DSE Investor User Guide

Contents

1. Introduction

Dhaka Stock Exchange Ltd. (DSE) has implemented a Centralized Order Management System 'DSE-FlexTP' for the TREC holders of the exchange to manage their orders. The introduction of this technology has bring a new dimension of business opportunities in the capital market, and it is exciting to see the exchange embracing state-of-the-art technology to improve trading efficiency. DSE-Mobile service is a platform of DSE-FlexTP by which investors of DSE can get real-time market updates and as well as can trade (if TREC permitted). This is connected investors to the state-of-the-art technology of trading. DSE-Mobile service is being facilitate to bring new dimension of business opportunities in the capital market.

DSE-Mobile service was introduced in March 2016 and has undergone regular updates to meet user needs and ensure compliance with security standards. The latest version, DSE-Mobile v2, was released in April 2023 with advanced feature and utilizes the latest development frameworks to optimize usability and improve the user experience. The DSE-Mobile service provides real time Equities bid/ask quotes, Request for Streaming (RFS) trading capabilities, managing and monitoring resting orders in a secure mode, in synchronization with a Web HTML5 app for dealers at office.

There are two applications under DSE-Mobile service as follows:

1. **DSE-Mobile (APP):** The DSE-Mobile (App) is mobile application (APP) which provides real time Equities bid/ask quotes, Request for Streaming (RFS) trading capabilities, managing and monitoring resting orders in a secure mode, in synchronization with trader-dealer terminal. DSE-Mobile is a native mobile application for iOS and Android phones. DSE-Mobile (APP) has following versions:

- **DSE-Mobile VIP** – Allows you to be aware of your portfolio and favorites without efforts, keep in touch with professional trader to get high-end services. Trader will professionally manage best execution of your orders.

- **DSE-Mobile Trader** – Allows you to be aware of your portfolio and favorites without efforts, keep in touch with professional trader to get high-end services while availing ability to manage orders yourself.
- DSE-Mobile Biz Owner – Allows business owner to be aware of activities of their broking business status. This is only for dealer account (Type D) of TREC holder.

2. **DSE-Investor**: It's an application which can run on any HTML-5 compatible browser. It can access from PC, Laptop, TAB through HTML-5 compatible browser like Google chrome, Firefox, Safari, Edge etc.

1.1. Features DSE-Investors

This application is similar the trader terminal of a TREC but for the individual only. Main features available in DSE-Investor are:

- Real time market information and indicative bid/ask prices;
- Intuitive navigation menu;
- Customized favorite lists;
- Securities Listed in Different Indices (DSEX, DS30, DSMEX and ATBX);
- Historical and intraday Charts with technical indicators;
- Placement of instant orders via PODs;
- Placement of single leg LIMIT resting orders;
- Portfolio management with Real-time P&L;
- Tracking of executions;
- Order Blotter Filters;
- Biometric Authentication;
- Self-password reset and device un-register;

⚠ **DSE-FlexTP System** - *Information in this manual is general in nature. We recommend to seek independent financial advice and ensure you fully understand the risks involved before trading.*

2. Pre-Requisite

To access the DSE-Investor application, you should have User-ID, Password and 2FA (Two Factor Authentication) code.

You should apply in prescribed form to your TREC to get DSE-Mobile service. According to your application the TRE will complete registration process in the system and you will get User-ID/Login-ID and system generated password.

2.1. Install DSE-Mobile APP

To get the 2FA, you need to install the DSE-Mobile App in your mobile device. Contact your TRECs (Broker) for registration and subscription for DSE-Mobile service.

- Once your login has been created by your TREC (Broker), you will receive your credentials (login/password) by email and respective links.
- Click on the download link of the email, or search for “DSE Mobile” in the Google Play Store or Apple App Store.
- Select the app and click on “Install”

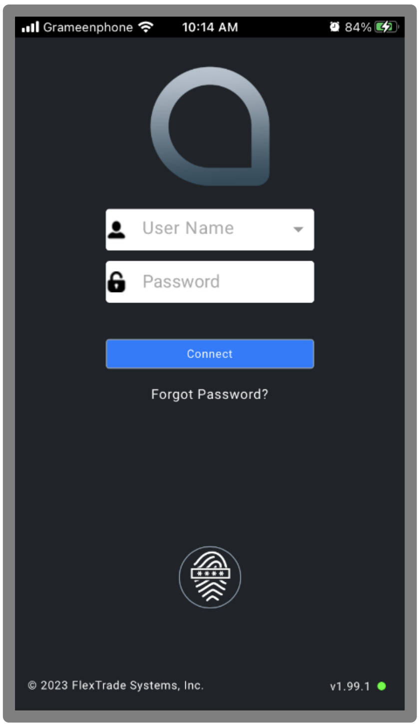
TIPS: *The app might prompt you to update it from time to time, although in most cases your phone will update it automatically. This is to ensure that you access all the latest features that are published.*

Device Compatibility - Minimum requirements for the DSE-Mobile App:

- **Android Device**: Minimum version of Android is 11 to get optimum features and all functionalities of DSE-Mobile. But user can install the App on Android 8.1 or later version subject to support by the Google Play.
- **iOS Device**: Minimum version of iOS is 13 to get optimum features and all functionalities of DSE-Mobile. But user can install the App on iOS 12 subject to support by the Apple App Store.
- Phone viewport size (screen resolution): over 350px
- Internet data connectivity: 4G or Wi-Fi

2.2. Device Registration

- Click on the DSE-Mobile icon installed on your device Home screen.
- The login screen prompts you to enter your Username and Password.



Login and password are provided by your TREC through email.

Please contact your TREC IT desk for blocked access.

Click on "Forgot Password" to reset your password.

Figure - the Login page

On the first login it will ask for change the password and register your device. Do these tasks to complete the process.

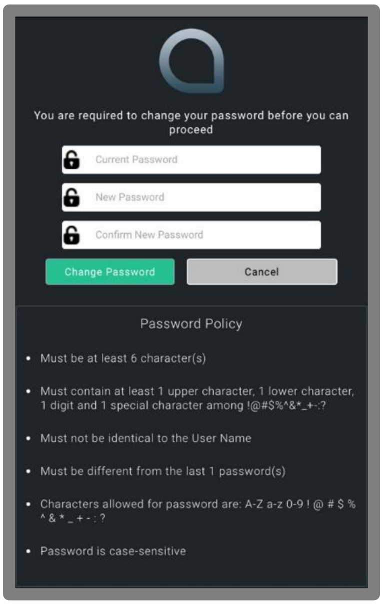


Figure – password change

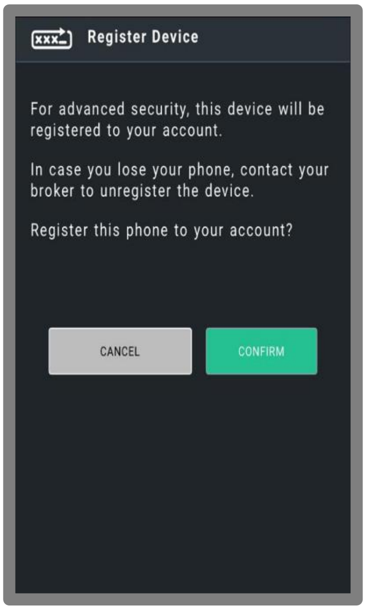


Figure – device registration

3. Accessing DSE-Investor

Once completed necessary tasks (section-2) you can access the DSE-Investor

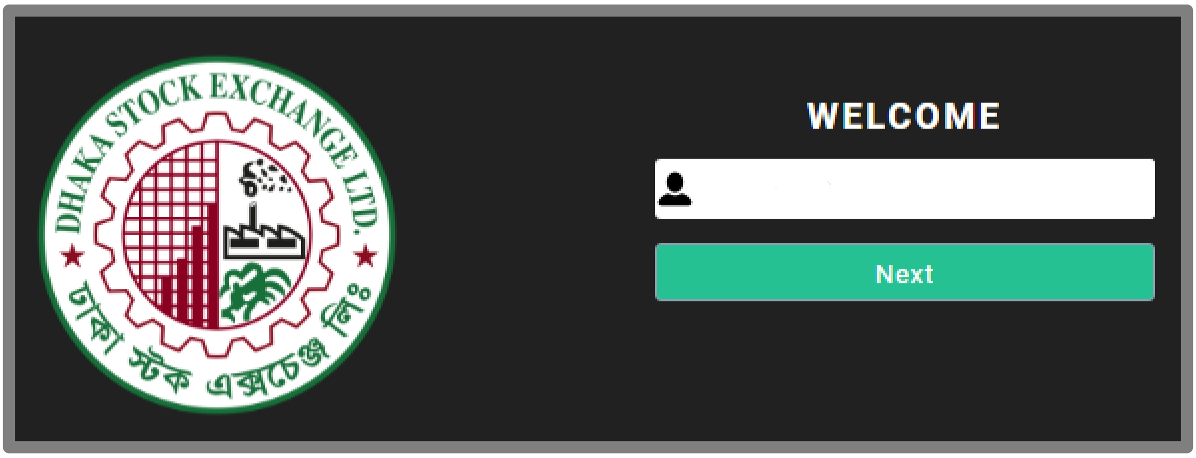
3.1. Log-in to DSE-Investor

You should use HTML-5 compatible browser (like Google chrome, Firefox, Safari, Edge etc.) in your device PC, Laptop, TAB and browser should be updated. The minimum version of browsers as follows:

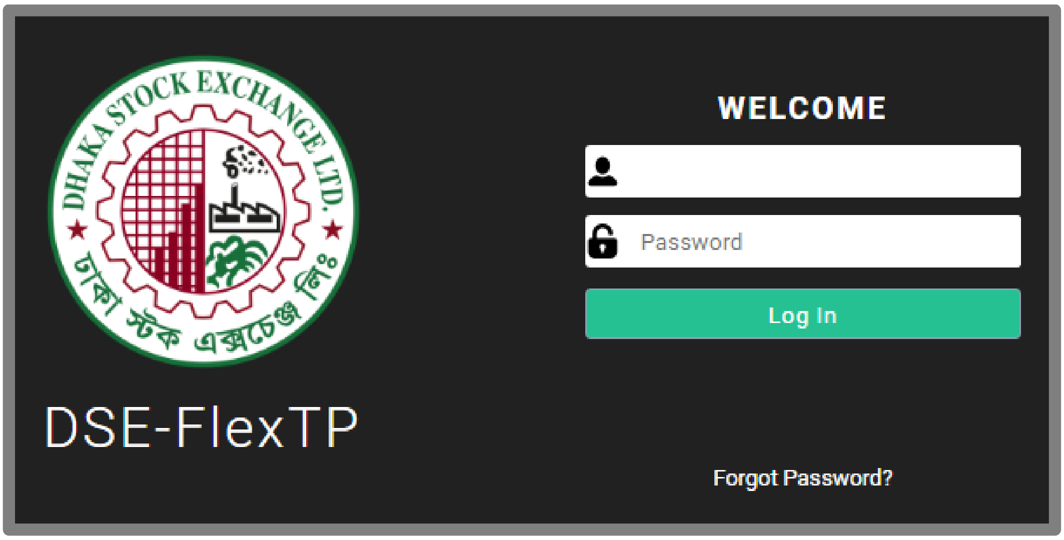
Browse	Latest Version*	Min. Recommended Version
Chrome	114.0.5735.134	102.0.0
Edge	114.0.1823.67	101.0.0
Firefox	114.0.2	101.0.0
Safari	16.0.0	13.0.0

** As on June 2023.*

- Open a Browser and launch the DSE-Investor link: https://minvest.dsetrade.com
- Put your Login-ID in the opening screen and click on next

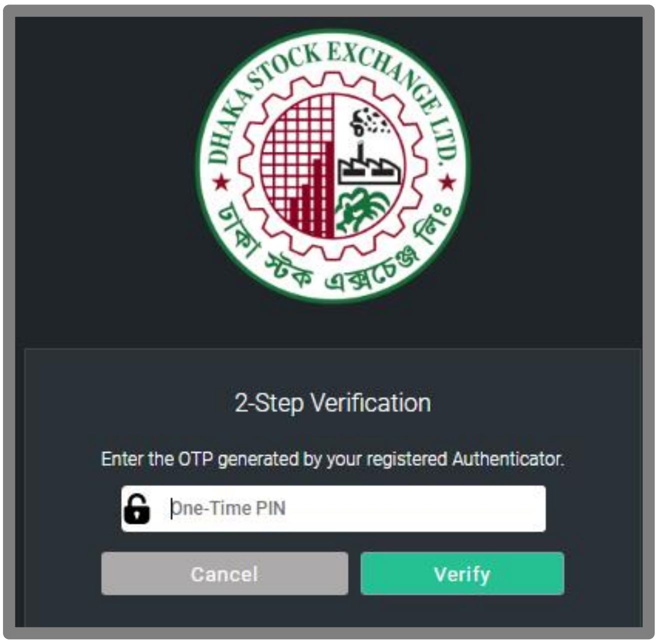


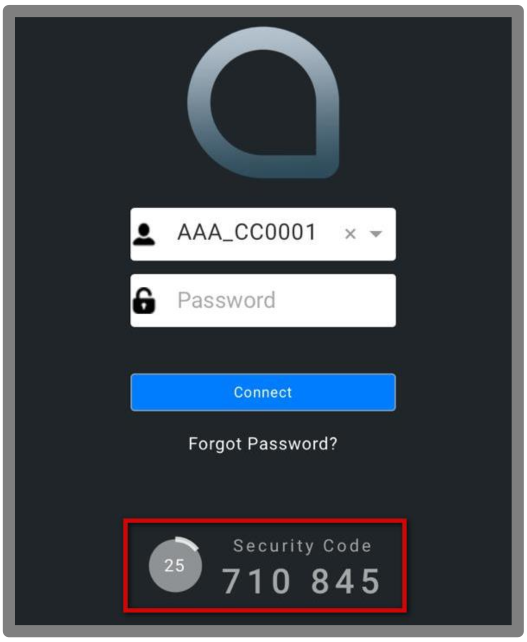
- Put your password in the next screen and click on "Log In"



Click on "**Forgot Password**" to reset your password

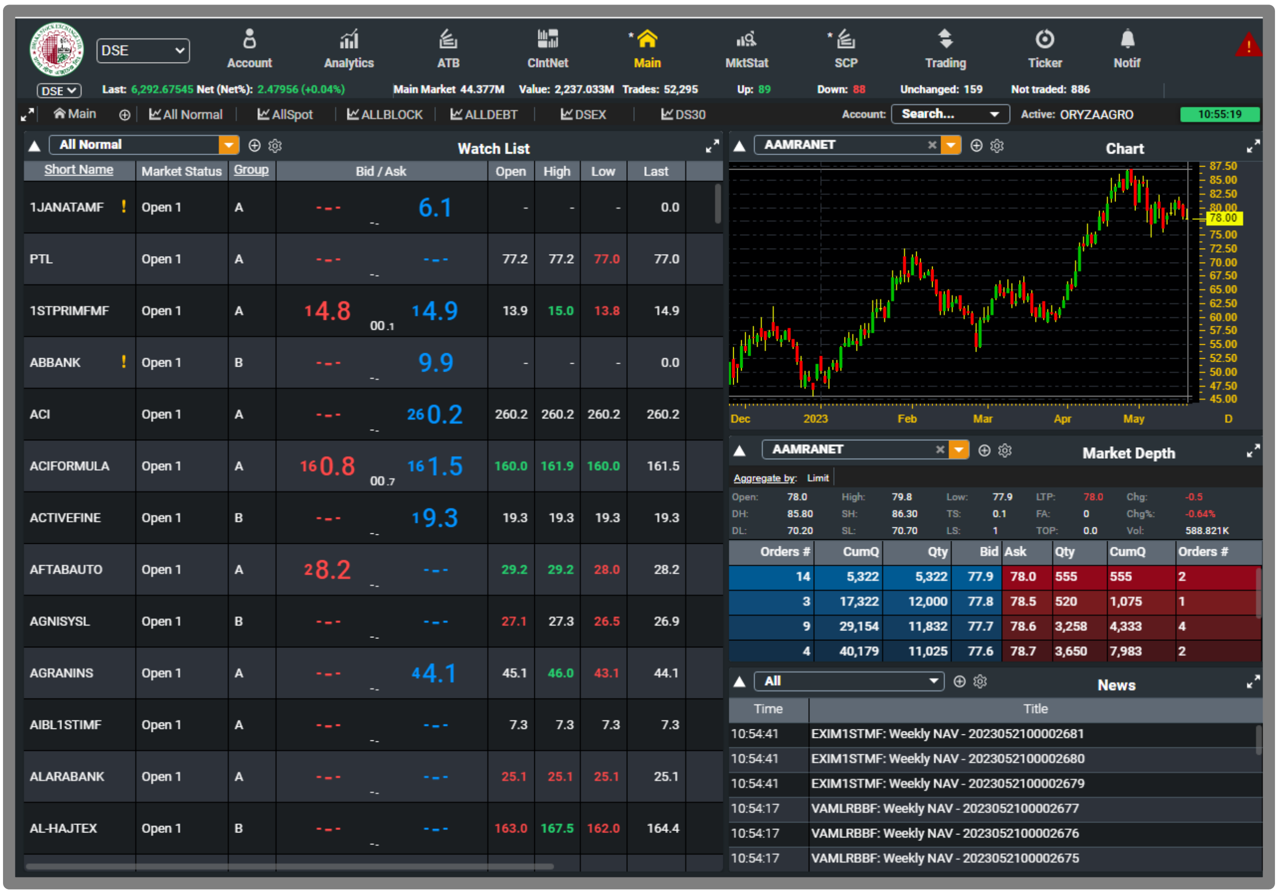
- It will ask for OTM (One Time Password) as part of 2FA.
- Open the DSE-Mobile APP in your mobile device to get the OTP.
- Put the OPT (Security Code) and click Verify to complete login process.





