DEUTSCHE BÖRSE GROUP

Deutsche Börse Group's T7 - Cash Markets

T7 Release 15.0 – Trader, Admin and Clearer GUI

Manual

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1 Introduction

1.1 Introduction

The present document provides a detailed description of the Cash Markets GUI applications which are provided to participants for access to trading functions, risk and security functions.

The applications provided and specified herein are: *Cash Trader*, the application provided to traders, *Cash Admin* which is tailored to the service administrator and *Cash Clearer* providing risk control functions for the backoffice and risk staff.

Note: Data contained in the screenshots and samples in this publication are for illustrative purposes only and should not be relied upon as a true representation of the current market.

Any information which is presented in this document, including screenshots, are subject to change.

This document is also available via the online help of these applications. The online help is based on this document and will always carry the most up to date information.

1.2 Overview

The functions of the GUI applications have been organized based on the different roles of the users, which are explained in the next paragraphs.

Roles and Applications

The GUI applications *Cash Trader*, *Cash Admin* and *Cash Clearer* are provided to users of the following roles (a selection of the most important roles):

- Trader

  Access to the market: Display of market data, order entry, order maintenance, order display, trade display, time & sales, statistics, risk functions.

- Market Maker

  Access to the market: Display of market data, trade display, time & sales, statistics, risk functions.

- Trading View

  View only access to the market: Display of market data, order display, trade display, time & sales, statistics.

- TES Broker

  Access to the TES Trade Entry facility (broker mode), display of TES trades in the *Trades* and *TES View*.

- TES Trader

  Access to the TES Trade Entry facility (simple mode), display of TES trades in the *Trades* and *TES View*.

- TES View

  View only access to the TES View, time & sales, statistics.

- User Data View

  View only access to see all users and their entitlements.

- Service Administrator

  User Maintenance: setup and maintenance of users, configuration of trading limits and user entitlements, risk controls, trade enrichment rules.

- Emergency Trading Stop, Clearing Member Stop

  Emergency risk control functions to stop trading for a user or an entire business unit.

- CM Backoffice View

  View only access to the Backoffice Trades view for display of the trades of the NCM.

- Clearing Member Stop

  Ability of a clearing member to stop an NCM via the Stop Trading view.

Depending on the role the user has been assigned, the user only needs to operate a single application for the daily business with Cash:

GUI Application	Role	Functionality
Cash Trader GUI	Used by participant users: traders, market makers and trading view users.	Market and market depth view, Orders, Trades, Time & Sales, Order Entry, T7 Entry Services, Statistics, Risk Controls
Cash Admin GUI	Used by the service administrators and user data view users.	User Maintenance and Entitlements, Trade Enrichment Rules, Risk Controls
Cash Clearer GUI	Used by the backoffice and risk staff of a clearing member.	User Maintenance (setup and maintain users assigned to a clearing BU), Risk Controls (Emergency Stop NCM) and Backoffice Trades

An introduction and general description on how to operate these applications can be found in chapter 2 General GUI Concepts and Functions.

Please refer to the following chapters for an overview of the functions provided by the applications *Cash Trader* (chapter 3), *Cash Admin* (chapter 4) and *Cash Clearer* (chapter 5).

1.3 List of terms and Abbreviations

Please find a list of the terms and abbreviations used in the document.

AVD	*Auction Volume Discovery* - AVD orders are traded exclusively during scheduled auction phases without impacting the price determination process. They feature a post-trade transparency, i.e are not visible during the auction.
Business Unit	A participant structure that offers a Business Unit (BU) concept for separating lines of business.
CA-S	*Continuous Auction with Specialist* trading model, i.e. trading model of T7 Deutsche Börse Frankfurt.
Context menu	The context menu appears right next to the mouse pointer when clicking the defined mouse button. Allowing a fast selection out of a distinct set of choices (e.g. quantity, limit).
CCP	Central Counterparty. CCPs support clearing of trades executed in CCP eligible instruments on T7.
CLOB	Central Limit Order Book
Entitlement Role	Sets of resources (e.g. authorizations for mass quote, delete all quotes) are combined into logical user roles (e.g. market maker). A set of pre-defined user roles is available to participants for user administration purposes.
ETP	Exchange Traded Products (e.g. ETFs)
Filter	The filter allows the user to display information in an overview view according to pre-defined criteria.
GMC	GUI Middleware Cluster
GUI	Graphical user interface. Also called *application*.
Head trader	A head trader is part of a user group and may see and maintain standard orders of all traders in the same user group in *Cash Trader* - granted, that the required entitlements are assigned.
ID	Identification
Inside Market	Identical to Top of Book.
Instrument	Refers to the object which is traded at Cash Markets .
ISIN	12 digits international security identification number. For multi currency instruments only unique with the specific currency.
Lean order	Lean orders are supported on high and low frequency sessions but not on *Cash Trader* GUI. Lean orders are only visible to the current session. Lean orders are always non-persistent.
Limit Order	Bid/ask orders which are to be executed at their specified limit or better.

LIS	Large In Scale, a CASH TES trade type
Market Depth	Market information which is provided in the Market view, display of the best bid/ask limits with accumulated volumes per instrument.
Market Order	Unlimited bid/ask orders
Market Reset	An event where all non-persistent orders and all quotes of a partition are deleted by the T7 system during the online day.
MDI	Market Data Interface
Midpoint Order	Orders that are traded in a separate, in-transparent ('dark') order book. Executions of Midpoint orders will take place at the midpoint between the best ask and best bid of the CLOB.
Order Book	Identical to Market Depth
(TES) OTC	Over The Counter, a Cash TES trade type.
Persistent/Non-Persistent Orders	In various situations as e.g. a trade interruption (e.g. during technical order book processing, session disconnect) all quotes and all orders marked as non-persistent will be deleted.
PSM	Product State Monitor, a tool that shows an overview of the number of products and instruments for each product and instrument state, and per "control segment".
PUEV (trade)	Cross Market OTC trade, specific to pre-approved OTC Trade Uploads in the context of cross exchange OTC trading of German Stock Exchanges within the trading venue Deutsche Börse Frankfurt
RDS	Reference Data System
Standard order	Standard orders provide access to their complete history.
Supervisor	The supervisor user level may see and maintain orders of all users of the same business unit - granted, that the required entitlements are assigned.
TES	Cash T7 Entry Services. The T7 Entry Services enable traders to enter pre-arranged off book trades. TES trades can be entered using the respective views of the *Cash Trader* GUI.
ToB	Trading on-Behalf (by market supervision)
Top of Book	Overview in which the best bid and best ask limits with accumulated volumes of the order book are displayed.
Trade	Defines the result of an order or quote match.
Trader	A trader is an individual admitted for trading at the exchange. Unlike a head trader and supervisor, a regular trader cannot see the orders or trades of other traders from the same user group. If displayed in views, Trader refers to the *User Name* of the *Exchange Account* for the respective system.

Trading capacity	The trading capacity is a property of orders and trades, and is used to inform clearing about the order capacity: Agent, Proprietary or Market Maker. This field is not visible in *Cash Trader*, but the *Order Entry* uses the value of the Account field to fill the trading capacity.
User group	The concept of a group of traders, comparable to the trader subgroup of the Xetra classic trading system. The user group however is not identified as a part of their user ID - the user group can individually be assigned as part of the user settings.
User Level	Every user is designated to have one (and only one) user level: trader, head trader or supervisor. Users enter their own orders, and their user level defines which orders they are authorized to act upon.
View	A view is always only a part of a window. It may be the only content of a window. But in case of the desktop tab of the main window, multiple views can be part of a single window.
Window	A window is a part of the operating system and because of that it is visible in the taskbar. A window may contain a single or multiple views.

2 General GUI Concepts and Functions

The Cash Exchange's T7 GUI applications, namely *Cash Trader*, *Cash Admin* and *Cash Clearer* share common elements. All of them will open a *Login* window when started and will show a *Main* window once the login is successful. The *Main* window features a menu, a toolbar above the central desktop and a status bar below. The central desktop provides access to the most important views, which are opened inside of the central desktop.

Also the views share common elements: the view has a window title bar with icons in it, it has a central pane containing a form or a table and eventually an additional button bar below or next to it. This chapter provides a general description of *Cash Trader*, *Cash Admin* and *Cash Clearer*, it describes the basic GUI elements that will appear in the various views of these applications.

Note: Data contained in the screenshots and samples in this publication are for illustrative purposes only and should not be relied upon as a true representation of the current market.

Note: Descriptions of GUI functions are subject to change.

2.1 General Description of the T7 GUIs

The first window which is shown to the user of the T7 GUI is the *Master Login* view (explained in more detail in chapter 2.7). If the login is successful, the user is presented with the application window showing the *Welcome View*.

Regarding windows and views: While the application window is visible as a single window in the operating system, this single application window can display multiple views in one instance. These smaller windows inside the main window, for example the *Market* view and *Orders* view are called *views*. In order to achieve this, the application features a desktop on its own - similar to the trading board of the Cash legacy trading system Trading GUI. This desktop will be described later in this section.

The application window consists of the following elements:

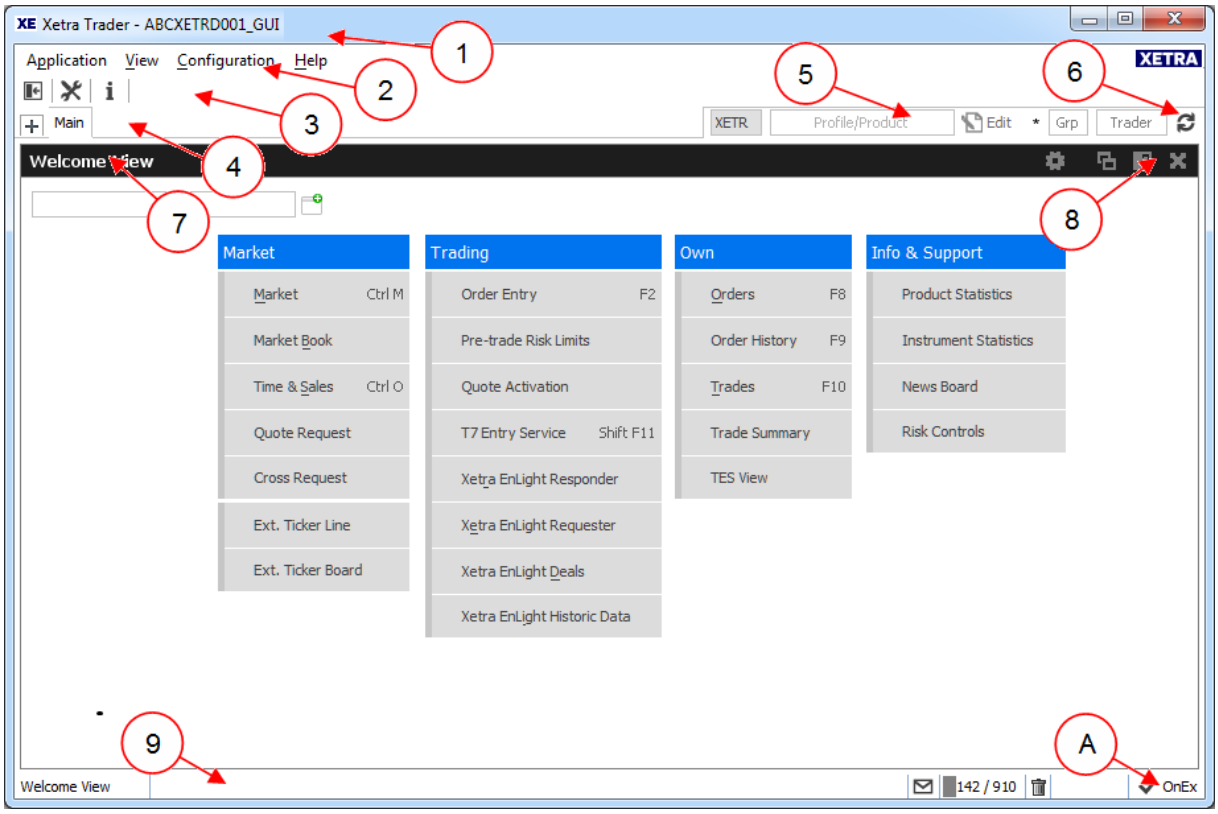


Fig. 1: Screenshot of the Cash Trader *Main* window showing the *Welcome* view.

