CME Group

EBS Workstation User Guide

April 10, 2025

Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade. All examples discussed are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience.

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Getting Started

EBS Workstation is a pre-screened credit-based trading system that allows professional traders to deal in Spot foreign exchange, NDFs, and metals, anonymously on EBS Market, or bilaterally via EBS Direct. The Workstation can be accessed via EBS Leased Lines and the internet using either a Chrome browser or installed EBS Workstation application. The user interface (UI) provides access to a wide range of trading capabilities in a clear, intuitive manner while allowing layout configurations for individual trading styles.

System Overview

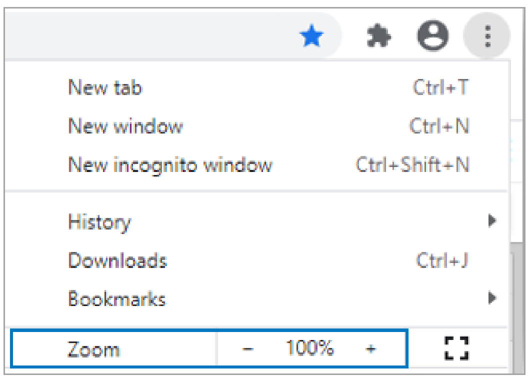
The highly responsive HTML5 presentation layer is based on web components designed and optimized for high performance using the latest web standards and technologies. Several Service Levels are available:

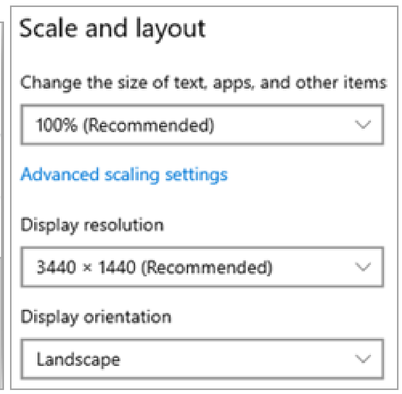
1. Web Connect: access from your PC via Internet using either standard Chrome Browser or installed EBS Application
2. Leased Lines: access from own PC via EBS Leased Lines or CME Co-Location services using installed EBS Application
3. Full Service: access using dedicated Workstation terminals provided by EBS

The EBS Workstation assumes a minimum screen resolution of 1280 x 1024.

An Unsupported Browser/Resolution error message appears in Chrome when the screen resolution does not meet the minimum requirements.

To resolve the issue, adjust the Chrome browser zoom setting to 100% or lower, and if necessary, adjust Scaling using the Windows Display Settings.





Version Updates

See What's New for a summary of the latest EBS Workstation updates and features.

What's New

The list below illustrates the updates made to the EBS Workstation Help system.

Date	Topic	Description
2025-03-12	FX Spot + Market, Instrument Preferences, EBS Deals, Orders Card, Trader Deals	Added FX Spot + Market
2024-04-09	EBS Deals Card	Change to instrument display limit
2024-02-24	General Preferences, FX Spot Market Card, Trader Deals card, Market Data card, EBS Deals cards	Market card price display options
2024-01-06	Application Menu;GFID Deals Card;General Preferences; Instrument Preferences; Market Data Card; Using Cards; Orders Preferences	Added dark theme option, new Information card; regional market data
2023-08-22	Application Menu; Open BUY SELL Request Form	Added Reload Workstation & Futures options (App Menu); Min Fill Qty

Date	Topic	Description
		option (Open BUY SELL form)
2023-06-23	Iceberg Orders, FX Spot Mixed Liquidity Card	Added new order options
2023-03-27	Instrument Preferences > FX Spot: Market Options section	Updated to reflect Market cards only
2023-02-04	Enhanced the prior EBS Workstation Quick Start User Help into this comprehensive EBS Workstation User Help for new and existing users.	Initial Version

System Login and Two-Factor Authentication (2FA)

Corporate email addresses are being used as usernames and are protected with Two-Factor Authentication (2FA) via Duo Security, in accordance with CME Group's Security guidelines.

The password policy:

- minimum of 10 characters (with at least one number, one upper case letter, one lower case letter, and one symbol)
- must not be a previously used password
- must not contain all or part of the user-name, first or last names of the user
- must not be present in our list of commonly used passwords

Two-Factor Authentication is mandatory for all users:

On first time login, EBS Workstation prompts users to set up a second authentication factor. Subsequently, users will be required to authenticate via a second factor on the following occasions:

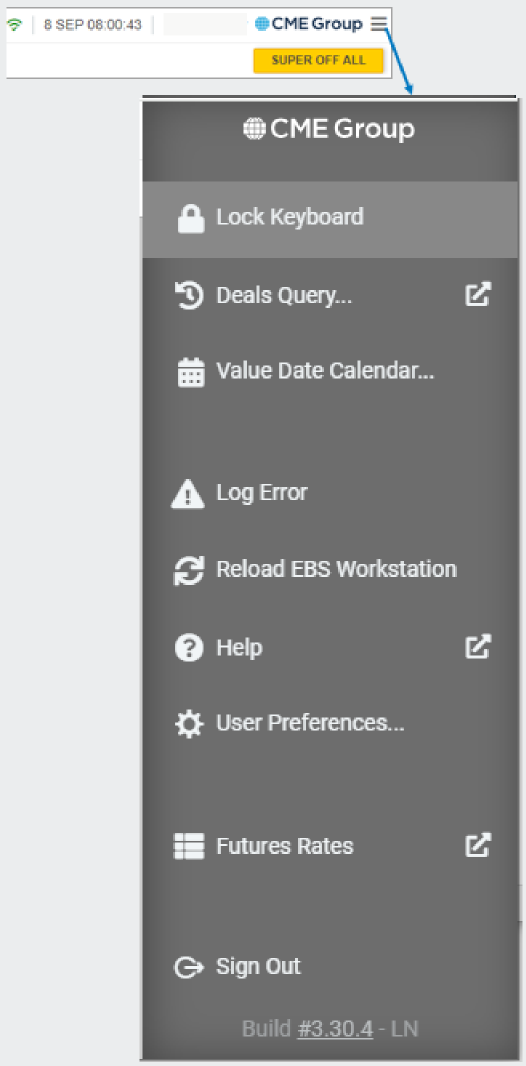
- first-time login on a new device
- 90 days after the previous second factor authentication on a trusted device
- after clearing all browser cookies
- when attempting to make any changes to 2FA option

Select from the following options:

- **Duo Mobile App:** An application on Android or iOS mobile device requiring users to respond to a push notification when challenged. Users need to download and install Duo Mobile app from Google Play or Apple store prior to log in.
- **U2F Key:** Universal Second Factor USB Key (ex. YubiKey) inserted into the user's workstation or new EBS Keypad and tapped when requested.
- **Desk Phone:** A call to the user's registered desk phone number to deliver a one-time password (OTP) when requested. To enable Desk Phone self-registration, contact your Account Representative.

Application Menu

Use the Application Menu allows to access various EBS Workstation functionality and tools. Click either the **CME Group** logo, keypad key, or the menu icon to open.



Lock Keyboard - Locks input from the EBS Keypad, mouse, and keyboard to prevent accidental order entry. Set a PIN code in the General Preferences tab.

Deals Query ... - Use the Deals Query window to query and view historical deals done by the trader on EBS Workstation.

Value Date Calendar - The Value Date Calendar reflects EBS Value Dates.

Log Error - Opens a Log Error window. Click Send to submit all events from the current session to EBS. The events will be used to assist in the query.

Reload EBS Workstation - Click to reload EBS Workstation. Any active orders will be canceled as a part of reload.

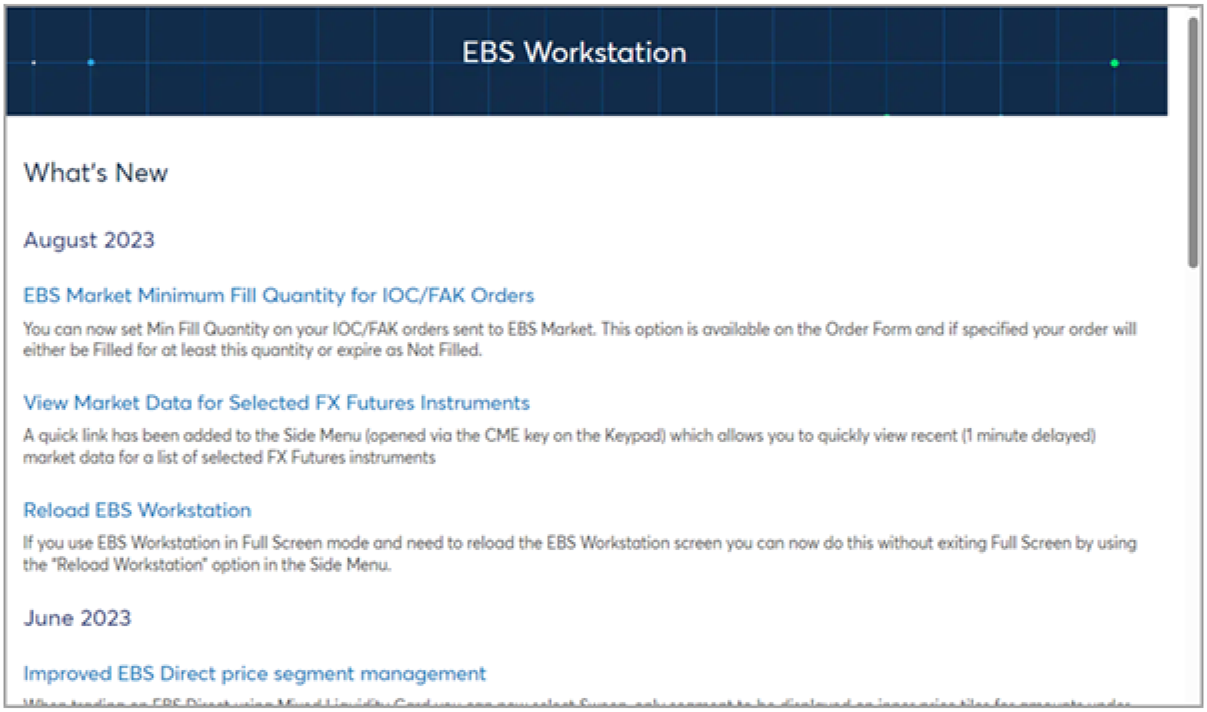
Help - Select to access the EBS Workstation User Guide.

User Preferences ... - Set General, Instruments, Orders, and Keypad preferences.

Futures Rates - Click to quickly view recent (1 minute delayed) market data for a list of selected CME FX Futures instruments.

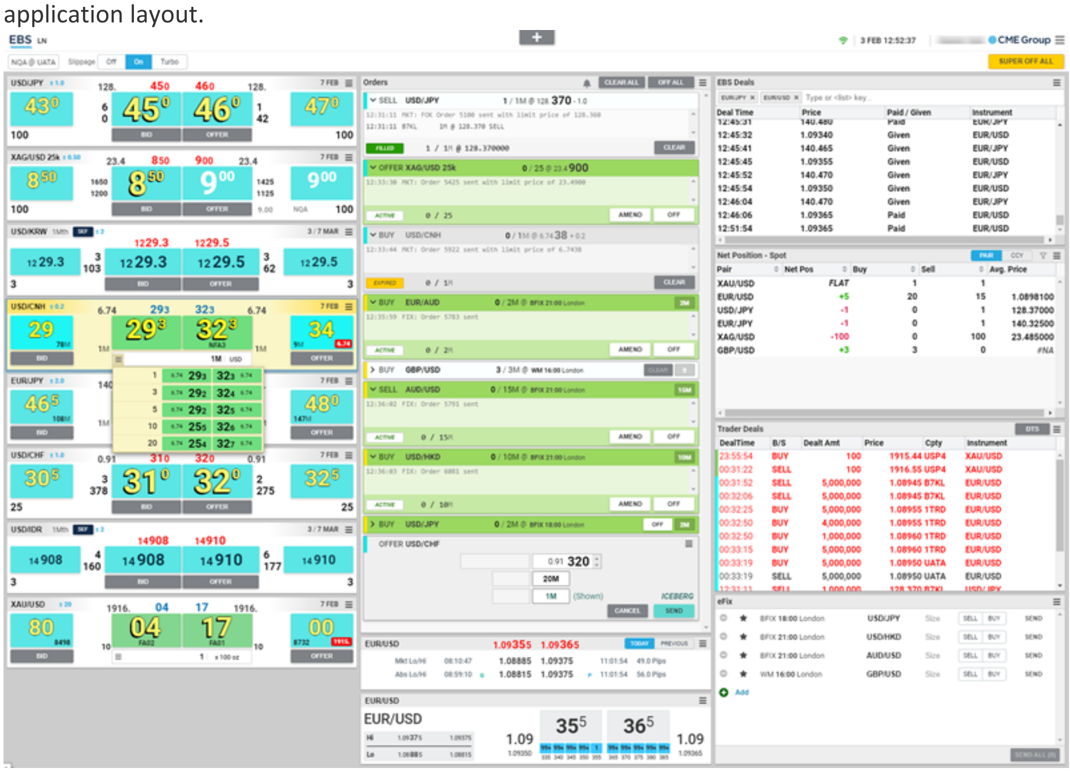
Sign Out - Click to log out of EBS Workstation. **Note:** Any active orders will be canceled.

Note: Click **Build #** to view a list of new and updated EBS Workstation features and tools:



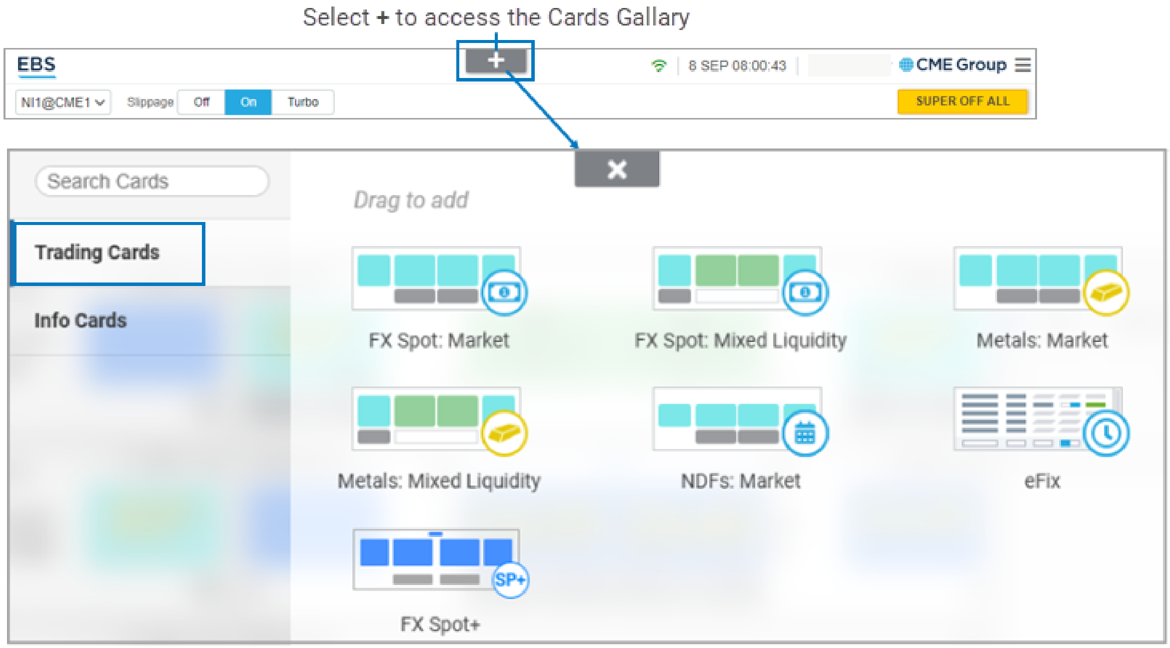
Workspace Overview

In the Workspace, users set up functional elements known as Cards according to individual preference. The Workstation allows the addition of multiple cards as the available window space allows. Cards can be dragged and dropped to set up a preferred application layout.

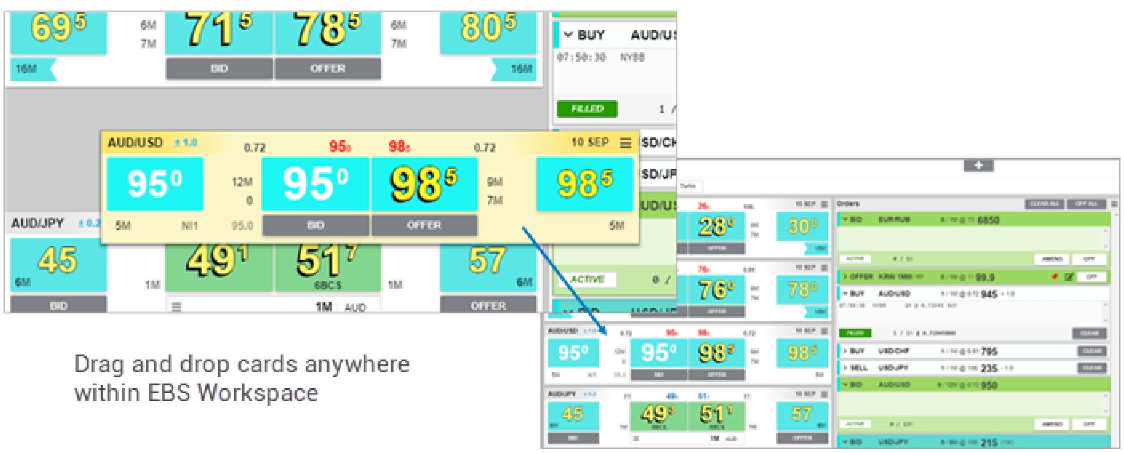


Note: By default, the Workspace always has an Orders Card in the container which cannot be removed.

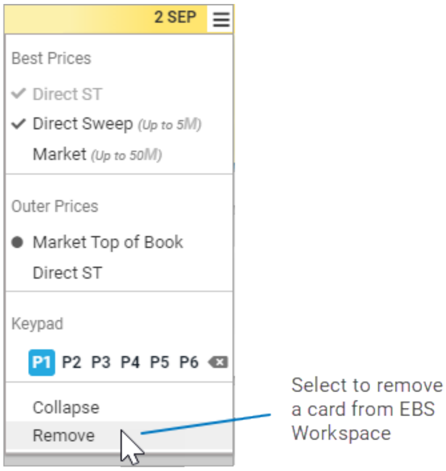
- **Add** Cards from the Cards Gallery, which can be accessed via the **+** button at the top of the application.



- **Drag and drop** Cards to set up a preferred application layout. For example, the [Trader Deals](#) card or [Orders](#) card can be placed anywhere in the application's Cards Container.

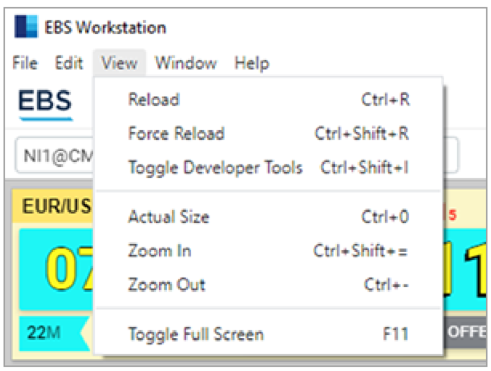


- **Remove** Cards by selecting the **Remove** option from the Card's menu.

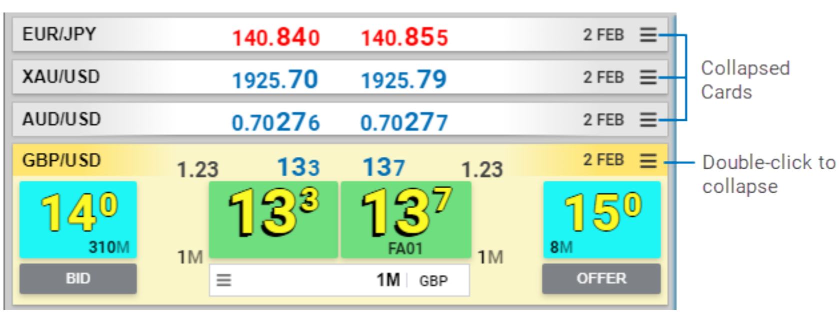


- **Zoom in or out** using the zoom settings of the browser or installed EBS Workstation application. For example zooming out from 100% to 90% zoom will potentially expand workspace by adding an extra column, while zooming in from 100% to 120% will increase sizes of all elements and fonts making it potentially easier to read.

> **Note:** When using the installed EBS Workstation version of the application, press **F9** on your Keyboard to reveal an advanced menu bar at the top of the application. Use the **Zoom In** or **Zoom Out** options, and after adjusting the zoom, press **F9** again to hide advanced menu.



- **Collapse** some UI elements (e.g. Price Cards or Orders) to allow for more effective space management. This can be done either by double-clicking on the header Price Card or Order or using the **<shift>**+**<->** key combination on the EBS Keypad.



Arranging Cards in the Workspace

Cards may be dragged and dropped in any column where sufficient space exists in the Workspace.

When attempting to add or move a card to a column which is already full, the column appears unavailable.

Some of the cards are fixed height (ex. Trading, Market Monitoring) while others will adjust their vertical height depending on available space (ex. Orders, Net Position).

Cards of a fixed height move within the workspace to make room for dragged cards, and the height of flexible cards also changes to make room for dragged cards.

When users expand a card in a workspace column that is full, the card above the expanded card collapses automatically.

Window Resizing & Column Adjustment

The number of card columns within a window adjusts as a user re-sizes the window and window space changes. When column width is too small, columns become hidden unless a column includes/accommodates an Orders Card. The number of columns depends on available width/minimum card width, and must be viewed at a minimum screen resolution of 1280 x 1024.

> **Note:** Accessing EBS Workstation on a different computer screen may hide or reveal some of the columns and cards depending on the available screen space.

Fixed Height & Flexible Height Cards

Fixed height cards are expandable and collapsible, but users cannot change the card height (e.g. Price Cards).

Flexible height cards can change height, however they cannot be expanded or collapsed. When filled with elements, they support a scroll bar (e.g. Orders card, Trader Deals card).

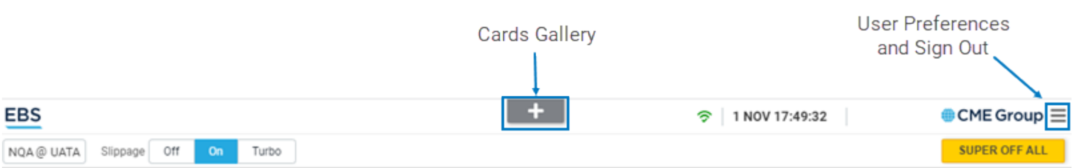
Non-Draggable Elements

An Order Card is a card that hosts different types of Order-Views and forms (elements). Forms are used to create and submit orders. The Order View contains information about submitted orders. While cards can be dragged & dropped using the mouse, elements (forms or Order Views) in the Orders Card cannot.

> **Note:** Any column containing an Orders Card always remains visible even when other columns are hidden because of insufficient screen space.

Header Bar

Located at the top of the Workspace, the header bar contains a number of options for the management of the Workspace within the Workstation.



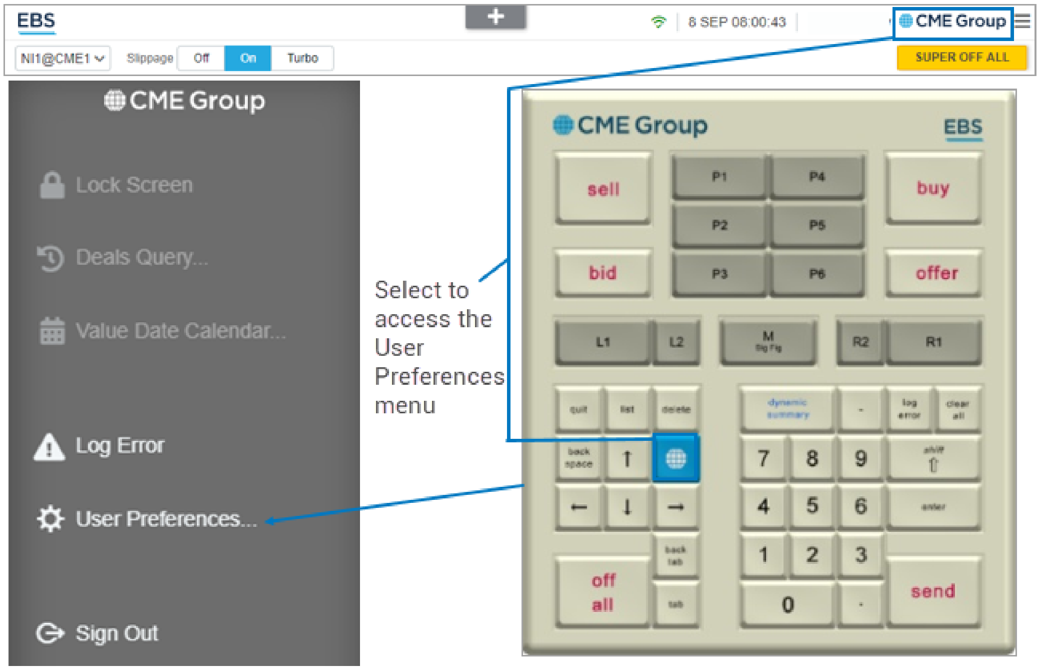
Header Elements

- Slippage switch: On, Off, or Turbo
- Cards Gallery ('+' icon) access: add functional widgets called "Cards" to the Workspace by clicking the '+' icon and dragging and dropping the card in the Workspace area
- **Time and Date:** current date and time in GMT
- **Application menu icon:** link to User Preferences and Sign Out options
- SUPER OFF ALL: orders kill-switch, which immediately cancels ALL Active orders on the Orders Card (regardless of whether the order is pinned).

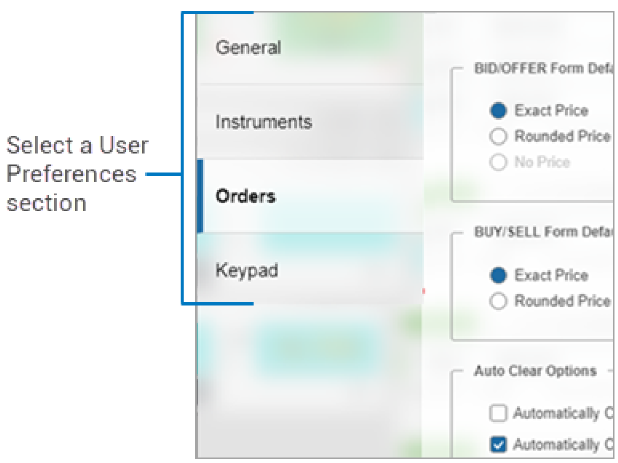
> **Note:** See Using Cards and Setting User Preferences for more details on configuring the Workspace.

Setting User Preferences

Access the application menu, which contains **User Preferences** (Settings), pressing the blue **<CME Group>** key on the EBS Keypad or by clicking the **CME Group** logo in the top right corner of the application.



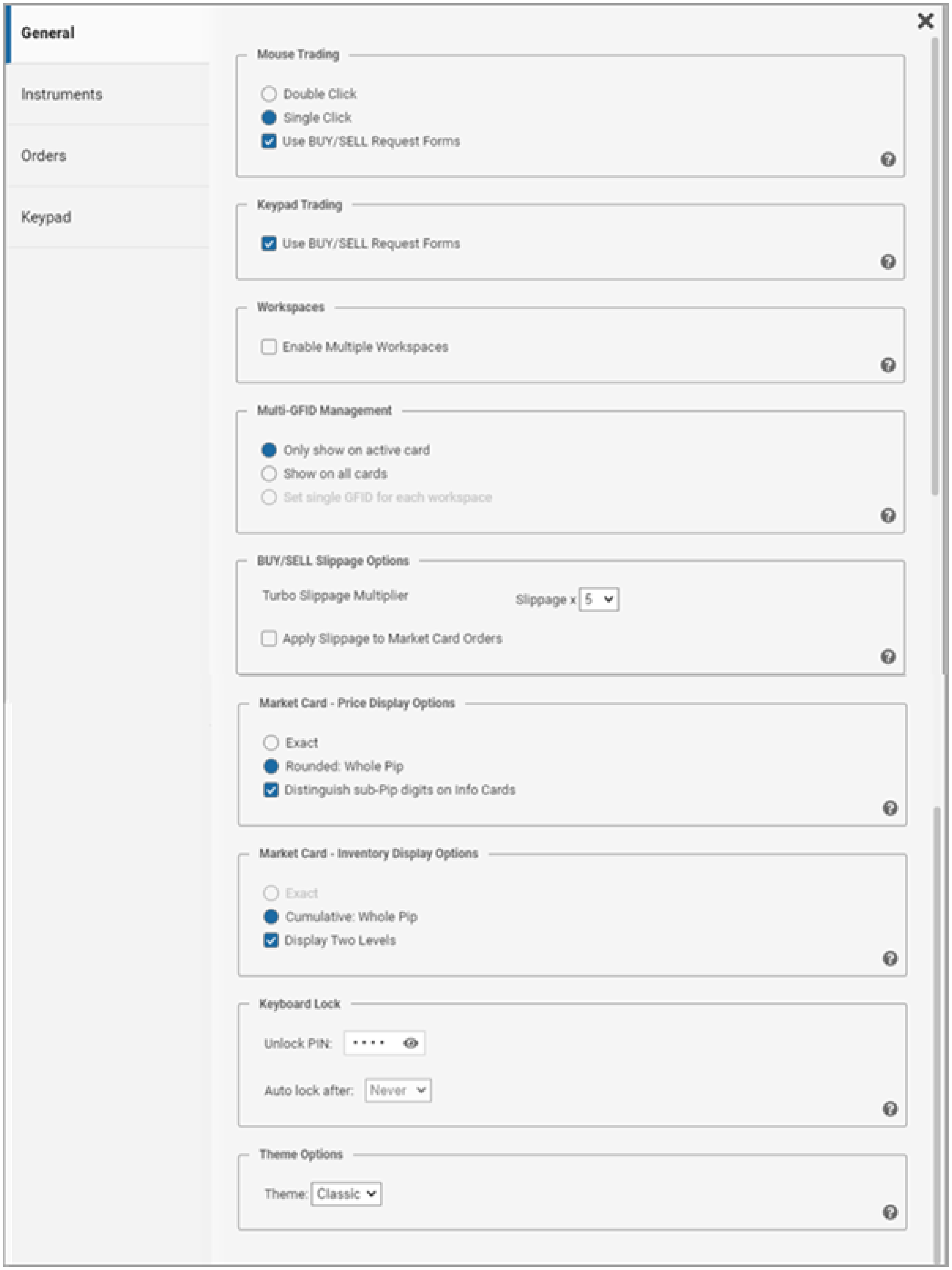
The User Preferences screen is split into several sections (General, Instruments, Orders, Keypad) that users select with a mouse. Each tab contains a number of configurations.



> **NOTE:** Changes to parameters in any tab are applied immediately with no impact to other parameter configurations.

General Preferences

Use **General Preferences** to define actions for entering and displaying orders.



Mouse Trading

- Choose whether a double- or single- mouse click on a price in a trading card triggers action.
- To be able to modify order parameters for BUY/SELL orders prior to submission, select **Use BUY/SELL Request Forms**. If left unchecked, clicking a price immediately submits an order with default settings.

