HKATS User's Guide

CLICK Trade XT with OMex 19.1

(CLICK Trade XT 1.9.1.13)

Effective 16 May 2011
Trading & Market Operations
Derivatives Market Department

Introduction of HKATS

The Hong Kong Futures Automated Trading System (HKATS) is provided by OMX. The Exchange has obtained a license from OMX to develop HKATS in order to accommodate the trading of derivative products in the Hong Kong market. HKATS is a transaction based network system with operations through CLICK workstations which are located at the premise of users. Each CLICK workstation is installed with CLICK Trade interface program that connects users to the central marketplace. Users can utilize CLICK Trade to gather real-time financial information, execute orders through various methods and provide market liquidity.

This User's Guide facilitates as a learning tool and provides guidance in operating functions of CLICK Trade. Sections are divided as follows:

Section 1 : Overview of CLICK Trade
This section covers the log on and exit procedures of the application, passwords, the help function, quick menu and toolbar icons.

Section 2 : The Market
This section covers the basic functions that help users gather financial data and market information.

Section 3 : Orders
This section covers the tools for placing and managing orders.

Section 4 : Trade Information
This section covers display functions and details on entering block trades.

Section 5 : Market Making Function
This section covers instructions for derivative calculations and provides information on tools for market markers.

Section 6 : Customization
This section covers how to customize appearance, set alerts and toolbar settings.

Section 7 : Contingency Measures
This section covers what users should do in case of system malfunctions.

Appendices 1-8:
The appendices covers descriptions of series name standards, combinations, bulletin board functions, option valuation models, pre-market activities, gateway connection, system anomalies and miscellaneous items.

HKATS User's Guide Change History

The following is the summary of the recent changes made to the HKATS User's Guide - CLICK XT.

Date	Section	Description Summary
22 February 2010	4.5 Clearing Trades Appendix 7 - HKATS Anomalies	Update the description for RQty column in Clearing Trades window. Delete item No. 10 and 11 in Appendix 7 – HKATS Anomalies.
28 June 2010	Appendix 7 - HKATS Anomalies	Update Anomaly in the Enter Bulletin Board Order window.
20 September 2010	7.3.2 Failure of System Recovery by Failover Mechanism 7.4 Failure during Pre-Market Opening Period and Principles for Extended Trading	Updated for the Termination of Participant Email System.
7 March 2011	7.4.1 Contingency Measures on the Pre-Market Opening Period 7.4.3 Summary of Market Arrangements in the Event of Market Interruption During the Afternoon Trading Session Affecting the Scheduled Close of the HSI and MHI Futures Markets Appendix 3.4 Cancel Bulletin Board Orders Appendix 5 Pre-market Opening Period	Updated for the extension of trading hours.
9 May 2011	7.2.2 SOS Center Location Appendix 1.4 - Stock Futures and Options	Updated for the new name of SOS Center Updated for Synthetic Futures in Stock Options Market
16 May 2011	Appendix 3 – Bulletin Board Functions	Extension of the Bulletin Board Function to Mini Hang Seng Index and H-shares Index Futures and Options

Table of Contents

1 Overview of CLICK Trade

This section provides an overview of the basic function required to start the application. In addition, the Help function, Quick menu and toolbar icons will be reviewed.

1.1 Log on and Exit of Click Trade

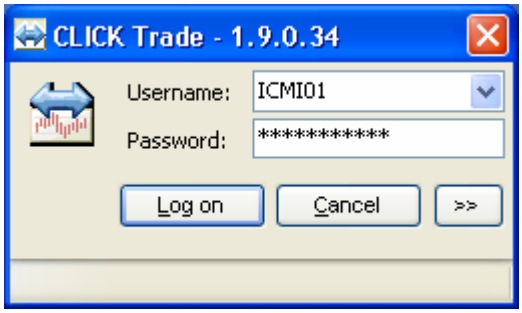
1.1.1 Log on CLICK Trade

Follow the procedures described below:

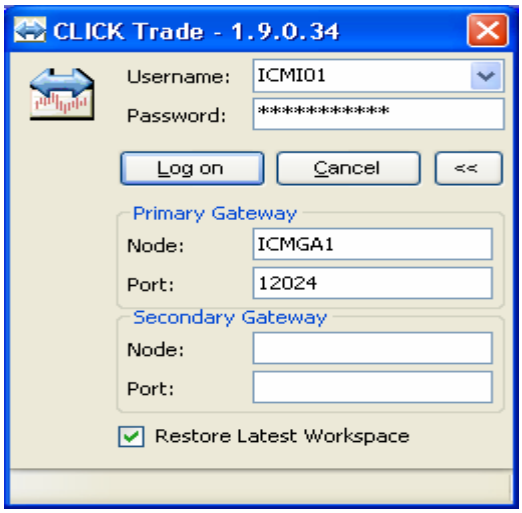
1. Double-click the CLICK Trade icon to bring out the Log on panel.

OM icon

2. Enter the assigned username and password.



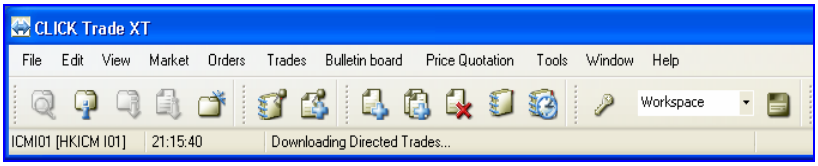
The **[>>]** button displays additional fields that contain technical information necessary for communication between the CLICK workstation and the marketplace.



The "Restore Latest Workspace" box is automatically checked. This means that the windows will be displayed in the same format as it was previously saved. Ensure to enter the correct Node and Port applicable to the gateway provided in order to log on successfully.

User should pay special attention to the security of the user password.

3. The menu bar will appear with the relevant user name along with a downloading indicator.



1.1.2 Exit HKATS

There are three ways to exit CLICK Trade:

1) Press **[Alt]** and **[F4]**
2) Select the File menu and then Exit
3) Select the Exit icon

Attention

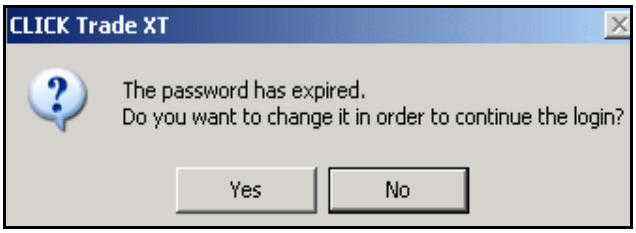
Users are strongly advised to follow the above procedures. Exiting the application through powering off is not recommended.

1.2 Changing Password

Open this window from the View menu and then choose Session Information. Select the **[Set Password]** button to set the new password. The expiration time of the password is currently set as 90 days and it must contain a minimum of 6 characters and a maximum of 24 characters. Users may use alphabets and/or numbers.

1.2.1 Password Expired

When user attempts to log on while the password has expired, the following pop-up window will appear:

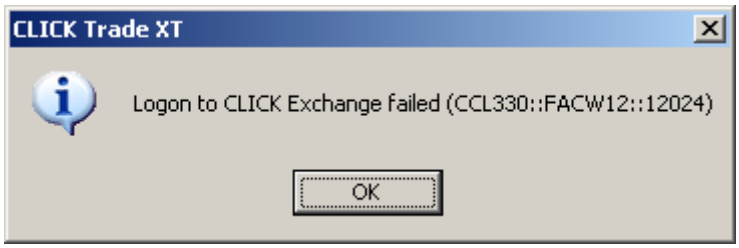


To change the expired password:

1. Select the **[Yes]** button. (The Set New Password window will appear)
2. Enter the old password in the Old password field.
3. Enter the new password in the New password field.
4. Reconfirm the new password in the Confirm field
5. Select the **[OK]** button to activate the new password.

1.3 Incorrect Password

The following message will appear when users enter an incorrect password.



Users who enter an incorrect password 10 consecutive times will have their accounts locked and must contact the HKATS hotline at 2211 6360 to reset their passwords.

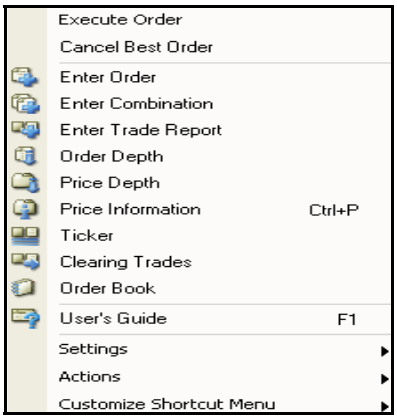
1.4 Help Function

Users can get help information from the User's Guide in the Help menu or press the **[F1]** button.

1.5 Quick menu

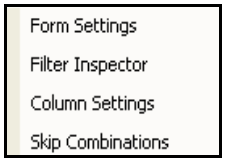
Most of the windows in the application can also be opened from the Quick menu. To bring up the Quick menu:

1. Bring the cursor to selected windows of the CLICK Trade application. (Except the Menu bar)
2. Right-click on the mouse.
3. Select the desired window to be opened

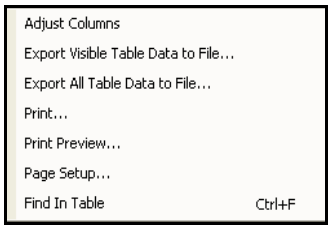


Three sub-menus can be access from here.

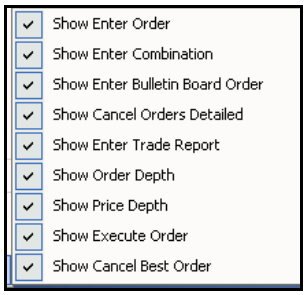
1) Settings:



2) Actions:



3) Customize Shortcut Menu:



Details of each function will be described in the following sections of this User's Guide.

1.6 Toolbar

The **Toolbar** allows users to access relevant windows easily and quickly.

To bring up the Toolbar, right click on the Menu bar and then the following menu will appear.

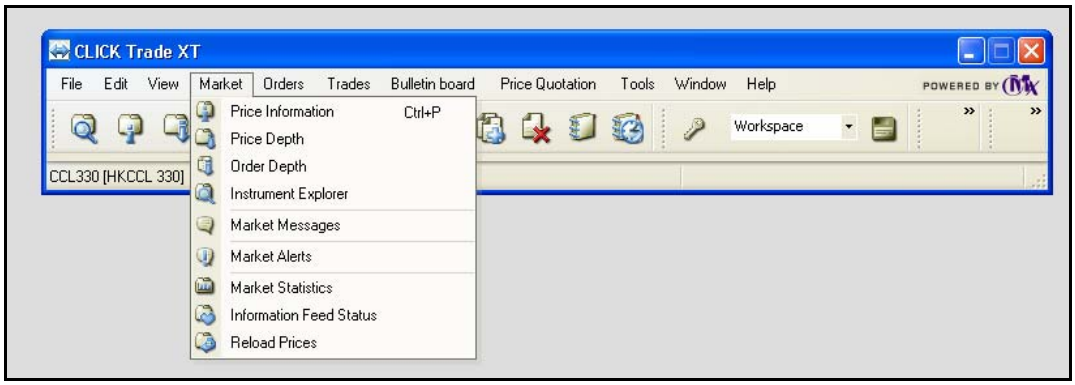
Users can select the toolbars relevant to their needs or select Customize to further customize the toolbar. If all the toolbars are selected, it will appear as follows. More on customization will be discussed in Section 6 of this User's Guide.

Icons	Functions
	Shows Instrument Information
	Shows Price Information
	Shows Price Depth
	Shows Order Depth
	Shows Price Quotation
	Shows Bulletin Board Order Book
	Shows the Enter Bulletin Board Order window
	Shows the Enter Order window
	Shows the Enter Order Combination window
	Shows Cancel Order Details
	Shows Order Book
	Shows Order History
	Log Off and Exit
	Save Workspace
	Shows Market Messages
	Shows Market Alerts
	Shows Information Feed Status
	Shows Traders
	Shows Market Statistics
	Shows Ticker
	Shows Company Trades

2 The Market

This section covers basic financial data and market information retrieval functions available in CLICK Trade. These functions allow users to navigate through the markets for price discovery, market depth and liquidity assessments. Users can also view market statistics, market messages and set market alerts.

Users should exercise due care in operating their workstations. Valid identity, price and quantity should <u>ONLY</u> be entered into the corresponding fields. <u>NO</u> space is required for such entries. Users should be aware that they are fully responsible for any unstable condition or breakdowns of their CLICK workstations if improper strings or values are being entered into the relevant fields. Users are advised that they should only enter alphabetic and numeric values to the Info field when entering an order.



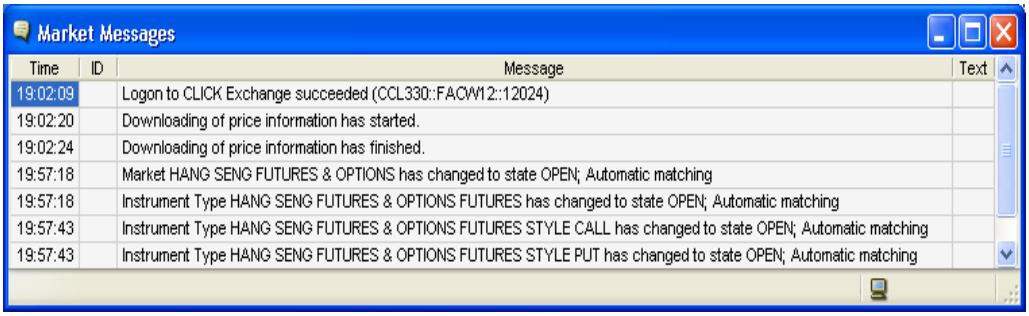
2.1 Market Messages and Information Feed Status Windows

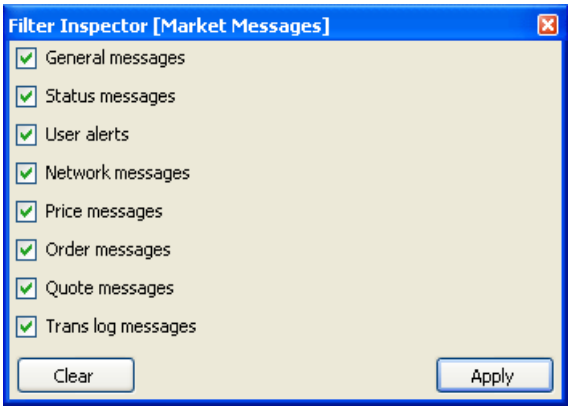
The Market Messages window serves as one of the communication channels between the Exchange and users. The Information Feed Status window displays the connection status between the local workstation and the central marketplace. Users are strongly recommended to open these windows at all time.

2.1.1 Market Messages

This window displays messages sent from the Exchange. Such messages include openings and closings of the markets, quote request broadcast, potential connection problems, and other information of general interest.

Open the Market Messages window from the Market menu or the toolbar icon.





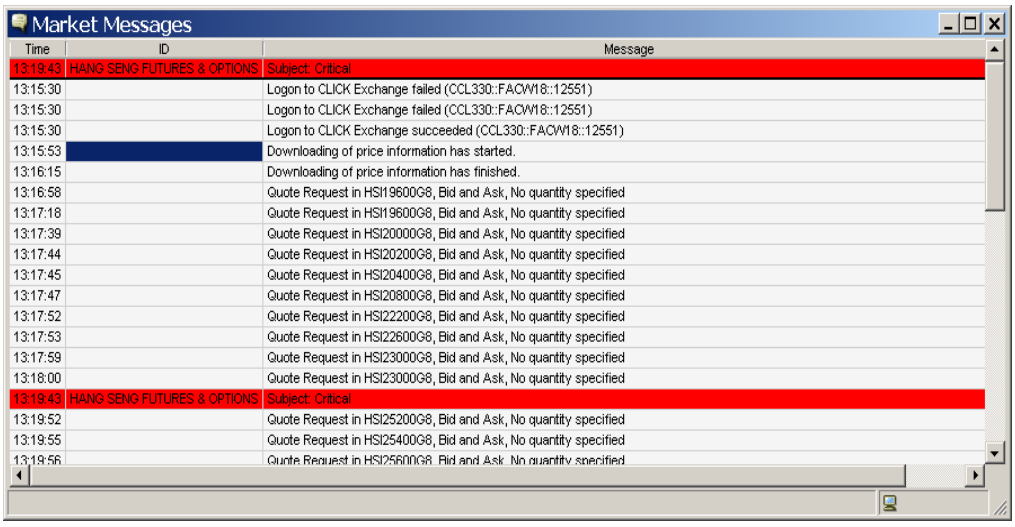
Two kinds of messages or alerts will be displayed in the Market Messages window:

1. Price or quantity alerts generated by the Market Alerts window (Refer to Section 2.6 – Market Alerts).
2. Normal messages generated by other users or warning alerts announced by the Exchange.

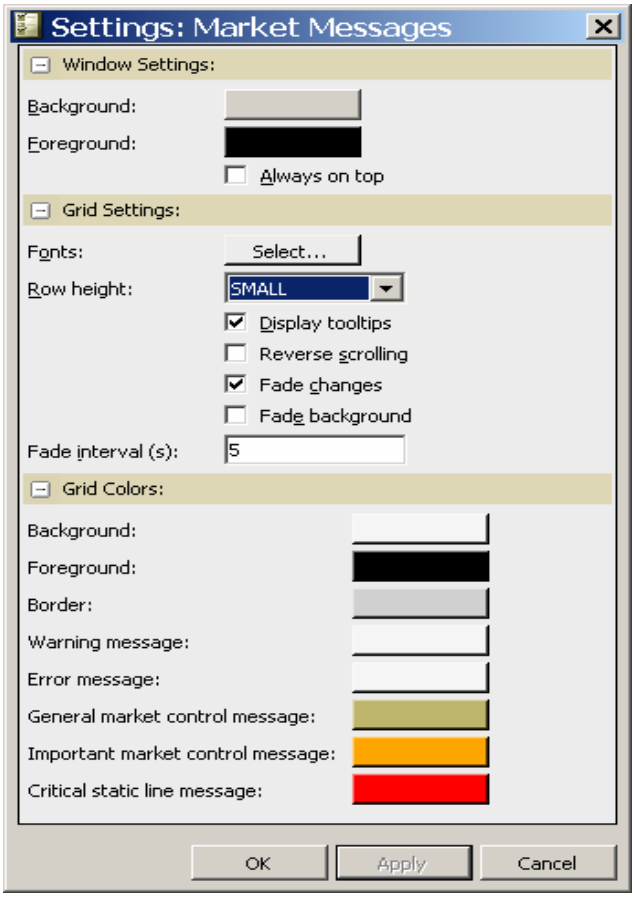
Users can filter the above messages or alerts by selecting the corresponding box(es) in the Filter Inspector window which can be opened by right clicking to the Quick Menu then select Settings followed with Filter Inspector.

Users can select “General messages” to only display important messages sent by the Exchange (eg. messages relating to error trades or contingency arrangements)

During critical situations, the Exchange will sent messages where it will be displayed in Red as default. The latest critical message will remain in the first line of the Market Messages window throughout the trading day and are displayed regardless of login time.



Users can right click to the Quick Menu then select Settings followed with Form Settings to customize the colour of these messages.

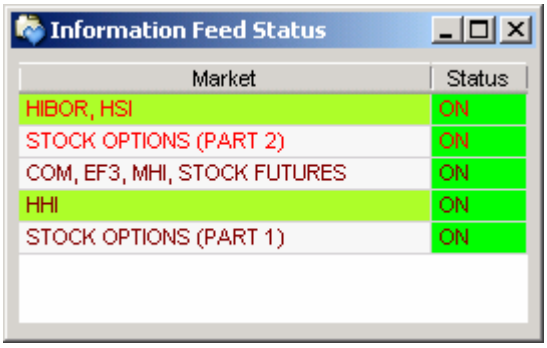


SINCE THE EXCHANGE WILL MAKE USE OF THE MARKET MESSAGES WINDOW TO ANNOUNCE IMPORTANT NOTICES AND INFORMATION TO EXCHANGE PARTICIPANTS, IT IS STRONGLY RECOMMENDED TO OPEN THIS WINDOW AT ALL TIME.

2.1.2 Information Feed Status

This window displays the normality of the connection status between the local workstation and the central marketplace.

Open the Information Feed Status window from the Market menu or the toolbar icon.



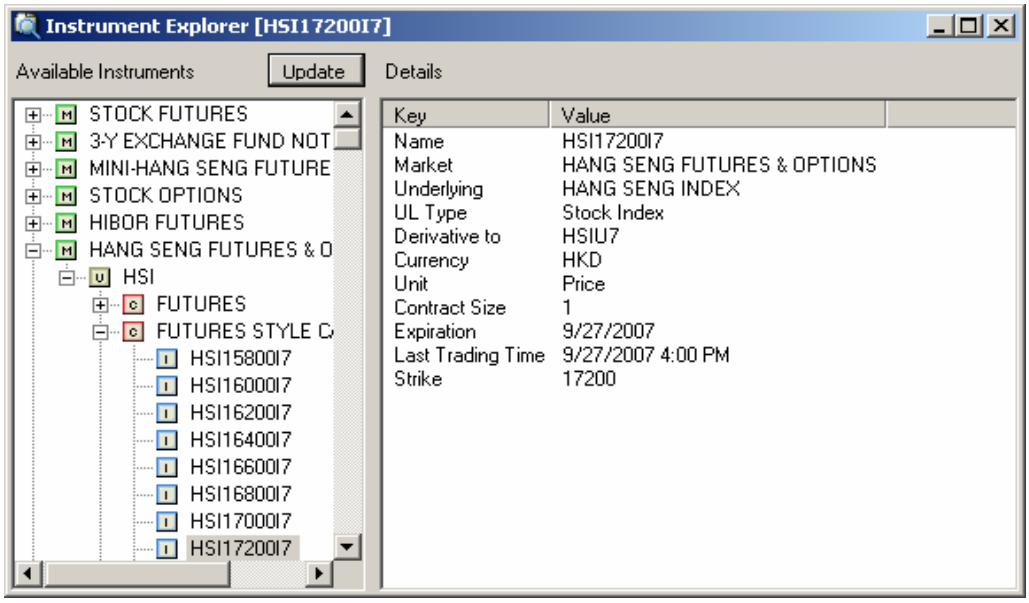
- **ON** in the Status column indicates connection between the CLICK workstation and the central marketplace is normal.

- **OFF** or **a blank** in the Status column or if an error message pop-up appears indicates connection between the CLICK workstation and the central marketplace is interrupted. Users should contact the HKATS Hotline at 2211 6360 immediately. (Refer to Section 7 – Contingency Measures)

2.2 Instrument Explorer

This window allows the user to gather instrument information. Open the Instrument Explorer window from the Market menu or the toolbar icon. The Instrument Explorer window is divided into two sections.

In the left section, all instruments in the system are shown in an expandable tree structure where the instruments are grouped together by instrument type for each market. In the right section, details for each instrument are shown.



The Instrument Explorer window provides information about instrument series and pre-defined standard combinations. Information is displayed in the details section and can be updated by clicking the **[Update]** button.

Window Items - Instrument Explorer window

Item	***Description***
Name	Specifies the instrument identity.
Market	Specifies the market.
Underlying	Specifies the underlying.
UL Type	Specifies the underlying type.
Derivative to	Specifies the related futures instrument.
Currency	Specifies the currency of the chosen instrument.
Unit	Specifies the underlying unit.
Contract Size	Specifies the number of underlyings are traded in one contract.
Expiration	Specifies the date when the chosen instrument expires.
Last Trading Time	Specifies the last date when the instrument effectively can be traded.
Strike	Specifies the strike price of the chosen instrument.

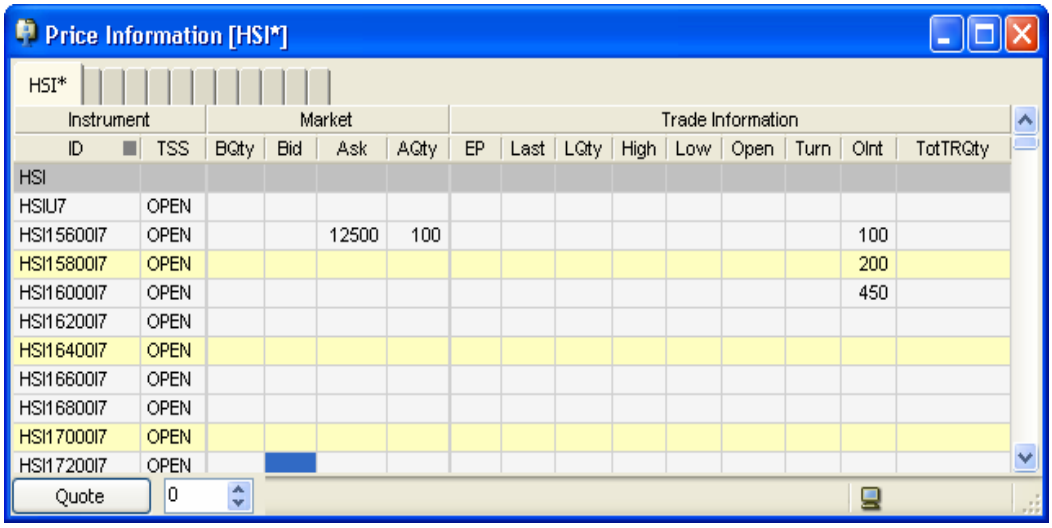
To display instrument information in Instrument Explorer window

1. Select a market. (The underlyings available in this market will be displayed)
2. Select an underlying. (The instrument available for this underlying will be displayed)
3. Select an instrument. (The instrument series available for this instrument will be displayed)
4. Select an instrument series. (The information relating to this instrument series will be displayed in the Details section)

2.3 Price Information

This window displays the current market prices in the selected instrument, i.e. the best bid and offer prices, last traded price, last traded quantity, high, low, open, turnover and open interest in the market and updates in real-time basis.

Open the Price Information window from the Market menu or the Quick menu (right mouse click) or the toolbar icon or by pressing **[CTRL]** and **[P]**.



Window Items – Price Information window

Item	*Description*
ID	Specifies the instrument identity.
TSS	Specifies the trading session status.
BQty	Specifies the best bid quantity.
Bid	Specifies the best bid price.
Ask	Specifies the best ask price.
AQty	Specifies the best ask quantity.
EP	Specifies the calculated opening price (COP) in pre-market opening period. (Refer to Appendix 5 – Pre-market Opening Period)
Last	Specifies the last traded price of the instrument or of the underlying stock or index.
LQty	Specifies the last traded quantity.
High	Specifies the highest traded price.
Low	Specifies the lowest traded price.
Open	Specifies the opening price.
Turn	Specifies the total number of traded contracts. (Including block trades)
OInt	Specifies the open interest of the previous day.
TotTRQty	Specifies the total block trade quantity.

To display instrument information in Price Information window

Specify an instrument name in the tab and then press **[Enter]**. Users can use an asterisk (*) as a wildcard. Inputting an underlying code will display all series relating to that specific underlying. Users can also display information for pre-defined instrument groups. (Refer to Section 6.6 – Instrument Group Management). To display information relating to a particular market, select from the drop down button.

Each Price Information window contains 12 information display sheets. Users can arrange 12 different instrument groups in one window. Moreover, CLICK Trade allows multiple Price Information windows.

To customize the display setting, users can right click to the Quick menu and then select Settings to display a number of display options such as selective columns or display colors. (Refer to Section 6.3 Preference – Window)

Send Quote Request to Market Makers

User can request for quotation on an instrument series if market makers are available. Select anywhere in the Market column of the desired instrument series and then click on the **[Quote]** button. The box on the right is used to specify the desire quantities for the quote request. Quote requests can be sent with or without a quantity parameter. The quote request will be displayed in the Market Messages window.

Send an Order to the Market

Select an instrument in the Price Information window and open the Enter Order window or the Execute Order window from the Quick menu. (Refer to Section 3 – Orders)

Additional information

TSS	• PRE_MKT_ACT = market in Pre-market Activities session • OPEN = market is open • PAUSE = market is in a pause period • CL_CLOSE = trading is stopped, DCASS performing closing activities • CLOSE = market is closed. Available for HSI, HHI, and MHI futures only: • PREOPEN = market is in Pre-Opening session • PREOPENALLOC = market is in Pre-Open Allocation session • OPENALLOC = market is in Open Allocation session. (Refer to Appendix 5– Pre-market Opening Period)
BQty/Bid/ Ask/AQty	Changes in the price or quantity of the best bid or offer will be updated immediately with red or blue color. Red represents a decrease in value and blue represents an increase in value. The colors appear in a flash and will return to its original state subsequently. The change in color can be customized (Refer to Section 6 – Customization).
EP	The calculated opening price (COP) in pre-market opening period. (Refer to Appendix 5 – Pre-market Opening Activities)
Last & Qty	Changes in the last traded price and quantity will be updated immediately with red or blue color. Red represents a decrease in value and blue represents an increase in value. The colors appear in a flash and will return to its original state subsequently. The change in color can be customized (Refer to Section 6 – Customization). Please note that prices and volumes associated with combos vs. combo trades, block trades, bulletin board trades, and post trade deal registrations will not affect the last traded price and quantity.
High/Low	Prices associated with combos vs. combo trades, block trades, bulletin board trades and post trade deal registrations will not affect the high or low price of the day.

2.3.1 Reload Prices

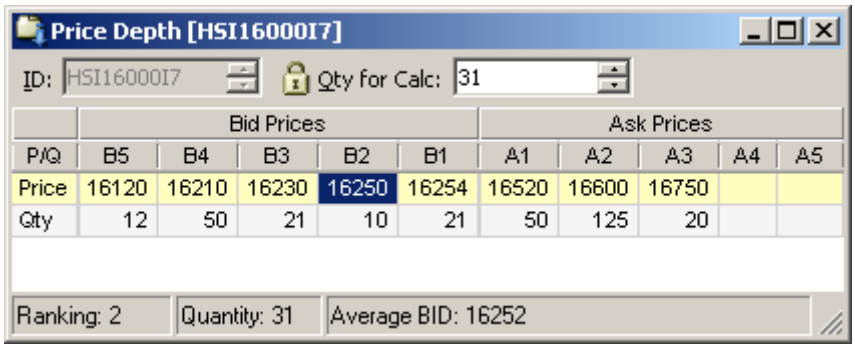
Under rare circumstances, connection between the CLICK workstation and the marketplace may be interrupted. Users are advised to update the market prices by selecting the **[Reload Prices]** button in the Market menu.

During reloading of prices, the Information Feed Status may turn to "OFF" status. This is normal during price reloading. However, a rare situation may occur where a connection problem coincidently occurs during price reloading. In this case, a warning message will pop up in the Market Message window to warn users that their connections are interrupted.

2.4 Price Depth

This window shows the five best bid and ask prices in the market along with the accumulated quantities on real-time basis. The best bid starts from B1 down to B5 and the best ask starts from A1 up to A5.

Open the Price Depth window from the Market menu or the Quick menu or the toolbar icon.



Window Items - Price Depth window

Item	***Description***
B1-B5	Specifies the best five bid prices and the accumulated quantities.
A1-A5	Specifies the best five ask prices and the accumulated quantities.

Lock Id

The Lock icon is for locking the view of the selected instrument series. When this is selected, the ID field will be disabled and the instrument series ID will not change if another instrument series is selected in another CLICK application window.

When this is not selected, the ID field will be enabled. The instrument series ID will change if a different instrument series is selected in another CLICK application window. When the ID field is enabled users can also enter another instrument series manually and then press **[Enter]**.

Average display

Display the calculated average price for a specified quantity indicated in the Qty for Calc field. If an Ask Price column is highlighted, this would display the Average ASK. Similarly, if a Bid Price column is highlighted, the Average BID will be displayed.

Send an Order to the Market

Executions can be done by double clicking any price in the Price Depth window. The Execute Order window will appear displaying the amount of contracts the user can buy or sell if executed at the selected price. (Refer to Section 3.4 – Execute Order Window).

2.5 Order Depth

This window shows the market depth of a particular instrument series. The maximum number of orders shown in the bid side or the offer side of the Order Depth window is 125. Orders are ranked on a price and time priority basis. Unlike the Price Depth window, Order Depth window will not be automatically updated and therefore users are required to the click the **[Update]** button to obtain updated information.

Open the Order Depth window from the Market menu or the Quick menu or the toolbar icon.

Window Items - Order Depth window

Item	*Description*
BTrd	Specifies the user of the bid order. (Visible only if the order was placed by the user or another user in the same company)
BCmp	Specifies the bid company. (Visible only if the order was placed by the user or another user in the same company)
BQty	Specifies the bid quantity.
Bid	Specifies the bid price.
Ask	Specifies the ask price.
AQty	Specifies the ask quantity.
ACmp	Specifies the ask company. (Visible only if the order was placed by the user or another user in the same company)
ATrd	Specifies the user of the ask order. (Visible only if the order was placed by the user or another user in the same company)

Only those orders placed by the user or another user in the same company will be visible in the BCmp or ACmp column. In addition, these will be displayed in green. The ranking indicator allows the user to identify the ranking of their orders. The Quantity indicator displays the total number of contracts from ranking 1 to the ranking highlighted by the user.

Average display

The Average ASK or BID indicator displays the quantity-weighted average price of orders from ranking 1 to the ranking highlighted by the user. In addition, the quantity used for calculation can also be inputted in the Qty field above.

Lock Id

The Lock icon is for locking the view of the selected instrument series. When this is selected, the ID field will be disabled and the instrument series ID will not change if another instrument series is selected in another CLICK application window.

When this is not selected, the ID field will be enabled. The instrument series ID will change if a different instrument series is selected in another CLICK application window. When the ID field is enabled users can also enter another instrument series manually and then press **[Enter]**.

Send an Order to the Market

Executions can be done by double clicking any bid or ask column in the Order Depth window. The Execute Order window will appear displaying the amount of contracts the user can buy or sell if executed at the selected price. (Refer to Section 3.4 – Execute Order Window).

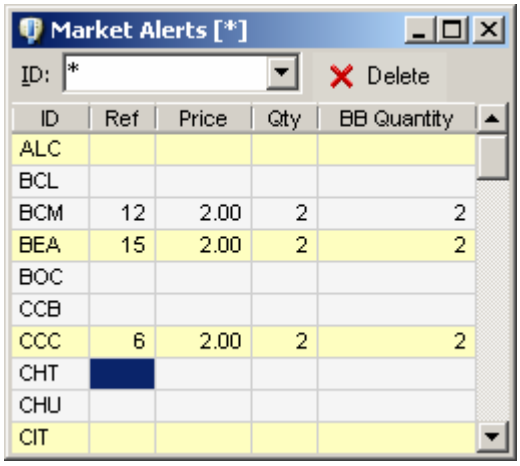
Attention

The information displayed in the Order Depth window does not update automatically. Therefore, if the Execute Order window is accessed from the Order Depth window, there is a possibility that information on there is not updated. Users should confirm with updated information before executions.

2.6 Market Alerts

This window is used to define parameters for market alert features. This window allows for monitoring order quantities, price changes in underlying prices, or bulletin board order quantities.

Open the Market Alerts window from the Market menu or the toolbar icon.



Window Items – Market Alerts window

Item	***Description***
ID	Specifies the underlying identity.
Ref	Specifies the reference price of the underlying.
Price	Specifies the delta price. When the market price differs by more than the delta, a market alert will appear.
Qty	Specifies the defined quantity. When an order quantity is entered in the market greater than this, a market alert will appear.
BB Quantity	Specifies Bulletin Board order quantities.