Item	Description
1	Application window title, displays the name of the application and the environment level (SIMU for simulation).
2	Menu bar. The menu bar contains the actions provided both by: 1) the application. 2) and by the currently selected view. While the actions provided by the application are fixed, the actions provided by the currently selected view will change automatically, if a different view is selected. The menu bar is explained in more detail below.
3	Toolbar. The toolbar provides quick access to the most important functions. The toolbar is automatically updated once a different view is selected.
4	This is the desktop tab area. Multiple desktops can be created by a click on the plus-sign on the left hand side of this space and are presented by their name here. Desktops can be switched by a single click on the respective tab in this area. In the example above only one tab is available which is called *Main*. In this example the *Main* desktop tab contains only the Welcome view. The *Main* tab is initially presented to the user if the user logs in for the first time. Tabs can be renamed by a double click on the tab.

5	The desktop filter. This area provides filter fields which will be in effect for all of the views of the currently selected desktop. If the desktop is switched, this filter will also switch, because it is part of the currently selected desktop. Two basic filters are provided here: • *Profile/Product*: Enter a product or profile here to use it on all views of the currently selected desktop tab. • *Trader*: This filter allows a head trader and supervisor to filter the display of orders and trades on all windows of the current desktop for a specific user name. This filter is only provided to head traders and supervisors. • *Group*: Group filter to filter for data in the context of the selected user group.
6	The '*Go'*-button. Clicking on this button applies the filter. This button will also be present in most views, and anytime this icon is displayed it can be used to apply a filter next to it. The filter can also be applied by pressing the *enter* or *return* key.
7	This is the view title of the Welcome view. In this particular example it is the only view which is displayed on the desktop and it occupies the whole space of the desktop. The desktop is explained in more detail below in this section.
8	These buttons affect the currently selected view and provide quick access (from left to right) to: externalize the current view, to split the current view and to close the current view.
9	Status bar. The status bar always displays the last message of the currently selected view. If the view changes, the status bar automatically changes as well. Double clicking the status bar opens the Log Messages view which displays the history of status messages.
A	The system connection status display. In this area the current connection status to the trading systems are displayed, for which the user is logged in.

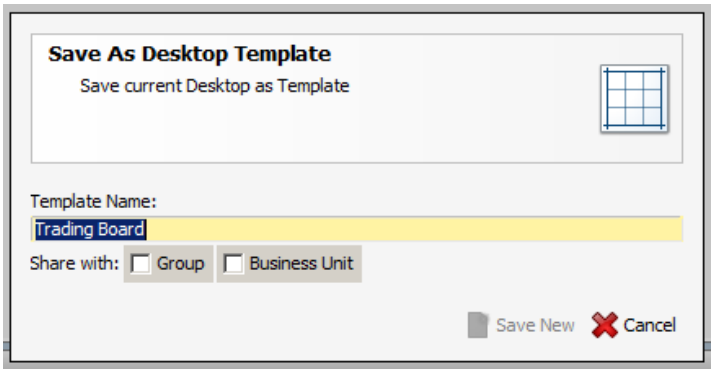
2.1.1 Menu Items and Actions

The menu bar displays the following menus:

- Application
- View
- Action
- Configuration
- Help

If the currently selected view does not provide any actions, the *Action* menu is not shown. The various menu items that display in the menus, depending on the selected view, are described in the

following. For the *Action* menu only the most common actions are described - the description of the specific actions is part of the description of the respective view.

Menu	Menu Item	Description
Application	New Window	Opens a new instance of the application.
	Close Window	Closes the currently open instance of the application.
	Save Settings	Saves the current configuration of the application.
	Preferences	Opens the Application Preferences view.
	Login / Logout	Opens the Login/Logout dialog.
	Save Desktop Template	Saves the currently selected desktop tab into a named desktop template. Templates can be shared within the own user group or business unit (depending on the user level): 
	Desktop Templates	Select a predefined or an own desktop configuration. This menu also allows to delete own templates.
	Exit	Closes all windows of the currently running application.
View	New View	Splits the currently active view to open a new empty view.
	Find	Opens the find dialog to start a search in the table of the currently selected view.
	Print	Opens the print dialog to print the currently selected view.
	Export	Opens the export table dialog to export the table of the currently selected view.
	Show Log	Opens the Log Messages view for the current view
	Properties	Opens the view Properties.
	Save Columns	Saves the columns of this view in current order, useful after user has reordered or hidden columns. Newly open view will thus display same column order.
Action	Add	Starts the creation of a new element.

	Modify	Starts a modification of the selected element.
	Delete	Deletes the selected elements.
Configuration	Exchange Accounts	Opens the Exchange Accounts view.
	Alerts	Opens the Alert Configuration view.
	fx Formula	Allows to create user defined columns and formulas.
	fx Constants	Allows to create user defined constant values per product/contract.
	Profiles	Opens the Profiles view.
	Text Field	Opens the Text Field Configuration view.
	Counterparties	Opens the Configuration view for TES and Xetra EnLight counterparties.
Help	Browse Help	Starts a web browser to display the online help.
	About	Displays the version number, Trader info and GUI system info of the application.
	Collect screens	Brings all open windows of current GUI to the active screen.
	On this View	Starts a web browser to display the online help for the currently active view.
	What's New	Opens the What's New view.
	Bulk Templates	Opens the dialog to download the (TES) templates for bulk actions.

2.1.2 Buttons and Icons

The following table shows the generic buttons and icons of the application. The actions which are triggered by these buttons behave in the same way throughout the application:

General Buttons / Icons		
Icon	**Image**	**Description**
Apply		Submits the data shown in the view without performing a reset afterwards. Only enabled if all mandatory fields of the corresponding view are filled.
Submit		Submits the data shown in the view and performs a reset after successful operation to indicate that the task is done. Only enabled if all mandatory fields of the corresponding view are filled.
OK	✔	Applies changes and closes the window

Cancel		Closes the window without any further action
Refresh		Loads or reloads the display
Reset		Resets fields to predefined values
Expand		Clicking the *Expand* icon expands the table to display a specific market depth
Collapse		Clicking the *Collapse* icon collapses the table, restoring the initial view
Lock		Access to this function has not been granted
News		Opens the News Board view

2.1.3 Status Bar and Message Log

During the entry of data into a form window, the window logic validates the input from the user and decides whether or not to display additional information in the *Status Bar.* As a result of actions that are triggered on a window, the system will respond with a message indicating the status of the transaction, whether it was successful or not.

All these messages are displayed in the *Status Bar* of the window. If the content of the message does not fit into the status bar, the full text is available by double clicking the *Status Bar* which opens the *Messages Log* window.

The *Message Log* can also be opened via the menu option *View -> Show Log*.

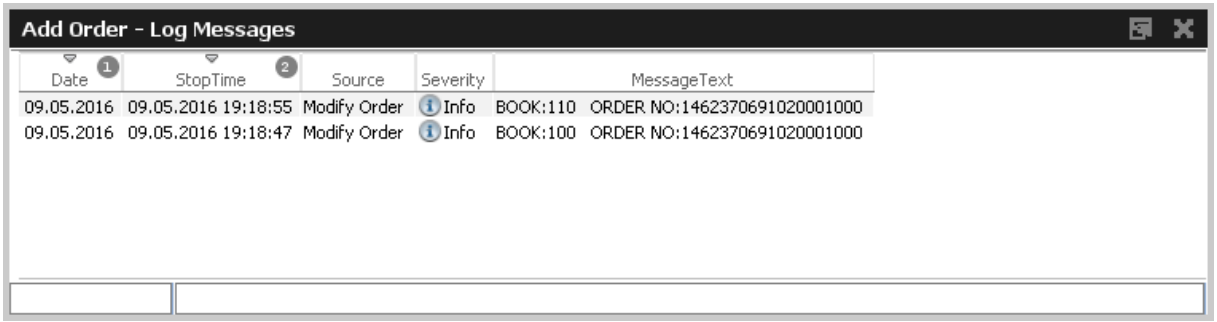


Fig. 2: Screenshot of the Messages Log window.

2.2 Trading Desktop

The *Trading Desktop,* or simply the '*desktop*', allows you to open a variety of views (*Market* view, *Orders* view, *Order Entry*, etc.) within a single display. Within the *Trading Desktop*, views can be resized, they can be moved, be closed or even taken out of the *Trading Desktop* to have them as external windows.

Multiple *Trading Desktops* within the same main window are also supported - they can be created and switched from the desktop tab area. The capabilities of the Desktop are explained next.

Adding a new view to the Desktop

An empty *Trading Desktop* which is opened for the first time will display the *Welcome* view as described before. This *Welcome* view displays the complete menu available. A view can be opened by a click on the respective menu item. Once an item has been chosen, the *Welcome* view will be replaced by the requested view.

A new view can be added to the current desktop by clicking the Split icon from the view title bar:

Fig. 3: Screenshot of the Split icon.

Alternatively, new views can also be added by a click on the outmost (left, right, top or bottom) border of the *Trading Desktop*:

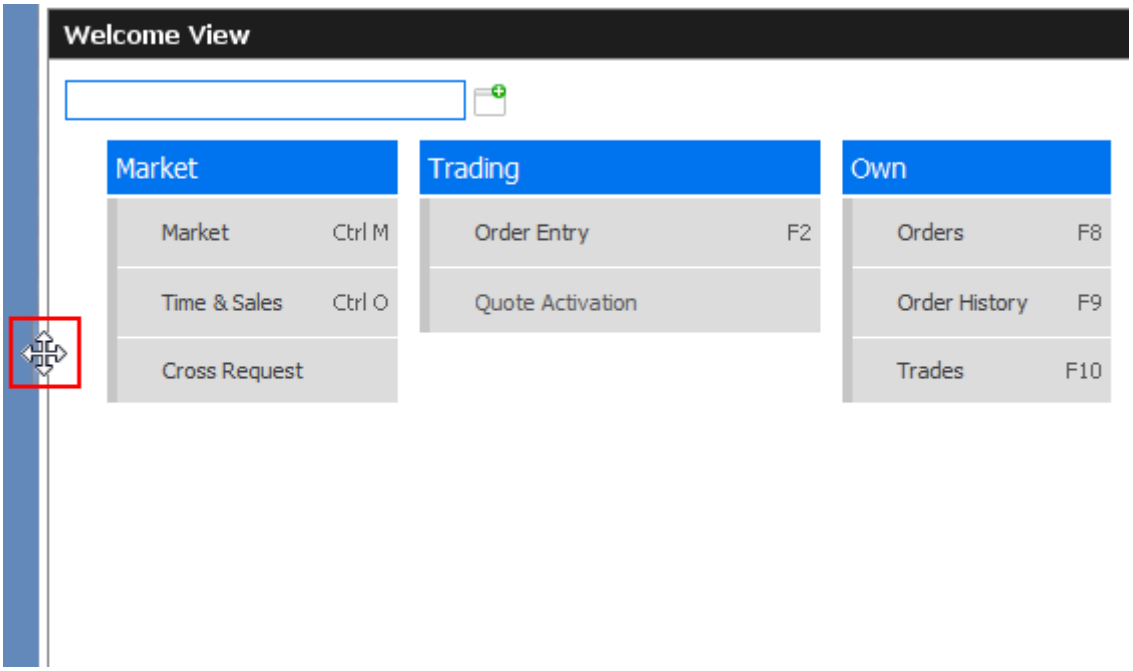


Fig. 4: Screenshot of the *Trading Desktop* illustrating how to add a new view

If a new empty panel cannot be created this way, this would mean the Trading Desktop is full and other windows inside of it must be closed to make space for a new one.

If a view is closed using the Close-icon (see illustration below) the view will not close - instead it will be replaced by the *Welcome* view to allow for a quick change to a different view. If the *Welcome* view is then closed, the space that has been used by that view will be provided to the remaining views of the current desktop.