Keypad Trading

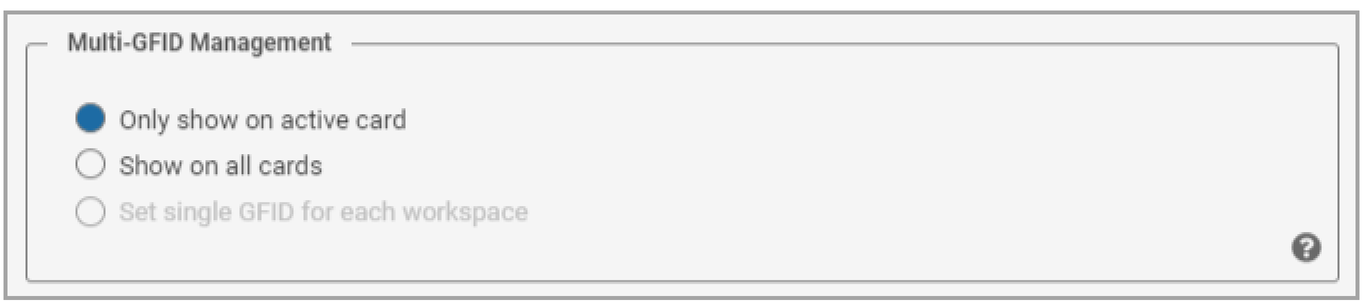
- Check the **Use BUY/SELL Request Forms** option to be able to review and/or edit a BUY/SELL order prior to submitting. Not checking this option enables orders to be sent with default values using a single Keypad key.

Workspaces

Users with access can select the **Enable the Multiple Workspaces** option to create and manage additional workspaces with added cards. See Multiple Workspaces for more information.

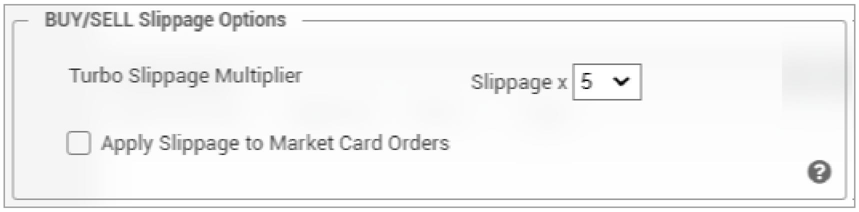
Multi-GFID Management

Note: This option only appears for users with more one GFID assigned to the same Trader ID. See Multi GFID Management for more information.



BUY/SELL Slippage Options

Slippage and Turbo Slippage are two different markups applied to BUY/SELL orders. Select a generic multiplier by which Slippage is multiplied to define the Turbo Slippage. Users can define Slippage per instrument and see resulting Turbo slippage under individual Instrument Preferences.

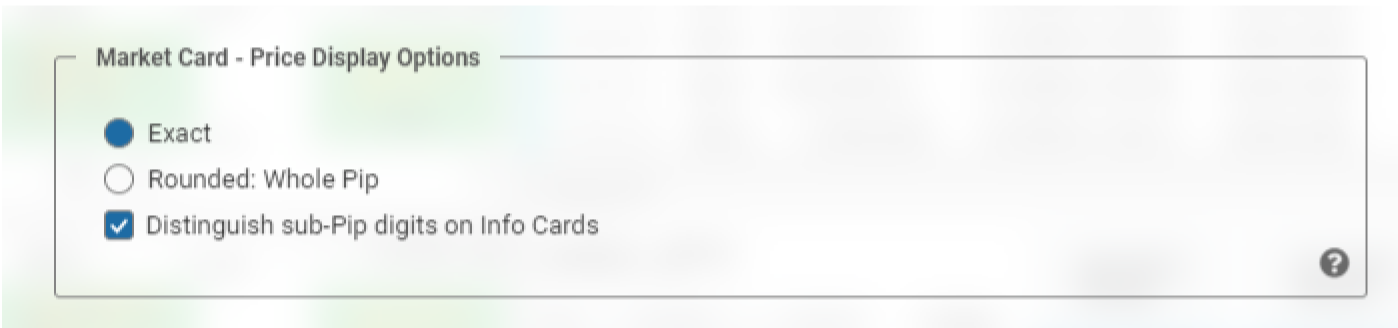


Note: Users can disable Slippage for orders launched from a Market Card.

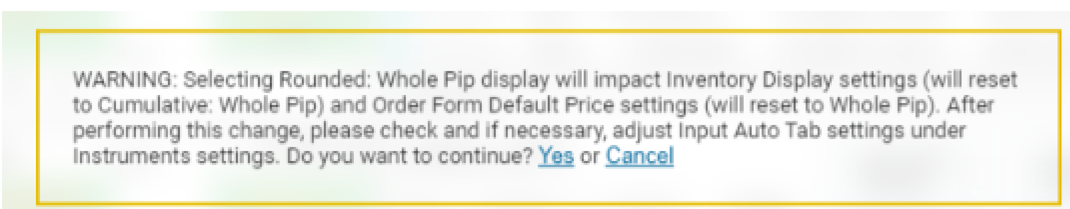
Market Card - Price Display Options

Configure how prices will appear on EBS Market and information cards:

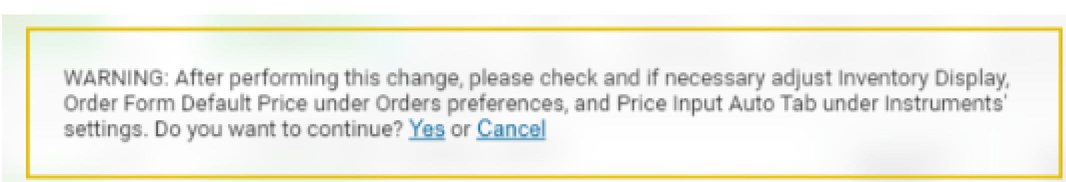
- **Exact:** Displays sub-pip price elements in small font on EBS Market cards
- **Rounded:** Hides any sub-pip price elements and rounds value to whole pip
- **Distinguish sub-Pip digits on Info Cards:** Displays sub-pip prices on Trader Deals, EBS Deals, and Market Data cards



Note: Changing the setting from **Exact** to **Rounded** will trigger changes to the Display settings (will reset to Cumulative: Whole Pip) and Order Form Default Price settings (will reset to whole Pip). See relevant sections of User Preferences for more details.



Note: Changing back from **Rounded** to **Exact** will not trigger changes, but will trigger this Warning:



Users are strongly advised to check their settings to make sure they match their expectations.

Market Card - Inventory Display Options

Configure how the Inventory (available for matching) displays on Market Price Cards throughout the application.

Configuration is a two-step process:

Configure how the inventory (ToB Depth) displays

Select one of the two options to define how to display sizes available for matching (ToB Depth):

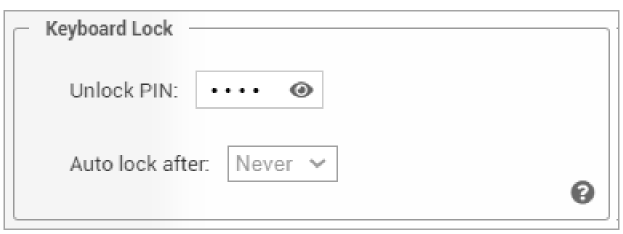
- **Exact:** Displays the exact Size available for matching at the Best Dealable top of book price.
- **Cumulative: Whole Pip** Displays the cumulative Size available for matching from the Best Dealable top of book price out to the next whole pip price.

Show/Hide the 2nd Level Inventory (Best Dealable +/- 1 pip Amount)

Specify whether to display or hide available inventory at the 2nd best price level after Top of Book. Depending on Exact/Cumulative settings this may either mean +/- minimum available increment or +/- 1 Full Pip Increment.

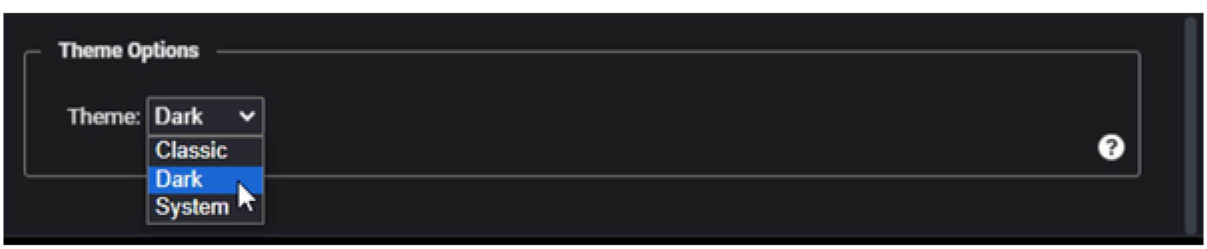
Keyboard Lock

Use the Keyboard Lock property to lock input from a Keypad, mouse, or keyboard to prevent accidental order entry. When locked, a trading session remains open and resting orders remain active. Configure an **Unlock PIN** number to unlock input. The Keyboard Lock feature is designed to work in combination with the end user security controls deployed and managed by an organization.



Theme Options

Users can switch between Classic and new Dark Themes. This system option will use the settings from your OS app mode settings and display either in Classic (Light) or Dark Mode depending on chosen colors setting.



Slippage Switch and Slippage Preferences

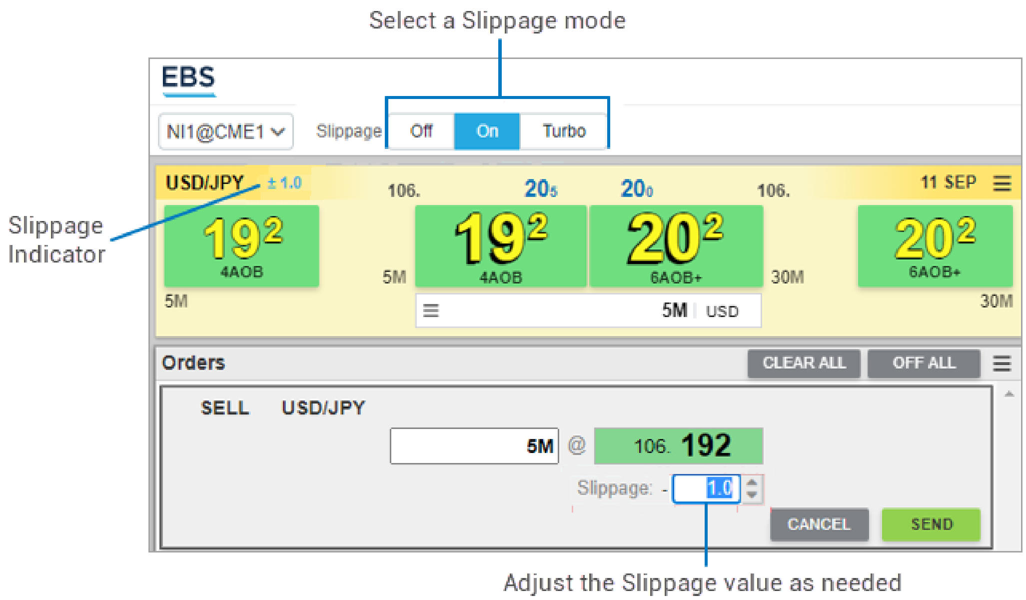
Slippage is an additional price mark-up expressed in pips and applied on top of the specified order price. Applying slippage to an order price increases probability of a fill, however, under some circumstances it may result in an order getting filled at a worse price within the specified slippage range.

Turbo Slippage is intended to maximize fill probability in very fast-moving markets, and applies a multiplier to the normal slippage value.

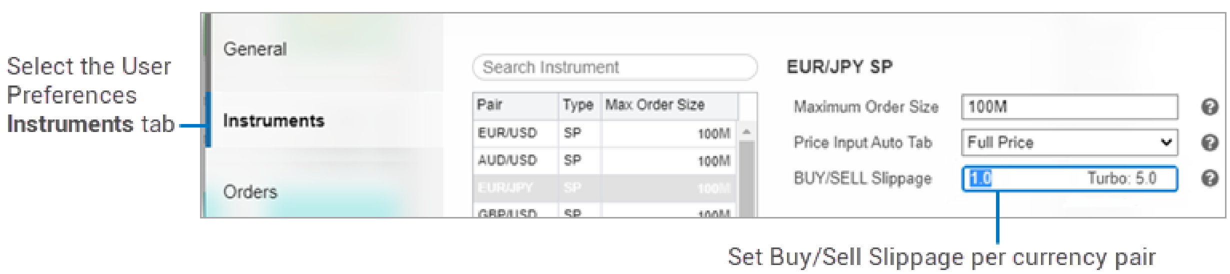
With Slippage enabled, the Slippage Indicator displays on the Price card beside the name of the selected instrument.

This default value is set per product in User Preferences. Use the Slippage Switch at the top of the application to quickly switch slippage for all Orders **Off** or **On**, or enable **Turbo** mode.

When an order form is open, with Slippage enabled (**On** or **Turbo**), the **Slippage** field appears pre-populated with the default slippage for this instrument. This value can be adjusted before submitting an order.



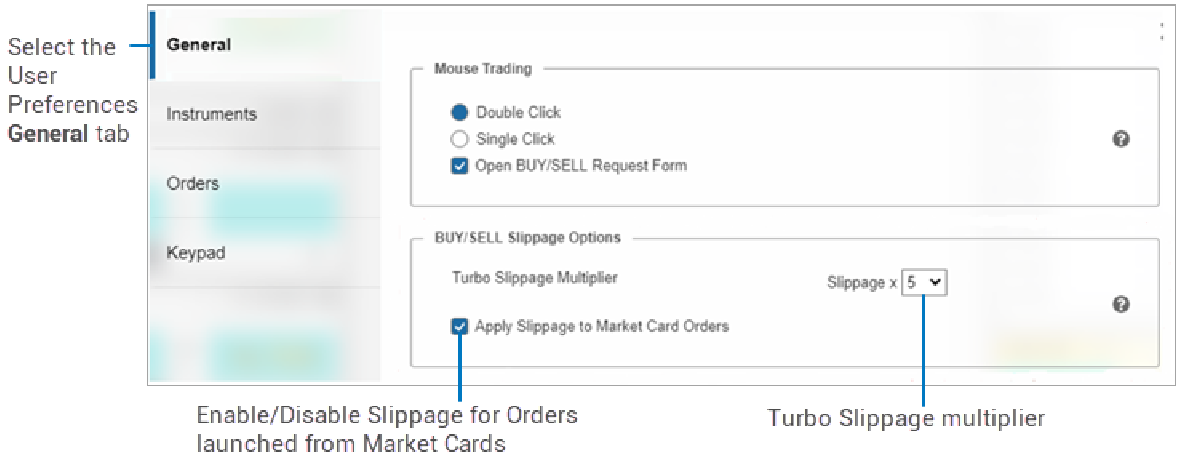
Manage Slippage settings from two areas within User Preferences. In the **Instruments** tab, users can set the normal Buy/Sell Slippage per currency pair. Slippage is set in pips. For example, 1.5 translates into one-and-a-half pip.



Use the **General** tab, under the **BUY/SELL Slippage Options** pane to set the **Turbo Slippage Multiplier**. The Turbo multiplier applies to all currency pairs.

In addition, slippage can be enabled or disabled for orders launched from Market Cards. If disabled, slippage will not be applied to EBS Market orders launched from Market Cards.

Note: Slippage will still apply to EBS Market orders launched from Mixed Liquidity Cards.



Keyboard Navigation

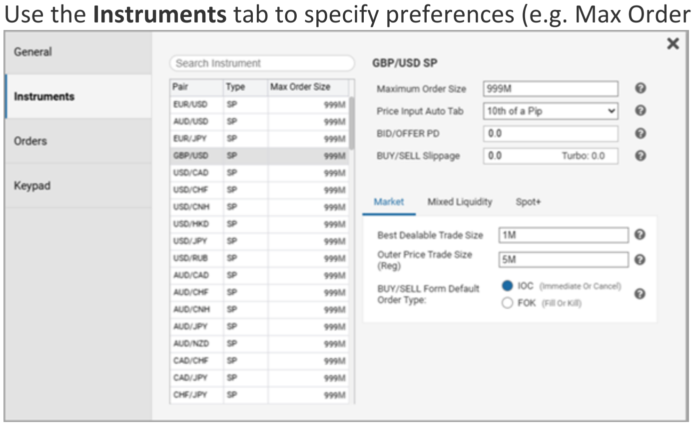
Use the **Tab** key of the computer keyboard key to navigate between elements in the Workspace. Tabbing from the top left to bottom right, the focus shifts to visible elements (elements inside a collapsed card are ignored).

Note: Press the **Shift** + **Tab** keys to back tab.

keyboard key	Function
Tab	price > quantity > Set PD > SEND > CANCEL
Shift + **Tab**	Big Fig > CANCEL > SEND > Set PD > quantity
up/down arrows	moves between cards in the Workspace
enter twice	sends order to market
esc	cancels order

Instruments Preferences

Use the **Instruments** tab to specify preferences (e.g. Max Order Size, Price Input, Slippage) for each instrument.

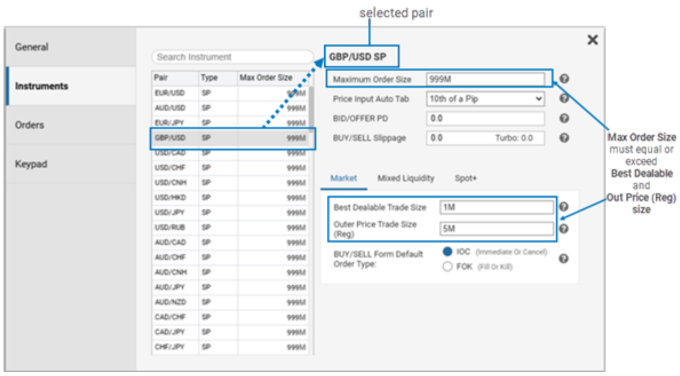


Search Bar

Use the Search bar to search for a specific instrument in the table. The search tool uses predictive search that populates as you type. The instruments in the table are filtered incrementally as you enter text in the search.

Instrument Table

Use the Instrument Table to view available instruments by name, type and Maximum Order Sizes, based on the selected Search filters. Click a specific row to select a record. Any change to a parameter in this tab is applied to the selected Instrument. Parameters include Pair (Instrument), Type (Security Type), and Max Order Size (max order size in Millions).



Preferences Applicable to All Cards and Market Segments

Maximum Order Size

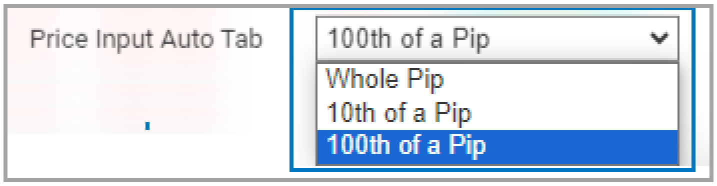
Use this setting to configure a maximum order size. An error will display when inputting a trade quantity for an order that is greater than the Maximum Order Size. This feature is a safety mechanism to avoid "Fat Fingers" (unintentionally inputting a very large quantity).

Maximum Order Size Configurations

- Field Input uses digits only (0-9)
- Value must be:
  - >= Best Dealable Trade Size
  - >= Regular Trade Size
- When the input value is not valid then:
  - The input field is outlined in red
  - The invalid value is not saved
  - When focus shifts from the field, if no valid value is available, the system uses the last valid value
- When the Maximum Order Size input value is valid:
  - The new value applies to the Active instrument throughout the system (regardless of market segment, Price Card Type, Order Type, Form etc...)
  - The new value is persisted

Price Input Auto Tab

Use this setting to configure how the cursor navigates (tab) to the next field in the sequence when inputting pips in the price input field for instruments with pip decimal.



Select from the dropdown menu:

- **Whole Pip -** The cursor moves to the next field automatically after the last whole pip digit is entered. Any decimal pip (if required) is padded with zeros ("0" or "00")
- **10th of a Pip -** The cursor moves to the next field automatically after tenth of a pip digit is entered. For Quarter Pip instruments last digit (100th of pip precision) will be automatically entered as 0 or 5 based on entered decimal (0, 2, 5, 7) producing quarter pip increments of 00, 25, 50, and 75.
- **100th of Pip -**Available for quarter-of-a-pip instruments only. The cursor moves to the next field automatically after all of the price digits (including last digit of the Quarter Pip price) are entered.

BID/OFFER PD

Use Pip Discretion (PD) functionality to add aggressive elements into passive Bids and Offers. Aggressive action will be triggered when opposite side price moves within the specified PD range of a passive order price. Outstanding balance on the passive order will be automatically reduced.

BUY/SELL Slippage and Turbo Slippage

Slippage and Turbo slippage are two different mark-ups applied to BUY/SELL orders.

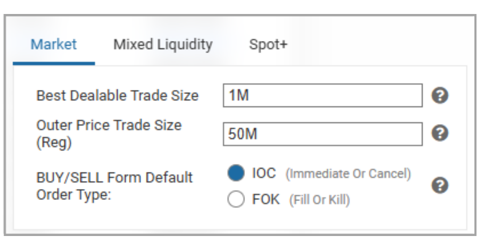
Turbo slippage value for each instrument is derived from specified Slippage and Turbo Multiplier values and is displayed as a read-only value. Users select a generic Turbo multiplier that the Slippage for each instrument is multiplied by.

When an instrument has different pip increments for Direct and Market, then the lowest granular value is applied. See Slippage Switch Preferences for more details.

FX Spot: Market Options

The following parameters can be configured for FX Spot: Market Card, Metals: Market Card, and NDF Market Card:

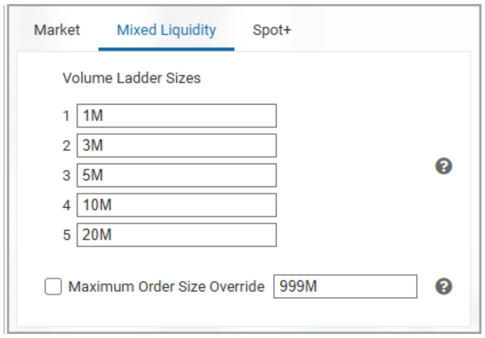
- Best Dealable Trade Size (inner price)
- Outer Price (regular price)
- IOC (Immediate or Cancel) or FOK (Fill Or Kill) can be set as the default BUY/SELL order type for all pairs on EBS Market



FX Spot: Mixed Liquidity Card Options

The following parameters can be configured for FX Spot: Mixed Liquidity and Metals: Mixed Liquidity cards:

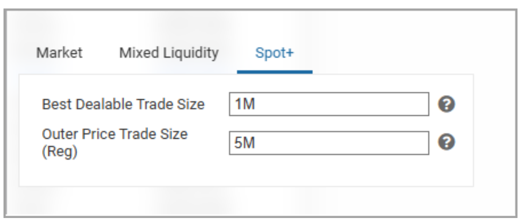
- Volume Ladder Sizes
- Use the Maximum Order Size Override to set a separate maximum order size for the Mixed Liquidity card. This allows for a higher maximum order size when trading via Market Cards while preventing large sized trades via EBS Direct.



FX Spot +

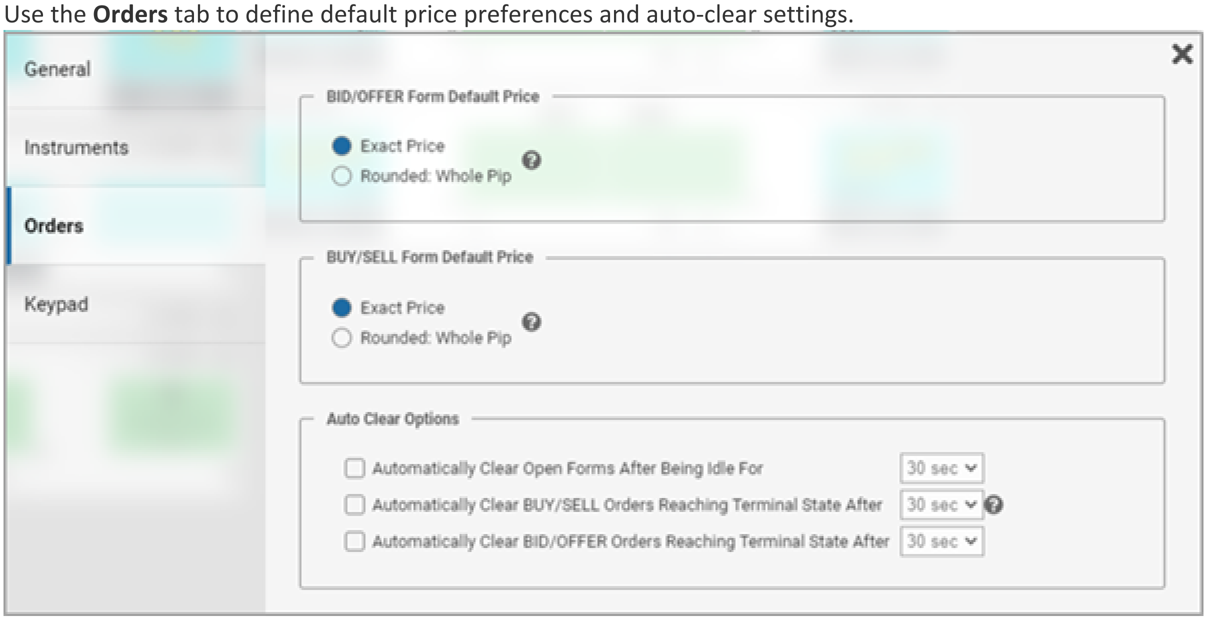
The following parameters can be configured for FX Spot + currency pairs - EUR/USD, GBP/USD, AUD/USD, NZD/USD, USD/JPY, USD/CAD, USD/CHF, and USD/MXN:

- Best Dealable Trade Size
- Outer Price Trade Size (reg)



Orders Preferences

Use the **Orders** tab to define default price preferences and auto-clear settings.



BID/OFFER Form Default Price

Configure the default price that pre-populates the BID/OFFER Request Form by selecting either **Exact Price (Default)** or **Rounded Price: Whole Pip.**

When a BID/OFFER Request Form is triggered and the Exact Price is selected, the form pre-populates with the exact ToB price value.

- BID Form pre-populates with ToB BID price
- OFFER Form pre-populates with ToB OFFER price

When the Rounded Price is selected, the form pre-populate with the ToB price value rounded to the nearest whole pip.

- BID Form- Round down
- OFFER Form - Round up

Note: Half/Tenth pip pairs will be effected. Whole pip (Full Pip) pairs will not be effected.

BUY/SELL Form Default Price

Configure the default price that pre-populates the BUY/SELL Request Form by selecting either the **Exact Price (Default)** or **Rounded: Whole Pip.**

When aggressing a price the BUY/SELL Request Form is triggered, and the price field pre-populates with a value based on the selected option.

- Exact Price selected: The form pre-populates with the exact price value (as captured)
- Rounded Price selected: The form pre-populate with the rounded price value (rounded to the nearest whole pip):
  - SELL Form- Round down
  - BUY Form - Round up

Auto Clear Options

Configure the automatic removal of idle open Order forms and Terminal state Order-Views from the Orders Card.

When an Auto Clear option is enabled (checked), the dropdown menu becomes enabled and you can configure the time to trigger an automatic element removal.

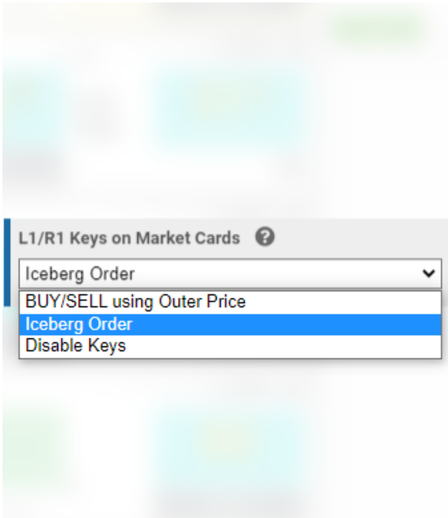
Enable/disable the following options:

- Automatically Clear Open Forms After Being Idle For (time)
- Automatically Clear BUY/SELL Orders Reaching Terminal State After (time)
- Automatically Clear BID/OFFER Orders Reaching Terminal State After (time)

Note: For the enabled option, also select a time setting.

Keypad Preferences

The **<L1> / <R1>** keypad keys, when used with Market Cards (FX Spot: Market Card, Metals Market Card, or NDF Market Card), can be configured to open an Iceberg order form or Bid/Offer order form, or to launch Buy/Sell order form using Outside (Regular) prices and a default amount.



Note: Configure Default Amount for Outside (Regular) prices from Instrument > FX Spot Market settings. This key can also be disabled entirely when focus is on the Market Card.

Using the EBS Keypad

Navigate the Workspace, move between input fields and other elements within each card, send trades, edit orders, and modify settings using the EBS Keypad, a keyboard, or a mouse or *any combination of the three.*

The EBS Keypad is the fastest and easiest way to navigate the Workspace and trade once users set up their Workspace layout and become familiar with working with Cards.

Enabling shortcuts for the Keypad make execution of trades even easier.

To begin using the EBS Keypad

- Attach the Keypad to the computer by plugging in the USB cord.

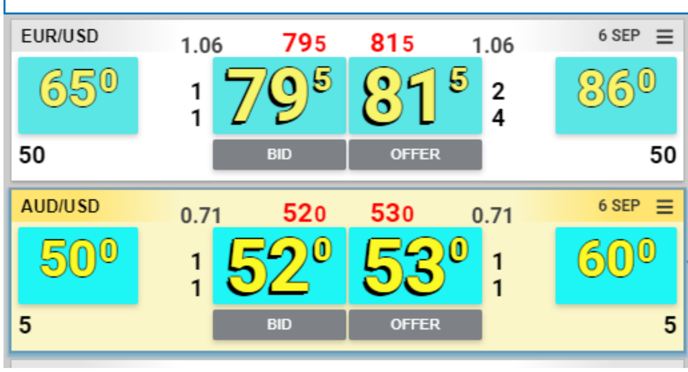
NOTE: The EBS Keypad comes with additional keycap substitutions for the L1 and R1 keys (ICE BID / L1, ICE OFFER / L2, BUY REG / R1, SELL REG / L1) and L2 and R2 keys (page up, page down). Use the wire pull tool to replace key caps more easily.

"Focus" in the Workspace

Whenever a Card, field, or option is selected or highlighted using the Keypad (or mouse or keyboard), that element said to be "**in focus**." Any actions that are taken apply to editable attributes of the in-focus element.

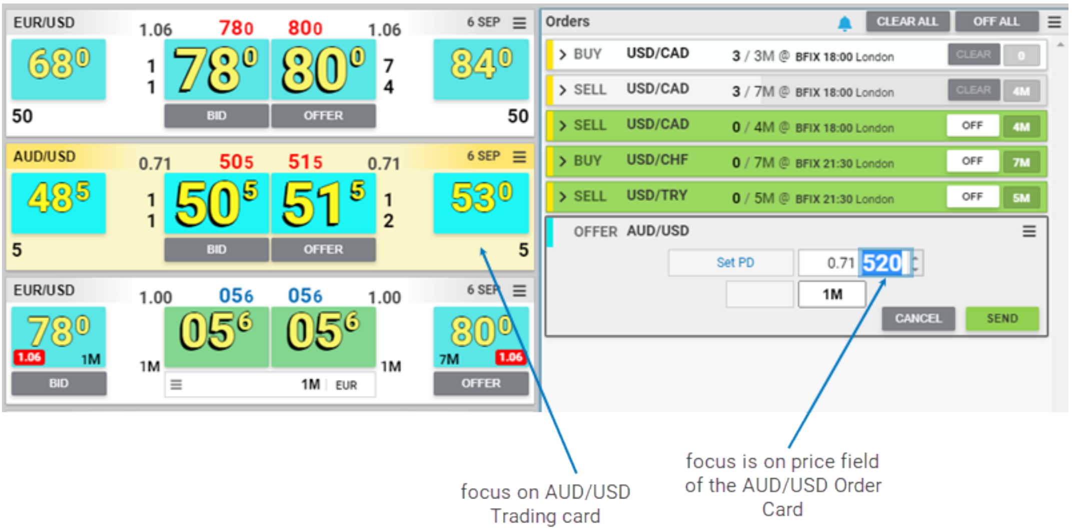
A Trading Card is in focus when the background color of the card is yellow and there is an outline around the card. Note that a Trading card can also be Active but not in Focus. A Trading card is active when its highlighted in yellow even when the Focus is on a different non-trading card. In the example below, AUD/USD trading card is in focus. Using the Keypad keys, **<BUY> / <SELL> / <BID> / <OFFER>,** initiate a trade for that pair.