3.2. Home Page

Once you logged in, the landing page will be follows:



Tips: *To get optimum performance of real-time market information, you should ensure good quality of internet connection or network connectivity.*

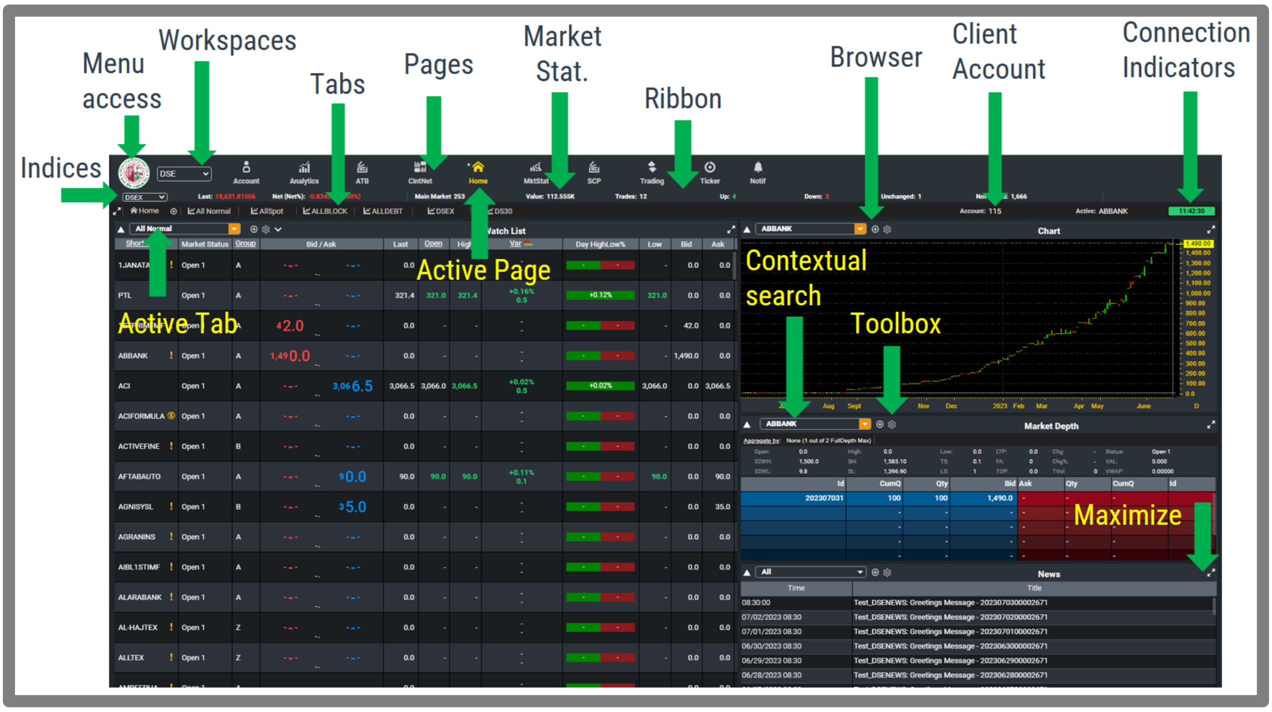
4. Operation of DSE-Investor

- This section of the User Guide describes the following operational aspects of the DSE-Investor application:
- The Interface Layout
- The Main Access Menu
- Pages
- Connection Data
- The Tab Bar
- The Component Title Bar
- Contextual Menus

4.1. The Home Page Layout

The DSE-Investor home page have the following tools and features.

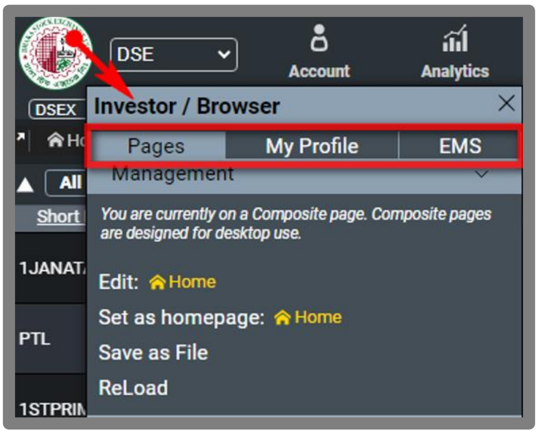
- The Main Access Menu
- Workspaces
- Tabs
- Pages
- Market Statistics
- Ribbon
- Connection Indicator
- Component Contextual Menu



Click on the respective tools or feature for the relevant activities.

4.2. The Main Access Menu

The Main Access Menu gives access to key features such as saving, loading pages, changes password and log out. To open the Main Access Menu, click on the DSE icon in the top-left hand corner of the window.



There are three tabs under
Pages
My Profile
EMS

4.2.1 Pages

The items in the pages are as follows:

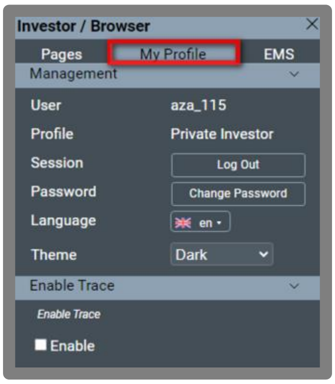
Menu Item	Description
Edit	Click to create to edit page
Save	Click to save changes done on current pages.
Save As	Click to create a new page based on the current page template
Load previous save	Click to reload the previously saved state.
Reload	Click to return to original settings and reset all saved states.

* All option may not available right now

4.2.2 My Profile

Following features are available under My Profile:

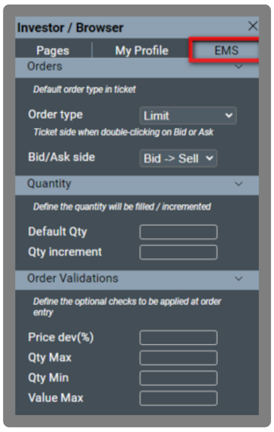
- User – The account number of the investor;
- Profile – Profile name;
- Session – Click “**Logout**” form the DSE-Investor. The session timeout is 30 minutes;
- Password – Click “Password” to change the password. It’s mandatory to change the password in every 30 days;
- Theme – Changing the current theme of the DSE-Investor. There are three different themes for user choice i.e. Dark, Light and Light Purple;
- Enable Trace – For debugging purpose;



4.2.3 EMS

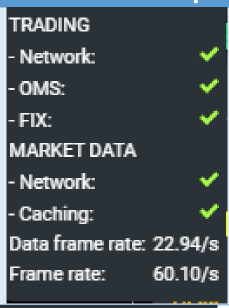
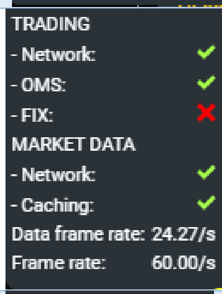
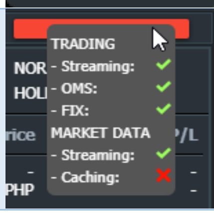
There different parameter for Order/Execution Management (EMS). User can set desired value or remain blank.

- Order Type – There are three different order types
  - Limit – Order in price specific;
  - Marker – Order in Market Price;
  - Marker At Best – Order in Market Price;
- Bid/Ask Side – Define Bid as Buy or Sell;
- Default Qty – To set default quantity for an order;
- Qty Increment – To set value to increase/decrease order quantity on a click.



4.3. Connection Indicator

Below the Market Status is a clock that represents the trading and market data connections. There are 3 connection statuses which are represented by 3 colors. When you point your mouse over the clock, a tooltip appears which shows you the connection status details:

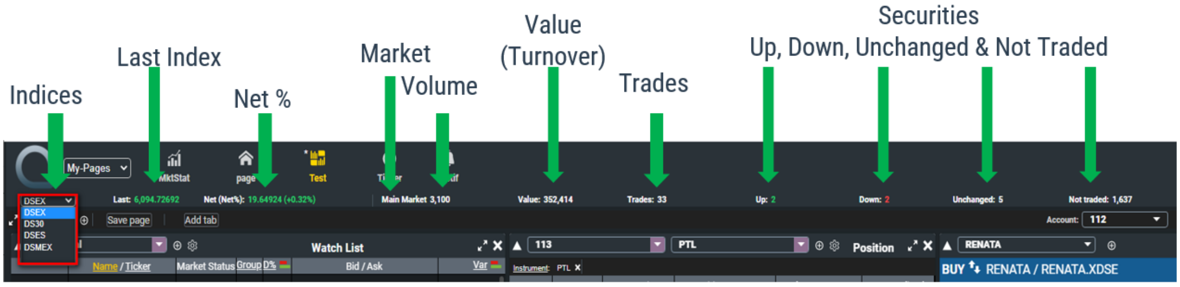
Color	What it Means	What the Tooltip May Show
Green	Trading and market data are connected 	
Orange/Amber	Either OMS or FIX (or both) connection is (are) down 	
Red	Market data connection is down 	

4.4. Market statistics:

User wish to select Indices DSEX, DS30, DSMEX or ATBX and can view Last value of Index, Net% change, Market turnover, Value, Total trades, Securities Ups, Downs and Unchanged

Following Market Statistics are available for Main Market, SCP & ATB:

- Indices (Last Value and NET % Change)
- Volume
- Value (Turnover)
- Total Trades
- Count on Ups, Downs, Unchanged & Not Traded securities



4.5. Workspaces and Pages

Your basic working environments are divided into two related elements: Workspaces and Pages.

4.5.1 Workspaces

Workspaces are a selection of either pre-defined layout which cannot be altered or sections that you create yourself. They are organized as a drop-down list, each containing an associated set of pages. The application offers two workspaces accessible from the drop-down list next to the logo:

- DSE
- Responsive

- DSE workspace

This workspace contains pages that have been designed as default pages for all users and cannot be altered. The content and layout of the page are pre-defined and cannot be modified.

- Responsive workspace

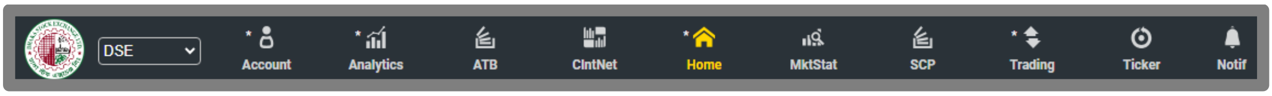
This workspace contains pages that have been designed as default pages for all users and cannot be altered. The content of the page can be customized but the layout is pre-defined and cannot be modified.

Responsive workspace is following the responsive design concept. All components will adapt automatically to maximize and optimize the display to the size of the screen allowing users to use M-Invest on a tablet for example.

4.5.2 Pages

The Page is your immediate working environment and is made up of your personal selection of components. The pages are presented as a list of personally selected icons at the top of the screen. You can create a maximum of twelve pages in this Workspace.

DSE-Investor is designed with 10 pre-defined pages under the DSE workspace:



Page	Components Description
Account	Execution, My Reports, Alerts, Logout and Change Password
Analytics	Chart, POD, Day% Treemap, Day% Pie, Sector Treemap, Sectors Pie
ATB	Watchlist, Chart, Market Depth, Score Board of ATB Board
ClntNet	Watchlist, Visualization Trading, Order Summary, Orders and Execution
Main	Watchlist, Chart, Market depth and News
MktStat	Chart, DSE Indices, Score Board of Main Board, Gainers, Losers and Active security
SCP	Watchlist, Chart, Market depth and Score Board of SCP Board
Trading	Watchlist, Cash/Credit Limit, Position, POD, Ticket, Order, Execution
Ticker	Rolling Ticker or Market Ticker on DS30 securities only
Notifications	Timeline of trading event

4.6. Tabs

The Tab Bar is situated at the top of the screen beneath the Ribbon. This tool enables you to add additional views to a pre-defined page model, thus ensuring that you can quickly view large quantities of data.

The Page component layout will always be identical, but you can change the data that is displayed in the components and make it unique to each shortcut if required. You may for example want to use this tool to display different list of instruments and call them quickly or to display graphs for many different instruments in a page.

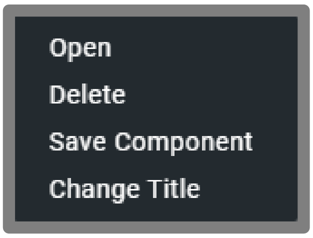
The Tab Bar is specific to each page.

To create a new tab, click the **Add Tab** option. This opens the **New panel** window.

Type the **Tab name** and Click **OK** to create the new tab that will appears immediately in the Tab bar.

Note: *Make sure that you save a Page to ensure that the tabs you have created remain linked to the page.*

To configure one of the tabs, right-click on the tab name. This displays the following contextual menu.

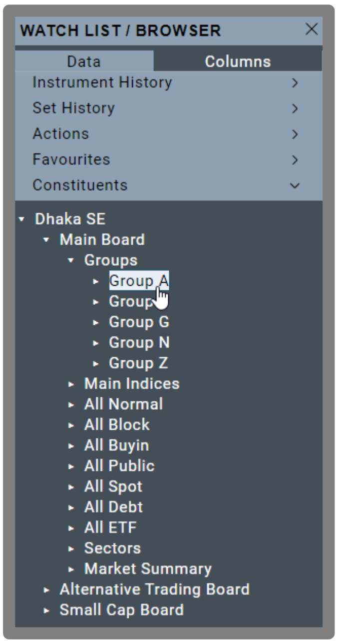


The menu items are as follows:

Menu item	Description
Open	Open the page corresponding to the icon you clicked on.
Delete	Enables you to remove the selected tab shortcut.
Save Component	To add a new component configuration to the existing tab.
Change Title	Change the name of the Tab.

Example: Create 2 tabs to display quickly Majors and Precious watchlists.

1- Open the Watchlist browser and click on *Group A* in the Main Board of the Constituent section



2- The Watchlist now displays Group A instruments
3- Click "Add tab" and name as "Group A"

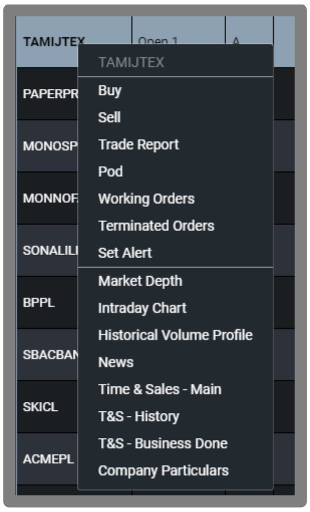
To create the Group B watchlist:

4- Open Watchlist browser and Click on Purge Watch list.
5- Expand the Dhaka SE constituent list by clicking on the white arrow.
6- Click Main Board, Groups, then Group B to add to the composite watchlist.
7- Click "Add tab" and name as "*Group B*"

Upon clicking on the "Group A" or "Group B" tabs, instruments will be displayed in the watchlist accordingly.

4.7. Component Contextual Menus

Almost every component contains a contextual menu. This menu is displayed when you right-click on an instrument in the component. The instrument name is displayed at the top of the menu, then the menu is divided into two or three sections: **Trading** and **Market Data**. All selected options in this menu open in a separate pop-up window.



Most of the menu items are available in each component, but certain items, such as trading instructions, or the Specific section are only available from certain components at certain times.