Fig. 5: Screenshot of the *Trading Desktop* illustrating how to close a view

Resizing

Views can simply be resized by clicking and dragging the slider between the views:

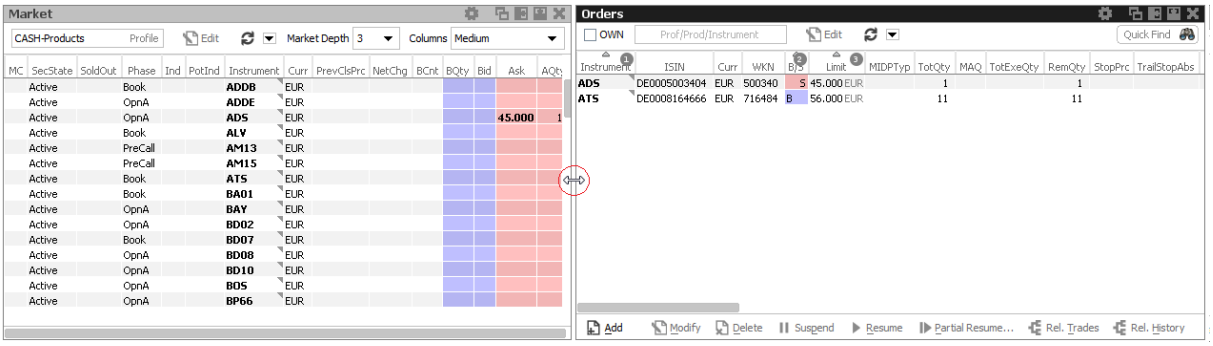


Fig. 6: Screenshot of the *Trading Desktop* showing how to resize views

Moving a view

Views can be moved inside of the desktop by clicking and dragging the view title:

Fig. 7: Screenshot of the *Trading Desktop* illustrating how to move a view to a new target

While dragging the title, the view will be extracted from the current desktop and a tiny preview of the view is shown at the location of the mouse. A blue bar appears which indicates the new location of the view. The new location can be changed by moving the mouse pointer across the desktop. If the new target location is to the liking of the user, a click on the mouse button will insert the view into the new location.

If the mouse button was pressed outside the borders of the current desktop, the view will be opened as an external window. The next section describes a different way to externalize a view.

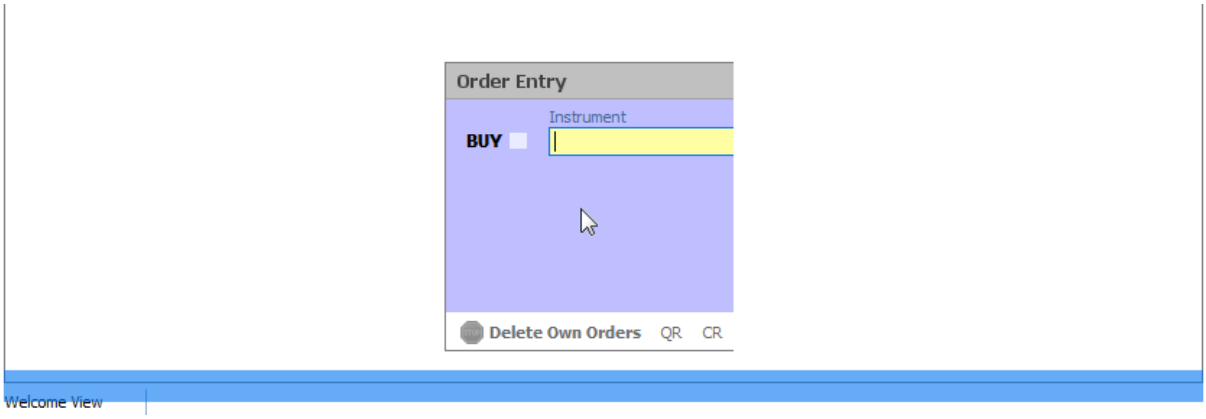


Fig. 8: Screenshot of the *Trading Desktop* illustrating how to drop a view to a new target

Externalizing a view

As described in the previous section about moving a view, a view can be externalized if the view title has been dragged outside the boundaries of the current desktop, and the mouse button pressed.

It may be more convenient to externalize a view just by a click on the Externalize-Icon in the view title:

Fig. 9: Screenshot illustrating how to externalize a view

Creating a new Desktop

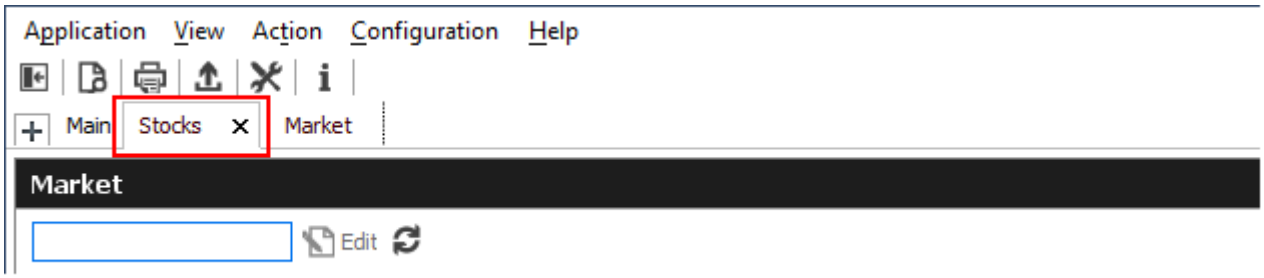
A new desktop can be created using the Plus-Icon from the desktop tab bar:

Fig. 10: Screenshot of the *Trading Desktop* showing the desktop tab bar

Desktops can be switched by simple clicks on the respective tab of the desktop tab bar. A user defined name can be given to the current desktop tab by double clicking the desktop tab label, and by typing the new name of the tab.

Desktop tab placement

Desktop tabs can be reordered simply by dragging the respective tab to a new location.



2.3 Forms and Fields

2.3.1 Text Input

Fields that only require the input of text can be filled in by typing the corresponding value. However, many of the entry fields support the selection of a value from a context list, which is provided by right clicking the mouse button:

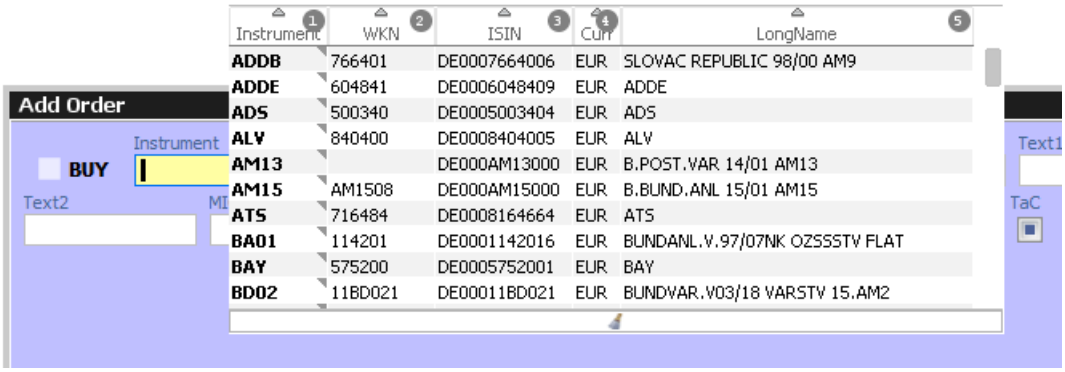


Fig. 11: Context sensitive Field Chooser

These fields that support the selection of a value from a list, also provide some help via the keyboard: By typing the first characters of the value to be entered a context menu will automatically pop-up to provide a list of matching values:

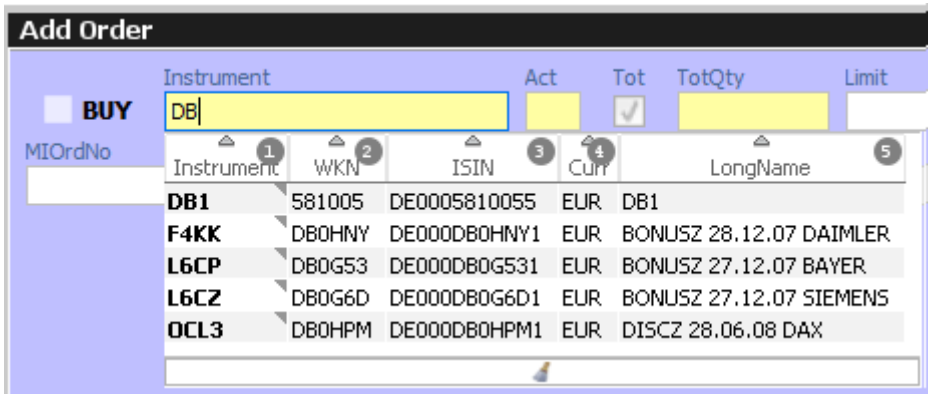


Fig. 12: Context sensitive Field Chooser providing a list of values matching the typed string.

By using the cursor up and down keys, the value can be chosen. The tab or enter key closes the pop-up and copies the selected value into the field. The pop-up can be closed using the escape key without selecting a value.

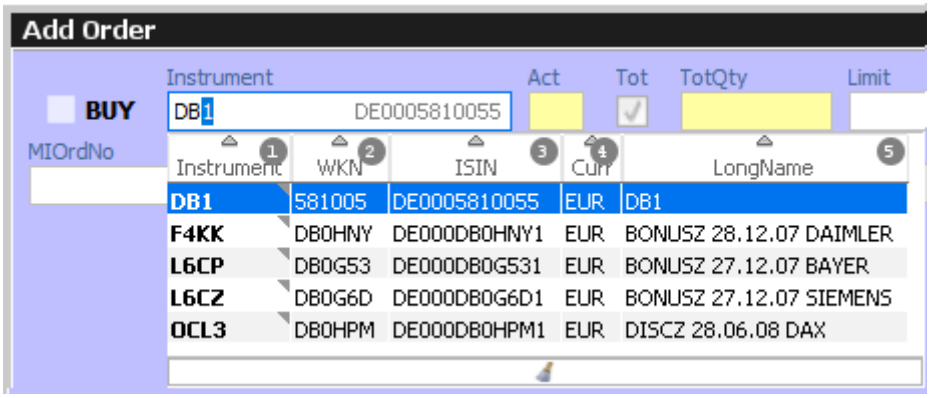


Fig. 13: Context sensitive Field Chooser providing a list of matching values, the current value is selected.

Context Fields that provide completion also allow the list of available values to be scrolled through using the cursor up/down keys. The cursor up key selects the previous value and the cursor down key selects the next value from the list.

2.3.2 Number Input

If the field the user wants to specify requires numeric input, the number can be typed using the keyboard. Alternatively, a context-sensitive pop-up window provides easy access to change or enter a number.

A click with the left mouse on the number increases the value by the selected number, a right click decreases that value. A click on **C** clears the entry field.

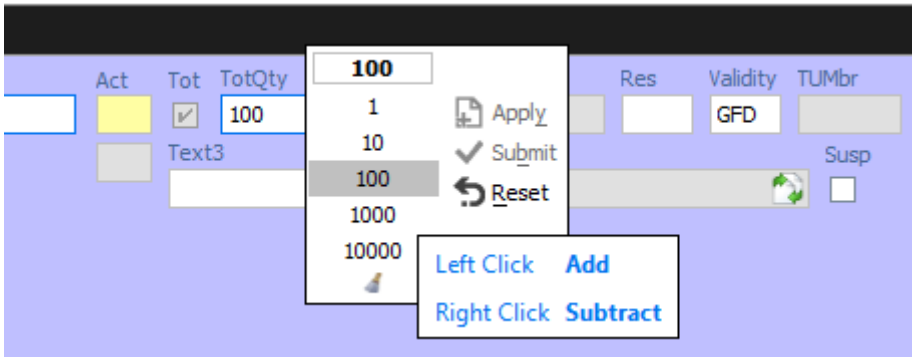


Fig. 14: Number Chooser

2.3.3 Date Chooser

The *Date Chooser* opens by right-clicking the *Date* filter field of the main window, which allows you to select the required date. The currently selected value is indicated with a blue background. A new date can be selected by simple clicking on the respective cell:

Fig. 15: Date Chooser

The *Date Chooser* allows selecting a date in a range of three months around the currently selected date. However, the *Date* field allows entering dates in a wider range than the *Date Chooser.*

2.3.4 Color Chooser

The *color Chooser* allows changes to the colors for the following items: Foreground, Background, Mandatory, Highlight, Selection and Table Background to be changed:

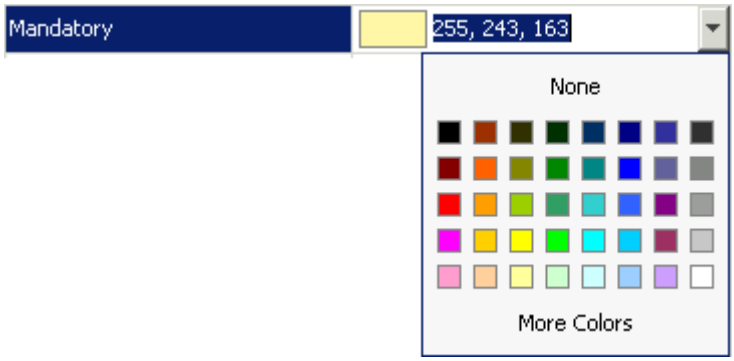


Fig. 16: Color Chooser

The three numbers 255, 243,163 from the screenshot above identify the selected color, each value refers to one of the elementary colors: red, green, blue. Values from 0 to 255 per number are allowed. These values do not need to be typed - the desired color can also be picked from the color Chooser.