Once the underlying price or the order quantity deviates from the pre-defined alert level, an alert message will appear in the Market Messages window.

Display Market Alert settings:

Enter an underlying name in the ID field or enter an asterisk **[*]** to display all underlyings and then press **[Enter]**. Previous parameters, if any, will be displayed in the table together with the underlying.

Setting Market Alert settings:

- Setting Price Alert
  - Click on Ref of the selected instrument and input a reference price
  - Click on Price and enter a price deviation level (in absolute value or percentage).
- Setting Quantity Alert
  - Click on the Qty cell of the selected instrument and input an alert quantity
- Setting Bulletin Order Quantity Alert
  - Click on the BB Qty cell of the selected instrument and input an alert BB order quantity

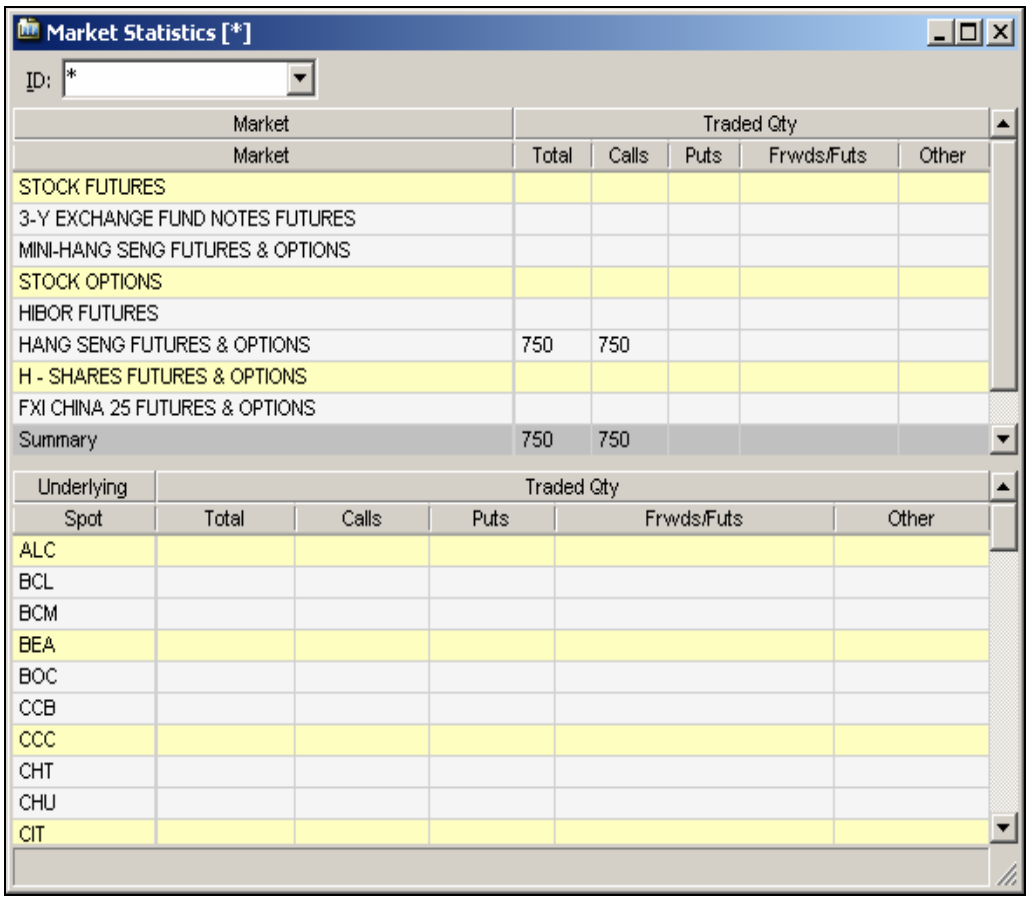
Delete Market Alert setting:

Users can delete a market alert setting by selecting the underlying and then click the **[Delete]** button. Another method is to clear out the entries in the Price or Qty column.

2.7 Market Statistics

This window shows the total turnover for each market separately, displaying for each underlying within the market in the lower section. The turnover is shown as an aggregate from the start of the trading day and it is separated by calls, puts and forwards/futures. Enter an Instrument ID or an asterisk **[*]** to display all markets and press the **[Enter]** button.

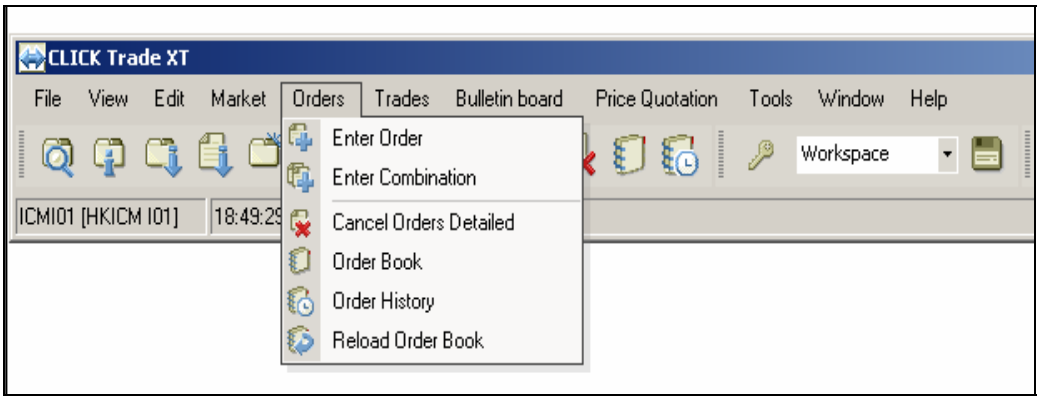
Open the Market Statistics window from the Market menu or the toolbar icon.



3 Orders

This section covers various order entry functions on HKATS. Users will also learn the basic Order Book management tools that CLICK Trade offers. After an introduction to the HKATS order types and order features, users will walk through all the windows and functions listed on the pull-down menu bar – Orders.

Users should exercise due care in operating their workstations. Valid identity, price and quantity should <u>ONLY</u> be entered into the corresponding fields. <u>NO</u> space is required for such entries. Users should be aware that they are fully responsible for any unstable condition or breakdowns of their CLICK workstations if improper strings or values are being entered into the relevant fields. Users are advised that they should only enter alphabetic and numeric values to the Info field when entering an order.



3.1 Order Types on HKATS

There are primarily three types of orders in HKATS, namely, Limit Orders, Auction Orders and Give Up Orders.

Limit Order
A limit order is an order that has a price limit assigned by the user.

Auction Order
An auction order is an order that does not have a price limit. An auction order is ready to be matched at the Calculated Opening Price (COP) during the Pre-market Opening Period. At the end of the Pre-market Opening Period all unmatched auction orders will be converted to either limit orders or inactive orders with validity until the end of the trading day. For details of the COP, Pre-market Opening Period and order conversion of the unmatched auction orders. (Refer to Appendix 5 – Pre-market Opening Activities)

Give Up Order
This is an order that will give up its position to another company once it is traded. The Give Up account must be specified in the Give Up field.

The above orders can have either an Active or Inactive status. The following will provide further information.

Active Order
An active order is an order that is currently placed in the central Order Book, which is a database for all the outstanding orders in the marketplace ready to be traded at any time during a trading session. Depending on the validity setting (to be discussed below), once an active order is input to the central Order Book, order matching will be repeatedly performed automatically by the central system. Note that bulletin board orders are not registered in the central Order Book. They are all active orders registered in the Bulletin Board Order Book.

Inactive Order
An inactive order is an order that is kept with the CLICK Trade application in the local Order Book. External users will not have any access to this type of orders. Therefore, it is not a tradable order unless users activates the order and place it to the central Order Book.

3.2 General Features of an Order

An order generally contains the following attributes wherever applicable.

ID The Instrument series ID (name).

Price The limit price. An order is to be matched at the limit price or better

Qty The maximum executable quantity per order specification depending on the Validity.

Validity

Fok Fill or Kill. Fok validity means that the order is to be matched, immediately after submission, at the exact quantity specified in the Qty field or else it will be canceled automatically by the system at once.

Fak Fill and Kill. Fak validity means that the order is to be matched, immediately after submission, as much as possible, up to quantity specified in the Qty field and the remaining unmatched portion, if any, of the order will be canceled automatically by the system at once.

Day Rest of day (default). Day validity means unmatched orders will remain in the central Order Book until the market close of the day.

Exp Until Expiry. Exp validity means that unmatched orders will remain in the central Order Book until the market close of the expiration day of the product.

Date Specified Date. Date validity means that unmatched orders will remain in the central Order Book until the market close of the business date specified in the Date field. The upper limit for the Date field is 255 calendar days from today's date or the expiry day of the contract whichever applicable. The format of Date field is MM/DD/YY.

Account type To register a trade in a particular account, specify the account in the Customer field. To register a trade in the house account, enter a single character "H", and to register a trade in the client account, enter a single character "C". To specify a trade in the market maker account, enter the market maker account, eg. "R123".
For stock options, to register a trade in the customer account, enter "A1", in the house account, enter "P1" and in the market-maker account, enter "M1".
If this field is left blank or filled in with anything other than the above-mentioned account names (i.e. account not registered in the central database), the trade will be registered in the default account. Information entered in this field will be shown in the Order Book, Order History, Clearing Trades and Company Trades windows under the column Cust.

Info Free text information. Client information or any other free text information can be entered in the Info field. Information entered in this field will be shown in the Order Book, Order History, Company Trades and Clearing Trades windows under the column Info. A maximum of 15 characters is allowed to be entered. In order to ensure that information specified by users in this field is incorporated into and correctly displayed in the Trade Details File in DCASS, users are advised to enter only alphabets or numbers into the Info field. Entering any other character into the Info field may result in inaccurate or incorrect information being incorporated into the Trade Details File in DCASS.

Position Open or Close position orders can be sent either to open new positions by choosing Open or to close out/square existing positions by choosing Close.

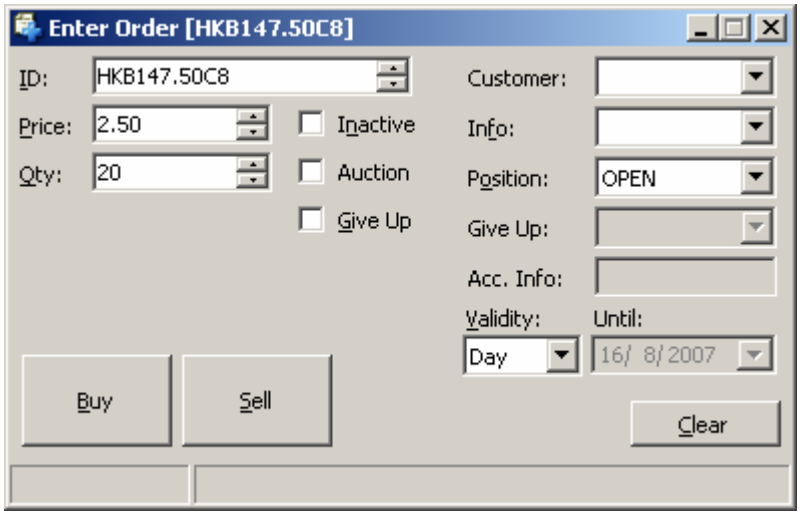
Give Up Company code name. (Give up party)

Acc. Info Arbitrary text information concerning the give up order.

3.3 Enter Order Window

This window is used for sending limit orders, auction orders and give up orders.

Open the Enter Order window from the Orders Menu or the Quick Menu (right mouse click) or from the toolbar icon. CLICK allows multiple Enter Order windows to be opened.



The instrument series ID can either be manually entered or selected by clicking at a prevailing market price or quantity in the Price Information window (the Price & Qty field will also be automatically filled in with the prevailing market price and quantity at the time of clicking).

Enter an Order

1. Open the Enter Order window from the Orders Menu, Quick Menu or the toolbar icon.
2. Select an instrument by clicking a row in the Price Information window or Order Depth window or Price Depth window or enter an Instrument ID in the ID field.
3. Select the price field in the Enter Order window and specify or change the price. For Auction orders, users must check the Auction box and the price field becomes disabled.
4. Select the Quantity field in the Enter Order window and specify or change the quantity.
5. Enter the appropriate order attributes described in section 3.2. For Inactive orders, users must check the Inactive box.
6. Send the order into the market by clicking the **[Buy]** or **[Sell]** button. Users can also use hotkeys **[F5]** or **[F8]** as the buy or sell button respectively. (Refer to Section 6.1 – Preferences)

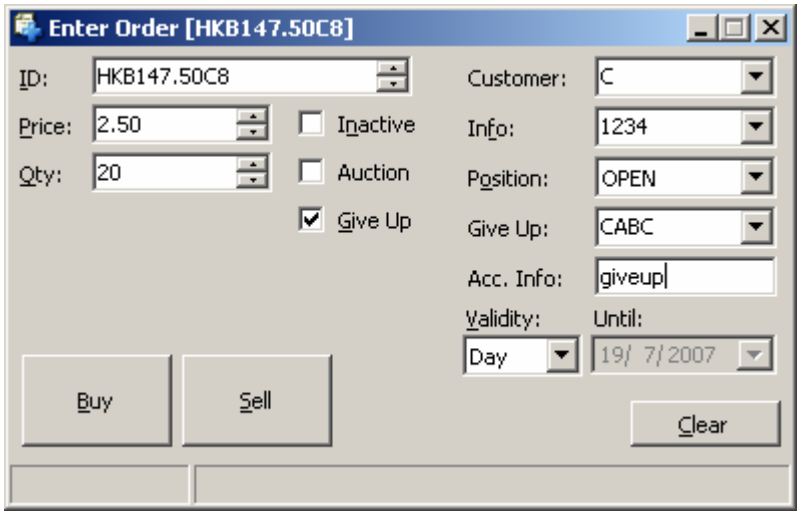
Results:
The order will then be displayed in the user's Order Book if it is a "Day", "Date", or "Exp" and it has not been fully traded immediately.

Attention

1) If an instrument series is selected in the Price Information, Price Depth or Order Depth window, the ID, Price and Qty fields of all the Enter Order windows opened will be automatically updated while the validity remains unchanged.
2) Users must be careful in the use of hotkeys. Holding down any of these keys will continuously send unintended orders to the market. Continuation of this will result in termination of the CLICK Trade application, in which case the application will stop sending orders. An indication of this incident is when the input fields of the Enter Order window flash rapidly. Users should only have hotkeys enabled if necessary.

Enter a Give up Order

1. Open the Enter Order window from the Orders Menu, Quick Menu or the toolbar icon.
2. Select an instrument by clicking a row in the Price Information window or Order Depth window or Price Depth window or enter an Instrument ID in the ID field.
3. Select the price field in the Enter Order window and specify or change the price.
4. Select the Quantity field in the Enter Order window and specify or change the quantity.

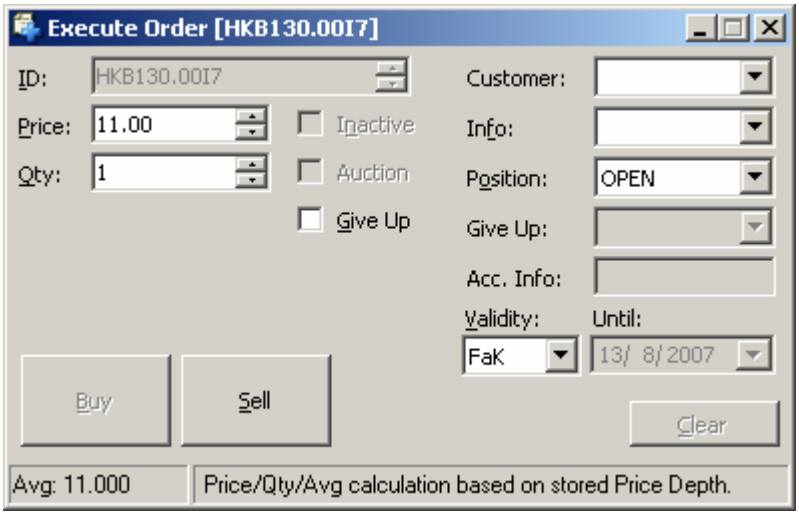


5. Select the Give Up box and both the Give Up and Acc. Info fields will be enabled. Enter the Clearing Mnemonic of the company whom the order is going to give up to in the Give Up field. Enter relevant free text information in the Acc. Info field.
6. Send the order to the market by clicking the **[Buy]** or **[Sell]** button. Users can also use hotkeys **[F5]** or **[F8]** as the buy or sell button respectively. (Refer to Section 6.1 – Preferences)

3.4 Execute Order Window

This is the fastest way which users can send an order at the best market price.

The Execute Order window can be opened from several windows (Price Information, Price Quotation, Price Depth and Order Depth windows) by double-clicking a price or a quantity of an instrument series.



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 Price Information window.
- The ID step arrows are disabled.
- Only Fill or Kill or Fill and Kill (Immediate or Cancel) orders are allowed.
- Either the Buy or the Sell button is disabled depending on which side was selected in the Price Information window. (Double click on the bid price or quantity will only allow user to sell; likewise, double click on the ask price or quantity will only allow user to buy).
- User may change quantity and price by using the up and down arrows at the side of the fields. By default the quantity field will be filled with the total quantities available at that price.
- ***Attention*** By nature, the functionality of the Execute Order window is for users to execute order with the maximum available quantity in the market at the price specified in the Price field. Therefore, changing the price itself may result in **a trade with a different quantity** from what is specified in the Quantity field when the window was originally opened. If users have the intention to change the price, they should use the Enter Order window instead.
- Only one Execute Order window will be opened at one time. Double-clicking in another instrument series in the Price Information, Price Depth or Order Depth window will automatically fill in the corresponding market data.
- Inactive and Auction orders are not available in the Execute Order window.

The Average Indicator

The average (Avg) shows the average contract price and is normally filled in when opening the Execute Order window. The indicator is updated when increasing or decreasing the price and quantity fields by means of the arrows. When changing the quantity field in this manner, the price field is updated to reflect the price required to get a trade for the new quantity. Conversely, changing the price field affects the quantity field so that it displays the maximum possible traded quantity for the new price. Otherwise, price and quantity information in this window will not be automatically updated as the market changes.

Note that these calculations are based on the locally stored price depth information which is limited to the five best prices for the bid and ask sides for a particular instrument. By opening the Execute Order window from the Order Depth window it is possible to take more price levels into account. Note, however, that the Order Depth window is not updated in real time for all installations.

Example:
Assume that Ask orders have been placed in the market to create the following price depth for an instrument:

	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 Avg field 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 Avg field 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 Qty and Avg.

Execute an Order

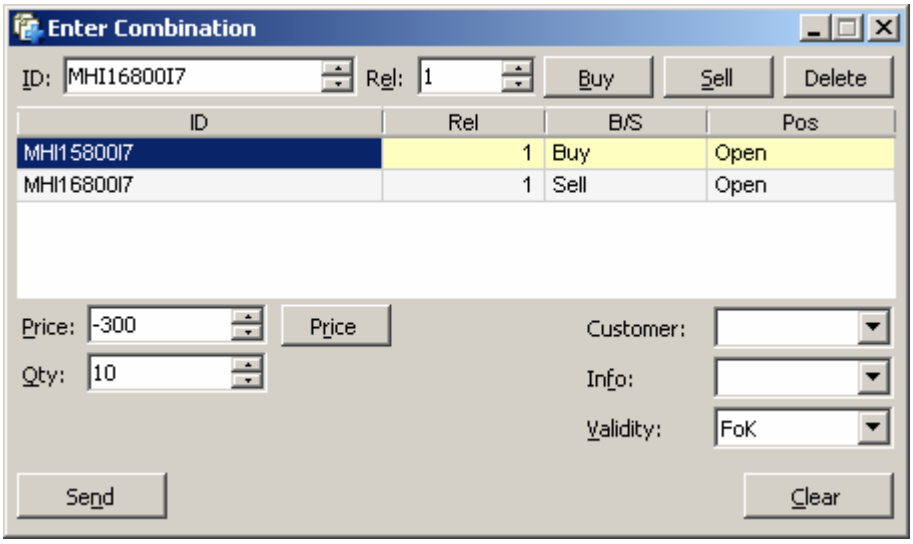
1. Open the Execute Order Window by double-clicking a price or a quantity in the Price Information, Price Quotation, Price Depth or Order Depth Window.
2. Select the Quantity field in the Execute Order window and specify or change the quantity.
3. Enter the appropriate order attributes as described in section 3.2.
4. Send the order into the market by clicking the **[Buy]** or **[Sell]** button. Users can also use the hotkey **[Enter]** as the buy or sell button. (Refer to Section 6.1 – Preferences)

Responsibilities of Users

A user should always act in the best interest of its client to ensure that the executed price of a client order is in line with the prevailing market price. In case of doubt regarding the executed price of a transaction, users should contact HKATS officials at HKATS hotline (2211-6360) for clarification. Users who intentionally execute a trade at off-market rates or fail to operate HKATS in accordance with the established procedure will be investigated by Market Surveillance.

3.5 Enter Combination Window

Open the Enter Combination Window from the Orders Menu or the Quick Menu (right mouse click) or the toolbar icon.



This window is used for entering combination orders. Only non-standard combinations are to be entered through this window. For standard combinations, users should use the Enter Order window (Refer to Appendix 2 – Combination). Fill or Kill is the only validity allowed for orders entered through this window.

To obtain information about the combinations defined as standard combinations, use the Instrument Explorer window under the Market menu. (Refer to Section 2.2 – Instrument Explorer).

Window Items - Enter Combination window

Item	***Description***
ID	Instrument series ID field. If an instrument series is selected in the Price Information window, the ID will be displayed as default in the Enter Combination window. User may enter an instrument series manually or use the arrows.
Rel	Relation between legs in the combination. This is the least common denominator.
Buy/Sell	Specify to buy or sell the instrument in the ID field.
Delete	Delete the highlighted instruments series from the combination
Price	The price field displays the price calculated (in market price) when pressing the **[Price]** button. The quantity must be specified before calculating the price. User may also manually input or use the arrows to specify a price.
Qty	Quantity in relation to the Rel field. The number of times the user want to trade the combination. If the relation is 2 and the quantity is 10 there is a total of 20 contracts.

Enter an Non-standard Combination Order

1. Open the Enter Combination window from the Orders Menu or Quick Menu or toolbar icon.
2. Specify one of the instruments that should be a part of the combination in the ID field. If users have selected an instrument in the Price Information window before opening Enter Combination, this instrument is already written in the ID field.
3. Specify the relation of the combination as the least common denominator in the Rel field.
   Example: To define a butterfly, enter the relation 1 for the first instrument 2 for the second and 1 for the third.
4. Click the **[Buy]** or **[Sell]** button depending on which leg to buy or sell in the combination.
5. Repeat step 2 to 4 for every instrument series to be added until the whole combination is constructed. (Max. 10 legs allow).
6. Fill in the quantity of the combination. The quantity is the number of times the user wanted to trade the combination, e.g. the butterfly.
7. Validity is set to FoK at default and can not be changed.
8. Specify the account in the Customer field for the order, and add free text information into the Info field.
9. Click the **[Price]** button to calculate the net price for the combination.
   The result is shown in the Price field if prevailing market prices are available for all instrument series included in the combination.
   When the system calculates the price, it uses the least common denominator. This means that if there are 10 butterflies and the relation is defined as 10, 20 & 10 and the quantity 1, the price would be 550. If the butterfly is in relation 1, 2, 1 and quantity 10 (which is the same), the price would be 55 (which is also the same but, a more common way of expressing prices in a combination).
   A negative price means that trade at discount (price * quantity) in the field. Vice versa, a positive price means that the combination is trading at premium.
10. Click the **[Send]** button to execute the entire combination at the calculated net price. A message will alert users if the combination is not traded due to insufficient quantity or price changes in the market. (Refer to Appendix 2.2 – Non-Standard Combinations)

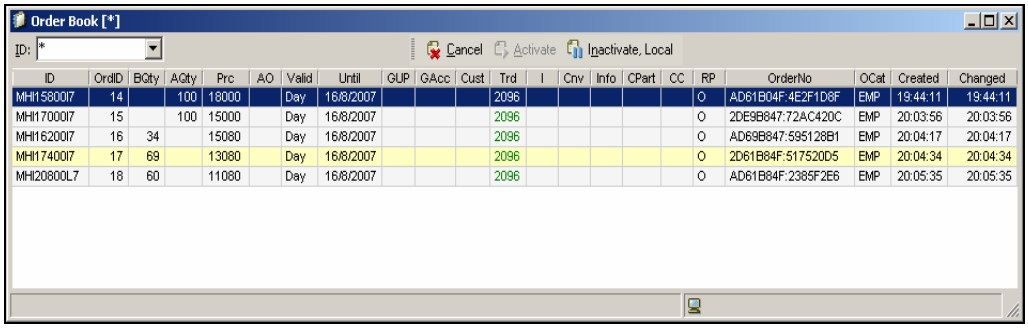
Refer to Section 3.2 for the relevant order attributes.

3.6 Order Book

This window is used to display and manage user's own orders or orders within the company. It allows users to manage their orders in the Order Book, such as canceling, changing, activating, and inactivating orders. This window will automatically update upon any changes of the orders and the order will disappear when it is completely matched.

All the information shown in the Order Book window will be updated by the central database of the Exchange. If in doubt, use the Reload Order Book function to refresh data on screen. However, users should note that there may be some differences between the central database and their local Order Book due to the time lag caused by the data transmission from the Exchange to their local database. Users are urged to check the order information in the price information windows and the local Order Book. For any discrepancy found, users are advised to call the HKATS Hotline at 2211 6360 and report the problem as soon as possible.

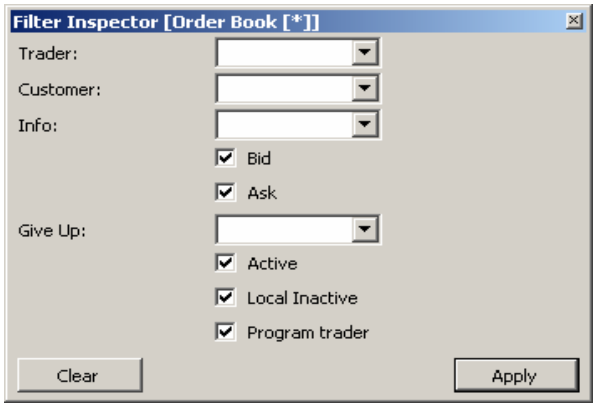
Open the Order Book window from the Orders Menu or the Quick Menu (right mouse click) or the toolbar icon.



Window Items - Order Book window

Item	***Description***
ID	Instrument Identity.
OrdID	Local order number.
BQty	Quantity of a bid order.
AQty	Quantity of an ask order.
Prc	Price of the order
AO	Auction Order. (an "X" will appear if it is an Auction Order)
Valid	Validity
Until	The date the order is valid until.
GUP	The company identity of the Give Up client.
GAcc	Free text in the Acc. Info field when entering a Give Up order
Cust	Customer – the accont type (C, H, R###, A1, P1 or M1).
Trd	User ID
I	Inactive or active order. A checked box indicates an inactive order.
Cnv	Converted. Marked with a "X" if an auction order is converted to a limit order.
Info	Free text field.
Cpart	Counterparty.
CC	Order condition code
RP	Requested position (Open or Close).
Orderno	Order number.
OCat	Specifies the order category, for example, Electronic Marketplace (EMP).
Created	Time when the order was created.
Changed	Time of the latest order change.

Users can right click to the Quick Menu then select Settings and then Filter Inspector to specify more detailed search criteria to view order information.



Cancel Order

1 Specify one or several orders to cancel by selecting with the mouse or holding the **[Shift]** key and moving the up/down arrow.
2 Click the **[Cancel]** button.

The selected orders are now removed from the central and the local Order Book.

Inactivate Order

Select the order to be inactivated (to select more than one order, hold the **[Shift]** key) and then click **[Inactivate, Local]**. The orders selected will be removed from the market but still be kept in the local Order Book (not seen by other users in the same company) with a **"√"** marked in the I Column. Users can activate the orders back to the market easily by clicking the **[Activate]** button.

Activate Order

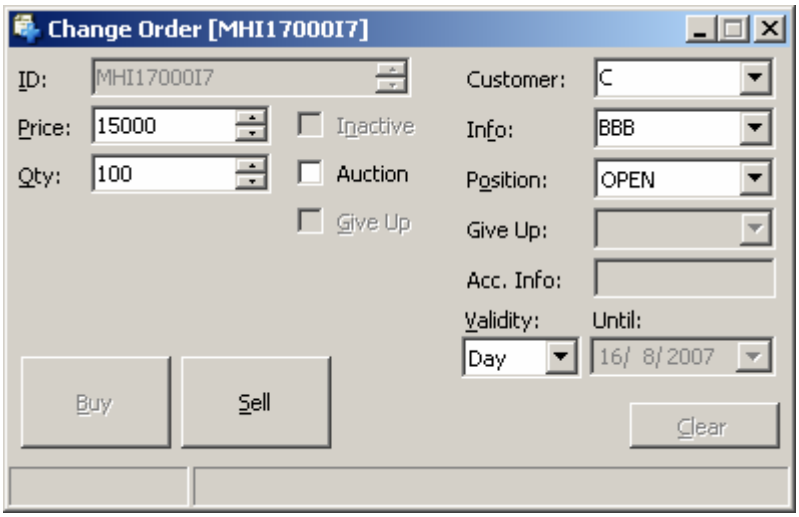
To activate an inactive order means to place the inactive order to the market. Simply select the order to be activated and then click **[Activate].** The **"√"** in the "I" column will then be gone. **Note that the activated order will be treated as new order and lose its previous priority. (If applicable)**

To search for specific order(s)

1 Specify the search criteria by opening the Filter Inspector and filling in the search keys
2 Press the **[Apply]** button

Changing an Order

To bring up the Change Order window, users need to double click the active or inactive order to be changed. It is possible to change the orders of other users in the same company. If an order is changed by another user, the original identity of the order will now be changed to the changer's identity.



(i) The following changes cannot be made:
- change from a bid order to an ask order and vice versa
- change the product identity
- change the validity time to Fill or Kill or Fill and Kill
- change the give up party and the acc. info

(ii) The following changes can be made without losing priority:
- reduce quantity
- change the validity time
- modification of information in Cust field
- modification of information in Info field

(iii) The following change will be treated as a cancellation of the original order and entry of another new order; therefore, loses its priority:
- increase quantity
- price alternation

If users do not want to lose priority of the original order, they may enter a new order for the additional quantities and leave the original order unchanged.

It is important to bear in mind that while users are changing the attributes of the order in the Change Order window, i.e. before clicking the applicable **[Buy]** or **[Sell]** to confirm the changes made, the order in the original condition is still open for trading in the market.

To confirm all the changes made, click **[Buy]** or **[Sell]**.

A Precautionary note to the Change Order window

While a user is in the process of changing an order, other users may, at the same time, be attempting to execute the order up to the full amount. The original order may have been partially or fully filled before (or at the same time as) the order change request reaches the central system. In such cases, warning messages will pop up to alert the user or prompt user for further confirmation. Warning messages may also appear in the Market Messages window. Therefore, whenever such a warning message(s) pops up or is displayed in the Market Messages window, users are strongly advised to abort all change requests and update their Order Book, check the Company Trades window and the Clearing Trades window for any of the above-mentioned order execution, and make sure their orders have been changed as intended. Please note that users have an option to turn off the display of warning messages in the Market Messages window. (Refer to Section 2.1.1 – Market Messages)

What to do after a momentarily Information Feed Status OFF

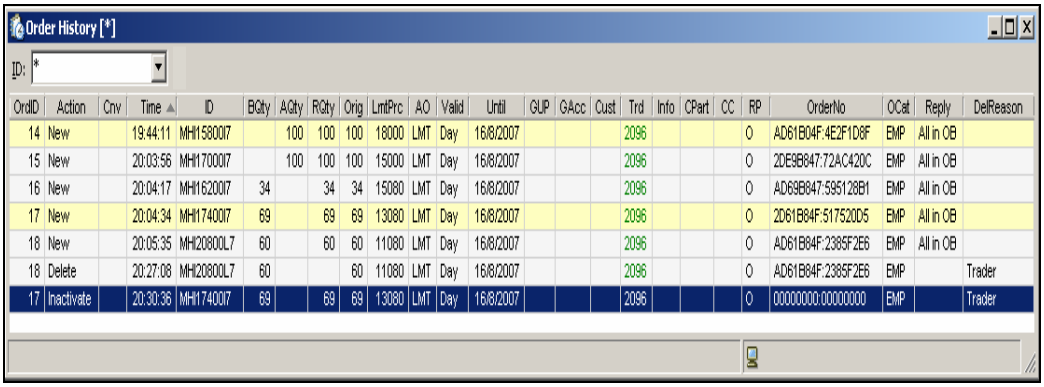
Under rare circumstances it may happen that the connection between the local workstation and the marketplace is interrupted, e.g. during a network failure and the market feed info has gone to OFF for a while.

When users suspect that the connection has been interrupted, choose the command Reload Order Book from the Orders Menu or toolbar icon.

This function compares the Order Book in the CLICK Trade application with the central Order Book and makes any necessary adjustments in the CLICK Trade Order Book. The result of the update is shown in a pop-up window.

3.7 Order History

Open the Order History window from the Orders Menu or the toolbar icon.



The window is dynamically updated when orders are entered, changed, traded and cancelled. The window displays the history of the user's own orders and orders entered by other users in the company. The window should be considered as a log and should not be used for examining current market status. To examine the market status, use other windows such as the Order Book or the Company Trades window.

Users can right click to the Quick Menu then select Settings and then Filter Inspector to specify more detailed search criteria to view order information.