4.8. Standard Components

4.8.1 Keyboard Shortcuts

Press Ctrl + **F1** to display the list of keyboard shortcuts:

List of keyboard shortcuts

F1	Buy	Popup Buy orders Ticket of current instrument
F1	Side to Buy	Set side to Buy in current Ticket
F2	Sell	Popup Sell orders Ticket of current instrument
F2	Side to Sell	Set side to Sell in current Ticket
F3	Duplicate Order Ticket	Open Ticket to Duplicate Order selected in Blotter
F4	Modify Order	Modify Order selected in Blotter
F5	Trade Report	Popup Trade Report Ticket of current instrument
F6	Executions	Popup Order Executions
F7	Buy Block	Popup Buy orders Ticket of current Block instrument
F9	Unpark Order(s)	Unpark Order(s) selected in Blotter
F10	Cancel Order(s)	Cancel Order(s) selected in Blotter
F11	Orders	Popup Orders
F12	Market Depth	Popup Market Depth of current instrument
Ctrl + F1	Help	Keyboard Shortcuts Index
Ctrl + F3	Time and Sales	Popup Time and Sales of current instrument
Ctrl + F6	Reset ticket	Reset inputs in ticket
Ctrl + F7	News	Popup News of current instrument
Ctrl + F8	Summary	Popup Summary of current instrument
Ctrl + F9	Business Done	Popup Business Done of current instrument
Ctrl + F10	Company Particulars	Popup Company Particulars of current instrument
Ctrl + A	Goto Ask Order(s)	Goto Ask Order(s)
Ctrl + B	Goto Bid Order(s)	Goto Bid Order(s)
Ctrl + K	My Account	Popup My Account
Ctrl + Q	Select next component	Select next component
Ctrl + Shift + Q	Select prev. component	Select prev. component
Alt + B	Send Buy order	Sends the Buy order ticket while the focus is in the Qty field
Alt + S	Send Sell order	Sends the Sell order ticket while the focus is in the Qty field
Double Click Order	Order Details	Show Details Order selected in Blotter
Double Click Ticker	Market Depth	Popup Market Depth of current instrument

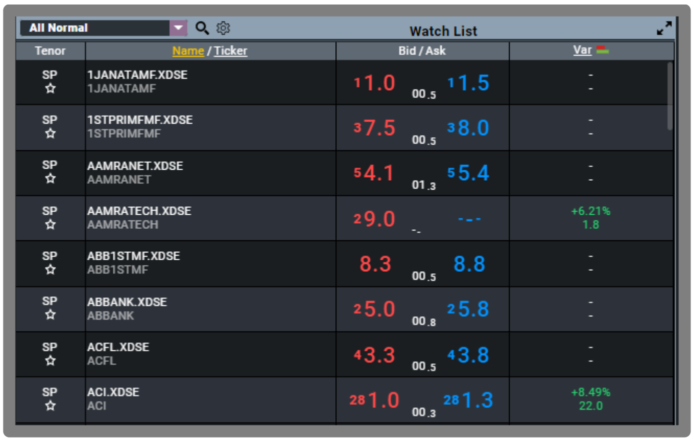
4.8.2 Watchlist & Favorite lists

The Watch List displays live market data for instruments or groups of favorites that you choose to create and display.

You can also trade from this component or display charts and market depth by right-clicking on the instrument and choosing the relevant option in the contextual menu.

Work with the Watch List component by using the following two configuration features:

- The Watch List Browser
- The Watch List Shortcuts



4.8.2.1 The Watchlist Browser

Each component has a unique Browser which features a selection of sections which enable you to configure the component layout, search for instruments and change display elements. The Watch List Browser enables you to perform the following tasks:

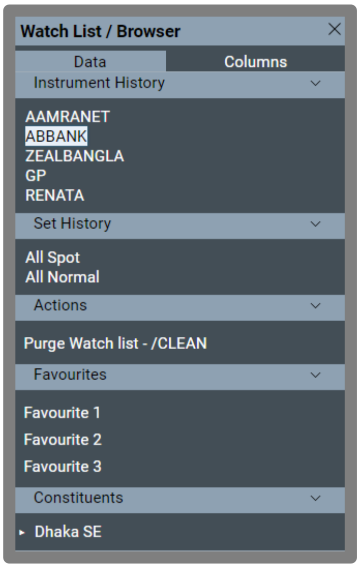
- Search for individual instruments.
- Add, change, or remove data elements.
- Add or remove columns.
- Change display options.

Data

The Data section gives rapid access to instrument and enables you to create and save your own lists of instruments. It also gives access to more advanced searches.

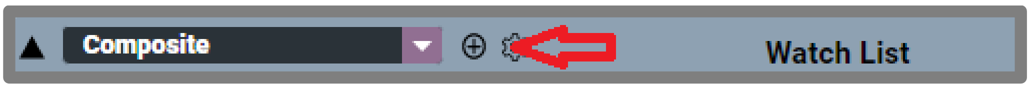
This section is divided into three sub-sections:

- Last Instruments: displays the most recently loaded instruments or indices. Click Search other instruments... to launch the Advanced Search window.
- User list: enables you to create favorites.
- Select constituents displays the full list of available instruments.



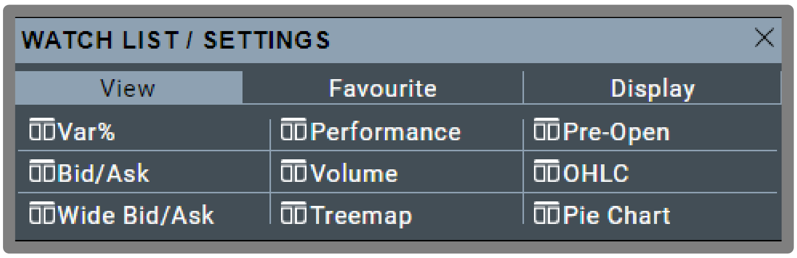
4.8.2.2 Watchlist Shortcut

The shortcuts box is a selection of tabbed sections with text entry fields, search options and action buttons. The principal role of the shortcuts tool is to enable you to perform simple tasks or change configuration elements in one click.



To open the Shortcuts Box, click on the Configure icon in the title bar. The Watch List Shortcuts Box is divided into three tabs:

- View
- Favorite
- Display



Selecting required option generally performs the associated action immediately.

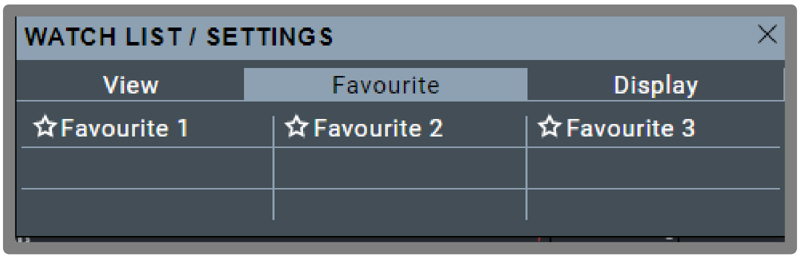
View

The shortcut choices are as follows:

Shortcut	Description
Var%	Displays the list with the emphasis on the instrument position percentage change.
Bid Ask	Displays the list with the emphasis on the bid and ask positions. The bid ask view displays the best offer demand prices and quantities, the last price and the time.
Wide Bid/Ask	Displays the list with the emphasis on the bid and ask positions
Performance	Displays a performance view, with the evolution of the value over one day, one week, one month and three months.
Volume	Displays a volume view. The Volume view makes it possible to estimate the volume of the last two trading sessions in terms of the average daily volume over the last week.
Pre-Open	Displays the pre-open view. The Pre-Open view displays the margin and the MBA (Mid Bid Ask), making it possible to anticipate the likely opening price
OHLC	Displays the Open, High, Low and Close as well as the last price and day percentage. This is the default display for the Watch List component.

Favourite

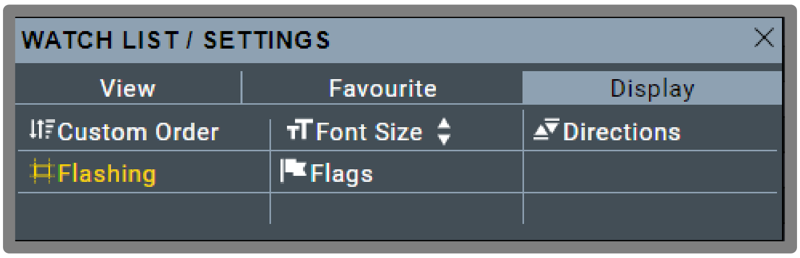
The Favourite tab enables you to display your previously configured instrument lists and column configurations.



Shortcut	Description
Favourite 1-3	Displays your previously saved list of instruments, known as favourites. See the Creating your own instrument lists section for more details on this feature.

Display

The Display tab enables you to configure certain display options in the Watch List.

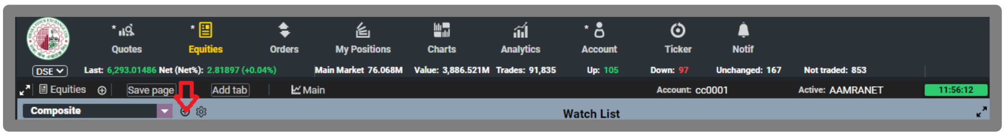


Shortcut	Description
Custom order	Sort the watchlist in the order it was created.
Flashing	Enables or disables quote flashing. Quote flashing is the process of highlighting instrument data each time there is a trade and a movement in the price or quantity. This option is enabled by default.
Font Size	Increases or decreases the text size in the Watch List component.
Directions	Displays a green or red arrow next to the last price, showing the last trade direction of the instrument.
Flags	Displays the country flag relating to the exchange on which the instrument is quoted.

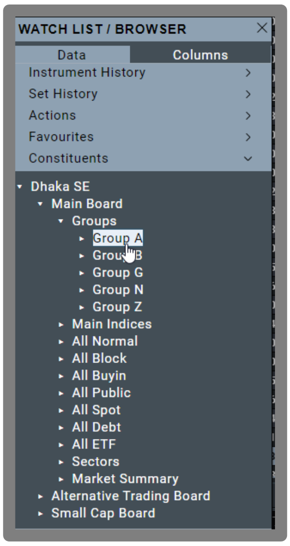
4.8.3 Creating your Favorites Instrument Lists

When you first open a session, by default the Watch List components are populated with lists of pre-defined lists. You can however create your own personal lists of instruments, known as Favorites, and store these for future retrieval.

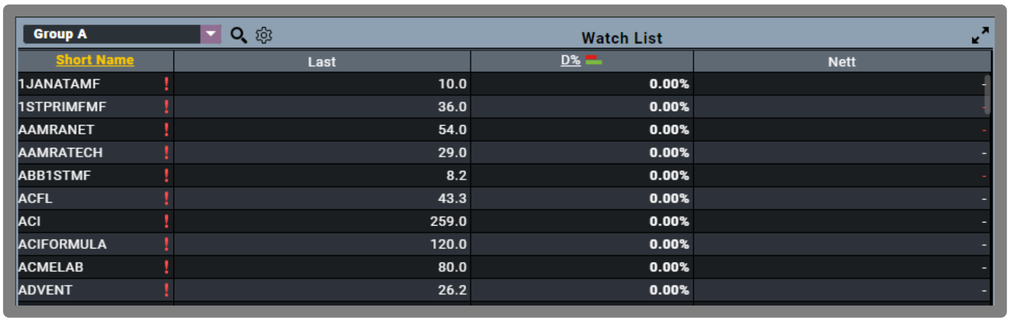
To method to retrieve pre-defined watchlists is the following:



1. Click the Watchlist Browser icon
2. Select the Data tab.
3. Expand the Constituents section, select Dhaka SE, Main Board and Groups and click one of the lists displayed:



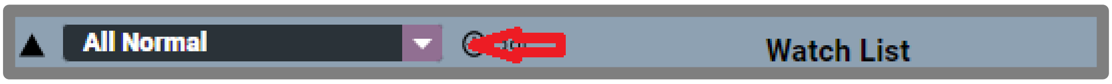
4. The Group A list of instruments is displayed:



Short Name	Last	D%	Nett
1JANATAMF	10.0	0.00%	-
1STPRIMFMF	36.0	0.00%	-
AAMRANET	54.0	0.00%	-
AAMRATECH	29.0	0.00%	-
ABB1STMF	8.2	0.00%	-
ACFL	43.3	0.00%	-
ACI	259.0	0.00%	-
ACIFORMULA	120.0	0.00%	-
ACMELAB	80.0	0.00%	-
ADVENT	26.2	0.00%	-

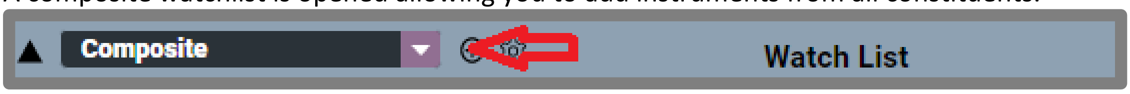
The method for the creation of favorites is the following:

1. Click the Browser icon.



2. Select the Data tab.
3. Click Purge Watch list to empty the Watch List component:

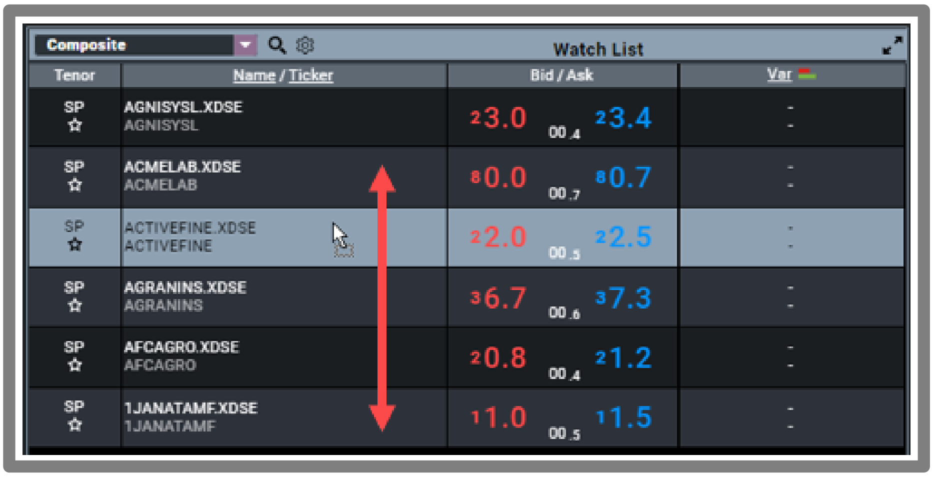
4. A composite watchlist is opened allowing you to add instruments from all constituents.



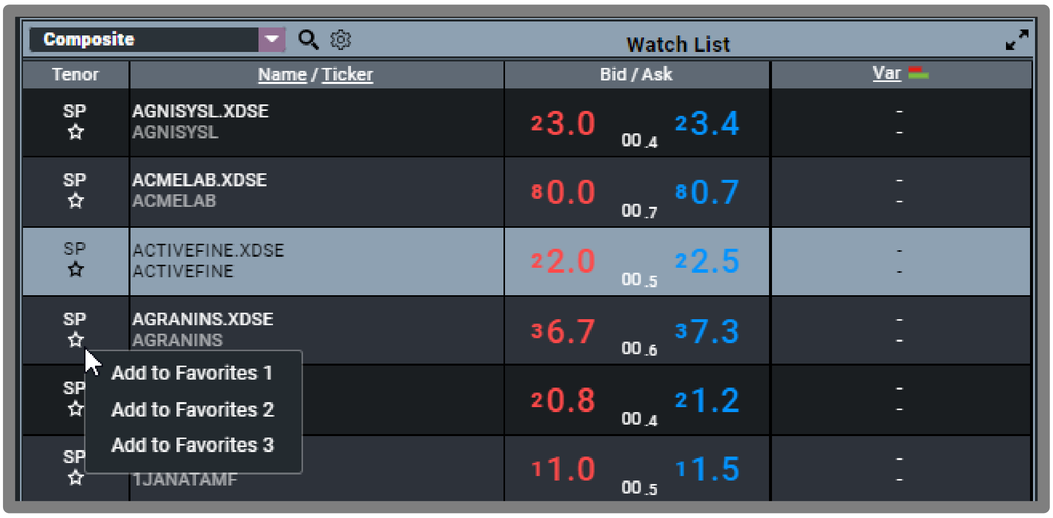
5. Using the Intelligent search feature of the composite Watchlist, you can add instruments to your list.
   The Intelligent Search feature is situated in the command box at the top of the component. As you type a string of letters, a box appears displaying the 10 most frequently accessed instruments that correspond to the string.