Note: The Keypad trading keys (BUY/SELL/BID/OFFER) work on an active Trading card regardless of where a user focuses within the application.



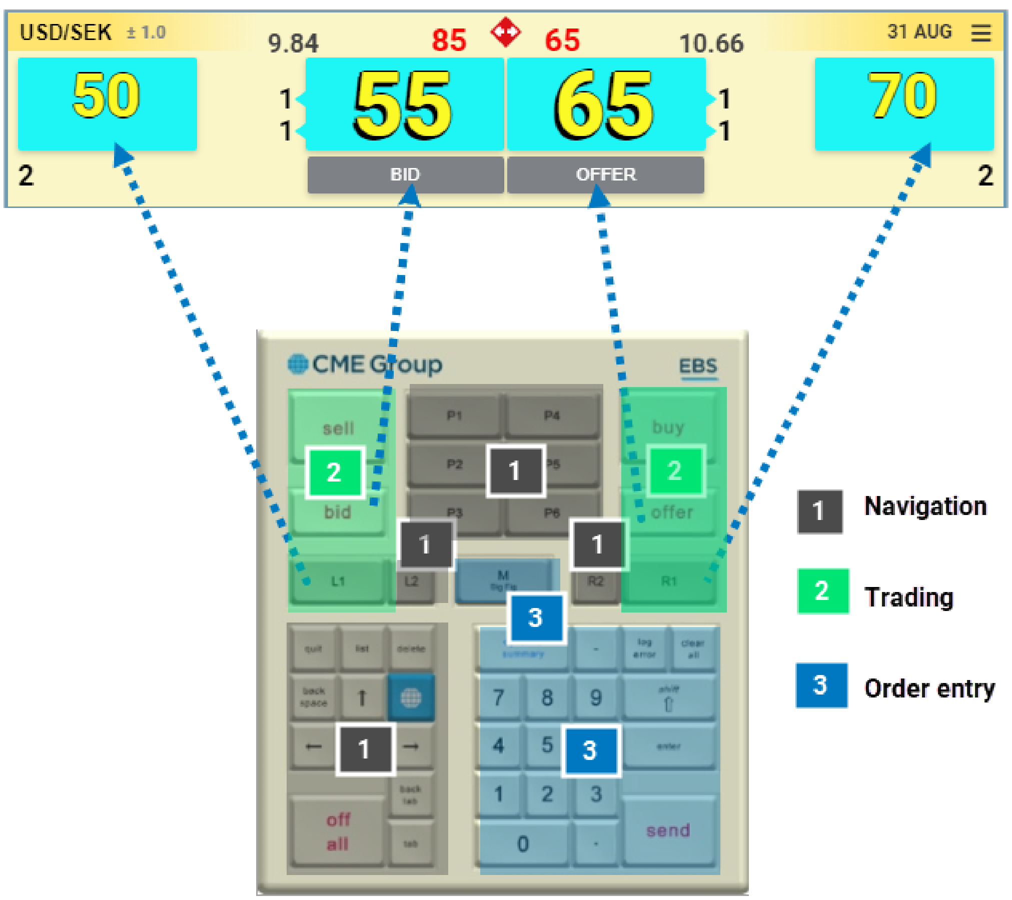
trading card in focus, as indicated by yellow card background and blue line around card border

Furthermore, any elements within a card that are in focus can be edited. In the example below, the price of the AUD/USD Order Card is in focus, so the price can be edited with the **<up> / <down>** arrows or **<numeric>** Keypad keys, etc. Simultaneously, since the AUD/USD is also in focus, any presses of the Keypad trading keys, **<BUY> / <SELL> / <BID> / <OFFER>,** will initiate another order for AUD/USD.



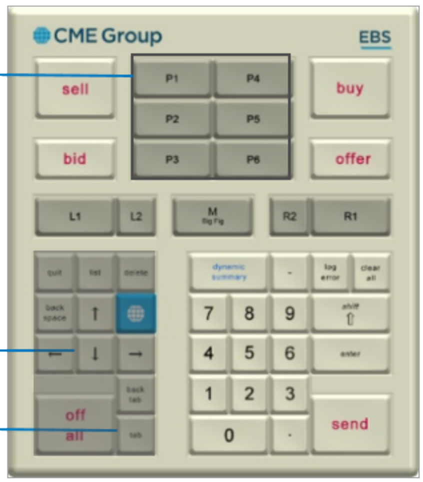
Keypad Navigation Keys

The Keypad keys fall in to 3 broad categories: **Navigation, Trading,** and **Editing Values.** They have similar functions when used to move through the Workspace and navigate the inside of Cards.



Navigate the Workspace and Cards using the following Keypad keys.

Use **tab**, **up/down arrows**, **list**, **quit**, and **P1-P6** keys to move between screen elements



tab, back tab keys

Use the **<tab>** key to navigate the Workspace from top to bottom and left to right **between** each of the cards and elements, as well as **within** each configurable option of each card type and container (e.g. Orders, eFix). Use the **<back tab>** key to move through the Workspace and cards in reverse.

Starting from the top of Workspace, each successive press of the **tab** key moves the focus from **card > card options > next card.**

Within menus **<tab> / <back tab>** key scrolls options.

Within each card type or container, **<tab>** key moves between editable options.

up/down, left/right arrows

Use the **<up> / <down>** arrow keys to move **between** cards in the Workspace when the focus is on a Card.

When the focus is on a menu, use the **<up> /<down>** arrow keys to scroll options.

When the focus is within the price and quantity fields, use the **<up> / <down>** arrow keys to incrementally increase or decrease amounts.

list key

Use the **<list>** key to open dropdowns to when focus is on a menu field.

enter key

Use the **<enter>** key to make selections within menus.

When focus is an open Order Form, press **<enter> twice** to send order to market.

CME Group logo key

Use the **<CME Group logo>** key to open the side menu with User Settings.

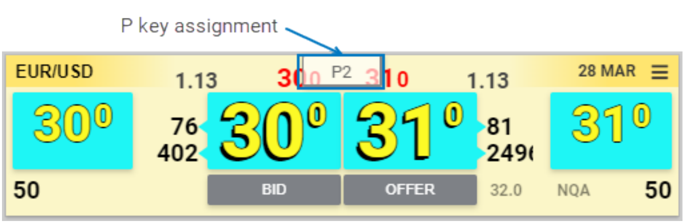
quit key

Use the **<quit>** key to cancel an order when focus is on an Order form or active order.

P1-P6 keys

Assign **<P1-P6>** keys to any Workspace elements for quicker access by going to the menu of the individual card and selecting a **<P>** key assignment.

The P key assignments flash briefly after pressing a P key.

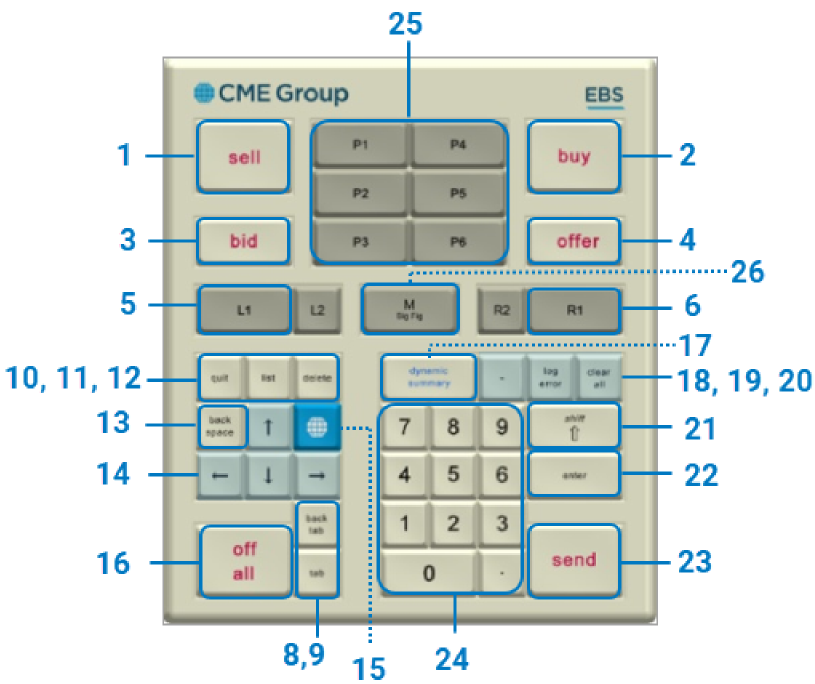


To navigate the Workspace using the EBS Keypad:

- Multiple elements can be assigned to the same P key.
- **<P4>** is the default to navigate within an order card.
- Some Cards which contain multiple rows inside the card can be navigated within the Card by pressing **<Enter>** key to enter the Card and **<Esc>** key to exit the card back to Workspace level.
- Any additional presses of the same P key shifts the focus to the next P key assignment regardless of element state and mode (Expanded/Collapsed/Active/Terminal).

Note: Shortcuts for trading functions can be enabled for the keypad and mouse to make execution of trades even easier.

Keypad Keys and Shortcuts



	EBS Keypad	Function	Keyboard
TRADING			
1	**<sell>**	sends a Sell Request aggressive order (IOC or FOK) for the Best Dealable Price; can be configured to open editable Sell Request form prior to sending in User Preferences	
2	**<buy>**	sends a Buy Request aggressive order (IOC or FOK) for the Best Dealable Price; can be configured to open editable Buy Request Form prior to sending in User Preferences	
3	**<bid>**	opens a bid, passive, editable order form for the EBS Market EBS Dealabale price	
4	**<offer>**	opens an offer, passive editable order form for the EBS Market price	
5	**<L1>**	sends a Sell Request, an aggressive order (IOC or FOK) for the Regular (outside) Price on a Market orders card; on Mixed liquidity card initiates Sell IOC or FOK order for outer price tile; can be configured to open Iceberg orders BID forms	

	EBS Keypad	Function	Keyboard
6	**<R1>**	sends a Buy Request, an aggressive order (IOC or FOK) for Regular (outside) Price on a Market card; on Mixed Liquidity card initiates Sell IOC or FOK order for outer price tile; can be configured to open Iceberg orders OFFER forms from Market Cards	
NAVIGATION			
8	**<tab>**	moves forward in Workspace between cards and between elements within the cards; ex. in Order Forms: pips > quantity > Set PD > SEND > CANCEL)	Tab
9	**<back tab>**	moves in reverse in Workspace between cards and elements of within card, ex. Order Forms: Big Fig > CANCEL > SEND > Set PD > quantity	Shift + Tab
10	**<quit>**	exits lists; when focus is on open order card removes card before submitting	esc
11	**<list>**	for an order card in focus, opens menu; for fields within cards with menus in focus, opens the list of options	
12	**<delete>**	removes field entry	Delete
13	**<back space>**	deletes the character before the cursor in editable field	Backspace
14	**<up>/<down> arrows**	navigates between cards and between rows within the cards containing grids, within numerical field up/down arrows increments/decrements; on menu moves thru list items	up/down arrows
15	**<CME Group logo>**	opens/closes side panel options	Tab
ORDER ENTRY			
16	**off all**	cancels all active orders in the market except for pinned or Resting orders	
17	**dynamic summary**	Initiates or Stops Dynamic Trade Summary option within Traders Deals Card	
18	**<->** (minus sign)	use with **shift** key to collapse card in focus	
19	**<log error>**	collects action logs for Customer Support	
20	**<clear all>**	removes all terminal order views (filled, canceled, or expired) from Orders Card	
21	**<shift>**		
22	**<enter>**	selects the option in focus	Enter
23	**<send>**	for an order card in focus, sends an order for fulfillment	Enter, Enter (press Enter twice)

	EBS Keypad	Function	Keyboard
24	**<numeric>** keys	for numeric entries in amount and price fields	
25	**<P1-P6>** keys	configurable keys for quick access to work-space elements	
26	**<M big fig>**	brings focus to the big figure in order form	

Keypad Shortcuts

<shift>+ **<off all>**	super off all
<shift> , **<->** (minus sign)	when focus on Card, collapses Card
<shift>, then **<list>**	pins Active order card in focus and minimizes card, protects from **off all** function
<shift> + **<dynamic summary>**	when focus is on BID/OFFER form changes order type to Iceberg; when focus in on BUY/SELL form changes order type to FOK
<shift> + **<P1-P6>**	moves to corresponding Workspace (when Multiple Workspaces enabled in General Settings)

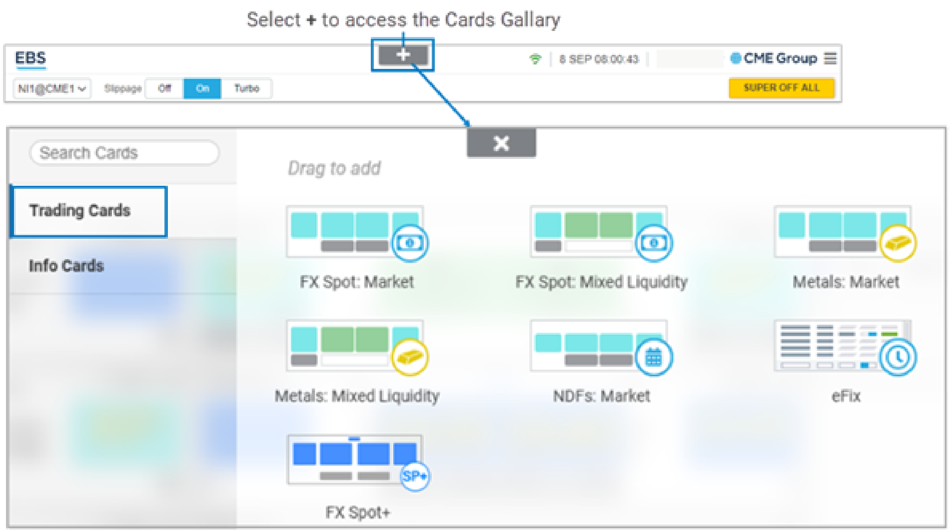
Using Cards

In the Workspace users set up elements known as Cards. Add cards to the Workspace from the Cards Gallery.

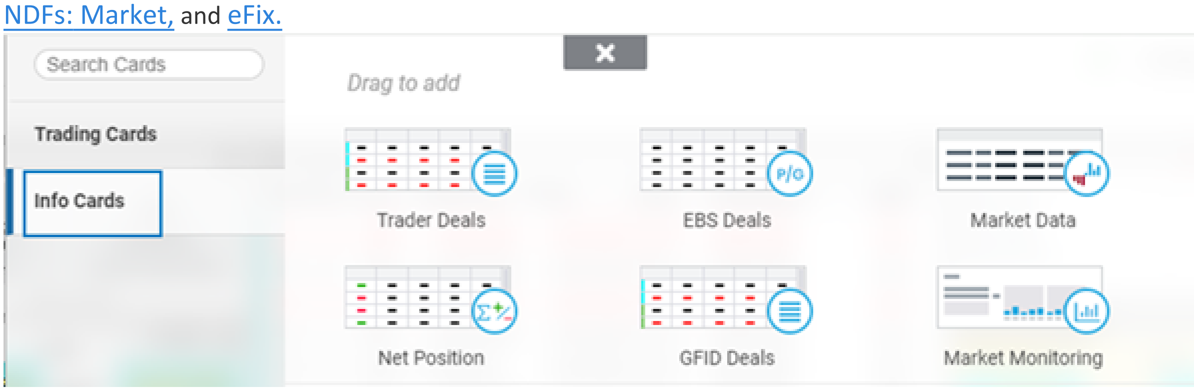
Note: Enter keywords in the Search Cards fields to filter for cards with specific instrument, trading attribute, etc.

To add a Card to the Workspace

1. Click the **+** icon at the top of the Workspace.
2. Select the Trading Cards or Info Cards tab.
3. Drag the icon of the desired card onto the Workspace.



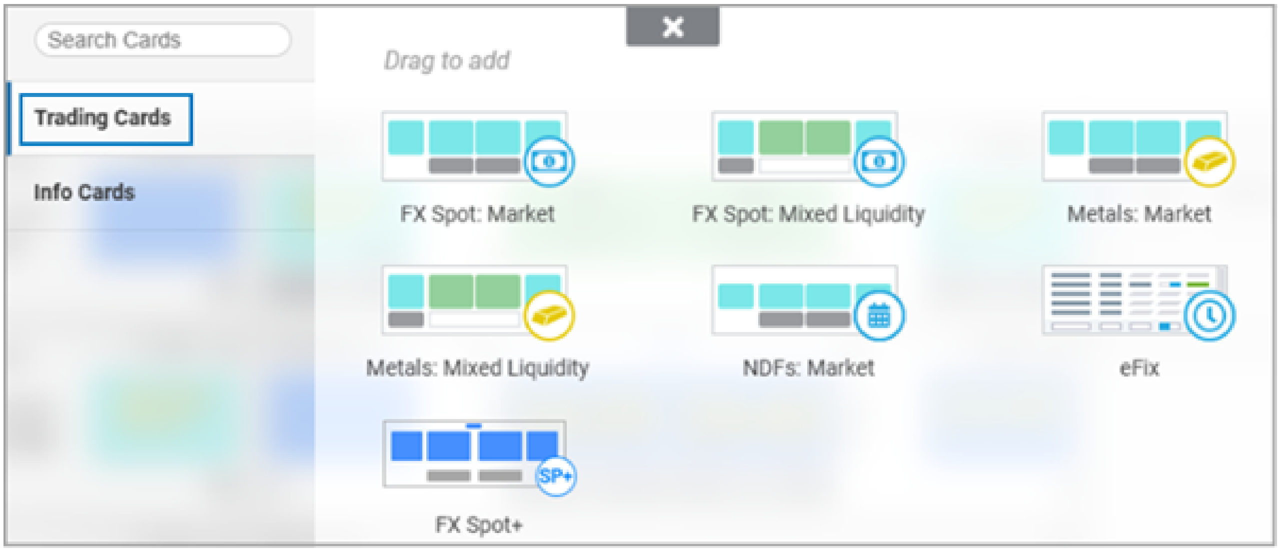
Trading Cards include: FX Spot: Market, FX Spot +, FX Spot: Mixed Liquidity, Metals: Market, Metals: Mixed Liquidity, NDFs: Market, and eFix.



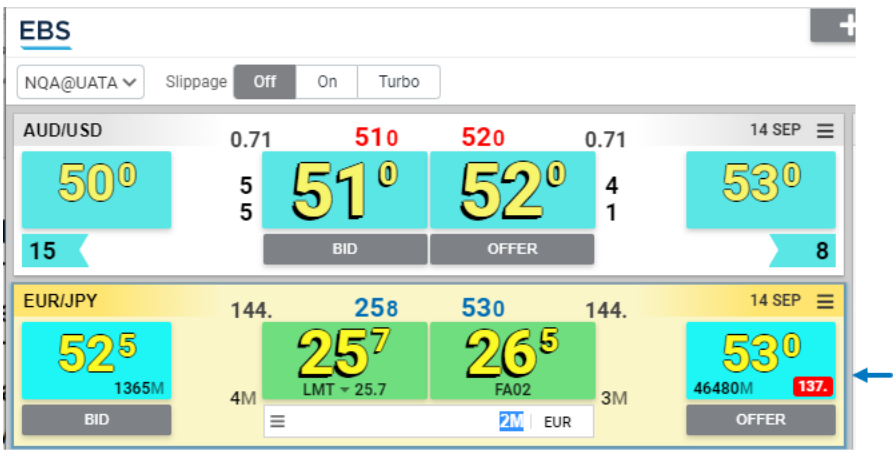
Info Cards include Trader Deals, EBS Deals, Market Data, Net Position, GFID Deals, and Market Monitoring.

Using Trading Cards

Use Trading Cards to submit and execute orders, as well as view market depth, best price, inventory and other order entry parameters. See Using Cards for information on adding cards to the Workspace.



Selecting a Trading card makes it the "active" card. The active price card displays with a yellow background and is the trading card currently selected for trading.



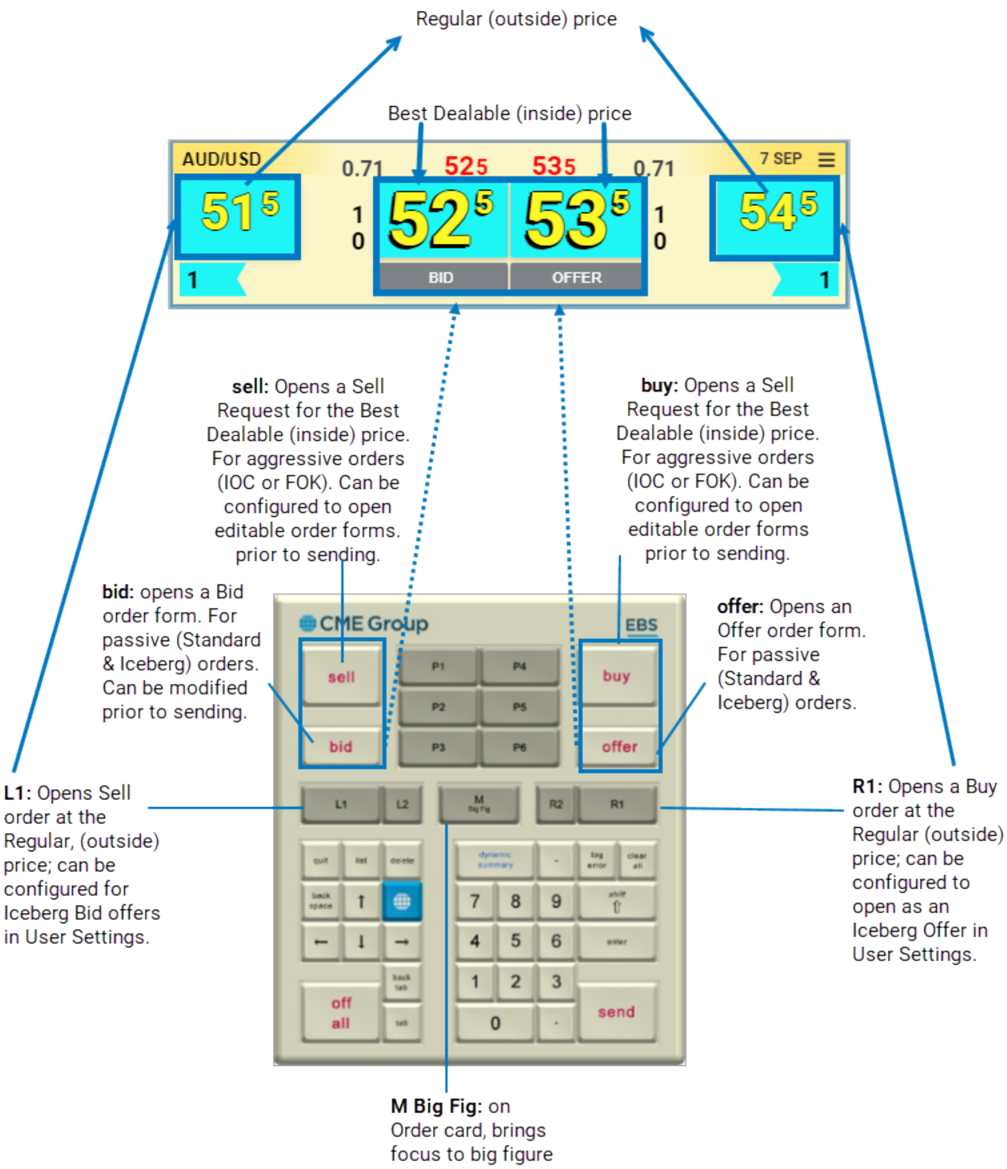
Active trading card indicated by yellow background

The following rules apply to active Trading cards:

- The Keypad trading keys (BUY/SELL/BID/OFFER) work on the active card regardless of where a user focuses within the application
- A Trading card can remain active even when the focus is moved to an Info Card
- When focus is moved to another Trading Card it shifts the Active state to that Trading Card

Use the **<bid>, <offer>, <sell>, <buy>,** and **<L1> / <R1>** keypad keys to trigger order forms and requests for the trading card in focus.

- **<bid> / <offer>:** When applicable opens a BID/OFFER form
- **<sell> / <buy>:** Triggers either a BUY/SELL Request or a BUY/SELL Order form depending on the User Preferences set. Can be configured to open a with keypad and mouse, see Setting User Preferences for details.



Refer to the instrument section for details on each type card and their configurations:

- **EBS Market CLOB Cards**
  - FX Spot: Market Card
  - FX Spot + Card
  - Metals Market Card
  - NDF Market Card
- **Mixed Liquidity Cards**
  - FX Spot: Mixed Liquidity Card
  - Metals: MIxed Liquidity Card
- **eFix Card**

FX Spot Market Card

The FX Spot Market Card, Metals Market Card, and NDF Market Card are optimized for professional foreign exchange spot trading on the EBS Market Central Limit Order Book. The FX Spot Market Card provides visibility of EBS Best Dealable price and inventory, as well as an indication of market depth. Dealable prices are based on mutual credit between a trader's firm and other counterparties.

Displayed prices may be from multiple counterparties, but the number of counterparties participating in a price is not displayed. The active Price panel has a yellow background and using trading keys of EBS Keypad will result in trading action from Active panel (see Orders section). A white background indicates that the panel is not active.

EBS Best Price

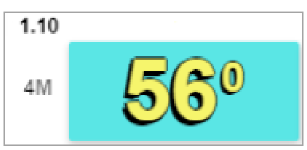
The EBS Best Price, shown in red on the Price Card header represents the single best price in the EBS Market for a given instrument pair, regardless of credit. The EBS Best Price is for display purposes only.

Price Tiles

Use price tiles to view Dealable prices and trade on them. Prices are calculated and presented based on the mutual credit with other counterparties and the card configuration.

Each price card has four spot price buttons. For each side of the market (Bid and Offer):

- Inner prices display Best Dealable Prices
- Outer Price display limit price for:
  - specific Amount as configured by the user
  - specific price range away from Dealable Best as configured by the user (inventory indicator underneath will display available amount at that range)



Best Dealable Prices

The spot price contains the following elements:

The Big Figure represents the first few digits in the price of an instrument based on historical market conventions

- For Bid - displayed in smaller font next to the upper left corner of the inner price tiles
- For Offer - displayed in smaller font next to the upper right corner of the inner price tiles

Pips:

- Pips represent more granular portion of the price based on historical market conventions for each instrument. Some instrument may have fractional pips at the end: e.g. half-pip, quarter of a pip, tenth of a pip.
- Pips display in an outlined yellow digits with shadow
- Traders own price displays in flat white digits (no shadow)
- Fractional pip (when it exists) displays in a small font located on the top right corner of the button

> **Note:** Fractional pips may be hidden from display by selecting the Rounded: Whole Pip option in User Preferences > Market Card – Price Display Options.

Top of Book Inventory

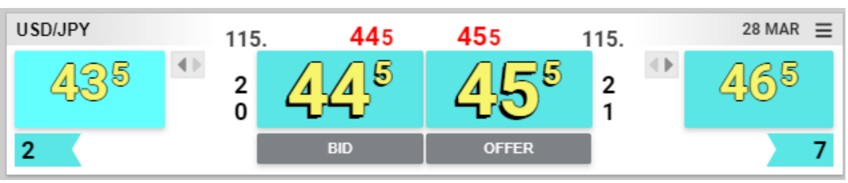
Top of Book inventory indicators displayed to the sides of each of price tiles represent inventory expressed in millions available at the best dealable price. Display of the 2nd level can be disabled from User Settings.

Exact or Cumulative Amount

ToB Inventory displays as either an Exact or Cumulative amount.

Exact Amount

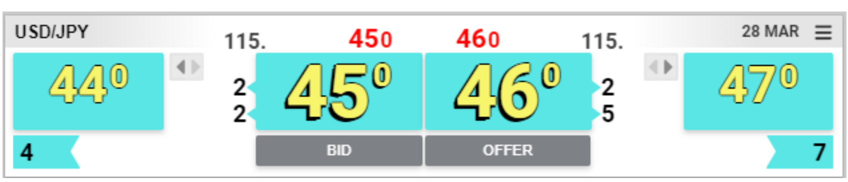
- Displays the liquidity available for at the Best Dealable price level
- When enabled 2nd inventory level displayed below primary ToB inventory indicator displays liquidity at the price level directly adjusted to top of book. 2nd level inventory value can be 0 if no liquidity exists at that price level.
- Lower Liquidity value displays the exact liquidity available for a price level which is 1 min increment away (pairs trading in halves - a half pip away, pairs trading in whole pip - 1 pip away)



Cumulative Amount

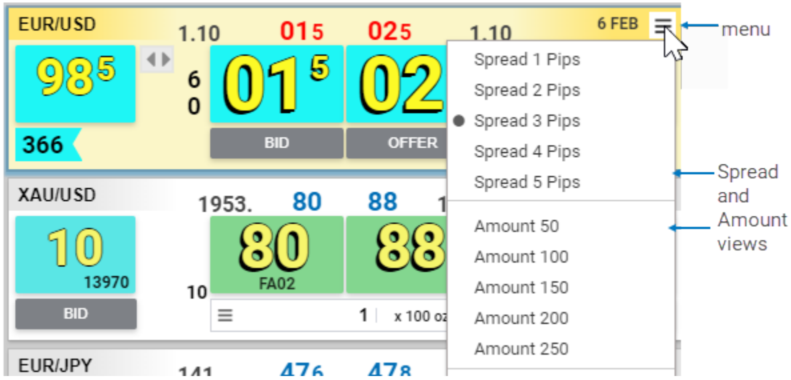
Cumulative Amount Inventory Display can be enabled for pairs which have fractional pips (halfs, tens). Visual indication for the "Cumulative Amount" configuration is visible: blue triangles pointing out towards each value.

- displays the aggregated liquidity from ToB price level the next whole pip price
- When enabled in Cumulative Amount mode 2nd inventory level displayed below primary ToB inventory indicator displays liquidity from nearest full pip to the top of book price to the next full pip.



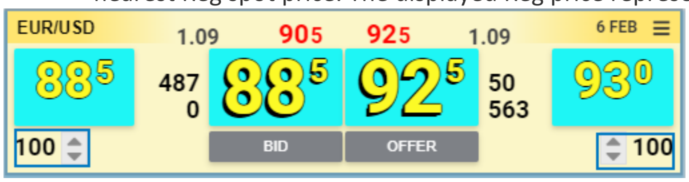
Outside Prices

Use the menu button on the market card to change the views.