Window Items - Order History window

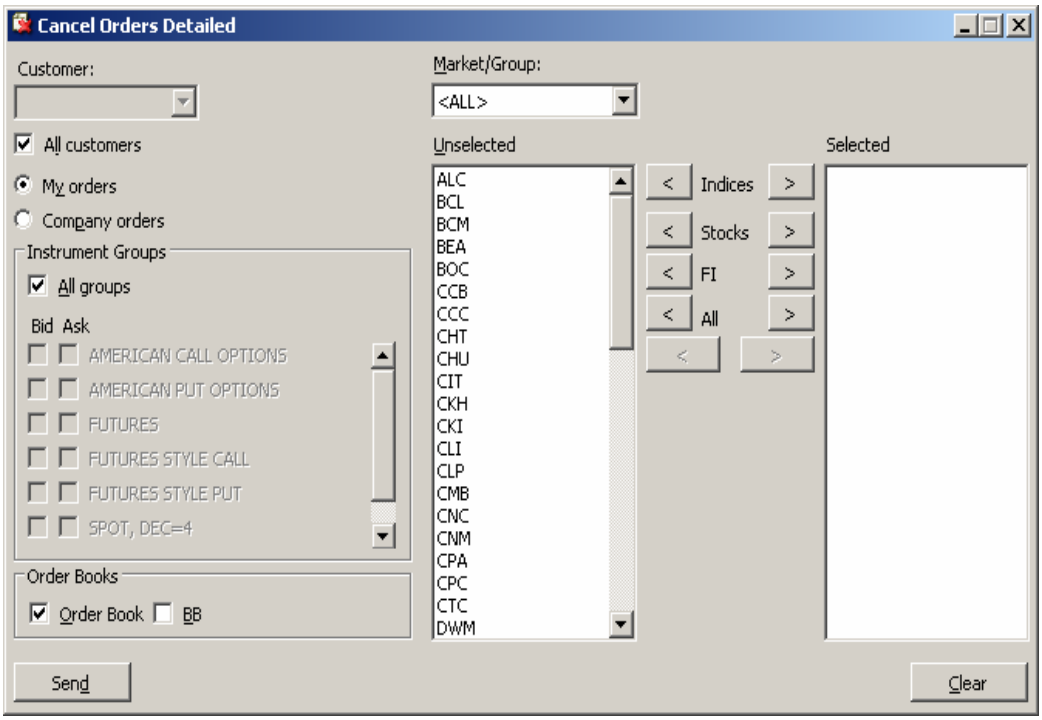
Item	*Description*
OrdID	Local order number. The first number is generated locally by each individual workstations according to its records stored previously. A same record may not be marked with a same local order number in different workstations.
Action	Displays the action of the order: • New – New active order created. • New Inact – New inactive order created. • Changed – Order has been changed. • Delete – Order has been cancelled or traded. • Traded – Order has been traded, fully or partly. • Activate – Inactive order has been activated. • Inactivate – Active order has been inactivated.
Cnv	Order that is converted from an auction order to limit order or inactive order after the pre-opening period with be marked with an "X" in this column.
Time	Time when the order action was executed.
ID	Instrument Identity.
BQty	Quantity of a bid order.
AQty	Quantity of an ask order.
RQty	Remaining quantity of original quantity.
Orig	Original order quantity.
LmtPrc	Limit price of the order.
AO	Auction Order. (an "X" will appear if it is an Auction Order)
Valid	Validity
Until	The date the order is valid until.
GUP	The company identity of the Give Up client.
GAcc	Free text in the Acc. Info field when entering a Give Up order
Cust	Customer –the account type (C, H, R###, A1, P1 or M1).
Trd	User Id
Info	Free text field.
CPart	Counterparty. (Only applicable to T4 block trades)
CC	Order condition code
RP	Requested position (Open or Close).
Orderno	Order number.
OCat	Specifies the order category, for example, Electronic Marketplace (EMP).
Reply	Reply received when the order was sent to the market place.
DelReason	Delete reason.

To search for specific order(s)

1 Specify the search criteria by opening the Filter Inspector and filling in the search keys
2 Press the **[Apply]** button

3.8 Cancel Orders

Open the Cancel Order window from the Orders Menu or the Quick Menu or toolbar icon.



The Cancel Orders window allows 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 for futures or options combined with bid/ask.
- All or a specified Client.

Default

The **[My orders]** button is checked at default. The **[Company orders]** button must be checked to cancel orders entered by other users in the same company.

Note: On the last trading day, users are not allowed to remove all or groups of orders from the Marketplace by using the Cancel Orders Detailed window after the last trading time of the expiring spot month contracts if the orders include those expiring spot month contracts. In that case, users are advised to use the Order Book Window (Section 3.6) to select and cancel orders other than the spot month series.

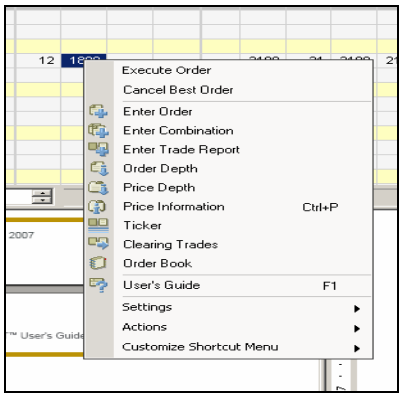
Cancel Orders

1. Select **[My orders]** button if users only want to cancel their own orders or select **[Company orders**] button to cancel all orders entered by other users in the company.
   If the [**Company orders]** button is checked but the user is not allowed to cancel orders of other users in the company, the transaction will fail.
2. Check the **[All customers]** box if the user wish to cancel orders for all account types or uncheck the **[All customers]** box then fill in the account type in the Customer field if users want to cancel orders for a specific type of account.
   If the field is empty, then all orders belonging to the given choice (My orders or company Orders) will be cancelled, but the user must confirm this in the pop-up message.
3. Check the **[All groups]** box to cancel all orders for all types of market and instrument groups. Otherwise uncheck the box then specify which market(s) or group(s) to be cancelled from the Market/Group dropdown menu.
4. Select the specific underlying to be cancelled in the left column marked Unselected.
5. Press one of the buttons between the columns to move items from the Unselected section to the Selected section. The **[>]** button will move a single underlying from the left column to the right column. It is possible to select all instruments of a kind by using the **[>]** button corresponding to the instrument type chosen.
   Example: If users click the **[Stocks >]** button all instruments with stocks as an underlying will be moved to the table on the right hand side. (Same usages for the **[<]** button)
6. Select Order Book and/or BB in the Order Books section to cancel order from the Order Book and/or from the Bulletin Board Order Book.
7. Click the **[Send]** button. All orders matching the cancellation criteria are removed from the Marketplace and the local Order Book and the Order History windows are updated accordingly. Users will also be informed of how many orders matching the criteria were withdrawn from the market.

Note: This window is used for bulk cancellation. For cancel a single order, please use Order Book window.

Cancel Best Orders Function

This function can be accessed in the Quick menu opened from the Price Information window. It allows users to cancel their best order entered for the highlighted instrument. A confirmation message will appear if the option is selected in the Preferences window (Refer to Section 6 – Customization).

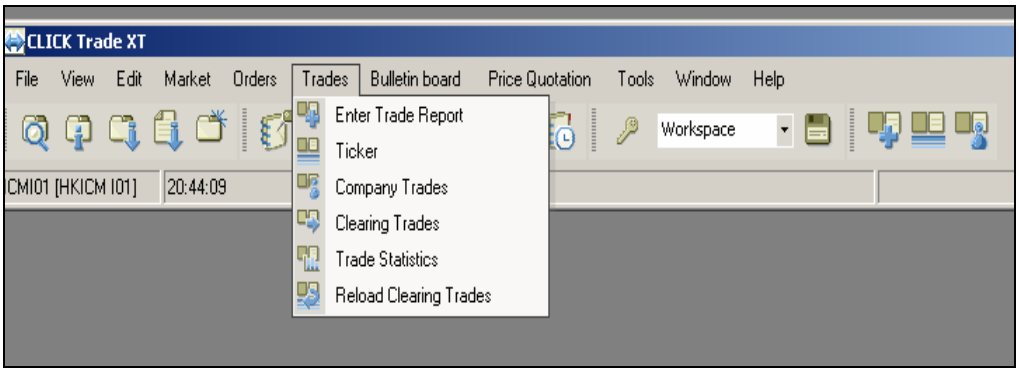


To cancel the best order

1. Select either the bid or ask column of the instrument for which the user would like to have their best order cancelled.
2. Right-click the mouse and the Quick menu appears.
3. Select the Cancel Best Order option. The best bid or ask of the instrument selected is now cancelled.

4 Trades Information

This section deals with the trades functions available on CLICK Trade for HKATS in the Trades menu. These windows are designed to provide users updated trades information and provide a function for users to enter Block Trades. Information in the Company Trades and Clearing Trades windows can be used for trade confirmation purposes. However, information in the Ticker window may only be used as an indication of the trading activities took place in the market. The Enter Trade Report window is used as a Block Trade facility.

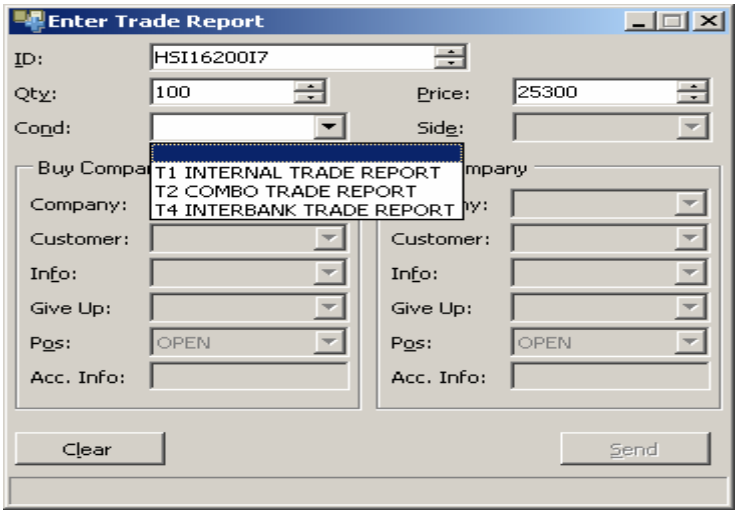


4.1 Enter Trade Report - Block Trades

HKATS handles block trades between two client accounts, house and client accounts, house and market maker accounts, market maker and client accounts, or two market maker accounts of the same or two different Exchange Participant through the Enter Trade Report window, which can be found in the Trades menu or Quick Menu (right mouse click) or the toolbar icon. To perform Block Trades, the order must meet all criteria specified by the Exchange from time to time.

4.1.1 Perform a Block Trade

1. Enter a valid Block Trade Contract series identity (ID). Valid Block Trade Contracts are designated by the Board and notified to Exchange Participants from time to time.
2. Enter the number of contracts (Qty). Ensure the quantity entered satisfies the Minimum Volume Threshold specified in the relevant Rules, Regulations, Procedures and Circulars of the Exchange.
3. Enter the Block Trade price (Price). Ensure the price entered satisfies the Execution Price stipulated in the relevant Rules, Regulations, Procedures and Circulars of the Exchange.
4. Select the appropriate Condition Code for the trade
   - T1 Internal Trade Report: To facilitate single leg Block Trades within one company
   - T2 Combo Trade Report: To facilitate multiple legs Block Trades within one company
   - T4 Interbank Trade Report: To facilitate single leg Block Trades between two company
5. Enter the buyer account in the Customer boxes in the Buy Company area.
6. Enter the seller accounts in the Customer boxes of the Sell Company area.
   * only one side is required for T4 (read section 4.1.2 “More information T1, T2 and T4”)
7. Enter the appropriate order attributes described in section 3.2.
8. Press the [**Send**] button to complete the Block Trade.



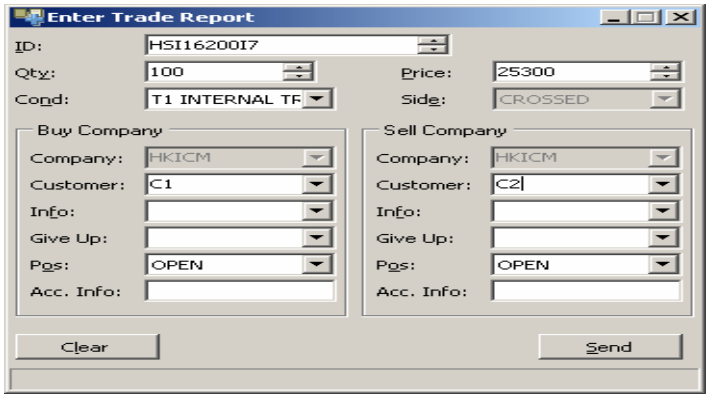
Refer to relevant sections in the Rules, Regulations, Procedures and Circulars for trading procedures of block trades.

4.1.2 Block Trade conditions (T1, T2 and T4)

This latest version of CLICK Trade allows for three different order entry methods for entering block trades, namely T1 Internal Trade Report; T2 Combo Trade Report; and T4 Interbank Trade Report. The following describes each in more detail.

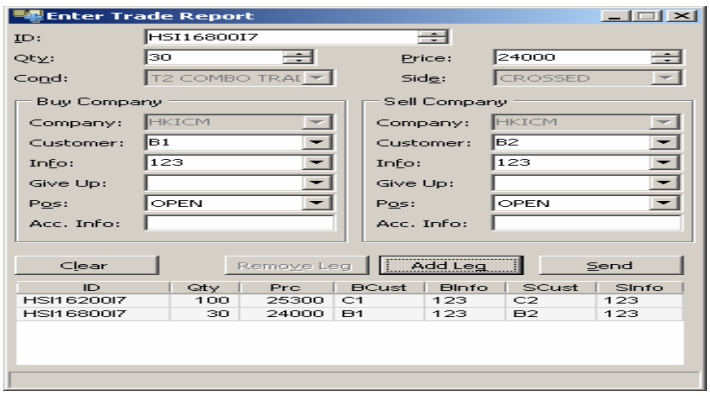
T1 Internal Trade Report

This order entry method handles block trades between two client accounts, house and client accounts, house and market maker accounts, market maker and client accounts, or two market maker accounts of the same Exchange Participant. This option only allows for single leg block trades. Users can specify the customer account information in the Customer field in BOTH the Buy Company section and the Sell Company section.



T2 Combo Trade Report

This order entry method handles block trades between two client accounts, house and client accounts, house and market maker accounts, market maker and client accounts, or two market maker accounts of the same Exchange Participant. This option allows for multiple legs block trade. After information of each leg is entered in the corresponding fields, click the **[Add Leg]** button. The information will be transferred to the window below. This procedure is repeated for all legs in a multiple legs block trade. The **[Remove Leg]** button can be used to remove legs in a strategy prior to execution. The system allows for a maximum of 10 legs per entry. Users can specify the customer account information in the Customer field in BOTH the Buy Company section and the Sell Company section.



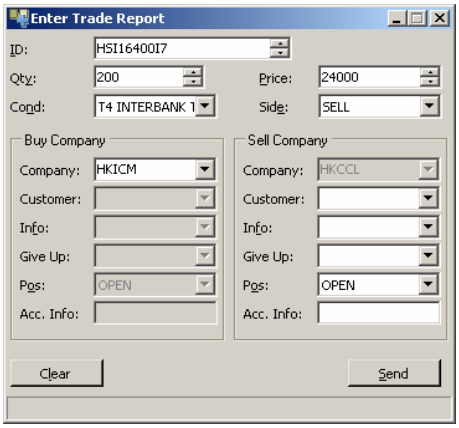
T4 Interbank Trade Report

This order entry method handles block trades between two client accounts, house and client accounts, house and market maker accounts, market maker and client accounts, or two market maker accounts of two Exchange Participants. The main feature of this function is to enable block trades between two different companies. This option allows for single leg block trades. Users must select to be on the Buy side or the Sell side of the trade and must enter their selection in the dropdown menu indicated as Side.

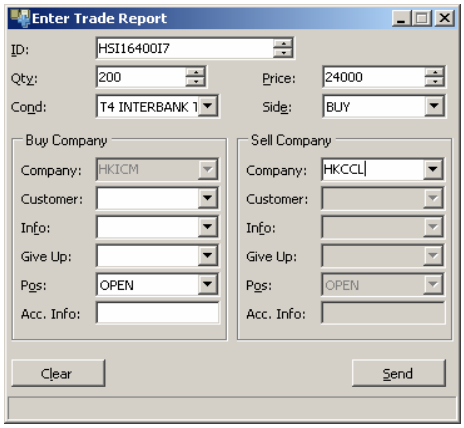
For an order to be identified and linked with the block trade entered by another company, each user must enter the other company's code in the opposite side Company field with identical Series ID, Price and Quantity. Note that the company code must have "HK" in the front. (See example below)

This example illustrates a T4 Interbank block trade performed by HKICM and HKCCL. Both users entered the identical Series ID, Price and Quantity along with a selection to be on the Buy side or Sell side. In addition, each have entered the counterparty's company code in the opposite Company field.

User: HKCCL



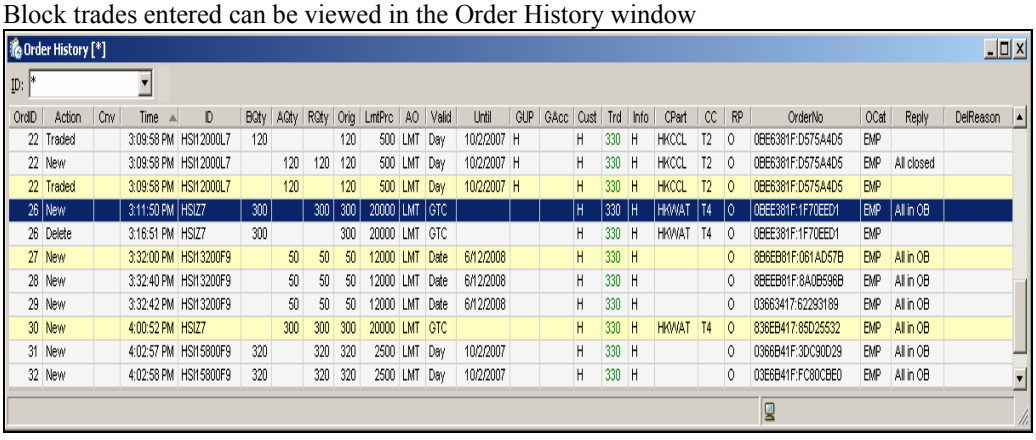
User: HKICM



The time difference between the input of one side of a Block Trade and the input of the other side of the Block Trade must be within 5 minutes or at such other time period as notified by the Exchange to Exchange Participants from time to time.

Any block trade order entered but not matched within the prescribed time period will be cancelled automatically.

Block trades entered can be viewed in the Order History window



Entering Block Trades that involves a Spread or Strategy Combination

- One of the legs in the strategy must satisfy the Minimum Volume Threshold requirement.
- Each leg must be entered into the Block Trade Facility. Each leg must have a reference free text and the free text must be the same in order to identify the legs as one strategy. (Entered via the Info field of the Enter Trade Report window).
- Block Trade price of each leg must satisfy the Execution Price applicable to the Block Trade contract concerned.
- One strategy is limited to two Exchange Participants only.
- The T4 order entry method can be used for entering strategies. Users must enter each leg separately using the same reference free text for the Exchange to identify the set of legs as one strategy.

4.1.3 Guideline on using the Info field

The free text entered into the Info field is used to identify the set of legs in a multiple leg strategy (combination). Different references can be inputted in the Buy side or the Sell side but yet be considered as one strategy. The following examples illustrate how the reference free text can be specified for the Exchange to consider the legs as one strategy.

- Case 1 – The references of Leg 1.1 and Leg 1.2 are **the same on each trade side**.

Leg 1.1

	Buy	Sell
Info	ABC	ABC

Leg 1.2

	Buy	Sell
Info	ABC	ABC

Both Leg 1.1 and Leg 1.2 will be considered as one strategy.

- Case 2 – The references of Leg 2.1 and Leg 2.2 are **not the same on each trade side**.

Leg 2.1

	Buy	Sell
Info	ABC	123

Leg 2.2a

	Buy	Sell
Info	123	ABC

Leg 2.2b

	Buy	Sell
Info	ABC	123

Same info reference is not required to be on the same trade side. All 3 legs will be considered as one strategy.

- Case 3 – The references of Leg 3.1 are **the same on each trade side** and Leg 3.2 are **not the same on each trade side**.

Leg 3.1

	Buy	Sell
Info	ABC	ABC

Leg 3.2

	Buy	Sell
Info	ABC	123

Both Leg 3.1 and Leg 3.2 will not be considered as one strategy.

- Case 4 – The references of Leg 4.1 and Leg 4.2 containing **Blank identities**.

Leg 4.1

	Buy	Sell
Info	ABC	"____"

Leg 4.2a

	Buy	Sell
Info	"____"	ABC

Leg 4.2b

	Buy	Sell
Info	ABC	"____"

All 3 legs will be considered as one strategy. (Similar to Case 2)

Deletion of Block Trades

Block Trades executed by an Exchange Participant will be deleted by the Exchange in conjunction with the Clearing House or SEOCH, without being required to give further notice to the Exchange Participant, if the Block Trades executed has not satisfied all the criteria applicable to the Block Trade. Other reasons for the deletion of Block Trades may also be applied in accordance with relevant Rules, Regulations, Procedures and Circulars.

Verification of Block Trades

Users should verify the details of the block trade execution in various windows of the CLICK Trade system and confirm the order with client immediately. In the Ticker, Company Trades and Clearing Trades window, all Block Trades will be displayed with either "EMP 1 BR" for T1 and T2 or "EMP D BR" for T4.

Block trade quantities reported in the Price Information window is reported in the TotTRQty column. However, note that total turnover reported in the Turn column includes block trade quantities (Refer to Section 2.3 – Price Information). In addition, price and quantities of trades executed through the Enter Trade Report windows are **not** included in the statistics calculated in Trade Statistics window.

The following section describes Special Deal Indicators that will appear in the DealSrc column of the Ticker, Company Trades and Clearing Trades window. These indicators can be used to confirm trade execution.

4.2 Special Deal Indicators

To maintain a high level of transparency to all users, the following types of transactions will be reported in the Ticker, Company Trades and Clearing Trades windows with the following special deal flags in the DealSrc columns:

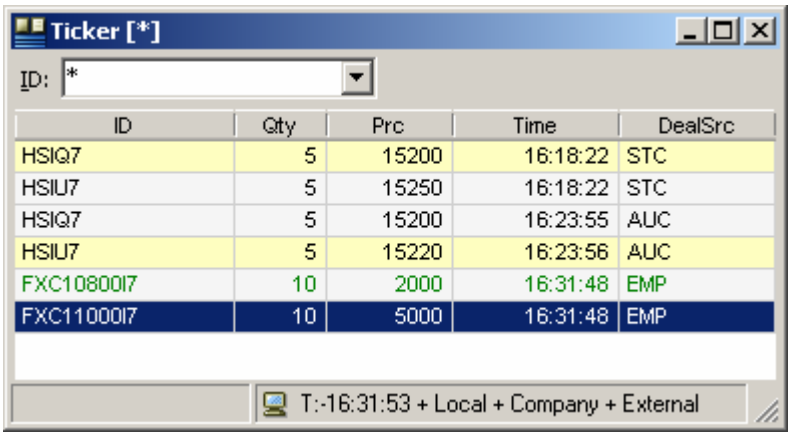
Deal Src Deal flag available in these columns are:

BB NSTC	= Bulletin Board Trades
STC	= Standard Combination Trades
AUC	= Auction Orders
MPS	= Deal Registration
GIVE UP	= Reverse Giveup Trades
EMP 1 BR	= T1 or T2 Block Trades
EMP D BR	= T4 Block Trades

4.3 Ticker

This window can display all trade information in various markets in a time and sales style. Information in this window is stored in the local workstation. Therefore, it can only display trades information received during the logged in period. Users will not be able to retrieve any trade details during the logged-off period or during the intervals when there may be equipment/telecommunication problems preventing proper connection to HKATS.

Open the Ticker window from the Trades Menu or the Quick Menu (right mouse click) or the toolbar icon.



Window Items - Ticker window

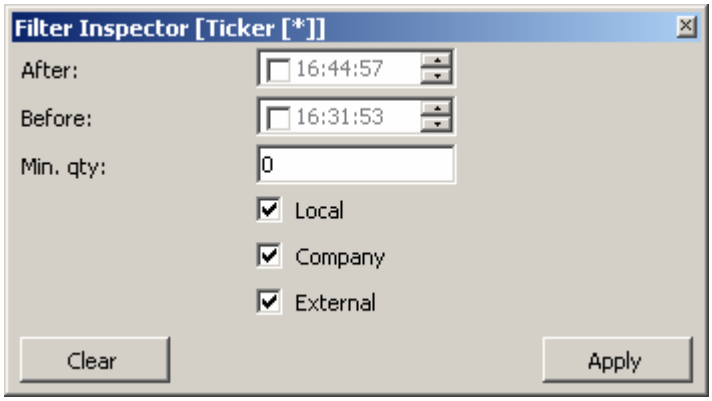
Item	***Description***
ID	Instrument identity.
Qty	Traded quantity.
Prc	Traded price.
Time	Time when tick was created.
Deal Src	Show special deal flags to indicate how the order was matched.

The Search field

To search for specific instrument, type in instrument name in the ID field then press **[Enter]**.

The Filter Inspector

Users can right click to the Quick Menu then select Settings followed with Filter Inspector to specify more detailed search criteria to view trades. For example, it is possible to display trades created after a certain time. Users may choose to display one or more combinations of an available instrument.



Information in the ticker window can be filtered by the following attributes:

ID	Review information of a particular series or a group of series that has been created in **Instrument Groups** ((Section 6.6 – Instrument Group Management)) or enter the identity of the series or the group name in the ID field and then press **[Enter]**. To review information of all the series, enter an asterisk **[*]** in the ID field and then press **[Enter].**
After	View trades transacted after the time specified
Before	View trades transacted before the time specified
Min Qty	View trades that the quantities were above the minimum specified
Local	View trades that involved the login user, check the Local box only. The trades displayed are in green.
Company	View trades that were done by other users in the same company (i.e. excluding the login user), check the Company box only.
External	View trades done in the market except Local and Company trades. The trades displayed are in black.

Users may select Local, Company, and External at the same time.

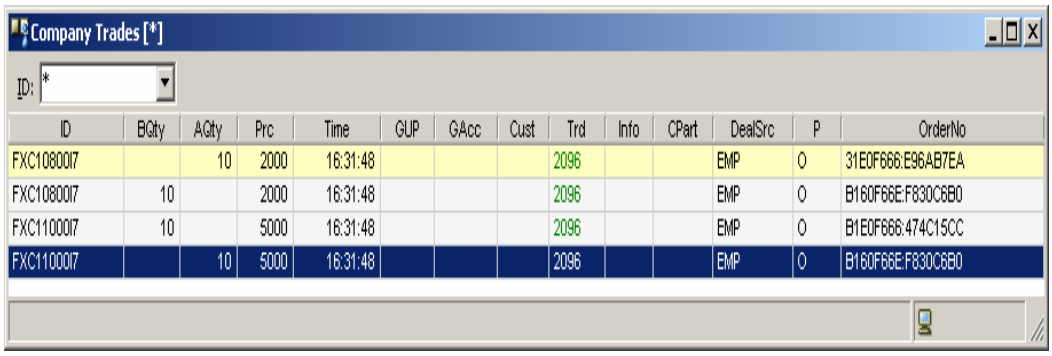
Attention

Users may have checked the **Local** box but the total quantity executed shown in the Qty column of the Ticker window may not be solely attributable to this user.

For example if this user is one of the three sellers in a deal, each seller sells 10 contracts, the ticker will show the total quantity of 30 contracts (even though this user's contribution is only 10 contracts). The same logic applies to choosing **Company** to view trades done by other users in the same company.

4.4 Company Trades

Open the Company Trades window from the Trades Menu or the toolbar icon.



The Company Trades window displays details of executed contracts of the current user and other users in the same company. However, please note that information in this window is stored in the local workstation. Therefore, it can only display trade information received during the logged in period. Users will not be able to retrieve any trade details during the logged-off period or during any time period when there may be equipment/telecommunication problems preventing proper connection to HKATS.

Window Items - Company Trades window

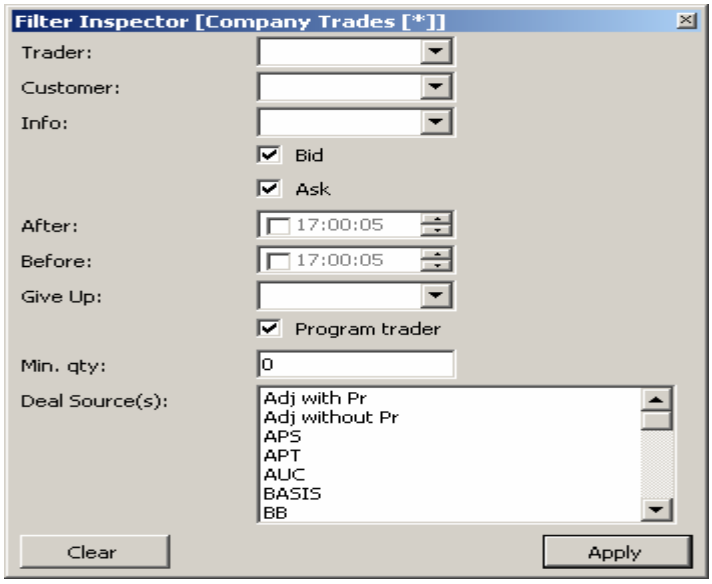
Item	***Description***
ID	Specifies the instrument identity
BQty	Specifies the traded bid quantity (Empty if traded order was an ask order)
AQty	Specifies the traded ask quantity (Empty if traded order was a bid order)
Prc	Specifies the traded price
Time	Specifies the the time (according to the PC time) when trade was created
GUP	Specifies the Identity of the company who receive the Give Up order
GAcc	Specifies the free text in the Acc. Info field when entering a Give Up order
Cust	Specifies the account type
Trd	Specifies the user ID
Info	Specifies the free text entered in the Info field when entering the order
Cpart	Specifies the counterparty.(Only applicable to T4 block trades)
Deal Src	Specifies the how the order was matched
P	Specifies the position requested
Orderno	Specifies the order number

The Search field

To search for specific instrument, type in instrument name in the ID field then press **[Enter]**.

The Filter Inspector

Users can right click to the Quick Menu then select Settings followed with Filter Inspector to specify more detailed search criteria to view company trades.



Display Company Trades

1. Open the Company Trades window from the Trades Menu or the toolbar icon.
2. Specify the search filter by entering specific instrument name into the ID field then press **[Enter]**.
3. Right click to reach the Filter Inspector to further specify query.

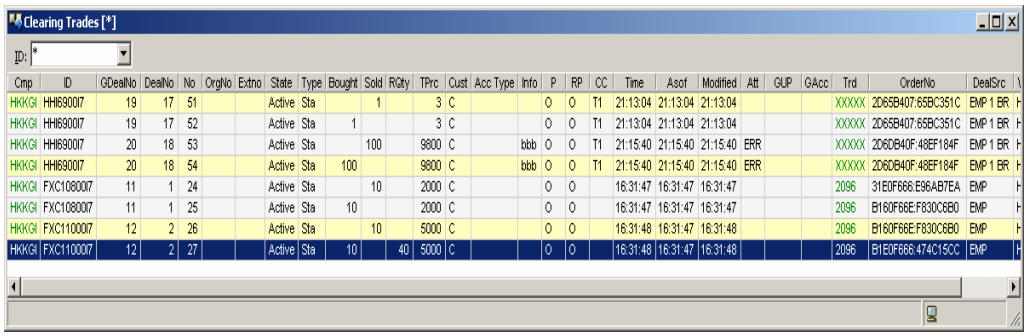
All trades matching the search criteria will now be displayed in the Company Trades window.

Information in the Company Trades window can be filtered by the following attributes:

ID	Review information of a particular series or a group of series that has been created in **Instrument Groups** (Section 6.6 – Instrument Group Management) or enter the identity of the series or the group name in the ID field and then press **[Enter]**. To review information of all the series, enter an asterisk **[*]** in the ID field and then press **[Enter].**
Trader	View trades done by a particular user in the same company, enter the identity of that particular user. To view trades done by every user in the company, simply leave this field blank.
Customer	View trades that are registered in a particular account type, enter the account code.
Info	View trades that are marked by the information specified in the Info field, key in the information entered.
Bid	View the bought trades.
Ask	View the sold trades.
After	View trades transacted after the time specified.
Before	View trades transacted before the time specified.
Give Up	View trades that were given up to a particular company.
Program trader	View trades done by program traders.
Min qty	View trades that the quantities were above the minimum specified.
Deal Source(s)	View trades with specific Deal Source. Users can choose multiple Deal Sources by using the CTRL or SHIFT keys. (Not all choices are applicable to HKATS trading system)

4.5 Clearing Trades

Open the Clearing Trades window from the Trades Menu or the Quick Menu (right mouse click).



Cmp	ID	GDealNo	DealNo	No	OrgNo	Extno	State	Type	Bought	Sold	RQty	TPrc	Cust	Acc Type	Info	P	RP	CC	Time	Asof	Modified	Att	GUP	QAcc	Trd	OrderNo	DealSrc
HKKGI	HHI69007	19	17	51			Active	Sta		1		3	C			O	O	T1	21:13:04	21:13:04	21:13:04				XXXXX	2D65B407:65BC351C	EMP 1 BR
HKKGI	HHI69007	19	17	52			Active	Sta	1			3	C			O	O	T1	21:13:04	21:13:04	21:13:04				XXXXX	2D65B407:65BC351C	EMP 1 BR
HKKGI	HHI69007	20	18	53			Active	Sta		100		9800	C		bbb	O	O	T1	21:15:40	21:15:40	21:15:40	ERR			XXXXX	2D6DB40F:48EF184F	EMP 1 BR
HKKGI	HHI69007	20	18	54			Active	Sta	100			9800	C		bbb	O	O	T1	21:15:40	21:15:40	21:15:40	ERR			XXXXX	2D6DB40F:48EF184F	EMP 1 BR
HKKGI	FXC108007	11	1	24			Active	Sta		10		2000	C			O	O		16:31:47	16:31:47	16:31:47				2096	31E0F666:E96AB7EA	EMP
HKKGI	FXC108007	11	1	25			Active	Sta	10			2000	C			O	O		16:31:47	16:31:47	16:31:47				2096	B160F66E:F830C6B0	EMP
HKKGI	FXC110007	12	2	26			Active	Sta		10		5000	C			O	O		16:31:48	16:31:47	16:31:48				2096	B160F66E:F830C6B0	EMP
HKKGI	FXC110007	12	2	27			Active	Sta	10		40	5000	C			O	O		16:31:48	16:31:47	16:31:48				2096	B1E0F666:474C15CC	EMP

Information displayed in the Clearing Trades window is stored at the Central System. Therefore, users are able to display all trades of the current business day by clicking the Reload Clearing Trades command in the Trades menu. Otherwise, it will display the trades since login. The trades are sorted by time in the table. Users may set in the Preferences – Interface if users want automatic loading of clearing trades at Login. Clearing Trades window will also display post-trade activities that are conducted by the back office or the Exchange.

Window Items - Clearing Trades window

Item	***Description***
Cmp	Specifies the mnemonic of the member firm. (a "C" character will be put in front of the mnemonic of the firm's Clearing Participants, e.g. ABC to CABC)
ID	Specifies the identity of the instrument series.
GDealNo	Specifies the global deal number. The Global Deal number is unique per Instrument Type and date. Global Deal number starts from 2.
DealNo	Specifies the deal number. The Deal number is unique per Instrument Type. That means deals of the same instrument type will follow a single numerical sequence according to the time of execution rather than the execution party (company).
No	Specifies the trade number.
Org No	Specifies the original trade number. It only appears with the new trade resulted from post-trade activities.
Extno	Specifies the external number. (Not applicable)
State	Specifies the trade status in the clearing house. (Active or Rectified).
Type	Specifies the trade type. The following types are available: Standard: "Sta" Transitory: "Tra" Overtaking: "Ove" Reversing: "Rev" Transfer: "Tsf"
Bought	Specifies the number of contracts in the Bid side.
Sold	Specifies the number of contracts in the Ask side.
RQty	Specifies the remaining quantity. Specifies the quantity that remains when a trade has been made.
TPrc	Specifies the traded price.
Cust	Specifies the account.
Acc Type	Specifies the account Type.
Info	Specifies the free text field.
P	Specifies the position.
RP	Specifies the requested position (Open or Close).
CC	Specifies the order condition code.
Time	Specifies the time of creation.
Asof	Specifies the time of when the original trade was registered. (As of)
Modified	Specifies the time when modified.

Att	Trades with errors in Customer and/or Open/Close will have an "ERR" flag. Trades executed during the failover period with have the "DUP" deal flag.*
GUP	Specifies the identity of the company who receive the Give Up order.
GAcc	Specifies the free text in the Acc. Info field when entering a Give Up order.
Trd	Specifies the user Id. This will display "XXXXX" for T1 and T2 block trades
Orderno	Specifies the the order number. It is displayed as "00000000:00000000" for records generated by the clearing system.
DealSrc	Specifies the Deal Source.
Whose	Specifies the trade owner.
CPart	Specifies the counterparty. (Only applicable to T4 block trades)

*Trades executed during the period of automatic recovery (failover) of the marketplace server in case of central system failure, will have this column marked with "DUP". Users are required to clarify immediately with HKATS hotline at 2211 6360 prior to confirming any order execution to their client. For details, refer to Section 7 – Contingency Measures.

