders.

Perform this procedure to change a stop order:

1. Change the information in the window.

2. Click the **Buy** or **Sell** button.

   > **Note:** You cannot change a bid order to an ask order or vice versa.

Some changes can be made without losing the priority of the order. Such changes are reduction of quantity, change of validity time or stated client, and modifications of the free text information.

For all other changes, such as increase of volume, the change is treated as a cancellation of the first order and an entry of a new order. This means that instead of increasing the volume of an order, and thereby running the risk of losing priority, you should enter a new order for the additional quantity.

5.8 Cancel Orders

The Cancel Orders function allows you to delete your orders by means of the shortcut menu.

From the **Order Book** window you can cancel selected orders, see <u>Canceling Orders in the Order Book</u> on page 86.

From the **Order Depth** window you can cancel selected orders, see description below.

If the **Order cancel** check box is selected in the **General tab** in the **Preferences** window, a warning message asks you to confirm the cancellation before it takes place.

5.8.1 Canceling Selected Orders

You can cancel orders in the **Order Depth** window. Any number of your orders (bid or ask) can be canceled by selecting them and right-clicking on the selection.

The order is canceled regardless of any updates that take place between selecting the order and clicking **Cancel Selected Orders**.

Perform this procedure to cancel your selected order.

1. Select either the bid or ask column of the instrument for which you desire to have an order canceled.

2. Right-click the mouse. The shortcut menu appears.

3. Select the **Cancel Selected Orders** option.

4. Your bid or ask of the instrument you selected is now canceled.

5.9 Cancel Orders Detailed

5.9.1 The Cancel Orders Detailed Window

In the **Cancel Orders Detailed** window you quickly remove groups of orders from the Marketplace.

Open the window from the **Orders** menu.
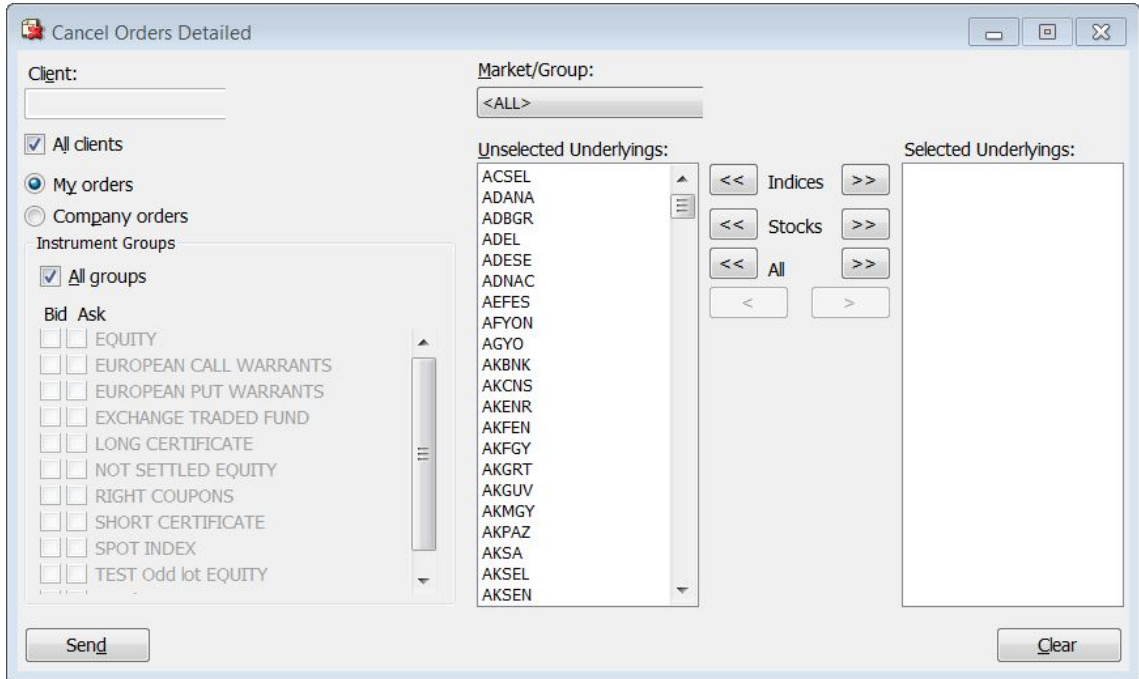
Figure 32: Cancel Orders Detailed Window

> **Note:** You can also cancel orders from the Order Book window.

The **Cancel Orders Detailed** window enables the user to quickly remove groups of orders from the Marketplace. The order groups are specified by selecting:

- One or several underlyings.
- All or some instrument groups, calls and/or puts combined with bid/ask.

Normally, you are not allowed to cancel orders entered by other traders at your company, but this function may be open for certain appointed users. For such cases, you can also cancel orders other than the orders owned by the yourself. This is done by selecting the Company orders option button instead of the My orders option button.

The table below describes the items in the **Cancel Orders Detailed** window.

Table 32: Cancel Orders Detailed Window Items

Item	Description
Client	Specifies the account to which the order belongs. > **Note:** The **Client** field may contain the wildcard characters * (substitutes zero or more characters) or % (substitutes a single character).
All clients	Select this check box if you want to select all clients.
Instrument Groups	
All groups	Select All groups if you want to cancel orders for all instrument groups. Otherwise, select bid and/or ask orders of the requested type.

Item	Description
	Press **CTRL** or **SHIFT** to select several groups to cancel.
Market/Group	
Market/Group	Specifies the market from which you want to cancel the orders.
Unselected [Underlyings]	Shows all underlyings not selected for cancellation.
Selected [Underlyings]	Shows all underlyings selected for cancellation.
Indices	Click this button if you want to move all instruments with indexes as underlyings from the left-hand column to the right-hand column, or vice versa.
Stocks	Click this button if you want to move all instruments with stocks as underlyings from the left-hand column to the right-hand column, or vice versa.
All	Click this button if you want to move all instruments from the left-hand column to the right-hand column, or vice versa.
</>	Click this button if you want to move a single instrument (that you have previously high-lighted) from the lefthand column to the right-hand column, or vice versa.

5.9.2   Canceling Orders

Perform this procedure to cancel orders in **Cancel Orders Detailed** window:

1. Decide whether you only want to cancel your own orders or orders from other traders in your company, by selecting the relevant option.

   > **Note:** If the Company orders option is clicked and the trader is not allowed to cancel other traders' orders in the company, the transaction will fail later on.

2. Select the **All clients** check box if you want to cancel orders for all clients; alternatively, fill in the client's name in the Client field, if you want to cancel orders for a specific client. You can also cancel orders for several clients at once by entering a so-called wildcard character (either *, which substitutes zero or more characters, or %, which substitutes a single character), either by itself or after one or several letters. For example, if you enter K* in the Client field, all orders belonging to clients with names that begin with the letter K will be canceled.

   > **Note:** If the field is empty, all orders belonging to your company will be canceled, but the trader must confirm this. If you clear the All clients check box, the Client field will be enabled.

   > **Note:** When you fill in a wildcard, all the orders matching it will be canceled.

3. Decide whether you want to cancel all orders for all markets or for a specific one by making a choice in the Market/Group drop-down list box. The default value in this field is <ALL>.

4. The instrument groups belonging to the market you have selected in the Market/Group drop-down list box will appear in the Instrument Groups section of the window.

5. In the Instrument Groups section to the left in the window, select the instrument groups the orders you want to cancel by selecting the Bid or Ask check box, or both, for the relevant instrument groups.

6. Click one of the buttons between the columns in the middle.

   The **>>** button will move single underlyings from the left-hand column to the right-hand column.

   It is possible to select all instruments of a kind by using the **Stocks >>** or **All >>** button.

   Example: If you click the **Stocks >>** button, all instruments with stocks as underlyings will be moved to the table on the right-hand side.

7. Click **Send** button.

   All orders matching your choice in the window will be removed from the Marketplace, and the local Order Book and Order History windows will be updated accordingly.

8. You will also be informed of how many orders, matching your criteria, that were withdrawn from the market.

9. Confirm your wish to cancel the orders of your choice by clicking **Yes** in the following dialog window that appears:
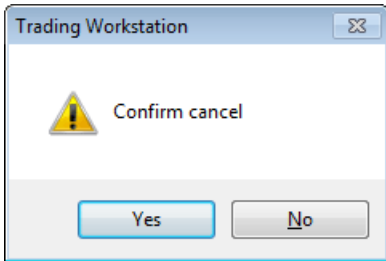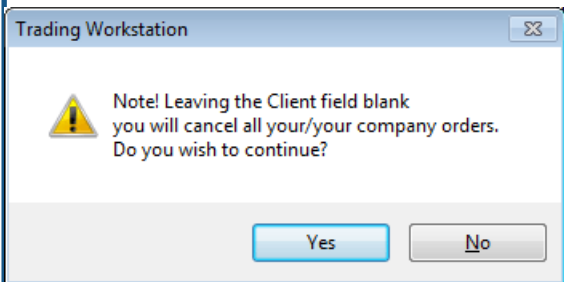
Figure 33: Confim Cancel Dialog Box

> **Note:**
>
> If you have left the Client field blank and the All Clients check box cleared, the following dialog box appears, asking you to confirm your wish to cancel all orders once again:
>
>

10. A window appears, informing you of how many orders, matching your criteria, were withdrawn:
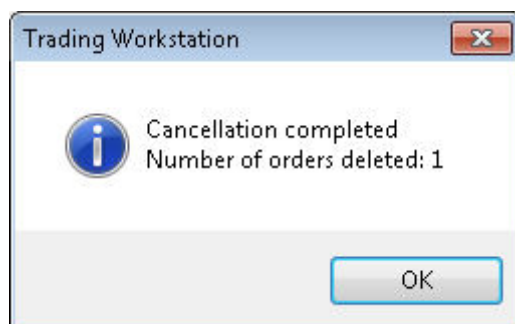
Figure 34: Number of Orders Deleted Dialog Box

11. Click **OK**.

12. The cancellation is now completed.

5.10 Entering Trade Reports

The **Enter Trade Report** window is used when a match has taken place outside the Marketplace and the trade is reported manually into the system.

5.10.1 The Enter Trade Report Window

Open the **Enter Trade Report** window from the **Trades** menu.

The **TAB** key can be used to step between the fields in the **Enter Trade Report** window.
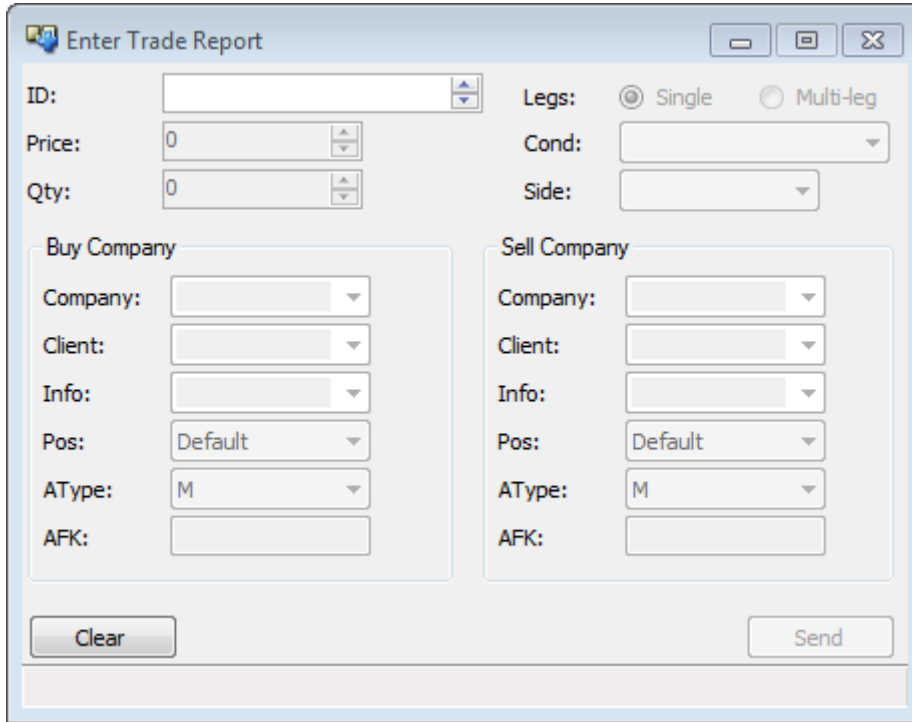
Figure 35: Enter Trade Report Window

Table 33: Enter Trade Report Window Items

Item	Description	
ID	Specifies the instrument identity. You can type in an instrument, select one in the **Price Information** or **Price Quotation** window, or use the up and down arrows to select an instrument.	
Price/Yield	The field name is depending on instrument type.	
	Price	The instrument is traded in price. To increase or decrease the price, click the arrows to the right of the **Price** field.
	Yield	The instrument is traded in yield. To increase or decrease the yield, click the arrows to the right of the **Yield** field.
Qty	Specifies the total number of contracts. You can increase or decrease the quantity by clicking the arrows to the right of the Qty field. This also affects the price and average contract price.	
Legs	Select option: Single Multi-leg	
Cond	Specifies the condition code for the trade. Which condition codes that are available depends on what the exchange has defined.	

Item	Description
	Example EQOO, EQWS, and EQSO
Side	Specifies which side of the trade report is being entered.
Buy Customer and Sell Customer	
Company	Specifies the customer for each side of the trade.
Trd	Specifies the trader, expressed as a user signature. **Note:** This field is only visible if the user is allowed to see it.
Client	Specifies the client for each side of the trade.
Info	Designates a free text information field for each side of the trade. Any information entered is of no logical importance and will not be interpreted in the system.
Pos	Specifies the requested position, which is either normal or close. "Close" means that the trade will close as many open contracts in the related account as possible.
AType	Specifies the account type, which can be of one of the following: • M: for client orders • P: for house (prop) orders. • F: for mutual fund orders.
AFK	Specifies the Agency/Fund Code. For fund orders (**AType** = F) this field cannot be blank. For client and house orders (**AType** = M or P) the field can be either blank, or contain additional information (the participant code) for the post-trade processing. When blank, the participant's default account (configured in the CDB) will be used as the default value for this field in the trades.

5.10.2   Reporting a Single Trade

Perform this procedure to report a single trade:

1. Enter data in the ID, Price, and Qty fields.

2. Specify a condition by selecting one in the Cond drop-down list box.

3. Select a side for the trade, **Buy Customer** or **Sell Customer**.

4. Enter customer.

5. Enter any information of your choice in the Cust.Info field, or, alternatively, select a piece of information from the list. This step is optional.

6. Specify position.

7. Click **Send.**

   Enter the name of a client account in the Client field, or, alternatively, select the name of a client account in the list.

8. Click **Buy** or **Sell**.

9. Before the matching takes place, your part of the trade report will appear in the **Pending Trade Reports** window.

5.10.3 Reporting a Multi-Leg Trade

You can enter a multi-leg trade report from the **Enter Trade Report** window.

Perform this procedure to report a multi-leg trade:

1. Enter ID, Price, and Qty of the first leg of the combination.

2. Select the Multi-leg option.

3. Two buttons, Add Leg and Remove Leg, and a grid at the bottom of the window will appear displaying all legs in the combination.

4. Enter a customer for the Buy and Sell sides.

5. Enter a client for the Buy and Sell sides.

6. Enter any additional information of your choice in the Cust.Info field, for either or both sides of the trade. This step is optional.

7. Click **Add Leg**.

8. The leg appears in the grid, displaying the following information:

   Table 34: Grid Columns

Item	Description
ID	Specifies the instrument identity.
Qty	Specifies the number of units.
Prc	Specifies the price of the trade.
BAFK	Specifies the Agency/Fund Code for the buy side.
BAType	Specifies the account type for the buy side.
BInfo	Specifies information on the buy side.
BClient	Specifies the client on the buy side.
SAFK	Specifies the Agency/Fund Code for the sell side.

Item	Description
SAType	Specifies the account type for the sell side.
SInfo	Specifies information on the sell side.
SClient	Specifies the client on the sell side.

The fields in the window will not be cleared after adding a leg.

9. Add the remaining legs of the combination.

The condition code is the same for all legs in the combination.

10. Click **Send**.

To remove a leg, select the leg from the grid and click **Remove Leg**.

5.10.4 Accepting/Rejecting a Trade Report

This applies to one-sided trade reports sent to your customer and which will be tagged with "IN" for incoming in the first column. To accept or reject a trade report, select it in the **Pending Trade Reports** window, then click **Accept** or **Cancel**. To accept, you can also double-click on a report row. When you accept, another accept trade report window in which you can set the private details of your counter order opens.

5.10.5 Changing a Trade Report

This applies for one-sided trade reports sent by your customer, which are yet to be accepted by the other party. They will be tagged with "OUT" for outgoing in the first column. In order to change a trade report, follow the procedure below.

1. In the **Pending Trades** window, double-click a trade report.

The **Change Trade** Report window appears.

2. In this window, change any data in the editable fields to your liking.

3. Click **Send.**

4. The original trade report will be deleted and the new one will instead appear in the **Trade History** and **Pending Trades** windows.

5.11 Order Book

5.11.1 The Order Book Window

In the **Order Book** window you view your own orders, as well as orders entered by other traders at your company. You can cancel, change, activate, and inactivate orders from the window.

Open the window from the **Orders** menu.
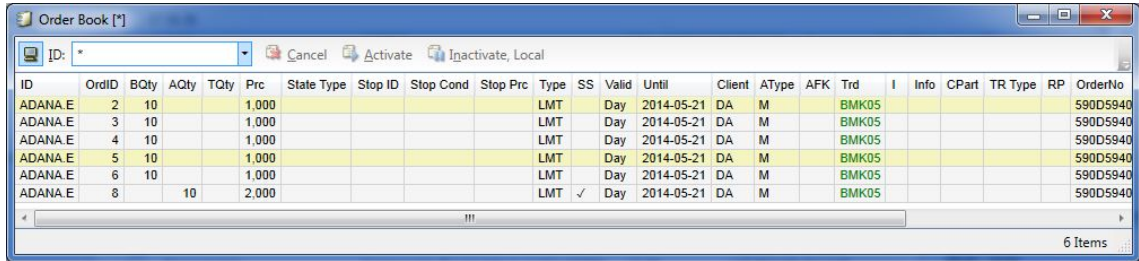
Figure 36: Order Book Window

Note that all columns available to you may not be visible in the figure above.
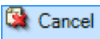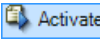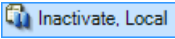
The window is dynamically updated upon changes of the orders. For example, when an order is fully traded, it will disappear from the window.

Locally and centrally inactive orders are marked with a special background color of the order row. Default is gray, but you can change the color from the shortcut menu. In addition, the box in the I column is selected.

Double click the Filter button to display more filter options.

The table below describes the items in the **Order Book** window:

Table 35: Order Book Window

Item	Description
ID	Select a market from the drop-down list box, which contains all the markets you are allowed to trade in. In this field, you are also able to do a wildcard search.
Company	Specifies the customer on whose behalf the order was entered. **Note:** This item is only visible if the user is allowed to see it.
Update	Updates the window. Depending on the system setup, the window is either updated automatically or manually. If the information is updated manually, you need to click **Update** each time you like to update the order depth information. **Note:** This item is only visible if the user is allowed to see it.
	Click the **Cancel** button to cancel an order.
	Click the **Activate** button to activate an inactive order.
	Click the **Inactivate, Local** button to inactivate an order locally.

The table below describes the columns in the **Order Book** window.

Table 36: Order Book Window Items

Item	Description
ID	Instrument identity.