2.3.5 Font Chooser

The *Font Chooser* allows selection of a font, style, and size to be chosen for:

- The presentation of data in forms and tables. Fonts for column headers and for table elements

(cells) can be set individually.

- The fonts of buttons, titles, and other window elements can be changed via *Appearance / Font*.

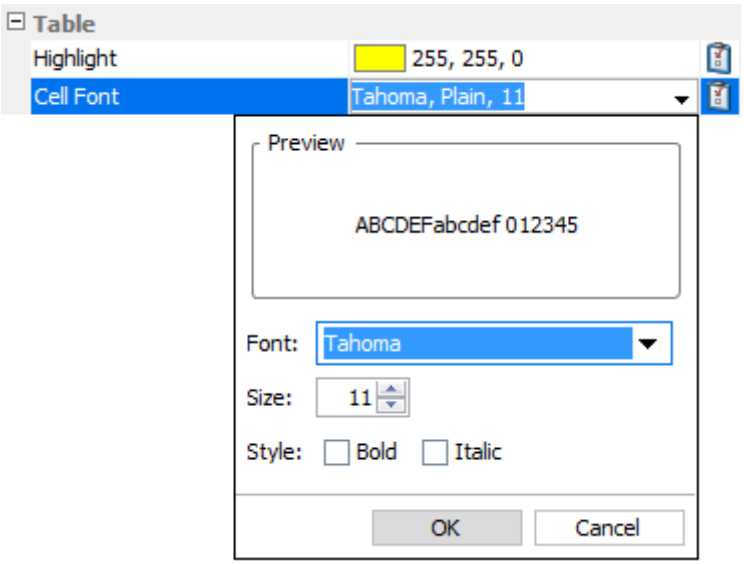


Fig. 17: Font Chooser

2.4 Tables

In general there are two types of views in the application: tables and forms and occasionally a combination of both of them. The elements of a table are the table cells, which are ordered by rows and columns.

Users can control the data displayed in the table:

- First of all, the user decides which data is to be displayed, by using the filter.

  Please Note: It is advised to be as specific as possible when using the filter, in order to save bandwidth and in order to keep the application responsive.

- Decide which columns should be visible. Some windows provide special functions for selecting a certain set of columns (e.g. the *Market* view). But in general the user can select which columns to display (an explanation follows on how to do this).
- Change the sort order of the table (explanation follows).
- Decide which columns to highlight, by changing the background color for individual columns.
- The general display of tables may be changed by changing the look and feel from the *Preferences* view; change the font, font size or foreground and background color.

2.4.1 View Filter and Generic Filter

A filter is used to tell the view which data to display. A filter usually consists of one or more entry fields, which are sometimes indicated by a yellow background to indicate that input is required by

the user. If all the required (mandatory) fields are filled, the *Go*-button is enabled and clicking the *Go*-button or pressing the Enter/Return key starts the inquiry.

Some filter fields cannot be removed - these fields are called the *View Filter* fields of a view. The user can however also add more fields to the filter line, in order to further narrow down the filtering and to reduce the amount of data displayed which the user is looking for. In this context these filter fields are now called a *Generic Filter*. The user can add these fields by dragging the column header (with ALT-key pressed) into this filter line.

In general, a table view has one filter row. The row starts with the view provided *View Filter* fields, followed by the *Generic Filter* (if provided by the user).

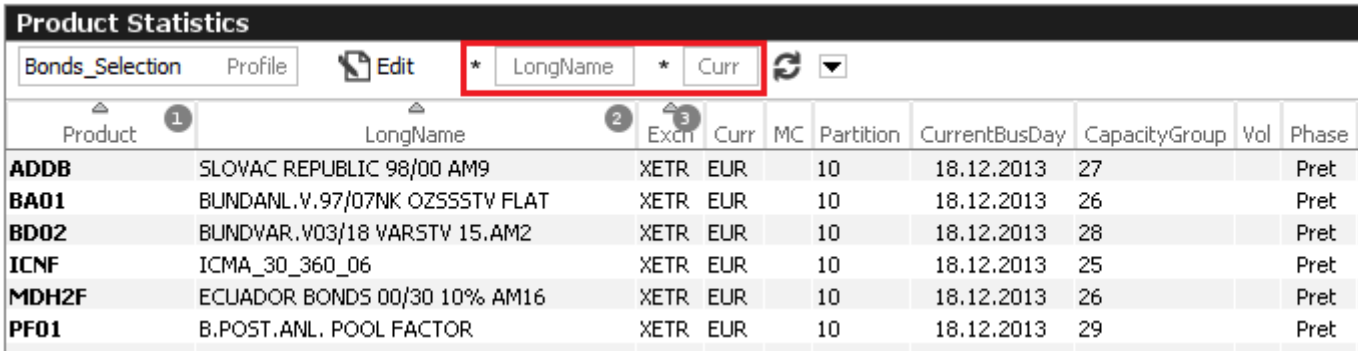


Fig. 18: View Filter and Generic Filter

2.4.2 Adding and removing a Generic Filter Field

In addition to the predefined filters in each panel, additional *Generic Filters* can be added for all available columns of a panel. By holding the 'Alt' key and dragging any column header on the space labeled 'Alt-Drag Column Header here..', a filter for the values of this column is added:

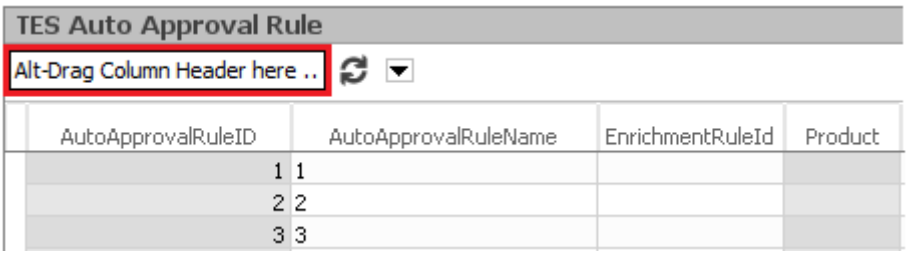


Fig. 19: Generic Filter - Filter Creation by using Alt-Drag

As showing in the **Example below**, the dragging feature works without the "Alt-Drag Column..." field being explicitly available. Just 'alt-drag' the desired column (here 'Act') of the view to the filter row to create a customized filter.

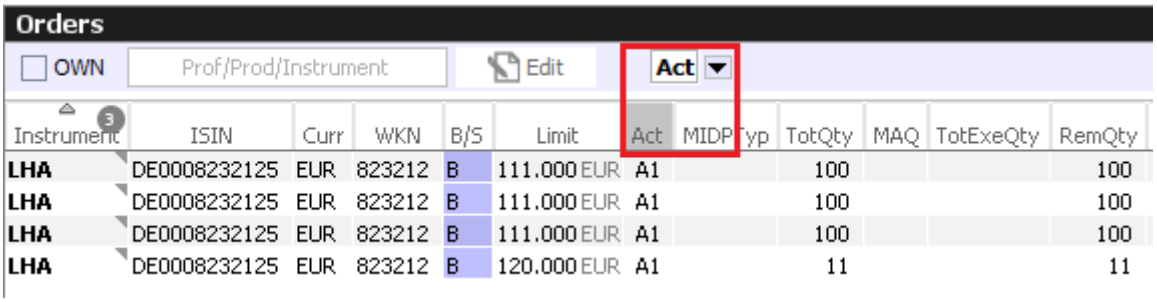


Fig. 20: Adding a Filter via ALT+Drag

Generic Filters can also be added by clicking on the down arrow button ( ) and choosing a value from the list of available columns.

Deletion of *Generic Filters* can be done in two different ways:

1. Deletion with Alt-Hover

Press 'Alt' and move the mouse across the filter that you want to delete (in the screenshot: 'Text'). When the mouse cursor reaches the text field, a white cross with a blue background ( ) appears in the top right corner. By clicking on the cross, the filter is removed.

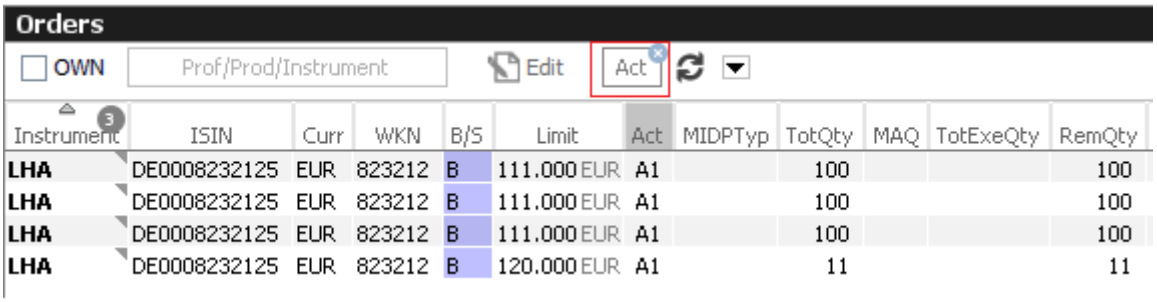


Fig. 21: Remove Filter via ALT-Hover

2. Deletion via 'Arrow Down' Button

A generic filter can also be removed by clicking on the down arrow symbol ( ) and selecting the column name from the list of filters.

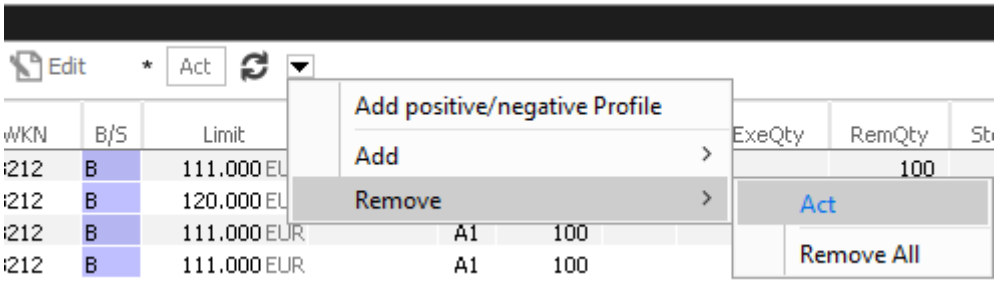


Fig. 22: Remove filter via arrow symbol

2.4.3 Using Generic Filters

A new generic filter will now display in the row above the table. The filter settings can be set by manually adding any value or using the context menu (right-clicking in any filter field). Please note that the background color of the filter turns to yellow as long as the filter is not applied via the enter key or inquiry icon. After it is applied, only records complying with the filter settings are displayed.

Each filter can also be configured, to only display values with a specific restriction, which can be selected by clicking on the (*) symbol on the left of every generic filter field. Available restrictions are:

- **Exact:** Only records exactly matching the filter value are displayed.
- **Substring:** Only records partly matching the filter value are displayed.
- **Greater than:** Only records greater than the filter value are displayed.
- **Less than:** Only records lower than the filter value are displayed.

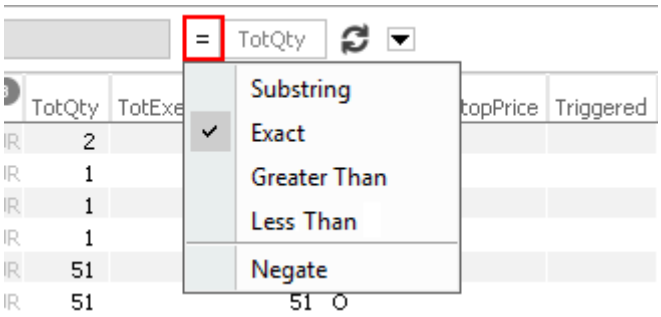


Fig. 23: Filter Restrictions

All Filter Settings can also be inverted by activating the ‘Negate’ setting from the filter restriction menu.