6. Click on one of these if it corresponds to the instrument you require to load into the component. You can also use the arrow keys on your keyboard to navigate between instruments, then select an instrument by clicking enter.
7. Once this is completed you can then type another instrument string, meaning that you can enter a series of instruments into the Watch List just by using your keyboard.

Last instruments added is displayed on top of the Composite watchlist. You can change the order of each instruments in the list using drag and drop:



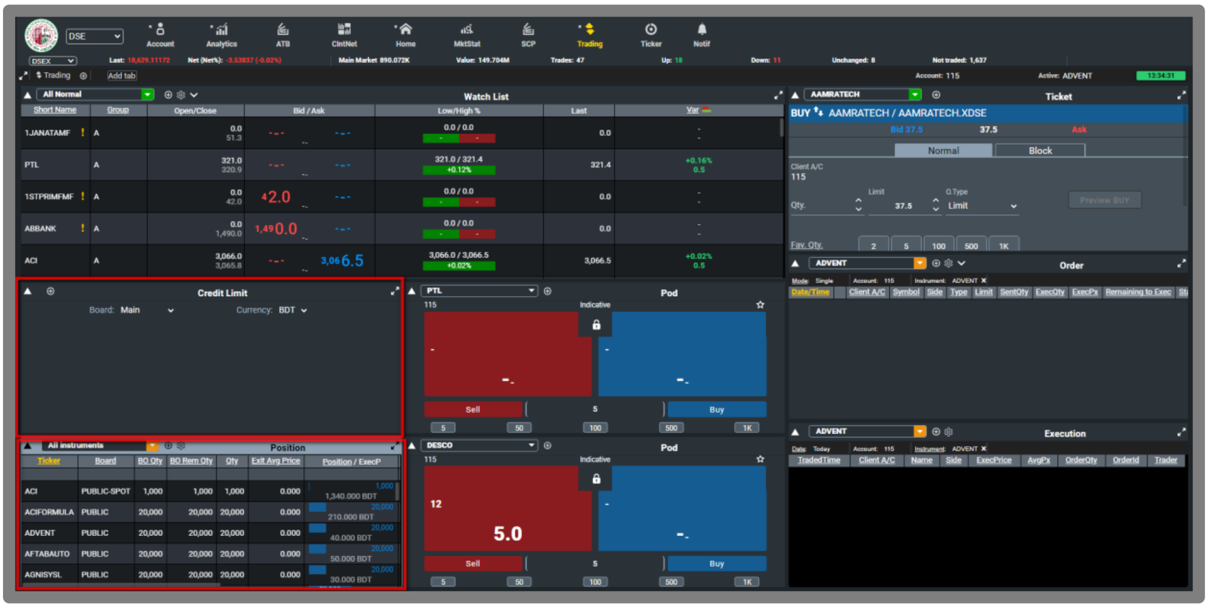
8. From the composite list, you can add instrument to a Favorite list using the Favorite Icon  by right click.



9. Save the Page to retrieve your composite watchlist at a later stage.

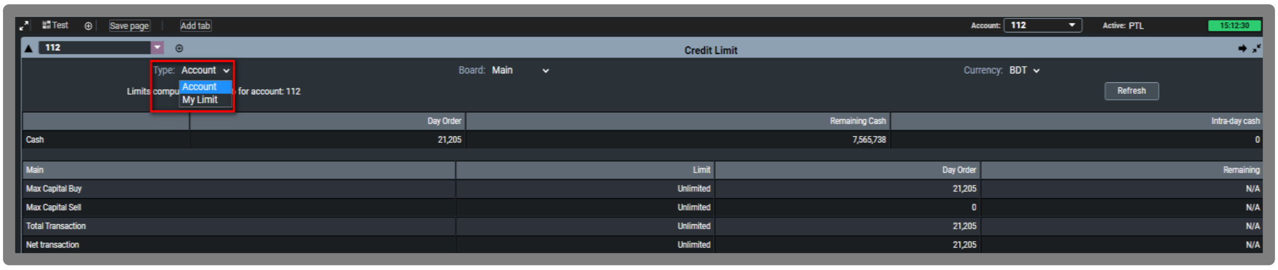
5. Portfolio Overview

You can view your cash and matured security by the following way:



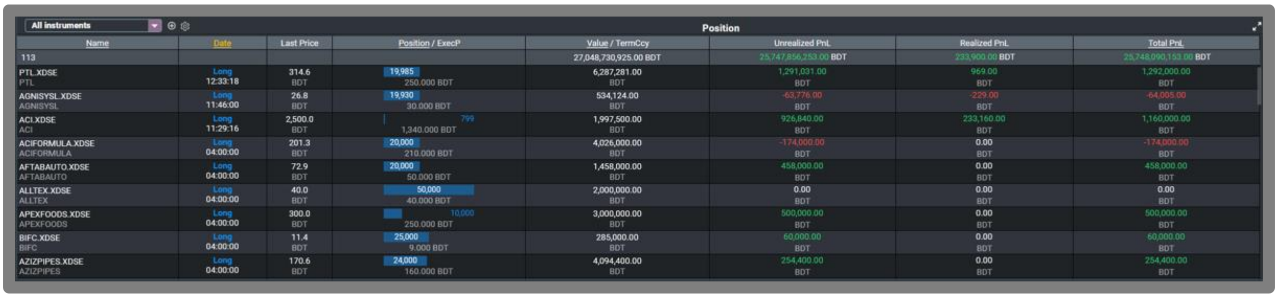
5.1. Cash

Switch your page to Trading page and can view cash and intraday cash. Cash means the back office matured balance which uploaded in the system and intraday means you sold share in the day which balance. You can buy share from cash and intraday cash as per the rules.



5.2. Position

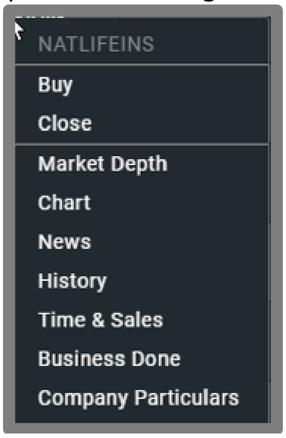
Your matured share to be viewed in the position page which uploaded in the system. You can sell share in the day.



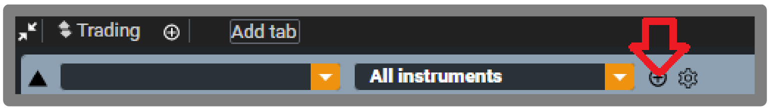
5.2.1 Position Blotter

The Position Blotter component provides a list of instruments in your portfolio that you have created.

Contextual Menu allows to take actions on each position. To open the contextual menu, right-click on any position under the Trading page to open the following menu and take actions:

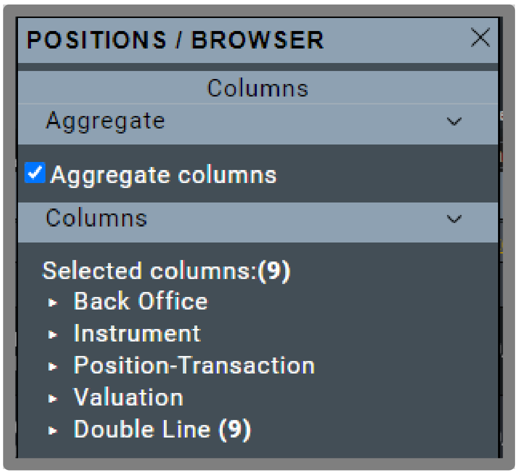


5.2.2 Position Blotter Browser

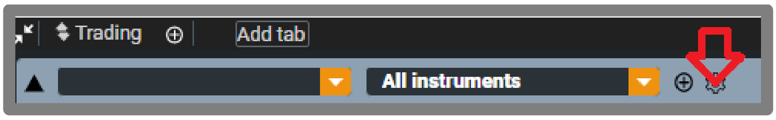


The Position Blotter Browser enables you to perform the following tasks:

- Add an Aggregation line on top of the component.
- Change columns.

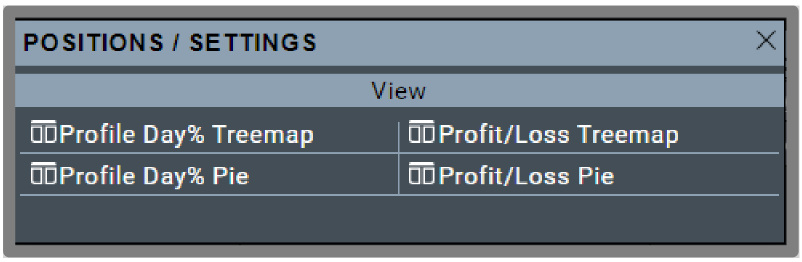


5.2.3 Position Blotter Tools



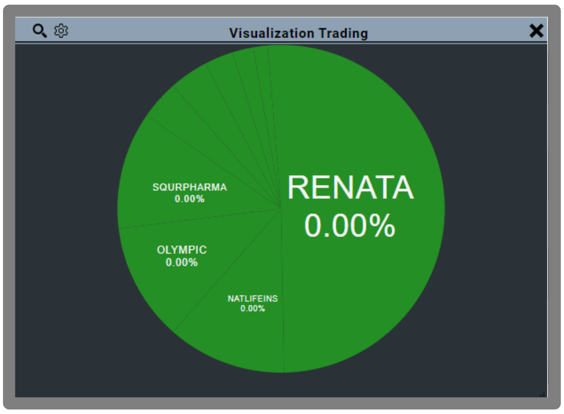
The Position Blotter offers different visualization options for the client's positions:

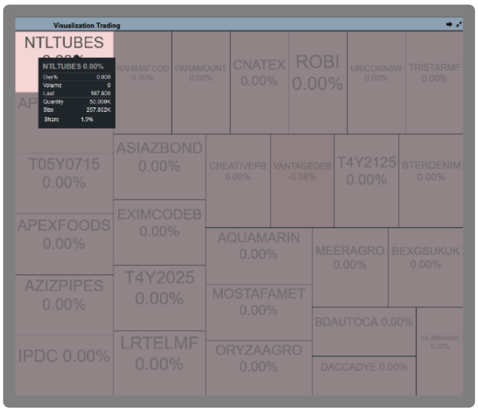
- Profile Day% Treemap
- Profile Day% Pie
- Profit/Loss Treemap



Example of Positions visualization:

- Day% - Today Day Change %
- Volume - Today Volume
- Last - Today Last
- Size - (Today Volume * Today Last)
- Share - percentage of the size of the Tree Map





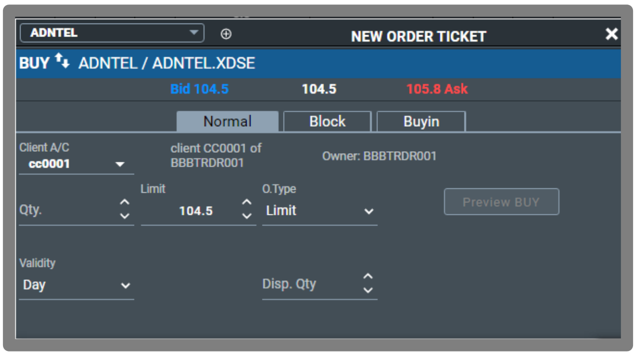
6 Trading

You can submit an order Buy/Sell from watchlist, Portfolio or Chart option. Right click in watchlist of any of your desired security and open a pop menu. You can select Buy/Sell from this option or press F1/F2 from keyboard and open buy/sell ticket. Then put qty, price and send buy.

6.1.Order Ticket

To open the order ticket, you must first select an instrument from the watch list or search for it using the search box. On the right panel, where the selected (or searched) ticker's details are displayed, you will see the [Buy] and [Sell] buttons. Upon clicking either of the buttons, the order entry ticket opens in a modal window.

The new ticket displays market context with Depth and Times and sales.

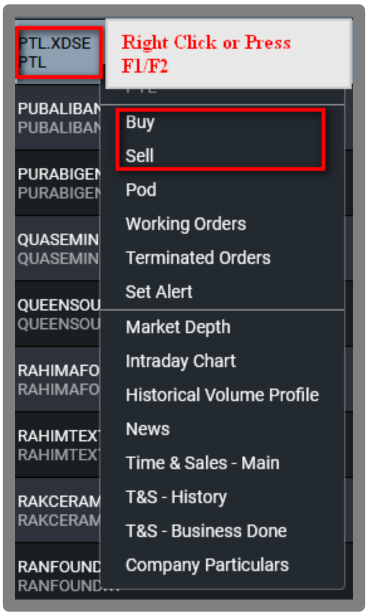


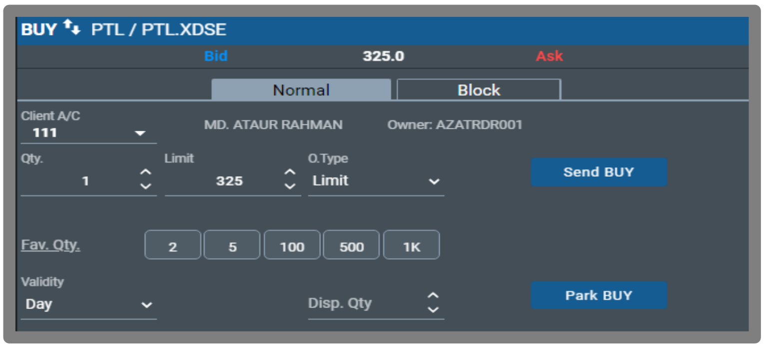
The following are fields in the order input part:

Field	Description
Instrument	Ticker code and name
Account	Your account name
Type	Order Type
Quantity	Enter the number of shares you want to trade on here
Limit	Contains the default price per share but you can change this
Value	Automatically shows the total cost of the transaction as you input the Quantity and/or price
Validity	Selection box for the trade validity type. By default, it shows 'Day' but you may select another choice from the list if available.

6.1.1 Place an Order:

Place order from order ticket or from watchlist right click of your desired security or press F1/F2 buy or sell and preview and place order for final submission.

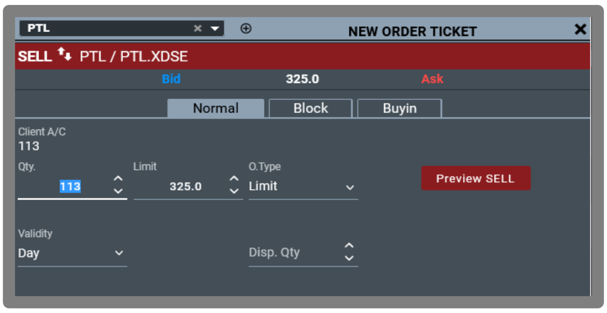


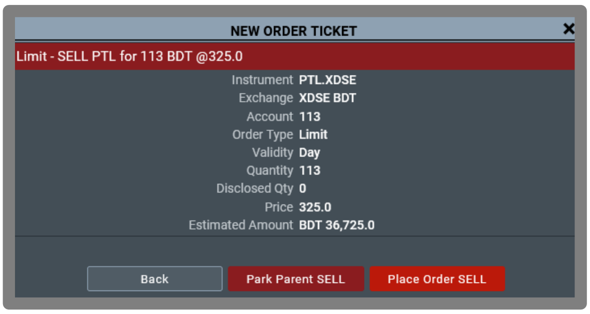


Enter the quantity. The keyboard or the pre-defined buttons can be used.

By default, an order is at Limit price and with Day validity.

Click on the [PREVIEW ORDER SELL] to view the order summary.





To change the order details, click on the [BACK] button.

If you confirm that the order details are correct, then click the [PLACE ORDER] button if you want to send the order immediately.

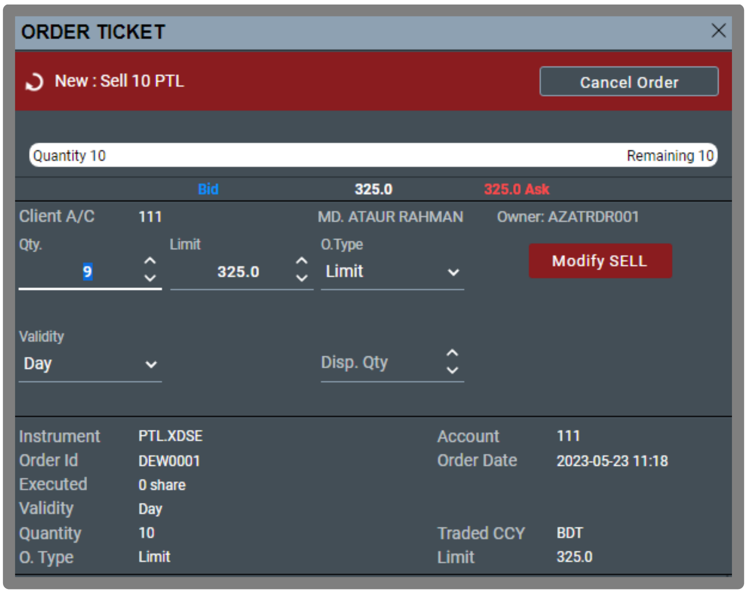
You will now see the order you placed in the Working Orders panel under Blotter.