Item	Description
OrdID	Application internal order number.
BQty	Quantity of a bid order.
AQty	Quantity of an ask order.
TQty	Total quantity of the order.
Prc	Price/premium of the order.
State Type	State type if the order was entered with one.
Stop ID	Stop condition instrument identity. The stop series defines the instrument that the stop price will be compared to.
Stop Cond	Indicates if the stop price must be greater than or equal to (>=) or less than or equal to (<=) the last price to be converted to a market or limit order.
Stop Prc	Defines what price level the price condition must meet to convert the order to a market or limit order.
Type	Order type.
SS	Specifies if the entered order is a short sell or not.
Valid	Validity of the order.
Until	Date or other details on which the order expires.
Client	Client account to which the order belongs.
AType	Account type, which can be of one of the following: • M: for client orders. • P: for house (prop) orders. • F: for mutual fund orders.
AFK	Agency/Fund Code.
Orig.Cmp	Originator company, in the case of on-behalf orders. **Note:** This column is only visible if the user is allowed to see it.
Orig.Trd	Originator trader, in the case of on-behalf orders. **Note:** This column is only visible if the user is allowed to see it.
Trd	The trader (user) at the exchange who entered the order.
I	Specifies if it is an inactive or active order. A tick indicates an inactive order.
Info	Arbitrary information concerning the order. The information displayed is of no logical importance and is not interpreted in the system.
CPart	Counterparty.
TR Type	Trade-report type.
RP	Requested position, that is, open or close.

Item	Description
OrderNo	Order number received from the Marketplace. An order entered as inactive has an order number consisting of zeroes.
Link	Shows if order is part of a linked order.
OCat	Order category. Indicative quotes are shown with INDQ in the column.
Created	Time at which the order was created.
Changed	Time of the latest order change.

5.11.2   Changing an Order

For description of how to change and order see <u>Changing an Order</u> on page 64.

5.11.3   Canceling Orders in the Order Book

> **Note:** The procedure described below is valid even for linked orders.

Perform this procedure cancel an order.

1. Select any one of orders in the **Order Book** window.

2. Click **Cancel** on the tool bar.

3. A confirmation message appears.

4. Click **OK** to confirm.

5. The orders will be canceled. This can be seen this in **Order History** and **Order Book** windows.

> **Note:** If a linked order is canceled all orders included in the linked order will be removed.

5.11.4   Locally Inactivating an Order

Perform this procedure to inactivate an order locally:

1. Specify one or several active orders to inactivate by selecting with the mouse.

2. Click the **Inactivate, Local** button.

3. The selected orders are now removed from the central Marketplace and marked as inactive in the local order book. Inactive orders are not displayed in the window if the window is configured to display active orders only.

5.11.5 Activating an Order

Perform this procedure to activate an order:

1. Specify one or several inactive orders to activate by selecting with the mouse.

2. Click the **Activate** button.

3. The selected orders are now sent to the central Marketplace and marked as active in the local order book. Active orders are not displayed in the window if the window is configured to display inactive orders only.

5.12 Mid Point Order Book

In the **Mid Point Order Book** window you view your own Mid Point orders, as well as Mid Point orders entered by other traders at your company for a selected instrument.

Open the window from the **Orders** menu.
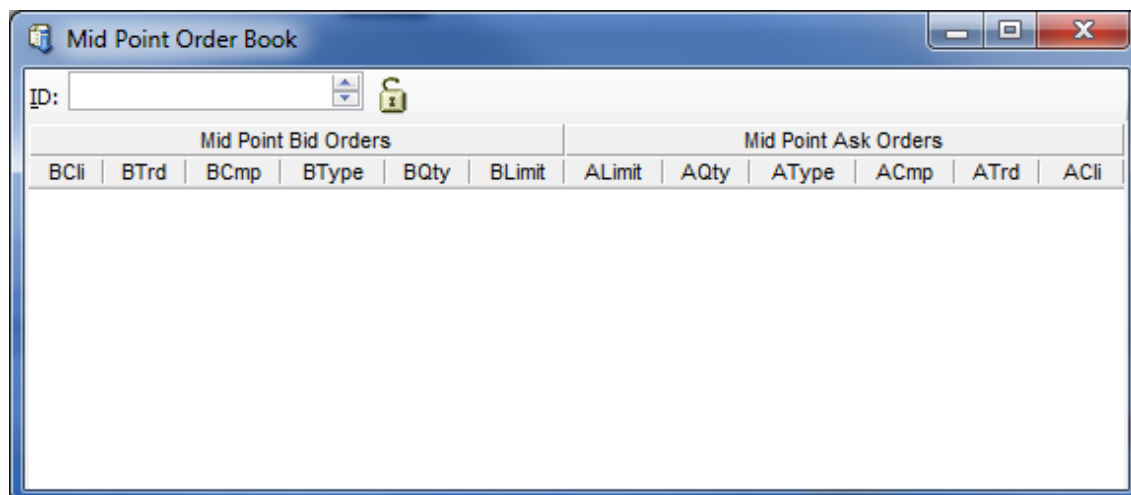
Figure 37: Mid Point Order Book Window

The table below describes the items in the **Mid point Order Book** window:

Table 37: Mid Point Order Book Window Items

Item	Description
ID	Select or type an Instrument in the drop-down list box.
🔓	Indicates whether the ID field is locked or unlocked. Click the padlock to either lock or unlock it.

The table below describes the columns in the **Mid point Order Book** window.

Table 38: Mid Point Order Book Window Columns

Item	Description
B/ACli	Buy/Ask Client.
B/ATrd	Buy/Ask Trader.
B/ACmp	Buy/Ask Company.
B/AType	Buy/Ask Order Type.
B/AQty	Buy/Ask Quantity.
B/ALimit	Buy/Ask Limit.

6 Auctions

6.1 Initiate One-Sided Auction

An issuer can initiate an auction. The auction is exposed to auction participants who can enter orders to trade up to the IPMO phase.

6.1.1 The Initiate One-Sided Auction Window

The **Initiate One-Sided Auction** window is used to set up an auction by an issuer with rights for an instrument.

Open the window from the **Auctions** menu.

Figure 38: Initiate One-Sided Auction Window

The table below describes the fields and buttons in the **Initiate One-Sided Auction** window.

Table 39: Initiate One-Sided Auction Fields and Buttons

Item	Description
ID	Instrument to be used in the auction.
Auction Type	Options include: Issue Buy back
Dissemination	Options include: Open Updates of the auction is public.

Item	Description
	Hidden Updates of the auction is hidden.
Net price for settlement	Pre-defined net price for settlement.
	The entered price must have the same number of decimals as the defined tick factor price step has for the applicable instrument.
Max Quantity	Maximum quantity of the instrument to be used in the auction. Optional field.
Auction time	Time of uncross <hh:mm>.
Auction date	Date of uncross <yyyy-mm-dd>.
Settlement date	Date of settlement, <yyyy-mm-dd>, if non-standard.
Clear	Reset all fields to default.
Initiate	Send initiation to start one-sided auction.
Status bar	Shows result of action.

6.1.2 Initiating a One-Sided Auction

Perform this procedure to initiate a one-sided auction:

1. Select instrument in **Price Information** window, or type it manually in the ID field.

2. Fill in appropriate fields in the **Initiate One-Sided Auction** window.

3. Click **Send** button to initiate auction.

4. A confirmation dialog box appears.

5. Click **OK** to confirm.

6. The status bar shows if the auction request was accepted. The result can also be seen in the **Auction Details** window, see page 95.

6.1.3 Responding to One-Sided Auction Request

An auction participant (not the issuer of the auction) can take part in the started auction before the IPMO phase.

Perform this procedure to respond to a one-sided auction request:

1. Assuming an Issue type auction, open the **Enter Order** window and enter a buy order with price and quantity.

2. The order appears in the **Order Book** and **Order History** windows.

3. Once the uncross time is reached, the result appears in the **Order History** window. If the order was traded, this will be shown in the **Ticker** and **Clearing Trades** windows.

Figure 39: One-Sided Auction in the Order Depth Window

4. All orders not traded may or may not, depending on the system configuration, be canceled automatically.

6.2 Auction Calculator

The **Auction Calculator** window displays calculations based on orders entered in the auction and the issued amount. It is updated constantly by orders from both sides.

The issuer of the auction can modify some fields the in **Auction Calculator** window to get an optimal result of the auction.

The auction can be terminated at any time with help of the **Cancel Auction** button.

6.2.1 The Auction Calculator Window

Open the window from the **Auction** menu.
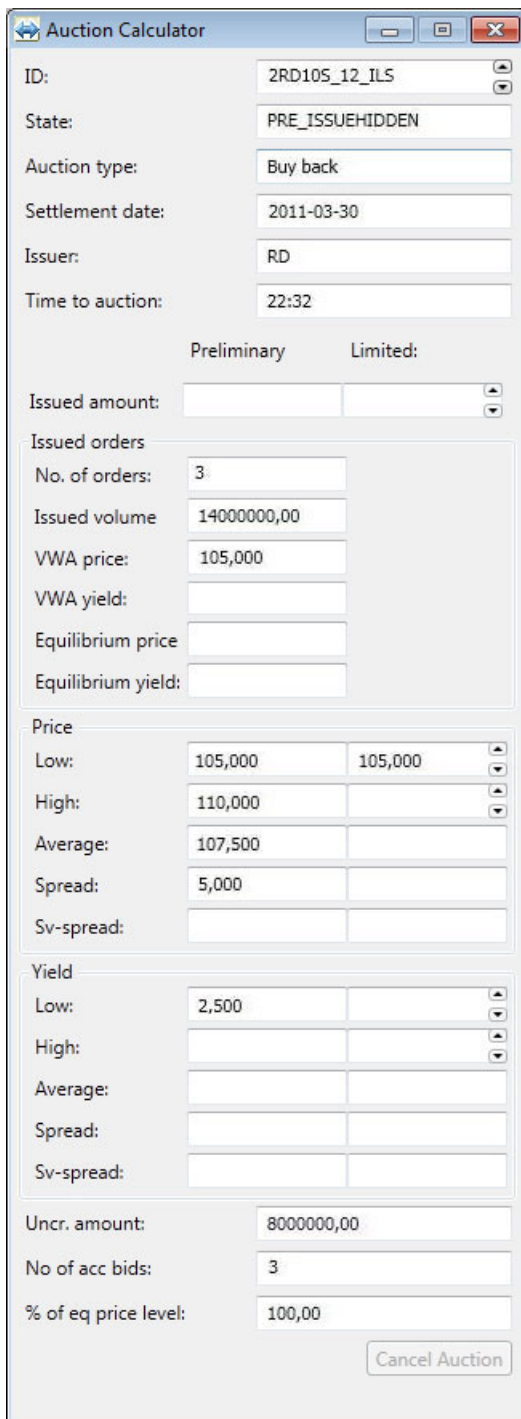
Figure 40: The Auction Calculator Window

The table below describes the fields and button in the **Auction Calculator** window.

Table 40: Auction Calculator Fields

Item	Description	
ID	Instrument used in the auction.	
State	Trading session state of instrument same as in Price Information window.	
Auction type	Set when initiated.	
Settlement date	Set when initiated.	
Issuer	Defined by Underlying issuer for the underlying.	
Time to auction	If auction day — Shows countdown time to uncross, in \<hh:mm:ss\> format. Is updated each second the day of the auction. If days before auction day — Shows remaining days and time of auction.	
	Preliminary/Final Values from order book shown in this column. If *Preliminary* is shown – Updated in real-time when auction participants enter orders in the order book. If *Final* is shown – The uncross time is reached and this is a final result of the auction.	*Limited* Simulated result is shown in this column.
Issued amount		
Issued orders	*Preliminary/Final*	*Limited*
No. of orders		Editable field, for description see section *Simulate the Outcome of the Auction* below.
Issued volume		
VWA price	Volume weighted average price.	
VWA yield	Volume weighted average yield.	
Equilibrium price		
Equilibrium yield		
Price	*Preliminary/Final*	*Limited*
Low		Editable field, for description see section *Simulate the Outcome of the Auction* below.
High		
Average	Average price.	
Spread	ABS (High-Low).	
Sv-spread	ABS (Worst-Average).	
Yield	*Preliminary/Final*	*Limited*
Low		Editable field, for description see section *Simulate the Outcome of the Auction* below.
High		
Average	Average yield.	

Item	Description	
Spread	ABS (High-Low).	
Sv-spread	ABS (Worst-Average).	
Uncr. amount	Uncrossed amount.	
No of acc bids	Number of accepted bids.	
% of eq price lev	The traded percentage of volume available at equilibrium price traded.	
Cancel Auction	This button is used to cancel the auction.	

6.2.2 Simulate the Outcome of the Auction

An auction participant, one at the firm who initiated the auction, wants to take part in the auction. The **Order History** and **Order Depth** windows show all order activity in the auction instrument. No user outside the issuing firm has this information.

Perform this procedure to simulate the outcome of the auction with help of the auction calculator.

1. Open the **Auction Calculator** before uncross time has passed. The state must be IPMO.

2. Select instrument in the ID field.

3. The Preliminary column will show actual outcome with current order book.

4. You can simulate the outcome of the auction by entering a value in any of the following fields in the Limited column: Amount, Price or Yield.

   For example, if you enter a value for the Amount, the entire column will show the outcome of the auction using this value. As long as you do not change this value, it will be fixed and used for all recalculations. If anything changes in the auction, recalculations will be done by keeping this fixed value.

   The same rule apply to the other fields; Price and Yield. The one you edited last will be fixed and used for recalculation. As soon as anything changes in the auction this field will not be changed, while the other two will reflect the outcome of calculations.

5. If the simulated outcome in Limited column is accepted, the entered order must be adjusted accordingly.

6. When the adjustment is done, the Preliminary column is updated to show the new figures.

7. When the uncross time passed the final result of the auction is presented in the Final column. The Limited column is disabled and blanked, no further simulation can be done.

8. The **Order Book, Order History** and **Order Depth** windows show the result of the auction.

6.2.3 Canceling a One-Sided Auction

The auction can be canceled at any time by the issuer by clicking the **Cancel Auction** button in the **Auction Calculator** window.

6.3 Auction Details

6.3.1 The Auction Details Window

The **Auction Details** window shows auction details to auction participants.

Open the window from the **Auction** menu.

Figure 41: The Auction Details Window

The table below describes the fields in the **Auction Details** window.

Table 41: Auction Details Fields and Columns

Item	Description
ID	Instrument in auction.
Settlement date	Date of settlement, as set by issuer or default date, can be blank.
Net price for settlement	Pre-defined net price for settlement.
Max Quantity	Entered by issuer, can be blank.
State	Auction state. PRE IPMO UNCROSS
Planned time	Date and time the state will change.
Warning message	Message that will be shown in Market Message window at time of change.

7 Understanding Calculations

7.1 Derivative Calculator

With the **Derivative Calculator** window you can calculate theoretical prices for derivatives.

Open the window from the **Tools** menu.

Figure 42: Derivative Calculator Window

To calculate theoretical prices for derivatives in the window, follow the procedure below.

7.1.1 Calculating Theoretical Prices in the Derivative Calculator Window

Perform this procedure to calculate theoretical prices in the **Derivative Calculator** window:

1. Select a business date from the calendar that opens when you click the down arrow in the Business date drop-down combo box.

2. Select a strike (expiration) date fromt he calendar that opens when you click the down arrow in the Strike date drop-down combo box.

3. Select an interest in the Interest (%) box.

4. Select a volatility in the Volatility (%) box.

5. If you know the market price, enter it.

6. Select a day-counting method in the Day counting list. You can choose between two methods, ACT/365 and E30/360.

7. Define your dividends by entering a date and size in the Date and Amount columns.

> **Note:** This only applies when you have stocks as underlyings.

8. Click **Calculate**.

9. The calculated data will appear in the right-hand part of the window.

7.1.2 Calculating Stock and Index Options

Perform this procedure to calculating Stock and Index Options:

1. Enter the underlying value (UL Value) and strike price.

> **Note:** Theoretical values will appear by means of B&S and Binomial. Implied volatilities will also appear if a reasonable price is given as the market price.

7.2 Global Calculation Parameters

In the **Global Calculation Parameters** window you enter the yield curve that is used to to calculate theoretical prices for the Price Quotation window.

Open the window from the **Tools** menu.
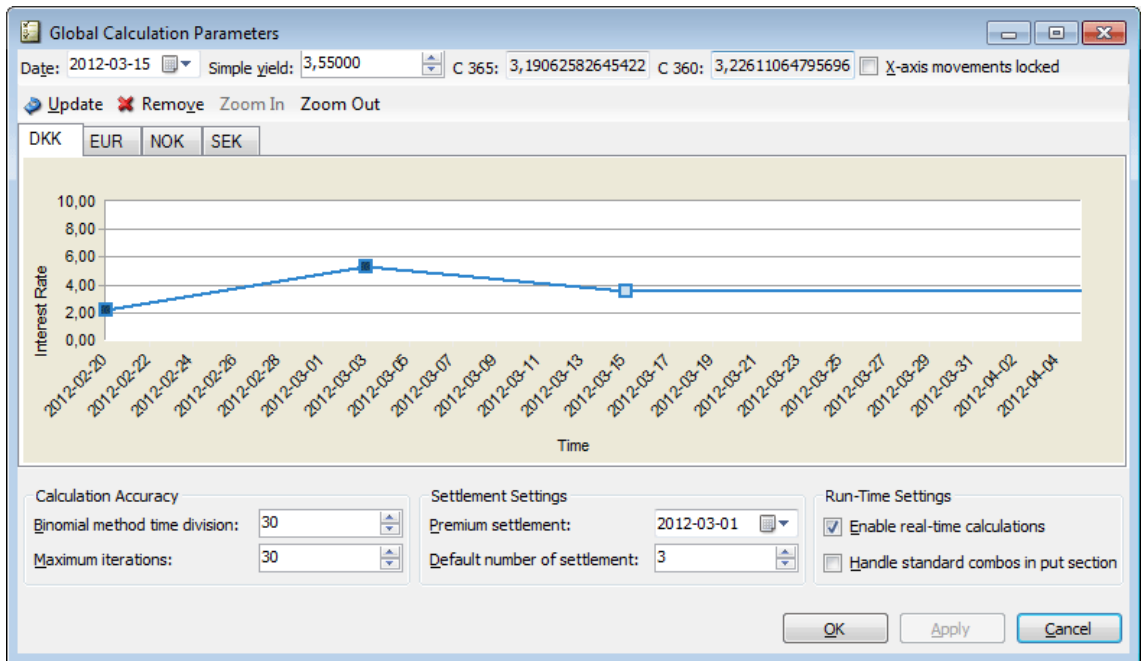
Figure 43: Example of the Global Calculation Parameters Window

The Date and Simple yield fields are used to enter the parameters that will be graphically displayed in the window.

The data in the Calculation Accuracy, Settlement Settings, and Run-Time Settings areas describes global settings that affect the way in which calculations are done in the entire application.

7.2.1 Setting the Parameters in the Global Calculation Parameters Window

This section describes the way in which you set the parameters in the Global Calculation Parameters window. The Date, Simple yield, Update, Remove, Zoom In, Zoom Out, and X-axis movements locked items all concern the interest curve. For a description of how you set the parameters for this curve, see .

Perform this procedure to enter data in the global calculation parameters window:

1. In the **Calculation Accuracy** area, enter a value of your choice in the Binomial method time division list box.

   > **Note:** By changing the data in this box, you can control the level of precision that you desire for the binomial calculations.