The Search field

To search for specific instrument, type in instrument name in the ID field then press **[Enter]**.

The Filter Inspector

Users can right click to the Quick Menu then select Settings followed with Filter Inspector to specify more detailed search criteria to view clearing trades. (Same usage as Company Trades window)

Display Clearing Trades

1. Open the Clearing Trades window from the Trades Menu or the Quick Menu.
2. Specify the search filter by entering specific instrument into ID field then press **[Enter]**.
3. Right click to reach the Filter Inspector to further specify query.

All trades matching the search criteria will now be displayed in the Clearing Trades window.

Information in the Clearing Trades window can be filtered by the following attributes:

ID	Review information of a particular series or a group of series that has been created in **Instrument Groups** (Section 6.3 Preferences – Instrument Groups) or enter the identity of the series or the group name in the ID field and then press **[Enter]**. To review information of all the series, enter an asterisk **[*]** in the ID field and then press **[Enter].**
Trader	View trades done by a particular user in the same company, enter the identity of that particular user. To view trades done by all users in the company, simply leave this field blank.
Customer	View trades that are registered in a particular account type, enter the account code.
Info	View trades that are marked with information specified in the Info field.
Bid	View the bought trades.
Ask	View the sold trades.
After	View trades transacted after the time specified.
Before	View trades transacted before the time specified.
Giveup	View trades that were given up to a particular company.
Min Qty	View trades that the quantities were above the minimum specified.
Deal Source(s)	View trades with specific Deal Source. Users can choose multiple Deal Sources by using the CTRL or SHIFT keys. (Not all choices are applicable to HKATS)

Reload Clearing Trades

Whenever there is any system/telecom/equipment problems causing disruptions to the access to or operations of HKATS, users are advised to update their Clearing Trades by using the Reload Clearing Trades function in the Trades menu after HKATS resumes normal.

Post –Trade Activities Related Information Display

Clearing Trades window displays post-trade activities in the following manner:

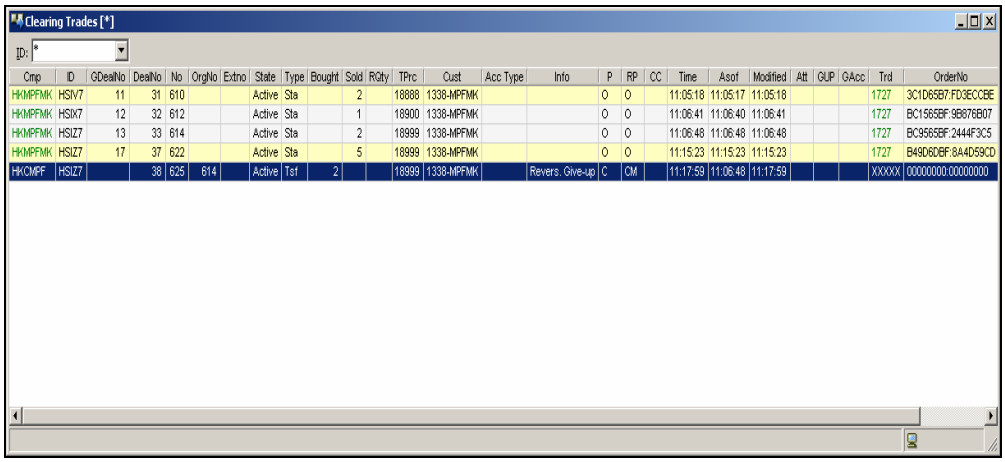
1) The original trade may change from Active to Rectified in the State column of the Clearing Trades window depending on the nature of the activities.
2) New trade(s) to reverse, offset or overtake the original trade will be displayed and marked with an indicator under the Type column.
3) Depending on the nature of the post-trade activities, in order to replace the original trade with the necessary number of new trades with the modification(s), zero to more than one trade will be displayed in the Clearing Trades window.
4) Please note that the new trade(s) will bear the Number of the original trade in the Org No. Users can use this number to refer back to the original trade.

Examples of Post-Trade Activities

A few examples of the post-trade activities are given below. Users should refer to the DCASS user guide for full details of post-trade activities.

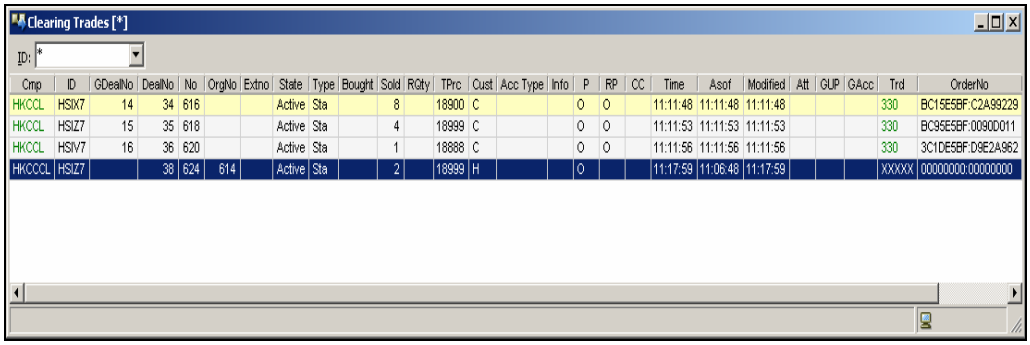
1. Give Up trades

   The back office indicates a Give Up on the original trade (614). A new trade (625) with opposite position is generated after the recipient has taken up the trade. Please note that the trade number of the original trade (614) will display in the Org No column of the new trade. To indicate that this is an action from the back office, a "C" will be put in front of the company's mnemonic when display in the Cmp column, e.g. ABC to CABC.



2. Take up trade

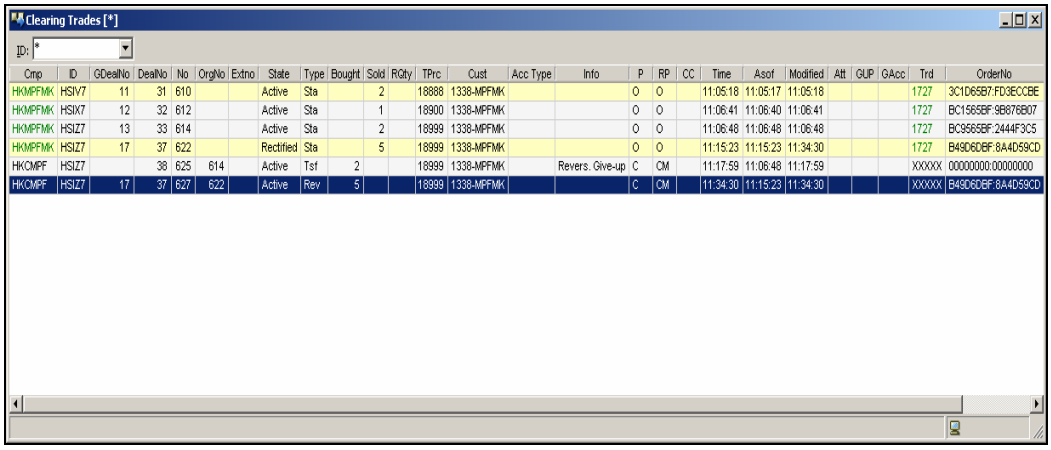
The recipient will take up the Giveup trade from the Giveup party with the original trade number (614) display in the Org No column.



Cmp	ID	GDealNo	DealNo	No	OrgNo	Extno	State	Type	Bought	Sold	RQty	TPrc	Cust	Acc Type	Info	P	RP	CC	Time	Asof	Modified	Att	GUP	GAcc	Trd	OrderNo
HKCCL	HSIX7	14	34	616			Active	Sta		8		18900	C			O	O		11:11:48	11:11:48	11:11:48				330	BC15E5BF:C2A99229
HKCCL	HSIZ7	15	35	618			Active	Sta		4		18999	C			O	O		11:11:53	11:11:53	11:11:53				330	BC95E5BF:0090D011
HKCCL	HSIV7	16	36	620			Active	Sta		1		18888	C			O	O		11:11:56	11:11:56	11:11:56				330	3C1DE5BF:D9E2A962
HKCCCL	HSIZ7		38	624	614		Active	Sta		2		18999	H			O			11:17:59	11:06:48	11:17:59				XXXXX	00000000:00000000

3. Error Trade

The original trade (622) is an error trade and a new trade with opposite position is generated to cancel the error trade. The original trade number (622) is displayed in the Org No column and an indicator "Rev" is displayed in the Type column.



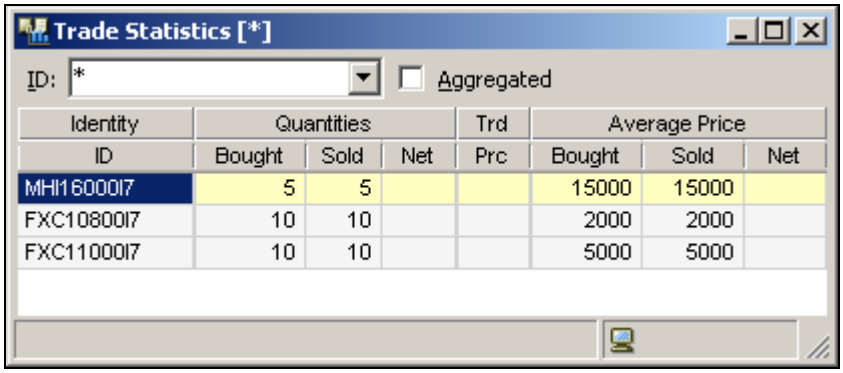
Cmp	ID	GDealNo	DealNo	No	OrgNo	Extno	State	Type	Bought	Sold	RQty	TPrc	Cust	Acc Type	Info	P	RP	CC	Time	Asof	Modified	Att	GUP	GAcc	Trd	OrderNo
HKMPFMK	HSIV7	11	31	610			Active	Sta		2		18888	1338-MPFMK			O	O		11:05:18	11:05:17	11:05:18				1727	3C1D65B7:FD3ECCBE
HKMPFMK	HSIX7	12	32	612			Active	Sta		1		18900	1338-MPFMK			O	O		11:06:41	11:06:40	11:06:41				1727	BC1565BF:9B876B07
HKMPFMK	HSIZ7	13	33	614			Active	Sta		2		18999	1338-MPFMK			O	O		11:06:48	11:06:48	11:06:48				1727	BC9565BF:2444F3C5
HKMPFMK	HSIZ7	17	37	622			Rectified	Sta		5		18999	1338-MPFMK			O	O		11:15:23	11:15:23	11:34:30				1727	B49D6DBF:8A4D59CD
HKCMPF	HSIZ7		38	625	614		Active	Tsf	2			18999	1338-MPFMK		Revers. Give-up	C	CM		11:17:59	11:06:48	11:17:59				XXXXX	00000000:00000000
HKCMPF	HSIZ7	17	37	627	622		Active	Rev	5			18999	1338-MPFMK			C	CM		11:34:30	11:15:23	11:34:30				XXXXX	B49D6DBF:8A4D59CD

A note on the Clearing trades window

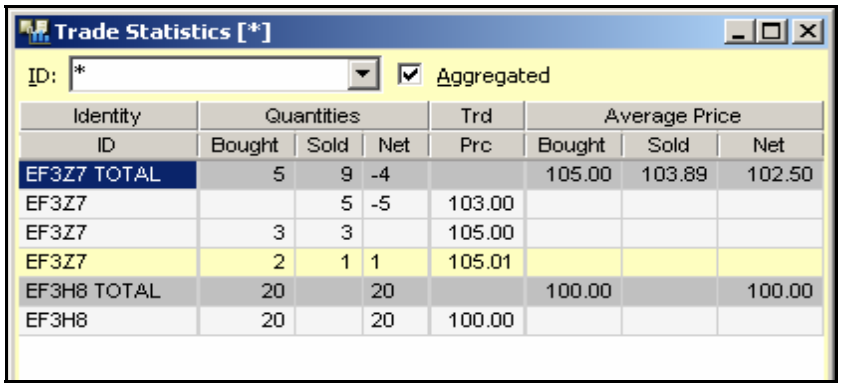
Please note that the response time for the Clearing trades window, by design, is slower than that of the Company Trades window.

4.6 Trades Statistics

Open the Trades Statistics window from the Trades Menu.



The Trade Statistics window displays the company's current position based on the trades since time of login. It will display the total trades of the current business day if Update Clearing Trades command is selected. When the Aggregated box is unselected, the average price bought or sold will be displayed along with the average net position. Calculations are described below. Note that price and quantities of trades executed through the Enter Trade Report windows are **not** included in these statistics.



When the Aggregated box is selected, a break down of bought and sold quantities will be displayed according to the traded price. In addition, the average price bought or sold will be displayed along with the average net position in the Total row.

Window Items – Trade Statistics window

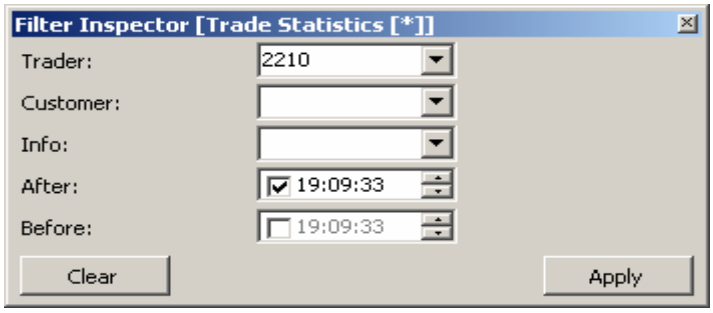
Item	***Description***
ID	Specifies the identity of the instrument series.
Quantities –	**Bought:** The bought volume.
Quantities –	**Sold:** The sold volume.
Quantities –	**Net:** Bought volume minus sold volume. ▪ +ve number means net long positions; ▪ -ve number means net short positions.
Average Price – **Bought:**	The price calculated by the sum of all bought quantities times its traded price divided by total bought quantities.
Average Price – **Sold:**	The price calculated by the sum of all sold quantities times its traded price divided by total sold quantities.
Average Price – **Net:**	The value calculated by the sum of the (price * quantities) of all bought contracts minus the sum of the (price * quantities) of all sold contracts, divided by the difference between the quantities bought and quantities sold.

The Search field

To search for specific instrument, type in the instrument name in the ID field then press **[Enter]**.

The Filter Inspector

Users can right click to the Quick Menu then select Settings followed with Filter Inspector to specify more detailed search criteria to view company trades.



To display trade statistics in Trade Statistics window

1. Open the Trade Statistics window from the Trades Menu.
2. Specify the search filter by entering specific instrument into ID field then press **[Enter]**.
3. Right click to reach the Filter Inspector to further specify query.

All trades matching the search criteria will now be displayed in the Trade Statistics window.

Information in the Trade Statistics window can be filtered by the following attributes:

ID	Review information of a particular series or a group of series that has been created in **Instrument Groups** (Section 6.6 – Instrument Group Management), enter the identity of the series or the group name in the ID field and then press **[Enter]**. To review information of all the series, enter an asterisk **[*]** in the ID field and then press **[Enter]**.
Trader	View trades done by a particular user in the same company, enter the identity of that particular user. To view trades done by every user in the company, simply leave this field blank.
Customer	View trades that are registered in a particular account type, enter the account code
Info	View trades that are marked by the information specified in the Info field.
After	View trades transacted after the time specified.
Before	View trades transacted before the time specified.

A note on the Trade Statistics window

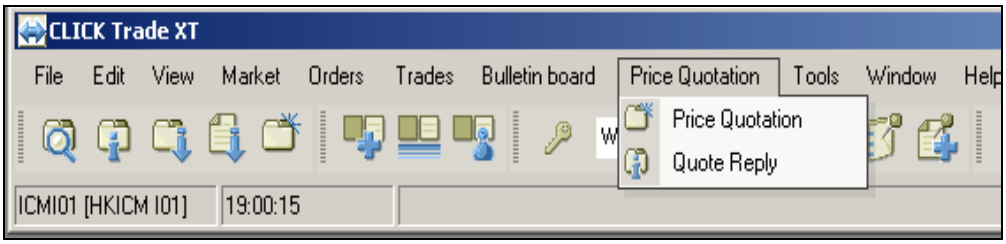
Please note that the Trade Statistics window uses the same data source as the Clearing Trades window and thus will have the same response time.

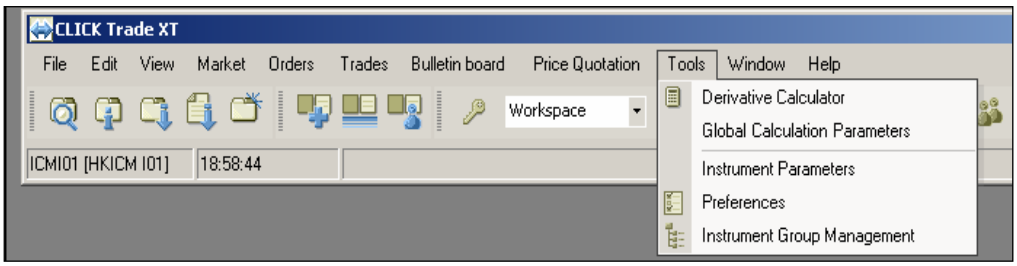
5 Market Making Functions

The responsibility of market makers is to provide quotations to the market. The Price Quotation window and the Quote Reply Window are designed to meet the requirements of market makers or those who want to quote prices on HKATS. These windows provide price information and quotation functionality. In order to fulfill market makers' obligation, all market-making users are required to submit their quote either through the Price Quotation window or the Quote Reply window. (For the market-making OAPI users, they are required to use the MO6 - External Price Quotation.) The functionalities of these windows are covered in depth in this section.

Theoretical prices can be calculated in two facilities of this application 1) Derivative Calculator and 2) Calculated section of the Price Quotation window. The former calculates theoretical price of a single option and the latter calculates theoretical prices for a number of options simultaneously. The latter requires the user to enter a set of parameters supporting the calculations and these are entered in the Global Calculation Parameters and Instrument Parameters. Details will be covered in Sections 5.3-5.6.

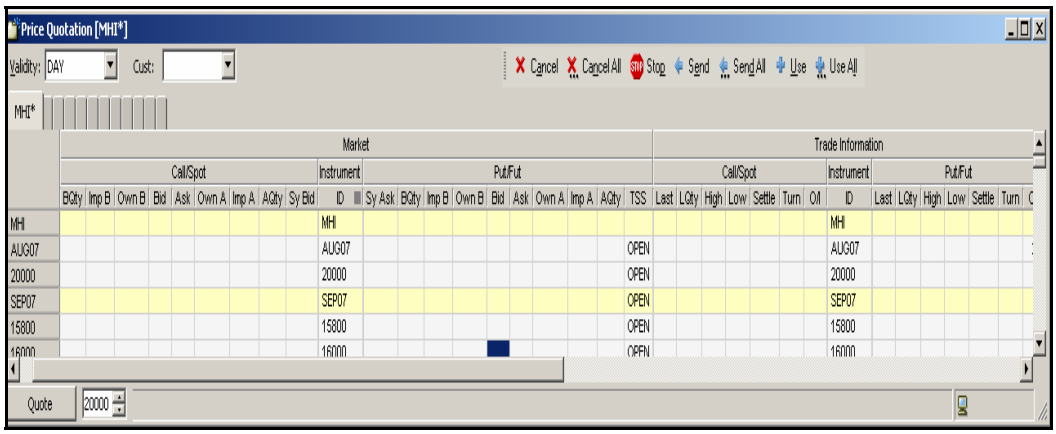
Users should exercise due care in operating their workstations. Valid identity, price and quantity should <u>ONLY</u> be entered into the corresponding fields. <u>NO</u> space is required for such entries. Users should be aware that they are fully responsible for any unstable condition or breakdowns of their CLICK workstations if improper strings or values are being entered into the relevant fields.





5.1 The Price Quotation Window

Open the Price Quotation window from the Price Quotation Menu or the toolbar icon.



This window is designed for market makers to send quotes to the market. The window is divided into six sections:

1)	**Market**	Displays best bid and ask price information in the market.
2)	**Trade Information**	Displays the statistics of trades during the day.
3)	**Risk Ratios**	Displays risk ratios (delta, gamma, vega, theta).
4)	**In Market**	Displays the user's orders in the Market entered from the Price Quotation Window.
5)	**Used Quotes**	Calculated prices from the Calculated section or entered manually. These prices can be transferred to the In Market section.
6)	**Calculated**	Prices calculated can be transferred to the Used Quotes section.

Description on each section is provided below.

Users can enter quotations through this window either manually or through the use of the derivative calculator within the CLICK Trade system.

Each Price Quotation window contains 12 information display sheets. Users can arrange 12 different instrument groups in one window. Moreover, CLICK Trade allows multiple Price Quotation windows.

5.1.1 Market Section

The Market section shows the best market bid, best market offer and their corresponding quantities. Options are sorted into Call & Put sections separately and Futures are sorted in the **PUT** section. Orders sent by the user are shown under the Own column and highlighted in green. In addition, it can also show market implied volatility and futures price given proper set up is done in the Derivative Calculator or Instrument Parameters window.

Window Items - Market Window

Call/Spot

Item	*Description*
BQty	Specifies the Call/Spot best bid quantity in the market.
ImpB	Specifies the implied bid volatility. (For Options only)
Own B	Specifies user's bid price in the market.
Bid	Specifies the best bid price in the market.
Ask	Specifies the best ask price in the market.
Own A	Specifies user's own ask price in the market.
Imp A	Specifies the implied ask volatility. (For Options only)
AQty	Specifies the Call/Spot best ask quantity in the market.
Sy Bid	Specifies the calculated synthetic bid price.

Put/Fut

Item	*Description*
Sy Ask	Specifies the calculated synthetic ask price.
BQty	Specifies the Put/Future best bid quantity.
Imp B	Specifies the implied bid volatility. (For Options only)
Own B	Specifies user's own bid price in the market.
Bid	Specifies the best bid price in the market.
Ask	Specifies the best ask price in the market.
Own A	Specifies user's own ask price in the market.
Imp A	Specifies the implied ask volatility. (For Options only)
AQty	Specifies the Put/Future best ask quantity.

The ID column in the middle shows the ID of the instrument.

To customize the Price Quotation Window right clicking the Quick Menu and select Settings followed with Column Settings.

5.1.2 Trade Information Section

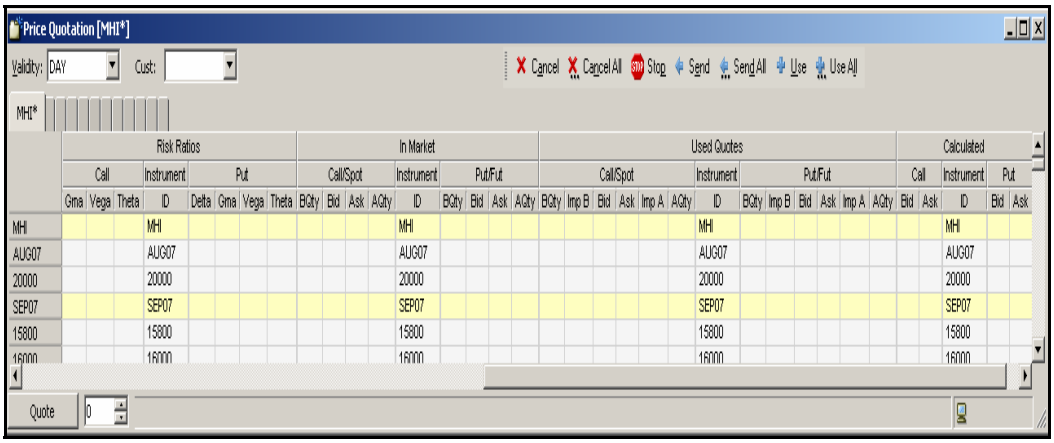
The Trade Information section displays the statistics of trades during the day. The information displayed is the same as those displayed in the Price Information Window.

Window Items - Trade Information

Call/Spot and Put/Fut

Item	*Description*
Last	Specifies the last traded price.
LQty	Specifies the latest traded quantity.
High	Specifies the highest traded price.
Low	Specifies the lowest traded price.
Settle	Specifies the settlement price.
Turn	Specifies the turnover.
O/I	Specifies the open interest of the previous trading day.

5.1.3 Risk Ratios Section
(Applicable to Options Trading ONLY)



The Risk Ratios section calculates the Delta, Gamma, Vega and Theta of the option. Depending on the parameter, the volatility can be taken from market-implied volatilities (for Options only), or user's own set of volatilities in the Derivative Calculator or Instrument Parameters window.

Gamma is shown multiplied by 1000.
For Bond options, Vega is shown in respect to Yield volatility.
For Bond futures the Price risk (Basis Point Value - BPV), the futures price sensitivity given movement in the future yield, is shown as a Delta in Risk ratios/Put section.

Window Items - Risk Ratios

Call and Put

Item	***Description***
Delta	Calculated delta value.
Gma	Calculated gamma value.
Vega	Calculated vega value.
Theta	Calculated theta value.

5.1.4 In Market Section

The In Market section shows the quotations that are active in the market. **Please note that the In Market section shows only quotes entered from the Price Quotation Window while ordinary orders are shown in the Order Book. Quotes entered from the Price Quotation window will be treated as ordinary orders and can be found in the Order Book if the application has been terminated and reconnected afterwards.**

Window Items - Used Quotes Section: Call/Spot and Put/Fut

Item	*Description*
BQty	Specifies the bid quantity.
Bid	Specifies the bid price.
Ask	Specifies the ask price.
AQty	Specifies the ask quantity.

5.1.5 Used Quotes and Calculated Sections

The Used Quotes section displays quotes that will be sent to the market. Only prices in the Used Quotes section can be sent to the market. Quotes here can be entered manually or moved from the Calculated section by using the **[+Use]** or **[+Use All]** button. (Refer to Section 5.2 – Manual Quotation Methods and Section 5.3 – Quotation Method using the Calculated Theoretical Price)

The Calculated section displays prices calculated according to the parameters set in the Global Instrument Parameters and Instrument Parameters windows. These prices can be transferred to the Used Quotes sections.

The prices from the Calculated section are moved and spread out according to the spread-rule parameters set out in the Price Spread Limit tab of the Instrument Parameters window. (Refer to Section 5.6 – Instrument Parameters)

Window Items - Used Quotes Section: Call/Spot and Put/Fut

Item	*Description*
BQty	Specifies the bid quantity.
Imp B	Specifies the implied bid volatility. (for Options only)
Bid	Specifies the bid price.
Ask	Specifies the ask price.
Imp A	Specifies the implied ask volatility. (for Options only)
AQty	Specifies the ask quantity.

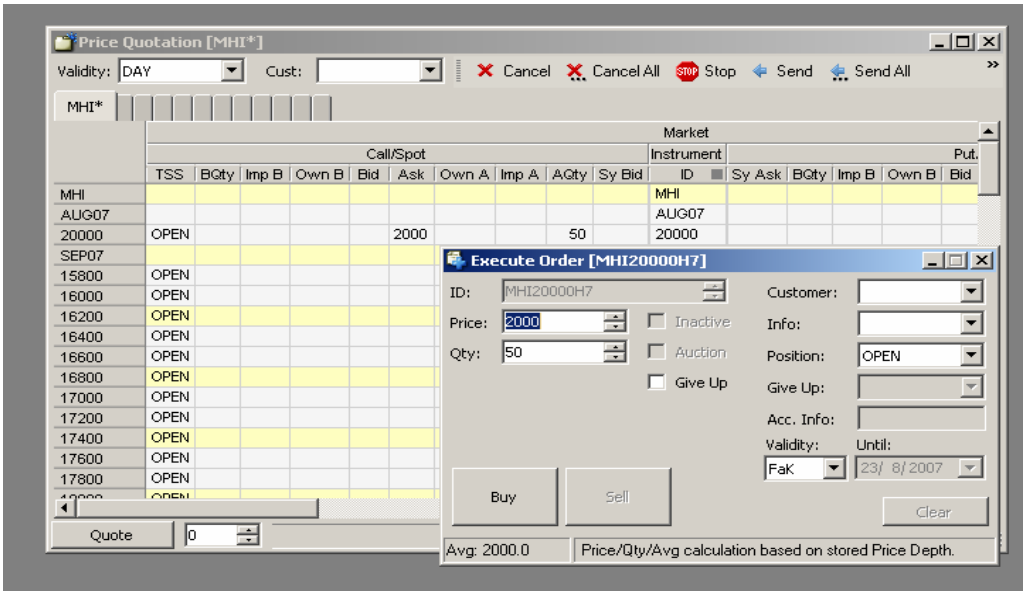
Implied volatility is shown for the calculated prices.
Users can also use the **[+]** or **[-]** key on the keyboard to step the price up or down. The implied volatility will be recalculated whenever the price is changed. If **[Auto Use]** is selected from the Price Quotation Window Setting Menu, the prices in the Used Quotes section will change automatically with a change in the Calculated section.

Attention

Ensure that the option prices calculated in the Price Quotation window agree with the calculation of the user's own pricing models. Prices in the Used Quotes will disappear after performing a search with another product ID or user-defined instrument group in the ID field of the Price Quotation window.

5.1.6 Execute Orders Using Price Quotation Window

The Price Quotation window works like the Price Information window in which users can execute orders by clicking the market price. To do this, double click on the bid or ask side of the selected series in the Market section. For example, if a user wants to buy a contract, users should double click on the ask side. The Execute Order window will then pop up with the **[Buy]** button enabled. (Refer to Section 3.4 – Execute Order Window)



5.2 Manual Quotation Methods

The following procedures show how manual quotations can be entered, sent, and cancelled.

5.2.1 Enter Quotes

1) To enter quotes for a particular series or a group of series that has been created in Instrument Groups window (Section 6.6 Preferences - Instrument Group Management), double click into one of the tabs of the filter sheets then enter the identity of the series or the group name in the ID field then press **[Enter]**. To enter quotes for all series, enter an asterisk **[*]** and then press **[Enter]**.
2) In the Cust field, fill in the account to which the trade will be registered. If this field is left blank or filled in with any account that has not been registered in the central database, the trade will be registered to the default account.
3) Quotations should be entered in the Used Quotes Section.
4) To enter the quantity, click into the BQty or AQty of the selected series under the Used Quotes section, type in the quantity then press **[Enter]**.
5) To enter the bid price, click the Bid of the selected series in the Used Quotes section, type in the bid price then press **[Enter]**.
6) To enter the ask price, click the Ask of the selected series in the Used Quotes section, type in the ask price then press **[Enter]**.
7) To enter quotes for other series, repeat (4) to (6).

User can enter volumes one by one or can copy cells.

1. Select the cells to copy.
2. Press the **[Ctrl]** + **[C]** keys to copy. (Alternative: **[Ctrl]** and **[Down Arrow]** to copy consecutively)
3. Press the **[Ctrl]** + **[V]** keys to paste

The values in the previously highlighted cells are now copied to the other selected cells.

5.2.2 Send Quotes to the Market

Quotes can be sent to the market either by using the **[Send]** or **[Send All]** button. User can send quotes manually by selecting them with the mouse.

1. Select the quotes. A quote is selected if the Volume, Implied Volatility or the Price is within the selection.
2. Click the **[Send]** button. After confirmation, the quotes are sent to the market, and will appear in the In Market section.

Tip: Note that quotes without a volume will NOT be sent to the market. User 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.

User may send all quotes with price and volume by clicking the **[Send All]** button. Unmatched quotes will be shown in the In Market section.

If new quotes are sent to the market, the previous unmatched quotes will be replaced and cancelled. Since the Price Quotation window cannot handle more than one pair of buy/sell order for each series at a time, it is therefore not recommended for non-Market Makers to enter orders using this window.

5.2.3 Change Quotes

To change quotes in the selected market, highlight either the bid or ask price of the selected series in the Used Quotes section, change the prices by entering the appropriate figures and then click the **[Send]** button which will replace the existing quote.

5.2.4 Cancel Quotes

To remove the previous quote from the selected market, highlight the selected quote under the In Market section and click the **[Cancel]** button. To remove all quotes from the market, click the **[Cancel All**] button. Users can also use the cancel function in the Order Book to cancel all or part of the quotes in the market. (Refer to Section 3 – Orders)

5.2.5 Stop Button

By using the **[Send]** or **[Send All]** functions and the **[Cancel]** or **[Cancel All**] functions, users can send out or cancel a batch of quotations. While the transaction is in progress, users can click the **[Stop]** button to stop the process.

5.3 Quotation Methods Using the Calculated Theoretical Price

(Applicable to Options Trading ONLY)

The following procedures show how calculated quotations can be used.

Enter quotes

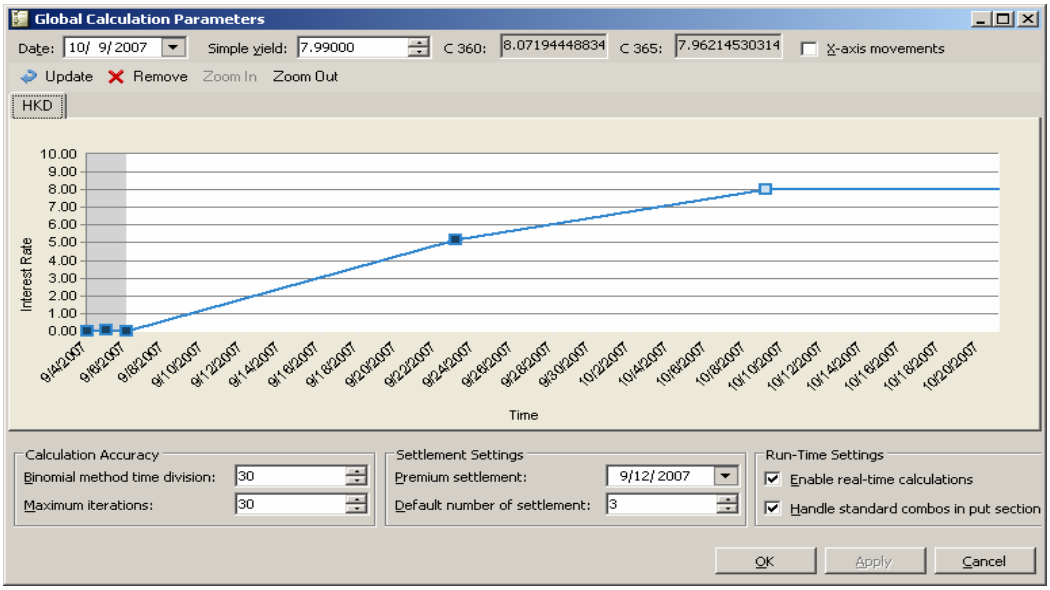
Having defined the parameters in the Global Calculation Parameters window (Refer to Section 5.4) and Instrument Parameters window (Refer to Section 5.5), calculated theoretical prices will be generated in the Calculated section of the Price Quotation window. Selected prices can be highlighted and then moved to the Used Quotes section by clicking **[<<Use]** button**,** or all calculated prices can be moved to the Used Quotes section at one time by clicking **[<<Use All]** button.

The auto quotation generation method for Options pricing are provided for reference only. Users should verify the accuracy of the calculated prices and should not SOLELY rely on such prices as a base for trading in the Options market.