Amount View

- Select an Amount View from the menu.
- Hover over the Active price card to display the Amount spinners. Use the spinners to change the Amount views for the nearest Reg spot price. The displayed Reg price represents the price level in which the Amount can be satisfied.



Spread View

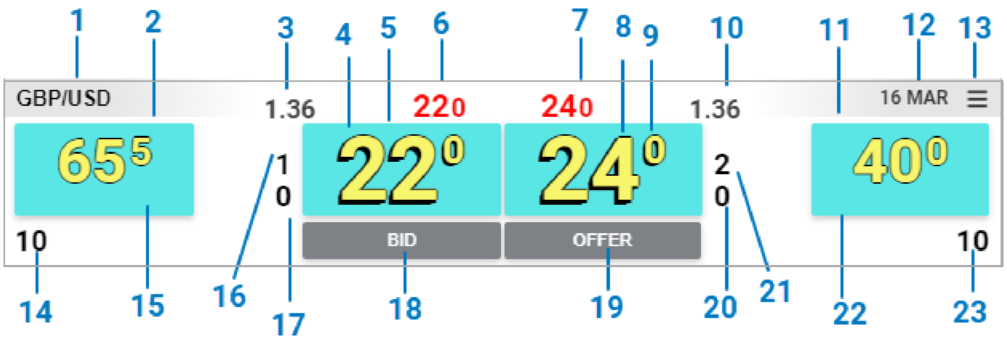
- Select a Spread View from the menu.
- Hover over the Active price card to display the Spread spinners. Use the spinners to change the spread view for the nearest Reg spot price. The displayed inventory represents the accumulated available amount from ToB price.

Value Date

Located on the left side of the menu button, the Value Date identifies the settlement date associated with today's trading for the Spot currency pair.

> **Note:** To enable, manage, or disable Market Card Slippage settings, refer to Slippage Switch and Slippage Preferences. If trading NDF, Metals, and eFix refer to NDF Market Card, Metals Market Card, and eFix Card.

The FX Spot Market Card contains the following elements:



Number	Description
1	Currency Pairs selection
2	Reg Bid spot price button (outside Bid button)
3	Best Dealable Bid spot price label big fig
4	Best Dealable Bid spot price button (inside Bid button)
5	Best Dealable Bid spot price label pips
6	Market ToB Bid spot price label pips
7	Market ToB Offer spot price label pips
8	Best Dealable Offer spot price label pips
9	Best Dealable Offer spot price button (inside Offer button)
10	Best Dealable Offer spot price label big fig
11	Reg Offer spot price button (outside spot button)
12	Value date label
13	Menu button
14	Amount View Bid size indicator
15	Reg Bid spot price label pips
16	Aggregated Bid Liquidity for ToB to next whole pip
17	Aggregated Bid Liquidity for 1 pip away from ToB next whole pip
18	BID button – triggers a BID form
19	OFFER button – triggers an OFFER form
20	Aggregated Offer Liquidity for 1 pip away from ToB next whole pip
21	Aggregated Offer Liquidity for ToB to next whole pip
22	Reg Offer spot price label pips
23	Amount View Offer size indicator

FX Spot + Card

The FX Spot+ Card, FX Spot Market Card, Metals Market Card, and NDF Market Card are optimized for professional foreign exchange spot trading on the EBS Market Central Limit Order Book. CME FX Spot Plus (CME FX Spot+) a new tradable spot FX instrument, leveraging CME FX Link liquidity to bring together OTC spot FX and FX futures.

CME FX Spot+ enables spot FX market participants to tap into CME FX futures liquidity through an open, transparent central limit order book while giving FX futures users broader access to OTC liquidity. This unique liquidity connection is made possible by implied matching through CME FX Link, a liquid, tradable spread between OTC spot FX and FX futures.

The FX Spot+ products are available for the following currency pairs: EUR/USD, GBP/USD, AUD/USD, NZD/USD, USD/JPY, USD/CAD, USD/CHF, and USD/MXN

Displayed prices may be from multiple counterparties, but the number of counterparties participating in a price is not displayed. The active Price panel has a yellow background and using trading keys of EBS Keypad will result in trading action from Active panel (see Orders section). A white background indicates that the panel is not active.

Note: FXS+ is available for trading only while CME Futures market for the related instrument is also open. While futures markets remain closed FXS+ cannot be submitted and no prices will be visible. A "Market Closed" message will be displayed on the FXS+ Price Card.

Price Tiles

Use price tiles to view Dealable prices and trade on them.

Each price card has four spot price buttons. For each side of the market (Bid and Offer):

- Inner prices display Best Dealable Prices
- Outer Price display limit price for:
  - specific Amount as configured by the user
  - specific price range away from Dealable Best as configured by the user (inventory indicator underneath will display available amount at that range)

Best Dealable Prices

The spot price contains the following elements:

The Big Figure represents the first few digits in the price of an instrument based on historical market conventions

- For Bid - displayed in smaller font next to the upper left corner of the inner price tiles
- For Offer - displayed in smaller font next to the upper right corner of the inner price tiles

Pips:

- Pips represent more granular portion of the price based on historical market conventions for each instrument. Some instrument may have fractional pips at the end: e.g. half-pip, quarter of a pip, tenth of a pip.
- Pips display in an outlined yellow digits with shadow
- Traders own price displays in flat white digits (no shadow)
- Fractional pip (when it exists) displays in a small font located on the top right corner of the button

> **Note:** Fractional pips may be hidden from display by selecting the Rounded: Whole Pip option in User Preferences > Market Card – Price Display Options.

Top of Book Inventory

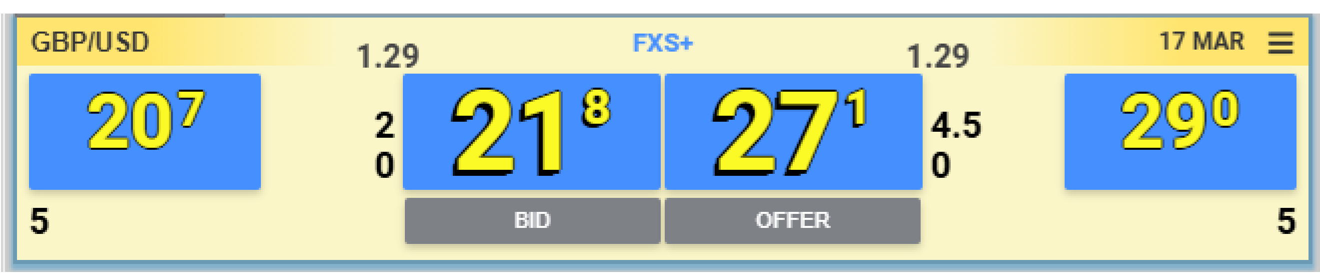
Top of Book inventory indicators displayed to the sides of each of price tiles represent inventory expressed in millions available at the best dealable price. Display of the 2nd level can be disabled from User Settings.

Exact or Cumulative Amount

ToB Inventory displays as either an Exact or Cumulative amount.

Exact Amount

- Displays the liquidity available for at the Best Dealable price level
- When enabled 2nd inventory level displayed below primary ToB inventory indicator displays liquidity at the price level directly adjusted to top of book. 2nd level inventory value can be 0 if no liquidity exists at that price level.
- Lower Liquidity value displays the exact liquidity available for a price level which is 1 min increment away (pairs trading in halves - a half pip away, pairs trading in whole pip - 1 pip away)



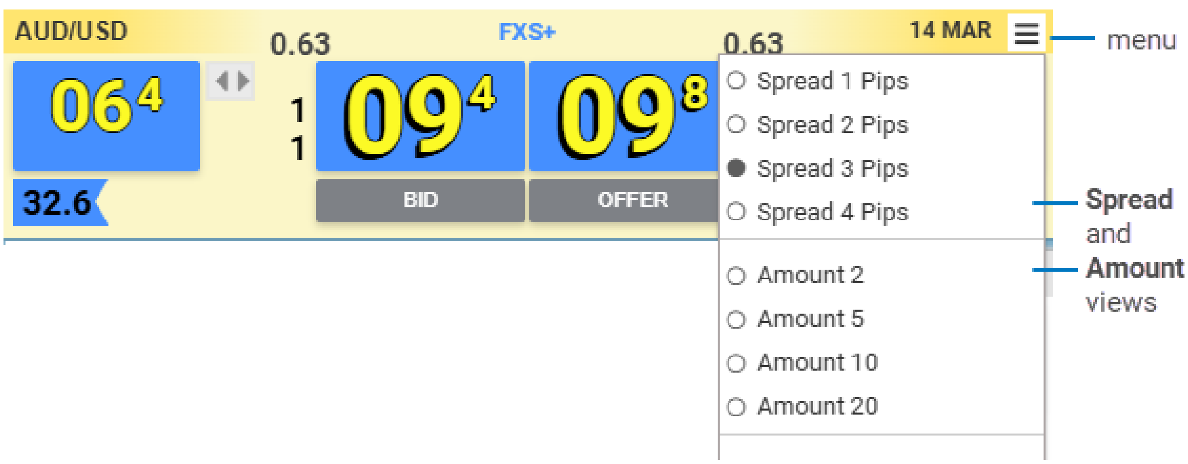
Cumulative Amount

Cumulative Amount Inventory Display can be enabled for pairs which have fractional pips (halfs, tens). Visual indication for the "Cumulative Amount" configuration is visible: blue triangles pointing out towards each value.

- displays the aggregated liquidity from ToB price level the next whole pip price
- When enabled in Cumulative Amount mode 2nd inventory level displayed below primary ToB inventory indicator displays liquidity from nearest full pip to the top of book price to the next full pip.

Outside Prices

Use the menu button on the market card to change the views.



Amount View

- Select an Amount View from the menu.
- Hover over the Active price card to display the Amount spinners. Use the spinners to change the Amount views for the nearest Reg spot price. The displayed Reg price represents the price level in which the Amount can be satisfied.

Spread View

- Select a Spread View from the menu.
- Hover over the Active price card to display the Spread spinners. Use the spinners to change the spread view for the nearest Reg spot price. The displayed inventory represents the accumulated available amount from ToB price.

Value Date

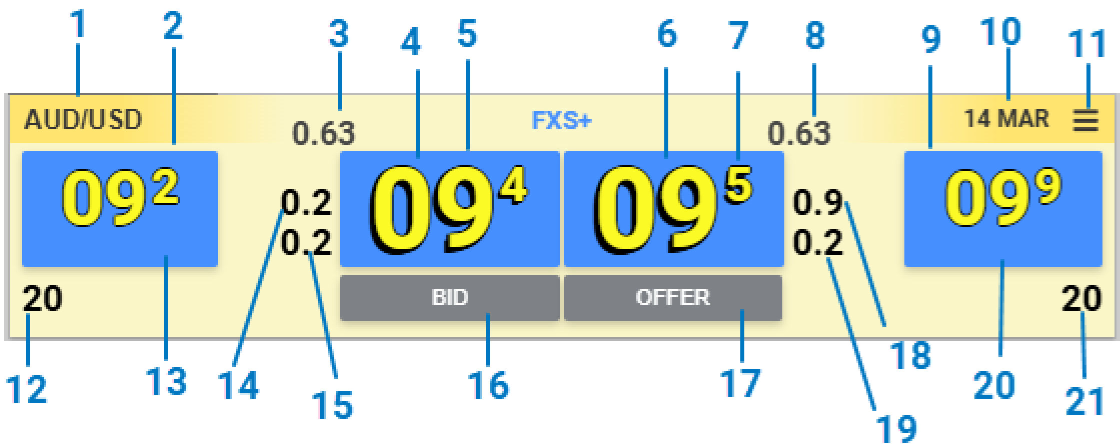
Located on the left side of the menu button, the Value Date identifies the settlement date associated with today's trading for the currency pair.

Note: To enable, manage, or disable Market Card Slippage settings, refer to Slippage Switch and Slippage Preferences. If trading NDF, Metals, and eFix refer to NDF Market Card, Metals Market Card, and eFix Card.

Inverted Pair Indicator

A circular arrow next to pair signifies that this pair is inverted in futures markets (i.e. MXN/USD in Futures, but USD/MXN in SPOT). For such pairs fill amount may potentially be down to dollar value as a result of converting futures prices and orders into FX Spot prices and orders.

The FX Spot + card contains the following elements:



Number	Description
1	Currency Pairs selection
2	Reg Bid spot price button (outside Bid button)
3	Best Dealable Bid spot price label big fig
4	Best Dealable Bid spot price button (inside Bid button)
5	Best Dealable Bid spot price label pips
6	Best Dealable Offer spot price label pips
7	Best Dealable Offer spot price button (inside Offer button)
8	Best Dealable Offer spot price label big fig
9	Reg Offer spot price button (outside spot button)
10	Value date label
11	Menu button
12	Amount View Bid size indicator
13	Reg Bid spot price label pips
14	Aggregated Bid Liquidity for ToB to next whole pip
15	Aggregated Bid Liquidity for 1 pip away from ToB next whole pip
16	BID button – triggers a BID form
17	OFFER button – triggers an OFFER form
18	Aggregated Offer Liquidity for 1 pip away from ToB next whole pip
19	Aggregated Offer Liquidity for ToB to next whole pip
20	Reg Offer spot price label pips
21	Amount View Offer size indicator

Metals Market Card

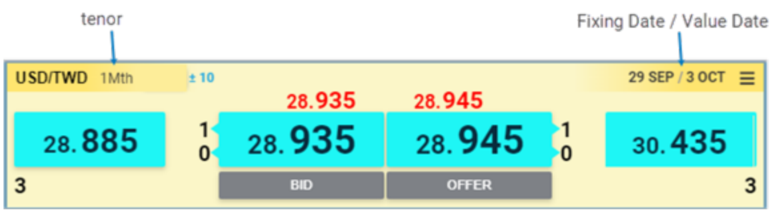
The Metals Market Card is optimized for Precious Metals trading on the EBS Market Central Limit Order Book and provides visibility of EBS Best Dealable price and inventory, as well as indication of market depth.

Metals Market Card

Note: Metals Market Card functionality mirrors that of the FX Spot Market Card.

NDF Market Card

The NDF Market Card is optimized for NDF trading on the EBS Market Central Limit Order Book. The NDF Market Card provides visibility of EBS Best Dealable price and inventory, as well as an indication of market depth.



NDF Market Card

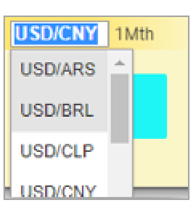
Note: NDF Market Card functionality mirrors that of the FX Spot Market Card.

The layout of the NDF Market Card is similar to the FX Spot Market Card with the addition of the Tenor display and dropdown list.

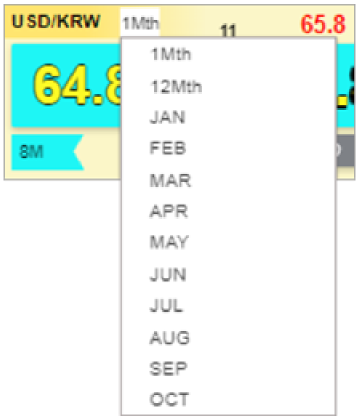
The standard tenors supported for a selected instrument can include:

1Mth	3Mth	6Mth
12Mth	JAN	FEB
MAR	APR	MAY
JUN	JUL	AUG
SEP	OCT	NOV
DEC		

Select NDF Currency Pair and Tenor from separate lists.

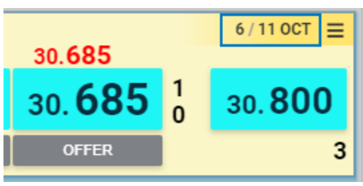


The Tenor dropdown displays a list of all available tenors for the pairs.



Fixing Date

The Fixing Date is the date at which the difference between the prevailing spot rate and the agreed-upon exchange rate is calculated. This date needs to be a non-holiday date for the local currency. The fixing date is retrieved from the calendar service. The dates on the basic NDF card display as follows: <Fixing Date> / <Value Date>. If the fixing date occurs on a different month than the value date, then the day date of the fixing date displays, followed by the day date and month of the value-date.

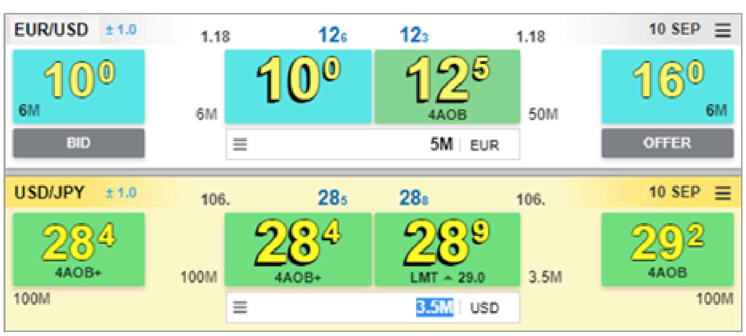


FX Spot Mixed Liquidity Card

The FX Spot Mixed Liquidity Card is optimized for price taking in foreign exchange spot on a variety of liquidity pools. Depending on preferences, view and execute Limit Orders for specified amounts from either preferred Liquidity Providers on EBS Direct or on EBS Market.

Note: Users add FX Spot Mixed Liquidity cards from Cards Gallery.

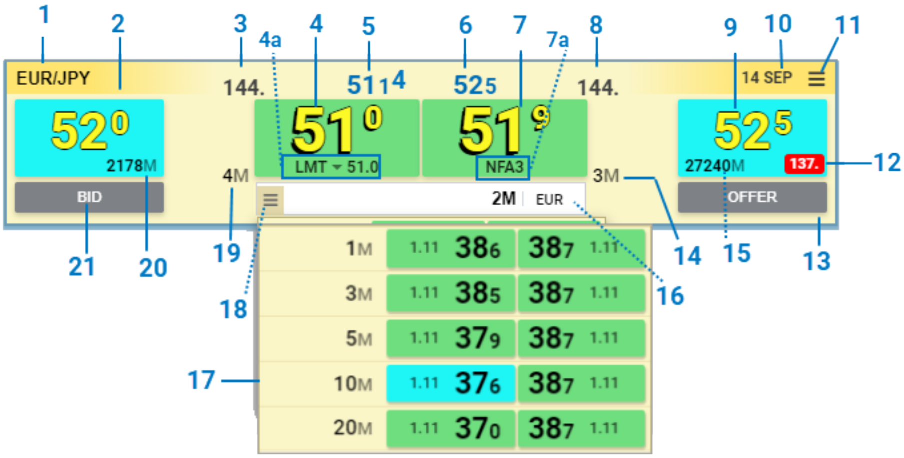
Mixed Liquidity Cards



Displaying a mixture of EBS Market and EBS Direct Prices

Note: The size entered in the bottom of the card drives the price display.

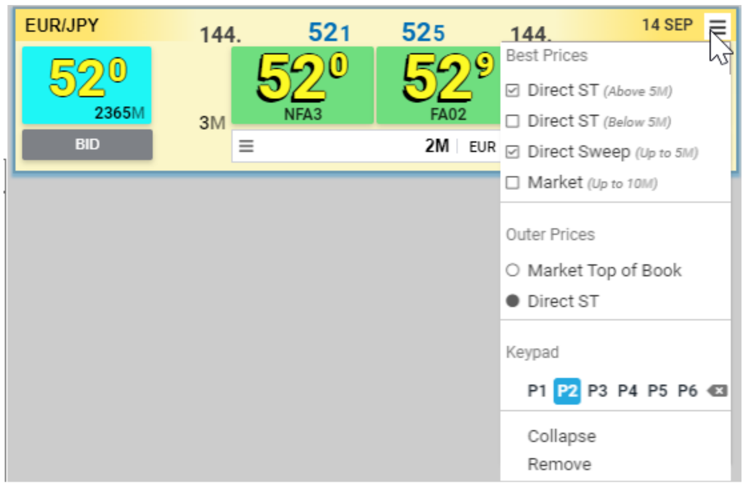
The Mixed Liquidity Card contains the following elements:



Number	Description
1	Instrument Pair
2	Outer Price tile (Sell). Displays price as Pips
3	Inner tile (Sell) Big Figure
4	Inner price tile (Sell). Price displayed as Pips.
4a	When displaying VWAP price for Sweepable segment of EBS Direct or EBS Market this shows worst limit price to fill required quantity.
5	Best available sell price displayed as Pips
6	Best available buy price displayed as Pips
7	Inner price tile (Buy). Price displayed as Pips
7a	When displaying price for Single Ticket segment of EBS Direct this show the LP code which provided the price.
8	Inner tile (Buy) Big Figure
9	Outer Price tile (Buy). Displays price as Pips
10	Value date label
11	Menu button
12	Indicates if BigFig for the price displayed in the outer tile is significantly different for BigFig value displayed for the same side Inner price tile.
13	Offer Button (for EBS Market only)
14	Total inventory available at the Inner tile (Buy) price. Will show in red if available inventory is not sufficient to fill requested quantity.
15	Total inventory available at the Outer tile (Buy) price. Will show in red if available inventory is not sufficient to fill requested quantity.
16	Quantity Input
17	Quick Amount Ladder

Number	Description
18	Quick Ladder Icon (open/close)
19	Total inventory available at the Inner tile (Sell) price. Will show in red if available inventory is not sufficient to fill requested quantity.
20	Total inventory available at the Outer tile (Sell)
21	Bid Button (for EBS Market only)"

Configure the Spot FX Mixed Liquidity Card price display for Inner and Outer Price tiles from the Card Menu.



The Card Menu includes the following elements:

Best Prices: Select the segments for display in the Inner price tiles:

- **Direct ST *(Above 5M)*:** default: enabled
- **Direct ST *(Below 5M)*:** default: disabled
- **Direct Sweep *(Up to 5M)*:** default: enabled
- **Market (*Up to 10M)* :** default: disabled

Outer Prices: Select the segments for display in the Outer price tiles

- **Market Top of Book:** default: disabled
  - When selected, BID and OFFER buttons are displayed on the Mixed Liquidity card, and a BID/OFFER form can be triggered
- **Direct ST:** default: enabled
  - When selected, BID and OFFER buttons are hidden, and a BID/OFFER form cannot be triggered

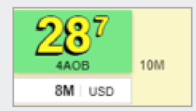
Note: Each order can only be directed to one single segment. Sweeping across multiple segments is not possible.

Inner Price Tiles

In the Inner price tiles users can select which liquidity sources are used to display the best price for a specified amount. By default Inner price tiles would show the best VWAP price from the EBS Direct Sweepable price segment for amounts under Max Sweep Size threshold and the best price from the EBS Direct Single Ticket segment for amounts above Max Sweep Size threshold. It is also possible to blend these prices with EBS Market prices and for amounts below Max Sweep Size threshold with EBS Direct Single Ticket prices. When blending the segments the Inner price tiles will display the price of whichever liquidity source has the best price, it would not allow sweeping across multiple liquidity sources. A green tile color indicates that the price is from EBS Direct, while a blue tile color represents the EBS Market Price.

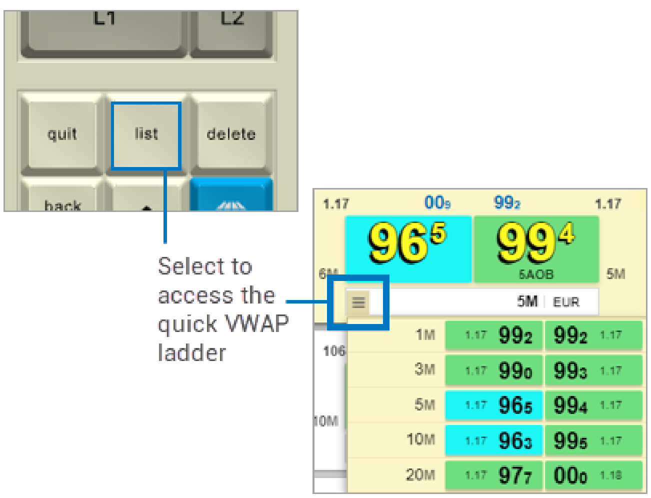
- A green tile with a liquidity provider identifier indicates this quantity is available as a single ticket price from that single provider.
- A green tile with no identifier indicates a Sweepable amount at that price level.
- A green tile with **LMT** label indicates that the price is a VWAP, calculated from multiple price levels. The price next to the **LMT** label is the worst price or **Limit Price** participating in the VWAP calculation.
- A blue tile indicates this price is from EBS Market. Please note that for Mixed Liquidity Card Inner price tiles, the price displayed for EBS Market is still a VWAP price rather than a Limit price. The worst price in the VWAP calculation will be indicated next to the **LMT** label.

The total inventory expressed in Millions available at the given price displays in the lower left and right of the central tiles. If there is insufficient inventory for the Requested Amount, the number displays in red.

EBS Direct Single Ticket Price Display	EBS Direct Sweep VWAP Price Display	EBS Market VWAP Price Display	Available Amount Indicator
			

Note: EBS Direct Sweepable and EBS Market prices will only be aggregated and displayed in the Mixed Liquidity Card if the requested amount does not exceed thresholds set by EBS for each instrument. For larger sizes only EBS Direct Single Ticket prices will be shown.

The VWAP ladder allows quick viewing of the best prices for various sizes. Access this feature either by clicking on menu button in the left of the size input field or by using the **list** button on the EBS Keypad (when focus is on the Mixed Liquidity Card).



The price field for Order Forms, opened from Inner price tiles, dynamically updates with the Limit price depending on the specified size. VWAP price displays above the price field when applicable. The price field color indicates the source of the best available price for the specified amount. Users can override the dynamic price by entering a desired price, just as with the standard Buy/Sell form.

Mixed Liquidity Card Order Form

If the Mixed Liquidity Card Inner Prices have been configured to aggregate more than one price segment (e.g. EBS Market, EBS Direct Sweep), then depending on best price for each segment, the Order can be directed to any one of these segments.

Outer Price Tiles

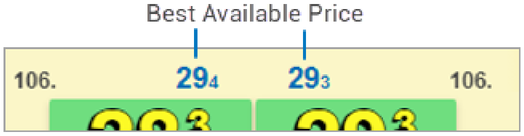
Use the Outer Price tiles to set the display to either the Direct ST price for the specified amount, or the EBS Market Top of Book Price. This allows users to see prices and efficiently execute trades via Keypad form a different liquidity pool on the same Price Card in addition to prices configured for Inner tiles. The total inventory available at the given price displays in the lower outer corners of the tiles. If there is insufficient inventory for the Requested Amount, the number displays in red.

Price Card Header

The price card header, above the inner tiles, always displays the best available price for 1 million.

> **Note:** The size input value does not impact this price.

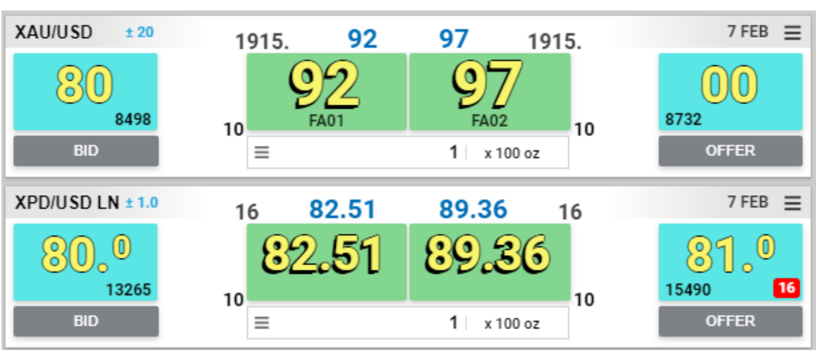
Best Available Price



Metals Mixed Liquidity Card

The Metals Mixed Liquidity Card is optimized for price taking in Metals on variety of liquidity pools. Based on preferences, users view and execute Limit Orders for specified amounts from either preferred Liquidity Providers on EBS Direct or on EBS Market.

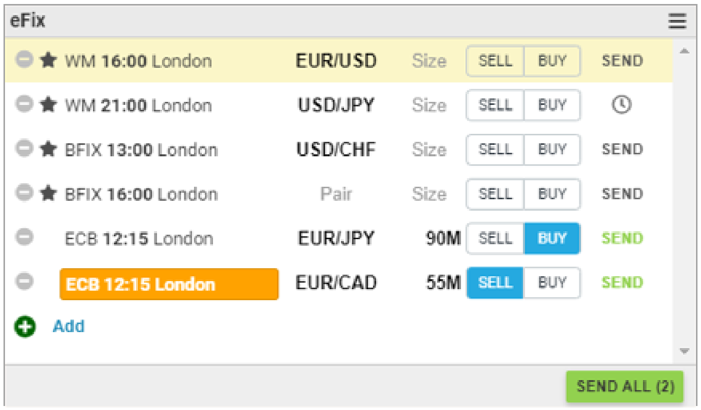
> **Note:** Metals Mixed Liquidity Card functionality mirrors the FX Spot Mixed Liquidity Card.



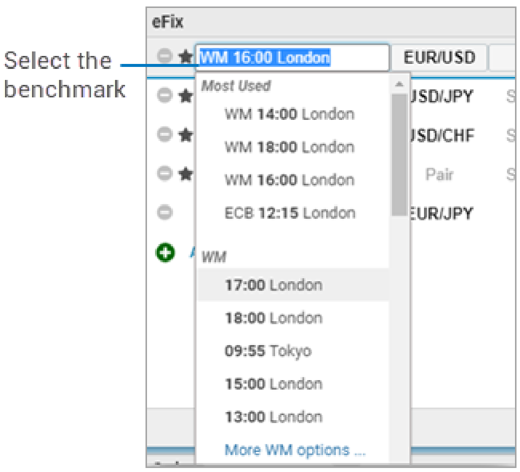
eFix Card

The eFix Card is optimized for executing orders against EBS eFix Benchmarks. Traders can save a list of their favorite benchmarks and currency pairs for ease of access. Add one or more eFix cards from the Cards Gallery. The eFix card automatically adjusts its size to take maximum available vertical space.

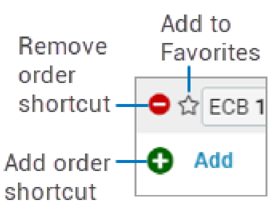
Navigate to the eFix card using **<up>/<down>** arrows on the EBS Keypad or a computer keyboard. Press **<enter>** to perform actions inside eFix card. Press **<quit>** to navigate away from the card. Once inside the card, use the arrows and tab buttons to move between the order shortcuts and enter orders.



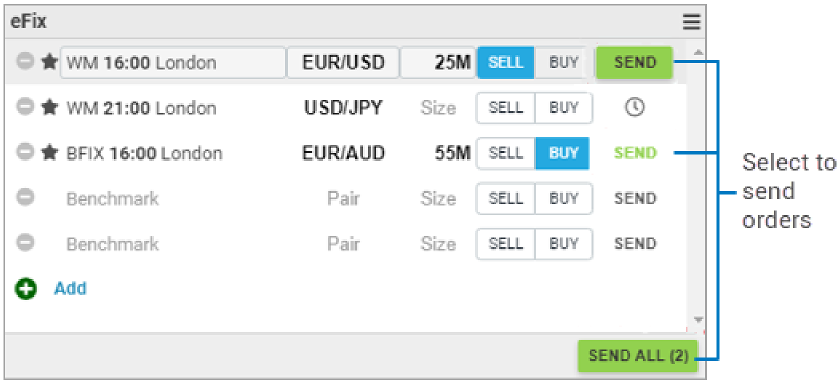
Add and remove order shortcuts for multiple benchmarks and currency pairs before submitting orders.



Add Order shortcuts to the Favorites using the star icon next to each order shortcut. Shortcuts added to Favorites persist after order submission. Order shortcuts not added to Favorites are cleared after Order submission.