2. Enter a value in the Maximum iterations list box.

   > **Note:** By changing the data in this box, you can control the level of precision that you desire for the binomial calculations.

3. In the Settlement Settings area, enter a date in the Premium settlement list.

4. Enter the number of premium settlement days in the Default number of settlement list.

   > **Note:** The premium settlement date will be calculated from today and forward. Saturdays and Sundays will be excluded. If there are other national holidays before the premium settlement date, you must enter the date manually. The date is only calculated by the application at startup, or when the default number of settlement days is changed.

5. In the Run-Time Settings area, decide whether you want to see calculations in real time. If you do, select the Enable real-time calculations check box; if you do not, keep it cleared.

6. Decide whether you want standard combos to be handled on the put side instead of the call side in the Price Quotation window. If you do, select the Handle standard combos in put section check box; if you do not, keep it cleared.

7. Click **Apply** or **OK** when you are finished. When you click **OK**, the window also closes.

8. The new settings will become immediately active.

7.2.1.1 Setting the Parameters for the Interest Curve

1. Select a date in the Date list box. Alternatively, type in a date in the field.

2. The **Update** button changes names to **Add** once you have selected a date.

3. Select a yield in the Simple yield list box. Alternatively, type in a digit in the field.

4. Click **Add**.

5. A node containing the data you have just entered will be added to the chart.

> **Note:** The **Add** button will change names to **Update** once you have clicked it.

The table below describes the items in the Global Calculation Parameters window.

Table 42: Global Calculation Parameters Window Items (Yield Curve)

Item	Description
Date	Enter a date of your choice to add a new node to the chart.
	Also, when you click on an existing node in the chart, this field will display the date for that node.
Simple yield	Enter a yield of your choice to either add a new node to the chart or update an already existing one.
	Also, when you click on an existing node in the chart, this field will display the yield for that node.
Update/Add	Click this toolbar button to update the yield of the selected node.
	Note: The name of this button changes to **Add** when you change the date to one that does not reflect an existing node in the chart.
Remove	Click this toolbar button to remove the node that you have previously selected from the chart.
Zoom In	Click this toolbar button to change the date scale of the graph, to display fewer future dates.
Zoom Out	Click this toolbar button to change the date scale of the graph, to display more future dates.
X-axis movements locked	If this check box is selected, you can only drag nodes in the yield direction. When it is cleared, you can drag the nodes in the date direction also.

> **Note:** If you press the CTRL key at the same time as you move a node, only the node that you are currently highlighting will move. Otherwise all nodes to the right in the curve will move.

7.3　Instrument Parameters

In the **Instrument Parameters** window you set the parameters for calculations of theoretical prices for option and futures. Calculation parameters are used to calculate the prices that are displayed in the Calculated section in the **Price Quotation** window.

Open the window from the **Tools** menu.
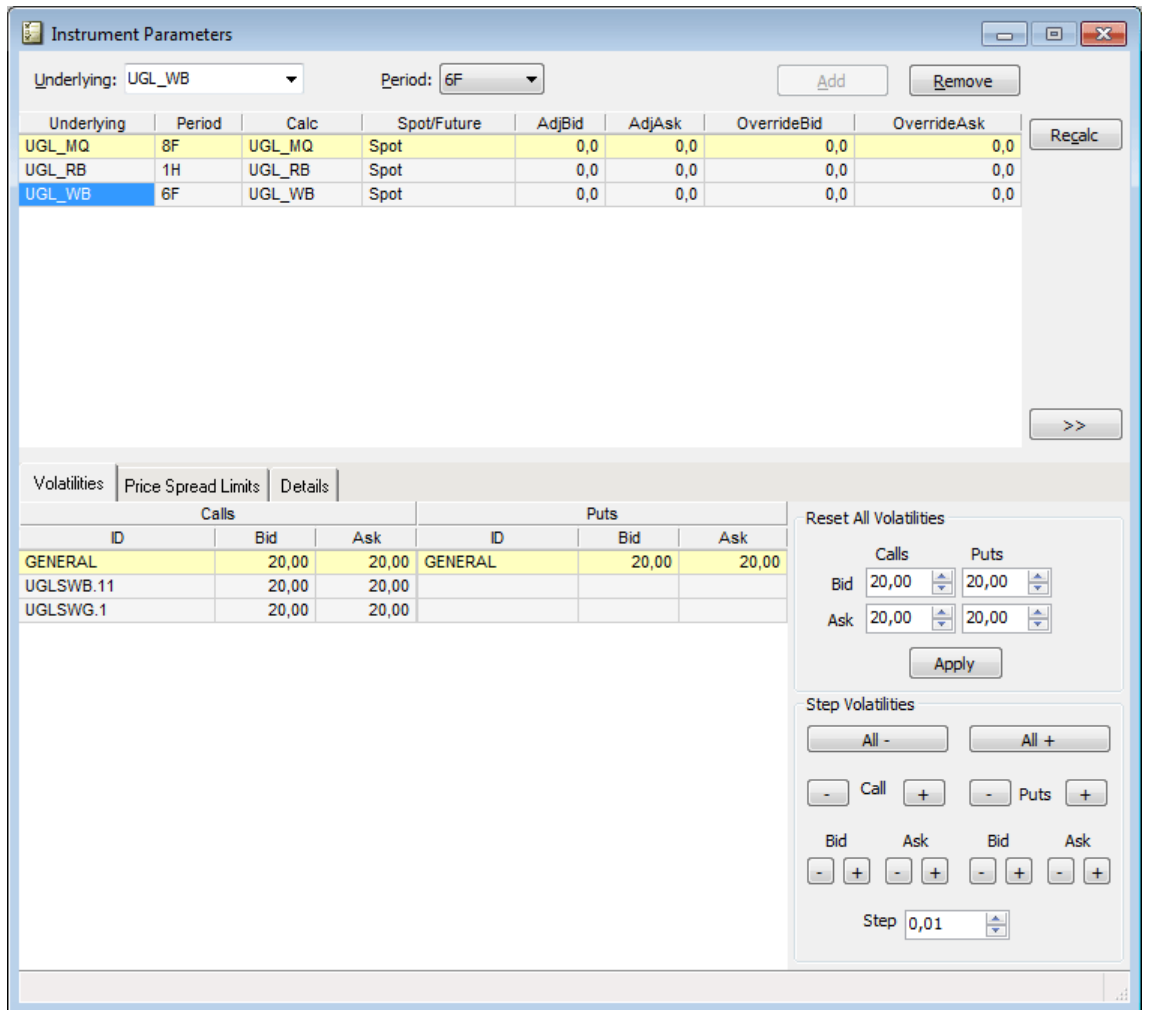
Figure 44: Instrument Parameters Window
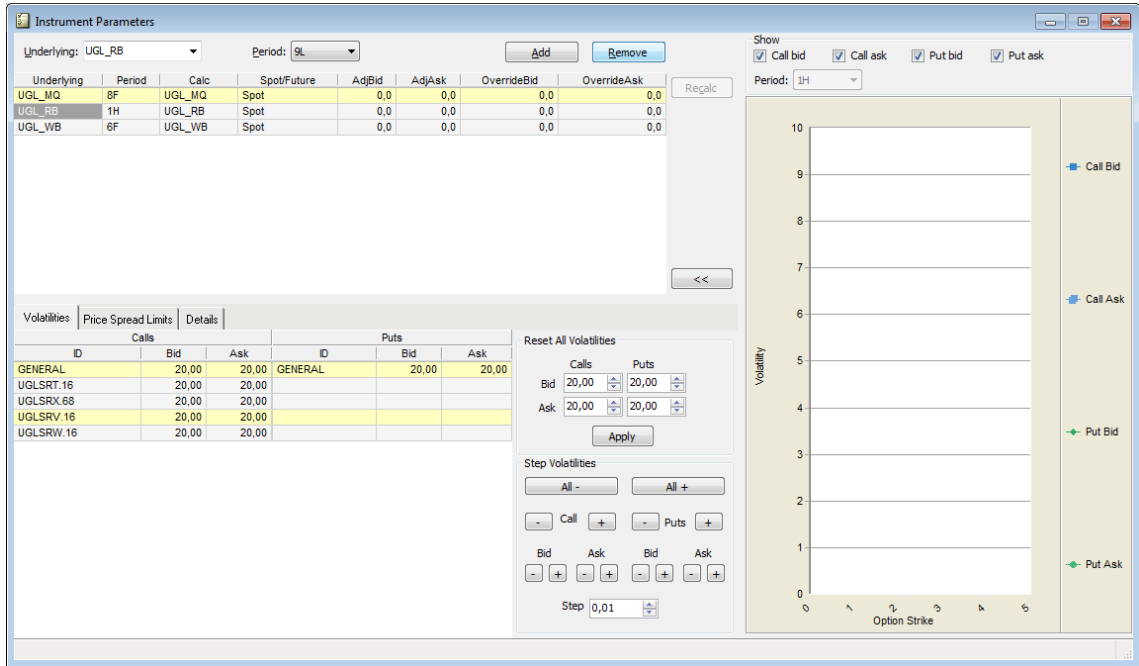
Figure 45: Instrument Parameters Window: Graphic

When you click the **>>** button, a graphical presentation of your calculations will appear on the right-hand side. You are not allowed to edit the graph. You can go back to previous view by clicking the **<<** button.

Table 43: Instrument Parameters Window Items

Item	Description
Underlying	Specifies that this parameter applies to all derivatives with this instrument as underlying.
Period	If this parameter is only valid for derivatives of a specific period, enter the period here. Syntax: <Year>+<Month character A to L> Example: Year 2005 = 5, Month September = I is written as 5I
Recalc	
Underlying (column)	If you want to use another instrument as the underlying when calculating, enter it here. The default is to copy Underlying.
Spot/Future	If the spot is selected as the underlying for calculations, the Black & Scholes method is used (on condition that Black & Scholes is chosen as calculation method in the Details tab. If the future is selected as the underlying for calculations, the Black-76 method is used (on condition that Black & Scholes is chosen as calculation method in the Details tab.
AdjBid AdjAsk	Adjustment to underlying values before calculating (for example, when using a future price as the underlying for the calculation).
OverrideBid	If you want to specify your own value for underlying bid price, enter it here. Otherwise leave it blank.
OverrideAsk	If you want to specify your own value for the underlying ask price, enter it here. Otherwise leave it blank.
Yield	Select which yield curve to use for the calculations from the drop-down combo list. The default setting is the yield curve of the underlying instrument's currency.

Press TAB or SHIFT+TAB to step between entry fields. Click the **Add** button to save the underlying and it will be added to the list. Pressing ENTER or clicking **Recalc** saves the parameter and triggers a recalculation.

For performance reasons, avoid having unused parameters defined; delete all parameters not in use.

7.3.1 Volatilities Tab
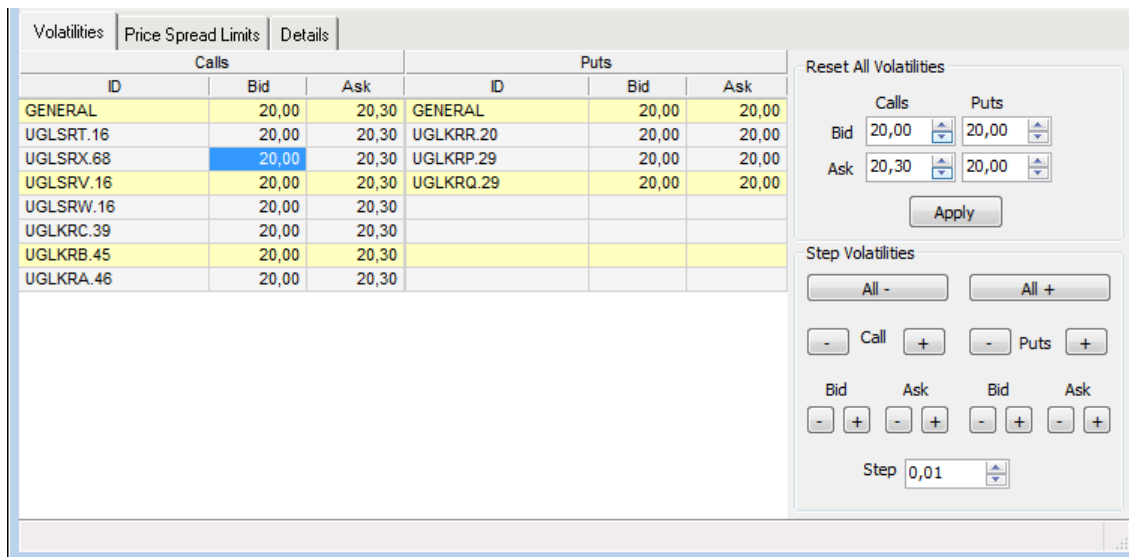
Figure 46: Volatilities

Enter volatilities to use when calculating theoretical values. The left-hand column is for CALLS, and the right column is for PUTS. You must have a GENERAL parameter, which is used if no specific parameter is found. If you save a parameter without specifying a GENERAL volatility, the application will add it for you.

7.3.2   Price Spread Limits Tab
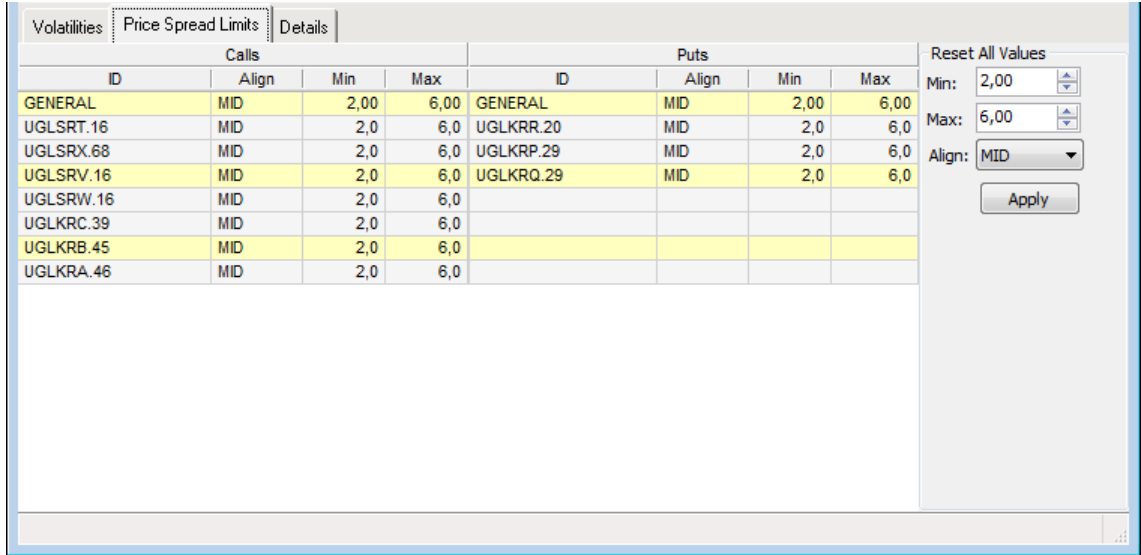
Figure 47: Price Spread Limits

Enter spread rules that are used when moving calculated data into the Used quotes section. Enter Min/Max spread, and how the spread is to be aligned. You can choose to align the prices using either the calculated bid (BID), the calculated ask (ASK), or the average of the bid and ask (MID). MID is default.

The alignment works as follows:

Let us assume that the minimum allowed spread is set to 2 and the maximum is set to 4. In series A the calculated prices are 7.25 – 8.75 and in series B the prices are 17 – 22.50. If alignment BID is chosen, the prices in series A would be moved as 7.25 – 9.25 and in series B as 17 – 21. Alignment using ASK would result in the prices 6.75 – 8.75 and 18.50 – 22.50 respectively MID alignment would result in the prices 7 – 9 and 17.75 – 21.75 in the Used quotes section.

7.3.3   Details Tab
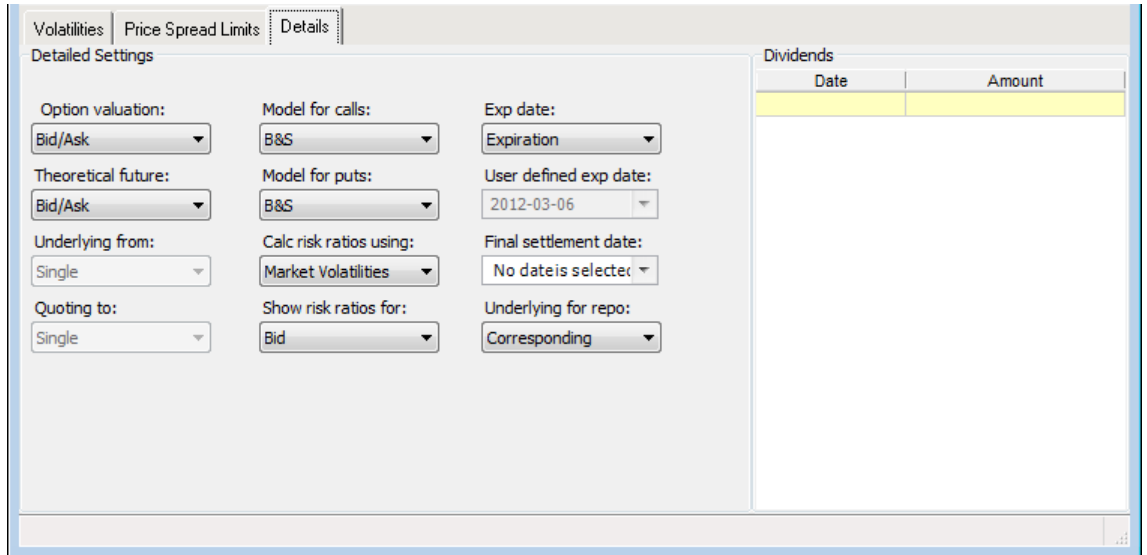
Figure 48: Details

Enter settings for a parameter to be calculated.

Table 44: Parameters Details Tab Items

Item	Description	
Option valuation	Which value of the underlying should be used when calculating values?	
	Last	The underlying last paid price is used for both sides on calls and puts.
	Bid	The underlying bid is used for both sides on calls and puts.
	Ask	The underlying ask is used for both sides on calls and puts.
	Mid	The average of the underlying bid and ask is used for both sides on calls and puts.
	Bid/Ask	For calls; The underlying bid side is used for the bid side, the underlying ask side is used for the ask side. For puts: The underlying bid side is used for the ask side, the underlying ask side is used for the bid side.
	Note: If any Override underlying is entered, that value is used instead.	
Theoretical future	Which value of the underlying should be used when calculating theoretical values?	
	Bid/Ask	For calls, The underlying bid side is used for the bid side, the underlying ask side is used for the ask side.
	Mid	The average of the underlying bid and ask is used for both sides on calls and puts.
	Last	The underlying last paid price is used for both sides on calls and puts.
	For puts	The underlying bid side is used for the ask side, the underlying ask side is used for the bid side.

Item	Description
	Note: If any Override underlying is entered, that value is used instead.
Underlying from	Which market the underlying should be picked from.
Quoting to	Which market the quotes should be sent to.
Model for Calls	Choose calculation model for Calls. **Note:** If the underlying is an Index or a Bond, the Black 76 is used instead.
Model for Puts	Choose calculation model for Puts. **Note:** If the underlying is an Index or a Bond, the Black 76 is used instead.
Calc risk ratios using	Calculate risk ratios using: Own volatilities: volatilities set up in the Instrument Parameters window. Market volatilities: volatilities set by market prices.
Show risk ratios for	Calculate risk ratios for Bid or Ask price.
Exp date	Here you may choose what expiry date to use in calculations. Expiration — The predefined expiration date for this instrument. Last trd — Last trading date set for this instrument. User def — The user defines the expiration date.
User defined exp date	Use the calender to select an expiration date.
Final settlement date	The date on which the final settlement takes place. Use this to override the default, which is the number of days entered in the Global Calculation Parameter window. You can only enter a final settlement date for parameters with a specified period defined.
Underlying for repo	When you calculate implied repos for futures, use this underlying price field. (Not implemented)

7.3.3.1 Entering Parameter Records for Underlyings to be Calculated

Perform this procedure to enter parameter records for underlyings to be calculated:

1. Select an underlying and a time period in respectively drop-down lists.

   Note: You may omit the period if you like by leaving the period field empty.