A combination of the ‘Negate’ option and a filter restriction will produce an output based on the following logic:

- **Not** Exact: The Output must differ from the filter value.
- **Not** Substring: The Output must differ from the filter value or any substring of the filter value.
- **Not** Greater than: The Output must be smaller or equal to the filter value.
- **Not** Less than: The Output must be greater or equal to the filter value.

As each column can be added multiple times as a *Generic Filter*, several values and restrictions can be combined for advanced search options.

Example:

Two ‘Date‘ filters can be combined to show all records for one day by using the ‘Greater Than’ restriction for the first Date-Filter and the ‘Less Than’ option for a second Date-Filter.

Fig. 24: Combination of multiple Filters and Restrictions

2.4.4 User group and trader filter

The main window features a user group and trader filter which can be used by users with user level Head Trader (*Trader* field only) and user level Supervisor users. It is located in the top right corner of the trading desktop:

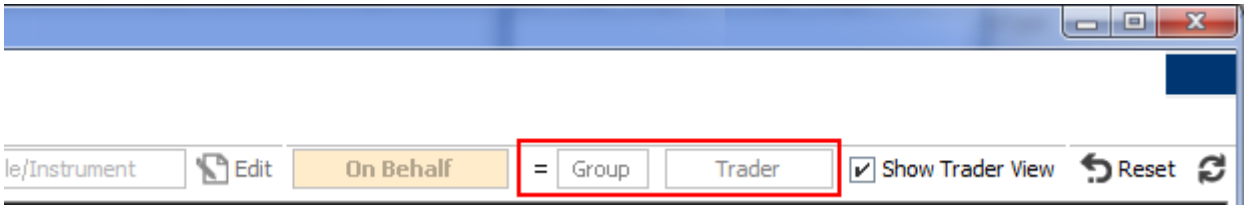


Fig. 25: User group and trader filter of the main view.

2.4.5 Quick Find

The *Quick Find* function provides a quick way of finding data among the currently displayed data in a table. This function is not available in all tables. It is strongly suggested to use the regular filter or user defined filters instead if possible, as this *Quick Find* filter is applied only on the data which is already displayed:

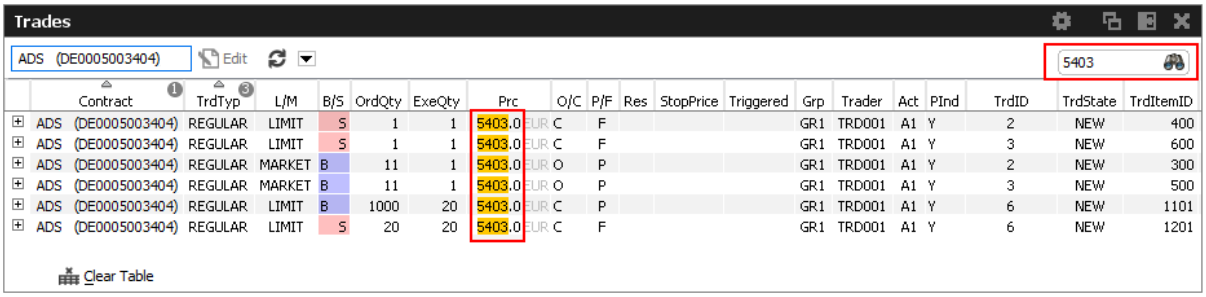


Fig. 26: Trades view with highlighted results from quick find

2.4.6 Tables: Sort

Users may choose either default sorting or enable user defined sorting to create their own sort order. For user defined sorting, users can single-click on the corresponding column header. A first click sorts the table to the chosen column in ascending order. A second click causes the sorting to be done in descending order. The latest chosen column is always the sort criterion which is used first.

Previously chosen sort criteria follow-up and are applied as sort criteria 2 or 3. Please note that only three sort criteria are supported.

The picture below shows the visibility of the applied sort criteria within a window.

Product	LongName	Exch	Curr	MC	Partition	Phase	TESProductState
ADDB	SLOVAC REPUBLIC 98/00 AM9	XETR	EUR		10	Trad	OFF
ADDE	ADDE	XETR	EUR		10	Trad	ON
ADS	ADS	XETR	EUR		10	Trad	ON
ALV	ALV	XETR	EUR		10	Trad	ON
AM13	B.POST.VAR 14/01 AM13	XETR	EUR		10	Trad	ON
AM15	B.BUND.ANL 15/01 AM15	XETR	EUR		10	Trad	ON
ATS	ATS	XETR	EUR		10	Trad	ON
BA01	BUNDANL.V.97/07NK OZSSSTV FLAT	XETR	EUR		10	Trad	ON
BAYX	BAY	XETR	EUR		10	Trad	ON
BD02	BUNDVAR.V03/18 VARSTV 15.AM2	XETR	EUR		10	Trad	ON
BD07	B.BAHN OBL.90 12/20 NOFLAT 4Q.AM7	XETR	EUR		10	Trad	ON

Fig. 27: Visibility of Sort Criteria in a Table

2.4.7 Tables: Find

The *Find* window is used to search for a specific word in a table.

Fig. 28: Find dialogue

The user enters the text to search for in the *Find* entry field. Checking the *Match Case* box specifies a case sensitive search. Checking the *Whole Word* box restricts the search to whole words only. Clicking the *Find Previous* button searches the entered text backwards from the current position through the table. Clicking the *Find Next* button searches the entered text from the current position forward through the table. If a match is found, the cursor is set to the first occurrence of the search text. If no match is found in the direction of the search, it continues at the other end of the table.

2.4.8 Tables: Print

For windows that display a table the *Print Table* window allows the user to print the content of a table.

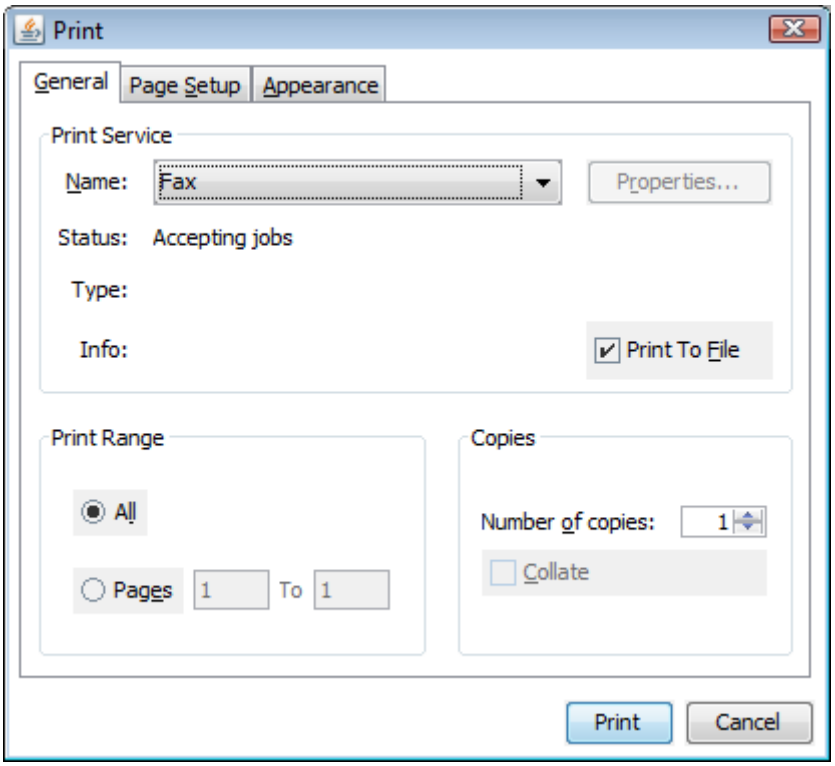


Fig. 29: Print Dialogue

2.4.9 Tables: Import

The table import function can be used to import a comma separated file into the table of the current view, provided that table import is supported on that view. The separator to be used in the csv file can be defined in the GUI's Preferences (-> 2.6 Preferences). Clicking the Import menu item, a file selection dialog opens which allows browsing the file system and to select the input file.

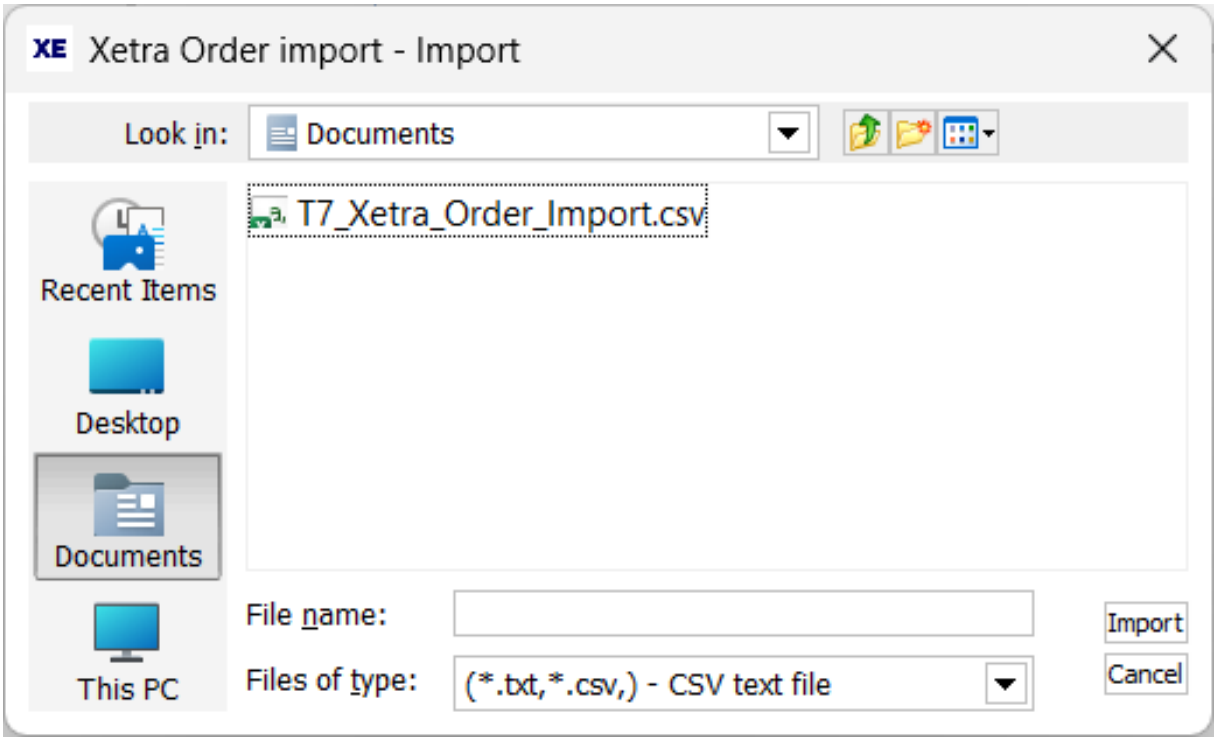


Fig. 30: Import Dialogue

When the window is opened, the *Files of type* field is pre-filled with a CSV file. Clicking the *Import* button causes the file to be imported.

2.4.10 Tables: Export

The table export function can be used to export the content of the table of the currently selected view into a comma-separated values file The separator to be used in the csv file can be defined in the GUI's Preferences (-> 2.6 Preferences). The table export function is generally available, even on those views that do not support the import of data.

The *Export Options* dialog opens by clicking the *Export* option from the *View* menu. Using the *Export Row Options* option the user can then decide to export data from all rows or only from the selected rows. The *Export Column Options* controls which columns should be exported: all or only the visible ones.

The *Export Path* supports selecting a file or path using a file browser, which can be opened using the ellipsis (**...**).