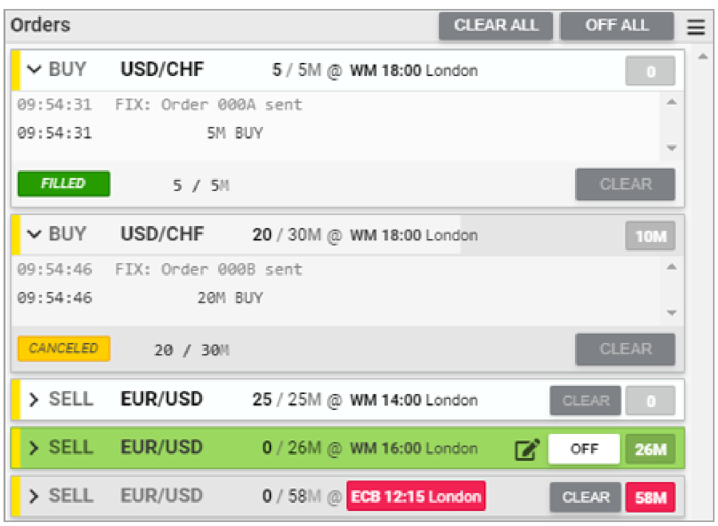


After selecting the benchmark and currency pair, the Amount and Side must be specified before submitting the order. Select the Side of the order using either the mouse or the **<Sell>** / **<Buy>** keys on the EBS Keypad. Enter orders using the Keypad's **<send>** key or by clicking the **SEND** button on the screen. Submit multiple orders simultaneously using the **SEND ALL** option at the bottom of the eFix price card.



Once submitted, manage each eFix order similarly to normal EBS Market and EBS Direct orders. eFix order tiles always appear in collapsed mode but can be expanded by double-clicking on the order or by using the **<shift>** + **<->** shortcut on EBS Keypad. Workstation identifies eFix orders with an yellow stripe in the left corner. The remaining unmatched amount displays in the right corner. Active orders can be amended or canceled. Matched orders stay on the screen and cannot be cleared until the eFix rate is published. eFix publication status is indicated by the color badge behind the Fix name in the header of the order tile: orange for pre-closing, red for closed (awaiting rate). Once published, the rate updates in both the Order tile and in the Traders Deals panel.

eFix Order Examples

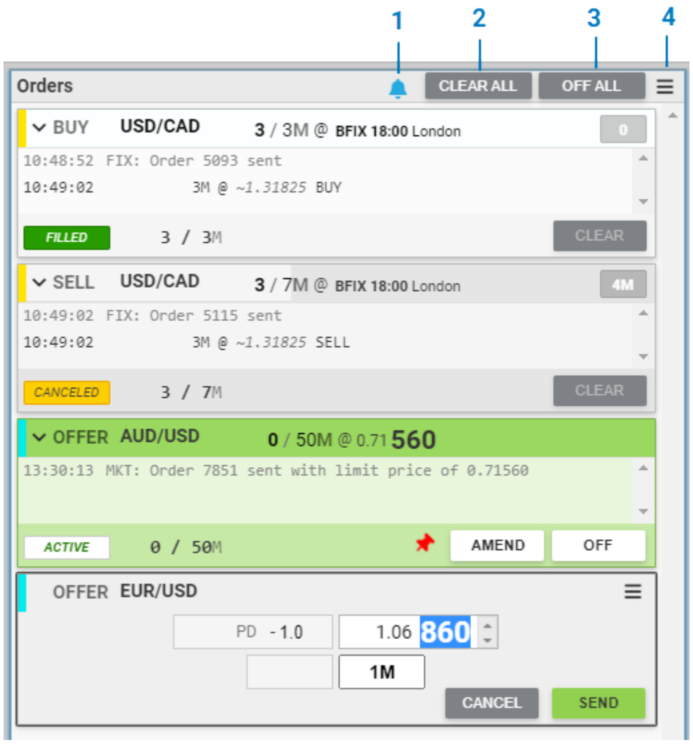


Using Orders Card

The Orders Card always displays in the Workspace and offers a dedicated space where all order flow occurs. Use Orders Cards to view all in-progress (active) and completed (terminal) orders. Bid/Offer and BUY/SELL orders that are submitted with Request Forms, can be modified prior to sending, and amended, pinned, and / or canceled while still active in the market.

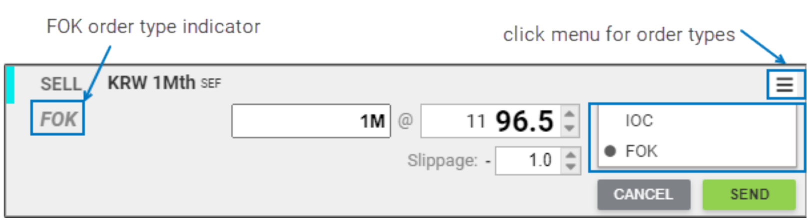
Two types of elements appear in the Orders Card:

1. Forms (can be edited prior to submission)
   - BID/OFFER Form
   - BUY/SELL Request Form
2. Order Status tiles track and manage the status of a submitted order
   - Active Order
   - Terminal Order (Filled, Expired, Canceled)



Number	Description
1	Audio Alerts option
2	**CLEAR ALL**: Removes all individual order status tiles in Terminal State from the Orders Card
3	**OFF ALL**: Cancels all Order-Views in Active State that are not pinned
4	Menu : Expand All / Collapse All, P key options

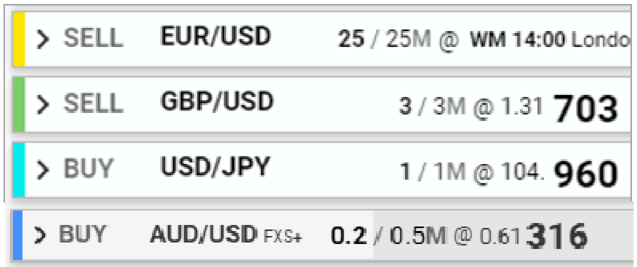
Access IOC/FOK options from the Buy/Sell order form menu, or use the **<list>** key on the EBS Keypad.



Manage default IOC/FOK and Buy/Sell form settings for specific instruments from the Instruments tab within User Preferences.

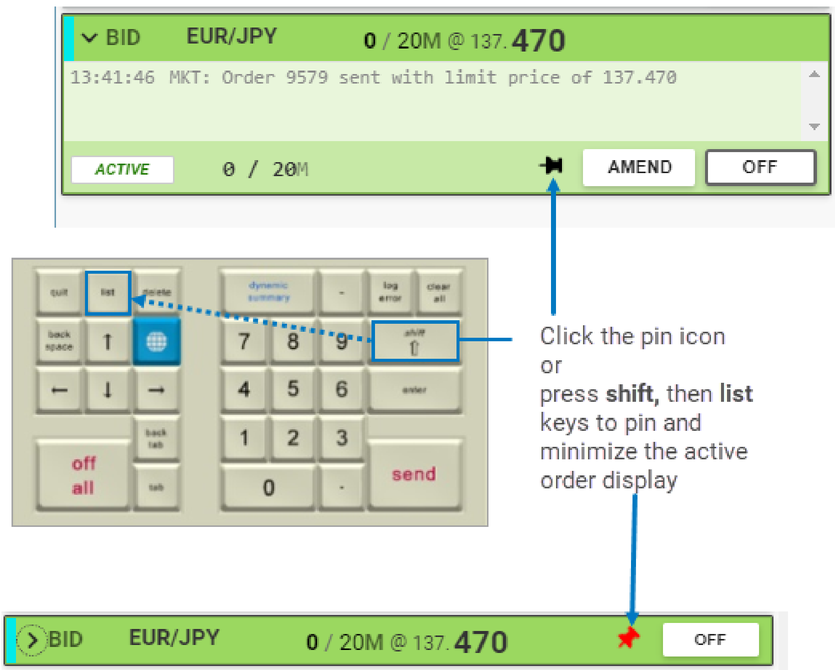
NOTE: For details on using Iceberg orders, refer to Iceberg Orders.

The segment to which an order was sent is indicated by the color of the stripe in the left corner of the Order pane. Colors indicators are : light blue for EBS Market, green for EBS Direct, yellow for EBS eFix, and dark blue for FX Spot +



Minimize Active/Completed order elements by double-clicking on the order header or using **<shift>** then **<->** (minus sign) key combination on the EBS Keypad.

Use **<shift>** then **<list>** keys on Keypad to pin and minimize active Bid and Offer orders, which effectively turns the orders in Resting Orders (which are protected from **<Off All>** function and have to be canceled individually or using the super all off key combination **<shift** >+ **<off all>** on the keypad).



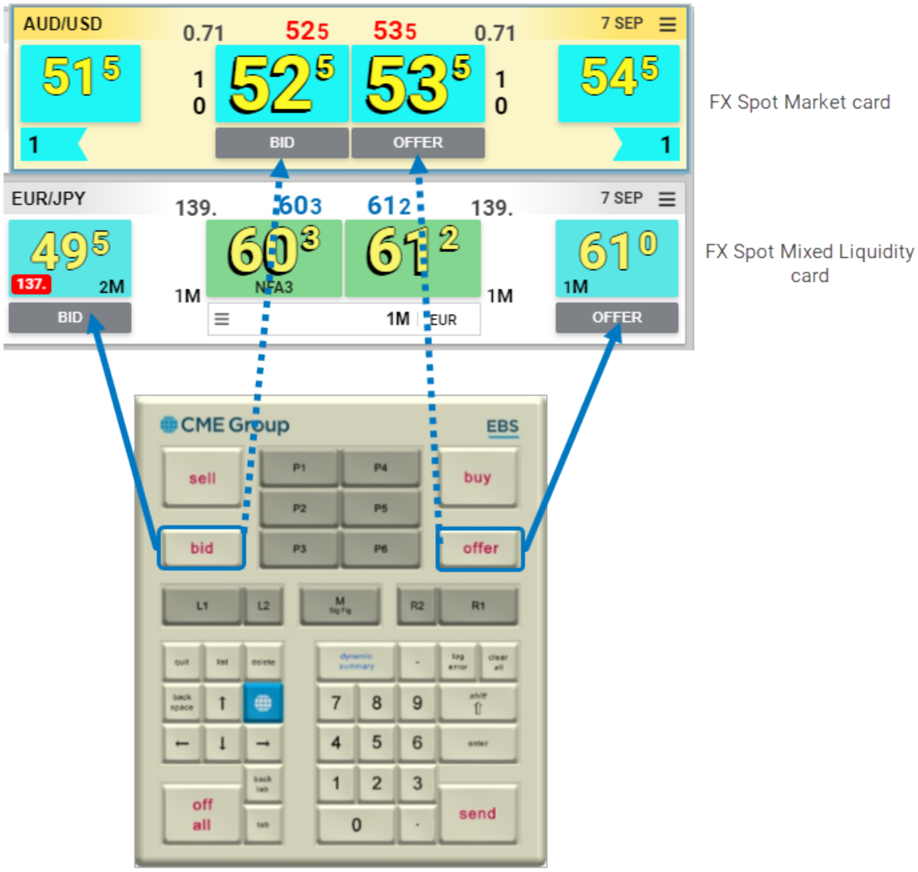
BID/OFFER Form

Use the Bid/Offer Form to review and edit Standard and Iceberg Bid and Offer orders (Good till Canceled, "GTC") before submitting them to EBS Market. Bid and Offer orders are **only** supported for EBS Market.

To open a BID/OFFER Form

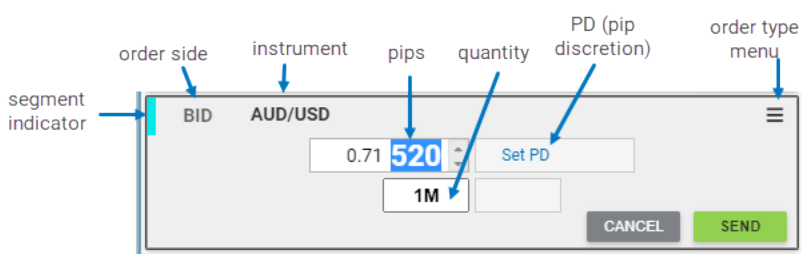
With focus on active price card,

- via EBS Keypad: press **<bid>/<offer>** keys (or ICE BID / ICE OFFER keys if configured to open Iceberg Orders, see Set-ting User Preferences)
- via mouse: clicking on **BID** or **OFFER** buttons



For BID/OFFER Form the Big Figure and Pips displayed are those that existed in the Price panel at the time you activated the BID/OFFER function. The form refreshes when users press a price button or the keypad BID/OFFER buttons whenever a BID/OFFER Form is already open from this card.

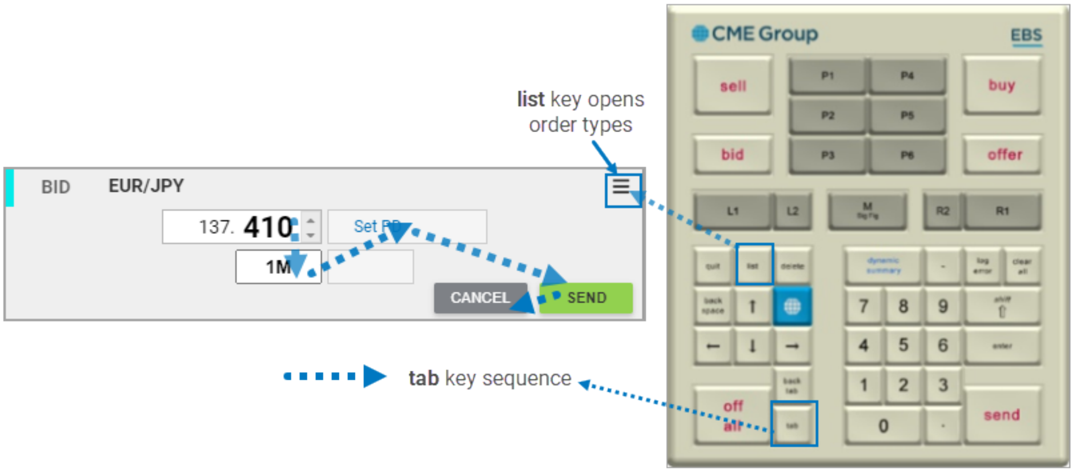
Note: The quantity input value does not refresh regardless of whether it was edited.



To navigate a BID/OFFER order via keypad:

- **<tab>** the forward tabbing sequence for the panel is as follows: Pips > Size > Set PD > **SEND** > **CANCEL**
- **<back tab>**: the reverse tabbing sequence also includes the “Big Figure” field.
- **<up>/down** arrows increment price (or quantity) up and down when focus is in those fields; toggle between order types when menu options are in focus
- **<list>** opens order type options when focus is on menu icon
- **<enter>** confirms edits / selections to price, PD, quantity field, and order type menu

- **<send>** submits order to market
- **<quit>** exits the form without submitting the order



Editing Quantity, Price (pips), and Big Fig

To edit quantity, price (pips), and big fig

- via EBS Keypad or keyboard: **<up> / <down>** arrows to increase/decrease the value, **<numeric>** keys to enter specific value
- via mouse: use the scroll wheel to increase/decrease the value

For details on the Quantity, Price, and Big Fig parameters, see the sections below.

Bid/Offer Quantity

Valid input characters are:

- 0 1 2 3 4 5 6 7 8 9 . K k M m B b
  - K, k, M, m, B and b considered valid only as a suffix (last character in the sequence)
  - K or k - for Thousands
  - M or m for Millions
  - B or b for Billions

Price (pips)

Valid input characters:

- 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Invalid characters are ignored and not displayed on screen when entered

Price (big fig)

To move focus to the big figure field when using EBS Keypad

- Press **<big fig>** key or **<back tab>** from Pips field.

Valid input characters are:

- 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 and '.'
- Invalid characters are ignored and not displayed on the screen when entered
- The big fig field can contain up to seven characters
- When focus shifts to the big fig field, the last digit of the pre-populated value is highlighted

Select the entire value using the mouse or **<shift>/<Ctrl>** + **<side arrows>** keys on the keypad or keyboard.

To Increment/Decrement Big Fig Field

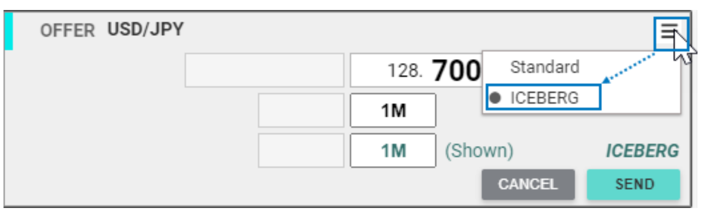
The value of the big fig changes by +/-1 when increased or decreased.

Changing Bid/Offer Order Type

The Bid/Offer form opens to a Standard order by default.

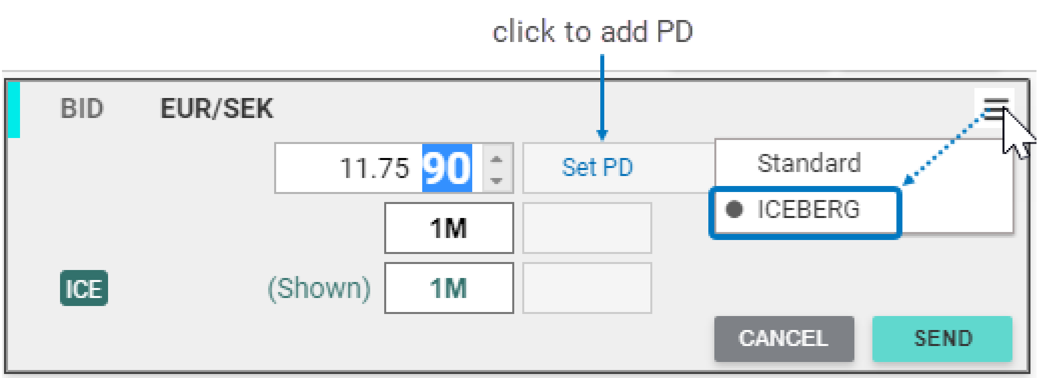
To change the Order type:

- via keypad:
  - configure L1 and R1 Keys on EBS Keypad to automatically open Iceberg orders, see Setting User Preferences
  - use **<shift> + <dynamic summary>** keys shortcut on EBS Keypad
- via mouse: select order type from Order Form Menu

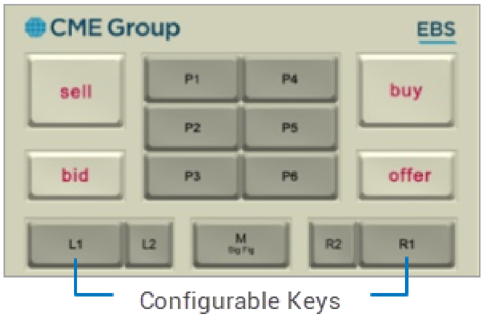


Iceberg Orders

Use Iceberg Orders to minimize your market impact by only displaying a portion of your overall order. The hidden size remains in the order book and is subject to being dealt. Access Iceberg Order functionality from the menu of the Bid/Offer order form. An option to add PD (Pip Discretion) to the order is available.



Users can also configure the Keypad to automatically open the Iceberg Bid/Offer form using the Keypad **<L1>** and **<R1>** buttons. Manage the configuration using the Keypad settings in Setting User Preferences.



To open an Iceberg order form

With the focus on the Bid/Offer order form:

- via Keypad
  - press **<list>** to open menu, **<up>/<down> arrow** to scroll to **ICEBERG**, and **<enter>** to select
  - press **<shift>** then **<dynamic summary>**
  - press **<ICEBERG BID>** (or **<ICEBERG/OFFER>**) key (if configured for Iceberg orders)
- via mouse: select the **ICEBERG** option from the Order form menu

Audio Alerts

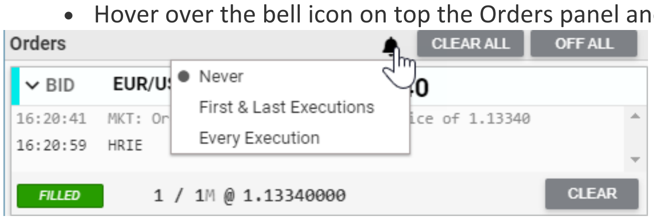
For Bid and Offer (EBS Market) orders, an audible chime can be enabled to play as an order is filled.

Audio Alerts options are:

- **Never** (default)
- **First & Last Executions** for every individual order
- **Every Execution**

To set Audio Alerts for all Orders:

- Hover over the bell icon on top the Orders panel and select frequency



To set Audio Alerts for individual Orders:

- Hover over the lower edge of the order form until the bell icon appears, select, and scroll to frequency
- 

BUY/SELL Form

BUY/SELL Orders can be sent immediately for matching as BUY/SELL Request, or they can be reviewed and edited prior to submitting an order with a BUY/SELL Request Form if configured to bypass Buy/Sell Request Form in User Preferences > General Preferences. Using a BUY/SELL Request Form offers protection from submitting a BUY/SELL Order accidentally. It allows users to see exactly how the Order will be submitted, and to make modifications prior to submitting the Order.

Opening a BUY/SELL Request Form

The BUY/SELL Request Form opens from an Active Price card provided that there is Dealable price and the BUY/SELL Form Keypad and / or mouse option has been enabled in the Orders tab of User Preferences.

Users can open a single Buy Form and a single Sell Form from a single trading card concurrently.

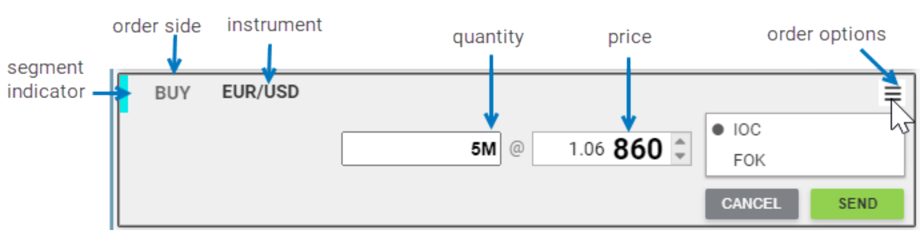
For an Order Form opened from Market Price Card the Big Figure and Pips displayed are those that existed in the Price panel at the time the **<buy> / <sell>** key was pressed. For an Order Form opened from Mixed Liquidity Card the price will automatically update itself based on current price for selected amount, unless user chooses to override the price. See FX Spot Mixed Liquidity Card and Metals Mixed Liquidity Card for more details.

The form refreshes when users clicks a price button or the keypad **<buy>**/**<sell>** keys whenever a Buy/Sell Request Form is already open from this price card. The forward tabbing sequence for the panel is as follows: Size>Pips> send>cancel. If Slippage is enabled it follows Pips field in the forward tabbing sequence. The reverse tabbing sequence also includes the “Big Figure” field.

To trade using open a BUY/SELL Request Form

1. With Trading Card in focus press **<buy>** / **<sell>** keys of the EBS Keypad (or **<L1> / <R1>** keys if configured to aggress out Outside prices under Keypad Preferences) of the Keypad or mouse-click price tile (single-click and double-click modes are both supported and can be configured from User Preferences)
2. Review and make any edits necessary.
3. Press **<send>** on the Keypad or click mouse-click the **Send** button to submit your BUY/SELL Order.

Note: Press the **quit** key or mouse-click **Cancel** to cancel your Sell/Buy Order Request.



The BUY/SELL Order Request panel contains the following information:

- Segment indicator (light blue = EBS Market; green = EBS Direct; dark blue = FX Spot +)
- Instrument name
- Sell or Buy indicator
- Price (Big Figure and Pips) of the order
- Order amount
- Menu button
- send button
- cancel button

To edit quantity, price (pips), and big fig

- via EBS Keypad or keyboard: use **up/down** arrows, or enter value using **numeric** keys
- via mouse: use the scroll wheel to increase/decrease the value

For details on the Quantity, Price, and Big Fig parameters, see the sections below.

Editing Order Quantity

Valid input characters are:

- 0 1 2 3 4 5 6 7 8 9 . K k M m B b
    - K, k, M, m, B and b are considered valid only as a suffix (last character in the sequence).
    - K or k - for Thousands
    - M or m for Millions
    - B or b for Billions

Editing Order Price (Pips)

Use a mouse, Keypad, or keyboard to edit the value in the spot-price-input field.

Valid input characters:

- 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Invalid characters are ignored and not displayed on screen when entered

Editing Price (Big Fig)

Use a mouse, Keypad or keyboard to edit the value in the spot-price-input big fig field. To move focus to Big Figure field when using EBS Keypad press big fig key or back tab from Pips field.

Valid input characters are:

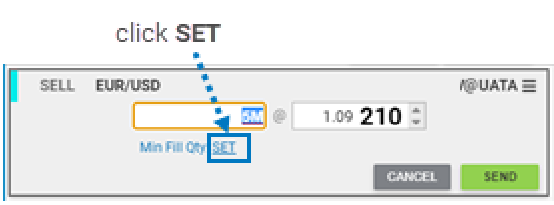
- 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 and '.'
- Invalid characters are ignored and not displayed on screen when entered
- When focus shifts to the big fig field, the last digit of the pre-populated value is highlighted

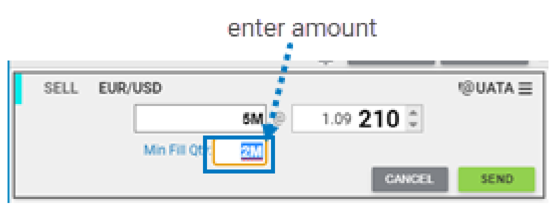
Minimum Fill Quantity for IOC/FAK Orders on EBS Market

Users can set Min Fill Quantity on IOC orders sent to EBS Market. This option is available on the Order Form and, if specified, the order will be Filled for at least this quantity or else will expire as Not Filled.

To set Min Fill Qty

- via EBS Keypad: use **tab** to navigate to **Min Fill Qty** option, click **SET** and enter quantity
- via mouse: click **SET** next to **Min Fill Qty** and enter quantity





In the example below, the order was not filled for the minimum quantity so it expired unfilled:

Warnings & Errors on All Order Forms

When formatting a BUY/SELL Request Form, either by opening the form with prepopulated values or by editing a value, validations occur. If a validation fails, a Warning or Error message appears.

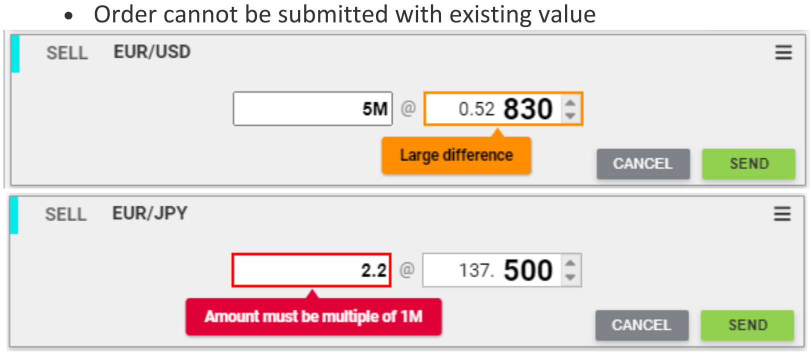
Warnings and Errors display inside the BUY/SELL Request Form as a text bubble and describe the issue.

Warning

- Orange scheme
- Order can still be submitted with existing value

Error

- Red scheme
- Order cannot be submitted with existing value



Changing BUY/SELL Order Type

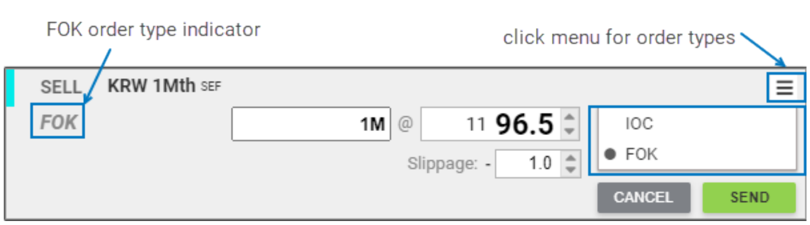
BUY/SELL orders can be submitted as with either two types of time in force instruction:

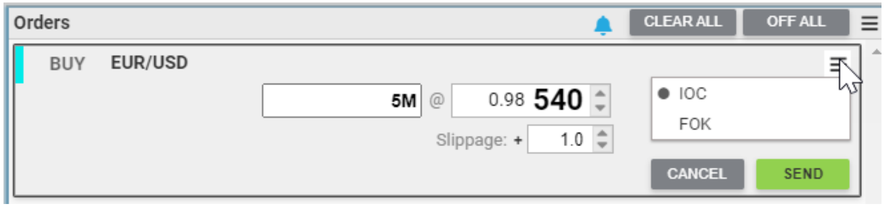
- IOC (Immediate or Cancel): order is executed all or in part immediately
- FOK (Fill or Kill): order is executed immediately and completely or not at all

Change the BUY/SELL order type either by selecting appropriate type from the order form menu with their mouse, or by using **<shift>+<dynamic summary>** shortcut keys of the EBS Keypad.

The default order type can be configured for each pair in the Instruments tab of User Preferences.

> Note: IOC order forms do not have a visual indicator.





Submitting/Aborting a BUY/SELL Order

The following rules apply:

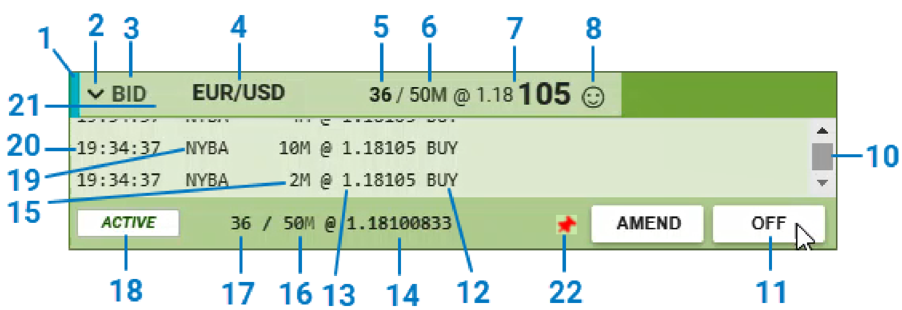
- Submit a Buy/Sell Request as an IOC or FOK order when no Error message displays, by pressing **<send>** on the Keypad or clicking **SEND.**
- To abort the workflow and close the BUY/SELL Request Form, click **CANCEL.**

Order Status View

The Order Status View is an element hosted within an Orders Card that provides information on the progress of a submitted order, where "Active" is a state in the life-cycle of an order in which a submitted order can be matched (unlike a "terminal" state order in which the order can no longer be matched).

BID/OFFER (not BUY/SELL) orders trigger the Active Order-View, which users can pin or cancel (by selecting the OFF button).

Active Order View Layout



The Active order-View has the following elements:

Number	Description
1	Segment Indicator
2	Collapse/Expand chevron icon
3	Side Indicator – BUY/SELL/BID/OFFER
4	Instrument Name
5	Total filled quantity (abbreviated format) – Total quantity of matched ERs - Execution Report
6	Requested quantity (abbreviated format)
7	Requested Price
8	Smiley icon – Displayed when Filled Price (14) is better than Requested Price (7)
10	Scroll bar
11	'OFF' button – To cancel the Active order

Number	Description
12	Trade direction
13	Trade price
14	Order weighted average fill price (with precision = 8)
15	Trade size
16	Requested quantity (abbreviated format)
17	Total filled quantity (abbreviated format)
18	Status label
19	Counterparty code
20	Trade (hh:mm:ss)
21	Filled quantity progress bar
22	Pin icon (displays only on mouse over)

Users can collapse an Active Order View.