2. Click the **Add** button.

3. Information about this instrument will appear in the top of the window.

4. Click the **Details** tab if settings are to be changed for the parameter.

   Note: The settings can be changed as described in the table under heading **Details Tab** above.

5. Click the **Recalc** button to save the parameter, and trigger a recalculation of all derivatives that are affected by the parameter.

7.3.4 Calculations and Recalculations

If you click **Recalc** in the Instrument **Instrument Parameters** window and nothing happens, check the following:

- No calculation at all will be performed if calculations are DISABLED (See Global Calculation Parameters on page 98.)
- No calculation at all will be performed if there is no yield-curve data entered. (See Global Calculation Parameters on page 98.)
- An instrument will only be calculated if there is a parameter record defined for its underlying. (See Instrument Parameters on page 100.)
- If you have two parameters that affect the same instrument, for example one parameter XXX-<BLANK> and one XXX-5I, the latter will take preference, because it is more detailed in its specification.
- The Use process will fail if the calculated BID is larger than the ASK.
- If there is no underlying price established, the calculation will not be performed.

7.3.5 Checking the Calculations

You can check the calculations by using the Calculator, but be careful to check which volatility is used. The parameter setting 'Calc risk ratio using' means 'where to find the volatilities.' 'Market prices' means that the implied volatilities from the market should be picked, while 'Calculated prices' means that the volatilities entered in the parameter should be used.

8 Information Enhancement

8.1 Order History

8.1.1 The Order History Window

In the **Order History** window you view the history of your own orders and orders entered by other traders at the company. The window is automatically updated.

Open the window from the **Orders** menu.
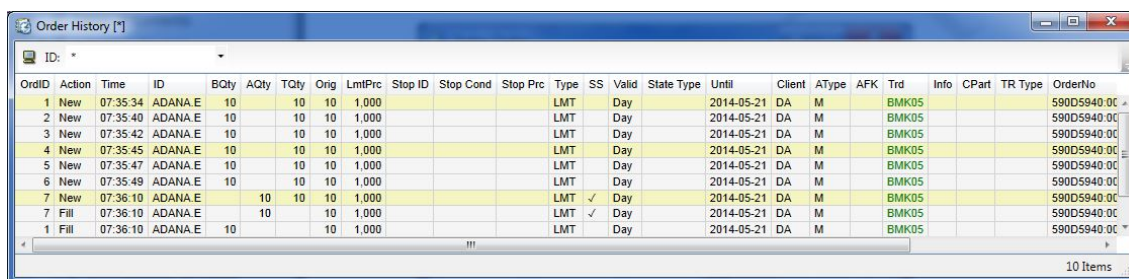
Figure 49: Order History Window

Note that all columns available to you may not be visible in the figure above.

In the ID field, you select which market to view. The filter function (see below) allows you to view orders of particular companies, traders, and so on.

The table below describes the items in the **Order History** window.

Table 45: Order History Window Items

Item	Description
ID	Select a market from the drop-down list the order history for which you wish to see in the window.
	In the ID field you are also able to do a wild card search. For example, by writing "A*" to search for all series starting with the letter "a."
OrdID	Application internal order identity.
Action	Action of the order:
	New New active order created.
	New Inact New inactive order created.
	Changed Order has been changed.
	Delete Order has been canceled or traded.
	Fill Order has been traded, fully or partly.
	Activate Inactive order has been activated.
	Inactivate Active order has been inactivated.

Item	Description
	Stop conv. Stop order has been converted to Regular order.
Time	Time at which the order action was executed.
ID	Instrument identity.
BQty	Quantity of a bid order.
AQty	Quantity of an ask order.
TQty	Total quantity of the order.
Orig	Original order quantity.
LmtPrc	Limit price of the order.
StopID	Stop ID.
Stop Cond	Stop condition.
Stop Prc	Stop price.
Type	Order type.
SS	Specifies if the entered order is a short sell or not.
Valid	Time validity.
State Type	State type if the order was entered with one.
Until	Date on which the order expires, or other detail of time validity.
Client	Client account.
AType	Account type, which can be of one of the following: • M: for client orders. • P: for house (prop) orders. • F: for mutual fund orders.
AFK	Agency/Fund Code.
Trd	Trader, that is, the user who entered the order.
Info	Arbitrary information concerning the order. Any information displayed is of no logical importance and will not be interpreted in the system.
CPart	Counterpart participant.
TR Type	Trade-report type.
OrderNo	Order number.
Link	Shows if order is part of a linked order.
OCat	Order category.
Reply	Reply received when the order was sent to the Marketplace.
DelReason	Reason for deleting the order.

8.1.2 The Filter Function

By clicking the **Filter** button, you can specify detailed search criteria, such as the display of orders created before a certain time.
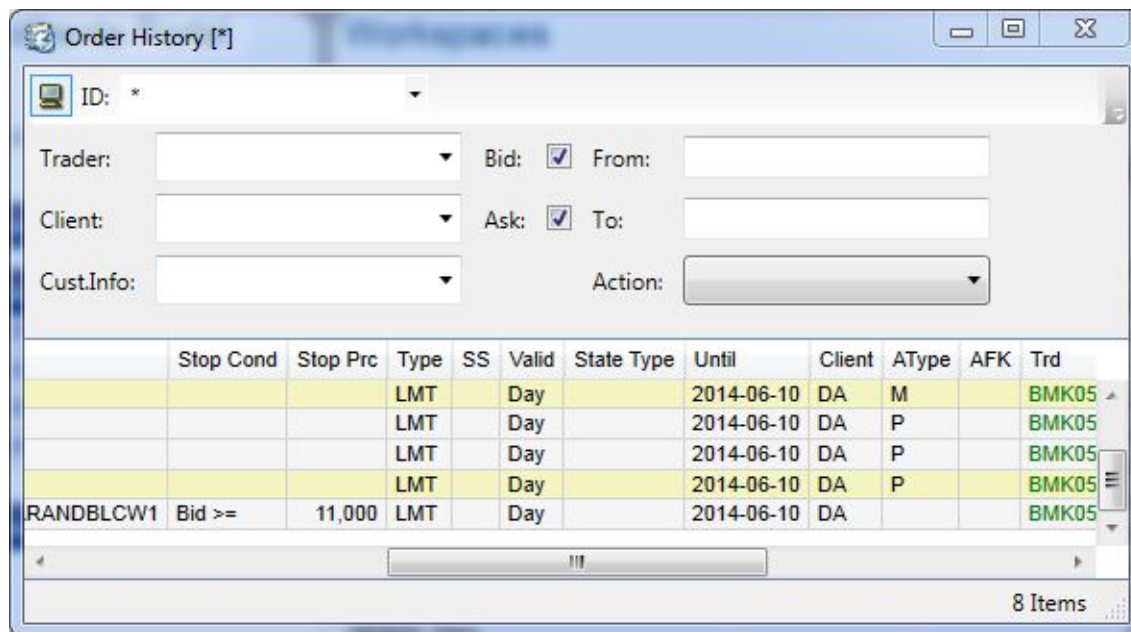
Figure 50: Order History Filter Inspector Window

Table 46: Filter Inspector Window Items

Item	Description	
Trader	Actions done by a certain trader.	
Client	Actions done by a certain client.	
Cust.Info	Actions done with certain information.	
Bid	Select this check box to see bid orders.	
Ask	Select this check box to see ask orders.	
From	Actions done from the specific time.	
To	Actions done to the specific time.	
Action	Only shows order history with the selected item.	
	New	New active order created.
	Replace	Order has been changed.
	Delete	Order has been canceled or traded.
	Fill	Order has been traded, fully or partly.
	Activate	Inactive order has been activated.
	Inactivate	Active order has been inactivated.

8.2 Traders

Open the **Traders** window from the **View** menu.
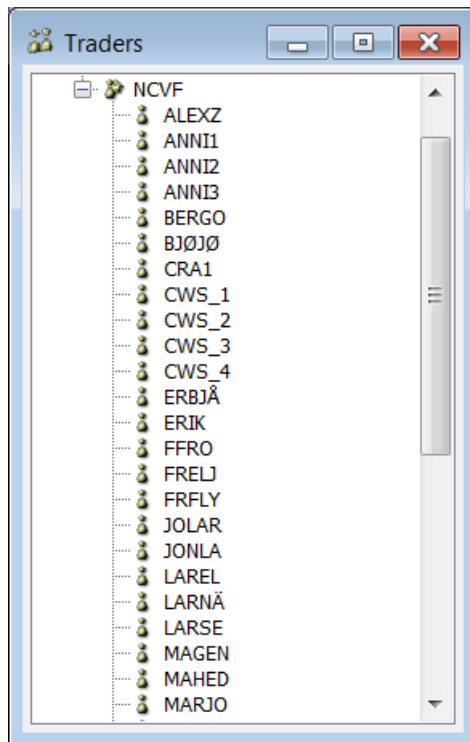
Figure 51: The Traders window

The window displays the brokers'/traders' signatures registered for your customer in the central system.

8.3 Instrument Explorer

8.3.1 The Instrument Explorer Window

The **Instrument Explorer** window can be used to display the properties of different instruments.

Open the **Instrument Explorer** window from the **Market** menu.
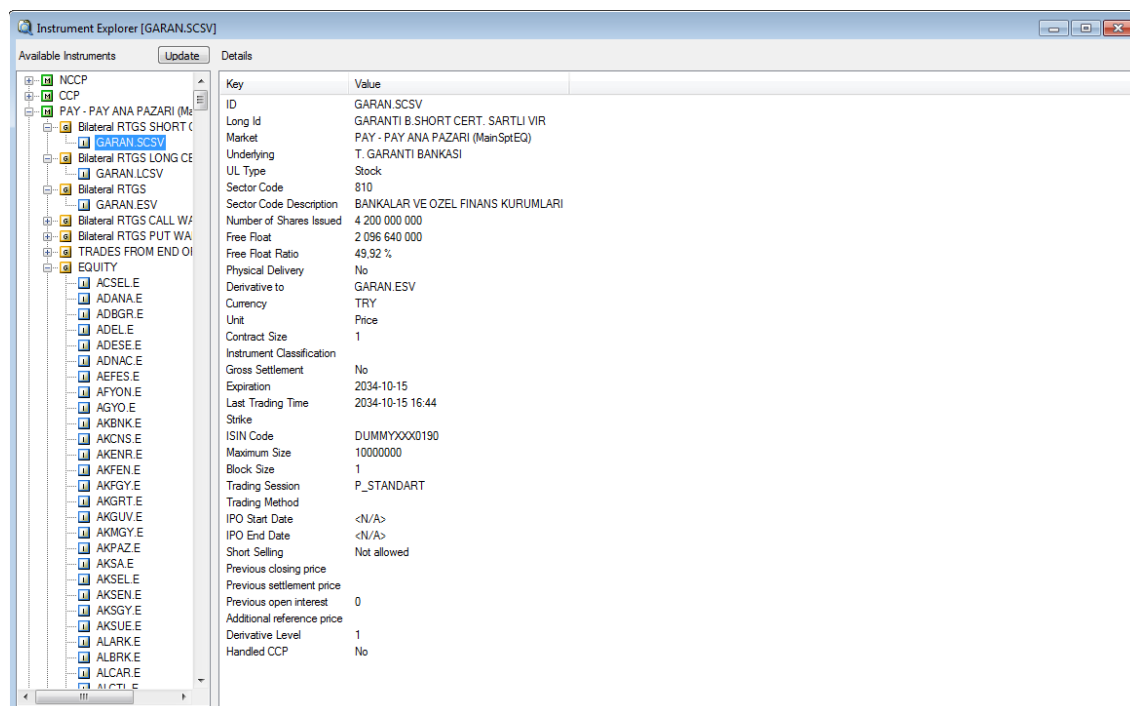
Figure 52: Instrument Explorer Window

The **Instrument Explorer** window is divided into two sections. In the left part, all instruments in the system are shown in an expandable tree structure, where the instruments are grouped together by type for each market. In the right part, details for the selected instrument are shown. Thus, some fields listed below are not available for all instruments.

Table 47: Instrument Explorer Window Items: Details Section

Item	Description
ID/Name	Instrument identity.
Long Id	Long version of the instrument identity.
Market	The market.
Underlying	The underlying.
UL Type	The underlying type.
Sector Code	The Sector Code.
Sector Code Description	The Sector Code description.
Number of shares issued	Total number of issued shares for a company. If no information has been entered in this field in the central system, this field will not appear at all in the window.
Free Float	Number of outstanding shares that are available for the public to trade. If no information has been entered in this field in the central system, this field will not appear at all in the window.
Free Float Ratio	Ratio between the number of issued shares and free float. If no information has been entered in this field in the central system, this field will not appear at all in the window.
Physical delivery	Either Yes or No.
Multiplier	Appears when there is information from the query response.

Item	Description
Reference	Appears when there is information from the query response.
Currency	Currency.
Unit	Payment type (for example, money).
Contract Size	Number of underlyings traded in one unit.
Instrument Classification	Instrument classification.
Market Segment	Market Segment.
Gross Settlement	Specifies if the instrument is subject to gross settlement or not.
Constituents	Index constituent information.
ISIN Code	ISIN/CUSIP code. **Note:** If no ISIN/CUSIP code has been entered for the instrument you are looking at in the central system, this field will not appear at all in the window.
Liquidity Provider	Liquidity Provider
Market Maker	Market Maker
Indices	Related indices, if any.
Maximum Size	Maximum Size
Block Size	Block Size.
Trading Session	Type of Trading Session.
Trading Method	The Trading Method.
IPO Start Date	IPO Start Date.
IPO End Date	IPO End Date.
Short Selling	Specifies if short selling is allowed in the selected instrument and if there is any price validation.
Expiration	Expiration date.
Last Trading Time	The last date on which the instrument effectively can be traded.
Strike	Strike price.
Extended Info	If no information has been entered in this field in the central system, this field will not appear at all in the window.
MS	Market segment code.
Base	Base price.
Llim	Lower price limit.
Ulim	Upper price limit.
Close	Closing price, that is, last traded price from the previous day.
Settle	Settlement price from the previous day.
OInt	The open interest from the previous day.
Ref	Additional reference price provided by the exchange.
Derivative level	For levels 1 and 2 instruments, the level is displayed.

Item	Description
Derivative Instrument Series	This will not be displayed.
Handled CCP	Either Yes or No.

> **Note:** Depending on the instrument you have chosen to see the details for, the Details section of the window will contain different items. The table above constitutes an example of such a list, but should not be seen as an all-inclusive list.

When an instrument is highlighted, it is possible to access, for example, the **Enter Order** and **Enter Trade Report** windows for this instrument. These options are invoked through right-clicking on the instrument name.
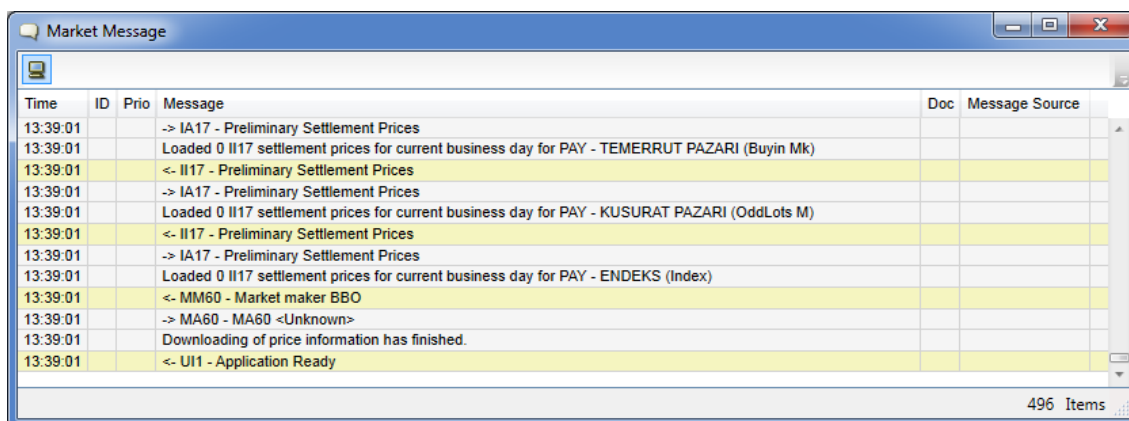
8.4 Market Messages

8.4.1 The Market Message Window

In the **Market Message** window you view all messages sent from the exchange and the system to the application. For example, messages are sent about opening and closing of markets, quote requests, and potential problems.

> **Note:** The Market Messages window provides Company Announcements for an equity market.

Open the window from the **Market** menu.

Figure 53: Market Messages Window

The table below describes the columns in the **Market Messages** window.

Table 48: Market Messages Window Columns

Column	Description
Time	Specifies the time at which the message was received.
ID	Specifies the identity of the market, underlying, or instrument series of the message concerned, if applicable.
Prio	Specifies the priority of the message.

Column	Description
Message	Contains the actual text message.
Doc	A symbol in this column indicates that the message contains a link to a document that is accessible on the web.
Message Source	Specifies the sender of the message.

8.4.2   The Filter Function

When you click the **Filter** button, the following dialog box will appear:
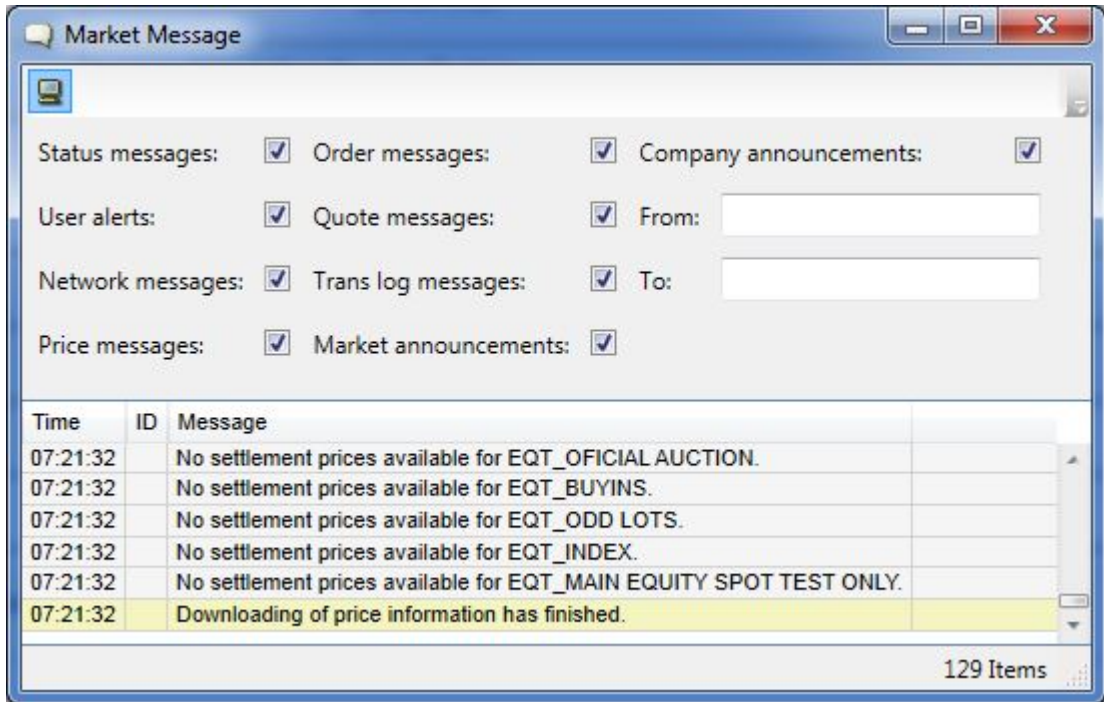
Figure 54: Market Messages Filter

The filter allows you to specify the types of messages you wish to receive, something which is done by selecting the relevant check boxes.