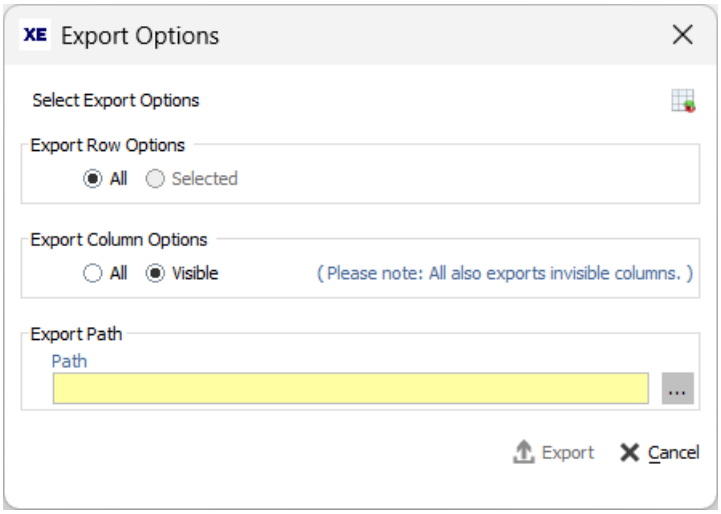


Fig. 31: Export Options

The following file formats are supported:

- text files (*.txt)
- comma separated files (*.csv)

Clicking the *Export* button, the table data is exported. If the exported file already exists in the system, a confirmation dialog is displayed.

2.4.11 Tables: Hide/Show Columns

The *Column Selection* pop-up allows the user to determine which columns in the table are visible. The pop-up is displayed if the user clicks with the right mouse in a column header and moves the mouse over the *Show/Hide* entry:

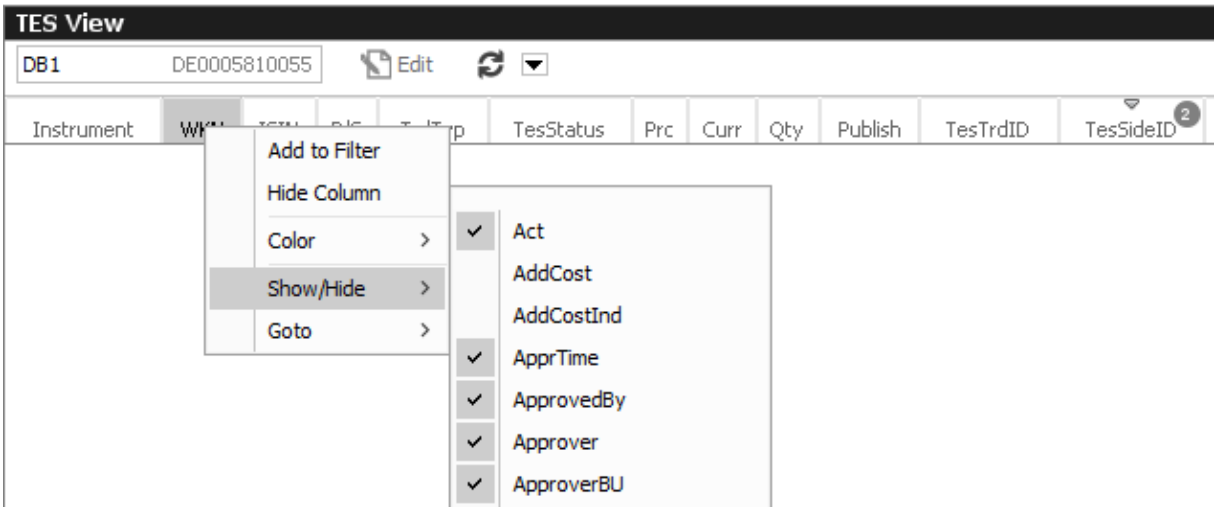


Fig. 32: Column Selection Pop-up

After selecting/deselecting the corresponding columns, a click outside the pop-up will close it.

2.5 Profiles

Most views in the application that display data related to products and instruments (*Market* view, *Orders* view, *Trades* view, to name just a few), feature a Profile/Product/Instrument selector field. This field accepts the entry of a single product or instrument, but it also accepts the entry of a profile, which may contain a selection of any number of single and multiple products and even single or multiple instruments.

The following shows an empty Profile/Product field of the *Market* view:

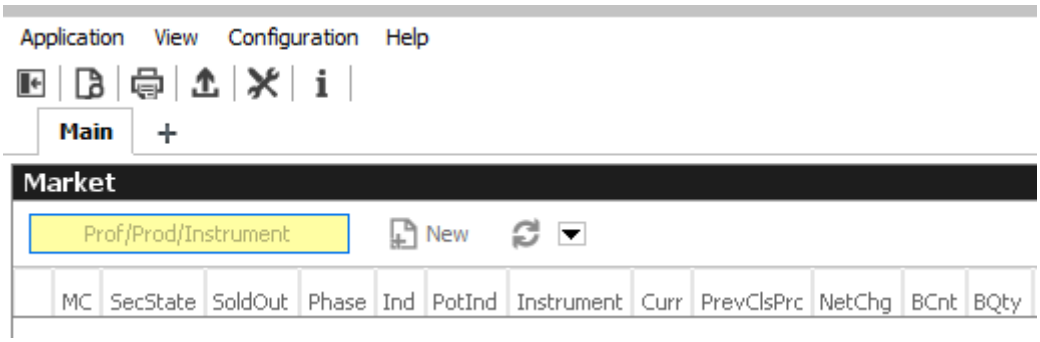
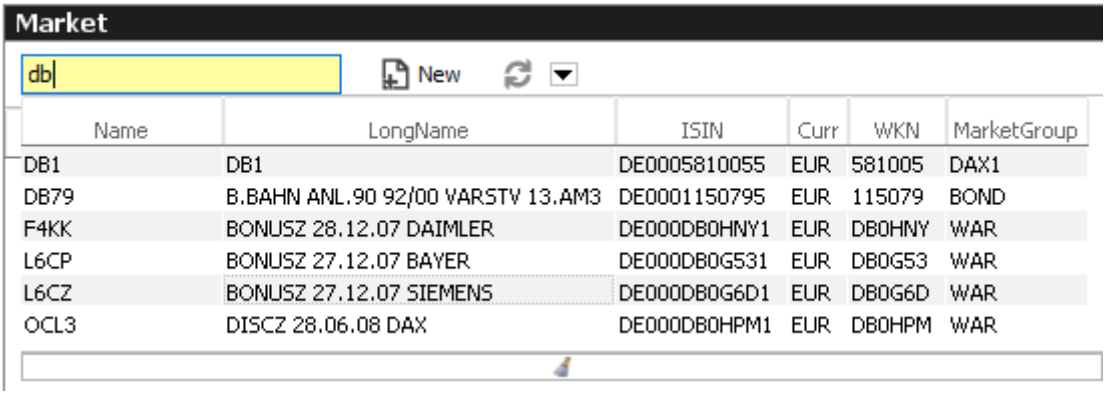


Fig. 33: Profile/Product Selector

This field supports the entry of a single product, instrument or a profile as can be seen here:



Name	LongName	ISIN	Curr	WKN	MarketGroup
DB1	DB1	DE0005810055	EUR	581005	DAX1
DB79	B.BAHN ANL.90 92/00 VARSTV 13.AM3	DE0001150795	EUR	115079	BOND
F4KK	BONUSZ 28.12.07 DAIMLER	DE000DB0HNY1	EUR	DB0HNY	WAR
L6CP	BONUSZ 27.12.07 BAYER	DE000DB0G531	EUR	DB0G53	WAR
L6CZ	BONUSZ 27.12.07 SIEMENS	DE000DB0G6D1	EUR	DB0G6D	WAR
OCL3	DISCZ 28.06.08 DAX	DE000DB0HPM1	EUR	DB0HPM	WAR

Fig. 34: Profile/Product Selector accepting the entry of a product, instrument or profile

A set of ready to use profiles is provided by the application, however, users are encouraged to define their own selection of products and instruments for daily use - which is very simple, following the description below. User defined profiles can also be shared among other users of the same user group - or even among the whole business unit (only supervisor user level has the permission for that).

2.5.1 Generated Profiles

Generated Profiles are created by the Cash GUI without user intervention and are usually based on the available market groups, like BOND-Marketgroup or DAX1-Marketgroup. They can be accessed by right-clicking in the profile selector field.

Please note, for Deutsche Börse Frankfurt, no ready to use profiles are provide instead user defined - or user activity profiles (see below) can be utilized.

A right click of the mouse on the Product/Profile field will bring up the list of profiles which are currently available. Here, the DAX1 market group has has been selected from the list:

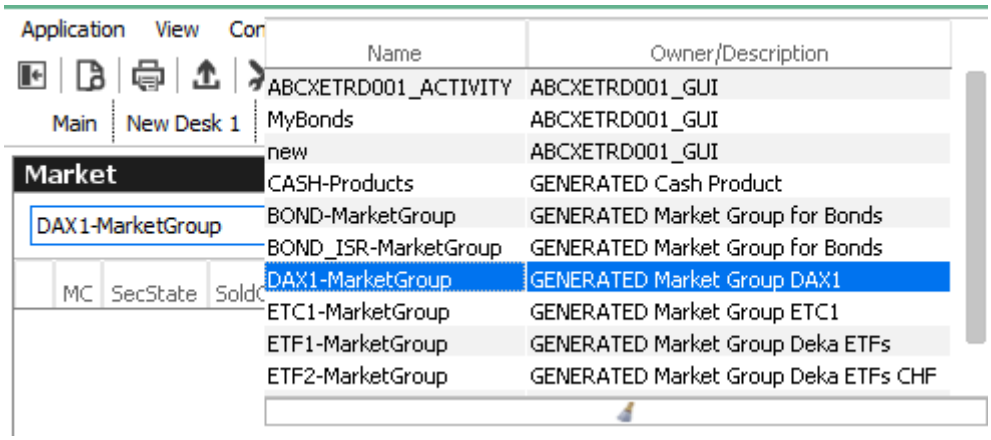


Fig. 35: A right-click into the profile selector field allows to select generated (and user defined) profiles

2.5.2 Activity Profile

The activity profile is a generated profile which is automatically updated to contain all the products and instruments a trader had entered orders or quote requests on the current day and for which trades are available.

This profile is useful e.g. on the Market view to have a quick overview on the market data of instruments the user is most interested in.

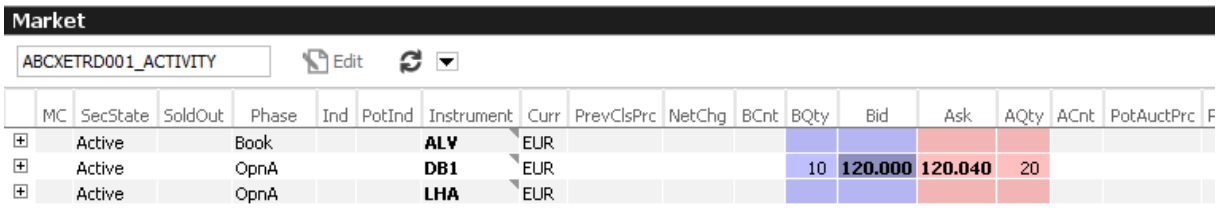


Fig. 36: Activity profile

2.5.3 User Defined Profiles

Most users want to use a profile which contains only those products and instruments which are of interest to them. The profile chooser allows creating a new profile on the fly, just by typing its new name, clicking the *New* button and selecting the products and instruments of interest (the *New* button then changes into a *Save*-button):

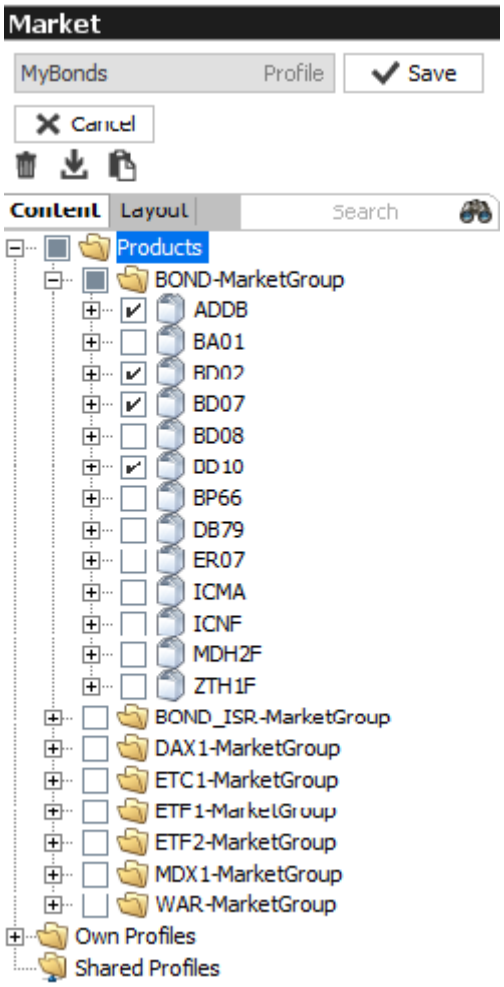


Fig. 37: Profile/Product Selector showing the Profile Editor, editing the user defined profile “MyBonds”

For Deutsche Börse Frankfurt it won’t be possible to directly select products and instruments from the Product Tree but by searching for them.