To collapse an Active Order View

1. Press **<shift>+<->** Keyboard shortcut when focus is on the Order Status tile.
2. Double click Active Order View header
3. Single click on the collapse/expand chevron icon

Active Order Collapsed View

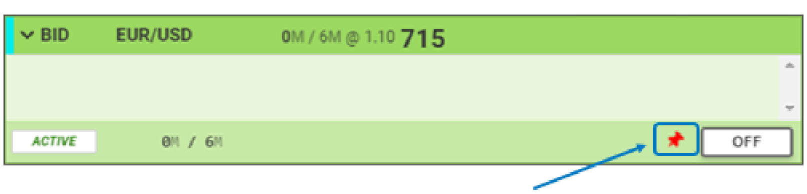
Pinning Orders

Active-Orders may be pinned to provide them exemption from the OFF ALL key.

The pin icon displays (in black) in the Active Order-View when users mouse hover over an Order.

To pin an active order

1. Click the black pin icon to trigger the OFF ALL protection. Red pin icon displays once order has been pinned.



2. Click the red pin icon to cancel the protection.

Canceling Active Order

An Active order can be canceled in any of the following ways:

via Keypad:

- **<esc>** when focus is on an Active order
- **<enter>** when focus is on an Active order OFF button (this is default focus when navigating to specific order)
- **<off all>** to cancel all non-pinned orders
- **<shift>+<off all>** to cancel all orders including pinned orders (super all off function)

via mouse:

- Click the 'OFF' button in the Order-View
- Click 'OFF ALL' button in the Orders-Card header when Order-View is not pinned
- Click 'SUPER OFF ALL' button in the Workspace header Which will cancel all orders including pinned orders

When the Order-View terminates, the order can no longer be matched and the view changes to Terminal state.

Note: The application can terminate Active Order-View automatically upon failovers or disconnections.

Terminal Order-View

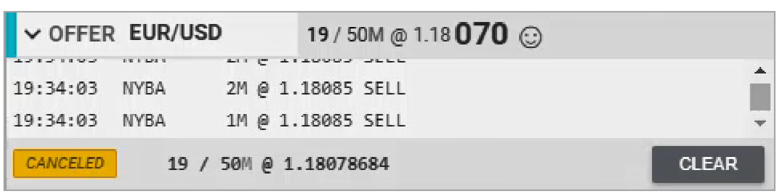
The Terminal order status is an element hosted within the Orders Card, and provides information about Filled, Canceled, and Expired orders, where "Terminal" is a state in an order's life-cycle in which an order is no longer active.

Filled

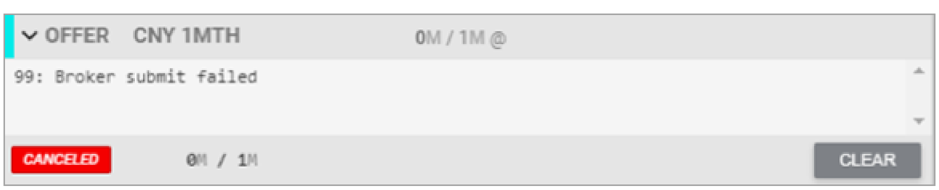
A filled order status means that order has been fully filled for the entire requested amount and is indicated in green. There may be one or multiple trades information depending on how the order was filled.

Canceled

When an order isn't filled at all or is only partially filled, then gets canceled by the user, the canceled indicator appears orange.

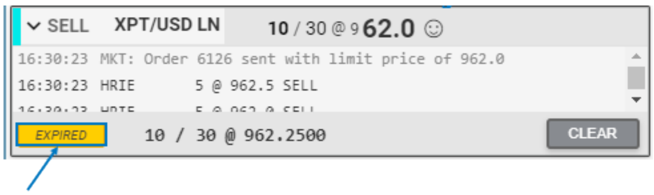


When an order is unexpected canceled due to a system reject, the canceled indicator appears in red.



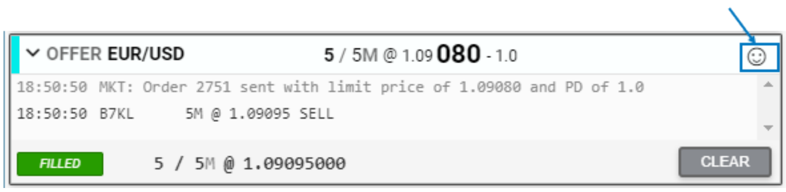
Expired

When an IOC or FOK order isn't filled at all or is only partially filled and then Expires the status will be indicated as "Expired."



Price Improvement (smiley face icon)

A smiley face icon displays in the header when the fill price is better than the requested price.



To clear a specific terminal order view from the Orders card

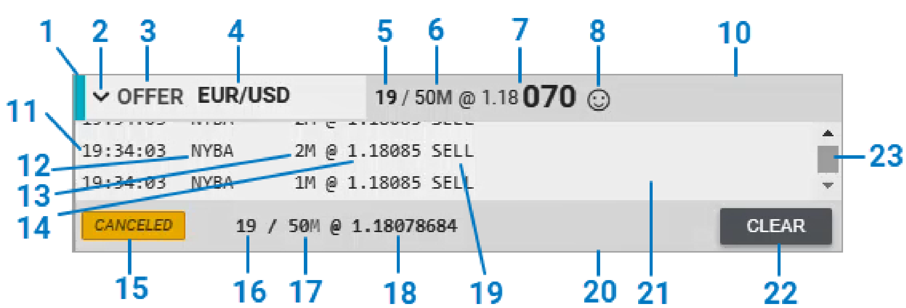
With terminal card in focus

- via EBS Keypad: press **<quit>**
- via mouse: click **CLEAR**
- via keyboard: click **esc**

To clear all terminal order views from the Orders card

- via EBS Keypad: press **<clear all>** from anywhere in Workspace
- via mouse: click **CLEAR ALL** on the Orders Card

Terminal Order View Layout



Number	Description
Header (10)	
1	Market Segment indicator -Green for EBS Direct, Blue for EBS Market, Golden for eFix
2	Collapse/Expand button navigates between the 2 views
3	Side indicator
4	Ccy Label

Number	Description
5	Order filled quantity, in abbreviated format
6	Requested quantity in abbreviated format
7	Requested price
8	Smiley Icon (in case of price improvement)
Body: List box (21) contains the list of deals filled in the order, each deal includes:	
11	Time of matched trade
12	Counterparty Code
13	Single Trade filled quantity (quantity that was matched in each trade
14	Single Trade filled Price (ER)
19	Buy/Sell indicator to identify whether the user bought or sold
23	Scroll Bar (for multiple lines of matched trades. can scroll when there are more than 2 LPs
Footer (20)	
15	Status Indicator (Expired/Filled/Cancelled)
16	Accumulated filled quantity (total quantity that was matched)
17	Requested quantity
18	Weighted Average filled Price for the Order
22	Clear button- clears the card from view

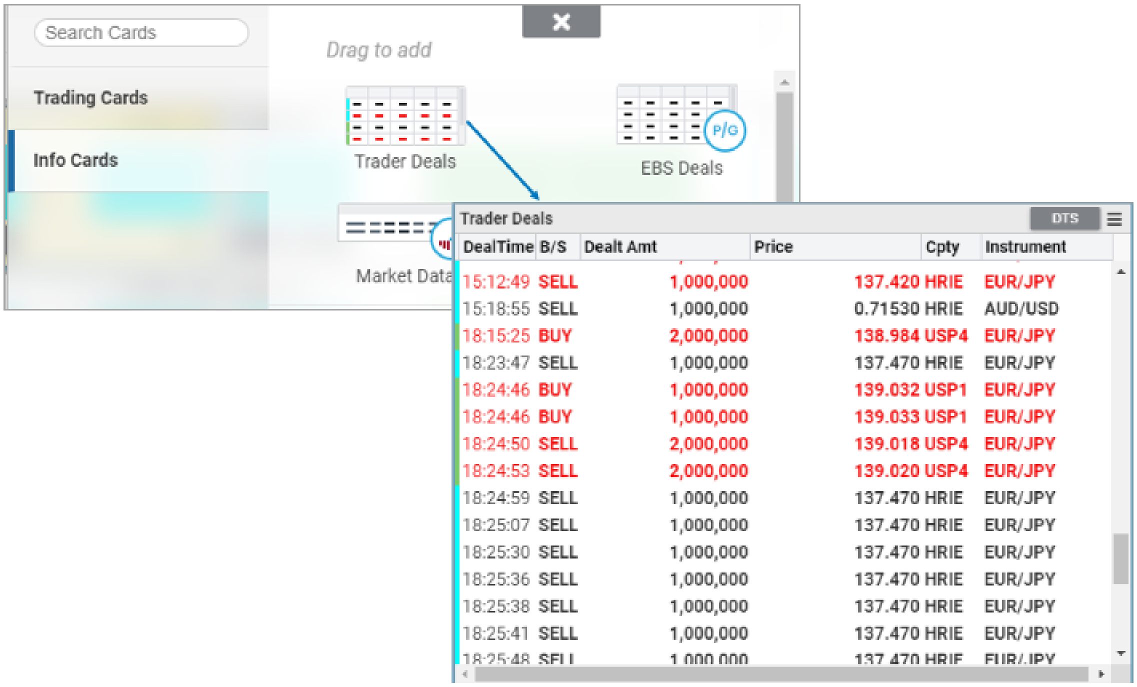
Information Cards

- Trader Deals Card
- EBS Deals Card
- Net Position Card
- Market Monitoring Card
- Market Data Card
- GFID Deals

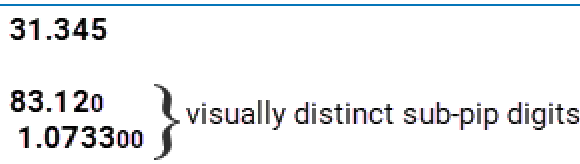
Trader Deals Card

A Deals blotter displays records of completed deals, starting from the current trading day until the session closes. The most recent deals display at the bottom of the list and there is no limit to the number of deals that can be displayed. Within this card a Dynamic Trade Summary can be added.

As with Orders, the Segment where a Deal was executed is indicated by the color stripe on the left of each deal: light blue for EBS Market, green for EBS Direct, gold for eFix, and dark blue for FX Spot +.



Note: Sub-pip prices can be set to be appear visually distinct in EBS Deals, Trader Deals, and Market Data information cards. Refer to General Preferences > Market Card – Price Display Options for more details.



Note: Maker deals display in black while Taker deals display in Red.

A new optional field in Trader Deals allows user to see their own GFID (Globex Firm ID) and GUS (Globex User Signature) for each deal. This is not switched on by default user has to enable this field from Trader Deals card menu. See Multi-GFID Management for more information.

To add GFID and GUS columns to the Trader Deals card

- From the Trader Deals menu, select GFID and GUS

The following deals information is displayed in the Trader Deals Card:

Field Name	Description
Deal Time	Timestamp of the trade on the execution platform.
B/S	(BUY/SELL) indicator whether the deal was bought or sold.
Dealt Amt	Total amount of the order which has been filled, in terms of the Dealt Currency in full format.
Price	Full price
Cpty	Account of CP_FLOOR as defined at the moment of the Ticket Creation, unless specified on the deal.
Instrument	The currency pair requested, in CCY1/CCY2 format, where CCY1 and CCY2 are the ISO codes of the base and local currencies.
GFID	Globex Firm ID, Globex Firm ID, unique identifier for market participants.
GUS	Globex User Signature, identifies a person authorized to manage the GFID and submit orders.
DTS	Option to start Dynamic Trade Summary with next deal.

Note: To query and view one's own historical deals, see Deals Query.

Dynamic Trade Summary

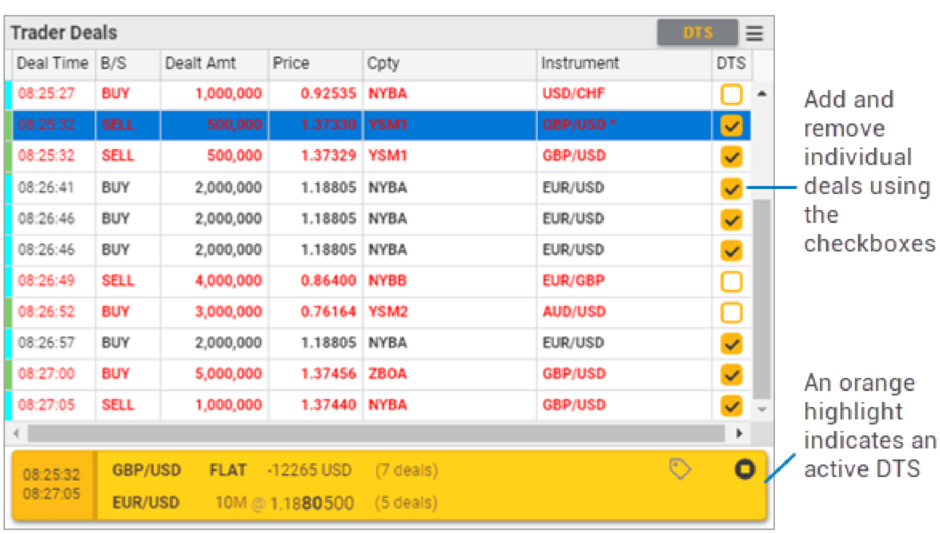
The Trader Deals Panel provides optional Dynamic Trade Summary (DTS) functionality that enables users to track dealing positions in one or more currency pairs while continuously updating as the user continues to trade.

Initiate the DTS function using either the **<dynamic summary>** key on EBS Keypad, or by clicking on DTS button in the top right corner of the Trader Deals card. Clicking either a second time will stop the active DTS. Once enabled, every subsequent trade is included in the active DTS.

Note: The DTS tab tracks as many as five currency pair positions.

Add and remove individual deals using the checkboxes, or highlight a specific deal and select the **shift** + **-** keys on the EBS Keypad.

Active Dynamic Trade Summary



After stopping an active DTS, users can initiate another active DTS, which hides a previously undismissed DTS behind the active one.

To expand the stack displaying active and all undismissed DTS, click the DTS tab or select the **list** key on the EBS Keypad while focusing on the Trader Deals Card. Navigate the DTS expanded stack using the Keypad arrows.

> **Note:** As many as five DTS may display as a part of a stack.

Expanded DTS Stack Showing
Active and Historical DTS

Use the EBS Keypad to navigate a DTS expanded stack.

- **<list>** - Closes the stack
- **<enter>** - Closes the stack placing highlighted DTS at the top
- **<quit>** - Dismisses highlighted historical DTS or stops highlighted active DTS

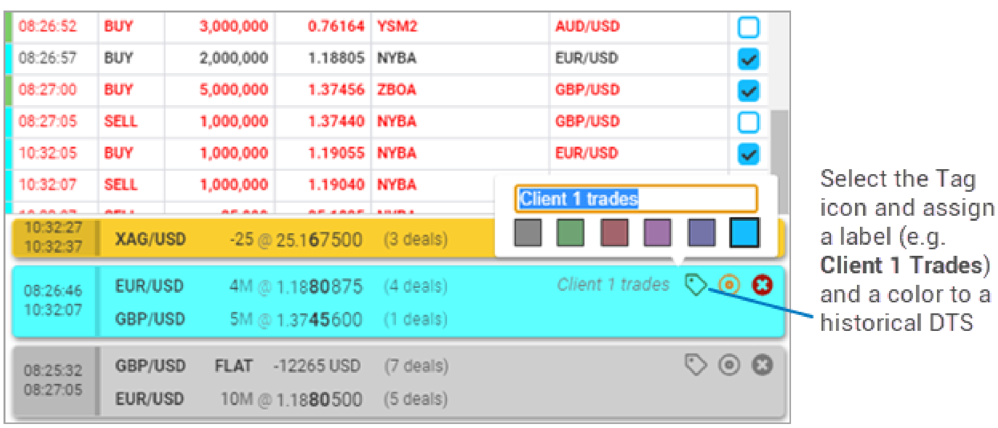
With the DTS stack expanded, use the EBS Keypad to navigate to various options for highlighted active or historical DTS using the **<tab>** keys. All options can also be accessed using a mouse.

Add or remove Deals in the historical DTS using the checkbox at the end of each row, or highlight a Deal and select **<shift>** + **<->** on the EBS Keypad.

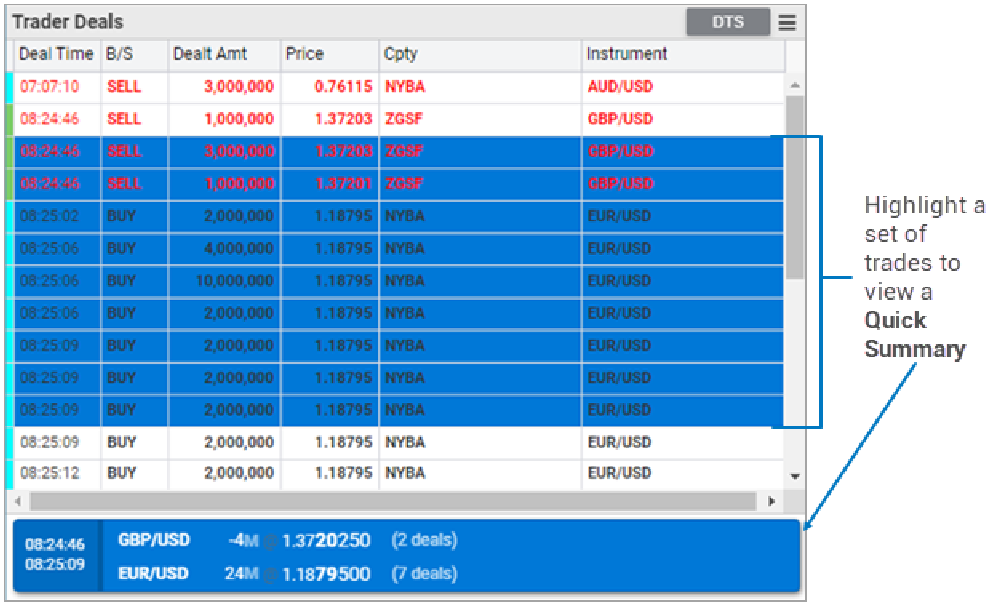
Re-activate historical DTS by clicking the circle icon, or navigate using the EBS Keypad.

When tracking multiple historical DTS, tag the DTS with a label and color to differentiate the different historical DTS.

DTS Tagging Feature

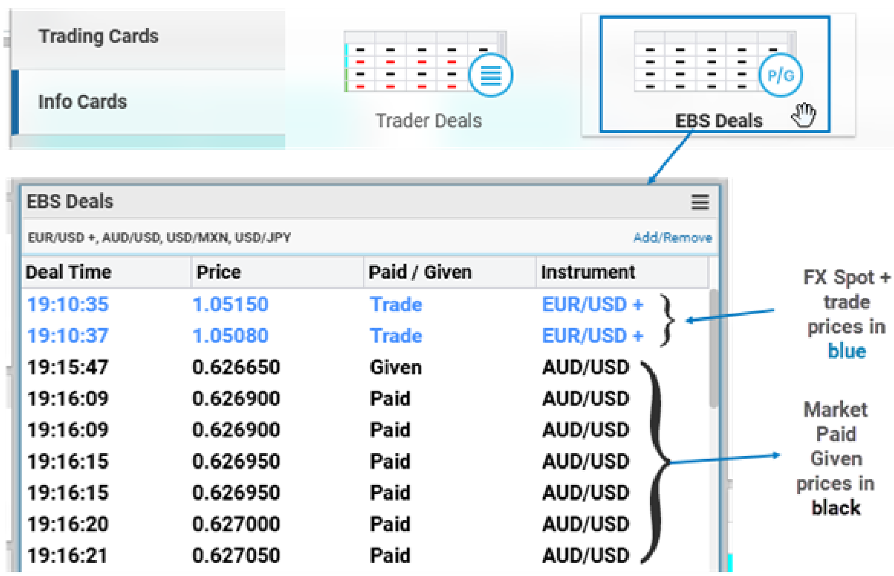


To view a Quick Summary when not running an active DTS, highlight a set of trades in the Trader Deals Card. To highlight trades, click and drag or use the **shift** and arrow keys on the EBS Keypad.



EBS Deals Card

EBS Deals Card displays the last dealt prices on the EBS Market and FX Spot + Central Limit Order Books for currency pairs chosen by the user. For EBS Market published prices are shown as Paid or Given while for FXS+ direction of the trade is not disclosed. Dealt Prices are populated from the time of user loginfor currency pairs chosen by the user. Paid/Given rates are populated from the time of user login.



Add an EBS Deals Card to a Workspace from the Info Cards section of the Card Gallery at the top of the screen. As with other cards, users can drag and drop the EBS Deals Card anywhere in the Workspace.

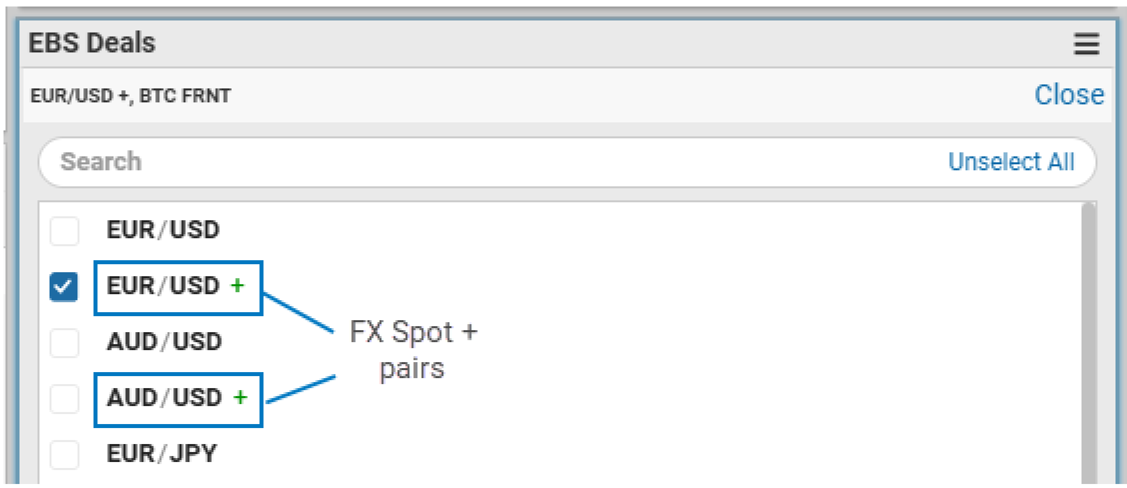
Users can add more than one EBS Deals Cards to their Workspace, setting each card to display different currency pairs if desired, and track up to 20 instrument pairs per card.

To add instrument pairs

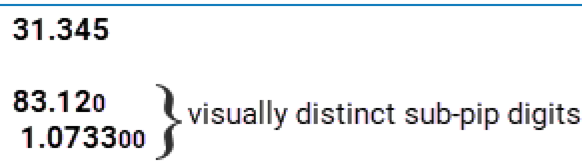
1. Navigate to **EBS Deals Card > Add/Remove**

2. Scroll to find and select desired instruments or use search bar to filter relevant pairs. Once selection is made, **Close** to confirm.

Note: FXS+ instruments are denoted by '+' sign to distinguish them from EBS Market pairs.



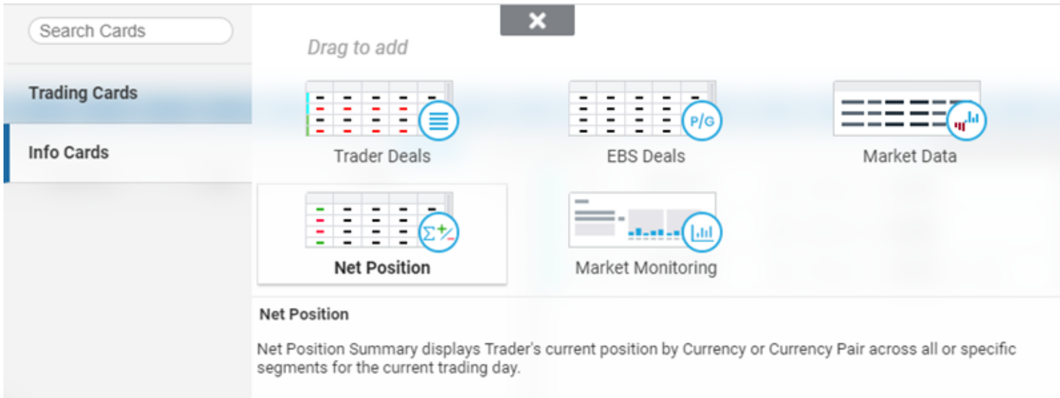
Note: Sub-pip prices can be set to appear visually distinct in EBS Deals, Trader Deals, and Market Data information cards. Refer to General Preferences > Market Card – Price Display Options for more details.



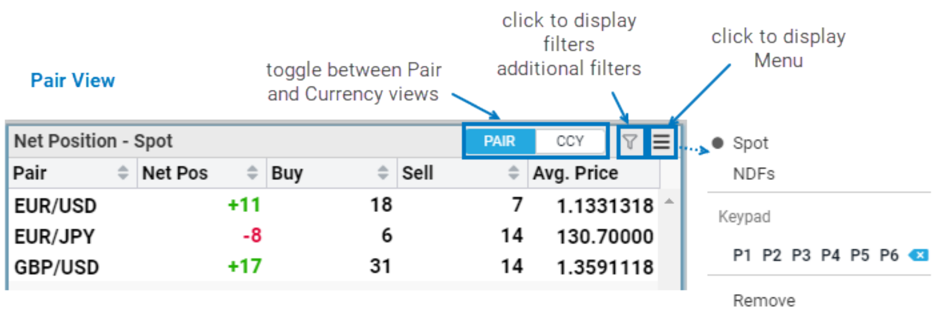
Net Position Card

The Net Position card tracks deals and updates the current net position for all pairs traded.

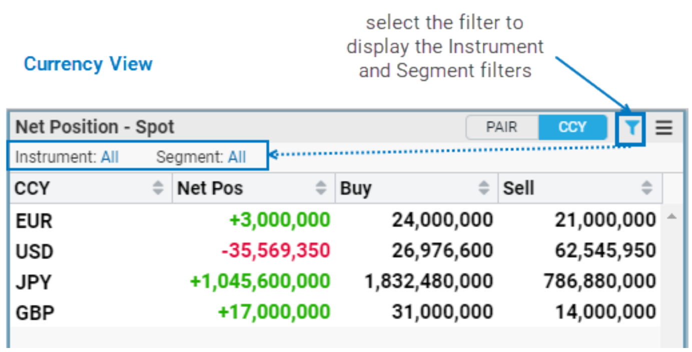
To add the Net Position card to the Workspace, go to the Cards Gallery and select and drag the card to the Workspace.

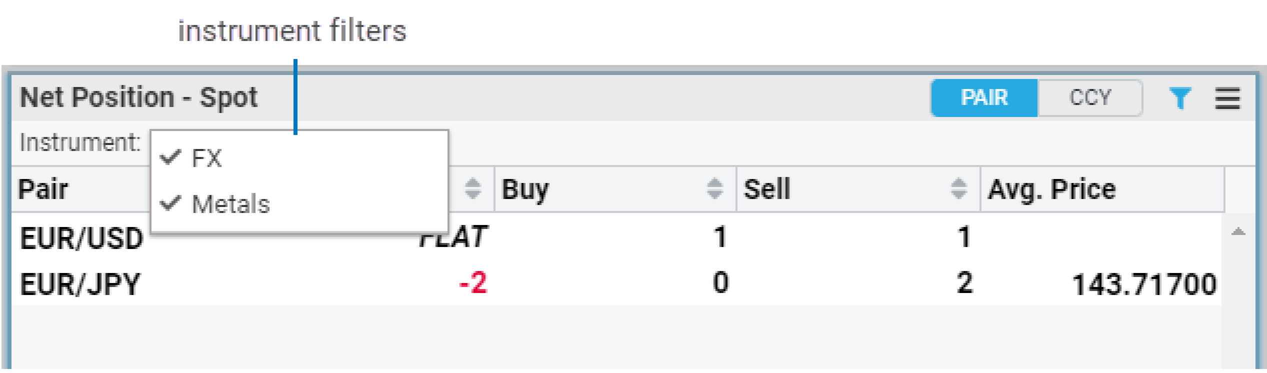


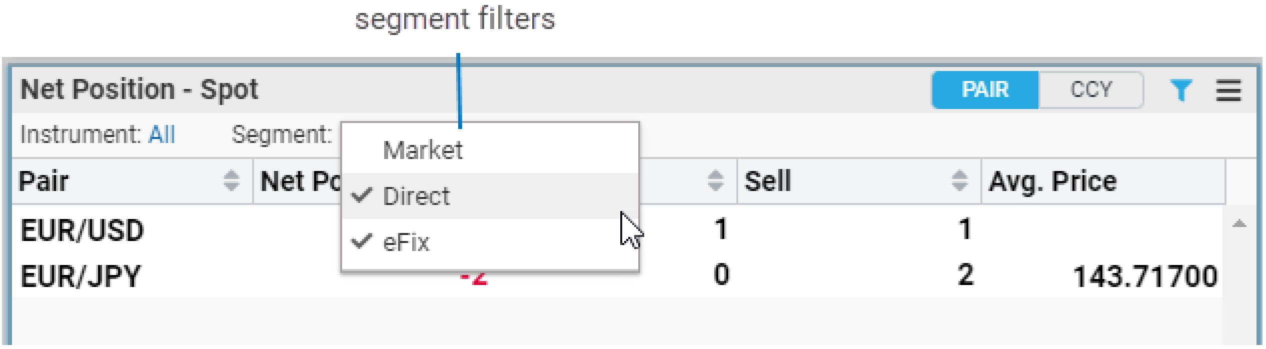
Pairs are displayed on the card by default. Use the toggle to switch between Pair and Currency views.



Enable filters to narrow the view to specific instrument and segment types.