The table below describes the items in the Market Messages window.

Table 49: Market Messages Window Filter Items

Item	Description	
Check Boxes (System Messages and Market Messages)	Select any check box that corresponds to the type of message that you want to appear in the window. These check boxes are selected by default.	
	Status Messages	Displays messages about underlying status, series status, and so on.
	User Alerts	Displays messages that involve drawing the user's attention to a potential problem.

Item	Description	
	Network Messages	Displays messages about the OMnet connection.
	Price Messages	Displays messages about start and end of price reloading.
	Order Messages	Displays order-related messages, such as received block/facilitation order messages.
	Quote Messages	Displays quote-related message, for example, a message when a quote can not be sent.
	Trans Log Messages	Displays messages about transaction logs, for example, failed transactions.
	Market Announcements	Displays information about market announcements.
	Company Announcements	Displays information about company announcements.
	From	Enter a day and point in time from which you want messages to appear in the window.
	To	Enter a day and point in time from which you want messages to appear in the window.
From	Enter a day from which you want messages to appear in the window.	
To	Enter a day until which you want messages to appear in the window.	

Click **Apply** to activate your filter criteria.

8.4.3   Setting Your Own Colors in the Market Messages Window

Each type of information message is displayed in a different color in the **Market Messages** window. The default settings can be seen below. You can set your own choice of colors for the different types of information messages.

Perform the following procedure to set your own colors in the **Market Messages** window:

1. Right-click in the **Market Messages** window and select **Form** Settings.

   The **Settings** window opens.

2. In the window, expand the **Grid Colors** section.

   The window now looks as follows:
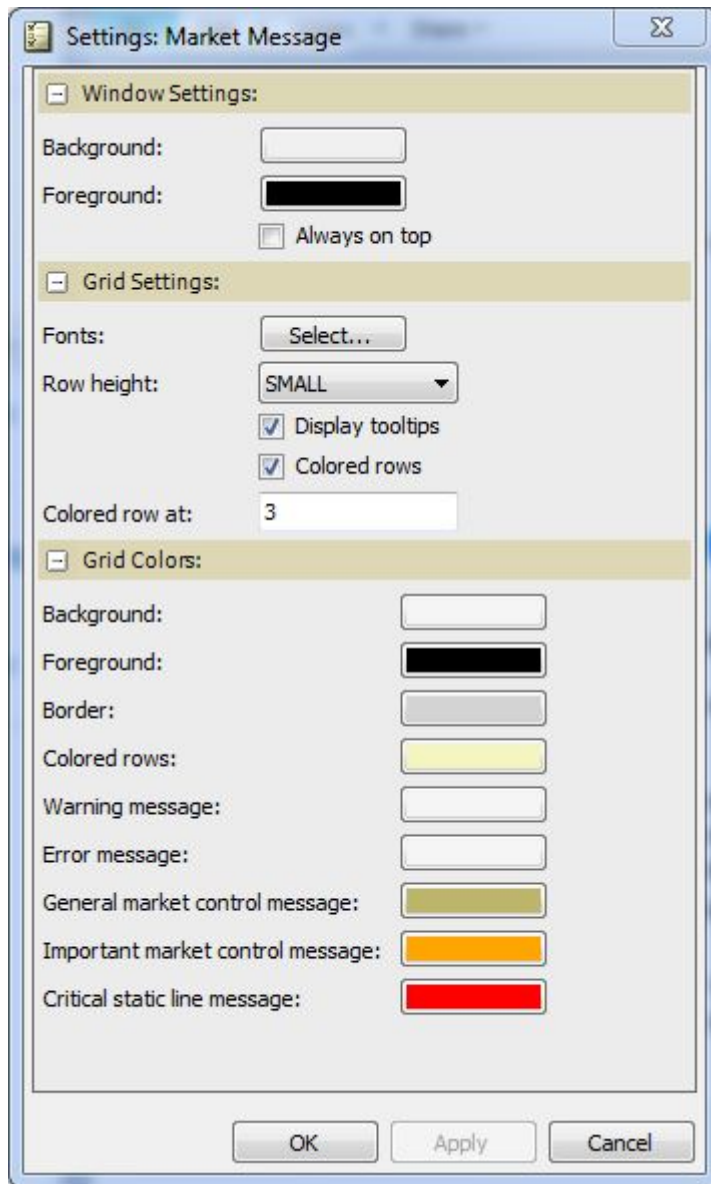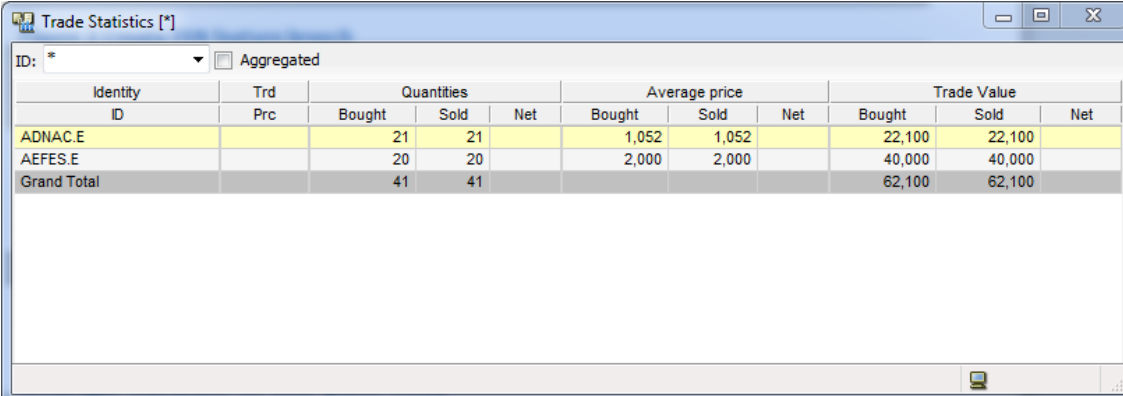
Figure 55: Market Messages: Settings Window

3. In the window, double-click on any of the colors the corresponding message type for which you want to set your own color. In the palette that appears, select a color by clicking it.

4. The new color will appear immediately in the color field.

5. When you have set all colors to your liking, click **OK** or **Apply** in the window. Clicking **OK** will close the window.

6. The new color settings will become active immediately.

8.5 Trade Statistics

In the Trade Statistics window you view the statistics based on all cleared trades executed by your own firm since logon.
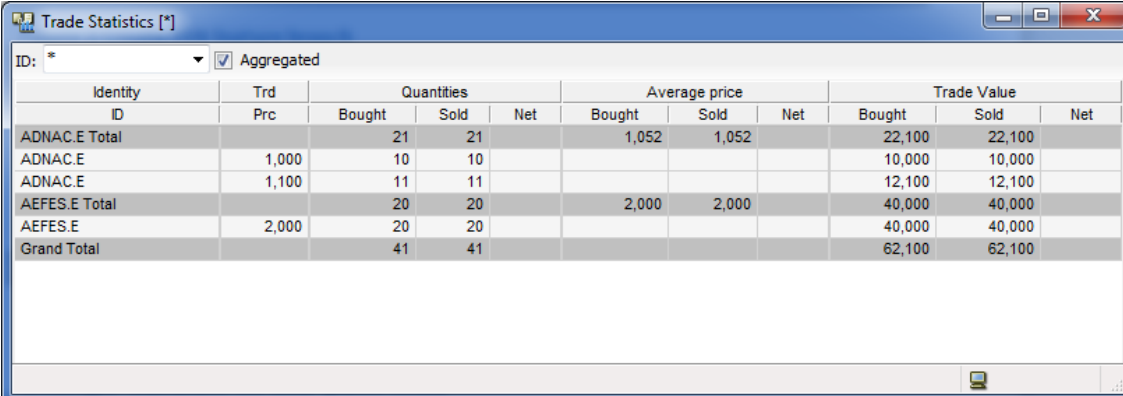
Open the window from the Trades menu.

Figure 56: Trade Statistics Window

Figure 57: Trade Statistics Window (Aggregated)

If you select Reload Clearing Trades in the Trades menu, the window will display all cleared trades executed by your own firm during the current trading day.

If you enable the Load at Logon function, the window will automatically reload all of the current day's trades. You enable this function in the Clearing Trades field in the Interface tab in the Preferences window.

The aggregated view, which you enable by selecting the **Aggregated** check box, gives a more detailed view of each traded instrument.

Select the market for which you want to display trade statistics by selecting one from the drop-down list. The Filter Inspector allows you to filter out the trades that you do not want to see.

> **Note:** The Trade Statistics window will only display information about series in which there is activity.

8.5.1 Setting Your Trade Statistics Filters

When you click the **Filter** button, the following window appears:
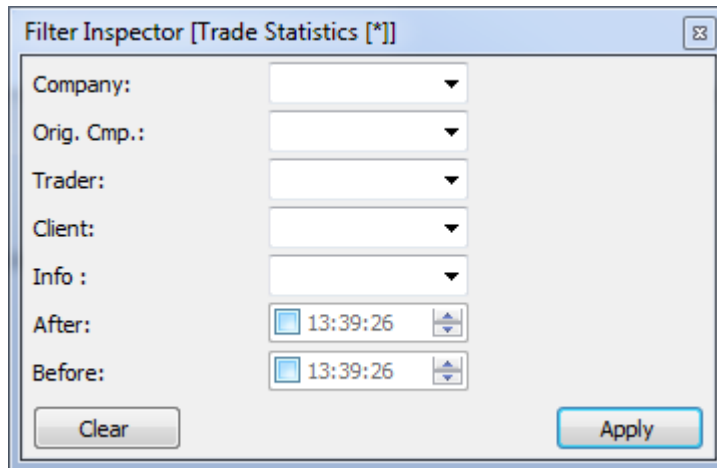
Figure 58: Trade Statistics Filter Window

In the dialog box you select which trades to display statistics for according to one or several of the following criteria:

Table 50: Filter Inspector Window Items

Item	Description
Company	Select a company on which to filter orders from the drop-down list box.
Orig. Comp	Select the originator company on which to filter orders from the drop-down list box.
Trader	Select a trader on which to filter orders from the drop-down list box.
Client	Select a client on which to filter orders from the drop-down list box.
After	Specifies the point in time after which a trade came in.
Before	Specifies the point in time before which a trade came in.

By specifying a date and time, the period for which you wish to see the trades made, you will be able to see trades other than those made today. If you do not fill in information in the After and Before fields, however, you will only see today's trades.

Click **Apply** to activate your choice.

8.6 Clearing Trades

In the **Clearing Trades** window you view all trades executed during the current trading day. Note that the window displays trades that were not cleared as well.

8.6.1 The Clearing Trades Window

Open the **Clearing Trades** window from the **Trades** menu.

Figure 59: Clearing Trades Window

The window normally displays trades executed since you logged in, but you can reload all of the current day's trades by selecting **Reload Clearing Trades** in the **Trades** menu. If you enable the **Load at Logon** function, the window will automatically reload all of the current day's trades. You enable this function in the **Clearing Trades** field in the **Preferences** dialog, see Interface on page 130.

The table below describes the columns in the window.

Table 51: Clearing Trades Window Columns

Column	Description
ID	Specifies the identity of the instrument.
Match ID	Unique ID for each generated deal, which comprises the buyer and seller per order book and price. HEX format.
GDealNo	Specifies the global deal number, which is unique per instrument type and date.
No	Specifies the number of the trade, something which is set at the clearing-house.
OrgNo	Specifies the original trade number.
ExtNo	Specifies the external number used by external clearing-house.
State	Specifies the state of the trade.
SS	Specifies if the entered order is a short sell or not.
Type	Specifies the trade type.
Bought	Specifies the number of contracts in the trade if bid side.
Sold	Specifies the number of contracts in the trade if ask side.
RQty	Specifies the remaining quantity.
TPrc	Specifies the price of the trade.
Client	Specifies the clearing client account to which order belongs.
AType	Specifies the account type, which can be of one of the following: • M: for client orders. • P: for house (prop) orders. • F: for mutual fund orders.
AFK	Specifies the Agency/Fund Code.

Column	Description
Cust.Info	Specifies any arbitrary information concerning the order. The information displayed is of no logical importance and is not interpreted in the system.
Ord.Ref	Specifies order reference concerning the order.
P	Specifies the position, for example, open or closed.
RP	Specifies the requested position.
TR Type	Specifies the trade-report type.
Time	Specifies the time at which the deal is matched.
Asof	Specifies the time at which the original trade was registered.
Modified	Specifies the time at which the trade was modified.
Clearing	Speifies the clearing date.
Trd	Specifies the trader identity (user).
Orig. Trd.	Specifies the originator trader, that is the trader on whose behalf the trade was made, if applicable.
OrderNo	Specifies the order number.
DealSrc	Specifies the Deal Source, one example of which is Electronic Marketplace (EMP).
Whose	Specifies the owner of the trade.
Orig. Cmp.	Specifies the originator company, that is the company on whose behalf the trade was made, if applicable.
CPart	Specifies the counterpart, which is only displayed if market rules allow it.

8.6.2   The Filter Function

The filter function allows you to specify which trades to display. To open the **Filter Inspector**, in which you set the filter, click the **Filter** icon.
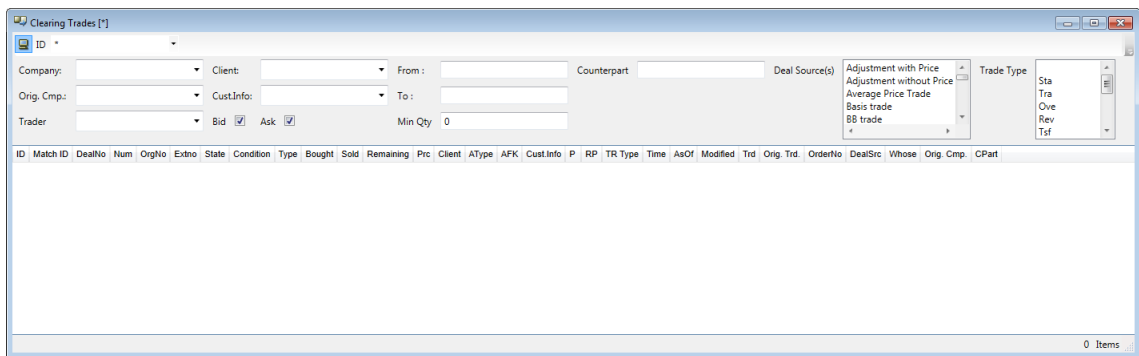
Figure 60: Clearing Trades Filter

Table 52: Clearing Trades Filter Inspector Window

Item	Description
Company	The company which owns the trades.
Orig. Cmp.	The originator company, on whose behalf the trades have been made.

Item	Description
Trader	Trades done by a certain trader.
Client	Trades related to a certain client.
Info	Trades related to a certain information.
Bid	Bid side of the trade.
Ask	Ask side of the trade.
From	Trades done after a certain time. Specify <yyyy-mm-dd>.
To	Trades done before a certain time. Specify <yyyy-mm-dd>. By specifying a date and time, the period for which you wish to see the trades done, you will be able to see trades other than those done today.
Min. qty	Minimum quantity.
Counterpart	Specifies the counterpart participant.
Deal source	You can filter on one or several deal sources. Simply highlight the one or ones you wish to filter on. To highlight a number of deal sources that appear in a row in the list, hold down the SHIFT key while clicking on the deal sources of your choice. To highlight a number of deal sources that appear in differences places in the list, hold down the CTRL key while clicking on the deal sources of your choice.
Trade type	Specifies the trade type.

8.7 Instrument Group Management

The **Instrument Group Management** window allows you to create, modify, and delete instrument groups.

Open the window from the **Tools** menu.
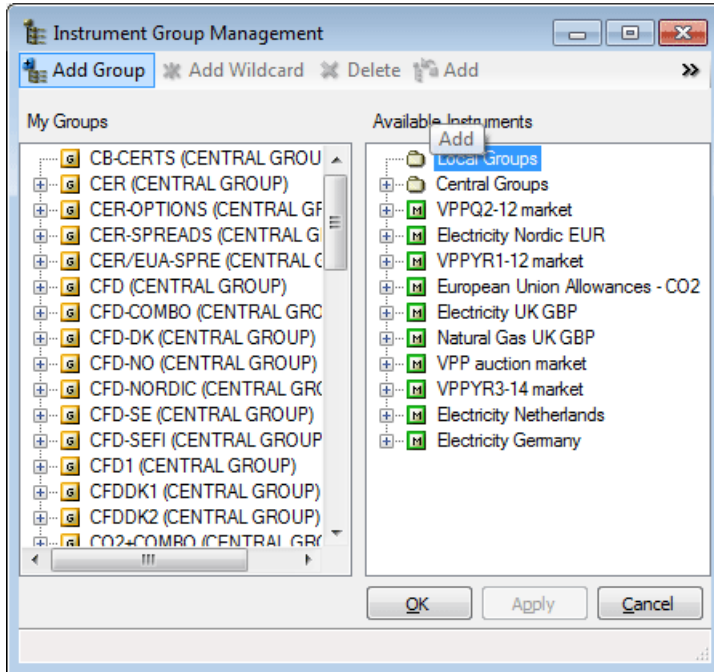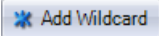
Figure 61: Instrument Group Management Window

The field My Groups contains a number of instruments, which you often need to refer to as a unity. A group name may be used instead of the search criterion in all windows that support searching on instrument names.

A group may consist of a combination of single instruments and references to other groups. Including a reference to another group means that all members of that other group will be seen as members of the enclosing group.

The table below describes the items in the **Group Management** window.

Table 53: Group Management Window Items

Item	Description
Add Group	Click the **Add group** button to add a new group.
Add Wildcard	Click the **Add Wildcard** button to add a wildcard to a selected group, see Using Wildcards on page 125.
Delete	Click the **Delete** button to delete a group or an instrument in a group.
Add	Click the **Add** button to add an instrument to a group.
»	By clicking this **Aggregate** button, you can view the details of a selected instrument.
My Groups	Displays all instrument groups.
Available Instruments	Displays all available instruments.

8.7.1   Creating an Instrument Group

Perform these steps to create an instrument group:

1. Click the **Add group** button.

2. Type the name of the new group in the My Groups section.

3. Select one or several instruments in the right-hand section (by expanding the instrument tree) and click the **Add** button.

   The selected instrument(s) are added to the selected group.

   You can also double-click an instrument instead of first selecting it and then click the **Add** button.