6.1.2 Modify a Working Order

User allows to modify working orders. From the Blotter, open the contextual menu and select "Modify" or press F4.

The modify ticket opens and allows to update the following information:

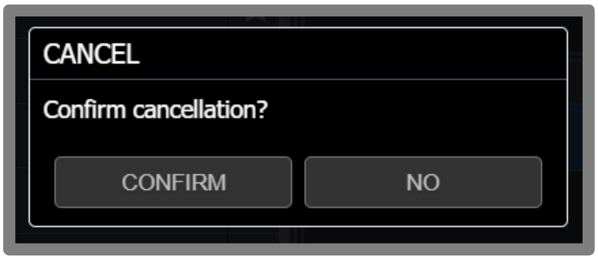
- Quantity
- Price



6.1.3 Cancel a Working Order

You may cancel an order that has not been filled yet or has only been partially filled. Select the order from the Working Orders panel and in the displayed details, click on the [CANCEL ORDER] button or press F10.

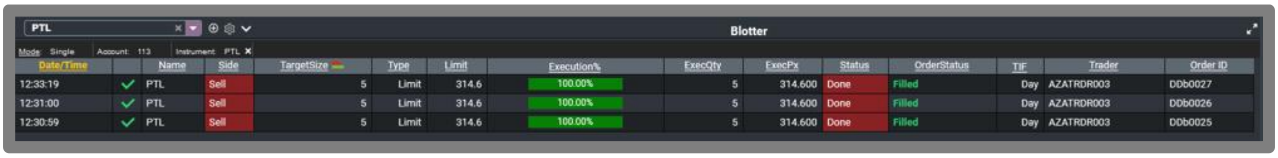
A confirmation message will be prompted.

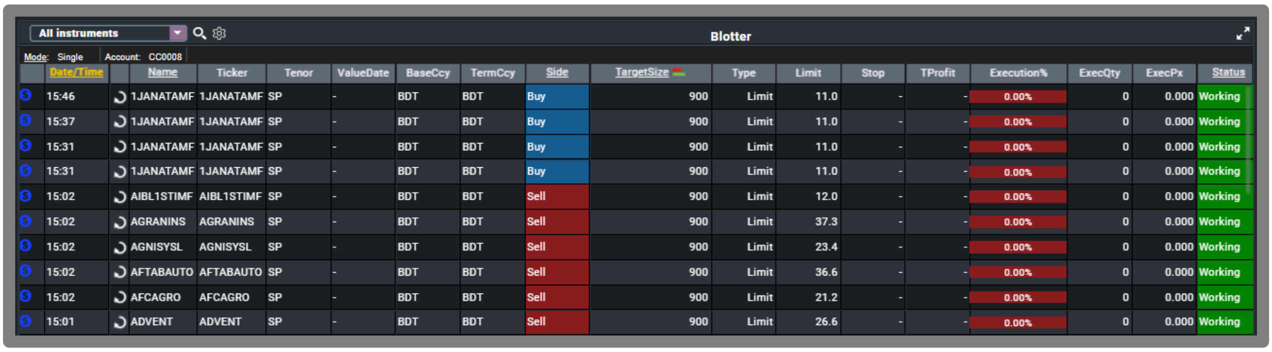


To proceed with the cancellation, click on [CONFIRM]. The order will be cancelled immediately and will appear under the Executed Orders panel as canceled.

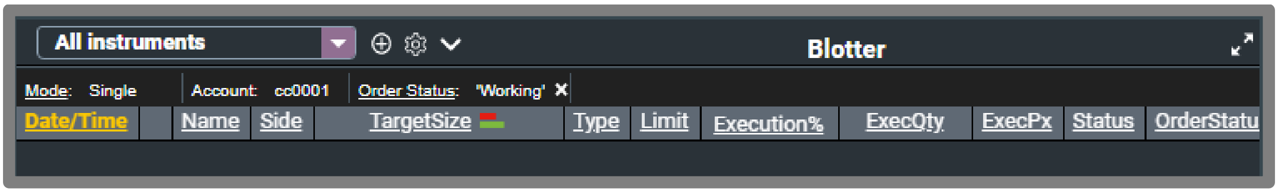
6.2.Order Blotter

The Blotter monitors the execution status of your orders in real-time. It can display pre-defined and customized views, offering a combination of execution and market data information using a selection of the available columns.





6.3.1 Blotter Browser

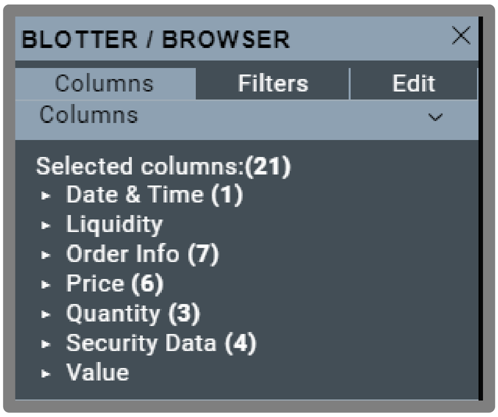


The Blotter browser enables you to perform the following tasks:

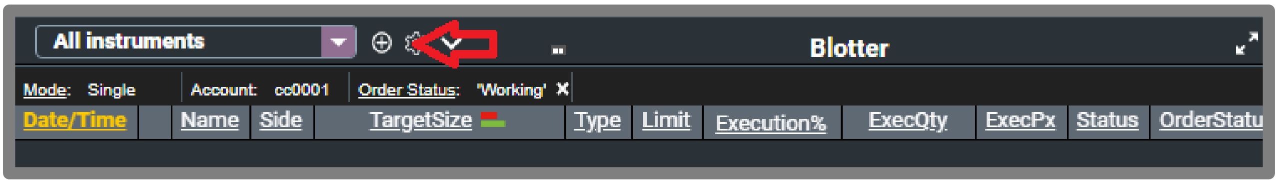
- Add or remove columns.
- Add and define filters.
- Change the component type, the link details, or the name of the chosen component.

Columns

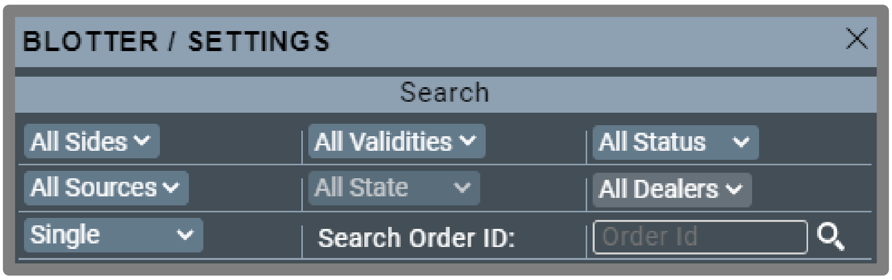
The Columns section enables you to create a personalized data display view by choosing the data columns that are most relevant to you



6.3.2 Blotter Shortcuts Tools



The Shortcuts tool offers a selection of shortcut icons that enable you to rapidly perform several organization and display actions. These are described in the table below.

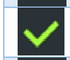
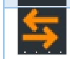
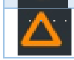


The shortcut choices are as follows:

Shortcut	Description
All Sides	To filter by side: Buy / Sell
All Dealers	To filter by Dealers
All Sources	To filter by source of the order (ET2 or Deal Online platform WEB or Mobile)
All Validities	To filter by validity (Day, FOK, GTC, GTD, custom date
Single Orders	To display by Parent/Child
All State	To filter by ET2 order state (Activated / Deactivated)
All Status	To filter by Order status (Terminated, Working, Filled)
Search Order ID:	To search an Order ID

6.3.3 Order Status

Each order under either Working or Executed Orders is represented by a symbol. The following symbols are used.

Symbol	Meaning
	New or Partially filled
	Filled
	Canceled or Rejected
	Replaced
	Parked
	Pending

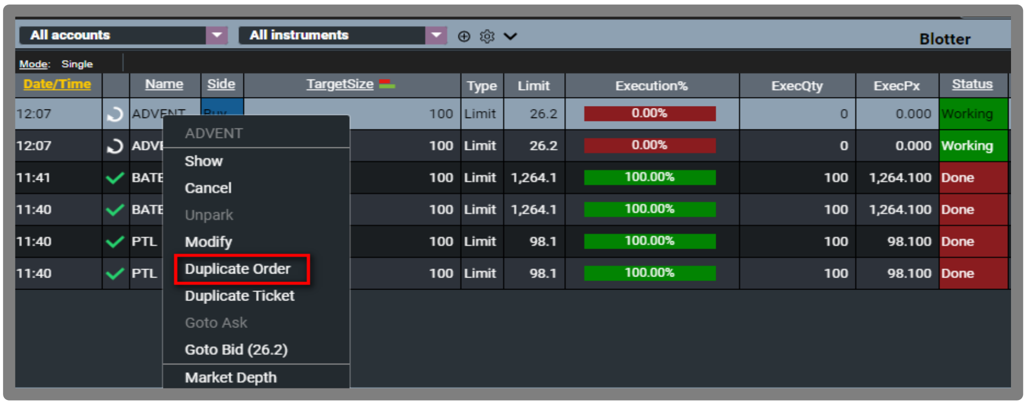
6.3.4 Order Details

To display order details, use the right click contextual menu and click: Show

6.3.Duplicate Order and Duplicate Ticket

You can send order quickly from order blotter by Duplicate order and Duplicate Ticket option

Duplicate Order: Order will be sent instantly. There is no preview or option to modify.



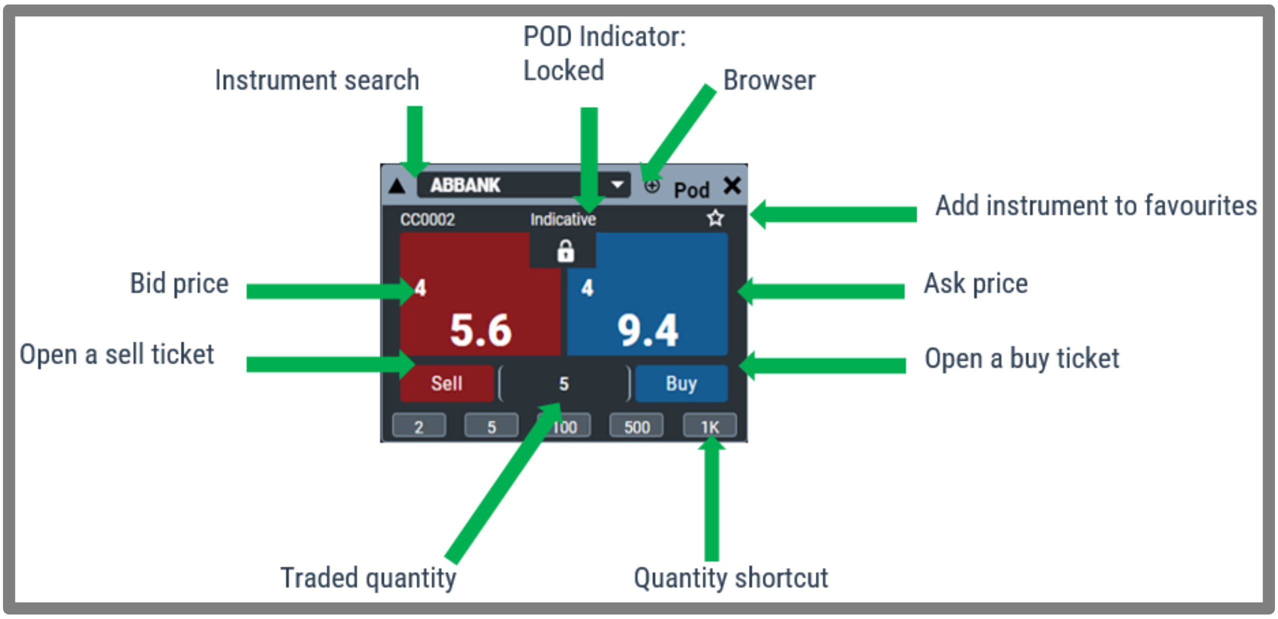
Duplicate Ticket: You can view and may modify the order before submission

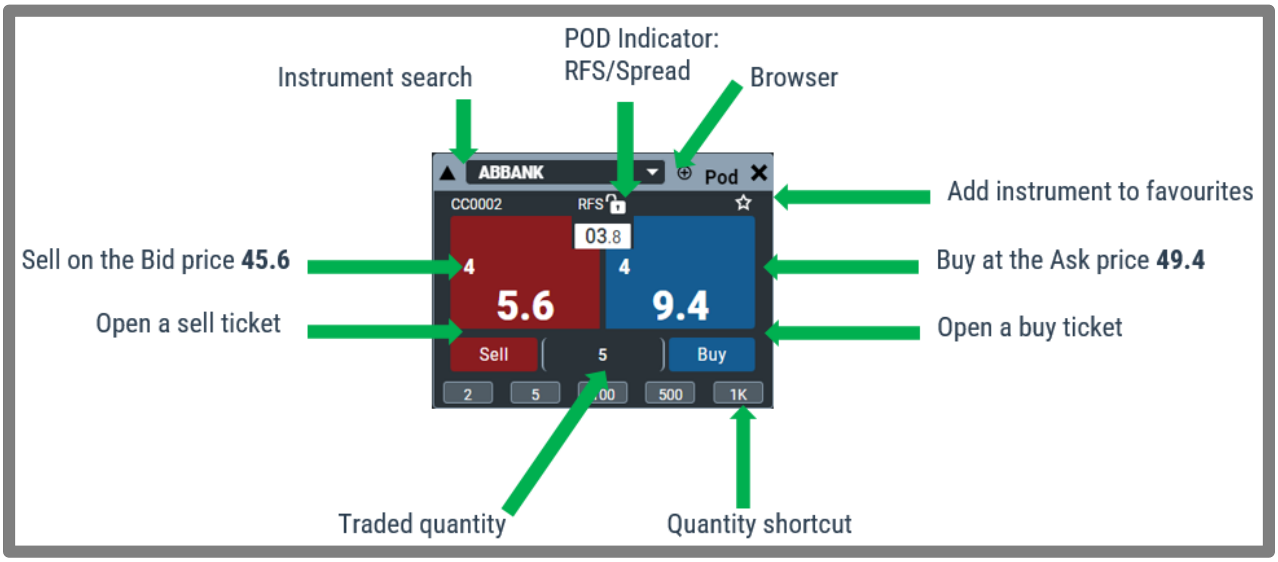
6.4.Trade from Chart

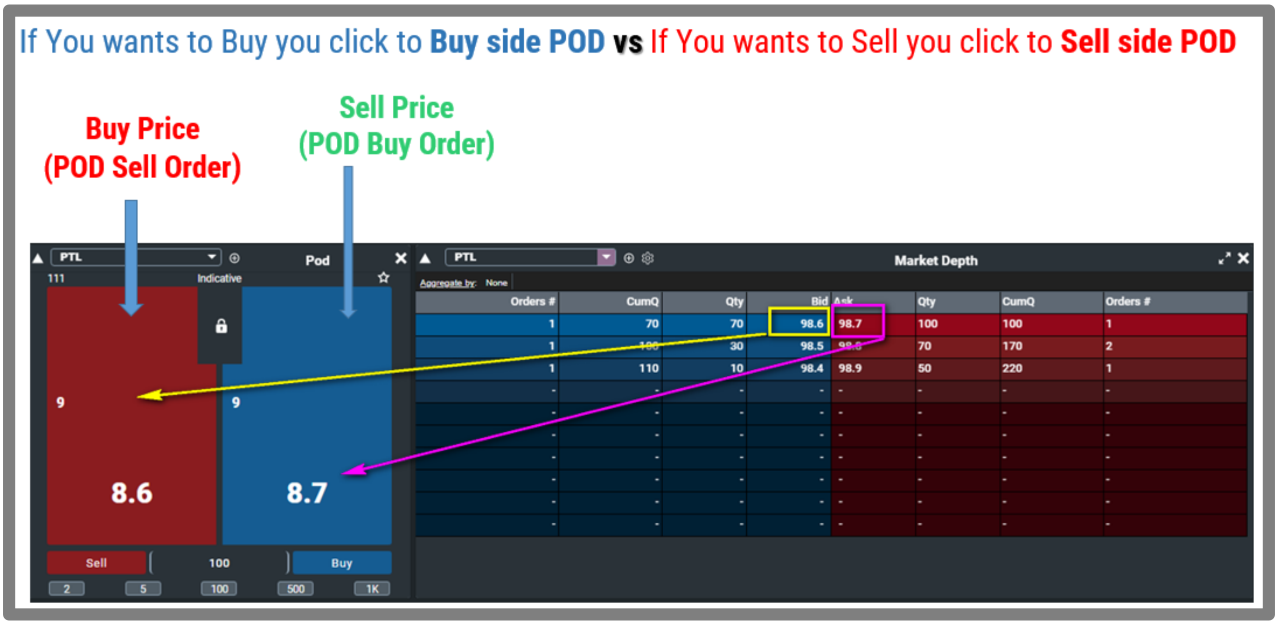
You can trade from security chart. Right click in the chart view and open Buy/Sell or POD ticket.