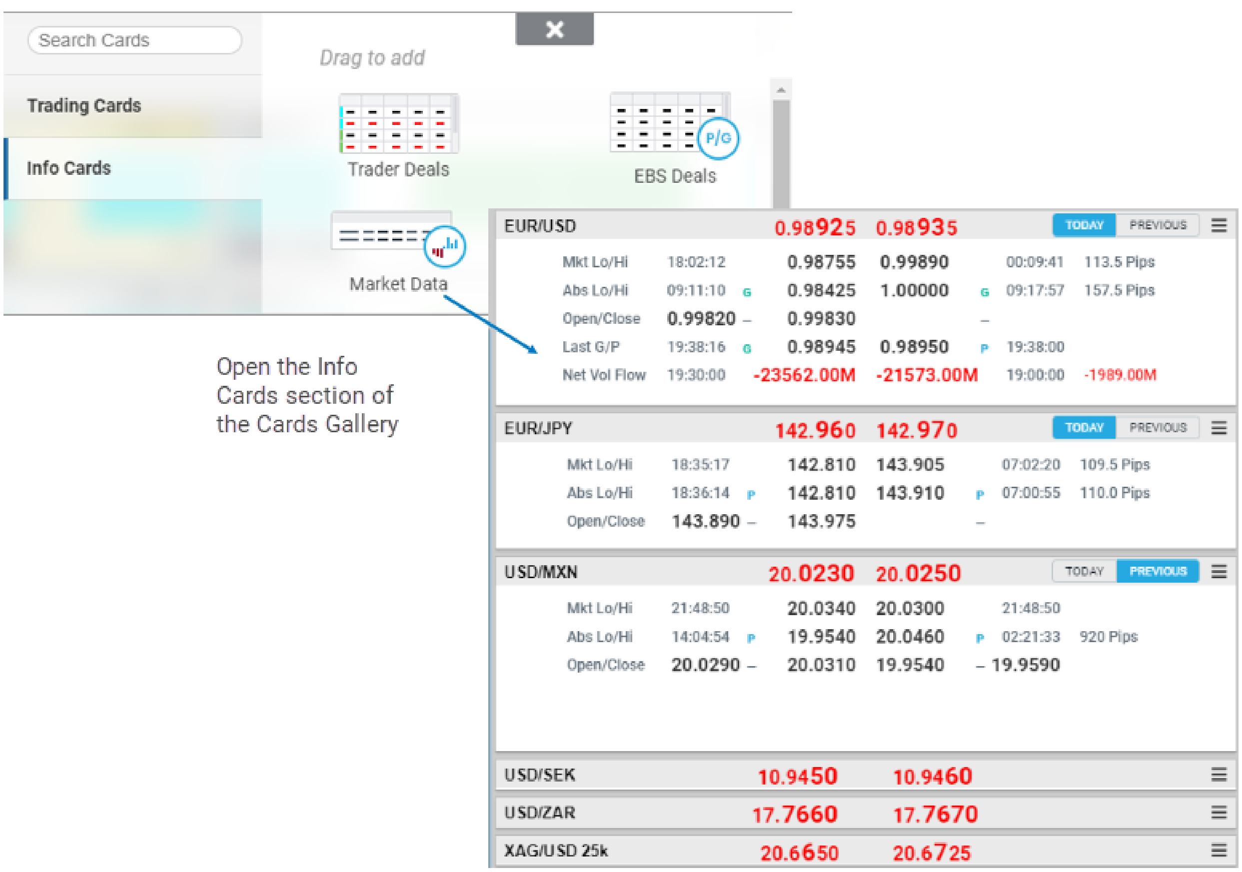




Market Data Card

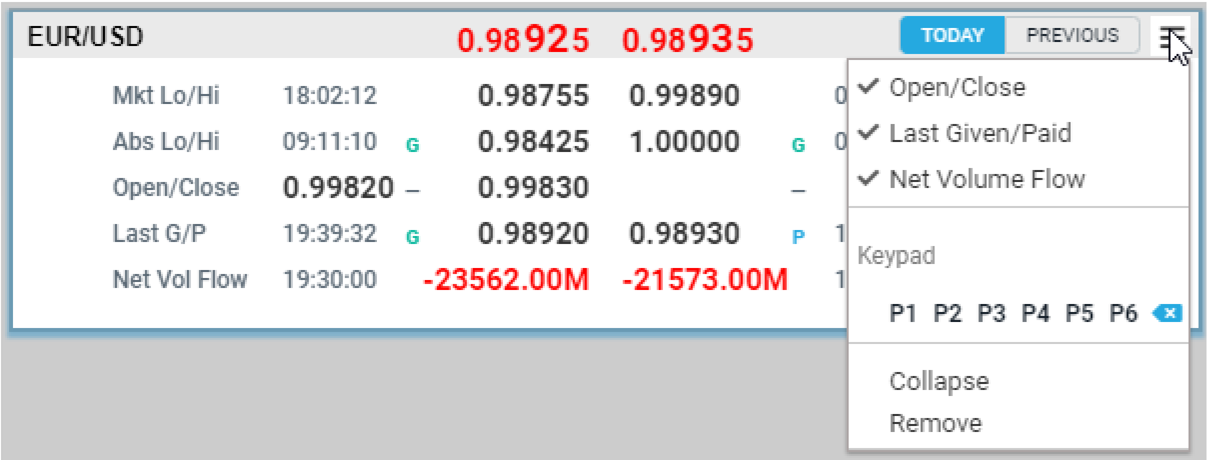
The Market Data card displays a summary of the current or previous trading date Market Data, with information such as:

- Current best price
- Absolute Low and High: Highest and Lowest rates dealt in a currency pair
- Market Low and High: Highest and Lowest rates dealt that meets the quantity criteria within 2 minutes interval; quantity criteria is defined centrally per currency pair
- Net Volume Flow (NVF): Aggressive Buys (Paid) minus aggressive Sells (Given) from beginning of the Trading Date
- Last Paid and Given Price
- Open and Close for the Trading date



Add the Market Data Card to a Workspace from the Info Cards section of the Card Gallery at the top of the screen. As with other cards, Market Data Cards can be dragged and dropped anywhere in the Workspace.

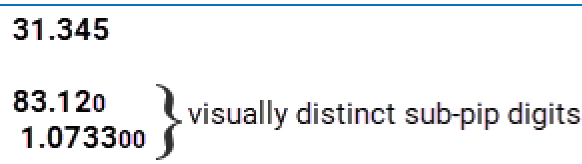
More than one Market Data card can be added to a Workspace, with each card displaying a different currency pair.



Configure each card to display different elements of Market date. By default, Market Low and High information displays. Open/Close and Last Paid/Given rates can also be displayed. Collapsed cards display current Best Price only.

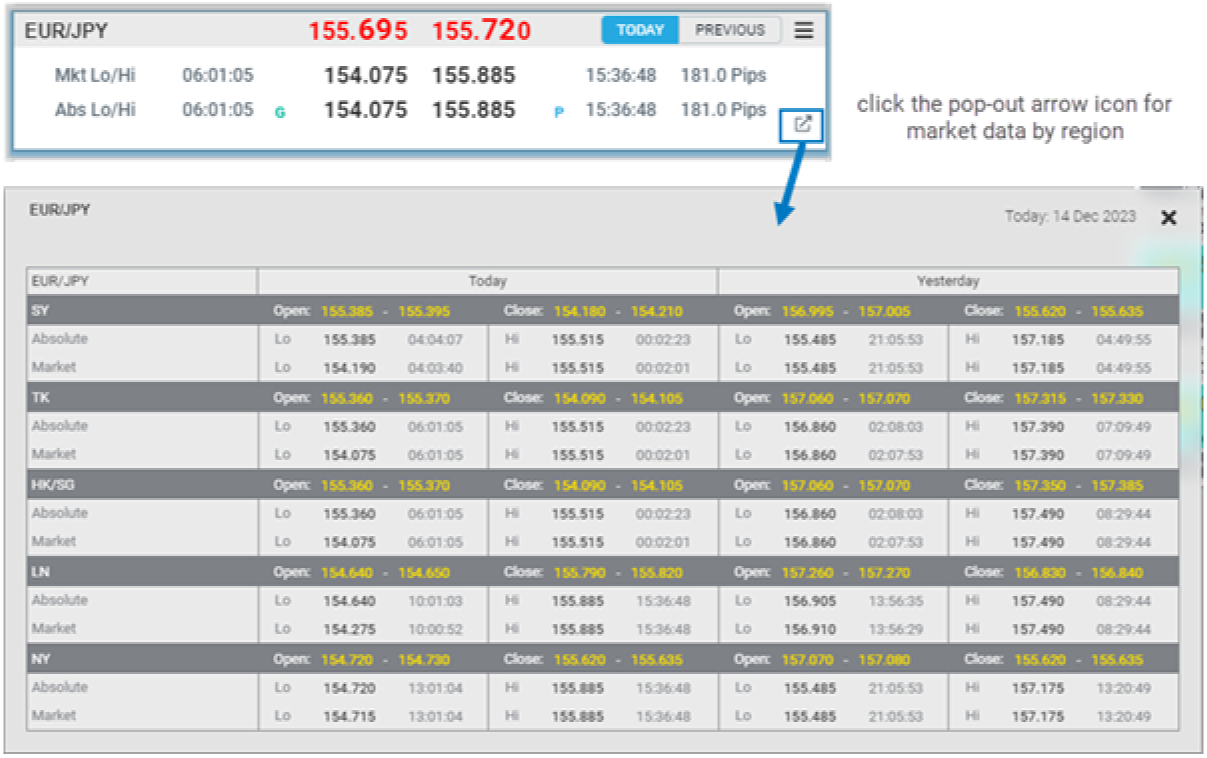
Use the **Today/Previous** button to toggle between the current and previous date.

Note: Sub-pip prices can be set to be appear visually distinct in EBS Deals, Trader Deals, and Market Data information cards.Refer to General Preferences > Market Card – Price Display Options for more details.



Regional Market Data

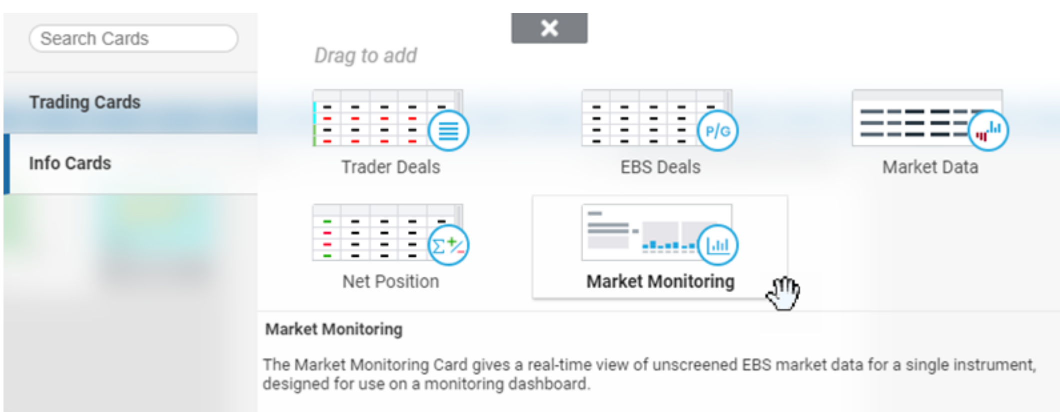
To view market data displayed by region, click the pop out arrow icon.

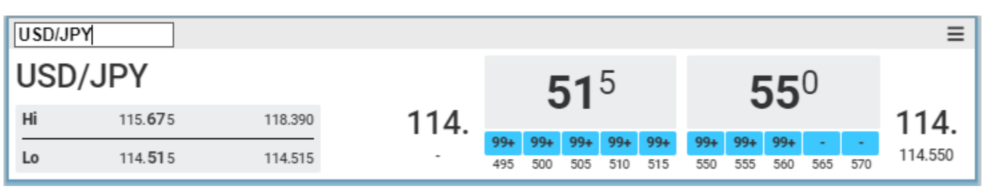


Market Monitoring Card

The Market Monitoring card displays EBS market data for a single instrument pair.

Go to the Cards Gallery > Info Cards to add the card to the Workspace.



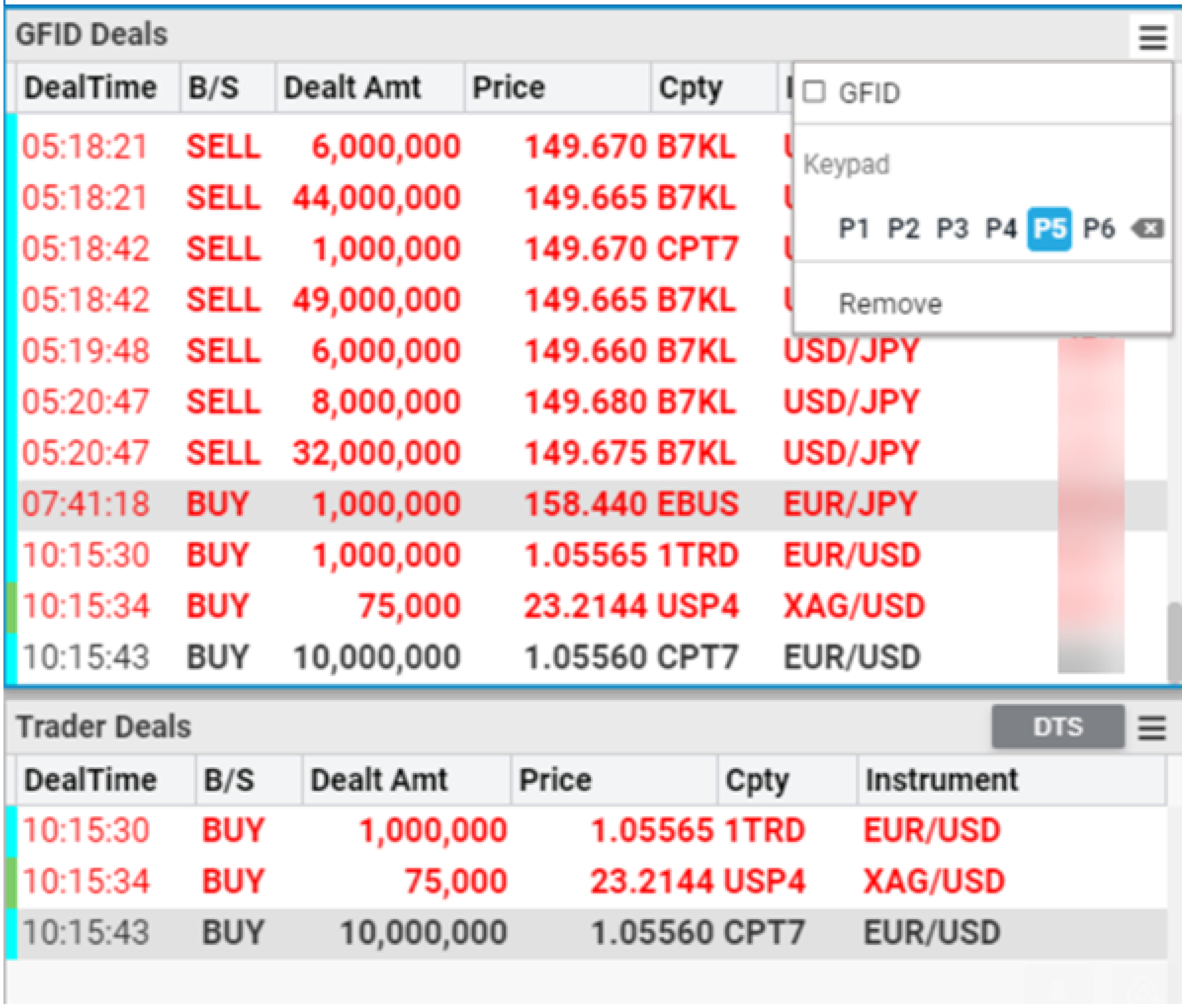


GFID Deals Card

GFID Deals is an information card which allows Users to see all Deals executed via EBS Workstation (no API trades) on EBS Market and EBS Direct by all Traders under the GFID which User has access to. Generally this card is very similar to Traders

Deals card, though it does not has DTS or Quick Summary function. This widget always show GUS of the user who executed a trade. GFID field can also be optionally enabled for display.

> **Note:** eFix deals are excluded from the GFID Deals display.



Other Features

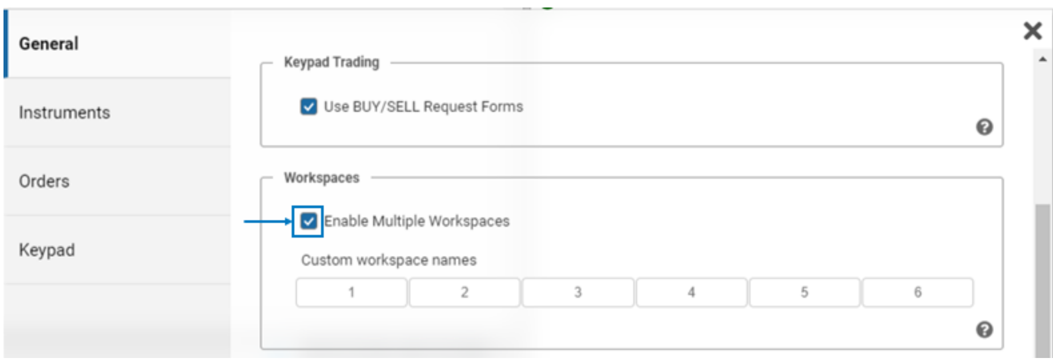
Multiple Workspaces

The **Enable Multiple Workspaces** option creates 6 separate Workspaces, allowing the addition of more cards and groupings of cards. Each Workspace layout is managed independently. All Workspaces share the same Orders Card (although it can be positioned differently) so that all active and done orders launched from any Workspace will always be visible on every workspace.

To enable multiple workspaces:

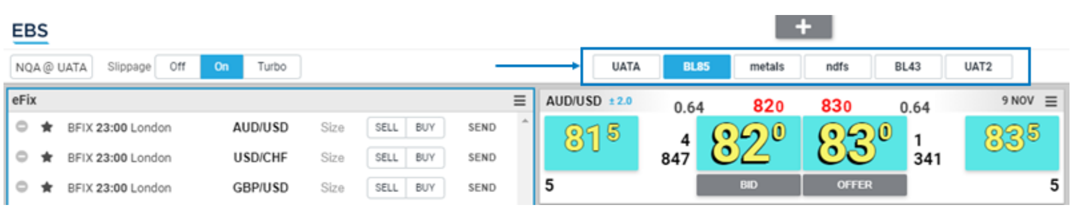
1. Go to the Workspaces section in General Preferences and check **Enable Multiple Workspaces.**

The screen will update with six Workspace name labels.



2. Click a label to enter a custom names (maximum of 6 characters) to each of the 6 Workspaces. Default names are numeric (1-6).

Workspaces navigation buttons appear at the top of the screen.



To navigate between Workspaces

- Using the EBS Keypad, press **<Shift>+<P>** keys at the top (**<P1>** is linked to first workspace, **<P2>** to the 2nd etc.)

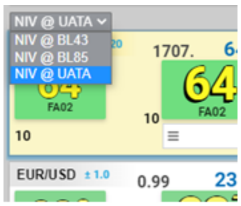
Multi-GFID Management

The Multi-GFID Management option in General Preferences is enabled by default for users with more than one GFID (Globex Firm ID) assigned to the same Username.

Note: By default each trading card is assigned its own GFID which can be changed.

To change the GFID for a card

- From the GFID menu at the top of the card, select a GFID.

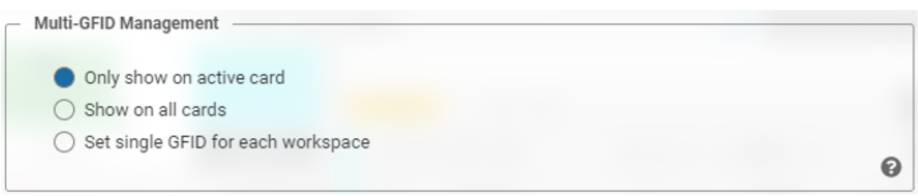


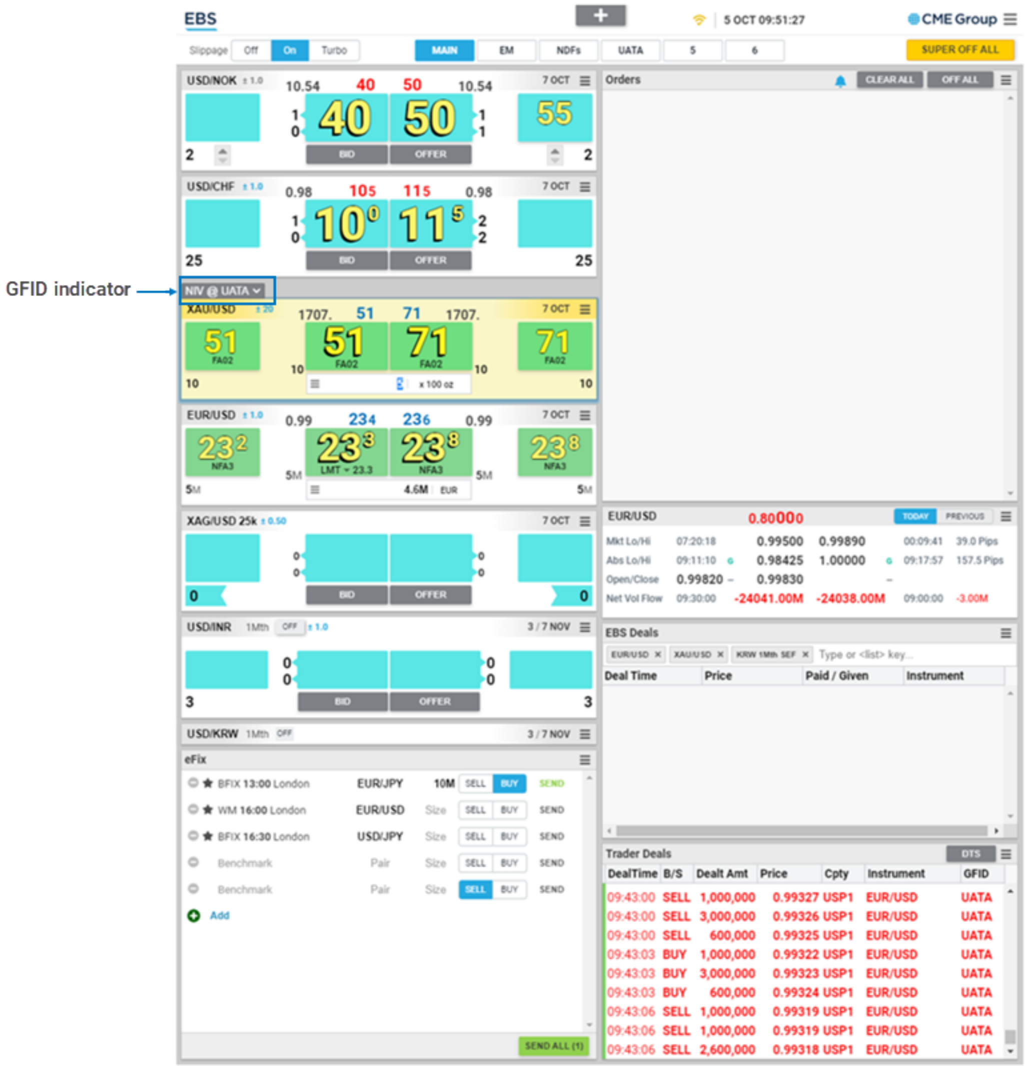
Note: For existing users, the last known selection from existing GFID selector in the top right will be applied to every individual card during the upgrade.

Users can choose to show the GFID indicator on the active card only or all cards. For users with enabled multiple Workspaces, there is additional option to a specific GFID to an entire Workspace.

Only show on active card (default)

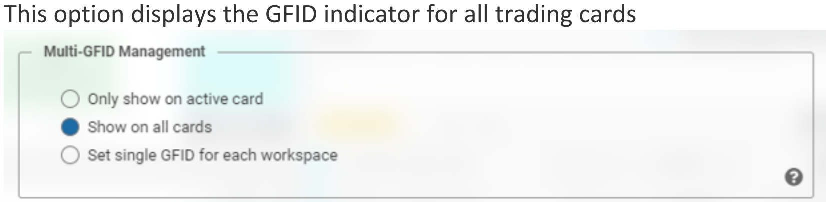
This option displays the GFID indicator for the active (yellow) trading card only. It saves screen space when space is at a premium, such as on smaller monitors.

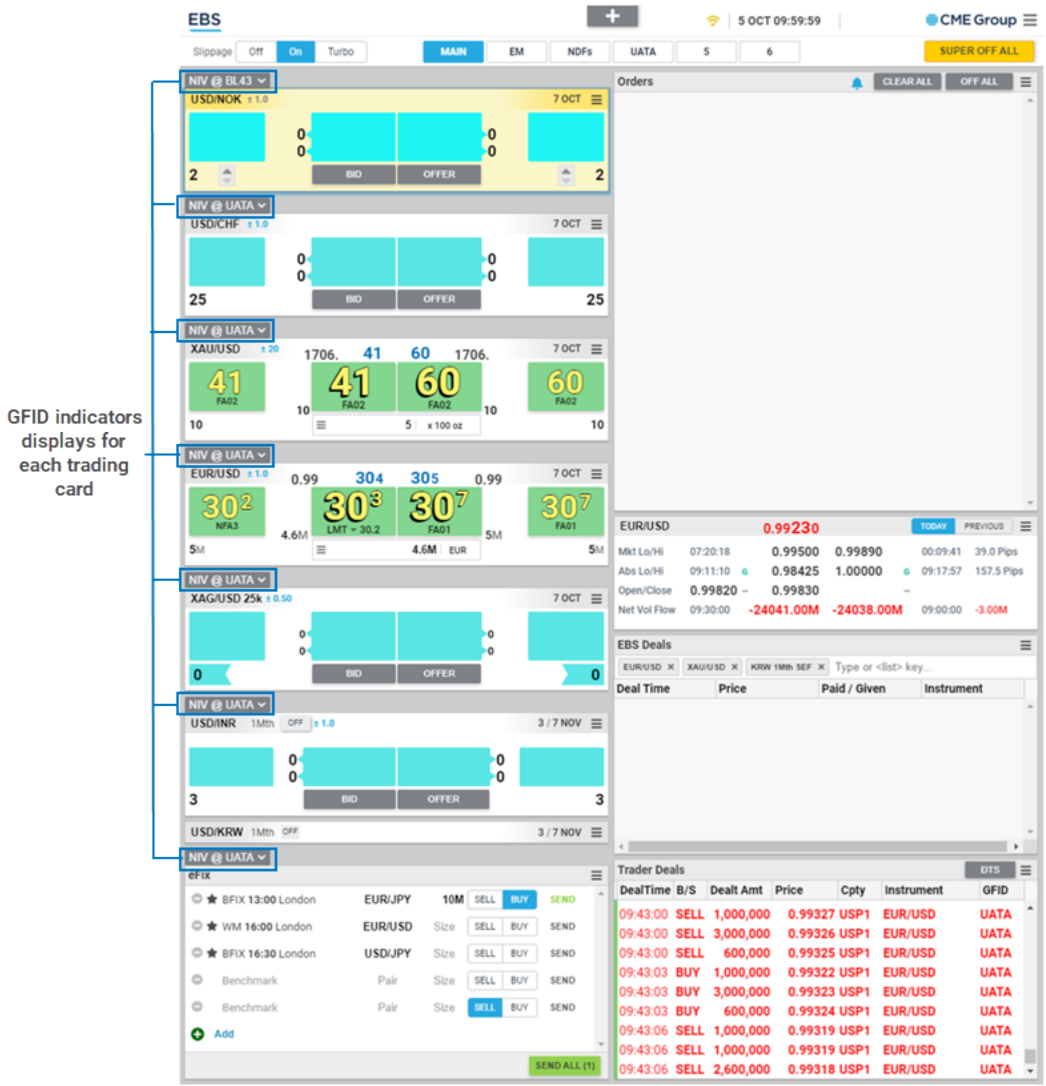




Show on all cards

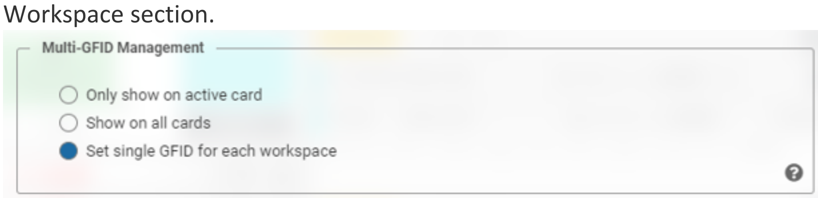
This option displays the GFID indicator for all trading cards

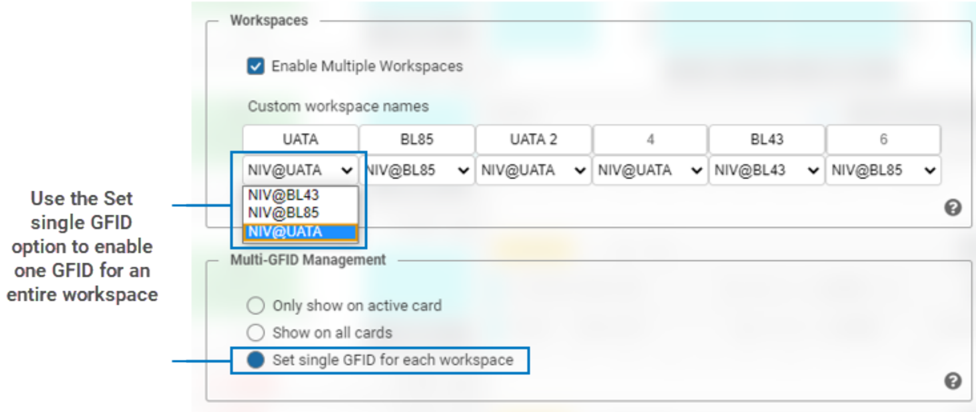




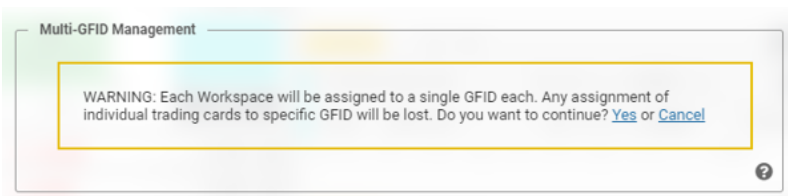
Set single GFID for each workspace

Use this options to allocate all Trading Cards on each of up to 6 Workspaces to specific GFID using the GFID-selector under Workspace section.

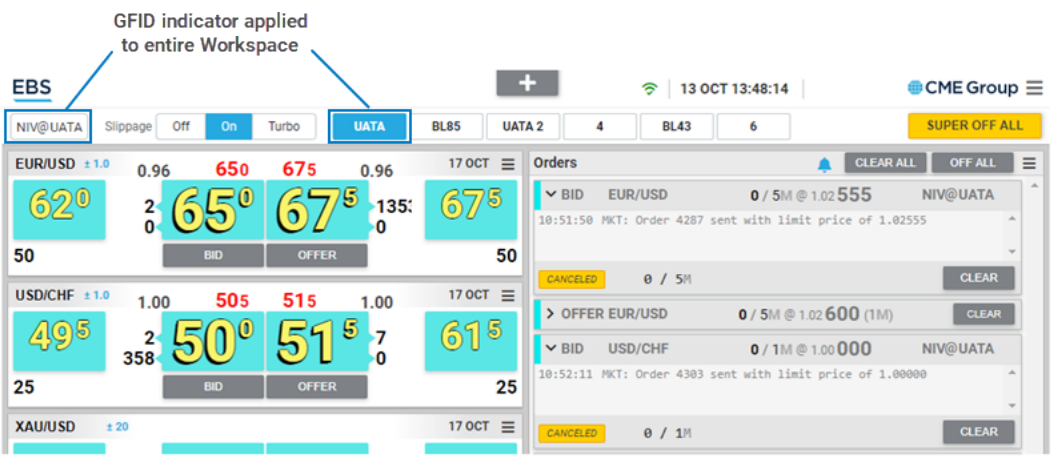




Note: When switching from individual card allocation to workspace allocation user will loose old GFID allocation.