8.7.2   Removing an Instrument from a Group

Perform these steps to remove and instrument from an instrument group:

1. Select the instrument(s) you wish to remove in the My Groups section.

2. Click the **Delete** button.

8.7.3   Removing a Group

Perform these steps to remove a group:

1. Select the group you wish to remove in the My Groups section.

2. Click the **Delete** button.

8.7.4   Using Wildcards

Perform these steps to to use wildcards:

1. Select a group in the left-hand section.

2. Click the **Add Wildcard** button.

3. An empty box appears under the selected group name.

4. Enter a wildcard (* or ?) by itself or with a combination of letters. For example, EC*, ?, or E?C.

5. Click **Apply**, and then **OK**.

6. The wildcard will be added under the selected group in the left-hand section. When you open the Price Information window and select this group, all instruments beginning with your wildcard combination will appear. You can add more wildcards to the same group.

8.8 Market Status

8.8.1 The Information Feed Status Window

In the **Information Feed Status** window you can view the status of the markets that you can access.

Open the window from the **Market** menu.
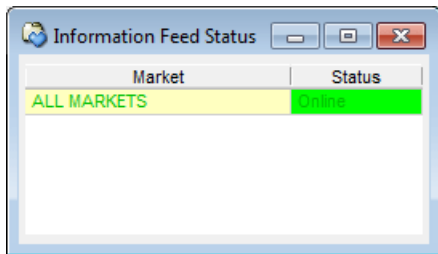
Figure 62: Information Feed Status Window

The table below describes the columns in the **Information Feed Status** window.

Table 54: Information Feed Status Window Columns

Column	Description
Status	Specifies the status of the corresponding market as either *Online* (available) or *Offline* (unavailable).
Market	Specifies the market that the status message concerns. **Note:** This column lists ALL MARKETS as default.

A continuous information feed is sent out from the central Marketplace system. When the signal reaches the application, the **Information Feed Status** window flashes the markets that are currently available in green.

This means that you can be sure that your connection with the marketplace is up and running. If the connection is broken, an error message will appear in the **Market Messages** window. If the feed is delayed or lost, the status for that market will turn to *Offline*, and the text will become red. This does not mean that the connection is broken permanent; the status may in fact return to *Online* if there was a temporary problem with the connection.

9 Setting Your Preferences

The **Preferences** window allows you to modify your user preferences. Open the **Preferences** window from the **Tools** menu.

The window is divided into five tabs, each with different options, described in the sections below.

9.1 General

The **General** tab is used for setting trading-related parameters such as price tick factors and different kinds of confirmations.

Preferences

| General | Interface | Window | Sounds | Order Settings |

☐ Confirmations:

- ☑ Trade report
- ☑ Order registration
- ☑ Order activation
- ☑ Order inactivation
- ☑ Order replies
- ☑ Order cancel
- ☑ Market Order
- ☑ Short Sell
- ☑ Alter by cancel/enter
- ☑ No market price
- ☑ Quote request

☐ Tick Factors:

Price step: `10`

Quantity step: `10`

☐ Miscellaneous:

- ☑ Show prices as tool tip on Enter Order Window
- ☑ Use hotkeys
- ☐ Auto close enter order windows
- ☐ Auto Bring to Front
- ☑ Auto add/delist instruments

Export folder: `                    ` [...]

[OK] [Apply] [Cancel]

Figure 63: General Tab

Table 55: General Tab Items

Item	Description
Confirmations	
Trade report	A confirmation message when you have completed the **Enter Trade Report** window. This check box is selected by default.
Order registration	A confirmation message when you have completed the **Enter Order** and **Change Order** windows. This check box is selected by default. **Note:** This message will not appear if you register a tailor-made combo series order.
Order activation	A confirmation message when you are about to activate an order. This check box is selected by default.
Order inactivation	A confirmation message when you are about to inactivate an order. This check box is selected by default.
Order replies	A confirmation message for messages originating from the central system that, when an order is placed in the order book, for example. This check box is selected by default.
Order cancel	A confirmation message when you cancel orders from the order book. This check box is selected by default.
Market Order	A confirmation message when you are about to place a market order, that is, when you have not defined a specific price for the order, but want to buy/sell at whatever price is in the market. This check box is selected by default.
Short Sell	A confirmation message when you are about to to enter an order as a short sell.
Alter by cancel/enter	A confirmation message when you are about to change an order in a way which destroys its current ranking. In this case the change is performed by deleting the old order and placing an entirely new order, for example, if you change to a better price. This check box is selected by default.
No market price	A confirmation message when there are no orders in the instrument type you are about to act in. This check box is selected by default. **Note:** This message will not appear if you register a tailor-made combo series order.
Quote request	A confirmation message when you are about to send a quote request. This check box is selected by default.

Item	Description
Tick Factors	
Price step	Increase or decrease the price by the number of steps specified. Each step is equal to the price tick size.
	For example, an instrument has a price tick size of 0.5 for a price below 4, and a price tick size of 0.25 for a price above 4. If the price step is 3 and the current price for the instrument is 3.0, then the price increase using the tick factor function is 3.0 + 0.5 + 0.5 + 0.25 = 4.25.
Quantity step	Increase or decrease the quantity by the specified quantity step. This works together with the instrument's tick size.
	For example, if the tick size is 0.5 and you choose 3 for quantity step, the quantity will change by 1.5 each time you step it.
Miscellaneous	
Show prices as tool tip on Enter Order window	When this check box is selected, a tool tip displaying information about price limits appears in the Enter Order, Enter Stop Order, and Enter Tailor-Made Combination windows when you are about to enter prices.
Use hotkeys	When this check box is selected, hotkeys are enabled. For a list of hotkeys available, see subchapter "Hotkeys" on page 32.
Auto close enter order windows	Close the **Enter Order** window (and any other windows used to enter orders of various kinds) after the order has been sent to the exchange.
Auto bring to front	Select this check box to automatically bring all windows to the front whenever a window is activated.
Auto add/delist instruments	Select this check box to add/remove instruments automatically in the **Price Information** and **Price Quotation** windows. If you clear this check box, a refresh button will appear in the window when changes in series are made centrally.
Export folder	Click the **Browse** button, , to see your folder structure. In this structure, select a folder to serve as storage area for information that you wish to store.

9.1.1 Tick Factor

This functionality allows you to increase or decrease a price or quantity by more than the standard tick size. It is implemented in the **Enter Order**, **Change Order**, and **Price Quotation** windows.

In the **Enter Order** and **Change Order** windows, hold down the CTRL key and click the up/down arrow in the price or quantity field.

In the **Price Quotation** window, select a price or quantity cell and press the MINUS SIGN or PLUS SIGN.

9.2 Interface

The **Interface** tab is used for setting parameters related to interfacing the exchange, such as connection loss detection.
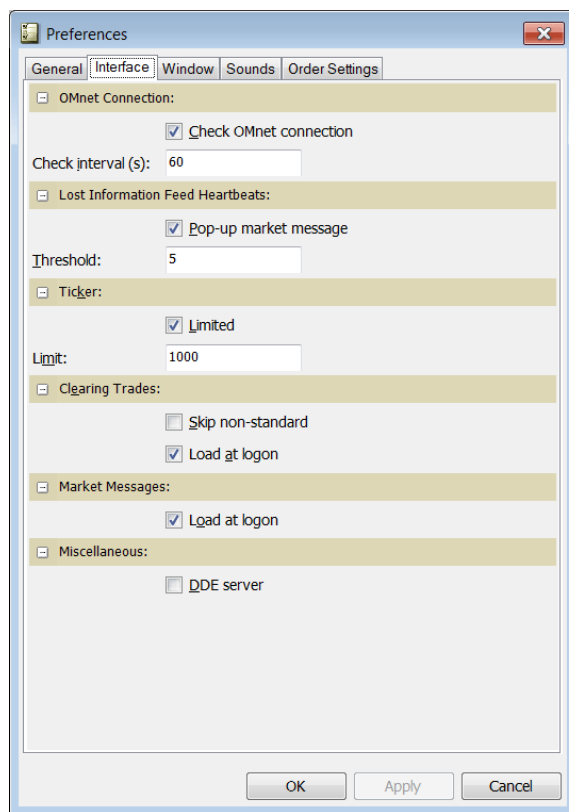
Figure 64: Interface Tab

Table 56: Interface Tab Items

Item	Description
OMnet Connection	
Check OMnet connection	Check if the connection to the exchange is still up.
Check interval (s)	Specify in seconds the intervals at which you want to check the connection to the exchange.
Lost Information Feed Heartbeats	
Pop-up market message	Show a market message if a certain number of consecutive heartbeats from the exchange are lost.
Threshold	Enter a value that specifies the number of lost consecutive heartbeats allowed before a market message is sent out.
Ticker	
Limited	Select this check box to limit the number of tickers displayed.
Limit	Enter a value that specifies the number of tickers allowed.
Clearing Trades	
Skip non-standard	Indicate if non-standard clearing trades should be excluded from the feed of clearing trades (in order to conserve bandwidth).
Load at logon	Select this check box to retrieve old clearing trades at logon.
Market Messages	

Item	Description
Load at logon	Select this check box to retrieve old market messages at login.
Miscellaneous	
DDE server	Indicate if the application should be active as a DDE server, such that it can interchange information with other windows applications.

9.3 Window

The **Window** tab allows you to modify the appearance of the windows, such as the different colors.
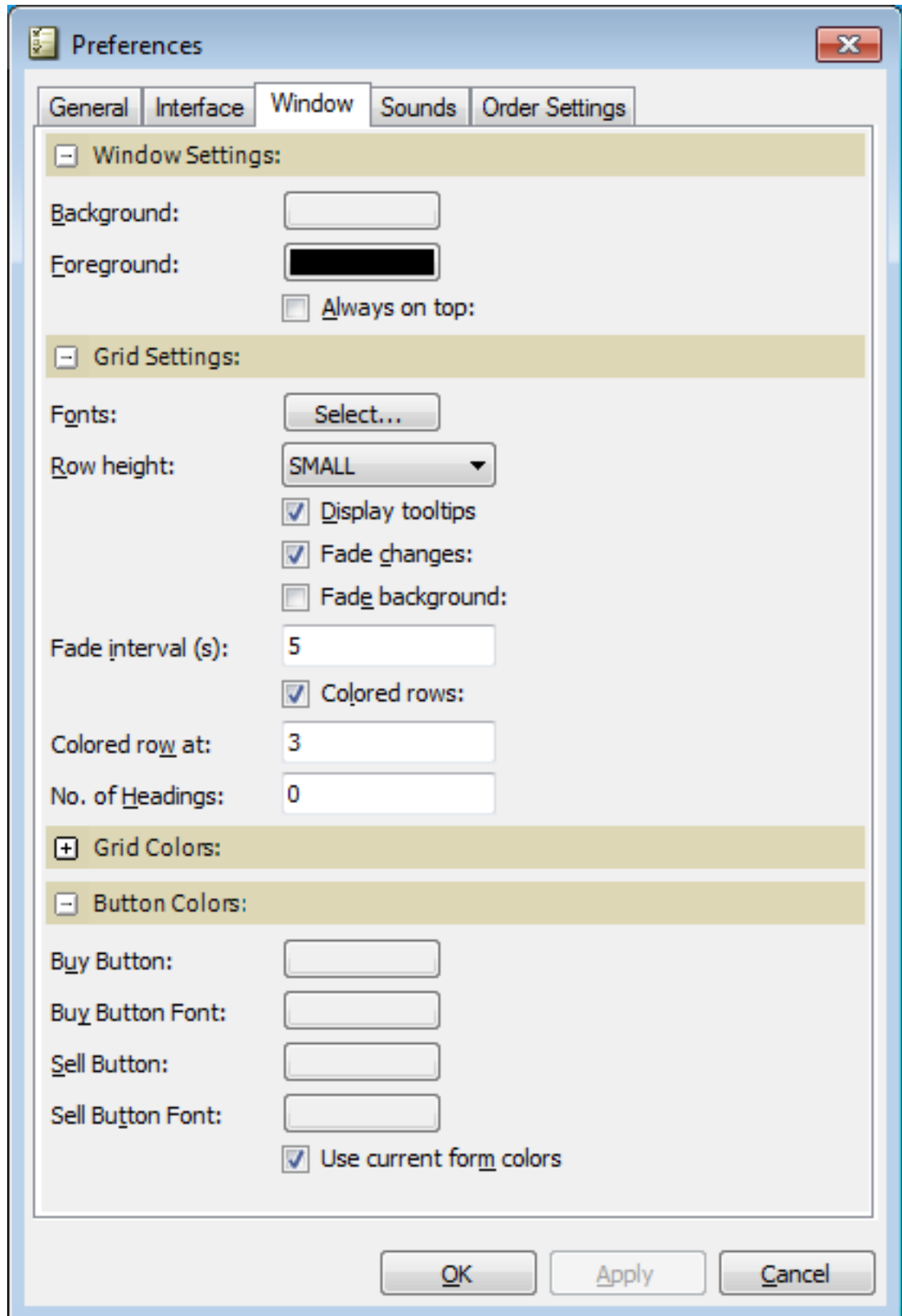
Figure 65: Window Tab

Table 57: Window Tab Items

Item	Description
Window Settings	Clicking on the **Background** or **Foreground** color buttons will display a window allowing you to choose a new color. Click inside the new window to close it.
Grid Settings	The **Grid Settings** include options for customizing the appearance of your grids, such as fonts, row height, and designating certain rows to appear in a different color.
Grid Colors	Click the **+** symbol to expand the section. Clicking on one of the grid color buttons will display a window allowing you to choose a new color for that grid. Click inside the new window to close it.
Button Colors	This section allows you to set a color of your choice for the **Buy** and **Sell** buttons in the Enter Order, Enter Stop Order, and Enter Tailor-Made Combinations (**Send Bid** and **Send Ask** buttons as well) windows. You can alter the color of the button as well as the color of the text displayed in the button to your liking. You must remember to clear the "Use current form colors" check box, which is selected by default, in order for your new settings to become valid. If the check box remains selected, your new settings will not become valid.

9.4 Sounds

The **Sounds** tab is used for selecting which warning sounds to be emitted for different events.
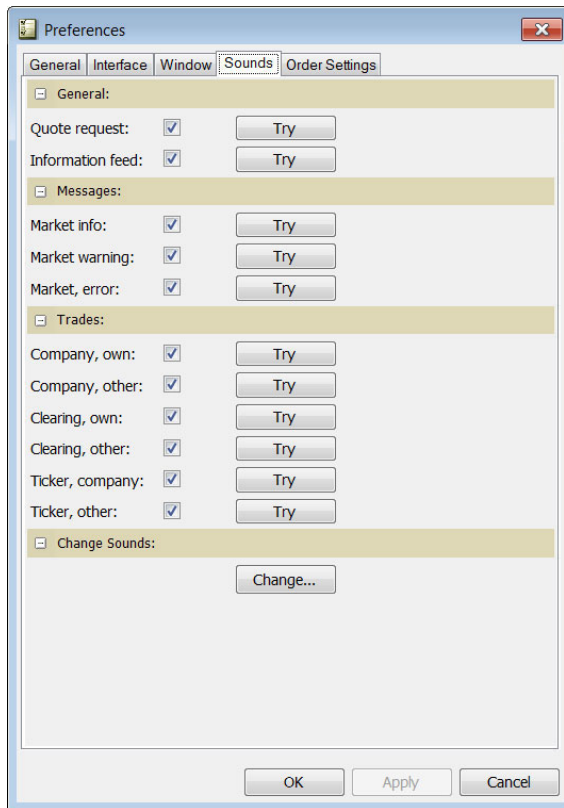
Figure 66: Sounds Tab

Select the check boxes to activate sounds for different events, or click the **Try** button to listen to the sound currently set for this event.

The **Change** button launches the Windows sound properties window, where the different sounds can be changed.

9.5 Order Settings

Under the **Order Settings** tab you can specify default values for your orders, along with limits for deviation warnings.
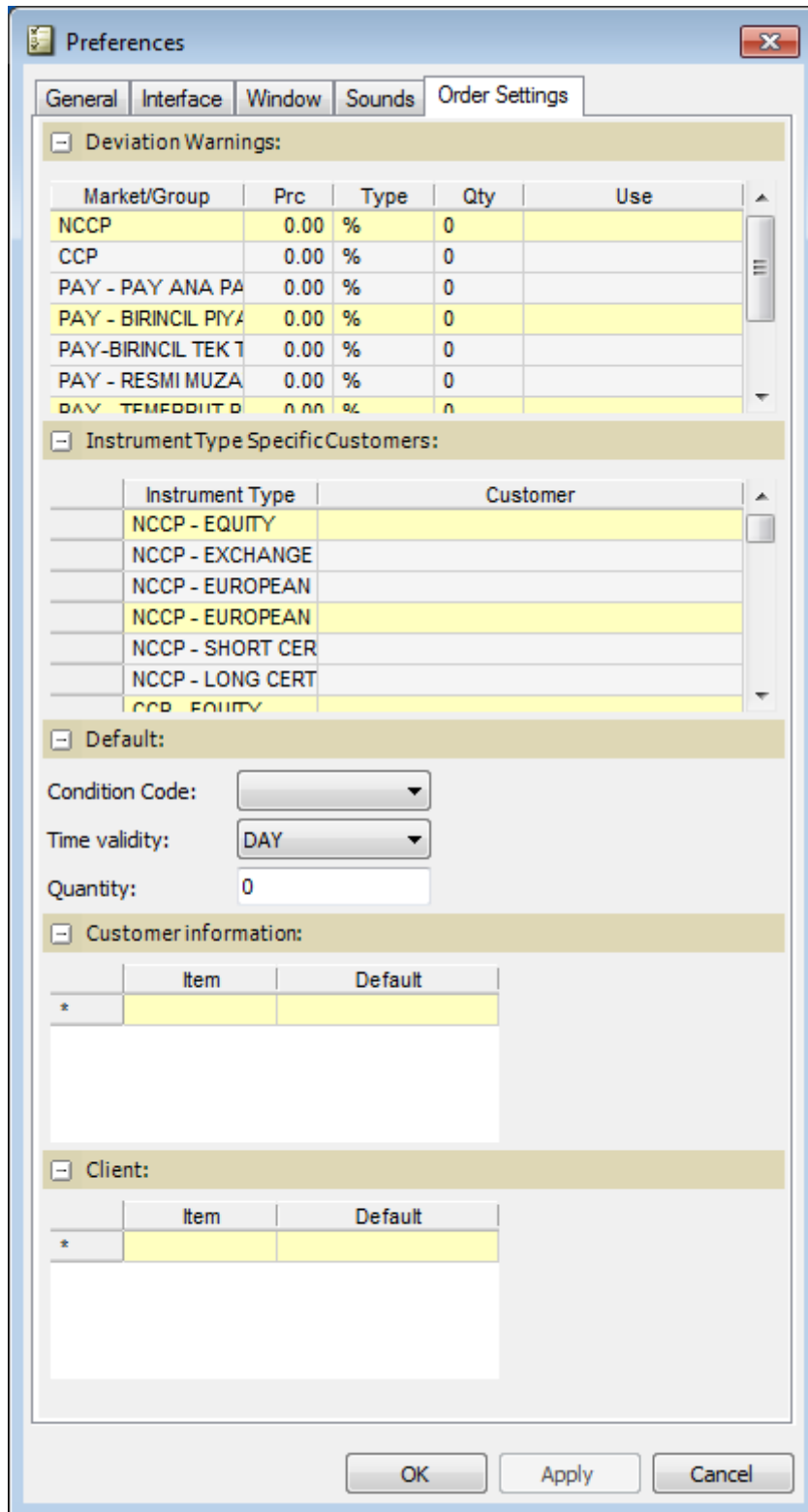
Figure 67: Order Settings Tab

The table below describes the items in the **Order Settings** tab.