It is also possible to select products just by pasting from the clipboard. In order to do so, just mark a list of products in a text editor, e.g. "BUD,DB1,LHA", copy these to the clipboard with Ctrl-C, then select the profile selector (or the view containing it) and pressing Ctrl-V (or use the paste icon).

Products can also be imported from a file. Product will be ordered in the same sequence as they are found in the import file. The products may be separated in the same way as in the clipboard example above, or be separated by new lines:

ALV

DB1

LHA

Fig. 38: File import file containing a list of products

The main part of the profile editor is the profile/product/contract tree, with the main nodes:

2.5.4 Products (Tree)

2.5.5 Own Profiles (Tree)

2.5.6 Shared Profiles (Tree)

2.5.4 Products Tree

The products node displays all available products, instruments in a hierarchical tree, starting with the product type or a specific market group as the top most level. The hierarchical levels are:

- Market Group
- Product
- Instrument

Clicking the checkbox next to an item of the tree will select/deselect that item and all subsequent parts of it. Please note, for Deutsche Börse Frankfurt the *Product Tree* feature is not available.

2.5.5 Own Profiles Tree

Own profiles lists all the profiles that have been created by the user. Details of the profile can be reviewed by expanding the respective node.

2.5.6 Shared Profiles Tree

User defined profiles can be shared with the own user group and business unit, depending on the own user level. Please note that only the creator of a profile can modify a shared profile.

These are the profiles that the user shares with the own user group and business unit. Please note that only the creator of a profile can modify a shared profile. Details of the profile can be reviewed by expanding the respective node.

In the seldom case that a name of a shared profile is identical to a name of an own profile, the own profile will be used to inquire. In order to be able to use the shared profile instead, please rename the own profile to resolve the naming conflict.

2.5.7 Layout of profiles

The *Layout* tab of the *Profile Editor* provides functions for the advanced user:

- Own profiles can be reordered by dragging the respective item to the desired location.
- Items of own profiles can be given a user defined background color.
- Separators can be added to the profile.

Please note, for Deutsche Börse Frankfurt the *Profile Layout* feature is not available.

Layout of profiles

The profile editor features a number of icons, buttons and checkboxes, as described below:

Profile Editor	
Icon/Button	**Description**
	Expands all the products and contracts in the Products tree, which are part of the current profile
	Collapse all expanded products
	Clears the current profile. Marks all products and contracts as not checked.
	Deletes the profile.
	Applies changes and closes the profile editor
	Merge selected profile into the current profile
	Delete selected own profile
	Import into current profile
	Paste products from clipboard to profile
	This node (product type, product, expiration or strike) is not checked and is not part of the profile.
	Only parts of this node have been checked. Click on the node to see which details have been checked, or press the icon.
	This node (product type, product, expiration or strike) is checked and so has everything in it.
Group	If checked, the current profile will be shared with all users of the own user group. This function is provided to head traders and supervisors only.
BU	If checked, the current profile will be shared with all users of the own business unit. This function is provided to supervisors only.

Reordering of Profile elements

instruments can be reordered on the Layout tab by drag and drop of an item:

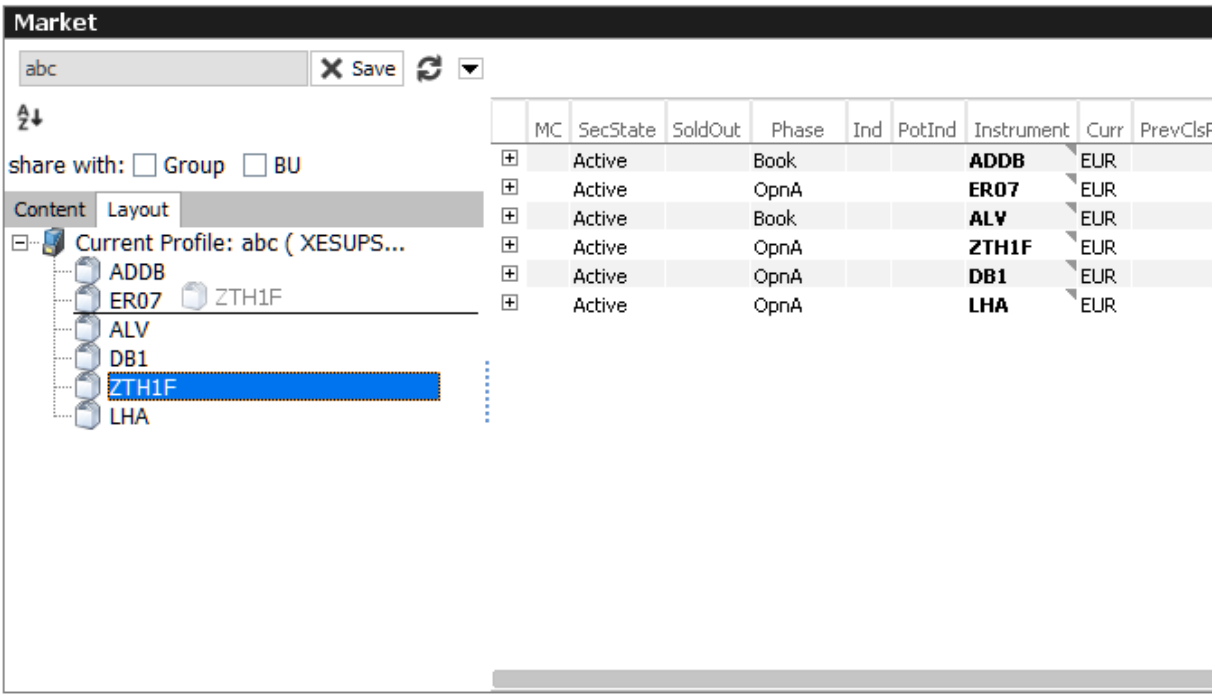


Fig. 39: Reordering of Profiles

Custom background color per product

Select a custom background color per product using the context menu:

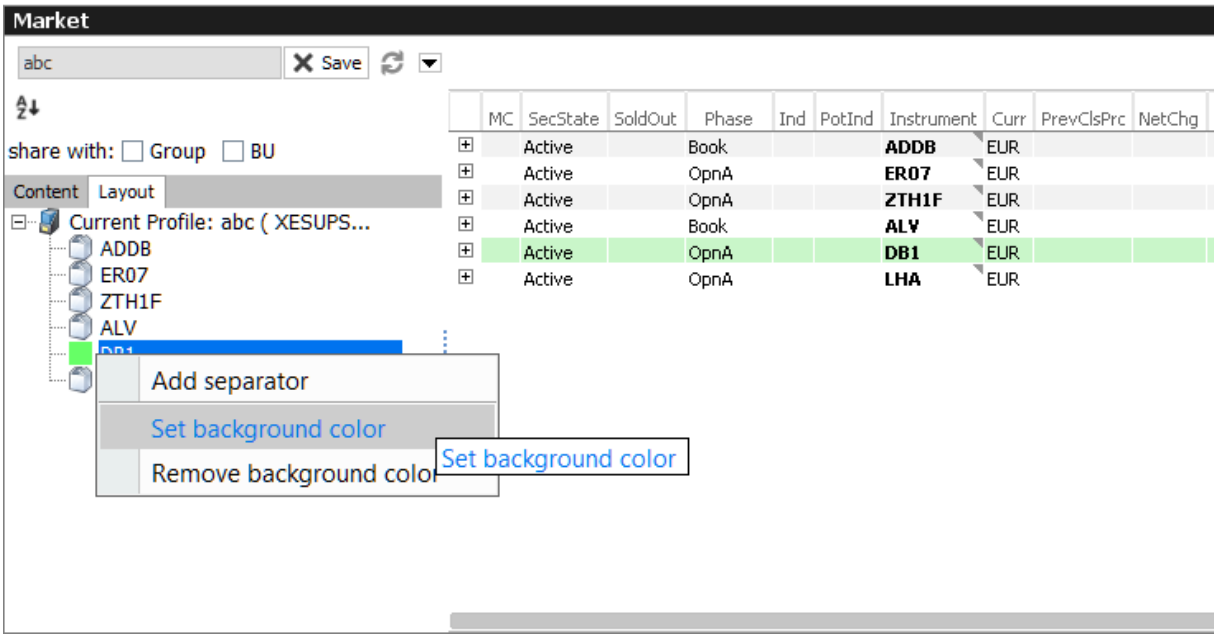


Fig. 40: Custom background color per product

Separators

Add a separators using the context menu:

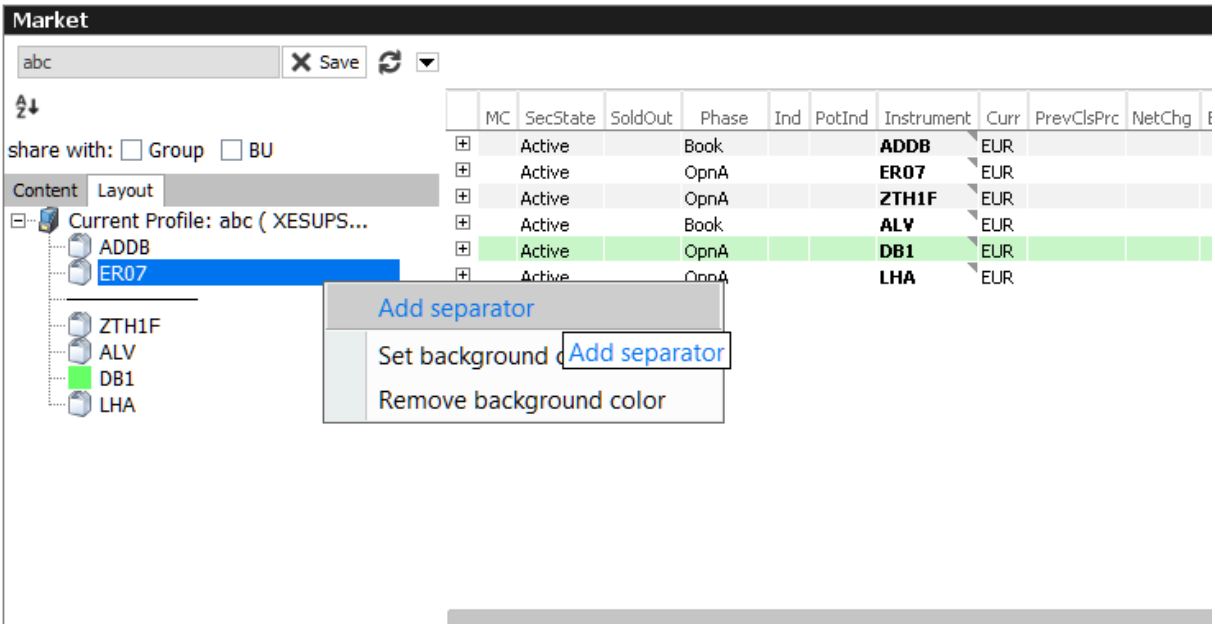


Fig. 41: Separators

2.5.8 Sharing of profiles

User defined profiles can be shared with the own user group and business unit, depending on the own user level. Please note that only the creator of a profile can modify a shared profile.

In the rare case that a name of a shared profile is identical to a name of an own profile, the own profile will be used to inquire.

2.6 Preferences

Generally, there are two levels of preferences in the application:

- *Application Preferences* - settings that apply to the whole application
- *View Preferences* - settings that are valid for a selected view

The former can be accessed from the *Application* menu, the latter is available from the *View* menu or by clicking the view's settings icon . In either view the resets the selected item to its default setting.

The *View Preferences* follows the currently selected view and provides the settings for that single view instance.