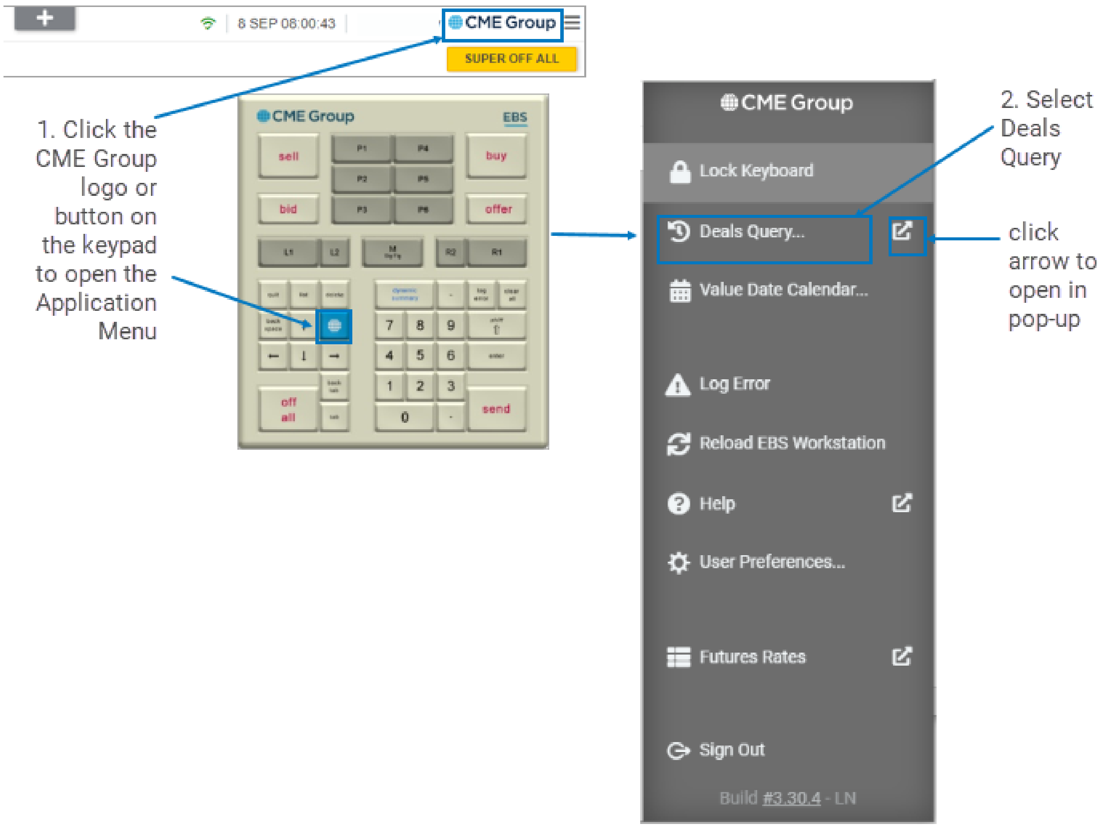
When GFID is allocated to specific Workspace a label at the top left corner is indicating which GFID is allocated to this Workspace (this is in the same place as GFID dropdown on current version)



Deals Query

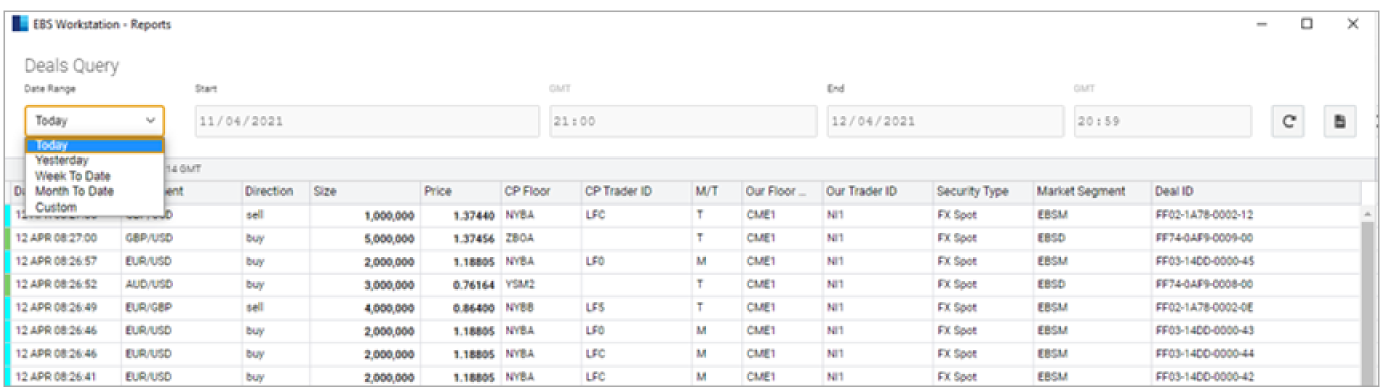
The Deals Query allows users to query and view historical deals done by the trader on EBS Workstation.

Access the Application Menu, which contains **Deals Query** (Settings), by clicking the **CME Group** logo in the top right corner of the application or by pressing the blue CME Group button on the EBS Keypad.



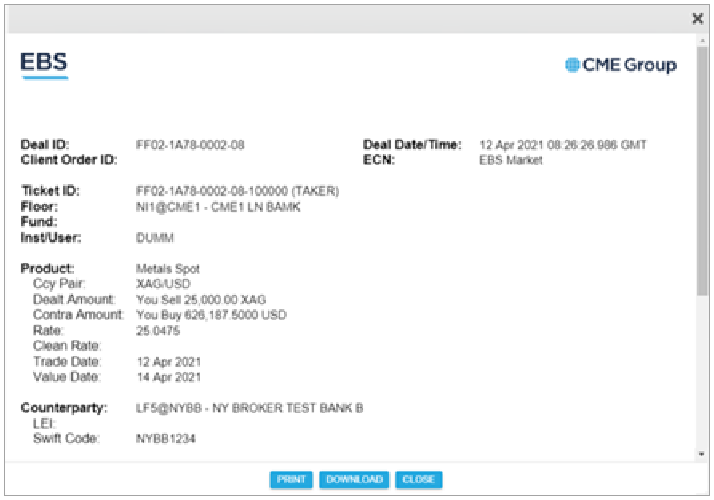
A Deals Query window displays and includes all deals for the current trading day by default. Additionally, the Deals Query allows users to run a query for a standard date ranges such as Yesterday, Week to Date, Month to Date or specify custom date and time ranges.

Deals Query Window

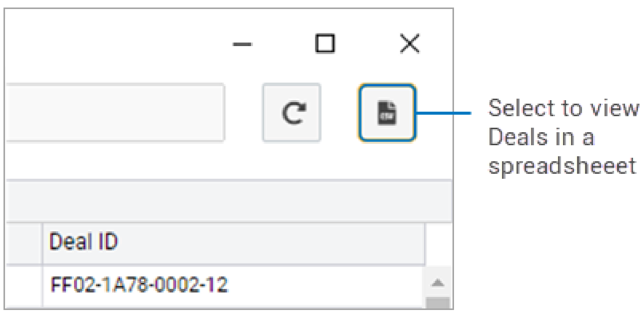


Double-click a Deal row in the grid to open a Ticket view containing details of the individual trade.

Ticket Display



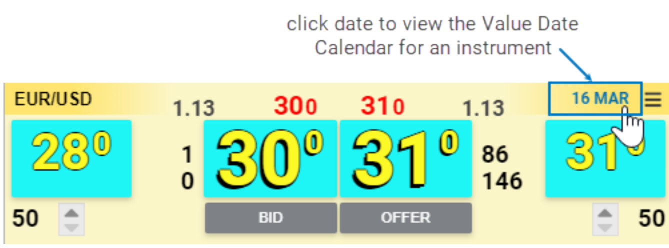
When running EBS Workstation on your own PC, use the export button to export Deal data to a spreadsheet.



Value Date Calendar

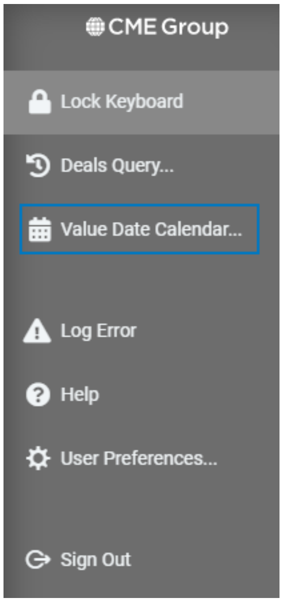
The Value Date Calendar which reflects EBS Value Dates, can be accessed in two ways

- Click the date on a trading card for a particular instrument:



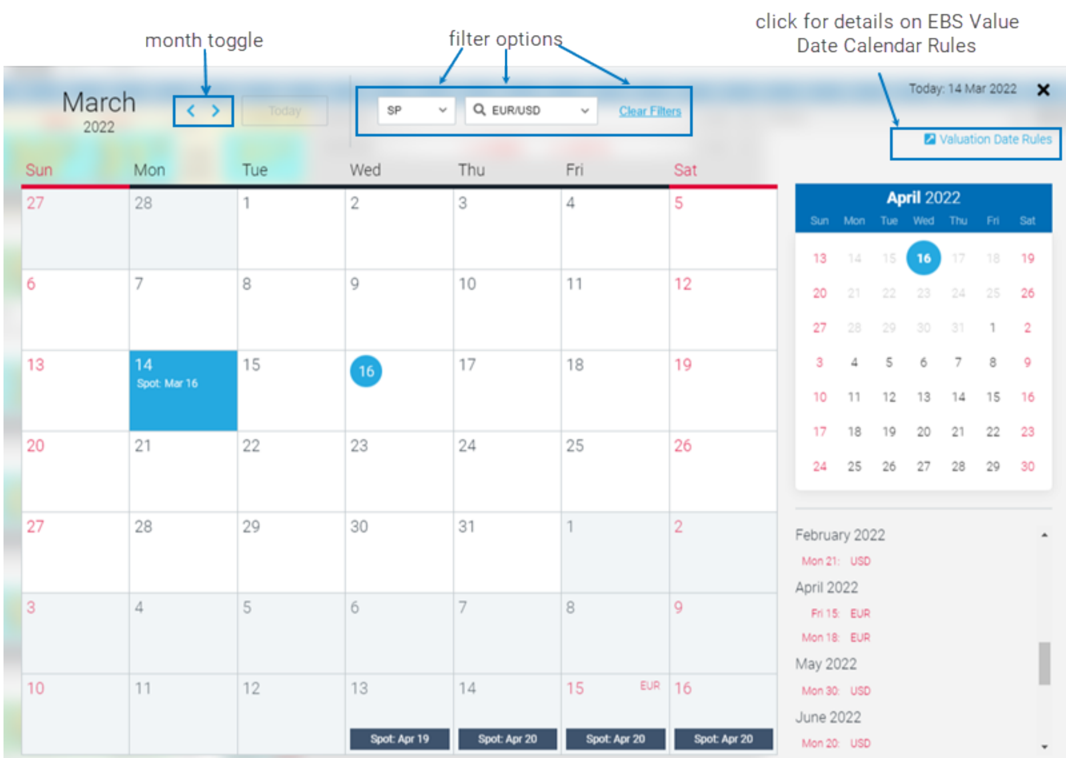
or

- Go to the [Application Menu](#) and click Value Date Calendar:

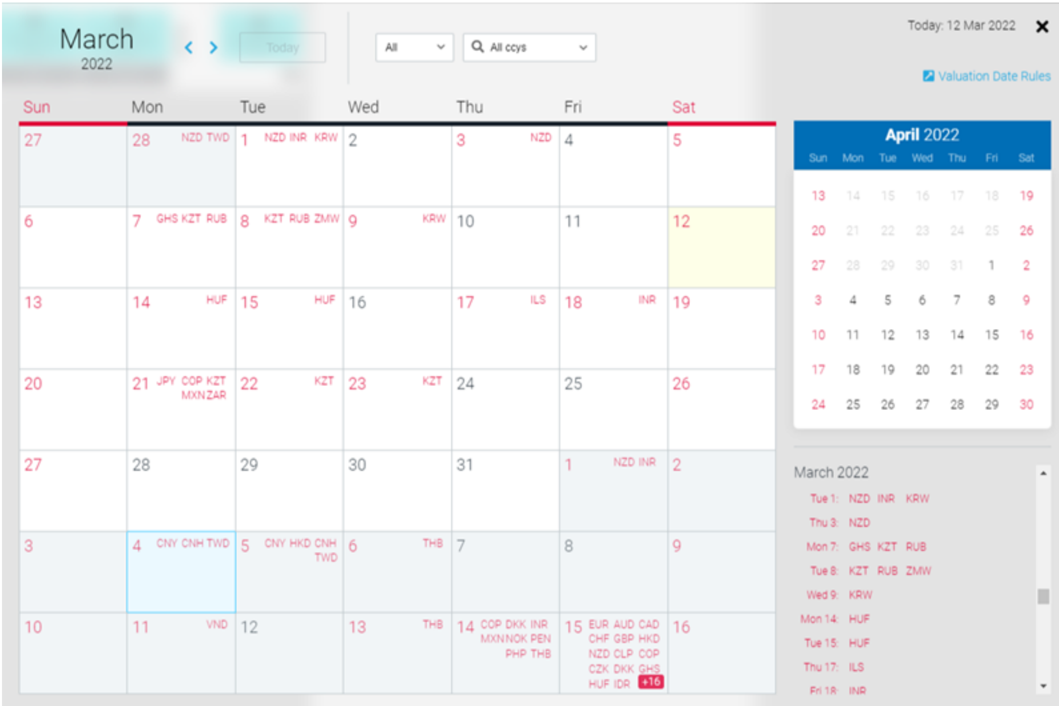


When the Value Calendar displays

- use the arrows to change the month
- filter by instrument type and currency pair
- click **Clear Filters** to see Value Dates for all instruments



Click the All instrument and All ccys filters to view value dates for all pairs.



Note: Select **Valuation Date Rules** to display detailed information on the EBS Value Date Calendar.

Errors & Warnings

When errors or warnings are detected, users receive a visual indication. These indications display for the following reasons;

- Absence of required parameters
- Incomplete parameters
- Invalid parameters
- When the distance between a parameter and a reference breaches a configured threshold

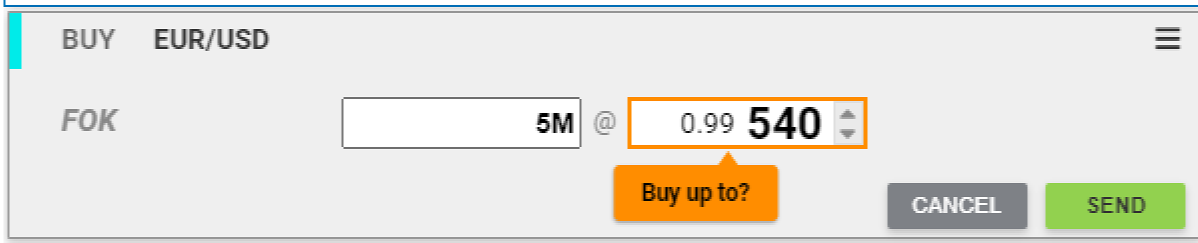
All errors and warnings display in the following elements:

- BUY/SELL Request Form
- Bid/Offer Request Form
- Mixed Liquidity Card

Warnings

A Warning is an indication that something in the inputs provided may be incorrect and require attention. When inputs are validated and a Warning exists, users can still submit the order.

Note: The field relating to the warning is outlined in orange.

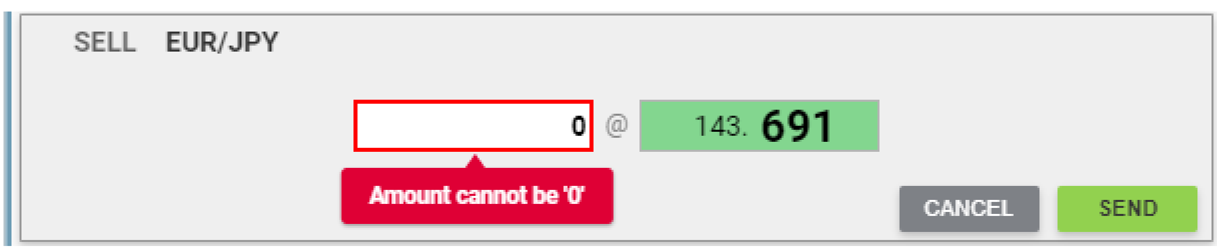


When a Warning is displayed, the user can still submit the order but will need to reconfirm by pressing **Send** again.

Errors

An Error is an indication that something in the inputs provided is incorrect and requires intervention. When inputs are validated and an Error exists, you CANNOT submit the order. You must either edit the error field and provide a valid value, to proceed, or abort. When an Error exists, the <enter> key changes behavior.

Note: The field relating to the Error is outlined in red.



Errors & Warning Priorities

The following tables present the various Errors and Warnings supported for Order Forms, and are sorted by priority. If two errors are triggered in parallel, the error which is higher in the following table displays on the form.

Price Related Errors & Warnings

Number	Error Message	Description	Type	Field in Error
1	Price cannot be '0'	When price is set to zero	Error	Spot Price Input
2	Pips must be multiple of %s	When pips is not a multiple of Pip Incre- ment	Error	Spot Price Input
3	Price outside range	When price crosses TOB price by more than threshold configured by EBS	Error	Spot Price Input
4	Large difference	When price is greater or lower than same side price by more than large diff	Warning	Spot Price Input
5	Wide spread	When price is away from opposite side best by more than threshold specified by EBS	Warning	Spot Price Input
6	Buy up to?	When price > Reg Dealable Offer Price	Warning	Spot Price Input
7	Sell down to?	When price < Reg Dealable Bid Price	Warning	Spot Price Input

Quantity Related Errors & Warnings

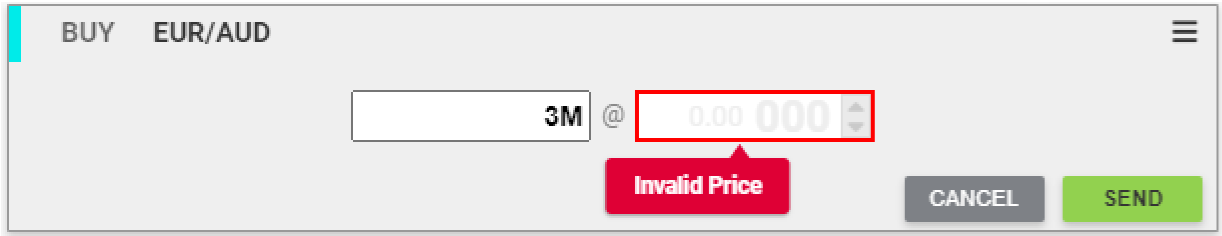
Number	Error Message	Description	Type	Field in Error
1	Invalid amount	When the inserted amount is not a valid input	Error	Quantity Input
2	Amount cannot be empty	When amount is empty	Error	Quantity Input
3	Amount cannot be '0'	When amount is set to zero	Error	Quantity Input
4	Amount must be multiple of %s	When amount is not a multiple of min trade size	Error	Quantity Input
5	Amount > EBS max trade size	When quantity input is greater than Max Trade Size	Error	Quantity Input
6	Amount < EBS min trade size	When quantity input is smaller than Min Trade Size	Error	Quantity Input
7	Amount > Max trade size %s	When quantity input value is greater than Max Trade Size set by user	Error	Quantity Input

Errors & Warnings Types

The following Errors and Warning are applied to Forms.

Error: Invalid Price

Users receive an error message when the spot price input = 0 (big_fig and Pips are each 0).

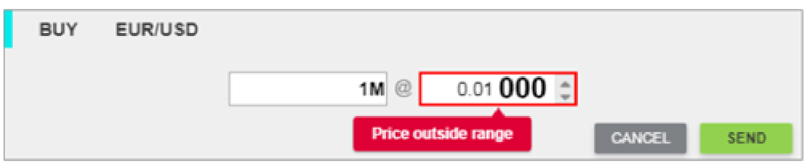


Error: Pips must be a multiple of ...

Users receive an error message when the spot price input Pips is not a multiple of Pip Increment parameter.

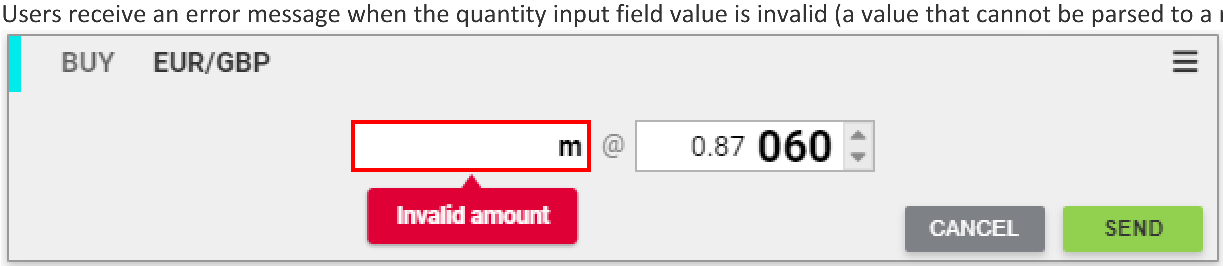
Error: Price outside range

Users receive an error message when the difference between spot price input and existing Best Dealable price exceeds threshold defined by EBS.



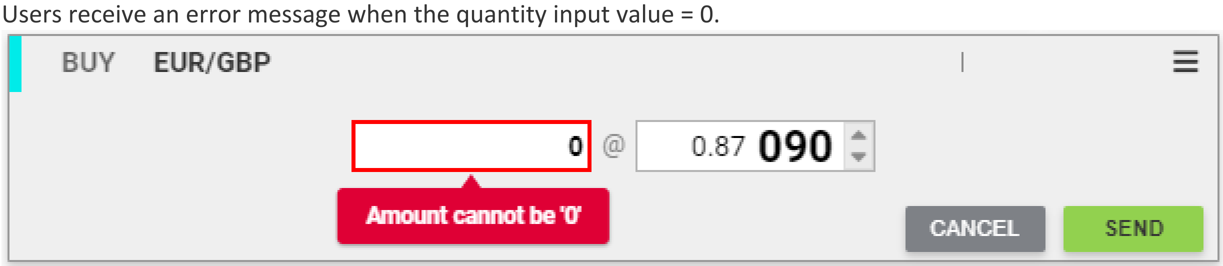
Error: Invalid amount

Users receive an error message when the quantity input field value is invalid (a value that cannot be parsed to a number).



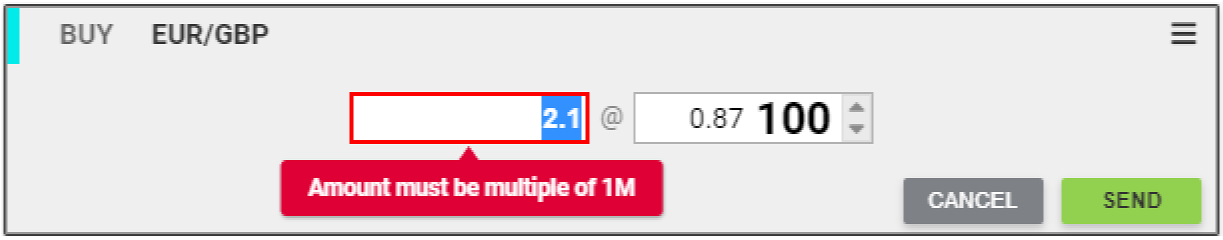
Error: Amount cannot Be '0'

Users receive an error message when the quantity input value = 0.



Error: Amount must be a multiple of ...

Users receive an error message when the quantity input value is not a multiple of the Trade Unit Size parameter.

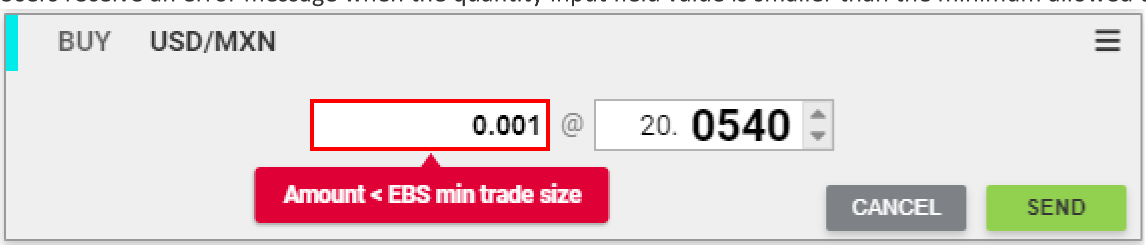


Error: Amount > EBS max trade size

Users receive an error message when the quantity input field value is greater than the maximum allowed trade quantity.

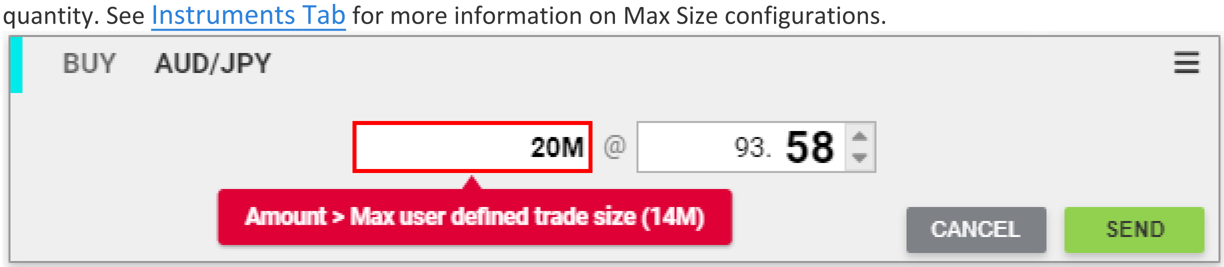
Error: Amount < EBS min trade size

Users receive an error message when the quantity input field value is smaller than the minimum allowed trade quantity.

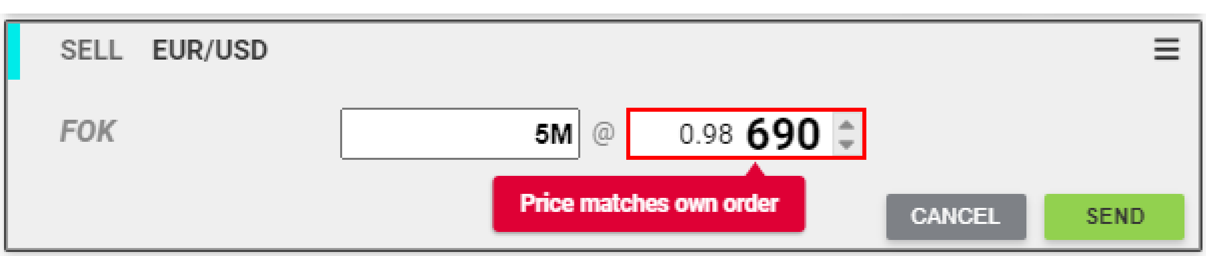


Error: Amount > Max user defined trade size

Users receive an error message when the quantity input field value is greater than the user settings for maximum trade quantity. See Instruments Tab for more information on Max Size configurations.

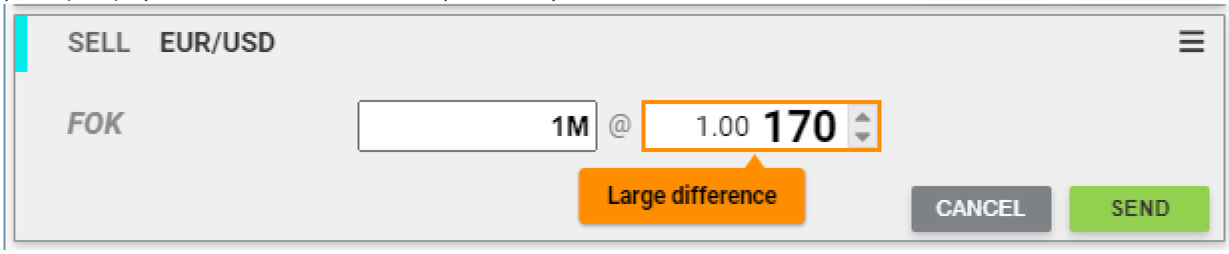


Error: Price matches own order



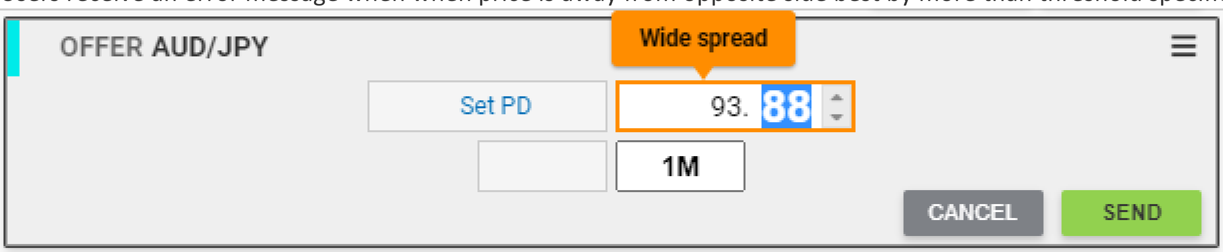
Warning: Large difference

Users receive an error message when the spot price input is either smaller or greater than existing same side Best Dealable price (ToB) by more than the threshold specified by EBS.



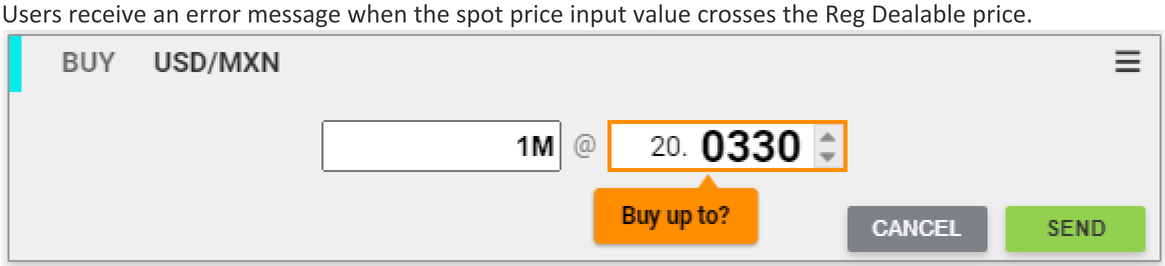
Warning: Wide spread

Users receive an error message when when price is away from opposite side best by more than threshold specified by EBS.



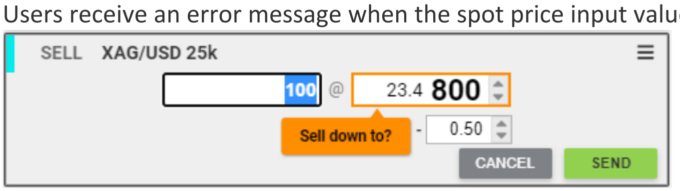
Warning: Buy up to?

Users receive an error message when the spot price input value crosses the Reg Dealable price.



Warning: Sell down to?

Users receive an error message when the spot price input value crosses the Reg Dealable price.



Errors Applied to Mixed Liquidity Cards

In addition to other cards, error messages regarding quantity input also display on Mixed Liquidity cards.

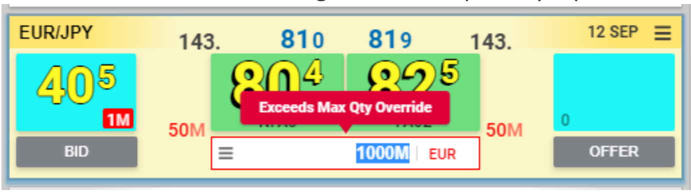
The following Errors are applied to Mixed Liquidity Cards.

Error: Input Below Minimum Quantity

Users receive an error message when the quantity input field value is smaller than the minimum allowed order size.

Error: Input Exceeds Maximum Quantity

Users receive an error message when the quantity input field value is larger than the maximum allowed order size.



Error: Invalid Quantity

When an input cannot be formatted to a XXXX, an Invalid Error is raised.