7 POD Trading

Trade in 2 clicks on the Bid or Ask. First unlock indicative and on Bid price or Ask price as the following screen. Condition is that it should have touchline price of that security. Following screen clear you the the POD trading.

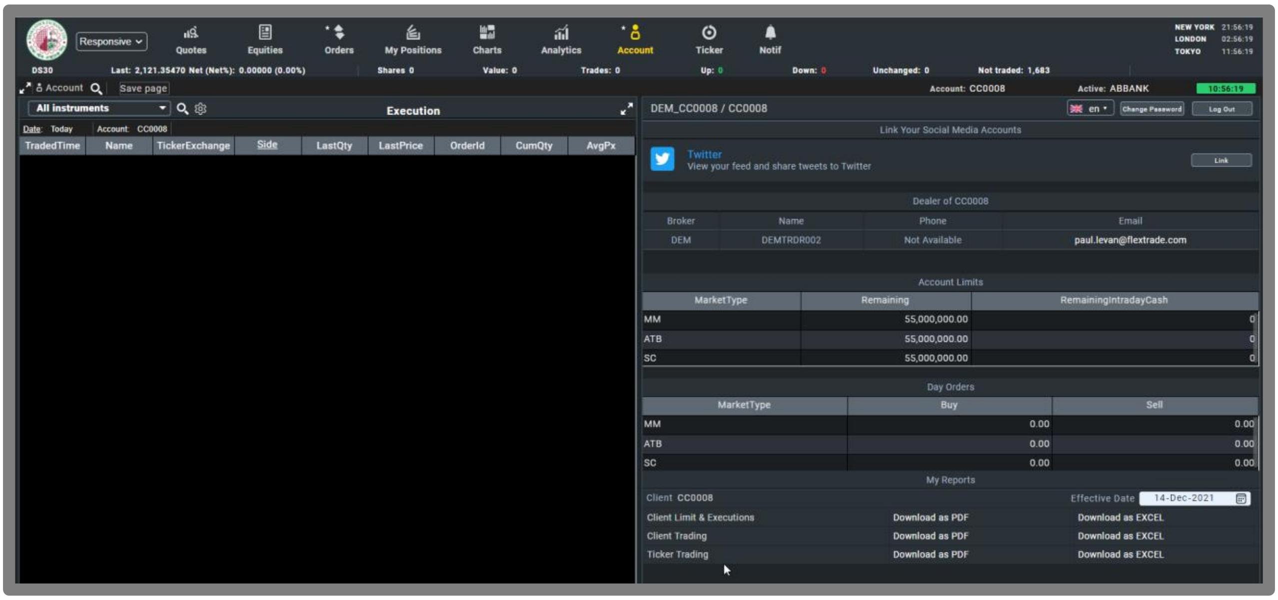




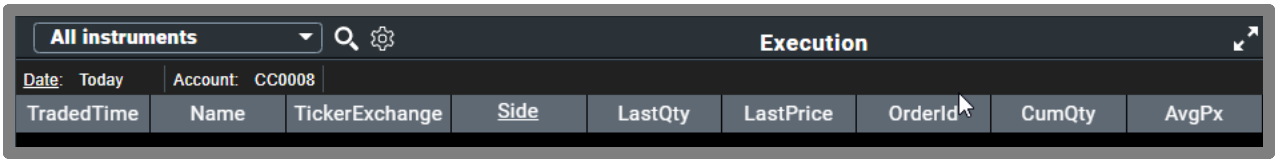


8 Execution

The account page is where you can view your account details and activity, view dealer information and logout.



On the left panel, you can view a list of your past executions for reference. You are provided with some filter tools on top of the list window.



8.1.Select Order Side

To view specific order side, click on the Setting wheel and select a side (or all sides).

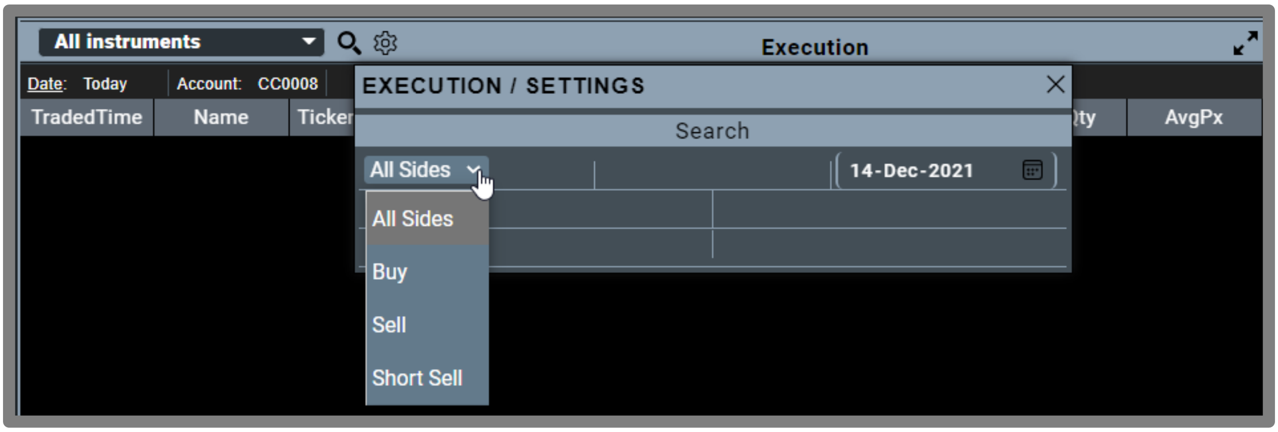
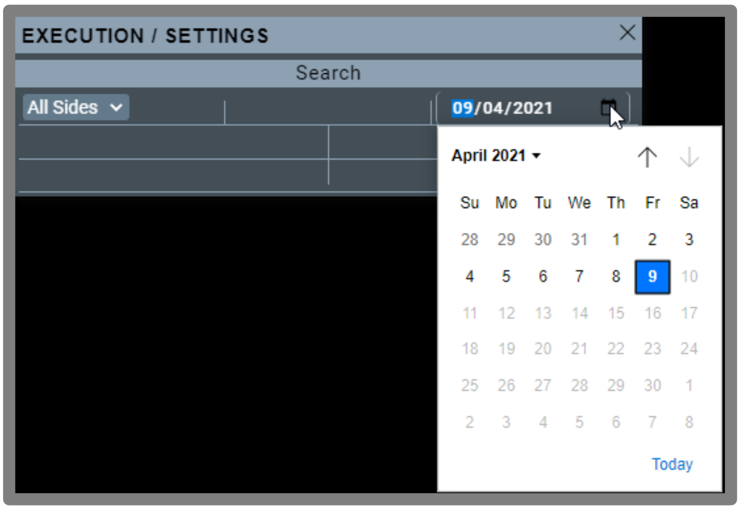


Figure 1 Selecting a Side Filter

8.2.Select a Date or Period

To specify a duration, click on the Execution Date dropdown to select the period type.

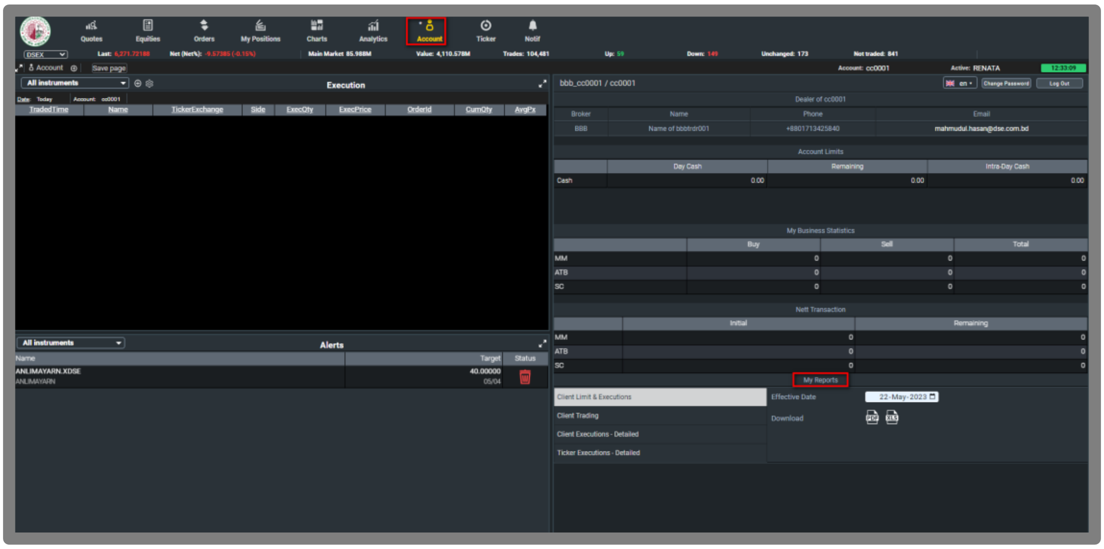


- 1 week – the date field will be disabled and will display the current date. This means that the executions from 1 week before the current date shall be displayed.

- 2 weeks - the date field will be disabled and will display the current date. This means that the executions from 2 weeks before the current date shall be displayed.

9 Report

From your account page, you have the capability to generate trade reports in both PDF and Excel formats. These reports come in various pre-defined types to cater to your specific needs and can be stored for future reference.



10 Chart

The Chart component provides a series of graphical analysis mechanisms which vary in their complexity and sophistication, and which have been conceived to suit the specific needs of each individual analyst. There are several ways to manipulate the data in a Chart component. It also offers a selection of tools which enable you to insert pointers, lines and comments, or redefine the indicator display mode. You can also choose the time scales which suit you and zoom in and out on specific zones.

Additionally, the new chart component offers trading capability, by either sending instant orders at the best bid/offer using the POD.

Work with the Chart component by using the following configuration features:

- The Chart Browser
- The Chart Shortcuts

There are several ways to display instrument data in a chart. You can:

- Type the name of the instrument in the Chart component command box.
- Search for an instrument using the Browser.
- Right-Click on the relevant instrument in a Watch List

10.1. Capturing the Chart Component

You can capture the data displayed in the Chart component in several different ways.

Click anywhere in the chart to see a snapshot of the market data at that moment. Two lines representing the x/y axis are displayed and a pop-up box shows a selection of data corresponding to the position at the time or date (intersecting point). Keep your finger on the mouse button and sweep across the chart to see other positions.

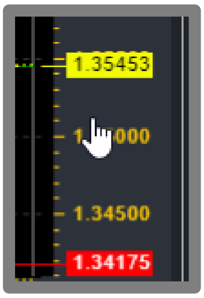
The data contained in the box is as follows:

- Date and Time. If the chart is configured to show daily positions or greater, the time will always be displayed as 00.00.
- The price at the intersecting point.
- The Opening (O), High (H), Low (L) and Closing (C) prices at the instrument position in the chart that corresponds to the intersecting point.

Note: This information may vary, depending on the type of chart you select and the timescale.

You can click on the instrument position bars or candlesticks to display a series of black squares showing that the data has been selected.

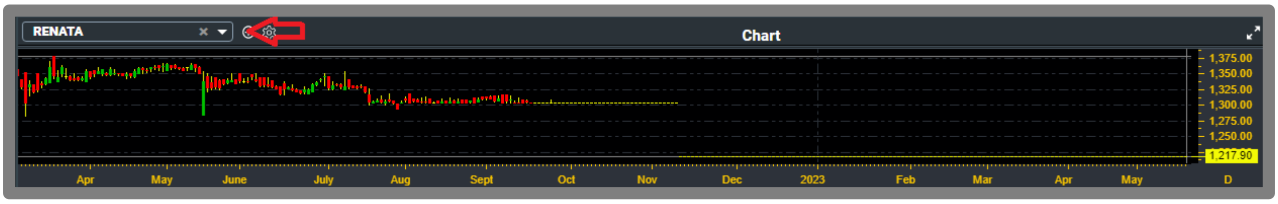
To move the x/y axis positions, position your cursor over the relevant zone. The cursor is now displayed as a hand.



Click at the position you wish to move.
You can now move the positions up or down or left or right. Click again to conserve the new position.

Double-click to reset the scale.

10.2. The Chart Browser



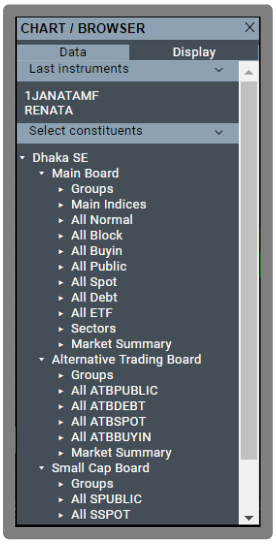
The Chart Browser enables you to perform the following tasks:

- Add and define data filters.
- Change display options
- Change the component type, the link details or the name of the chosen component.

Data

The Data section offers rapid access to indices and gives access to the Advanced Search tool. This section is divided into two sub-sections:

- Last Instruments: displays the most recently loaded instruments or indices. Click Search other instruments... to launch the advanced search window.
- Select constituents displays the full list of available instruments.



10.3. The Chart Shortcuts

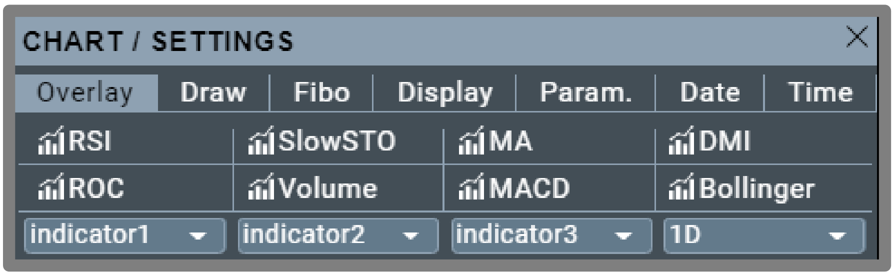
To open the Chart Shortcuts Box, click on the configure icon in the title bar.
The Chart Shortcuts Box is divided into four tabs, with a fifth available for certain technical settings:

- Overlay

- Draw
- Fibo
- Display
- Parameters

Overlay

The Overlay tab enables you to display a selection of indicator lines in the Chart component.

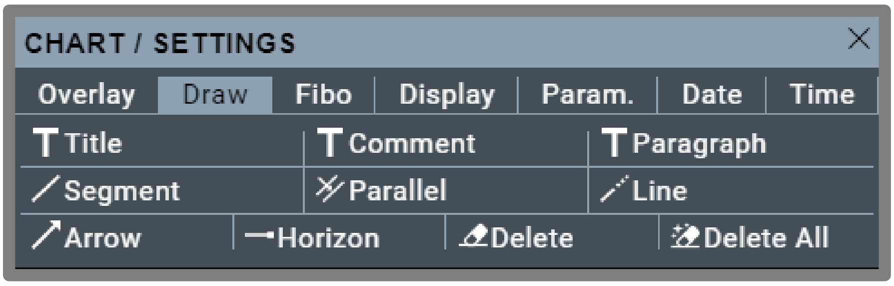


The shortcut choices are as follows:

Shortcut	Description
RSI	Displays RSI indicators at the bottom of the Chart.
ROC	Roc Displays ROC indicators at the bottom of the Chart.
Indicator 1-3	Indicator 1/2/3 Enables you to display a series of indicators, including volume, volatility and change percentages.
SlowSTO	Sto Displays stochastic indicators at the bottom of the Chart.
Volume	Vol Displays a volume bar chart at the bottom of the window.
MA	MA Displays Moving Averages indicators in the Chart.
MACD	Mac Displays MAC indicators at the bottom of the Chart.
DMI	DMI Displays DMI indicators at the bottom of the Chart.
Bollinger	Bol Displays Bollinger Bands in the Chart.
Period	Enables you to define the individual time plot sizes in the chart, from one minute to one year.