Table 58: Order Settings Tab Items

Item	Description
Deviation Warnings	
Mkt/Group	Fat finger protection can be set on market or group level. There will always be one row for each market configured for the trader.
Prc Dev	Price deviation.
	Select fat-finger protection for price and quantity.
	The maximum difference between a new order and the best bid/ask in the market. If the price of an order is larger than this difference, a warning will be displayed when trying to enter the order. The difference (stated with two decimals) can be defined as a percentage or as an absolute value. A value of zero means that the price should be unrestricted.
Type	Select type for deviation warning:
	% Percentage
	ABS Absolute value
	MAX Maximum value
	Fixing bps Maximum number of basis points allowed to deviate from yester-day's fixing price without showing a warning.
Qty	The maximum, absolute, quantity/volume for a new order. If the volume specified for an order is larger than or equal to this quantity, a warning will be shown when trying to enter the order. A value of zero means that the volume should be unrestricted.
Use	Specifies if this deviation warning setting is active or not. When this checkbox is unchecked, the deviation warning setting is stored, but not used. This means that the trader can recheck the checkbox at a later point, using the same settings as before.
Price Quotation	
Check price deviation	Issue a warning if the price of the quotation is outside the price deviation limits. This option requires that you have activated general price deviation warning confirmations above.
Auto spread at enter	Enter a matching quote on the other side of the spread, according to spreads defined per instrument.
Instrument Type Specific Customers	
Instrument Type / Customer	Use the Customer field to map customers to specific Instrument Types.
Default	
Condition Code	Condition Code
Time validity	Time validity that will appear as default time validity in all enter order windows.
Quantity	Default quantity.
Customer information	
Item	Enter pre-defined Customer Information to be available in relevant **Enter Order** windows.
Default	Check a box to make specific Customer Information default.
Client	
Item	Place the cursor in the Item box and type an item to be available as a Client in **Enter Order** and related windows.

Item	Description
Default	Place the cursor in the Default box, and select the check box that appears, to set this item as the default.

9.5.1 Setting Deviation Warnings (Fat Finger Protection)

If you set deviation warnings, or so-called fat finger protection, the following windows will be checked and if a setting value is exceeded, a confirmation message will appear:

- **Enter-**, **Change-**, **Execute Order** windows
- **Enter-** and **Changed Linked Order** windows
- Enter quote or indicative quote in **Price Quotation** window

The check is also performed when DDE is used, see

Perform this procedure to specify deviation settings.

1. Enter the new settings under general or specific deviation warnings.

   Each row represents one deviation warning setting.
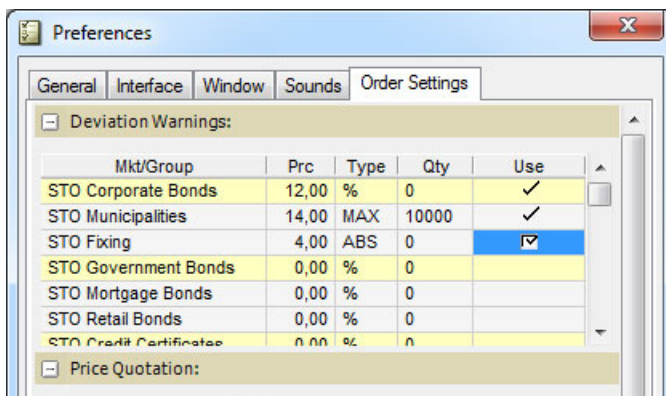
2. Click **OK** to save the deviations settings.

   Example

   The below dialog box is an example of a confirmation window.
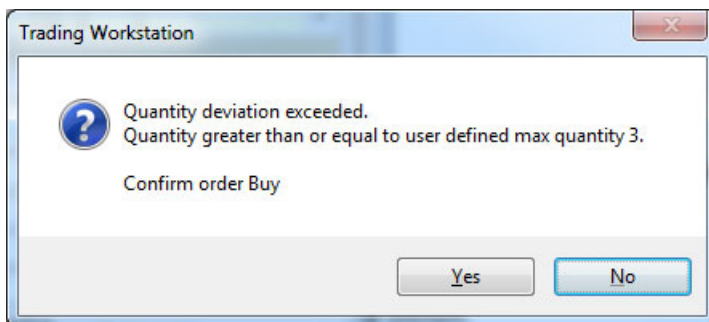
A   Glossary

Table 59: Glossary

Term	Description
Account	Each trade is registered on a single account.
	The members' and Market Makers' so-called daily accounts and the clients' trader accounts are normally used when trading, but they cannot hold any positions over night.
	A member can work on a position for several days on an interim account. Such a large position may then be transferred to a client account within the same organization.
Accounting details	Accounting order for the business accounting.
Accounting rule	All transactions should be posted to the correct accounts in the business accounting. These rules can be changed manually in the Settlement system.
American option	The option holder can, at any time during the lifetime of the option, use his/her right to buy or sell the underlying security, to exercise the option.
At-the-money-option	Option for which the strike price corresponds to the current market price of the underlying value.
Automatic exercise	A protection procedure where the clearing-house attempts to protect the holder of an expiring in-the-money option by automatically exercising the option on behalf of the holder.
Best Bid and Offer (BBO)	The matching engine maintains its own BBO based on all visible orders and quotes in its own market, including baits.
Call option	Security which gives the holder the right, but not the obligation to purchase the underlying security for a fixed price during the lifetime of the option (American style) or on expiration day (European-style options).
Cancellation note	Summary of canceled transactions by day. The cancellation note includes contract information by client and day.
Cash settlement	The settlement provision on some options and futures contracts that do not require delivery of the underlying instrument.
	For options, the difference between the settlement price on the underlying and the option's strike price is paid to the options holder at exercise.
	For futures contracts, the exchange establishes a settlement price on the final day of trading and all remaining open positions are marked to market at that price.
Charge	Remuneration for services, debited to the client by the broker, except for brokerage or tax.
Clearing fee	The transaction costs that are debited to the account due to a trade.
Clearing-house	Also referred to as a central clearing organization.
Clearing notes	Notes distributed to members pertaining to trading activities with the exchange, including Payment, Re-Registration, Margin and position listing, Summary lists, and Exercise and Delivery notes.
Clearing office	The back-office part of the clearing-house organization.
Client	Clients are composed of members trading in their own inventory and external investors. The distinction is that a member can be a client in a trade, but a member is never considered to be an investor.
	The investors do not have direct access to the marketplace and they are represented by a member at the exchange.

Term	Description
Closing transaction	A transaction where the client either buys back an identical contract written earlier or sells an identical contract purchased earlier. See Opening transaction.
CO	Set first leg to close, other legs to open (valid for combo series).
Collateral	Stocks, bonds or other securities approved as collateral, deposited and pledged as security for the obligations of the option issuer, or the buyer or seller of forwards.
Commission fee	A broker's charge for arranging a transaction for a client.
Commit	A commonly used command for performing an action in the system.
Company	The company is the member's identification code.
Customer	The customer is the member's identification code.
Cycle class	Classification of series noted by the Marketplace, according to the interval at the end of which the option matures. For example, a cycle class can be February, May, August, and November.
Deal	Transaction between two or more parties concerning the same securities, price, and time. These parties have identical transaction dates and settlement dates.
	A deal is regarded as a set of trades where each trade conceptually has the clearinghouse as the counterparty.
Dismiss	A commonly used command for leaving a form without completing any action.
Duration	The lifetime of a series. From the first listing day to the expiration date of the series.
End-customer	See Client/Investor.
End-company	See Client/Investor.
European option	An option which means that the option holder can only exercise his/her right to buy or sell the underlying security on the expiration day of the option.
Exercise	Allows you to make use of the rights specified in the option to buy or sell the underlying security. Exercise has to be preceded by an exercise order.
Exercise note	Summary of the day's exercised transactions. The exercise note states the type of option, client, and date.
Expiration date	Date on which an option expires and ceases to exist.
External Best Bid and Offer (EBBO)	The EBBO is received from external sources.
Held option	An opening purchase resulting in rights for the client to buy or sell the underlying value according to the conditions of the option.
Holder	The person who has the right in an option transaction. The holder of a Call option has the right to buy the underlying security. The holder of a Put option has the right to sell.
Holding	A registered trade or a rectification (correction) of a trade or a deal is never performed at once. Instead, they are put on hold until they are either confirmed or rejected by the back office or the clearing office.
In-the-money-option	Option with intrinsic value, that is, a call option with a strike price that is lower than the current market price of the underlying security, and put options with a strike price that is higher than the current market price of the underlying security.
Index option	Option for which the underlying value is an index.
Interest rate option	Option for which the underlying value is a bond or any other interest rate bearing security.
Intrinsic value	The positive difference between the strike price and the price of the underlying security. (See In-the-money-options.)

Term	Description
Journal number	A serial number that is created for each accounting of either the transfer from the Clearing System or the registered payments.
Lifetime	Time during which an option can be used. From the first listing day to the expiration date of the option series. (Also called duration.)
Limit order	Order with a specified price.
Liquidity forecast	A forecast over incoming and outgoing payments.
Margin requirements	Amount of collateral provided for written options and the purchase and sale of forwards.
Market Maker	A company or other legal entity which, in exchange for lower transaction fees (clearing fees), agrees to continuously quote firm bid and offer prices in some series.
Market order	Order concerning purchase or sale to the best possible price in the market.
Maturity	Denotes the point in time at which options cease to exist.
Member	Banks, Market Makers and broker firms authorized to trade directly with the exchange (see Customer).
National Best Bid and Offer (NBBO)	The matching engine calculates the NBBO based on the EBBO and BBO. The Bid part of the NBBO is the best price among the Bid prices in EBBO and BBO, correspondingly for the Ask part of the NBBO.
Note specification	A list of all the client's payment notes, up to a specified settlement date.
Note type	Represents type of note in the different option types respectively, such as trade note, exercise note, or cancellation note.
OC	Set first leg to open, other legs to close (valid for combo series).
Open interest	The net total of outstanding open contracts in a particular option series.
Opening transaction	An initial transaction where a member becomes a holder or a writer of the option. See also Closing transaction.
Option class	Options that are related to the same underlying value.
Option group	Options with the same expiration date.
Out-of-the-money option	An option lacking intrinsic value, that is, call options with a strike price that is higher than the current market price of the underlying security, and put options with a strike price that is lower than the current market price of the underlying security.
Payment note	A specification of the amount that will be drawn from, or put into, the client's bank account on the settlement day. The payment note is forwarded to the client.
Payment order	A specification of the amount that will be drawn from, or put into, your bank account, per bank, bank account and client. The payment order is forwarded to the bank.
Payment verification order	All payments made during one day are given a verification number. All the transactions that should be paid at the same time are given a common verification number.
Premium	The market price that the option holder pays for the option, and the amount that the option writer receives for writing (excluding the transaction costs).
Put option	Option which grants the holder the right, but not the obligation, to sell an underlying value for a fixed price during the time until the expiration date (American styled), or on the expiration day (European-styled options).
Rectify	The process of correcting mistakes made by the clearing-house or its members.
Series	A series uniquely defines what is actually traded in a deal.
Settlement	Procedures for payments and physical delivery of the contractual basis.

Term	Description
Settlement date	The date on which payment is made, according to Exchange regulations, or according to a special agreement made as part of the trade.
Stock issue	Means that a company increases its stock capital and/or the total number of stock in the company. There are different types of issues, such as bonus issues, split and new issues.
Stock options	Options which grant the holder the right to buy or sell the underlying stock.
Strike price	The price of underlying security that the option holder has to pay or sell if the option is exercised.
Trade	A standardized contract between the clearing house and a client.
Trading support	The part of a marketplace that supports the brokers.
Transfer	A movement of contracts between accounts.
User name	Each user is given a user name by the supervisor of the system. This name, together with a password, is then used at login.
Writer	The person who has the obligation in an option transaction. The writer of a Call option has the obligation to sell the underlying security. The writer of a Put option has the obligation to buy.
Written option	An opening transaction where the client is obliged to buy put options, or sell call options, the underlying value according to the conditions of the option.

B Calculation Reference

B.1 Formulas for Bonds

B.1.1 Conversion from Forward Yield to Forward Price

$$\text{Price}_{\text{dirty}} = \frac{\frac{Coupon}{Yield_{decimal}} \times ((1 + Yield_{decimal})^n - 1) + 100}{(1 + Yield_{decimal})^{n-1+d/360}}$$

n = number of coupons left

d = days to next coupon

Figure 68: Conversion from Forward Yield to Forward Price

B.1.2 Value of a Basis Point: BPV

$$\text{Value of a basis point (BPV)} = \frac{\text{Modified Duration} \times \text{Dirty Price}}{100}$$

Alt: Shift the yield one Bp down and take the price difference x 100.

Figure 69: Value of a Basis Point - BPV

B.1.3 Conversion of Yield Volatility to Price Volatility

$$\text{Price volatility} = \frac{\text{Yield volatility}}{(\text{Price}/\text{Yield}/\text{BPV})}$$

Figure 70: Conversion of Yield Volatility to Price Volatility

B.1.4 Conversion from Simple Interest to Continuous Compounding Yield

$$\text{Continuous yield} = LN(1 + (\frac{r_{simple}}{100 \times n})) \times 100 \times n$$

n = capitalizations per year

Figure 71: Conversion from Simple Interest to Continuous Compounding Yield

B.2 Formulas for Option Valuation

B.2.1 Black & Scholes

$$Call_{B\&S} = Price \times Normsdist\ (D_1) - e^{-repo \times time_{disc}} \times Strike \times Normsdist\ (D_2)$$

$$Put_{B\&S} = -Price \times Normsdist\ (-D_1) + e^{-repo \times time_{disc}} \times Strike \times Normsdist\ (-D_2)$$

$$D_1 = \frac{Ln(\frac{Price}{Strike}) + ((Repo \times \frac{volatility^2}{2}) \times time_{distribution})}{volatility \times \sqrt{time_{distribution}}}$$

$$D_2 = D_1 - volatility \times \sqrt{time_{distribution}}$$

$$Delta_{call} = Normsdist\ (D_1)$$

$$Delta_{put} = Normsdist(D_1) - 1$$

$$Gamma_{B\&S} = \frac{(1/\sqrt{2 \times \pi}) \times e^{(\frac{-D_1^2}{2})}}{Price \times volatility \times \sqrt{time_{distribution}}}$$

$$Vega_{B\&S} = Price \times \sqrt{time_{distribution}} \times (e^{\frac{-D_1^2}{2}} / \sqrt{2 \times \pi})$$

$$Theta_{B\&S\text{-}call} = ((\frac{Price \times volatility \times (e^{\frac{-D_1^2}{2}} / \sqrt{2 \times \pi})}{2 \times \sqrt{time_{distribution}}}) + (repo \times Strike \times e^{-repo \times time_{disc}} \times Normsdist(D_2))) / 365$$

$$Theta_{B\&S\text{-}put} = ((\frac{Price \times volatility \times (e^{\frac{-D_1^2}{2}} / \sqrt{2 \times \pi})}{2 \times \sqrt{time_{distribution}}}) - (repo \times Strike \times e^{-repo \times time_{disc}} \times Normsdist(-D_2))) / 365$$

Figure 72: Black & Scholes

B.2.2 Black -76

$$\text{Call}_{B-76} = e^{-\text{repo} \times \text{time}_{\text{disc}}} \times (\text{Price} \times 100 \times \text{Normsdist}(D_1) - \text{Strike} \times 100 \times \text{Normsdist}(D_2))$$

$$\text{Put}_{B-76} = e^{-\text{repo} \times \text{time}_{\text{disc}}} \times (-\text{Price} \times 100 \times \text{Normsdist}(-D_1) + \text{Strike} \times 100 \times \text{Normsdist}(-D_2))$$

$$D_1 = \frac{Ln(\frac{\text{Price}}{\text{Strike}}) + ((\frac{\text{volatility}^2}{2}) \times \text{time}_{\text{distribution}})}{\text{volatility} \times \sqrt{\text{time}_{\text{distribution}}}}$$

$$D_2 = D_1 - \text{volatility} \times \sqrt{\text{time}_{\text{distribution}}}$$

$$\text{Delta}_{\text{call}} = e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \text{Normsdist}(D_1)$$

$$\text{Delta}_{\text{put}} = e^{-\text{repo} \times \text{time}_{\text{disc}}} \times (\text{Normsdist}(D_1) - 1)$$

$$\text{Gamma}_{B-76} = \frac{(1/\sqrt{2 \times \pi}) \times e^{(-\frac{D_1^2}{2})}}{\text{Price} \times \text{volatility} \times \sqrt{\text{time}_{\text{distribution}}}} \times e^{-\text{repo} \times \text{time}_{\text{disc}}}$$

$$\text{Vega}_{B-76} = \text{Price} \times e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \sqrt{\text{time}_{\text{distribution}}} \times (e^{-\frac{D_1^2}{2}} / \sqrt{2 \times \pi})$$

$$\text{Vega}_{\text{yield } B-76} = \frac{\text{Vega}_{\text{Price volatility}}}{(\text{Price} / \text{Yield} / \text{BPV})}$$

$$\text{Theta}_{B-76\text{-call}} = ((\frac{\text{Price} \times e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \text{volatility} \times (e^{-\frac{D_1^2}{2}} / \sqrt{2 \times \pi})}{2 \times \sqrt{\text{time}_{\text{distribution}}}}) + (\text{repo} \times \text{Strike} \times e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \text{Normsdist}(D_2)) - (\text{repo} \times \text{Price} \times e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \text{Normsdist}(D_1))) / 365$$

$$\text{Theta}_{B-76\text{-put}} = ((\frac{\text{Price} \times e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \text{volatility} \times (e^{-\frac{D_1^2}{2}} / \sqrt{2 \times \pi})}{2 \times \sqrt{\text{time}_{\text{distribution}}}}) + (\text{repo} \times \text{Price} \times e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \text{Normsdist}(-D_1)) - (\text{repo} \times \text{Strike} \times e^{-\text{repo} \times \text{time}_{\text{disc}}} \times \text{Normsdist}(-D_2))) / 365$$

Figure 73: Black -76

B.3 Calculation Logic

Whenever a price update is received from the exchange, the Trading Workstation checks if a parameter is defined for the instrument. If so, one of two paths is taken. The instrument is either an underlying (either 'real' or 'defined'), where all derivatives to that instrument are recalculated, or a derivative, where only the instrument itself is recalculated.

The calculation starts by finding an underlying value (for both BID and ASK), and if you have entered an Override, that value will be used. Interest rate options underlyings will be converted to prices, if needed.

The number of days until strike is calculated. The time between the premium payment and final payment is also calculated.

The next step is to establish a risk-free interest rate. The rates you enter in Global parameters have previously been converted to continuous compound rates, which are used in the calculations.

The updated price record is then distributed to all subscribers. This means in practice that all calculations take place only once, no matter how many subscribers (windows) there are. This also means that if there are no subscribers, no calculation will be done even if there is a parameter.

Implied volatility and risk ratios are then calculated using the model specified in the parameter record. B76 is used instead of B&S if the underlying is an index or bond future.

For forwards/futures, implied repo is calculated instead of implied volatility.

For bond options, price volatility is converted to yield volatility.

For bond futures, BPV is shown in the delta put column.

The result is implied volatilities, risk ratios and a calculated BID and a calculated ASK.

B.4 Dates and Day Counting

When you enter a date in the Global Parameters, the number of days from today to the given date is calculated, both actual days and using 30/360 and E30/360. Also, this time is calculated in years, using E30/360, 30/360, ACT/360, and ACT/365.