5.4 Global Calculation Parameters

(Applicable to Options Trading ONLY)

In the Global Calculation Parameters window, users can enter the yield curves that are to be used for calculating theoretical prices in the Price Quotation window. Open the Global Calculations Parameters window from the Tools Menu.



The Date, Simple yield, Update, Remove, Zoom In, Zoom Out, and X-axis movements box all concern the yield curve and the graphical display in the window. The yield curve specified is used for calculations in the whole application.

In order to see calculations in real time, check the "Enable real-time calculations" box.
Also, by checking the "Handle standard combos in put section" box, standard combos will be handled on the put section instead of the call section in the Price Quotation window.

Users can adjust the accuracy of the binomial calculations by altering the "Maximum iterations" and the "Binomial method time division".

In the Settlement Settings area, users must select a "Premium settlement" date from the drop down menu and also to enter the number of "Default number of settlement". 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, users must enter the date manually. The date is only calculated by CLICK Trade at start up or when the default number of settlement days is changed.

A Note on Date Format

Date format in the Global Parameters window follows the date format selected in the Regional Settings Properties of the Control Panel of the user's own PC.

How to set the Parameters for the Yield Curve

1. Select or type in a date in the "Date" list box. (The **[Update]** button changes to **[Add]** once a date have been selected)
2. Select or type in a yield in the Simple yield list box.
3. Click Add.

Result: A node containing data the user has just entered will be added to the chart.

The "C 360" and "C 365" fields are automatically calculated to display continuous compounding rates based on 360 days and 365 days respectively. CLICK Trade converts a simple interest to continuous compounding interest using the following formula.

For 365 Days : LN[1 + (Rsimple * (365/360) / 100n)] * 100n
For 360 Days : LN[1 + (Rsimple/ 100n)] * 100n

Where:
Rsimple = the simple interest rate entered by user
n = the number of times the rate is compounded per annum

Additionally, when the "X-axis movements" box is checked, users can drag nodes in the yield direction. When it is unchecked, users can drag the nodes in the date directions as well.

How to enter data in the Global Calculation Parameters Window

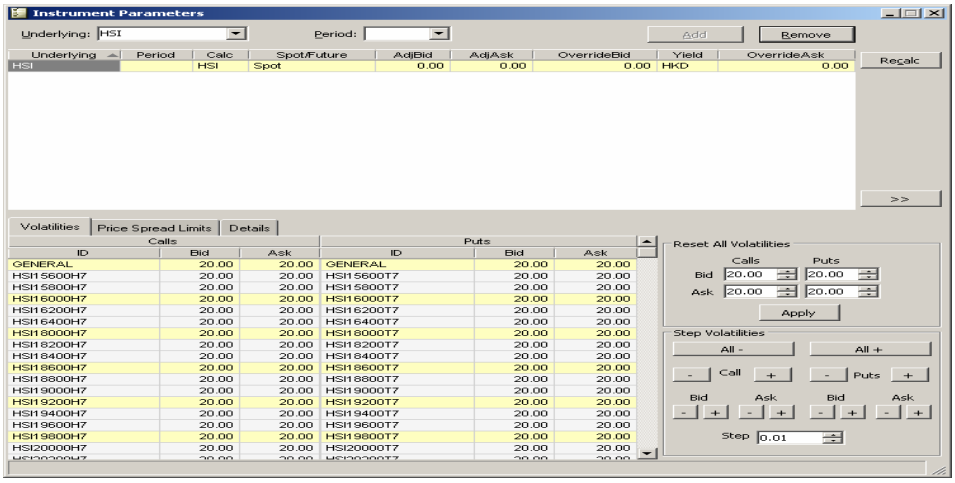
1. In the Calculation Accuracy area, enter a value of the user's choice in the "Binomial method time division" list box.
2. Enter a value in the "Maximum iterations" list box.
3. In the Settlement Settings area, enter a date in the "Premium settlement" list.
4. Enter the number of premium settlement days in the "Default number of settlement" list.
5. In the Run-Time Settings area, select the "Enable real-time calculations" box for calculations to be calculated using real-time data.
6. In the Run-Time Settings area, select the Handle standard combos in put section box to have standard combos handled in the put section in the Price Quotation window.
7. Click **[Apply]** or **[OK]** to finish. If OK is clicked, the window will close automatically.

Result: The new settings will become effective immediately.

5.5 Instrument Parameters

(Applicable to Options Trading ONLY)

The Instrument Parameters window is used for specifying parameters used to calculate theoretical prices that are to be transferred to the Calculated section in the Price Quotation Window. Open the Instrument Parameters window from the Tools Menu.



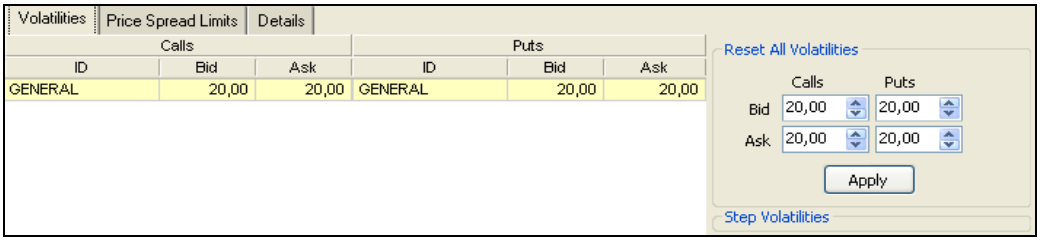
Window Items – Instrument Parameters window

Item	*Description*
Underlying	Specifies the underlying. All instruments with this as their underlying will use this set of parameters for its calculations.
Period	If this parameter is only valid for derivatives of a specific period, enter the period here.
▪ In Table	
Underlying	Specifies the underlying that the user has selected in the Underlying drop-down list box.
Period	Specifies the period that the user has selected in the Period drop-down list box.
Calc	If the user wants to use another instrument as the underlying for its calculations, enter it here. The selected underlying is the default value.
Spot/Future	If the spot is selected as the underlying for calculations, the Black & Scholes method is used. If the future is selected as the underlying for calculations, the Black-76 method is used. These are based on the condition that Black & Scholes is chosen as calculation method under the Details tab which is to be discussed below.
AdjBid /AdjAsk	Adjustment to underlying Bid or Ask values before calculating (For example, this is used when users use future prices as the underlying for the calculation).
OverrideBid	If the user wants to specify a value for underlying bid 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 specified in the Global Calculation Parameters window.
OverrideAsk	If the user wants to specify a value for underlying ask price, enter it here. Otherwise leave it blank.

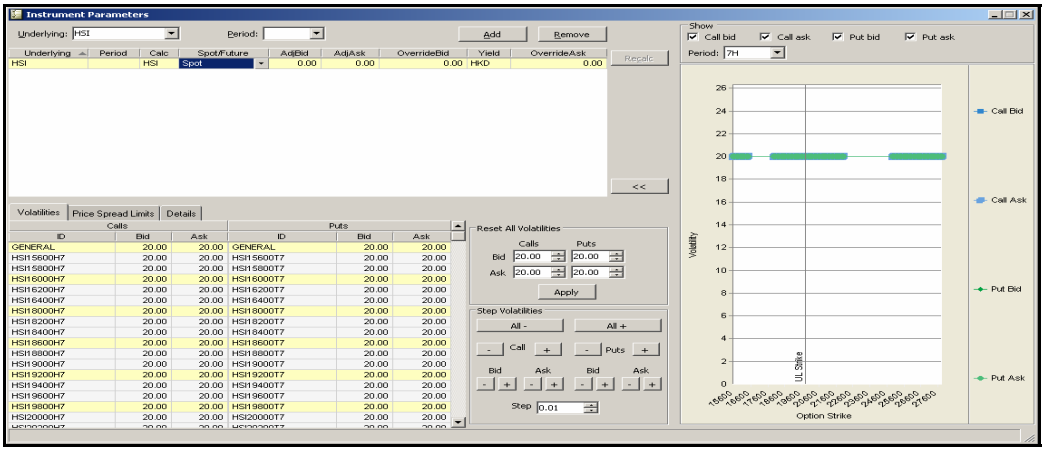
Press **[Tab]** or **[Shift]** + **[Tab]** to jump between entry fields. Click the **[Add]** button to save the underlying and it will be added to the list. Pressing **[Enter]** or clicking **[Recalc]** saves the parameter and triggers a recalculation.

Volatilities Tab

The Volatilities tab displays the volatilities table. The volatilities in this table will be used for calculating the theoretical values. The left column is for Calls and the right column is for Puts. The buttons on the right side allows users to reset All Volatilities or adjust through Step Volatilities. Users must have a General parameter if no specific parameter is found. If a parameter is saved without specifying a General volatility, the application will automatically add it.



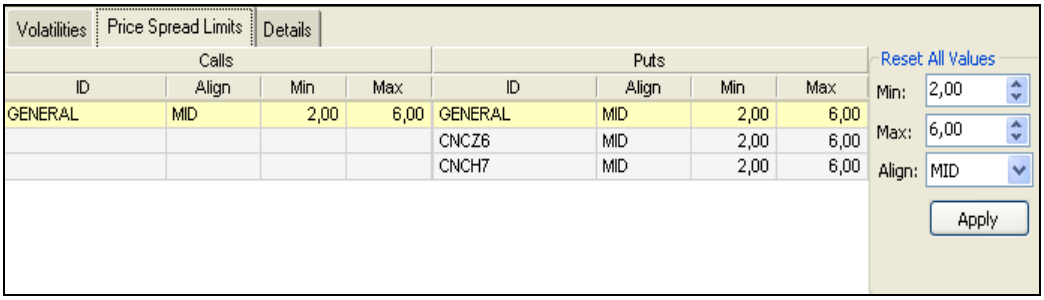
When users click the **[>>]** button, a graphical presentation of the volatility values of the selected underlying will appear on the right-hand side. Users are not allowed to edit the graph but can hide the graph by clicking the **[<<]** button.



Price Spread Limits Tab

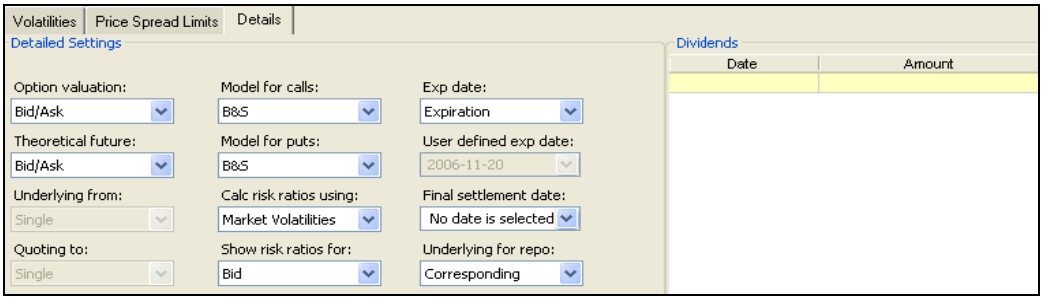
The Price Spread Limit tab allows the user to enter spread rules used when moving calculated data from the Calculated section to the Used quotes section. Enter Min/Max spread, and how the spread is to be aligned. Users can choose to align the prices using either the calculated bid (BID), the calculated ask (ASK), or the average of the bid and ask (MID) where MID is the default. Users are able to adjust all values through the Reset All Values buttons.

The alignment works as follows: 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 quote section of the Price Quotation window.



Details Tab

The Details tab allows users to further adjust their parameters.



Window Items – Details Window

Item	*Description*
Option valuation:	Specifies the underlying value to be used for calculating option 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 in the Instrument Parameter window, that value is used instead.
Theoretical future:	Specifies the underlying to be used for calculating future values. Last: The underlying last paid price is used for both sides. Mid: The average of the underlying bid and ask is used for both sides. Note: If any Override underlying is entered in the Instrument Parameter window, that value is used instead.
Underlying from:	Specifies the market which the underlying should be picked from, i.e. Single or Block. (Not applicable)
Quoting to:	Specifies the market which market the quotes should be sent to, i.e. Single or Block (Not applicable)
Model for Calls:	Choose calculation model for Calls: Black & Scholes or Binomial. Note: If the underlying is an Index or a Bond, the Black 76 is used instead.
Model for Puts:	Choose calculation model for Puts: Black & Scholes or Binomial. Note: If the underlying is an Index or a Bond, the Black 76 is used instead.
Show risk ratios for:	Calculated Bid or Ask, or Market Bid or Ask.
Expiration Date:	User may choose what expiration 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 calendar by selecting a date for expiration.
Final settlement:	The date when the final settlement takes place. Use this to override the default, which is the number of days entered in the Global Calculation Parameter window. User can only enter a final settlement date for parameters with a specified period.
Underlying for repo:	When calculating implied repos for futures, use this underlying price field. (Not implemented)
Dividends:	Shows a dialogue box where user can enter dividends date and amount. Only used when the underlying is a stock.

Note: When selecting a Final settlement date or defining an Expiration date, users are expected to exercise with caution and due care as these are intended to be used by professionals who have a thorough understanding and experience.

To enter data in the Global Calculation Parameters window

1. Select or type in an underlying and a time period in the respective drop-down lists. (Period may be omitted, the parameter will now be used for all periods)
2. Click the **[Add]** button.
   - Result: Information about this instrument will appear in the top of the window.
3. Click the "Details" tab if settings are to be changed for the parameter.
4. Click the **[Recalc]** button to save the parameter, and trigger a recalculation of all derivatives that are affected by the parameter.

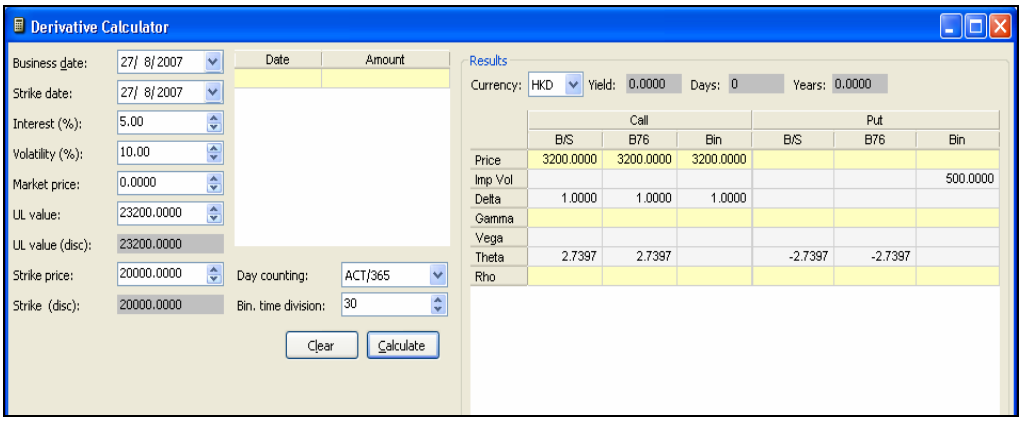
Attention

The window will have minor differences in the drop down boxes if the CLICK Trade Application is configured to handle the single market only.

5.6 Derivative Calculator

(Applicable to Options Trading ONLY)

The Derivative Calculator window is primarily used to check calculations. It can also be used as a general-purpose option valuation tool. This allows users to calculate option prices on a single calculation basis. Open the window from the Tools Menu.



To calculate theoretical prices in the Derivative Calculator window

1. Click the down arrow in the Business date drop-down menu to open the calendar and select a business date.
2. Click the down arrow in the Strike date drop-down menu to open the calendar and select a strike (expiration) date.
3. Select or type in an interest rate in the Interest (%) box.
4. To calculate the Theoretical Price – Select or type in a volatility in the Volatility (%) box. To calculate the Implied Volatility – Select or type in the Market price.
5. Select a day-counting method in the Day counting menu. Either ACT/365 or E30/360.
6. Define the dividends by entering a date and the amount in the Date and Amount columns. (For those with Stocks as an underlying)
7. Click **[Calculate]**.
   - ➢ Result: The calculated data will appear in the right-hand part of the window.
8. To select which yield curve to use for the calculation of the Yield value, select the yield curve currency in the Currency drop-down list box.

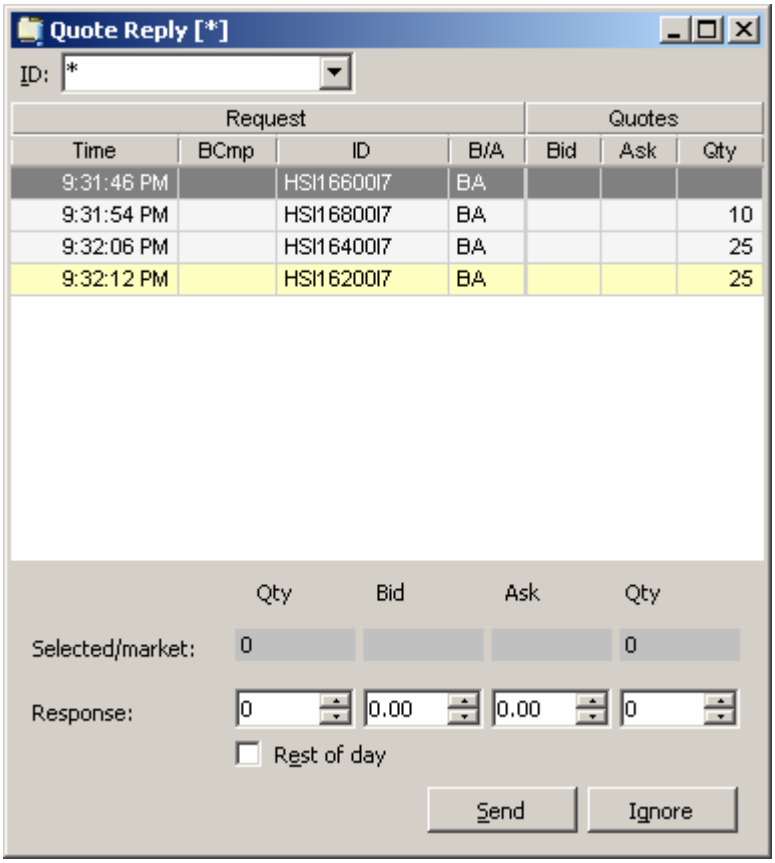
Theoretical values using B&S, Black-76 and Binomial will be displayed in the Results area. Implied volatilities can also be shown if a 'reasonable' price is given in the "Market price" field.

Calculate Bond Options

- Enter Futures rate (e.g. 10.76) and Strike (e.g. 10.80). Futures price is the rate converted to a price, BPV is the base-point-value, and Price volatility is the yield-volatility converted to a price volatility.
- Theoretical values using Black-76 will be shown. Implied volatilities will also be shown if a 'reasonable' price is given as the Market price.

5.7 Quote Reply Window

Open the Quote Reply window from the Price Quotation menu.



Depending on the nature of the instrument being requested for a quote, the market maker is responsible for responding within a defined period of time. The Quote Reply window is designed to assist market makers to respond to Quote Requests.

The CLICK Trade application does not locally store any quote requests. As a result, the table is empty each time a new Quote Reply window is opened. Quote requests will also be erased when the user press the **[Yes]** button in the pop-up message box that appears when the user inputs a new filter in the instrument identity. Previous quote requests received during a login session can still be seen in the Market Message window.

5.7.1 View Quote Request Information

Specify a series ID or an instrument group name in the “ID” field. (Refer to Section 6.6 - Instrument Group Management)

The quote request messages of the specified series will be shown. Users can select any of the incoming quote request messages from the “Request or Quotes” column. The market information of the respective series will be displayed in the Selected/Market section.

5.7.2 Replying a Quote

After the quote replies have been sent, the CLICK Trade application starts a timer in order to perform an automatic delete of the quotes. The quotes replies will be in the market for 30 seconds before they are deleted.

During these 30 seconds, the quote replies are displayed in the "Quotes" part to the right in the window. The table will display how much is left of the quotes, i.e. the user will be informed if the order is partly or completely filled during this period. In 30 seconds, the quotes will be automatically deleted and removed from the table.

If the user wishes to prevent a quote reply from automatic deletion after the given time, the user can select the Rest of day box. A quote reply that is sent with this box checked is stored for the rest of the day.

5.7.3 Sending a Quote Reply

1. Select a quote request in the table. The user will see the selected instrument series in the Selected/Market frame to the bottom of the table and the current market prices of the selected instrument series if available
2. Enter the quantity and price for both the bid and the ask side in the response section. If the quote is to be retained after the time-out, check the Rest of day check-box.
3. Press the **[Send]** button to send the quote to the marketplace. (Prices and Quantities must be positive)

5.7.4 Changing Quotes

Users can change the quote by entering a new price and/or quantity in the Response section and then press **[Send]** again. The new quote will be sent to the market and replace the original one.

5.7.5 Deleting a Quote Request

It is possible to delete one or several rows from the table by clicking on the **[Ignore]** button. Despite the removal of the row(s) from the table, the quotes will still be deleted in 30 seconds. This is also true for when the Quote Reply window is close.

How to Delete a Quote Request

1. Select one or several rows.
2. Click the **[Ignore]** button.
3. Click **[Yes]** to confirm

Note that quotes send to the market will also appear in the user’s Order Book or Order History where it can also be changed or deleted. (Refer to Section 3 – Orders)

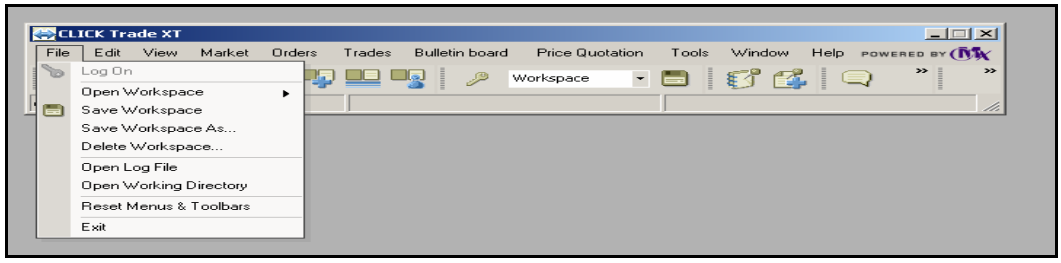
6 Customization

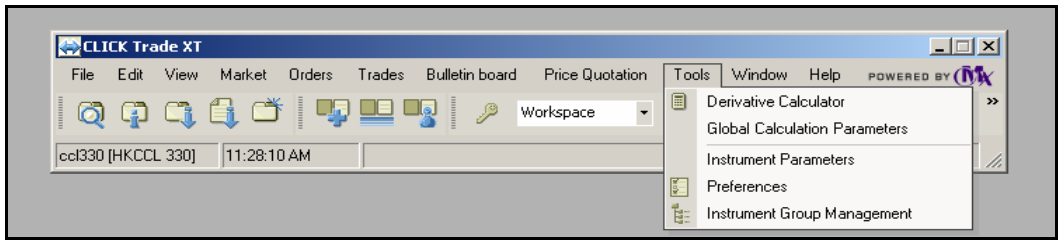
This section covers windows that allow users to customize the settings of the CLICK Trade application. The Preference window is opened from the Tools menu. It is divided into five tabs, General, Interface, Window, Sounds, and HKEX. Each of these tabs will be described in details in Section 6.1-6.5.

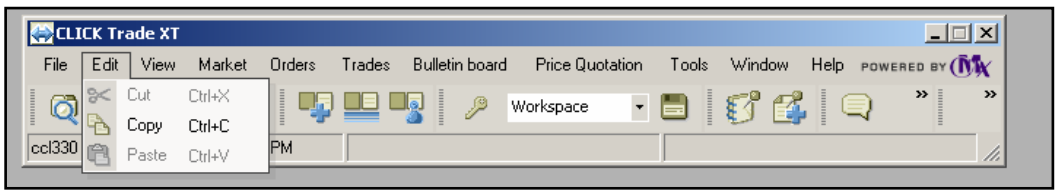
Users are able to specify and create instrument groups to facilitate their daily operating activities. This will be discussed in Section 6.6.

In addition, this section will introduce functions from the File menu which is used to save, open or delete a workspace. The File menu also contains functions related to log files and directories. These are described in Sections 6.7-6.8. This section will also introduce exporting data into the user's PC.

The Edit menu can be assessed to reach the Cut, Copy and Paste functions which will be described in Sections 6.9. This section will also introduce the printing functions available in the Quick menu.

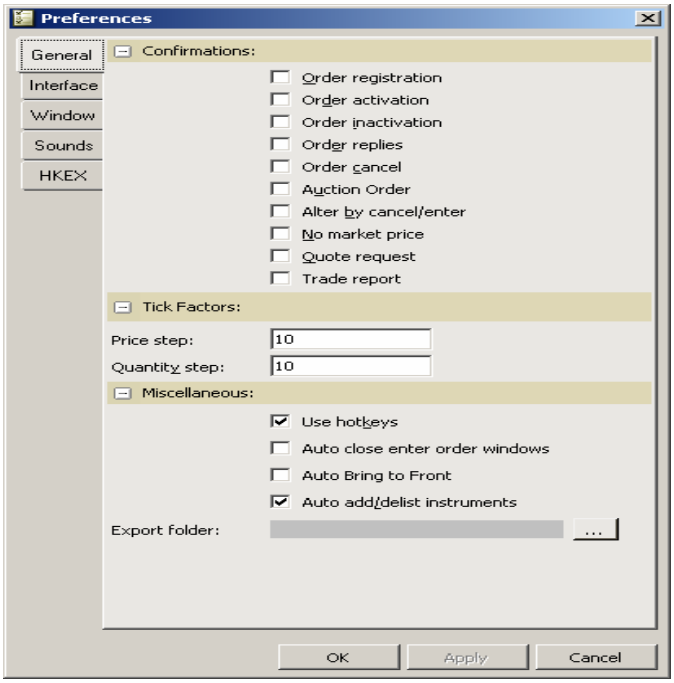






6.1 Preferences – General

Open the Preferences window from the Tools Menu.



The General tab displays the trade settings. Users can specify which confirmation windows will appear when managing their orders. After a confirmation setting is activated, a pop up message will appear for users to confirm the action.

Window Items – General tab

Item	*Description*
Order registration	A confirmation will appear when an order is entered.
Order activation	A confirmation will appear when users activate an inactivated order.
Order inactivation	A confirmation will appear when users inactivate an activated order.
Order replies	A confirmation will appear, when the central system response to the user's order.
Order cancel	A confirmation will appear when users cancel an order.
Auction Order	A confirmation will appear when users place an auction order.
Alter by cancel / enter	A confirmation will appear when users change an order and results in a loss of priority.
No market price	A confirmation will appear when users enter an order in which there is no market price.
Quote request	A confirmation will appear when users send a quote request.
Trade report	A confirmation will appear when users execute a block trade.
Price step	Indicates the value of each tick in Price fields.
Quantity step	Indicates the value of each tick in Quantity fields.
Use hotkeys	Allows users to press [F5] for buy and [F8] for sell in the Enter Order window and press [Enter] for buy or sell in the Executed Order window.
Auto close enter order windows	Close the Enter Order window automatically after entering an order.
Auto Bring to Front	Automatically bring all windows to the front.
Auto add/delist instruments	Automatically add or delist instruments in the Price Information and Price Quotation window.
Export folder	Specifies the default folder to export data files.

It is a good practice to have confirmations activated to avoid entering orders by mistake. The confirmations serve as a reminder of action taken.

The following displays some of the confirmation messages that will appear.

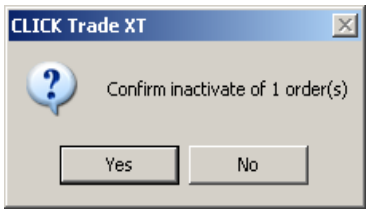
1. Order registration

One of the following messages will appear when users enter an order.

2. Order activation

The following message will appear when users activate an inactive order.

3. Order inactivation



The following message will appear when users inactivate an active order.

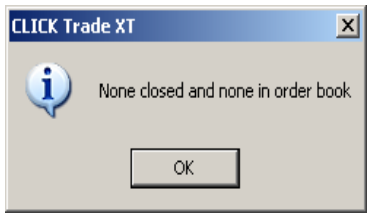
3. Order replies

Order replies are messages informing users of the current state of their order. Depending on the validity and the state of the market, one of the following messages will appear when an order is entered.

This indicates that the whole order is in the Order Book.

This indicates that the whole order has been filled.

This indicates that part of the order has been filled and the remaining is placed in the Order Book



This indicates that none of the order is filled nor stored in the Order Book.

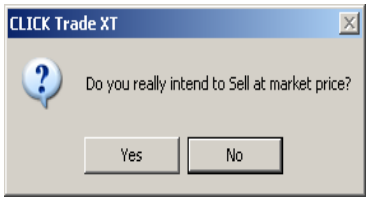
4. Order cancel

The following message will appear when users cancel an order.

5 No market price

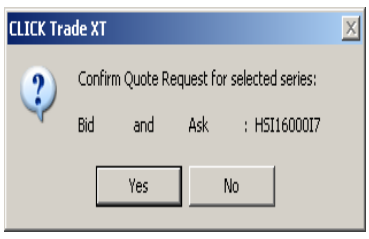
The following message will appear when users enter an order in which there is no market price.

6 Auction order



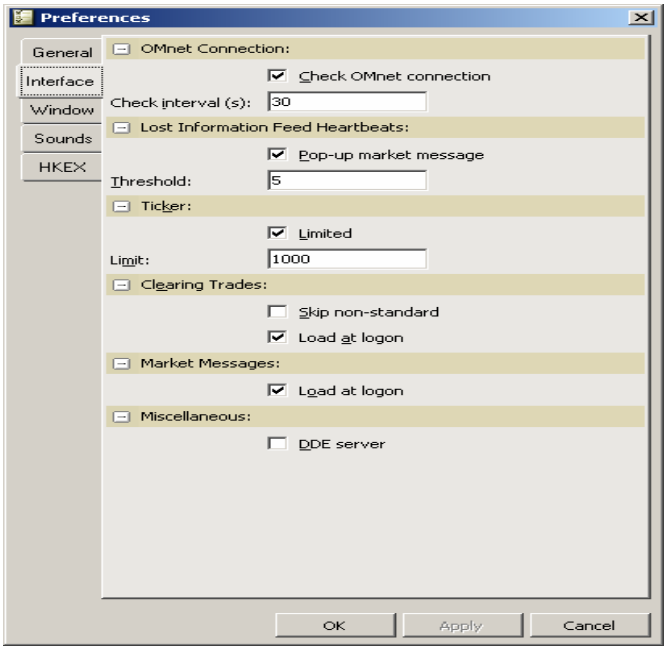
The following message will appear when users enter an auction order.

7. Quote request



The following message will appear when users send a quote request.

6.2 Preferences – Interface

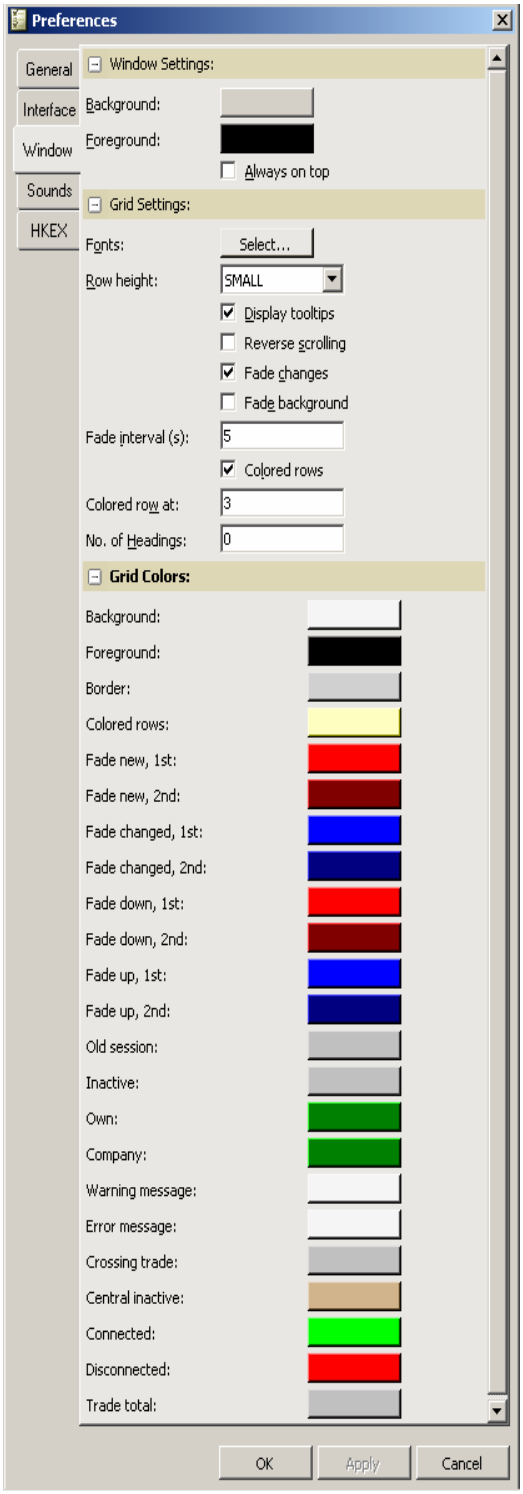


The Interface tab allows the user to setup CLICK Trade behaviours relating to the HKATS.

Window Items – Interface tab

Item	***Description***
OMnet Connection:	
Check OMnet connection	Check the healthiness of the connection to the Exchange.
Check interval (s)	Specify the intervals in seconds at which the connection to the Exchange is checked.
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 consecutive lost heartbeats allowed before a market message is sent out.
Ticker:	
Limited	Limit the number of entries stored in the ticker list. When a search is performed in the ticker list, it will be limited to the stored entries.
Limit	Enter a value that specifies the maximum number of entries stored in the ticker list.
Clearing Trades:	
Skip non-standard	Indicate if non-standard clearing trades should be excluded from the feed of clearing trades.
Load at logon	Indicate if old clearing trades should be retrieved upon logon.
Market Messages:	
Load at logon	Indicate if old market messages should be retrieved upon logon.
Miscellaneous:	
DDE server	Indicate if the application should be active as a DDE server, such that it can interchange information with other windows applications.

6.3 Preferences – Window

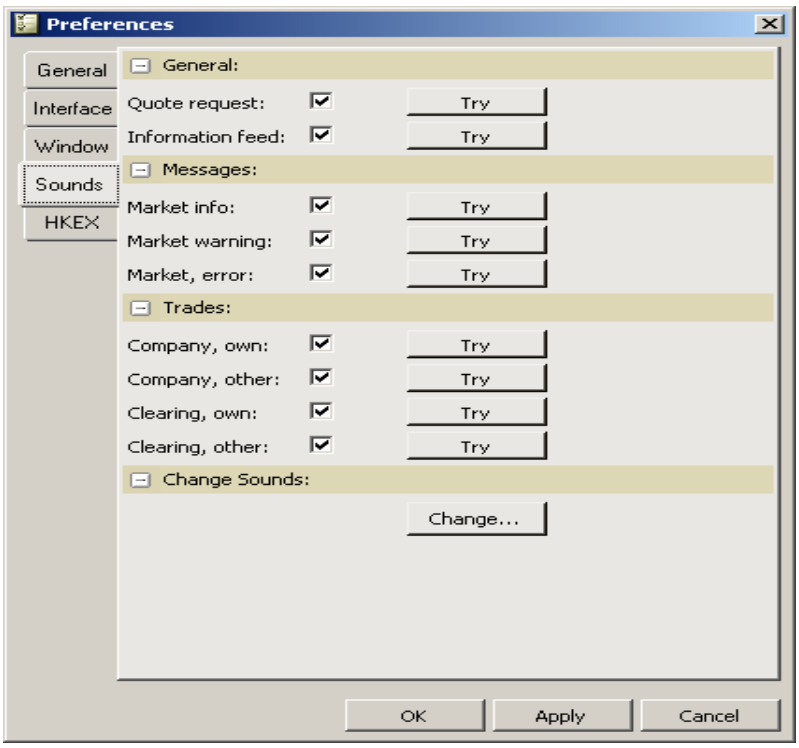


The Window tab allows users to modify the appearance of windows. Users can modify through changing the colours, font size, row height, and various other preferences. The below will describe the main categories of where users can customize their application appearence.