Draw

The Draw tab enables you to insert lines and text to the Chart component.

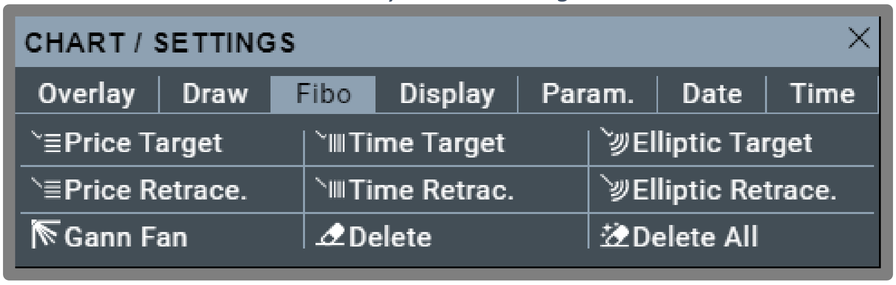


The shortcut choices are as follows:

Shortcut	Description
Title	Enables you to add titles in bold in the chart.
Segment	Enables you to draw a segment in the chart. The segment line remains the length you initially define.
Arrow	Enables you to draw arrows in the chart.
Comment	Enables you to write short comments in the chart.
Parallel	Enables you to draw parallel lines in the chart. First select the line, segment or arrow you wish to add (two small squares appear where the element is anchored) then click on this icon and finally click the position in the graph where you wish to add the parallel line.
Paragraph	Enables you to write longer comments in the chart.
Line	Enables you to draw an infinite line in the chart. This is useful for displaying mid and long term analysis of support and resistance.
Horizon	DMI Displays DMI indicators at the bottom of the Chart.
Delete	Enables you to remove a specific lines and text.
Delete all	Enables you to remove previously inserted lines and text.

Fibo

The Fibo tab enables you to add targets in the chart.

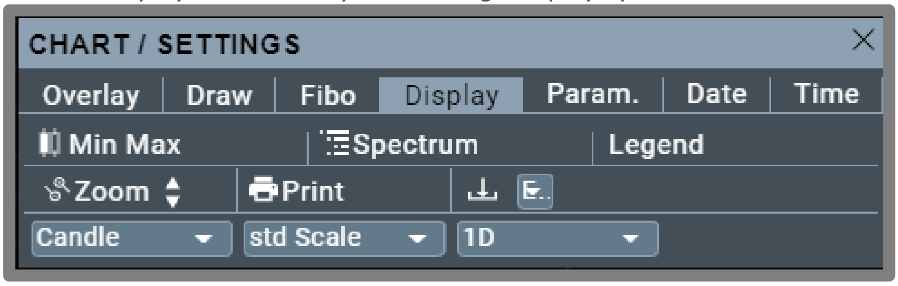


The shortcut choices are as follows:

Shortcut	Description
Price target	Enables you to determine high and low targets using Fibonacci ratios in terms of price.
Price retracement	Enables you to calculate targets using retracement Fibonacci ratios in terms of price.
Gann fan	Displays Gann lines.
Time target	Enables you to determine high and low targets using Fibonacci ratios in terms of time.
Time retracement	Enables you to calculate targets using retracement Fibonacci ratios in terms of time.
Cycle	Displays Gann cycles.
Elliptic target	Enables you to determine the elliptical using both time and price Fibonacci ratios.
Elliptic retracement	Enables you to calculate targets using elliptical retracement Fibonacci ratios in terms of time and price.

Display

The Display tab enables you to change display options in the chart.



The shortcut choices are as follows:

Shortcut	Description
Min max	Displays two lines, showing the minimum and maximum price levels for the instrument over the given time period.
Zoom	Click on the arrows to zoom in and out
Candle	Enables you to change the way the data is displayed in the chart, for example as in Barchart, Candlestick or Close mode.
Spectrum	Displays the spectrum view on the right-hand side of the chart. The spectrum displays the volumes in terms of quotation levels instead of time. You can use this display to determine support or resistance levels.
std Scale	Enables you to choose a display scale for the chart. This can be one of the followin:; Std scale, Base1000, %Var, Log.
Print	Print Enables you to print the chart graphics.
Apply to all	Applies the currently selected configuration elements to all open Chart components.
Legend	Displays a legend at the top of the chart, outlining the instrument, dates and times and other additional added elements.
1D	Enables you to define the individual time plot sizes in the chart, from one minute to one year.

Enables you to define the individual time plot sizes in the chart, from one minute to one year.

10.4. Compare Chart

The Compare Chart component enables you to compare up to five different values in one chart. There are several ways to manipulate the data in a Compare Chart component. It also offers a selection of tools which enable you to insert pointers, lines, and comments, or redefine the indicator display mode. You can also choose the time scales which suit you and zoom in and out on specific zones.

To configure this component, use the Browser and Shortcuts windows.

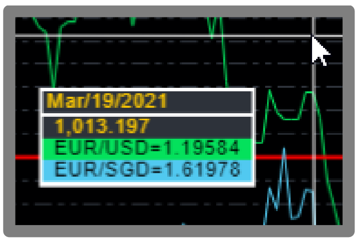
There are several ways to display instrument data in the Compare Chart. You can:

- Type the name of the instrument in the Compare Chart command boxes.
- Search for a particular instrument using the Browser.
- Drag and drop an instrument from a Watch List to a Compare Chart component.
- Click on the relevant instrument in a Watch List if the Watch List is defined as being linked to the Compare Chart component.

Note: Before inserting instruments, you should first choose the number of instruments you wish to insert from the drop-down list in the title bar.

10.5. Customizing the Chart Component

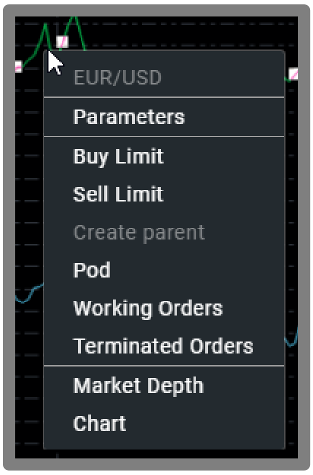
You can customize the data displayed in the Compare Chart component in several different ways. Click anywhere in the chart to see a snapshot of the market data at that particular moment. Two lines representing the x/y axis are displayed and a pop-up box shows a selection of data corresponding to the position at the particular time or date (intersecting point). Keep your finger on the mouse button and sweep across the chart to see other positions.



The data contained in the box is as follows:

- The date at the intersecting point.
- The price at the intersecting point.
- The price for each of the instruments in the chart corresponding to the intersecting point.

You can click on the progression line to display a series of black squares showing that the data has been selected. Right-click on any of the boxes to display a contextual menu.



Click the Parameters option to open the Parameters section of the Shortcuts Box. This enables you to change the size, colour and format of the line in the chart. This also applies to any of the chart editing shortcuts that you add to the chart.

To move the x/y axis positions, position your cursor over the relevant zone. The cursor is now displayed as a hand.

Click at the position you wish to move.

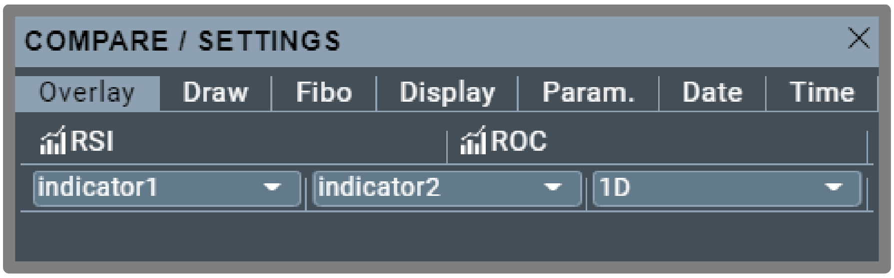
You can now move the positions up or down or left or right. Click again to conserve the new position.

10.6. Compare Chart Tools

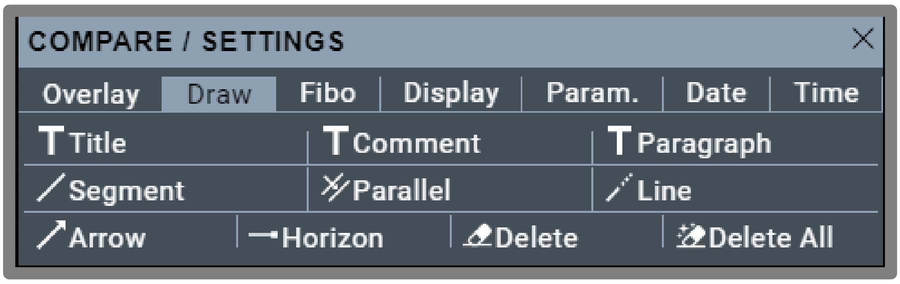
To open the Compare Chart tools window, click on the configure icon in the title bar.
The Compare Chart tools window is divided into four tabs, with a fifth available for certain manipulations:

- Overlay
- Draw
- Fibo
- Display
- Parameters

Overlay
The **Overlay** tab enables you to display a selection of indicator lines in the Compare Chart component.



Draw
The Draw tab enables you to insert lines and text to the Compare Chart component.



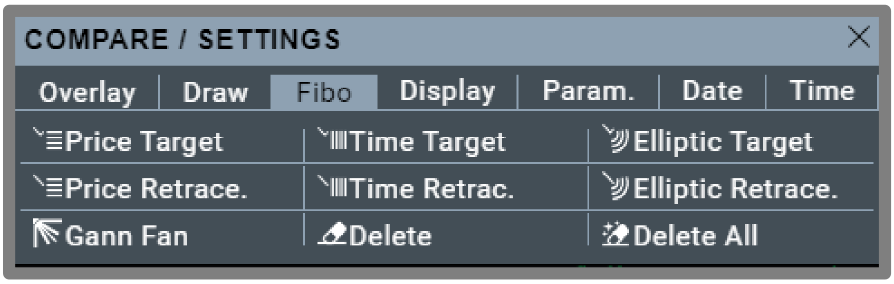
The shortcut choices are as follows:

Shortcut	Description
Title	Enables you to add titles in bold in the chart.
Segment	Enables you to draw a segment in the chart. The segment line remains the length you initially define.
Arrow	Enables you to draw arrows in the chart.
Comment	Enables you to write short comments in the chart.
Parallel	Enables you to draw parallel lines in the chart. First select the line, segment or arrow you wish to add (two small squares appear where the element is anchored) then click on this icon and finally click the position in the graph where you wish to add the parallel line.
Paragraph	Enables you to write longer comments in the chart.
Line	Enables you to draw an infinite line in the chart. This is useful for displaying mid and long term analysis of support and resistance.
Horizon	DMI Displays DMI indicators at the bottom of the Chart.

Delete	Enables you to remove a specific lines and text.
Delete all	Enables you to remove previously inserted lines and text.

Fibo

The Fibo tab enables you to add targets in the chart.

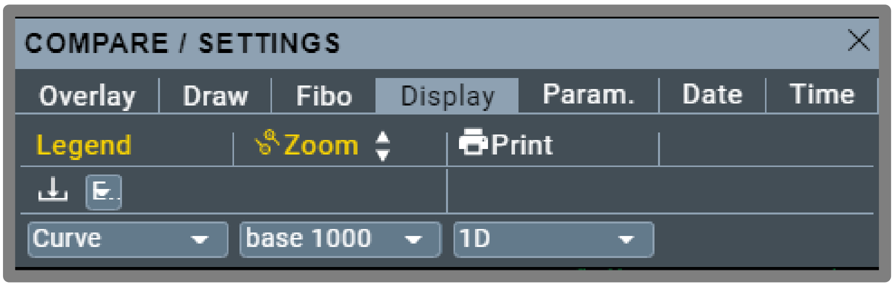


The shortcut choices are as follows:

Shortcut	Description
Price target	Enables you to determine high and low targets using Fibonacci ratios in terms of price.
Price retracement	Enables you to calculate targets using retracement Fibonacci ratios in terms of price.
Gann fan	Displays Gann lines.
Time target	Enables you to determine high and low targets using Fibonacci ratios in terms of time.
Time retracement	Enables you to calculate targets using retracement Fibonacci ratios in terms of time.
Cycle	Displays Gann cycles.
Elliptic target	Enables you to determine the elliptical using both time and price Fibonacci ratios.
Elliptic retracement	Enables you to calculate targets using elliptical retracement Fibonacci ratios in terms of time and price.

Display

The Display tab enables you to change display options in the chart.



The shortcut choices are as follows:

Shortcut	Description
Zoom	Click on the arrows to zoom in and out
Candle	Enables you to change the way the data is displayed in the chart, for example as in Barchart, Candlestick or Close mode.
std Scale	Enables you to choose a display scale for the chart. This can be one of the followin:; Std scale, Base1000, %Var, Log.
Print	Print Enables you to print the chart graphics.
Legend	Displays a legend at the top of the chart, outlining the instrument, dates and times and other additional added elements.
1D	Enables you to define the individual time plot sizes in the chart, from one minute to one year.
Export	Enables you to export a chart to Microsoft Word, to send the chart via e-mail or to save the chart in .gif format.

Parameters
If you select a line in a chart then right-click and select Properties, a Shortcut Box appears with the Display section being replaced by a Parameters section.

The shortcut choices are as follows:

Shortcut	Description
Color	Enables you to change the color of displayed item.
Thickness 1pt	Enables you to change the thickness of the chosen line, from 1pt to 5pt.

11 Time and Sales:

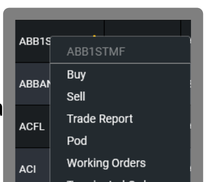
User can view Times and Sales of a Security/Index securities/ Group securities by right click of that securities or creating a T&S page.

Following three types of time and sales available

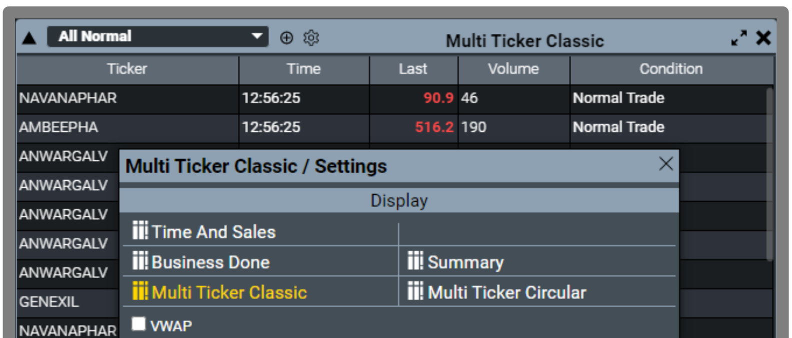
a) Time and Sales –Main

b) T&S- History

c) T&S- Business Done

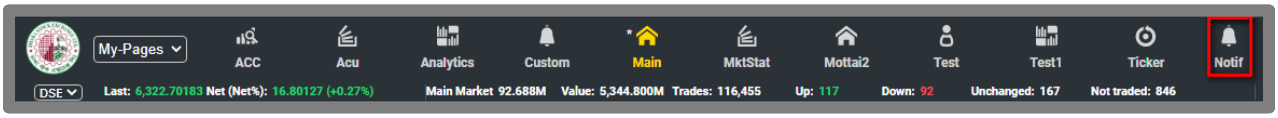


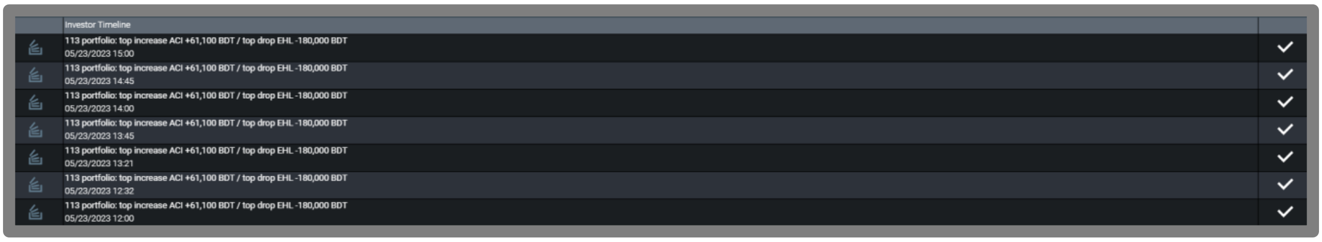
Pa



12 Notifications:

Execution, Price alert, Portfolio alert be available in the notification page.