This table is recalculated at Trading Workstation start-up, and is searched every time a rate needs to be found.

B.4.1 Differences between E30/360 and 30/360

The E30/360 way of calculating days and years presupposes that every month has 30 days; in the case of a 31st day, the number of days will be adjusted to 30. According to the 30/360 way of calculating days and years, the start date is adjusted to 30 if it is higher than 30. The final date is only adjusted to 30 if the start date equals, or is higher than, 30. In other words, it is only in cases where the start date equals a number between 1 and 29 and the final date equals 31 that the calculated number of days will differ between the two calculating methods. See also Table 1 below for examples of this.

> *Example 4:*
>
> Let us assume that we are to calculate the number of days for the time period 31 July – 31 August 2002. The following formula will be used:
>
> difference in years * 360 + difference in months * 30 + difference in days * 1 = number of days
>
> year: (0 – 0) * 360
>
> month: (8 – 7) * 30
>
> day: (30 – 30) * 1
>
> In the case of the aforementioned time period, then, the calculation will look as follows:
>
> 0 * 360 + 1 * 30 + 0 * 1 = 30
>
> In the table below, the difference between the two ways of calculating number of days and years is illustrated in two examples.

Table 60: Calculating Days According to E30/360 and 30/360

Time Period	E30/360	30/360
31 July – 31 August	Number of days: 0 * 360 + 1 * 30 + 0 * 1 = 30 days Number of years: 30/360 = 0.083333	Number of days: 0 * 360 + 1 * 30 + 0 * 1 = 30 days Number of years: 30/360 = 0.083333
28 February (Year 1) – 31 March (Year 2)	Number of days: 1 * 360 + 1 * 30 + 2 * 1 = 392 Number of years: 392/360 = 1.0888888	Number of days: 1 * 360 + 1 * 30 + 3 * 1 = 393 Number of years: 393/360 = 1.0916666

B.5 Calculation Configurations

See [Understanding Calculations](#) on page 97.

C DDE Interface Usage and Syntax Description Overview

C.1 Overview

The Trading Workstation Trade DDE (Dynamic Data Exchange) Interface gives external applications, such as Excel, access to certain functions or "topics" in Trading Workstation .

The Instrument Information topic allows the external application to specify and subscribe to changes for each item of interest. An item is specified using the identity or ISIN code of an instrument and a field-code, for instance OMX0A500X/Bid1 (Bid price of instrument OMX0A500X).

The Instrument Name topic gives access to the series names available in the application.

By using the Enter Order topic, an external application can enter orders into the Marketplace.

The Enter Quote topic allows the external application to change quote volumes or prices and to send the quote to the market (optional).

Trading Workstation Trade adjust number formats to the local settings in your windows operating system (Control Panel - International). The decimal point character specified there is used when formatting a result string before sending it to the external application. The number of decimals used is defined in the Central Database (CDB).

The DDE Interface is activated in the **Tools** menu > **Preferences** > **Interface tab** > **Miscellaneous**. The DDE server check box must be selected in order for external applications to be able to use the DDE Interface.

C.2 DDE Interface Syntax Description

C.2.1 Obtaining Instrument Information

The DDE application and topic to be used are Click and Price, respectively.

The Item contains an instrument identity or ISIN code, a slash ("/") character, and a field code.

```
Application:    Click
Topic:          Price
Item:           OMX0A500X/BidVol1
```

> **Note:** The use of inter-process communication based on the DDE mechanism leads to a significant cost in terms of processing time. Do not use DDE to show large amounts (>100) of items at the same time.

Table 61: Field Codes for the Instrument Information Topic

Field Code	Description
Bid1	Single Market, best bid price
Bid2	Single Market, second best bid price
Bid3	...

Field Code	Description
Bid4	
Bid5	
Ask1	Single Market, best offer
Ask2	Single Market, second best offer
Ask3	
Ask4	
Ask5	
BidVol1	Single Market, best bid volume
BidVol2	Single Market, second best bid volume
BidVol3	
BidVol4	
BidVol5	
AskVol1	Single Market, best ask volume
AskVol2	Single Market, second best ask volume
AskVol3	
AskVol4	
AskVol5	
BlkBid1	Block market, best bid price
BlkBid2	
BlkBid3	
BlkBid4	
BlkBid5	
BlkAsk1	Block market, best offer
BlkAsk2	
BlkAsk3	
BlkAsk4	
BlkAsk5	
BlkBidVol1	Block market, best bid volume
BlkBidVol2	
BlkBidVol3	
BlkBidVol4	
BlkBidVol5	
BlkAskVol1	Block market, best ask volume
BlkAskVol2	
BlkAskVol3	
BlkAskVol4	

Field Code	Description
BlkAskVol5	
Last	Last price
CorrLast	Last corresponding price
LastVol	Last volume
High	Highest price this day
CorrHigh	Highest corresponding price this day
Low	Lowest price this day
CorrLow	Lowest corresponding price this day
TotVol	Total volume this day
OpenInt	Open interest
Open	Opening price
CorrOpen	Corresponding opening price
Settle	Settlement price
Fixing	Fixing price
BidImp	Implied volatility for Single Market best bid
AskImp	Implied volatility for Single Market best ask
BlkBidImp	Implied volatility for block market best bid
BlkAskImp	Implied volatility for block market best ask
Delta	Delta
Gamma	Gamma
Vega	Vega
Theta	Theta
CalcBid	Calculated (Theoretical) Bid
CalcAsk	Calculated (Theoretical) Ask

Note: The implied volatilities and greeks (Delta, Gamma, Vega, Theta) are calculated according to the parameters entered in the Instrument Parameters and Global Calculation Parameters windows in Trading Workstation .

Note: Microsoft Excel only allows 15 significant digits. Adding more numbers will causes number to appear in exponential notation.

C.2.1.1   Using the DDE Interface from Excel

When you use the DDE Interface from Excel, one item per spreadsheet cell can be displayed. For example, you may choose to get the best bid value from the block market for a certain instrument in one cell and the best ask value in another. You are required to modify the cell formula if you want to display a new item in a specific cell.

The following syntax is used to specify and subscribe to an item in a spreadsheet cell:

```
=Click|Price!'<id>/<field>'
```

<id> is a valid instrument identity, such as OMX5H1260 or ASTRA, or an ISIN code.

<field> is one of the field codes listed in the Filed Codes for the Enter Order Topic table above.

```
=TW|Price!'OMX/Last' =Click|Price!'OMX6B1400/BlkBid1'
```

The first example specifies the last price for OMX, and the second specifies the best block market bid price for OMX6B1400.

C.2.2 Obtaining Instrument Names

Use DDE Application "Click," Topic "Names" and specify a series or group name. You may use wildcards (such as "*" or "OMX*00*"). Note that to get all series names, you have to specify "*," that is, an empty name is not allowed. The result is a string containing all matching series names, separated by carriage return and line feed special characters.

```
Sub LoadInstruments()
myC = Application.DDEInitiate("CLICK", "Names")
result = Application.DDERequest(myC, "*")
Application.DDETerminate (myC)
 For i = LBound(result) To UBound(result)
     If LBound(result) <> UBound(result) Then
         v = result(i, 1)
     Else
         v = result(i)
     End If
     Worksheets("Sheet1").Cells(i, 1).Formula = v
 Next

  End Sub
```

C.2.2.1 Using the DDE Interface from Excel

This function is typically used from the integrated Excel Visual Basic programming language.

From an Excel perspective, the returned data is viewed as an array of name strings. The following sample code retrieves all series names and inserts them into the worksheet cells A1, A2, A3...

```
Sub GetNames()
     myChannel = Application.DDEInitiate("Click", "Names")
     result = Application.DDERequest(myChannel, "*")
     Application.DDETerminate (myChannel)
     For i = LBound(result) To UBound(result)
         If LBound(result) <> UBound(result) Then
 v = result(i, 1) Else v = result(i)
         Worksheets("Sheet1").Cells(i, 1).Formula = v
     Next
 End Sub
```

C.2.3 Entering Orders

The DDE application and Topic to be used are "Click" and "EnterOrder," respectively.

The Item consists of "Buy" or "Sell" followed by an equals sign ("="), an instrument identity or ISIN code, and a number of parameters separated by vertical bar ("|") characters. Each parameter consists of a field code (see table below) and a value. You only need to include parameters that are to have a value different from their default. Please note that the parameter order is insignificant.

```
Application: Click
Topic:          EnterOrder
Item:           Sell=OMX0A500X|Price=10|Volume=20|Cond=FAK
```

Table 62: Field Codes for the Enter Order Topic

Field Code	Description
Volume	Specifies the order volume.
VolumeShow	Allows you to see the volume for customers using hidden volume, VolumeShow may be used to define the volume to be shown. Hidden volume would then be calculated as the difference between Volume and VolumeShow. If VolumeShow is not defined, then shown volume is assumed to be the same as Volume (no hidden volume).
Price	Specifies the order price. (Use if instrument is traded in price)
Yield	Specifies the order price. (Use if instrument is traded in yield)
BlockSize	Specifies the block size of the market in which the order/quote is to be entered. If undefined, single market will be chosen.
Cust	Specifies the customer name.
Client	Specifies the client name.
AType	Specifies the account type, which can be of one of the following: • M: for client orders. • P: for house (prop) orders. • F: for mutual fund orders.
AFK	Specifies the Agency/Fund Code. For fund orders (**AType** = F) this field cannot be blank. For client and house orders (**AType** = M or P) the field can be either blank, or contain additional information (the participant code) for the post-trade processing. When blank, the participant's default account (configured in the CDB) will be used as the default value for this field in the trades.
Cond	Indicates type of order: • FaK • FoK • Day • Exp • GTC
Info	Indicates an information text field.
Inactive	Specifies whether inactive orders can be placed in the local order book.

Field Code	Description
	Note: The default is "Inactive=N" to ensure backwards compatability with old DDE clients.
Buy Client Order Id	Specifies the Client Order Id.
Sell Client Order Id	Specifies the Client Order Id.
Buy Account Type	Specifies the Account Type.
Sell Account Type	Specifies the Account Type.
Buy Account Id	Specifies the Account Id.
Sell Account Id	Specifies the Account Id.

C.2.3.1   Using the DDE Interface from Excel

Orders are normally entered using the built-in Excel Visual Basic programming language:

```
Private Sub EnterOrder()
    myChannel = Application.DDEInitiate("Click", "EnterOrder")
    DDEExecute myChannel, "Buy=OMX6B1400|Volume=10|Price=11"
    Application.DDETerminate (myChannel)
 End Sub
```

Programming note: The DDE Channel can be kept open for executing subsequent execute Enter Order or Enter Quote commands.

C.2.4   Entering Quotes

This function is used to change the quote volume or price for an instrument and send the quote to the market (optional).

Use DDE application "Click" and Topic "EnterQuote." The Item consists of "Buy" or "Sell" followed by a an equals sign ("="), an instrument identity (or ISIN code), and a number of parameters separated by vertical bar ("|") characters. Each parameter consists of a field code (see table below) and a value. You only need to include parameters that are to have a value different from their default. Please note that the parameter order is insignificant.

You can also enter quotes as indicative if you use the EnterIndicativeQuote topic instead. Then you may omit the Price or the Volume.

```
Application:   Click
Topic:         EnterQuote
Item:          Sell=OMX0A500X|Price=10|Volume=20|Send=1
```

Table 63: Field Codes for the Quote Topic

Field Code	Description
Volume	Specifies the quote volume.
Price	Specifies the quote price.
Yield	Specifies the order price. (Use if instrument is traded in yield)

Field Code	Description
BlockSize	Set the block size to quote into the block market. Only round lot is supported.
Send	Indicates whether a quote is to be sent to the order book or not, according to the following criteria: • 1=quote is to be sent to the order book • 0=quote is not to be sent to the order book.

> **Note:** An existing quote can be deleted by sending in a new quote with Volume set to zero (0).

> **Attention!**
> - The Price Quotation window must be open and the quoted instrument must be included in the active tab of the Price Quotation window.
> - The account used will be the one displayed in the Price Quotation window.
> - If calling the Result topic after the EnterQuote topic, the Result will only show that the quote was successfully entered in the Price Quotation window. It will not show if the quote was successfully entered into the market. The user has to verify that the operation has succeeded by checking the Own columns in the Price Quotation window, Spread Info window, or Order book window.
> - Before requoting, make sure that the quote has been successfully entered in the market by looking in the Price Quotation window.
> - Remember to disable all confirmations before sending quotes.
> - Never send multiple quote instructions for the same instrument in one DDE batch.

C.2.4.1   Using the DDE Interface from Excel

Quotes are normally entered using the built-in Excel Visual Basic programming language:

```
Private Sub EnterQuote()
    myChannel = Application.DDEInitiate("Click", "EnterQuote")
    DDEExecute myChannel, "Buy=OMX6B1400|Volume=10|Price=11"
    Application.DDETerminate (myChannel)
 End Sub
```

Programming note: The DDE Channel can be kept open for executing subsequent execute Enter Order or Enter Quote commands.

C.2.5   Entering Trade Reports

A crossed trade report can also be entered using DDE. The following fixed values will be used:

- Position: default
- Agreement time: current backend time
- Other fields: empty.

Table 64: Field Codes for the EnterTradeReport Topic

Field Code	Description
Instrument	Specifies the instrument name (optional if ISIN used)
ISIN	Specifies the ISIN (optional if Instrument is used)
Volume	Specifies the order volume
Price	Specifies the order price (Use if instrument is traded in price)
Yield	Specifies the order price (Use if instrument is traded in yield)
OrderReference	Specifies the order reference for both sides
Condition	Specifies the condition code.
Buy Client Order	Specifies the Client Order Id.
Sell Client Order Id	Specifies the Client Order Id.
Buy Account Type	Specifies the Account Type.
Sell Account Type	Specifies the Account Type.
Buy Account Id	Specifies the Account Id.
Sell Account Id	Specifies the Account Id.

C.2.5.1 Using the DDE Interface from Excel

```
Sub enterTradeReport()
myChannel = Application.DDEInitiate("Click", "EnterTradeReport")
DDEExecute myChannel, "Instrument=RGKO_3108_RTL|OrderReference=Test|Condi-
tion=NSTL|Volume=200000|Price=92,999"
myChannel = Application.DDEInitiate("CLICK", "Result")
result = Application.DDERequest(myChannel, "Text")
Application.DDETerminate (myChannel)
End Sub
```

> **Note:**
>
> If the instrument is traded in price, a Price tag should be used instead of Yield, mismatch will fail the transaction.
>
> Only one of Instrument and ISIN tags are needed but both may be included. If they mismatch operation will fail.

C.2.6 Canceling Orders

Orders can be cancelled by using DDE. The value of field OrderId is used to perform this feature.

> **Note:**
>
> A warning will be received if the user doesn't have permission to cancel the order.

Table 65: Field Codes for the Cancel Order Topic

Field Code	Description
OrderId	Specifies the order id.

C.2.6.1 Using the DDE Interface from Excel

```
Sub CancelOrder()
    myChannel = Application.DDEInitiate("Click", "CancelOrder")
    DDEExecute myChannel, "OrderId=42"
     Application.DDETerminate (myChannel)
End Sub
```

> **Note:**
>
> The DDE Channel can be kept open for executing subsequent **Cancel Order** commands.

C.2.7 Changing Orders

Orders can be changed by using DDE. The value of field OrderId is used to perform this feature. The fixed values listed in the table below will also be used.

Table 66: Field Codes for the Change Order Topic

Field Code	Description
OrderId Specifies the order id.	Specifies the instrument name (optional if ISIN used)
Volume	Specifies the order volume.
Price	Specifies the order price (used if instrument is traded in price).
Client	Specifies the client name.
Info	Indicates an information text field.
ExchangeInfo	Indicates an Exchange Info text field.
Afk	Specifies the Agency/Fund Code. This field can not be blank for fund orders, AType = F. This field can be blank or contain additional information, the participant code, for the post-trade processing for client and house orders, AType = M or P. When the field is left blank, the participant's default account, configured in the CDB, will be used as default value for this field in the trades.
AType	Specifies the account type, which can be of one of the following: • M - for client orders. • P - for house (prop) orders. • F - for mutual fund orders.

C.2.7.1   Using the DDE Interface from Excel

```
Sub ChangeOrder()
    myChannel = Application.DDEInitiate("Click", "ChangeOrder")
    DDEExecute myChannel, "OrderId=53|Vol-
ume=13|Price=7|Client=123456789|Afk=ZXC|AType=P|INFO=INFO|EXCHANGEINFO=EXCHINF"
     Application.DDETerminate (myChannel)
End Sub
```

> **Note:**
>
> The DDE Channel can be kept open for executing subsequent **Cancel Order** commands.

D   Technical Notes about the Maintenance of Trading Workstation

D.1   Directory Structure Workstation

The user's personal files are stored in the Working Directory used by Trading Workstation. When a user logs on, Trading Workstation checks in the log-in history file where the working directory exists or if one should be created. If nothing is specified, two separate user working directories will be created as subdirectories below the application data directory of the current Windows user, typically C:\Users\<Windows User Name>\AppData\Roaming\NASDAQ OMX\Trading Workstation\Users\<User Trading Workstation>\PROD and C:\Users\<Windows User Name>\AppData\Local\NASDAQ OMX\Trading Workstation\Users\<User Trading Workstation>\PROD. The **Working Directory** can be accessed through the **File** menu in the Trading Workstation.

D.2   Log Files

Whenever there is a problem, check the log files in the user directory before doing anything else. WORKSTATION.LOG is the most recent, WORKSTATION.000 is from the session before it, WORKSTATION.001 from the session before that, and so on.

Be careful to check the correct directory if there are several Trading Workstation user installations on the PC.

The following log files are produced by Trading Workstation in the user directory:

- WORKSTATION.LOG
- WORKSTATION.NNN

> **Note:** nnn is the sequence number of the log file.

The workstation.nnn log file is produced in the following way:

When the application starts, WORKSTATION.098 is renamed to WORKSTATION.099, WORKSTATION.097 is renamed to WORKSTATION.098 and so on. Similarly WORKSTATION.LOG is renamed to WORKSTATION.000 and a new WORKSTATION.LOG is created. In this way you will always have the 100 latest log files available. The current log file can be accessed through the File menu in Trading Workstation .

D.3   Data Files

Table 67: Data Files Produced by TW in the User Directory

File name	Description
H<YYYYMMDD>.dat	Order History

File name	Description
ClearingTradeRecord<YYYYMMDD>.<Number>.dat	Clearing Trades
TradeTickRecord<YYYYMMDD>.<Number>.dat	Trades
AmendTradeTickRecord<YYYYMMDD>.<Number>.dat	Amended Trades
MarketRegister_<customer name>_ICL.dat, MarketRegister_<customer name>_SER.dat, MarketRegister_<customer name>_UL.dat	Cached Static Data
M<YYMMDD>.dat	Market Message
OrderData.xml	Local Inactive Orders
OrderIdData.dat	Local Order IDs
UserEvents.log	User Events Log File
UserEvents.xyz	Old User Events Log File (see also the WORKSTATION.LOG files)
Preferences_ext_xml.cfg	Preferences Settings
Workspace_ext_cws.cfg	Saved Workspace Named "Workspace", if several Workspaces are saved several corresponding files will be saved, <workspace name>_ext_cws.cfg
Groups_ext_xml.cfg	Locally Defined Instrument Groups
Profiles_ext_xml.cfg	GUI User Settings
Profiles_OM_ext_xml.cfg	OM Specific GUI user Settings
Workstation.log	

Note: YYMMDD means current year, month, and day.