Window Items - Window tab

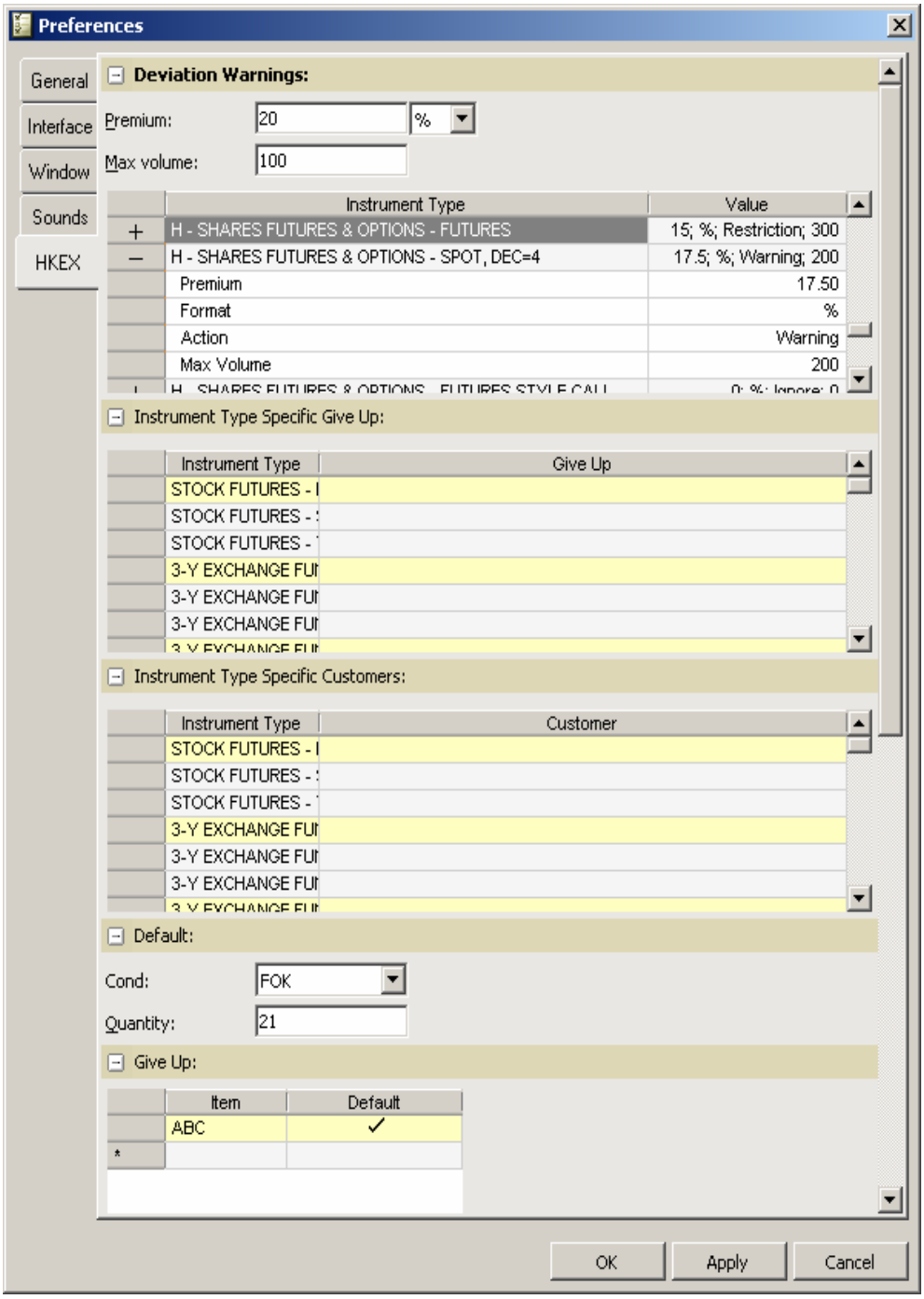
Item	***Description***
Window Settings	Allows users to customize the background or foreground colour. Selecting Always on top will make the CLICK Trade application on top of other applications constantly.
Grid Settings	Allows users to customize the appearance of grids such as font, row height or its colours.
Grid Colours	Allows users to customize the colour of the corresponding indicator.

6.4 Preferences – Sounds



The Sounds tab allows users to customize the warning sounds for different events. Users can select the sound of interest and then click the **[Try]** button to listen to the sound. The **[Change]** button launches the Windows sound properties where different sounds can be changed.

6.5 Preferences – HKEX



The HKEX tab allows user to specify default values for orders such as default Give Up or Customer accounts. Users can also set limits for volume and price deviations per instrument.

Window Items – HKEX tab

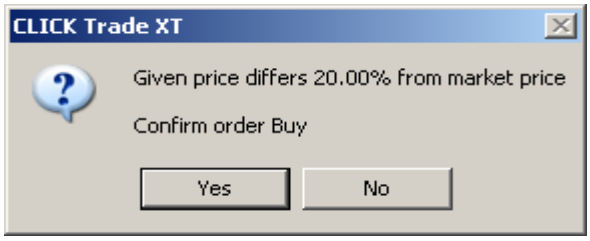
Item	*Description*
Deviation Warnings	
Premium	Specifies the maximum price deviation of an order for all instruments.
% or ABS	Specifies the unit for price deviation, percentage or absolute value.
Max volume	Specifies the maximum allowed volume for all instruments.
Instrument Type	Specify the maximum price deviation and volume for a specific instrument type. • Premium: The maximum allowed price deviation of an order. • Format: Percentage or absolute. • Action: The action to execute when violation occurs. (Ignore, Warning or Restriction) – refer to additional information • Max Volume: The maximum allowed volume.
Value	The above conditions can be entered here manually.
Instrument Type Specific Give Up / Instrument Type Specific Customer	
Instrument Type	List of all Instrument Types.
Give Up / Customer	Specifies the default Give Up or Customer for a specific instrument type.
Default	
Cond	Select the condition that will appear as default.
Quantity	Specifies the default quantity.
Give Up/Customer Information/Customers	
Item	Specify an account or free text to be available in a dropdown menu in the Give Up, Customer Information, or Customer fields. Click **[Apply]** to add rows.
Default	Select to set this item as the default to appear in the Information or C column.
Price Flow Selection	
Normal price flow	(Not Applicable)
Low bandwidth price flow	(Not Applicable)
Miscellaneous	
Skip AOG orders	Select this check box if users want to skip all Automatic Order Generators (AOG).
BB calc spread	When an order is selected in the Bulletin Board window which one or more of its legs does not have Bid and Ask prices in the market, this is used to find the suitable value of each leg. However, this only finds a suitable price based on this BB calc spread parameter and users may still want to manually enter leg prices to generate the desired net price. (Refer to Appendix 3 – Bulletin Board Functions)
Price Quotation	
Check price deviation	Issues a warning if the price of the quotation is outside the price deviation limits. This option requires that users have price deviation activated above.
Auto spread at enter	Enters a matching quote on the other side of the spread according to spreads defined per instrument.

Additional Information

1) If deviations of price or quantity entered from the reference levels are greater than or equal to the specified parameters, then depending on the action selected one of the following will appear.
   - Ignore – None
   - Warning – Displays a warning dialog
   - Restriction – Displays a message and abort the order entry
2) Deviation and quantity parameters for specific instrument types override the general deviation warning parameters.
3) Default Give Up and Customer account set up for general instruments override the specific instrument type settings.
4) Default Give Up and Customer for a specific instrument only apply to Enter Order and Execute order windows.
5) No warnings or restrictions will be issued for orders sent from the Quote Reply or Price Quotation windows unless the Check Price deviation box is selected in the Price Quotation section.
6) Price and quantity parameters only apply when values for the price or volume is a positive number.
7) Price and quantity parameters only apply to the first leg of a combination or bulletin board order.

Price Deviation Warning Message

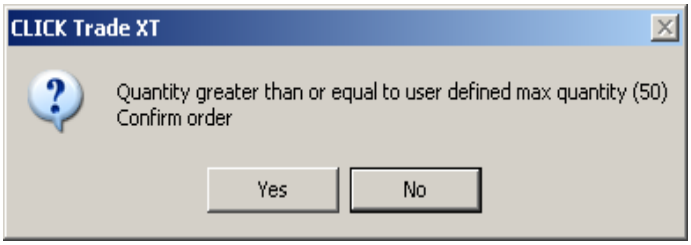
A warning message will appear if the order price deviates from the market price for more than the defined parameter. However, orders can still be sent to the market by clicking **[Yes]** to the following message.



Users who have set the price deviation parameter in absolute value will see the similar warning message when deviation restrictions are violated.

Max Volume Warning Message

The following message will appear if the order size is greater than or equal to the quantity restrictions set in the Max volume field. However, orders can still be sent by clicking **[Yes]** to the following message.

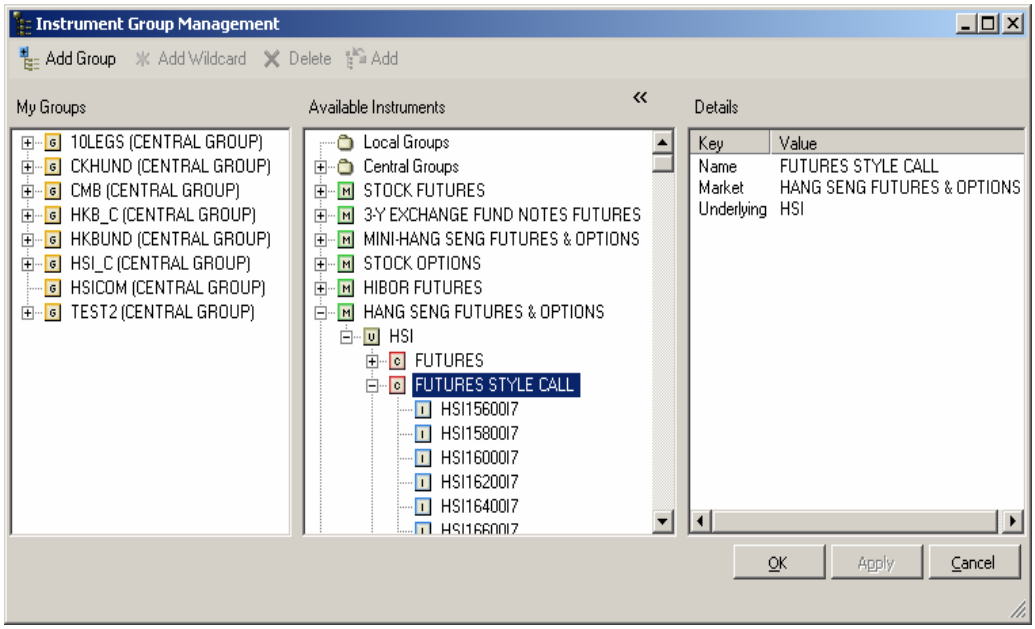


Mandatory Deviation Settings

USERS ARE REQUIRED TO SET PRICE DEVIATIONS AND MAX VOLUMES FOR ALL INDIVIDUAL INSTRUMENT TYPES. THEY ARE REQUIRED TO SELECT RESTRICTIONS AS THE DEFAULT ACTION. HOWEVER, USERS ARE ALLOWED TO SET THE DEVIATION AND QUANTITY PARAMETERS AT REASONABLE LEVELS ACCORDING TO THEIR OWN TRADING PATTERNS AND PRACTICES.

6.6 Instrument Group Management

Open Instrument Group Management window from the Tools Menu.



This window is used to create, modify and delete instrument groups. A group is a number of instruments where users often need to refer to as a unity. The group name may be used instead of a series name in the ID fields of all windows that has a searching function.

A group may consist of combinations of single instrument series or references to other instrument groups previously created. However, a group containing a reference to another group may not itself be a reference of a third group therefore, only one level of reference is allowed.

Window Items – Instrument Group Management window

Item	***Description***
Add Group button	By clicking on this button, users can add a new group.
Add Wildcard button	By clicking on this button, users can add a wildcard to a selected group.
Delete button	By clicking on this button, users can delete a group or an instrument in a group.
Add button	By clicking on this button, users can add an instrument to a group.
>> button	By clicking on this button, users can view the details of a selected instrument.
<< button	By clicking on this button, users can close the details of a selected instrument.
My Groups	Displays all instrument groups.
Available Instruments	Displays all available instruments.

Create a new 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 Available Instruments section (by expanding the instrument tree) and click the **[Add]** button or by double clicking on it.

Add instruments to an Instrument Group

1. Select the Instrument group to which users want to add instruments into the My Groups section.
2. Add a single instrument by selecting the instrument in the Available Instruments section.
   Users can also:
   - Add all instruments belonging to an underlying.
   - Add all instruments from an instrument class by selecting the instrument class.
   - Add individual instrument series.
   - Add a reference to an instrument group by selecting the instrument group in the right tree.
   - Add all instruments from an instrument group (local, central or swap box) by holding down the **[CTRL]** key and selecting the instrument group in the right tree control.
3. Click the **[Add]** button.

Remove instruments from an Instrument Group

1. Select the instrument(s) users wish to remove in the My Groups section.
2. Click the **[Delete]** button.

Remove an Instrument Group

1. Select the group users wish to remove in the My Groups section.
2. Click the **[Delete]** button.

Using the Wildcard

1. Select a group in the left-hand section.
2. Click the **[Add Wildcard]** button and then an empty box appears under the selected group name.
3. Enter a wildcard (***** or ?) by itself or with a combination of letters. (Example H?I or HSI*)
4. Click **[Apply]** and then **[OK]**. The wildcard will now be added to this instrument group. Information relating to this wildcard will appear during a search in this instrument group name. More than one wildcard can be added into one group.

6.7 File - Workspace

Users can save settings made in the Preferences window as well as instrument groups created. This function also saves the size and positions of the currently opened windows. The open, save, save as and delete workspace functions can be found in the File menu.

Save a Workspace

1. Open the windows that the user want to save in the workspace.
2. Enter the name that the user would like to apply to this workspace in the Active Workspace field in the toolbar.
3. Click the **[Save Workspace]** button.

An alternative is to go to the Save As selection in the File menu and then enter the workspace name.

Open a Workspace

1. In the Active Workspace drop-down list, select the workspace that the user want to open. The windows defined in the workspace will automatically open.

Note that the gateway such as Node or Port being used would not affect the opening of a previously saved workspace.

Delete a Workspace

1. Select Delete Workspace from the File menu.
2. Enter the name of the workspace users wish to delete or select from the drop-down list.
3. Click the **[Delete]** button.

6.8 File – Log Files

Log files are automatically collected during log on period and they can be accessed through the Open Log File located in the file menu. These files are text documents and they record down the user's activities as of the log on period for the day.

User's personal files are stored in a Working Directory. These files contain all the activities of a user not only for the current day. These files can be accessed through the Open Working Directory located at the file menu. Definitions and more detail regarding Log Files can be obtained by contacting the HKATS hotline (2211 6360).

Windows with data such as Price Information window or Market Messages window can be saved using the Export Data to File function. This function can be found in the Quick menu followed with selecting Actions and then Export Visible Data to File or Export All Data to File. Note that the latter includes hidden columns while the former only includes visible data. Users can then select the location to save these files.

6.9 Edit – Cut, Copy, Paste and Print

Users can copy, paste and print the windows in the application. Note that the usage of cut is very limited.

Copy & Paste: Highlight the data then select Copy from the Edit menu.

Print: Activate the window and right click to the Quick Menu then select Action followed with Print. Print Preview and Page Setup can also be accessed from here.

7 Contingency Measures

HKATS possesses the ability to monitor the connection between the central system and the user's workstation. Users can verify if there are any interruptions due to the network connection and/or equipment failure by opening the Information Feed Status window and Market Messages windows. (Refer to Section 2.1 – Market Messages and Information Feed Status Window)

This section describes the procedures during system malfunctions.

7.1 Signals of System Malfunction

The following is a list of possible symptoms in Information Feed Status and Market Messages windows that would occur if the system is unstable.

Change of Status in Information Feed Status window

- *Information Feed Status changed to **OFF***

Warning Messages from the Market Messages window

- *Warning! You are currently NOT receiving any updated price-information from OTHER MARKET. Please note that your orders still are active and can be traded.*
- *Warning! You are currently NOT receiving any updated price-information from HSI, HHI MARKETS. Please note that your orders still are active and can be traded.*
- *Problem detected in the OMet connections!*

  There is probably a transaction hanging.
- *Session is aborted.*
- *OMnet network status: Potential network problem discovered.*

  You MAY have lost Price-Information.

  Please update the price info by updating the orderbook;
- *OMnet network status: Potential network problem discovered.*
  You MAY have lost Deal-Information.
  Please update your orderbook and verify trades in the Clearing System.

Users are required to report to the HKATS hotline at 2211 6360 **immediately** if any of the above-mentioned symptoms appears.

7.2 Failure of User's Site

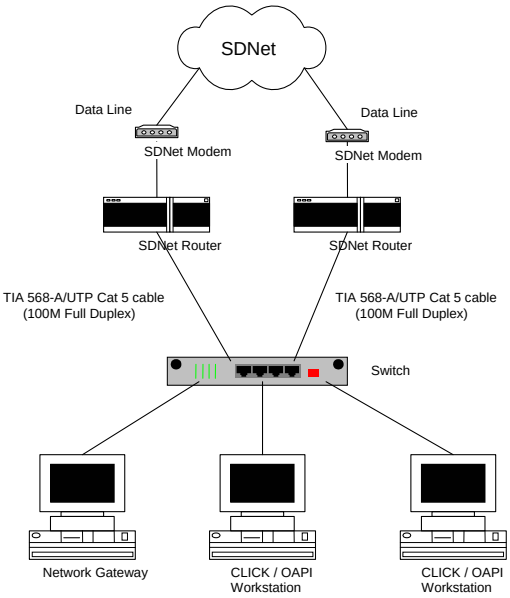
In the event of user's site failure, users must contact the HKATS hotline at **2211 6360** and advise the Exchange if the user would like to cancel all outstanding orders immediately or keep them activated. Users who fail to provide instructions to the Exchange within **10** minutes after the interruption of the system will have their orders inactivated automatically.

In addition to the handling of outstanding orders, the Exchange has also specified a set of contingency measures to allow users to continue their trading activities in an efficient manner during a site failure. These are separated into Technical Alternative and Administrative Procedures.

7.2.1 Technical Alternative

HKATS is capable of resuming trading activities for any point of a site failure. Detailed information is set forth in the following table & network diagram:

Network / Equipment	Backup / Recovery
Data Line	Dual Connection with Automatic failover
	Recovered by PCCW
Modem	Automatic failover
	On-site repaired by PCCW
Router	Automatic failover
	On-site repair by PCCW
Switch or Hub	Users can connect the CLICK workstation directly to Router by a cross cable.
	On-site repaired by Vendor
Network Gateway	Users can connect to the Central Gateway for handling the Network Gateway failure. However, the gateway node and port number must be configured and assigned by the Exchange. (Refer to Appendix 6 – Connection to Central Gateway) Notwithstanding the above, Exchange Participant is not allowed to use the Central Gateway except with prior approval from the Exchange.
	On-site repaired by Vendor
CLICK workstation	Each gateway can connect up to 10 CLICK workstations. Therefore, it is the user's own decision to install additional CLICK workstations to act as backup terminals.



7.2.2 Administrative Procedures

Currently, the Exchange has constructed a set of administrative arrangements for users to continue their trading activities in the event of a network or hardware failure. The options are as follows:

1) SOS Centre

Backup terminals are installed in the SOS Centre for users to continue their trading activities. Users must apply by returning a duly completed Form S to the Exchange. Upon verification of the signature, the Exchange will arrange the CLICK workstations and have it ready for use in 20 minutes.

SOS Center Location:

8th Floor, Infinitus Plaza,
199 Des Voeux Road, Central.

2) Allocation

Users may arrange with other exchange participants to handle new orders and subsequently reallocate resulting deals to the corresponding accounts.

7.3 Failure of Central System

The central system of HKATS is a system built in with an automatic failover facility. This allows the Exchange to continue all necessary operations in the event of a machine, process, subsystem crash or network component failure in the primary operating system. Possible scenarios for the failure of the central system are described in the following sections.

7.3.1 Failure immediately recovered by Failover Mechanism

The system is expected to automatically recover from site failover by a sophisticated failover mechanism. Depending on the nature of system failure, users may encounter different levels of interruption which may last from 5 seconds to 12 minutes.

The Exchange will notify all users immediately once the failover process is completed. Users should conduct the following list of procedures to rectify the information of their CLICK workstations:

- Verify if the status of Information Feed Status changes to **"ON"**;
- Examine if there is a pop-up message notifying user of the resumption of connection.
- Reconcile the details of Order Book by applying the **Reload Order Book** function
- Download the latest trade information from the Exchange by applying the **Reload Clearing Trades** function and examine the detail in Clearing Trades window;
- Reload the latest price information from the central marketplace by applying the **Reload Prices** function.

Users should be aware that the information of Order History, Company Trades and Tickers windows cannot be reloaded from the central marketplace. Therefore, there may be some discrepancies amongst these windows.

7.3.2 Failure of System Recovery by Failover Mechanism

In the event that the system failure cannot be recovered immediately, the Exchange may temporarily suspend trading activities until the system is capable of providing satisfactory service to all users. In this circumstance, users should be aware that:

1. After the system is recovered, the Exchange will notify users the opening schedule of all markets through the Market Messages window, HKATS Emergency Message Broadcasting System (EMBS)[1], Exchange News System, and/or any other available broadcasting channels.
2. Users should reconnect to HKATS.
3. In order to receive updated information from the Exchange, users should open the Market Messages window and pay special attention to Exchange announcement(s).
4. Users should verify their orders and trades. If necessary, user can cancel, amend or inactivate their orders in the system before market open.

Users should be aware that they can phone the HKATS hotline at 2211 6360 and request the Exchange personnel to cancel their outstanding order(s) immediately. This can be requested under any scenario, however charges will be imposed per cancellation.

[1] In order to receive the messages disseminated via EMBS properly, the following points must be followed:

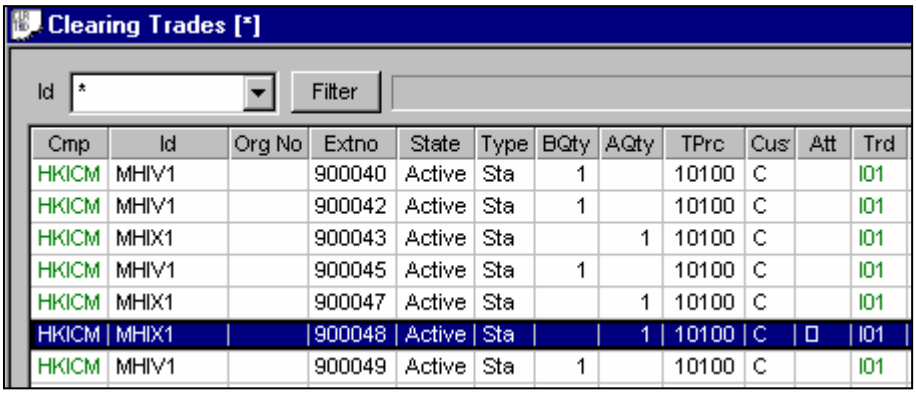
i. Restart any Click workstations that have been disconnected from the network
ii. Disable all Windows build-in and thirty party firewalls
iii. At least one Click workstation must be connected to HKATS gateway directly

7.3.3 Special Attention for the Failover of Marketplace

If a trade is being executed during the period of automatic recovery (failover) of the marketplace server, HKATS may record the trade information **twice** in the Company Trades and Clearing Trades windows. Therefore, users are required to clarify immediately with the HKATS hotline at **2211 6360** prior to confirm any order execution to their clients if any one of the following scenarios occurs**:**

1. The "9XXXXX" warning message pops up

2. An entry marked with "☐" displayed in "**Att**" column of Clearing Trades window.



Cmp	Id	Org No	Extno	State	Type	BQty	AQty	TPrc	Cus	Att	Trd
HKICM	MHIV1		900040	Active	Sta	1		10100	C		I01
HKICM	MHIV1		900042	Active	Sta	1		10100	C		I01
HKICM	MHIX1		900043	Active	Sta		1	10100	C		I01
HKICM	MHIV1		900045	Active	Sta	1		10100	C		I01
HKICM	MHIX1		900047	Active	Sta		1	10100	C		I01
HKICM	MHIX1		900048	Active	Sta		1	10100	C	☐	I01
HKICM	MHIV1		900049	Active	Sta	1		10100	C		I01

Users may refer to Table 1 – Operating Flowchart for the validation of Trade Details.

Important: API users must build in program logic to handle this situation in their API module.

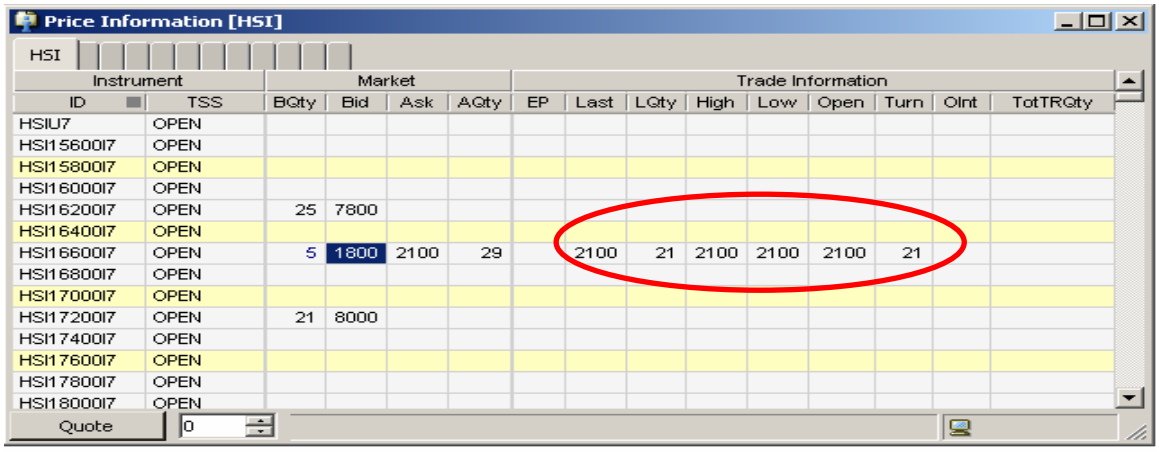
7.3.4 Failover of Node/Site

If an order is being input during the period of automatic recovery (node/site failover), HKATS may capture the relevant order twice in the Central Order Book. Hence, users are required to strictly follow the verification procedures as referred to in Table 2 - Operating Flowchart for the Validation of Possible Duplicate/Excess Order (Node and/or Site Failover).

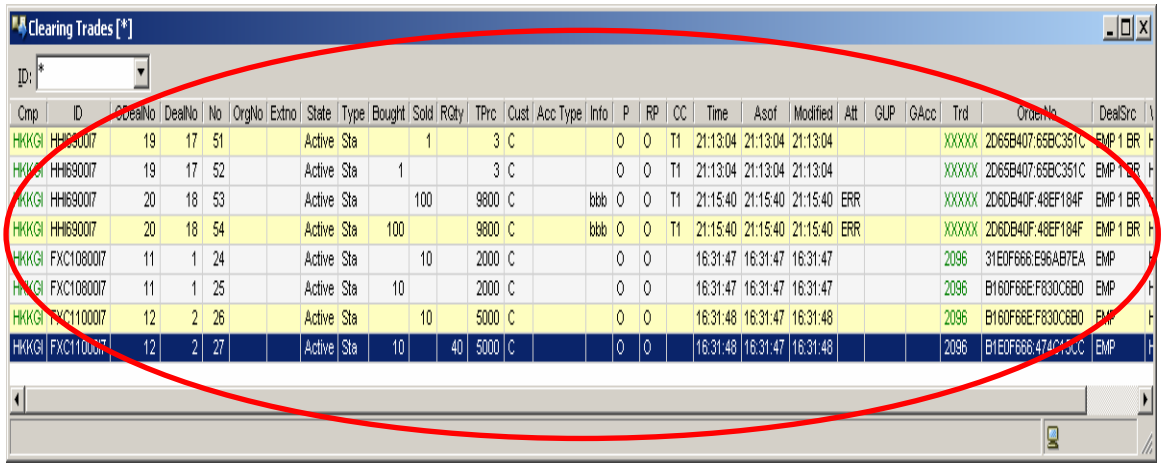
7.3.5 Failover of Clearing (CL)

If the failover involves Clearing (CL), the following information may take a longer time to update:

1. High / Low / Open / Last / Turnover (BD2)



2. Clearing Trades (BD4)



The Exchange will notify all users through the Market Messages window and/or any other available broadcasting channels. Users are advised to use Ticker (BD1) and Company Trades (BD1) to verify market information and their trade details.

7.4 Failure during Pre-Market Opening Period and Principles for Extended Trading

In the event that HKATS is experiencing difficulty in the primary site, the operations of the HKATS can normally be switched to the back up site by an auto-failover mechanism within 5 seconds to 12 minutes or manually in 45 minutes. In any case, users may experience interruption in terms of connection during this period of time. As such, the Exchange may temporarily suspend trading activities until a satisfactory level of trading services can be provided.

The followings set forth the contingency measures for the Pre-Market Opening Period and the general principles on the extended trading hours beyond the scheduled market close of HSI and MHI futures after system recovery in the event of a manual site failover.

Users are advised to follow all instructions broadcast by the Exchange through the Market Messages Window, HKATS Emergency Message Broadcasting System, Exchange News System, and/or any other available broadcasting channels.

7.4.1 Contingency Measures on the Pre-Market Opening Period

1. There will not be a Pre-Market Opening Period for the morning or afternoon trading session for the HSI, MHI and HHI Futures markets if system has been interrupted and cannot recover by either 8:15 a.m. or 12:30 p.m.; and
2. If the Exchange encounters any emergency or technical issue during or at any point of the Pre-Market Opening Period such that it is impossible to provide a complete and full length Pre-Market Opening Period, the Exchange will suspend and cancel the Pre-Market Opening Period. The markets may be reopened at the market Open state, without the Pre-Market Opening Period.

7.4.2 Principles for Extended Trading After the Scheduled Close

1. The extension of trading hours will only be applicable for the Hang Seng Index (HSI) and the Mini Hang Seng (MHI) Index Futures markets. All other markets will not be extended beyond their schedule close.
2. The extended trading hours in the HSI and MHI Futures markets will be a 15-minute trading session after system recovery and provided that the market will not close beyond 5:00 p.m.;
3. There will not be an extension in the trading hours on the last trading day of the expired HSI and MHI spot month futures contract. All HSI and MHI spot month contracts will be automatically deleted from HKATS at the pre-defined expiry time (as defined in the futures contract specifications); and
4. Trading will recommence 30 minutes after system recovery. Advanced notice will be given to users as soon as practicable after all the necessary preparation work has been completed.

7.4.3 Summary of Market Arrangements in the Event of Market Interruption During the Afternoon Trading Session Affecting the Scheduled Close of the HSI and MHI Futures Markets

System Recovery Time	Trading Arrangement	Remarks
System recovers at or before 3:30 p.m.	HSI and MHI Futures markets will reopen 30 minutes after the confirmed system recovery time and will close at the scheduled time.	There will be no Pre-Market Opening Period if system fails and cannot recover by 12:30 p.m.
System recovers between 3:30:01 p.m. and 4:15 p.m.	**The Exchange can decide to reopen the HSI and MHI Futures markets for 30 minutes after the confirmed system recovery time and trade for a fixed period of 15 minutes provided that, at all times, the market will close no later than 5:00 p.m.** Otherwise, HSI and MHI Futures markets will reopen on the next business day	**There will be no Pre-Market Opening Period for the HSI and the MHI Futures markets when they reopen.**
System recovers after 4:15 p.m.	HSI and MHI Futures markets will reopen on the next business day.	

7.4.4 Determination of Settlement Price in the Event of Extended Trading for HSI and MHI Futures

In the event of extended trading hours for HSI and MHI Futures markets after system recovery, the to-be-announced settlement price will be determined by the HKFE Clearing Corporation (HKCC). The settlement price will be delivered by the HKCC within 15 minutes after the close of the Cash market and subsequently broadcast via the Market Message window.

The methodology for the determination of settlement price is:
The settlement price will be that of the previous business day (Day T-1) adjusted for the change (D) between the cash closes of the current business day (Day T) and the previous business day (Day T-1) according to the formula below:

$$D = C.close\ (Day\ T) - C.close\ (Day\ T\text{-}1)$$

where: C.close (Day T) is the Cash closing price of the current business day
C.close (Day T-1) the Cash closing price of the previous business day.

For example:

	Day T-1	Day T
Futures (spot) Settlement Price	10,500	n.a.
Cash Closing Price	10,550	10,820

Hence, D = 10,820 - 10,550 = +270.

Therefore, the new settlement price of the spot month futures of the current business day will be that of the previous business day adjusted for the +270 change between the cash closes of the current business day and the previous business day, and that makes the spot month futures settlement price at 10,770 (= 10,500 + 270).

The same methodology will be applied to other far month contracts.

Please note that the settlement price determined will also apply towards the Open Interest and all trades conducted during the extended trading hours.

7.5 Help Desk

Help desk service of the Exchange operates during trading hours of the HKATS market. Users may contact the help desk for assistance by calling the HKATS hotline at **2211 6360**.