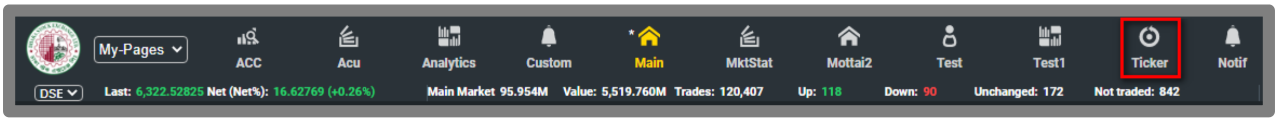


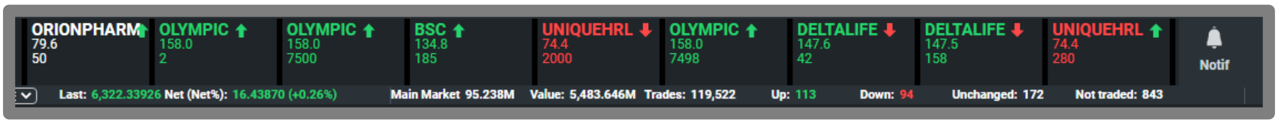
The Notifications page is where you can view pertinent messages about tickers and orders when certain events occur. The messages are displayed as follows:

- Left icon that's related to the topic
- Subject of the message
- Time when the message is issued

13 Market Ticker:

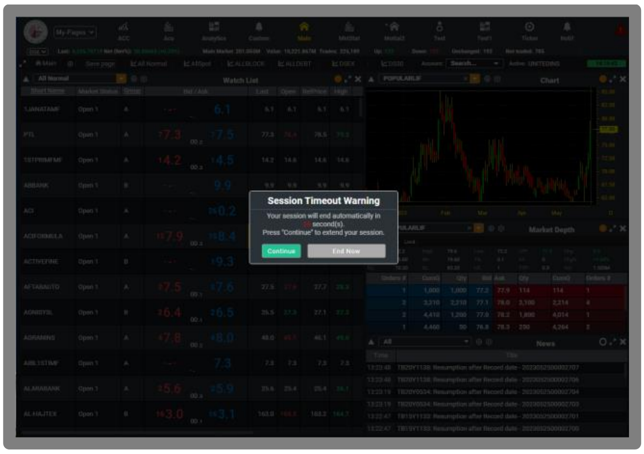
User can enable ticker by clicking ticker tab on the top of the workspace. DS30 Index securities trades showing in this ticker. If user disable ticker then just click on the ticker.





14 Session Timeout

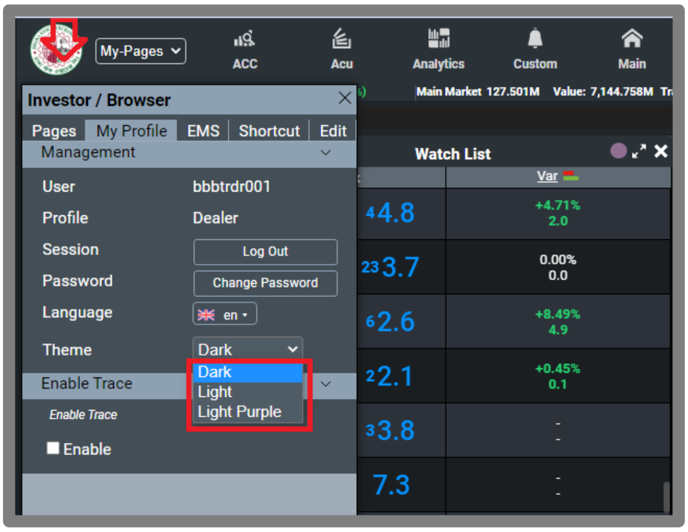
When you are logged-in to DSE Investor platform but have been idle for quite some time, a session timeout warning message will be displayed.

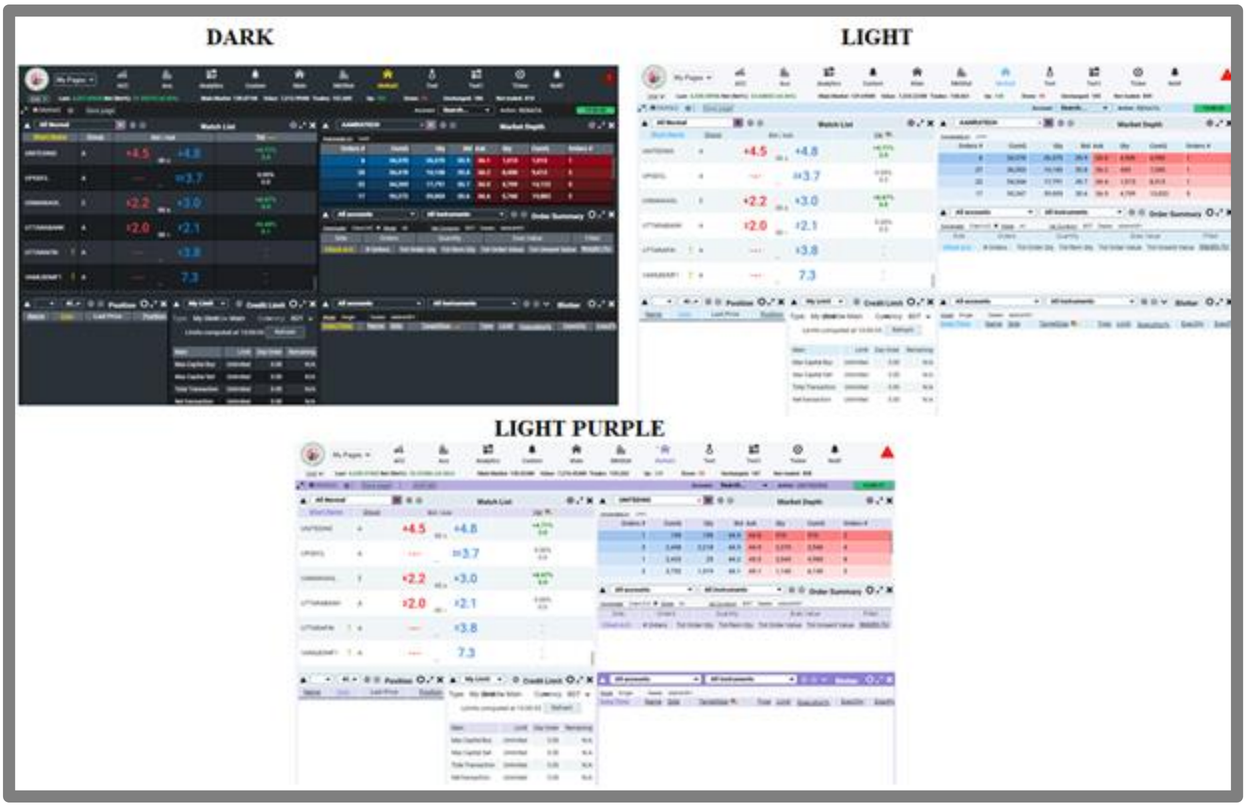


Click on [CONTINUE] to cancel the time counter and return to your session. Otherwise, click [END NOW] or do nothing within the 30-second time frame to be logged-out automatically from DSE Investor.

15 Theme change

There three types of theme available. You may change theme by your choice in the following way:

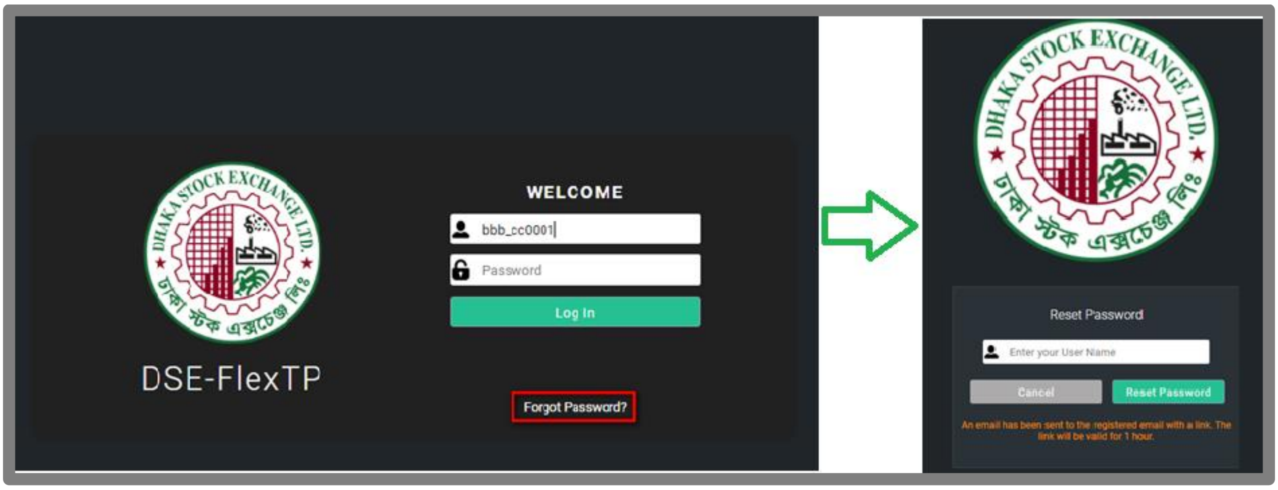




16 Self Service

16.1. Reset Password

In case of forgot password, you can utilize the "forgot password" option available on the login page. Upon selecting this option, a new page will prompt you to enter your user ID. An email will be sent to the email address associated with your account, which remains active for a duration of one hour. By clicking on the provided reset password link within the email, you will be directed to a page where you can enter a new password and confirm it, adhering to the password policy requirements.



Otherwise, *you can also request your TRECs (Broker)IT offcier to reset your password.*

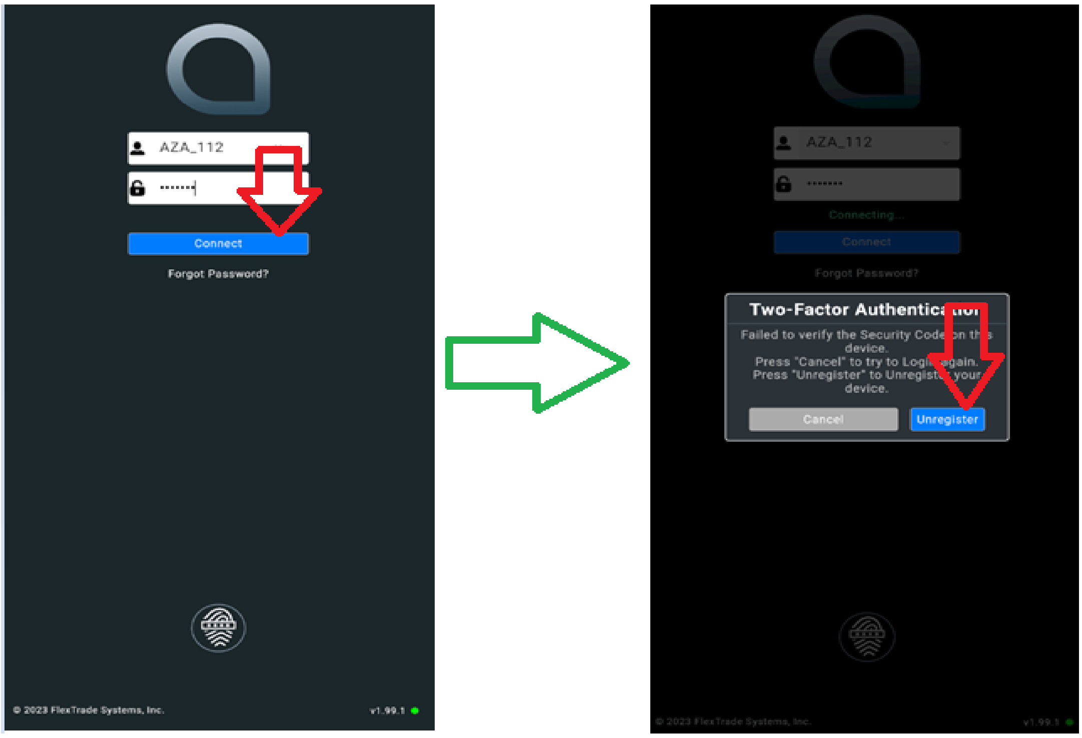
16.2. Device Unregister

It’s need to unregister the device in following cases:

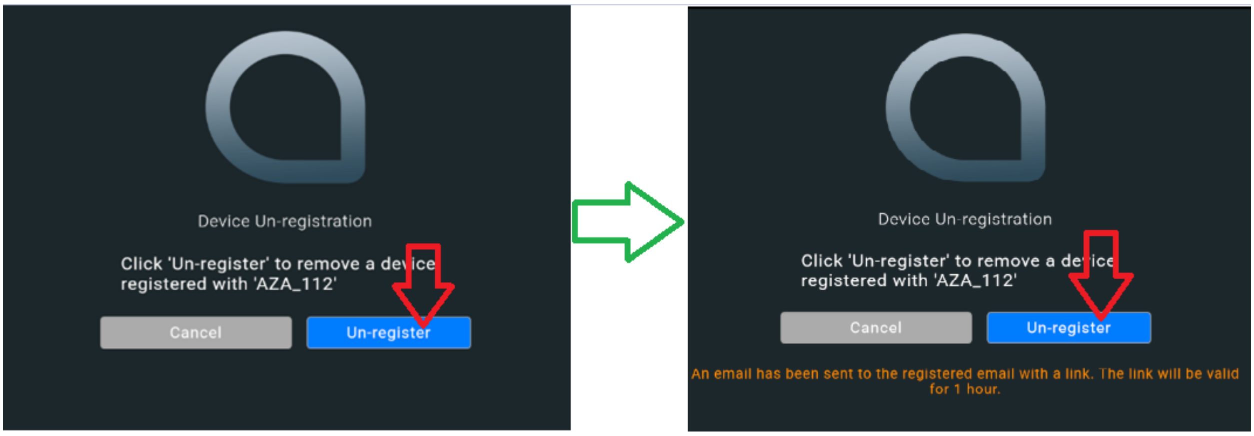
- Reinstall the DSE-Mobile app;
- Changing the Mobile device;
- Cleared the cache for DSE-Mobile App;

You can unregister the device by following steps:

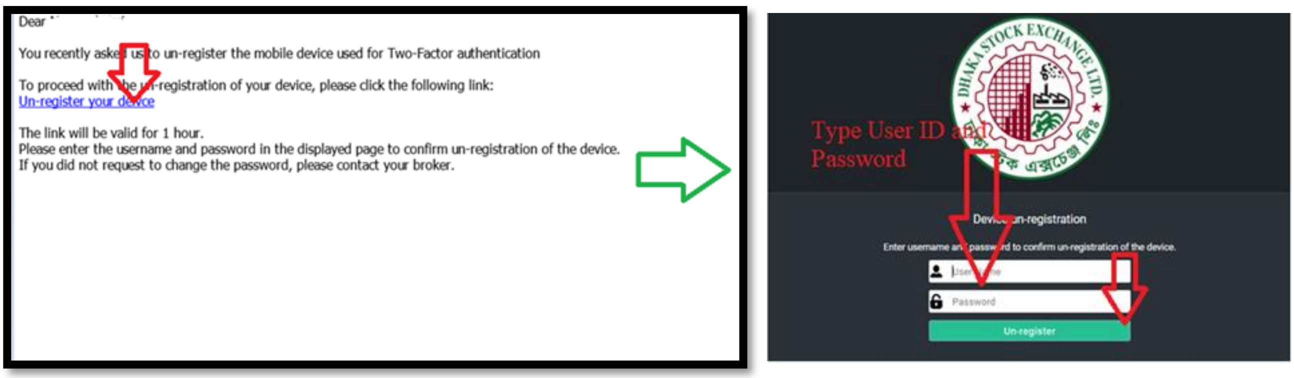
1. In login screen, put login Id and Password. Tap on the Connect, it will prompt “Two-Factor Authentication” and tap Unregister.



2. An email will send your registered email with the link “Un-register your device”. This email is valid for one hour.



3. Clicking on the link “Un-register your device” from email. A new page will open and type User ID and password, click unregister



4. Open the DSE-Mobile and login.

Otherwise, you can also request your TRECs (Broker) IT offcier to unregister the device.

17 Technical Issues

For any technical issue please caontact your TRECs (Broker) IT officer. You may report any to DSE through the Facebook page https://web.facebook.com/DSEMobileInvestor/

For any clerifcation on trading funcations, portfolio data and other business terms, please contact your trader.