TABLE 1 - OPERATING FLOWCHART FOR THE VALIDATION OF TRADE DETAILS

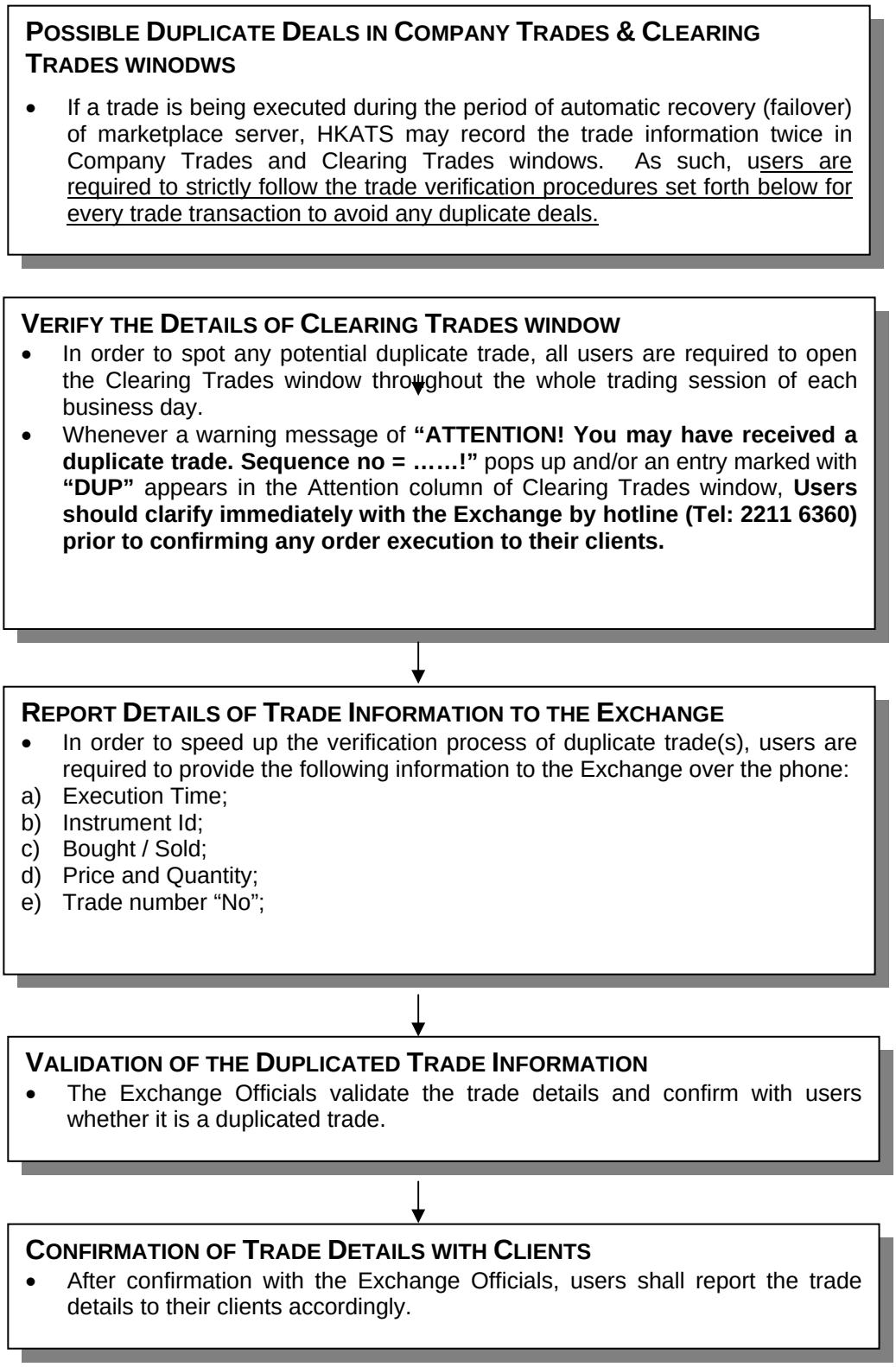
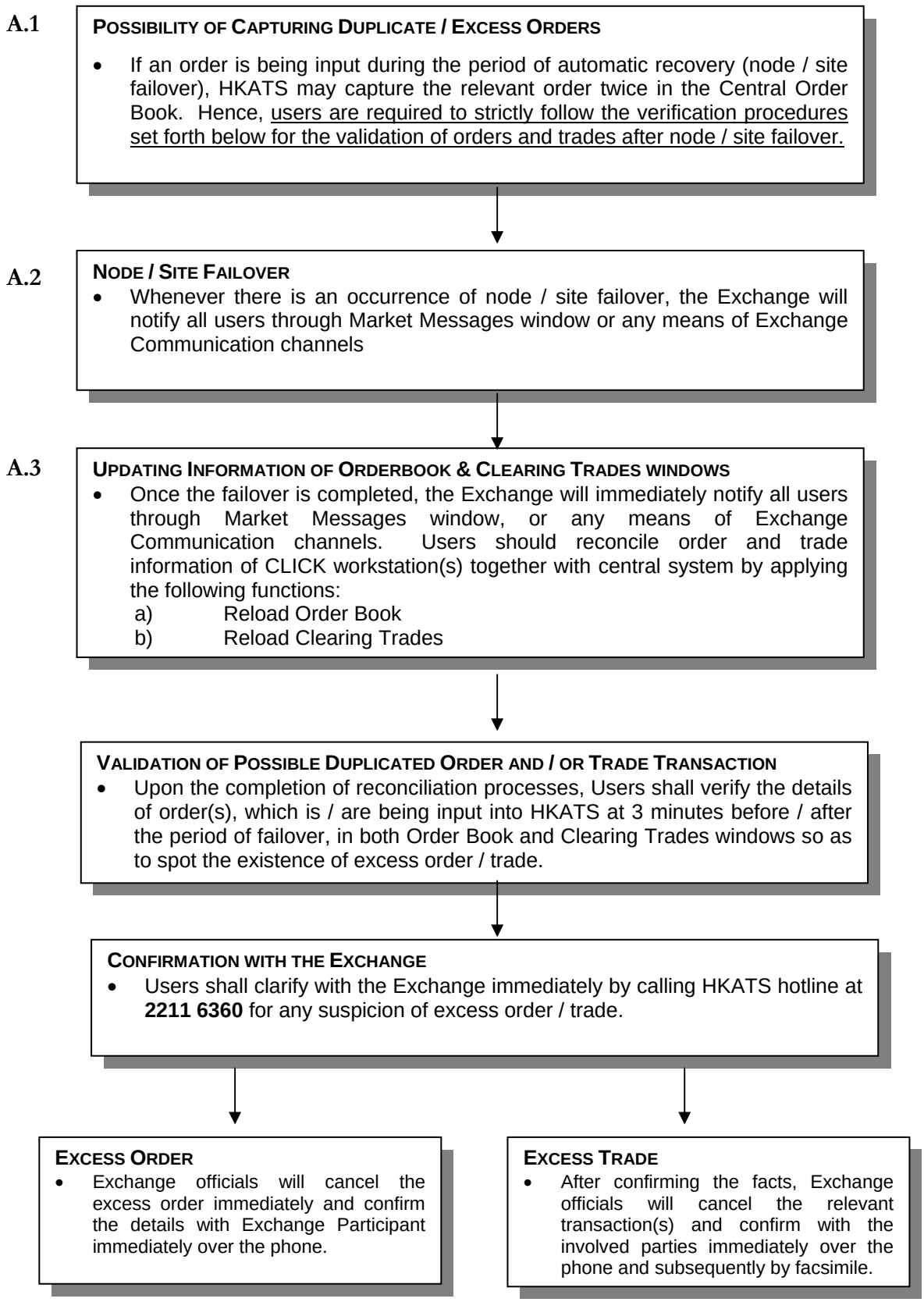


TABLE 2 OPERATING FLOWCHART FOR THE VALIDATION OF POSSIBLE DUPLICATE / EXCESS ORDER (NODE AND/OR SITE FAILOVER)



Appendices

Appendix 1 – Series Name Standard

This appendix covers the series name standard for products trading in HKATS. The identities of all series and standard combinations available can be found in the Instrument Explorer in the CLICK Trade program. (Refer to Section 2.2 – Instrument Explorer).

Appendix 1.1 – Index Futures and Options

The series name standards are illustrated below:

Root Symbol

HSI – Hang Seng Index
MHI – Mini-Hang Seng Index
HHI – Hang Seng China Enterprises Index
MCH – Mini-Hang Seng China Enterprises Index

For details, refer to the Instrument Explorer window in the CLICK Trade application or the HKEx website www.hkex.com.hk/prod/equityip/equityindexproducts.htm

Contract Month Code

Contract Month	Contract Month Code		
	Futures	Call	Put
January	F	A	M
February	G	B	N
March	H	C	O
April	J	D	P
May	K	E	Q
June	M	F	R
July	N	G	S
August	Q	H	T
September	U	I	U
October	V	J	V
November	X	K	W
December	Z	L	X

Contract Year Code

7 – 2007
8 – 2008
9 – 2009
0 – 2010

Series Name of Index Futures

The first 3 characters – The Root Symbol
The 4th character – The Contract Month Code
The 5th character – The Contract Year Code

Example:
Buy one "HSIU7" contract = Buy one Hang Seng Index Futures expiring in September 2007

Series Name of Index Options

The first 3 characters – The Root Symbol
The next 5 characters – The Strike Price
The 9th character – The Call/Put Contract Month Code
The 10th character – The Contract Year Code

Examples:
Buy one "HSI16000A8" contract = Buy one Hang Seng Index Call Option expiring in January 2008 with Strike Price at 16000
Sell one "HHI5800V7" contract = Sell one Hang Seng China Enterprises Index Put Option expiring in October 2007 with Strike Price at 5800

Series Name of Index Standard Combinations

Type 1: Calendar Spreads

The first 3 characters	– The Root Symbol
The 4th and 5th characters	– The Contract Month Code and Contract Year Code of the Near Month Contract
The 6th character	– The "/" symbol
The 7th and 8th characters	– The Contract Month Code and Contract Year Code of the Far Month Contract

Long a calendar spread of Index Futures at a ***positive price*** involves ***selling the near month contract at a discount price*** (in comparison with the far month contract) and ***buying the far month contract at a premium price*** (in comparison with the near month contract) simultaneously.

Long a calendar spread of Index Futures at a ***negative price*** involves ***selling the near month contract at a premium price*** (in comparison with the far month contract) and ***buying the far month contract at a discount price*** (in comparison with the near month contract) simultaneously.

While short a calendar spread of Index Futures at a positive/negative price is just doing the opposite.

Examples:

Buy one "MHIN8/U8" contract = Buy one Mini-Hang Seng Index Futures expiring in September 2008 and at the same time sell one expiring in July 2008.

Sell one "HHIF9/H9" contract = Buy one Hang Seng China Enterprises Index Futures expiring in January 2009 and at the same time sell one expiring in March 2009.

Type 2: Straddles

A straddle involves buying both the call option and the put option of the same expiry month at the same Strike Price.

The first 3 characters	– The Root Symbol
The next 3 characters	– The first 3 digits of the Strike Price
The 7th and 8th characters	– The Contract Month Code and Contract Year Code of the call option
The 9th character	– The "/" symbol
The 10th and 11th characters	– The Contract Month Code and Contract Year Code of the put option

Long a Straddle of Index Options is buying both the call option and the put option of the same expiry month at the same Strike Price.

Short a Straddle of Index Options is selling both the call option and the put option of the same expiry month at the same Strike Price.

Example:

Buy one "HSI150K8/W8" contract = Buy one Hang Seng Index call option and put option expiring in November 2008 with the same Strike Price at 15000 at the same time.

* Straddles are available in the Hang Seng Index Options market ONLY*

Type 3: Strangles

A Strangle involves buying a call option at a higher strike price and a put option at a lower strike price of the same expiry month.

The first 3 characters	– The Root Symbol
The next 3 characters	– The first 3 digits of Strike Price of the call option
The 7th and 8th characters	– The Contract Month Code and Contract Year Code of the call option
The 9th character	– The "/" symbol
The next 3 characters	– The first 3 digits of Strike Price of the put option
The 13th and 14th characters	– The Contract Month Code and Contract Year Code of the put option

Long a Strangle of Index Options involves buying a call option at a higher strike price and a put option at a lower strike price of the same expiry month.

Short a Strangle of Index Options involves selling a call option at a higher strike price and a put option at a lower strike price of the same expiry month

Example:

Buy one "HSI178J8/174V8" contract = Buy one Hang Seng Index call option with Strike Price at 17800 and put option with Strike Price at 17400 expiring in October 2008 at the same time.

* Strangles are available in the Hang Seng Index Options market ONLY*

*For details of the Hang Seng Index, Mini-Hang Seng Index, H-shares Index, FTSE/Xinhua China 25 Index Futures and Options, Hang Seng China H-Financials Index and Mini-H-shares Index Futures, refer to the respective specifications online.

Appendix 1.2 – HIBOR Futures

The series name standard is illustrated below:

Root Symbol

HB1 – 1-month Hong Kong Interbank Offered Rate
HB3 – 3-month Hong Kong Interbank Offered Rate
H1S – HIBOR strip composed of 1-month HIBOR Futures
H3S – HIBOR strip composed of 3-month HIBOR Futures

Contract Month Code

Contract Month	Contract Month Code
January	F
February	G
March	H
April	J
May	K
June	M
July	N
August	Q
September	U
October	V
November	X
December	Z

Contract Year Code

8 – 2008
9 – 2009
0 – 2010

Series Name of HIBOR Futures

The first 3 characters – The Root Symbol
The 4th character – The Contract Month Code
The 5th character – The Contract Year Code

Example:
Buy one "HB3X8" contract = Buy one 3-month Hong Kong Interbank Offered Rate futures expiring in November 2008.

Series Name of HIBOR Standard Combinations (Calendar Spreads)

The first 3 characters	– The Root Symbol
The 4th and 5th characters	– The Contract Month Code and Contract Year Code of the Near Month Contract
The 6th character	– The "/" Symbol
The 7th and 8th characters	– The Contract Month Code and Contract Year Code of the Far Month Contract

Long a calendar spread of HIBOR Futures at a ***positive price*** involves ***selling the near month contract at a discount price*** (in comparison with the far month contract) and ***buying the far month contract at a premium price*** (in comparison with the near month contract) simultaneously.

Long a calendar spread of HIBOR Futures at a ***negative price*** involves ***selling the near month contract at a premium price*** (in comparison with the far month contract) and ***buying the far month contract at a discount price*** (in comparison with the near month contract) simultaneously.

While short a calendar spread of HIBOR Futures at a positive/negative price is just doing the opposite.

Example:

Buy one "HB3M8/U8" contract	= Buy one 3-month HIBOR Futures expiring in September 2008 and at the same time sell one expiring in June 2008.

Serial Contract Months

For 1-month HIBOR Futures, the spot month and the next five calendar months contracts are available for trading.

For 3-month HIBOR Futures, the nearest three consecutive months and the next seven quarter months contracts are available for trading.

e.g. In July 2008, the following contract months are available for trading:

July 2008, August 2008, September 2008 (nearest three consecutive months)

December 2008, March 2009, June 2009, September 2009, December 2009, March 2010, June 2010 (next seven quarter months)

Series Name of HIBOR Strips

The first 3 characters	– The Root Symbol
The 4th and 5th characters	– The First Contract Month Code and the First Contract Year Code of the Strip
The 6th character	– The Number of Legs comprising the HIBOR Strip

Remarks:
The numbers of legs are fixed at 3 for H1S and 4 for H3S.

Examples:

Buy one "H1SV73" contract	= Buy each of the 1-month HIBOR futures expiring in October 2007, November 2007 and December 2007 at the same time.
Buy one "H3SH84" contract	= Buy each of the 3-month HIBOR futures expiring in March 2008, June 2008, September 2008 and December 2008 at the same time.

New Strips upon Expiry

1-month HIBOR Strips

Two new HIBOR strips will be introduced after the spot month contract of 1-month HIBOR Futures expires. The first strip is composed of the contracts expiring in each of the first 3 months (M1M2M3), and the second one is composed of contracts expiring in each of the last 3 months (M4M5M6). Therefore, there are altogether four strips available for trading each month, which three of them are carried forward from the previous months.

Month	Strips Available	
	New Strips	Existing Strips
1	M1M2M3 , M4M5M6	
2	M2M3M4 , M5M6M7	M4M5M6
3	M3M4M5 , M6M7M8	M4M5M6 , M5M6M7
4	M4M5M6 , M7M8M9	M5M6M7 , M6M7M8
5	M5M6M7 , M8M9M10	M6M7M8 , M7M8M9
…	…	…

Example:
When HB1V6 expires on 16 October 2006, the following four strips will be available for trading on 17 October 2006:
H1SG73 (new)
H1SX63, H1SZ63, H1SF73 (carried forward from Aug 2006, Sep 2006 and Oct 2006 respectively)

3-month HIBOR Strips

Two new HIBOR strips will be introduced after the nearest quarterly contract of 3-month HIBOR Futures expires. The first strip is composed of the contracts expiring in each of the first four quarter months (Q1Q2Q3Q4), and the second one is composed of the contracts expiring in each of the last four quarter months (Q5Q6Q7Q8). Therefore, there are altogether five strips available for trading each month, which five of them are carried forward from the previous months.

Month	Strips Available	
	New Strips	Existing Strips
1	Q1Q2Q3Q4 , Q5Q6Q7Q8	
2	Q2Q3Q4Q5 , Q6Q7Q8Q9	Q5Q6Q7Q8
3	Q3Q4Q5Q6 , Q7Q8Q9Q10	Q5Q6Q7Q8 , Q6Q7Q8Q9
4	Q4Q5Q6Q7 , Q8Q9Q10Q11	Q5Q6Q7Q8 , Q6Q7Q8Q9 , Q7Q8Q9Q10
5	Q5Q6Q7Q8 , Q9Q10Q11Q12	Q6Q7Q8Q9 , Q7Q8Q9Q10 , Q8Q9Q10Q11
6	Q6Q7Q8Q9 , Q10Q11Q12Q13	Q7Q8Q9Q10 , Q8Q9Q10Q11 , Q9Q10Q11Q12
…	…	…

Example:
When the HB3H6 expires on 13 March 2006, the following five strips will be available for trading on 14 March 2006:
H3SM74 (new)
H3SM64, H3SU64, H3SZ64, H3SH74 (carried forward from Jun 2005, Sep 2005, Dec 2005 and March 2006 respectively)

*For details of the HIBOR Futures, refer to the respective specifications online.

Appendix 1.3 – 3-Year Exchange Fund Notes Futures

The series name standard is illustrated below:

Root Symbol

EF3 – 3-Year Exchange Fund Notes

Contract Month Code

Contract Month	Contract Month Code
March	H
June	M
September	U
December	Z

Contract Year Code

8 – 2008
9 – 2009
0 – 2010

Series Name of 3-Year EFN Futures

The first 3 characters – The Root Symbol
The 4th character – The Contract Month Code
The 5th character – The Contract Year Code

Example:
Buy one "EF3U8" contract = Buy one 3-Year EFN Futures expiring in September 2008

Series Name of EF3 Standard Combinations (Calendar Spreads)

The first 3 characters	– The Root Symbol
The 4th and 5th characters	– The Contract Month Code and Contract Year Code of the Near Month contract
The 6th character	– The "/" symbol
The 7th and 8th characters	– The Contract Month Code and Contract Year Code of the Far Month contract

Long a calendar spread of EF3 Futures at a ***positive price*** involves ***selling the near month contract at a discount price*** (in comparison with the far month contract) and ***buying the far month contract at a premium price*** (in comparison with the near month contract) simultaneously.

Long a calendar spread of EF3 Futures at a ***negative price*** involves ***selling the near month contract at a premium price*** (in comparison with the far month contract) and ***buying the far month contract at a discount price*** (in comparison with the near month contract) simultaneously.

While short a calendar spread of EF3 Futures at a positive/negative price is just doing the opposite.

Example:

Buy one "EF3U8/Z8" contract = Buy one 3-Year EFN Futures expiring in December 2008 and at the same time sell one expiring in September 2008.

*For details of the 3-Year EFN Futures, refer to the respective specifications online.

Appendix 1.4 – Stock Futures and Options

The series name standard is illustrated below:

Root Symbol

3-character mnemonic of the underlying stock
e.g. HKB – HSBC Holdings plc

For details, refer to the Instrument Explorer window in the CLICK Trade application or the HKEx website www.hkex.com.hk/prod/so/classlist_so.htm

Contract Month Code

Contract Month	Contract Month Code		
	Futures	Call	Put
January	F	A	M
February	G	B	N
March	H	C	O
April	J	D	P
May	K	E	Q
June	M	F	R
July	N	G	S
August	Q	H	T
September	U	I	U
October	V	J	V
November	X	K	W
December	Z	L	X

Contract Year Code

8 – 2008
9 – 2009
0 – 2010

Series Name of Stock Futures

The first 3 characters – The Root Symbol
The 4th character – The Contract Month Code
The 5th character – The Contract Year Code

Example:
Buy one "HKBK8" = Buy one HSBC Holdings plc Stock Futures expiring in May 2008

Series Name of Stock Options

The first 3 characters – The Root Symbol
The next number – The Strike Price (up to 2 decimal places)
The following character – The Call/Put Contract Month Code
The last character – The Contract Year Code

Example:
Buy one "HKB132.50V8" contract = Buy one HSBC Holdings plc Put Option expiring in October 2008 with Strike Price at 132.50

Series Name of Synthetic Futures in Stock Options

The first 3 characters	- The Root Symbol
The next number	- The Strike Price (up to 2 decimal places)
The 4th and 5th characters	- The Put Contract Month Code and Contract Year Code
The 6th character	- The "/"symbol
The 7th and 8th characters	- The Call Contract Month Code and Contract Year Code
The last character	- SY

Buy a Synthetic Futures Series is to buy a call option and sell a put option with the same underlying, strike price and expiry date.

Sell a Synthetic Futures Series is to sell a call option and buy a put option with the same underlying, strike price and expiry date.

Example:
Buy one "HKB90.00Q1/E1SY" contract = Sell HSBC Put and buy HSBC call expiring in May 2011 with strike price at $90.00.

Series Name of Stock Futures Standard Combinations (Calendar Spreads)

The first 3 characters	– The Root Symbol
The 4th and 5th characters	– The Contract Month Code and Contract Year Code of the Near Month Contract
The 6th character	– The "/" symbol
The 7th and 8th characters	– The Contract Month Code and Contract Year Code of the Far Month Contract

Long a calendar spread of Stock Futures at a ***positive price*** involves ***selling the near month contract at a discount price*** (in comparison with the far month contract) and ***buying the far month contract at a premium price*** (in comparison with the near month contract) simultaneously.

Long a calendar spread of Stock Futures at a ***negative price*** involves ***selling the near month contract at a premium price*** (in comparison with the far month contract) and ***buying the far month contract at a discount price*** (in comparison with the near month contract) simultaneously.

While short a calendar spread of Stock Futures at a positive/negative price is just doing the opposite.

Example:

Buy one "HKBM8/N8" contract = Buy one HSBC Holdings plc Stock Futures expiring in July 2008 and at the same time sell one expiring in June 2008

*For details of the Stock Futures and Stock Options, refer to the respective specifications online.

Appendix 1.5 – Gold Futures

The series name standard is illustrated below:

Root Symbol

GLD – Gold of not less than 995 fineness

Contract Month Code

Contract Month	Contract Month Code
January	F
February	G
March	H
April	J
May	K
June	M
July	N
August	Q
September	U
October	V
November	X
December	Z

Contract Year Code

8 – 2008
9 – 2009
0 – 2010

Series Name of GLD Futures

The first 3 characters – The Root Symbol
The 4th character – The Contract Month Code
The 5th character – The Contract Year Code

Example:
Buy one "GLDZ8" contract = Buy one GLD Futures expiring in December 2008

Series Name of GLD Standard Combinations (Calendar Spreads)

The first 3 characters	– The Root Symbol
The 4th and 5th characters	– The Contract Month Code and Contract Year Code of the Near Month contract
The 6th character	– The "/" symbol
The 7th and 8th characters	– The Contract Month Code and Contract Year Code of the Far Month contract

Long a calendar spread of GLD Futures at a ***positive price*** involves ***selling the near month contract at a discount price*** (in comparison with the far month contract) and ***buying the far month contract at a premium price*** (in comparison with the near month contract) simultaneously.

Long a calendar spread of GLD Futures at a ***negative price*** involves ***selling the near month contract at a premium price*** (in comparison with the far month contract) and ***buying the far month contract at a discount price*** (in comparison with the near month contract) simultaneously.

While short a calendar spread of GLD Futures at a positive/negative price is just doing the opposite.

Example:

Buy one "GLDX8/Z8" contract = Buy one GLD Futures expiring in December 2008 and at the same time sell one expiring in November 2008.

*For details of the GLD Futures, refer to the respective specifications online.

Appendix 2 – Combinations

There are two types of combination trading in the HKATS, namely, standard combinations and non-standard combinations. The following sections cover the differences between standard combinations and non-standard combinations.

Appendix 2.1 – Standard Combinations

Standard combinations are pre-defined by the Exchange. Examples are Calendar Spread (futures strategy), Straddle and Strangle (options strategy) strategies. (Refer to Appendix 1 Series Name Standard)

1. Identities of all standard combinations are listed in the Instrument Explorer window (Section 2.2 – Instrument Explorer). Users can review the price or order information of standard combinations in the Price Information window (Section 2.3 – Price Information), Price Depth window (Section 2.4 – Price Depth) or Order Depth window (Section 2.5 – Order Depth).

2. To place standard combinations into the marketplace, users may use either the Enter Order window (Section 3.3 - Enter Order Window), the Execute Order window, (Section 3.4 - Execute Order Window) or the Enter Combination window (Section 3.5 - Enter Combination Window). However, if users choose to use the Enter Combination window, they must define each leg of the combinations and the price of the combination can be entered as premium, discount or at par. All combinations entered using the Enter Combination window will be considered as non-standard combinations despite the components of the combination and thus it will have a Fill or Kill validity status automatically.

To handle block trades which involves a spread and strategic combination, refer to Section 4.1 –Enter Trade Report.

3. **Limitations of trading standard combinations in HKATS:**

- Only validity time “Day”, “Fak” or “Fok” are allowed.
- Existing system does not offer a facility to automatically calculate theoretical prices of combo series. Market makers must therefore manually enter quotations.

4. Bait Calculation

HKATS features bait calculations to facilitate the execution of standard combinations. To increase their chance of executions, the system generates bait orders for each of the two separate legs and matches each leg individually. Prices of the baits will be adjusted according to the market prevailing price. Below are three examples of bait generation regarding the Calendar Spread, Straddles and Strangles respectively.

Example 1: Calendar Spread Bait Calculation

Suppose Exchange Participant A (EP A) is going to place a buy order of 10 lots of HSIF8/G8 at the price of 5 and the prevailing market prices of the combo legs are as follow:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSIF8	B	40	15520	15522	50	B
HSIG8						

Then the bait (HSIG8 bidding at 15525 for 10 lots) will be automatically generated by the system for EP A as shown below:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSIF8	B	40	15520	15522	50	B
HSIF8/G8	A	10	5			
HSIG8 (bait)	A	10	15525			

If another Exchange Participant (e.g. EP C) hits the bait, then EP A will simultaneously hit the prevailing HSIF8 bid order for 10 lots, allowing EP A to successfully buy 10 lots of HSIF8/G8 at 5 index points as desired.

Price and/or quantity of the bait will change if the combo bid (HSIF8/G8) or the best bid of HSIF8 changes.

Example 2: Straddle Bait Calculation

Suppose Exchange Participant D (EP D) is going to place a buy order of 8 lots of HSI156A8/M8 at the price of 100 and the prevailing market prices of the combo legs are as follow:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSI15600A8				60	15	E
HSI15600M8						

Then the bait (HSI15600M8 bidding at 40 for 8 lots) will be automatically generated by the system for EP D as shown below:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSI15600A8				60	15	E
HSI156A8/M8	D	8	100			
HSI15600M8 (bait)	D	8	40			

If another Exchange Participant (e.g. EP F) hits the bait, then EP D will simultaneously hit the prevailing HSI15600A8 ask order for 8 lots, allowing EP D to successfully buy 8 lots of HSI156A8/M8 at 100 index points as desired.

Price and/or quantity of the bait will change if the combo bid (HSI156A8/M8) or the best ask of HSI15600A8 changes.

Example 3: Strangle Bait Calculation

Suppose Exchange Participant G (EP G) is going to place a buy order of 10 lots of HSI172K8/168W8 at the price of 120 and the prevailing market prices of the combo legs are as follow:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSI17200K8				70	20	H
HSI16800W8						

Then the bait (HSI16800W8 bidding at 50 for 10 lots) will be automatically generated by the system for EP G as shown below:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSI17200K8				70	20	H
HSI172K8/168W8	G	10	120			
HSI16800W8 (bait)	G	10	50			

If another Exchange Participant (e.g. EP I) hits the bait, then EP G will simultaneously hit the prevailing HSI17200K8 ask order for 10 lots, allowing EP G to successfully buy 10 lots of HSI172K8/168W8 at 120 index points as desired.

Price and/or quantity of the bait will change if the combo bid (HSI172K8/168W8) or the best ask of HSI17200K8 changes.

5. Ranking Criteria of Derived Bait

The order ranking of the bait shall be in accordance with the time of order of the standard combination and not with the time the bait is generated. The bait generation can be subsequent to the time of order because bait generation requires one of the legs to have a market prevailing price. The following case illustrates this concept.

Example 4: Bait Generation – Order Time vs. Bait Generation Time

At 10:30am, the prevailing market prices are as below:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSIF8	B	40	15520	15522	50	B
HSIG8						
HSI15600A8				60	15	E
HSI15600M8						

At 10:45am, Exchange Participant A (EP A) placed an order of buying 10 lots of HSIF8/G8 at the price of 5, and EP D placed an order of buying 8 lots of HSI156A8/M8 at the price of 100, so the baits HSIG8 and HSI15600M8 were generated respectively as follow:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSIF8	B	40	15520	15522	50	B
HSIF8/G8	A	10	5			
HSIG8 (bait)	A	10	15525			
HSI15600A8				60	15	E
HSI156A8/M8	D	8	100			
HSI15600M8 (bait)	D	8	40			

At 10:47am, EP C placed an order of buying 10 lots of HSIG8 at 15518, and EP F placed an order of buying 15 lots of HSI15600M8 at 35.

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSIF8	B	40	15520	15522	50	B
HSIF8/G8	A	10	5			
HSIG8 (bait)	A	10	15525			
HSIG8	C	10	15518			
HSI15600A8				60	15	E
HSI156A8/M8	D	8	100			
HSI15600M8 (bait)	D	8	40			
HSI15600M8	F	15	35			

At 10:48am, EP B changed the bid price of HSIF8 from 15520 to 15513, and EP E changed the ask price of HSI15600A8 from 60 to 65. Then their baits correspond as follow:

Series	EP	Bid Qty	Bid Price	Ask Price	Ask Qty	EP
HSIF8	B	40	***15513***	15522	50	B
HSIF8/G8	A	10	5			
HSIG8 (bait)	A	10	***15518*** ***(higher priority)***			
HSIG8	C	10	15518			
HSI15600A8				***65***	15	E
HSI156A8/M8	D	8	100			
HSI15600M8 (bait)	D	8	***35*** ***(higher priority)***			
HSI15600M8	F	15	35			

At 10:52am, EP Y and EP Z executed a market order of selling 10 lots of HSIG8 at 15518 and selling 8 lots of HSI15600M8 at 34 respectively, and HKATS matched them with the baits generated at 10:48am instead of the limit orders placed by EP C and EP F at 10:47am. It is because the bait still prioritizes the outright order even though the outright is placed before the subsequent bait is generated.

6. Reporting the executed standard combination trades

The executed combination trades will be reported in CLICK Trade as two separate transactions. To signify those standard combination trades, STC will be displayed in the Deal Src column of the Company Trades, Clearing Trades and Ticker windows to differentiate them from trades executed in the individual market series. (Refer to Section 4.2 – Special Deal Indicators)

Attention

(i) Combinations executed in the individual series market

If the combinations are executed in the individual market series, the prevailing market price for each individual leg shall automatically apply as the transaction price for each individual leg. Any matched contracts will be recorded in HKATS as separate trades in the individual market series. "STC" will not be found in the Deal Src column of the Company Trades, Clearing Trades and Ticker windows. The remaining non-executed items will be left in the user's Order Book.

(ii) Combinations executed in the standard combinations market

If the combinations are executed in the standard combinations market, the deal price for each individual leg will be calculated based on the prevailing market prices and the prices of the standard combinations. The letters "STC" will be displayed in the Deal Src column of the Company Trades, Clearing Trades and Ticker windows to differentiate these trades from trades executed in the individual market series.

Users should also be aware that the executed prices of such transactions may not necessarily correspond with the prevailing prices of the individual market series.

7. Generation of Unusual Price when there is no Market Price

Under the current system design, unusual prices may occur in trades of standard combinations

In case there are no prices (bid, offer or last traded price) available for the legs of the respective combination order, the lower bound of the instrument will be used as the reference price for one leg. The lower bound plus or minus the net combo price will be used as the price for the other leg of the combination. The following example will demonstrate this concept.

For example EP A placed an order to buy a calendar spread (MHIN8/U8) at a price of 10. Assume there were no market prices and last traded prices for both MHIN8 and MHIU8 and the lower bound for MHI futures (set by the Exchange) is 6000. The system would automatically generate and report the two legs as 6000 and 6010 for MHIN8 and MHIU8 respectively.

8. Post-Trade Adjustments

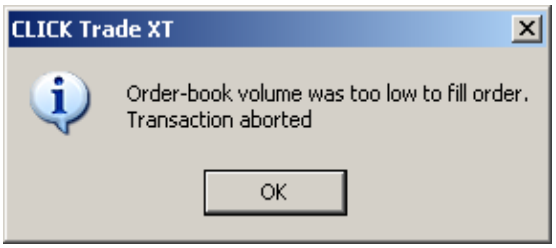
To perform post-trade adjustment on trades with unusual prices, users should first inform the Exchange about the prices suggested for the related combination series. The suggested prices should not fall outside the day high or the day low of the series, also it must be in the Exchange's discretion that the price is representative of the market level. In determining the reasonable price on option series in the combination trades, theoretical prices and respective market prices will be taken into consideration. The counterparty must agree with the adjustments or the request will not be processed by the Exchange. Users are required to fill in Form UPR and sent it to the Exchange within one hour after the close of the relevant market for adjustment of executed prices.

Appendix 2.2 – Non-Standard Combinations

Non-standard combinations are combinations defined by individual users using the Enter Combination window and the Enter Bulletin Board Order window.

Combination entered using the Enter Combination window will have a default validity status of Fill or Kill, thus they will be either executed in full or it will be cancelled. Such orders will not be partially executed.

The following message will appear if the market does not have sufficient quantity to execute the order.



The following message will appear if the premium is off market. The transaction will be aborted.

All matched combinations will be reported in the system as separate transactions and at different prices for each individual leg. For details about entering non-standard combinations using the Enter Combinations window, refer to Section 3.5 – Enter Combination window.

For details about entering non-standard combinations using the Enter Bulletin Board Order window, refer to Appendix 3 – Bulletin Board Functions.

Appendix 3 – Bulletin Board Functions

The Bulletin Board function allows users to define and place limit orders for futures and options strategies. These orders are entered using the Enter Bulletin Board Order window and displayed in the Bulletin Board Order Book window. Users can view all bulletin board orders entered by all users in the Bulletin Board Order Book window. (Note that bulletin board orders are displayed in Bulletin Board Order Book window only, these are separated from orders in the Order Book) Bulletin Board functions are applied to Hang Seng Index, Mini-Hang Seng Index and H-shares Index Futures and Options and Stock Options markets only. Users may combine future and/or option contracts of the same market in a bulletin board order. However, stock option strategies are confined to stock option contracts of a single option class.

Appendix 3.1 – Bulletin Board Order Book

Open the Bulletin Board Order Book window from the Bulletin Board menu or the toolbar icon.

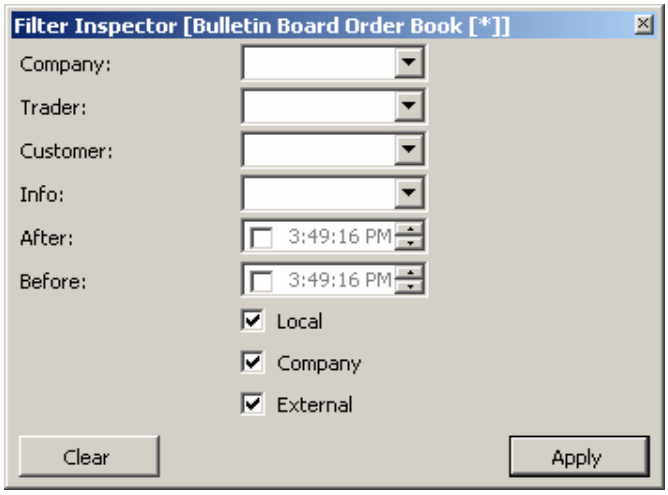
The Bulletin Board Order Book window shows all outstanding bulletin board orders of the market in real time without displaying the identity of other users. Users can refresh the Bulletin Board Order Book by selecting the **[Reload Bulletin Board Order Book]** button in the Bulletin board menu to view the most updated information.

Only Acceptable Order is allowed which is ready to be executed by other market participants. It specifies both the net price and quantity for buying and selling of such Bulletin Board Order.

Window Items – Bulletin Board Order Book window

Item	***Description***
Cmp	Specifies the company who entered the bulletin board order. (Blank for orders entered by other companies)
Trd	Specifies the user. (Blank for orders entered by other companies)
Qty	Specifies the quantity.
Net Prc	Specifies the net price of the bulletin board order.
Rel	Specifies the relation between the legs in the bulletin board order.
ID	Specifies the instrument identities of the each leg in the bulletin board order.

Users can right click to the Quick Menu then select Settings followed with Filter Inspector to specify more detailed search criteria to view bulletin board orders



Information in the Bulletin Board Order Book window can be filtered by the following attributes:

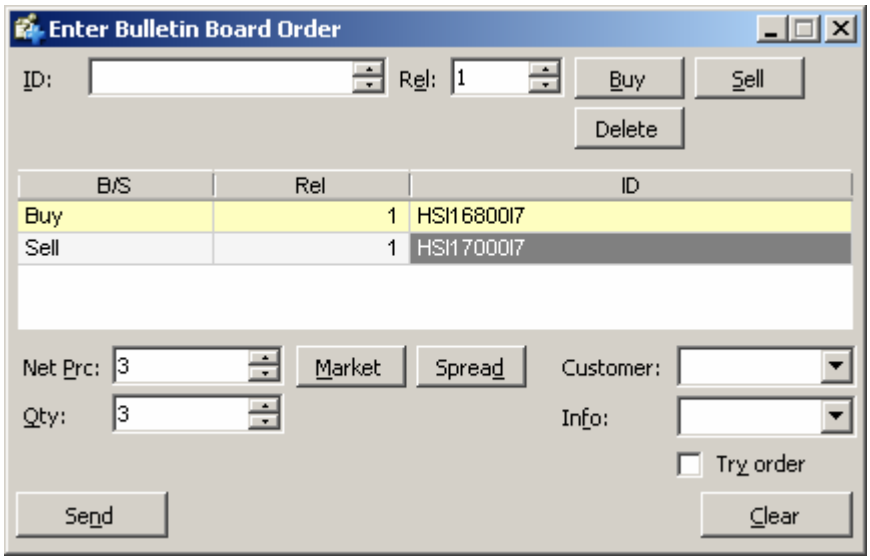
Company	View bulletin board orders entered by a particular company.
Trader	View bulletin board orders entered by a particular user in the same company, enter the identity of that particular user. To view bulletin board orders entered by every user in the company, simply leave this field blank.
Customer	View bulletin board orders that are registered in a particular account type.
Info	View bulletin board orders that are marked by the information specified in the Info field.
After	View bulletin board orders entered after the time specified
Before	View bulletin board orders entered before the time specified
Local	View bulletin board orders entered by the login user, check the Local box only.
Company	View bulletin board orders entered by other users in the same company (i.e. excluding the login user), check the Company box only.
External	View bulletin board orders entered in the market except Local and Company trades.

Users may select Local, Company, and External at the same time.

Appendix 3.2 – Enter Bulletin Board Orders

The Enter Bulletin Board Order window is used to define and place a bulletin board order in the market. Users need to determine the futures and/or options series legs, and their corresponding ratios in the bulletin board order. Standard combinations **cannot** be defined as legs in any bulletin board order.

To place a bulletin board order in the Bulletin Board Order Book

1. Bring up the Enter Bulletin Board window from the Bulletin board menu or toolbar icon.
2. 

2. Users can add a series by filling in the series in the ID field and then press the **[Buy]** or **[Sell]** button.
3. Users may adjust the relation/ratio of each leg in the bulletin board order by clicking the up and down arrow key beside the Rel field.
4. Repeat step 2 and 3 to add other series to the bulletin board order.
5. The maximum relation is 100 and the maximum ratio factor is 4.
6. Users can define a bulletin board order with 8 legs in maximum.
7. Users are not allowed to specify a particular series twice in a bulletin board order.
8. Price and quantity must be defined for all bulletin board orders.
9. To calculate the market price of the bulletin board order using the prevailing market price of each leg, users can press the **[Market]** button. In the case where market price for any combo leg is not available and/or the prevailing quantity in the market is not enough for the bulletin board order, the system will report zero in the price field.

For example, given a bulletin board order buying one HSI10400X8 and selling one HSI10600L8 with the market price of HSI10400X8 and HSI10600L8 as follows:

Series	Bid	Ask
HSI10400X8	30	34
HSI10600L8	15	21

The calculated price for such Bulletin Board order shall be 34 – 15 = 19. (i.e. paid)

In case the bid price for HSI10600L8 and/or the ask price for HSI10400X8 are/is unavailable, the system will return 0 in the price field.

10. Users can press the **[Spread]** button to obtain a theoretical price for the bulletin board order based on legs with existing market price. However, legs without existing market price and the quantity will not be considered.

    For example, given a Bulletin Board order buying one HSI10400X8 and selling one HSI10600L8 with the market price of HSI10400X8 and HSI10600L8 as follows:

Series	Bid	Ask
HSI10400X8	30	34
HSI10600L8		21

    The calculated price for such Bulletin Board order will be displayed as 34. (i.e. paid)

11. If users want to match the bulletin board order with orders in the market, users need to check the **[Try Order]** box. The order will be matched in the outright market in full on a Fill or Kill basis if possible. If the order cannot be matched in the outright market, users will be asked by the system whether the whole order should be retained and put into Bulletin Board Order Book window.
12. Users can also enter a price for the bulletin board order in the Net Prc field.
13. Bulletin board orders allow zero prices. If users expect to **pay** / **receive** premium for/from the bulletin board order, the premium should be in **positive** / **negative** figures.
14. Input information in the Customer field and the Info field.
15. Click the **[Send]** button to send the order to the market.
16. Users should be aware that there is no inactive Bulletin Board order. All acceptable orders placed in the Bulletin Board Order Book window are executable and they are valid until the end of the business day.
17. Under normal circumstances, the Exchange will not alter/delete or place Bulletin Board order on behalf of Exchange Participants.

Note that Open and Close indicators are not available for Bulletin Board order.

To remove series from a Bulletin Board order

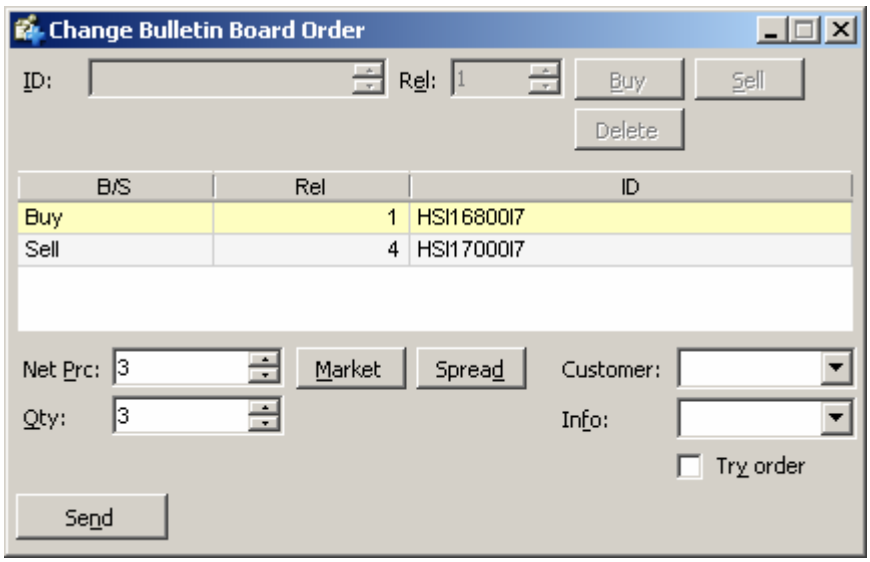
To delete any series from in the bulletin board orders, simply highlight the series to be deleted and click the **[Delete]** button

To clear all fields

To clear information in all fields, simply click the **[Clear]** button.

Appendix 3.3 – Change Bulletin Board Orders

1. Users may change the details of bulletin board orders placed in the Bulletin Board Order Book by highlighting the particular order in the Bulletin Board Order Book window and then clicking the **[Change]** button. The Change Bulletin Board Order window will pop up.



2. The following changes can be made:
   - Net Prc;
   - Qty;
   - The Customer and/or Info fields.

3. Users should note that any change made (including Customer and Info fields) to the order will render loss of the priority to the original order.

4. Users **cannot** change the instrument series of each leg, buy or sell of each leg and their ratios in the bulletin board order. If the users would like to make such changes, they need to cancel the bulletin board order in the Bulletin Board Order Book window first and then enter a new bulletin board order with the desired series.

5. Click the **[Send]** button to confirm the changes.

6. Users should beware that before clicking the **[Send]** button to confirm changes, the original order **is** still open in the market.

7. Amendment of Bulletin Board orders is not allowed in pre-market opening period. Any attempt to change the Bulletin Board orders in the Pre-opening phase will result in cancellation of the orders.

Appendix 3.4 – Cancel Bulletin Board Orders

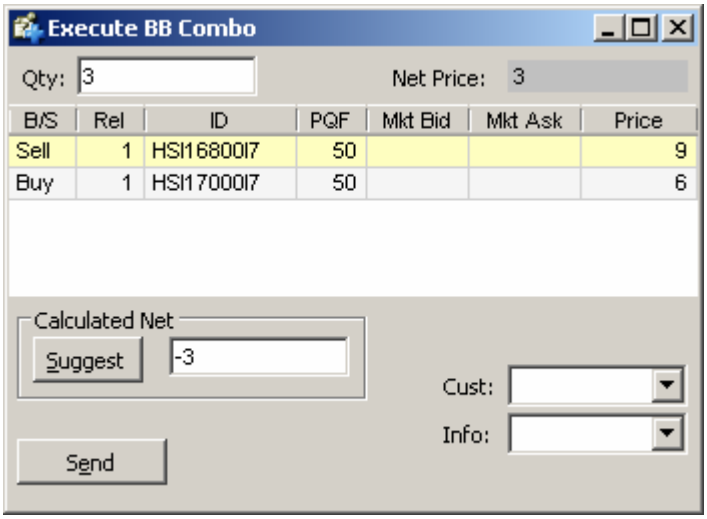
1. Users may cancel the bulletin board orders entered or of those entered by other users in the same company. The bulletin board orders can be cancelled by highlighting such orders in the Bulletin Board Order Book window and press the **[Cancel]** button.
2. Cancellation of bulletin board orders is allowed in the Pre-Market Opening or Pre-Market Activities of the afternoon trading session except for those bulletin board orders consisting of HSI futures contracts. These are not allowed to be cancelled from 13:29 to 13:30.

Appendix 3.5 – Execute Bulletin Board Orders

The Execute Bulletin Board Order window is used to execute an outstanding Acceptable order in the Bulletin Board Order Book window. The Execute Bulletin Board Order window can be brought up by either:

i Highlighting the bulletin board order in the Bulletin Board Order Book window and then click the **[Accept]** button; or

ii Double-clicking the bulletin board order in the Bulletin Board Order Book window.



1. Positive or negative Net Price refers to the premium that the price contributor of such order is willing to pay or receive, while the positive or negative Calculated Net price refers to the premium that the user is willing to pay or receive for such order.

2. The Execute Bulletin Board Order window includes the market bids and asks of all legs for user's reference. In case there are any missing price in market bid and/or ask, the system provides an algorithm to suggest a price for that leg(s)[1]. Users can simply press the **[Suggest]** button to obtain prices on all legs. Users can also input their desired price for each leg but the price should satisfy the spread check rules. (Refer to Appendix 3.6 – Spread Check Rules)

3. Input information in the Customer field and the Info field.

4. Click the **[Send]** button to execute the order.

5. HKATS will match and register the deal when:
   - Net Price and Calculated Net are the same amount but with opposite signs.
   - Prices of all legs satisfy the Spread Check rules for corresponding underlying.
   - Partial fill is allowed.

6. Users can obtain information regarding the executed deal through the Ticker, Clearing Trades and Company Trades windows with an indicator "BB NSTC".

7. The corresponding series in a bulletin board order will **not** be updated as the last trade. Hence, it will **not** affect the day high or low of that series.

8. **Only** the volume of the series in the bulletin board order is updated in the Price Information window.

[1] The price suggestion function uses the market spread to determine the price. When there is missing Bid or Ask, the Last price and a Calculation Spread (CS) parameter will be used to create a closed price interval. The value of CS parameter is configurable with default value 6.

Market Bid	Market Ask	Market Last	Resulting Price Interval
B	A	L	[B , A]
B	A	–	[B , A]
B	–	L	[B , B + CS]
B	–	–	[B , B + CS]
–	A	L	[Max(A – CS, "MF"), A]
–	A	–	[Max(A – CS, "MF"), A]
–	–	L	[Max(L – CS/2, "MF") , L + CS/2]
–	–	–	["MF", CS]

"MF" – The minimum fluctuation, smallest possible positive price movement of a particular series.
"–" – No Bid, Ask or Last price exists.

Examples

Market Bid	Market Ask	Market Last	Resulting Price for that instrument series Selling / Buying at
50	60	65	50 / 60
50	60	–	50 / 60
50	–	65	50 / 56
50	–	–	50 / 56
–	60	65	54 / 60
–	60	–	54 / 60
–	–	65	62 / 68
–	–	–	1 / 6 (MF=1)

Appendix 3.6 – Spread Check Rules

The Exchange has determined a rule to verify the price of each leg. The rule indicates that the executed price shall fall at or within the prevailing market spread (best bid and best ask) except when there is no market price.

The system is restricted to check **X-2** legs in any Bulletin Board order, where X refers to the total number of legs in the order. However, for those Bulletin Board orders that have 2 to 4 instrument series, two legs have to be checked. An illustration of the number of legs to be checked is provided below:

X = Total no. of legs in the bulletin board order	N = no. of legs to be checked
2	2
3	2
4	2
5	3
6	4
7	5
8	6

Appendix 3.7 – Sorting Methodology of Bulletin Board Order Book

In order to facilitate order executions based on a price/ time basis, all orders will be clustered into groups and sorted according to the following methodology:

Within a Bulletin Board Order, legs will be sorted by:

1) The Futures legs are placed upper than options legs, and front month futures is placed upper than far month;

2) Options are placed according to series month (front month options is placed upper than far month), then strike price for the same month (options with lower strike prices are placed upper than the higher strike counterparts). For options with same month and same strike, call options are placed upper than put options (e.g., HSI16800A0>HSI16800M0>HSI17000A0>HSI17000M0>HSI16800B0>HSI17000 C0>HSI16600L0).

Bulletin Board orders amongst the same strategy will be sorted according to:

1) Price of the order in descending method (Positive Number > 0 > Negative Number, e.g., 100>50>0>-50>-100).

2) Time priority.

With different strategies Bulletin Board Orders will be grouped and placed according to following sequence:

1) Market and Underlying (sequence same as Price Information window)

2) All Options > All Futures > Options with Futures

3) Number of Legs (2>3>4>5 …)

4) Futures: front month placed upper than far month

5) Options: front month placed upper than far month, then lower strike placed upper than higher strike, then call placed upper than put

6) Buy>Sell
(e.g., for 3 legs BBB>BBS>BSB>BSS>SBB>SBS>SSB>SSS)

7) Ratio ('Rel') (1:1>1:2>1:3>2:1>2:3>3:1>3:2 …)

Appendix 3.8 – Characteristics of Bulletin Board Orders

As the system will NOT automatically match acceptable orders, users must follow the guided sorting priority (including price/time) during execution and placement of bulletin board orders.

In order to avoid confusion caused by reversed order[2], users must check the existence of matchable order prior to placing any bulletin board order in the market place.

Always execute the top order amongst the same strategies of the same price. Identical orders are placed according to price or time priority; therefore, users must always execute the top order amongst identical strategy.

Bulletin board trades executed not in compliance with the price or time priority principle will be deemed to be invalid. The Exchange in conjunction with the respective clearing house will delete any such invalid trade as if the trade had never been executed.

The Exchange will monitor the trades in the Bulletin Board. Users need to be aware that any transactions which are found to be in breach of the Rules for Bulletin Board price or time priority may result in disciplinary action.

Generation of Unusual Price when there is no Market Price

In case there is no price available in the outright series of the respective bulletin board orders, the system will automatically generate prices for all of the legs in the bulletin board orders such that the price on each leg will not exceed the "BB Calc Spread" defined in the HKEX tab of the Preferences window. (Refer to Section 6 – Customization)

For example, suppose the BB Calc Spread is set at 6 and EP A placed an order to buy and sell one contract of HSI10600L8 and sell HSI10800L8 simultaneously at the net price of 10 point in the Bulletin Board Order Book window. Since there is no market price available in both legs, the system will generate the prices for each leg of such bulletin order such as 1 and 6 for HSI10600L8 and HSI10800L8 by default. To execute such bulletin order, counterpart of this order needs to adjust the price of either one or both leg(s) to make it into a difference of -10 point such as 200 and 210 in order to have an execution.

However, an unusual price situation can occur because the system would allow for the execution to proceed even if the price of the legs are set to 1 and 11. The execution is allowed as long as their difference results with -10. In this case, post trade adjustments are needed to amend the appropriate execution price. The post-trade adjustments are similar to those for combinations. (Refer to Appendix 2 – Combinations)

[2] Reverse Order is an order that is comprised of same components but with reversed Buy/Sell legs. (e.g. Buy A Sell B is equal to the reverse of Sell A Buy B.)

Appendix 4 – Trading of Options

Appendix 4.1 – List of New Strike Series

1. New strike series will be added for new contract month of all products. For details, please refer to relevant sections in the Rules, Regulations and Procedures.
2. The Exchange will review, from time to time, the closing price of the underlying or spot month futures contract and introduce new strike series, if necessary, to ensure the above item (1) mentioned criteria is fulfilled.
3. No new strikes will be introduced for spot month options contracts on or after the fifth business day preceding expiry.

Appendix 4.2 – Option Valuation Model

1. Standard Black & Scholes

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

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

$$D_1 = \frac{\text{Ln}(\text{Price}/\text{Strike}) + [(\text{Repo} + \text{volatility}^2/2) \times \text{time}_{distribution}]}{\text{volatility} \times (\text{time}_{distribution})^{1/2}}$$

$$D_2 = D_1 - \text{volatility} \times (\text{time}_{distribution})^{1/2}$$

$$\text{Delta}_{call} = \text{Normsdist}(D_1)$$

$$\text{Delta}_{put} = \text{Normsdist}(-D_1) \times (-1)$$

$$\text{Gamma} = \frac{[1 / (2\pi)^{1/2}] \times e^{-D_1^2 / 2}}{\text{Price} \times \text{volatility} \times (\text{time}_{distribution})^{1/2}}$$

$$\text{Vega} = \text{Price} \times (\text{time}_{distribution})^{1/2} \times [e^{-D_1^2 / 2} / (2\pi)^{1/2}]$$

$$\text{Theta}_{call} = \left\{ \frac{\text{Price} \times \text{volatility} \times [e^{-D_1^2 / 2} / (2\pi)^{1/2}] / [2 \times (\text{time}_{distribution})^{1/2}] + [\text{repo} \times \text{Strike} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{Normsdist}(D_2)]}{365} \right\}$$

$$\text{Theta}_{put} = \left\{ \frac{\text{Price} \times \text{volatility} \times [e^{-D_1^2 / 2} / (2\pi)^{1/2}] / [2 \times (\text{time}_{distribution})^{1/2}] - [\text{repo} \times \text{Strike} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{Normsdist}(-D_2)]}{365} \right\}$$

2. Standard Black-76

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

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

$$D_1 = \frac{\text{Ln}(\text{Price}/\text{Strike}) + [(\text{volatility}^2/2) \times \text{time}_{distribution}]}{\text{volatility} \times (\text{time}_{distribution})^{1/2}}$$

$$D_2 = D_1 - \text{volatility} \times (\text{time}_{distribution})^{1/2}$$

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

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

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

$$\text{Vega} = \text{Price} \times e^{-\text{repo} \times \text{time}_{disc}} \times (\text{time}_{distribution})^{1/2} \times [e^{-D_1^2 / 2} / (2\pi)^{1/2}]$$

$$\text{Theta}_{call} = \frac{\left\{ \begin{array}{l} \text{Price} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{volatility} \times [e^{-D_1^2 / 2} / (2\pi)^{1/2}] / [2 \times (\text{time}_{distribution})^{1/2}] + \\ [\text{repo} \times \text{Strike} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{Normsdist}(D_2)] - \\ [\text{repo} \times \text{Price} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{Normsdist}(D_1)] \end{array} \right\}}{365}$$

$$\text{Theta}_{put} = \frac{\left\{ \begin{array}{l} \text{Price} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{volatility} \times [e^{-D_1^2 / 2} / (2\pi)^{1/2}] / [2 \times (\text{time}_{distribution})^{1/2}] + \\ [\text{repo} \times \text{Price} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{Normsdist}(-D_1)] - \\ [\text{repo} \times \text{Strike} \times e^{-\text{repo} \times \text{time}_{disc}} \times \text{Normsdist}(-D_2)] \end{array} \right\}}{365}$$

Appendix 5 – Pre-market Opening Period

Appendix 5.1 – For HSI, MHI & HHI Futures Markets only:

Order Placements

The main objective of the pre-market mechanism is to establish the Calculated Opening Price (COP) before market open, so as to establish an orderly market open and enhance market efficiency.

Three trading sessions, namely the Pre-Opening Session, the Pre-Open Allocation Session and the Open Allocation Session, have been defined before market open for markets with Pre-market Opening Activities.

Session 1 (Pre-Opening)

- Users can place new, change or cancel Auction Orders, Limit Orders, and Inactive Orders. Most order types can be entered except Combinations and Bulletin Board orders. For details of entering orders on HKATS, refer to Section 3.3 Enter Order Window.
- Long orders (GTC orders) from the previous trading day are included and open to be matched during the Pre-market Opening Period.
- Combination series will not be included in this session.
- Once the Calculated Opening Price (COP) is determined, it will be displayed in CLICK Trade windows. For algorithm of determining the COP, refer to Calculating COP in the later section.
- Both limit orders and auction orders can affect the COP.

Session 2 (Pre-Open Allocation)

- Only auction orders can be entered.
- Orders cannot be cancelled or changed.
- Only new auction orders can affect COP.
- Bulletin Board & Combination orders are not allowed.

Session 3 (Open-Allocation)

- Orders will be matched at the COP, if any, at the end of this session.
- Remaining unmatched orders will be converted as described below.
- For those orders that are matched at COP, "AUC" will be marked in the Deal Src column of Ticker window, Company Trades window and Clearing Trades window.
- Users are not able to add, change or cancel orders.

The schedule of Pre-market Opening mechanism is summarized in the following table[1]:

Session	Time (Morning Session)	Time (Afternoon Session)	Duration (Minutes)
Pre-Opening	8:45 – 9:11	13:00 – 13:26	26
Pre-Open Allocation	9:11 – 9:13	13:26 – 13:28	2
Open-Allocation	9:13 – 9:15	13:28 – 13:30	2

Order Types during the Pre-Market Opening

1. Auction Orders

Auction Orders are placed without a limit price and only allowed in the pre-market opening period. If users enter an auction order, that means they are prepared to buy or sell at the COP. All Auction Orders will be displayed and matched in time priority basis.

Auction Orders will be displayed as COP or as "AO" if there is no COP in windows including Order Depth window, Price Depth window and Price Information window.

Unmatched Auction Orders will be converted after Open Allocation session in the following one or more attribute(s):

- If an Auction Order is partially filled at COP, the remaining quantity will be converted into a Limit Order at COP.
- If any Auction Orders are unmatched, and there is a COP, the Auction Orders will be converted to Limit Orders at COP.
- If any Auction Orders are unmatched, and there is no COP, the Auction Orders will be converted to Limit Orders at best BID and ASK prices.
- If any Auction Orders are unmatched, and there is no COP and no BID and ASK prices in the market, the Auction Orders will be put as inactive in the Order Book.

[1] Subject to change by the Exchange from time to time

The priority of the converted Limit Orders will be according to the time when the original Auction Order was placed. Also, there will be an indicator in the Order Book or Order History window showing that the order have been converted or inactivated. All converted or inactivated orders will be valid until the end of the trading day.

2. Limit Orders

Limit Orders will be matched as much as possible automatically if it is at COP or better. For those limit orders with a bid higher or ask lower than the COP, it will be displayed as the COP.

Any unmatched Limit Orders will remain as Limit Orders after the Open Allocation session.

3. Inactive Orders

Users can enter inactive orders by using the Enter Order window during the Pre-Market Opening Period. However, inactive orders are only allowed to be activated during the Pre-Opening Session or after market open.

Calculating COP

The COP is calculated every time an order is placed in the market and it will be displayed in the "EP" column of the Price Information Window. The COP is calculated according to the rules defined below:

1. The COP cannot fall outside the best bid and offer of unfilled orders, though it can be equal to the bid or offer;
2. If more than one price satisfy rules 1 above, the COP will be the price with the number of matched contracts is maximized;
3. If more than one price satisfy the rules 1 & 2 above, the COP will be the price at which the normal order imbalance[2] is the lowest;
4. If more than one price satisfy the rules 1 - 3 above, the COP will be the price at which the associated crossed qty is the highest;
5. If more than one price satisfy 1 - 4 above, the COP will be the price closest to the settlement price of previous trading section;
6. If more than one price satisfy 1 - 5 above or if no settlement price is defined, the highest price will be chosen;

[2] The Normal Order Imbalance is the difference of the quantity of Ask orders and Bid orders that can be matched at a certain price.
Consider the following example:

Bid	Ask
5 @ AO	10 @ AO
5 @ 11	6 @ 8
5 @ 10	3 @ 9

Here we have four possible COPs: 8, 9, 10 and 11.
Quantity executed at COP 11 is only 10, so it is screened out according to rule 2. All COP 8, 9 and 10 give 15 contracts so they will proceed to rule 3.
COP 8 gives at the Bid side the total quantity 15 that can be matched. The Ask side has quantity 16 that can be matched. Thus the normal order imbalance is 1.
Both COP 9 and 10 gives at the Bid side total quantity 15 and the Ask side has total quantity 19. Thus the normal order imbalance is 4.
In this example COP 8 would be chosen, as the normal order imbalance is lower at COP 8 than at COP 9 and 10.

Appendix 5.2 – For Products Other than HSI, MHI & HHI Futures:

Order Placements

Users are not permitted to manipulate their active orders until 30 minutes before market open. Such 30 minutes period is called "Pre-market Activities". Users can cancel, amend or inactivate their active orders during this period but no new active order could be placed to the market. Only inactive orders may be entered during this period. However, users may activate inactive orders upon the opening of the market. Users will be able to enter multiple orders at the opening of market with the following steps.

Step 1 (Prior to Market Opening)

- Receive Orders from Clients.
- Input into CLICK workstation(s) as **Inactive Orders**.
- All Orders will be stored locally in the CLICK workstation.

Step 2 (Market Opening)

- Highlight those orders that users intend to activate.
- Press **[Activate]** button once the relevant market is open.
- All Inactive Orders will be activated.

Step 3 (After Market Opening)

- All active orders will be stored in the marketplace and available for matching by other market participants.
- Time priority of activated orders will solely depend on the following factors:

1. Time frame for pressing **[Activate]** button by users; and
2. Time sequence of **Inactive Orders** in the user's local CLICK workstation.

- HKATS will match activated orders according to their time of entry into the Central Order Book. Due to the fact that there may be split second differences in the time activated orders reach the Central Order Book, there is a possibility that user's orders may not be filled at the market opening instance even though the price of such orders is better than any executed or traded price.

Order Amendments and Cancellations

Orders in the Central Order Book may be amended, cancelled, or inactivated only during the Pre-market Activities or during trading hours.

For example, the morning session of the HSI Options Market starts at 9:15 a.m., all the Pre-market Activities can be done after 8:45 a.m. In addition, the Exchange may arrange other Pre-market Activities periods before the market re-opens under special circumstances or special trading sessions (e.g. Retreat of Typhoon). Such arrangement will be announced in advance or displayed in the Market Messages window ahead of time.
During the Pre-market Activities Period, outstanding orders can be cancelled or inactivated. Also, users can perform the following actions:

1. Modification of information in Cust and/or Info fields;
2. Change duration of validity;
3. Decrease quantity.

None of the above shall affect the time priority of valid orders. However, any attempt to amend the order price or increase the order quantity during the Pre-market Activities Period will be considered as canceling the original order and a new inactive order will be entered into the system.

No order amendments or cancellation can be performed except during trading hours or during the Pre-market Activities Period.

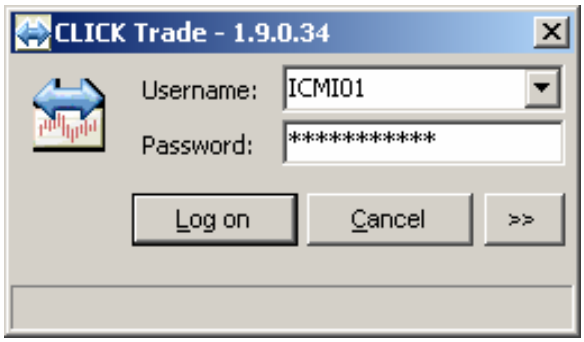
Responsibilities of Exchange Participants

An Exchange Participant should always act in the best interest of its clients. Failure to act in a client's best interest may be subject to disciplinary action by the Exchange.

Appendix 6 – Connection to Central Gateway

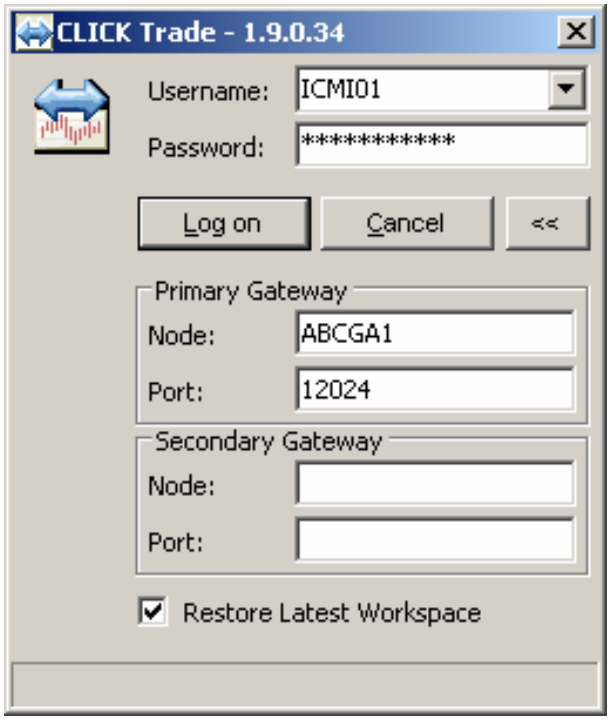
Step 1) Carry out normal login:

Step 2) Click the **[>>]** button to extend the login window:



Step 3) Enter the Node # and Port # name supplied by the Exchange hotline:

Step 4) Click the **[Log on]** button.



Appendix 7 – HKATS Anomalies (as of 28 June 2010)

The following items are HKATS anomalies, which have been identified in previous testing or reported by Participants. These items will not have significant impact on trading activity and will be addressed in future upgrades of HKATS.

Item	System Anomalies
1.	Pop-up messages regarding Auction Orders entered during market open may use wordings such as "Market Orders…" instead of "Auction Order ".
2.	After reducing the quantity of an order and followed by canceling it, the "Orig" column of the Order History window remains unchanged showing the initial quantity as if the quantity had never been reduced.
3.	If failover occurs during the activation of a batch of inactive orders a warning message - "Error activating order cannot be activated OK" – may pop up as a result of an interrupted/incomplete order activation process. Whenever such a message pops up, it means that one of the inactive orders will have been activated or executed during the failover period but it will still remain in the Order Book as an inactive order. Having clicked the "OK" button on the warning message, an "Abort batch? Yes/No" message may follow. Click "Yes" to abort the remaining order activation process. Click "No" to continue the remaining activation process. In any case, such an inactive order will still remain in the Order Book. Users are advised to update their Order Book and Clearing Trades windows, and cancel the excess inactive order.
4.	When users activate system inactivated orders (For example, when the CLICK workstation lose connection for more than 10 minutes, outstanding orders will be inactivated automatically), a warning message containing "Fill or Partial Fill on Order Please Check Order Book" will appear. Users must disregard the message and select OK to continue.
5.	Post-trade transactions for T-1 trades may cause the Trade Statistics window to display a 10-digit number or other numbers that do not reflect the current day turnover. Users can filter out all post-trade transactions by entering the identity of a particular user in the Trader field of the Filter Inspector. Please refer to Section 4.6 for more details.
6.	If validity time "Exp" is selected with a Calendar Spread or for an instrument series expiring at the current trading day, an error message "Unhandled exception has occurred in your application….." will pop up. User should click "Continue" to acknowledge the error message, then close and reopen the Enter Order window to continue. If users click "Quit", the application will hang up immediately.
7.	If an order with the validity of Until Expiry (Exp) is subsequently changed to be valid until a specified date, the order might not be carried forward to the specified date.
8.	If more than one user enter orders for the same series using the Price Quotation window, the In Market column of the Price Quotation window might not display the order information of the user or it might display order information of other users. Users should confirm their orders in the Order Book window. The Price Quotation window should only be used by one user for the same series to avoid this situation.
9.	If users attempt to specify the predefined values for Customer Information, no content item should be predefined with same string of alphabets. If saved and users select from the Info dropdown menu, an error message "Unhandled exception has occurred in your application ……" will pop up. Users should click "Continue" to acknowledge the error message. If users click "Quit", the application will hang up immediately.
10.	If users define a bulletin board order with net price and amend the buy/sell [B/S] or the relation/ratio [Rel] of the leg series in the Enter Bulletin Board Order window, the original price in the net price [Net Prc] field might be multiplied to a different price. Users should check and confirm the net price before sending the order to the market.

Appendix 8 – Miscellaneous

Monthly PC Hard Disk Maintenance

As the HKATS and DCASS integrated into one system, large amount of data will be exchanged between the central host and user's local workstation. As a result, large size log files are created in the user's local workstation hard disk from day to day trading. In order to avoid hard disk failure due to lack of memory capacities, users are advised to carry out the below hard disk housekeeping actions monthly:

1. Look for the log files from the file menu. (Refer to Section 6 – Customization)
2. Back up all files under the above path to other media of disk or tape
3. Sort all log files by date
4. Delete all log files that are longer than one month old.

Human Error

If, in respect of an F/O Contract executed through the HKATS, an Exchange Participant considers that is, or an employee of the Exchange Participant, made a human error when entering into the HKATS the order giving rise to the F/O Contract, the Exchange Participant may request the Exchange to assist it to minimize the effect of that error. If the Exchange considers in its absolute discretion that such a human error has occurred, the Exchange will, use reasonable endeavours to assist the Exchange Participant to minimize the effect of that error. The Exchange Participant shall indemnify the Exchange for any loss or expense incurred by the Exchange in connection with the giving of such assistance.