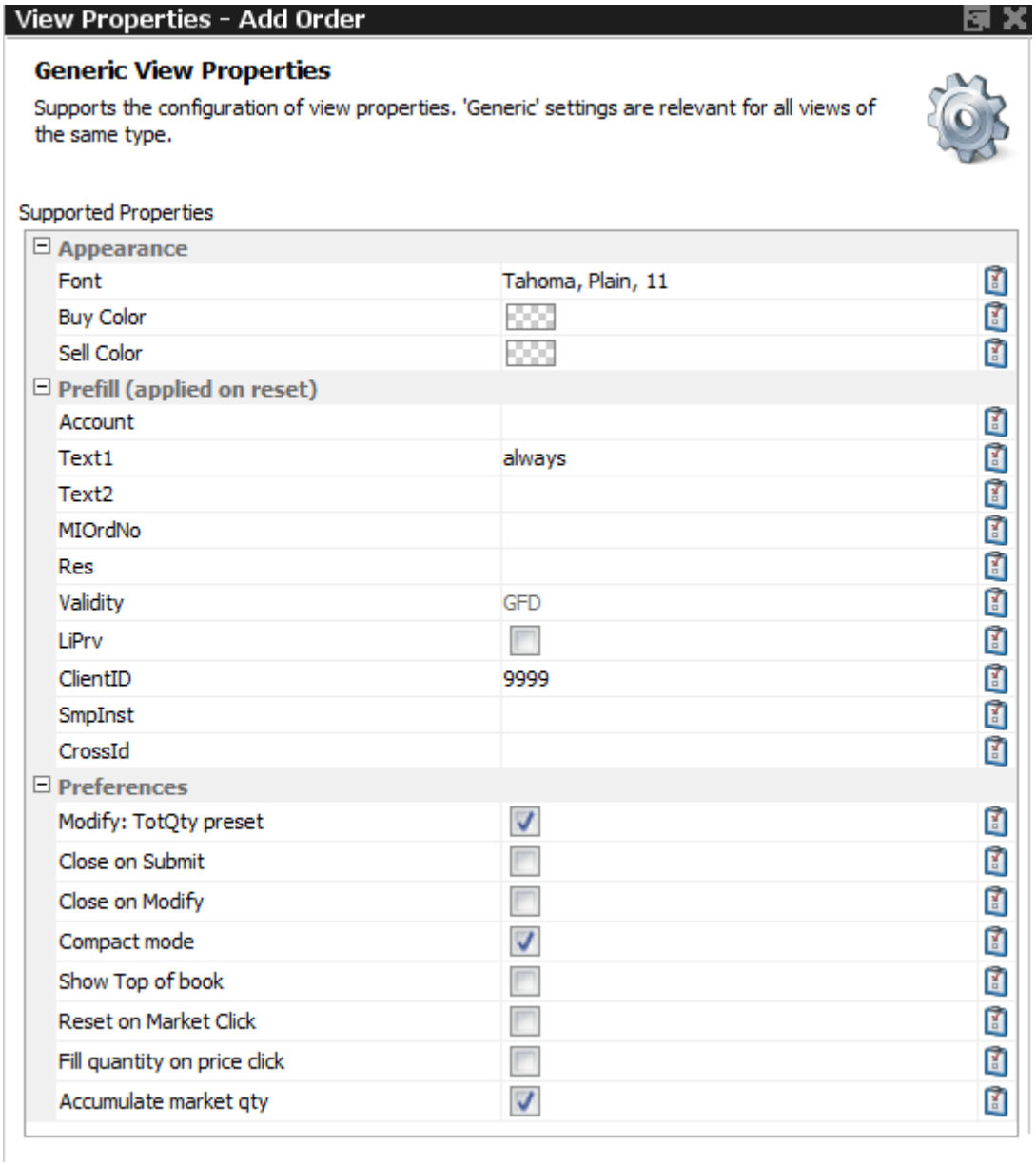


Fig. 42: Specific preferences for the *Orders* view

The *Application Preferences* view allows the user to define general properties that are valid for the whole GUI.

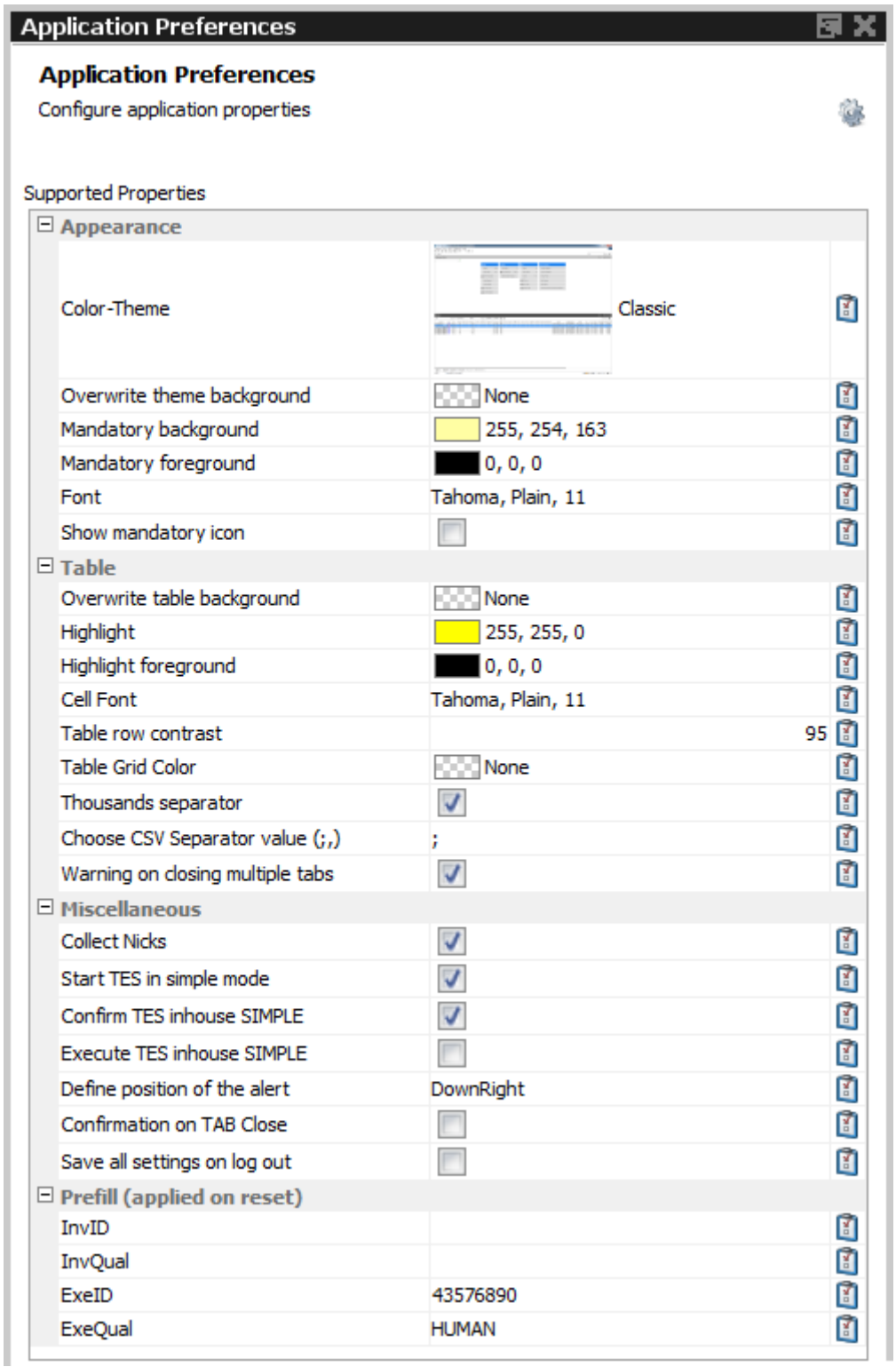


Fig. 43: Application Preferences view

2.7 Master Login

The *Master Login* window is the first window which is presented to the user on the start of the application. The user must specify the name and credentials of the master login account, which is required to gain access to the application.

The *Master login* window does not grant access to any of the possible back ends - these accesses are defined via the Exchange Accounts view, which is available from the Welcome view once the user is logged in.

Master login name can be recognized by the extension "_GUI". If the user forgets to add "_GUI", the extension will automatically be added into the field by the application.

The *Info* box below the *Network Connection Settings* reveals the environment variables that are used by *Cash Trader*, *Cash Admin* and *Cash Clearer*, if set. These variables don't need to be configured, but if they are, the application will use the user defined values instead of the defaults. The file system paths which are currently being used can be reviewed in this area:

GUI Version Check

In order to ensure the integrity and smooth operation of the *Cash Trader*, *Cash Admin* and *Cash Clearer*, a version check guarantees that outdated versions of these GUIs will not connect to our trading environment.

Outdated versions could connect to our system in the past in case the Trading GUI stayed open over night during a software update, and in case a trader was using a locally stored link to our GUI. This will be detected by the version check.

If this happens, a new GUI instance via the Cash-homepage needs to be started.

Window Description		
Field	**Tab**	**Description**
MarketPlace		The MarketPlace the Master User is registered for.
Market		The market the Master User is assigned to. This field is only provided in Cash Trader and Cash Admin.
Master User		Master account login name.
Master Password		Master account login password
Client Key Password		An optional password which can be used to decrypt the client key. The client key is required for internet connections only.
Login		Log in
Login Without Settings		Allows to login without using the settings of the last session. This function provides access to the GUI in the event of problems with the trader profile.
Logout		Log out

Change Master Password		Opens the Change Master Password dialog. Changes the password for the master login in sync with the exchange account password of the Cash Exchange's T7.
Network Connection Settings		A click onto this bar collapses/expands the Network Connection Settings pane
Leased Line	Network	Select Leased Line radio button for a leased line type of connection
Internet	Network	Select Internet radio button for the connection via the internet
Next	Network	Switches to the next tab of the Network Connection Settings wizard
No Proxy	Proxy	Select No Proxy for a direct internet connection
Use Proxy	Proxy	Select Use Proxy for a connection through a web proxy
Proxy	Proxy	HTTP proxy machine name
Proxy Port	Proxy	HTTP proxy port
Automatic Proxy Configuration URL	Proxy	URL for automatic proxy configuration
Detect Proxy	Proxy	Press this button to probe for an automatic detection of the web proxy
Client Key	Security	This is the file location of the client SSL public key file

2.8 Configuration Menu

2.8.1 Exchange Accounts

The *Exchange Accounts* view supports checking the connections to the back-end of the T7 trading system for the logged-in user.

The table ("Current Associations") displays the current state of the sessions in the *Status* column. Connection problems are indicated in the *Message* column.

2.8.2 Alert Configuration

The *Alert Configuration* provides an audio and visual event service to automatically trigger an audio signal (a .WAV file) or a popup window or both when certain events occur (e.g. matching of an order, order book deletion, risk limit exceeded).

It is possible to specify user defined filter criteria, which works in the same way as the generic filters

in table views. Please refer to chapter 2.4.1 for a full description of these generic filters.

It is possible to specify additional fields for display in the alert popup (e.g. columns from the selected view), and it is possible to specify a background color in order to provide an additional indication about the event.

2.8.3 Profiles

Most views in the T7 GUIs that display data in table format allow filtering on a profile of products or instruments. This can be a generated or user defined profile. This mechanism is described in chapter 2.5 in full detail.

All the views that support filtering on a profile, allow also the maintenance of these profiles. This is described in chapter 2.5 *Profiles*.

In order to provide easy access to this important filtering feature of the T7 GUIs, it is possible to access the *Profiles* editor from the *Configuration* menu.

2.8.4 Text Field Configuration

The *Text Field Configuration* view provides a service to define certain text fields to be conveniently used later in appropriate entry masks, e.g. in Order Entry.

In addition to the manual creation of text field configurations, these can also be imported and exported. The import dialog allows to remember the file location by ticking the *Save Path* checkbox.

Single entries or all records may be deleted by using the corresponding action buttons. Furthermore a search function allows to easily find erroneous entries or just arbitrary text (more details at the end of this chapter).

The configuration consists of the fields

- *Text1*, *Text2*, *Text4/MIOrdNo*,
- *Act*,
- *ClientID*,*Text5/LEI*,
- *InternalField1*, *InternalField2*,
- *RateID*, *Publish*, *InvID*, *InvQual*,

with the text fields being the key of a configuration record.

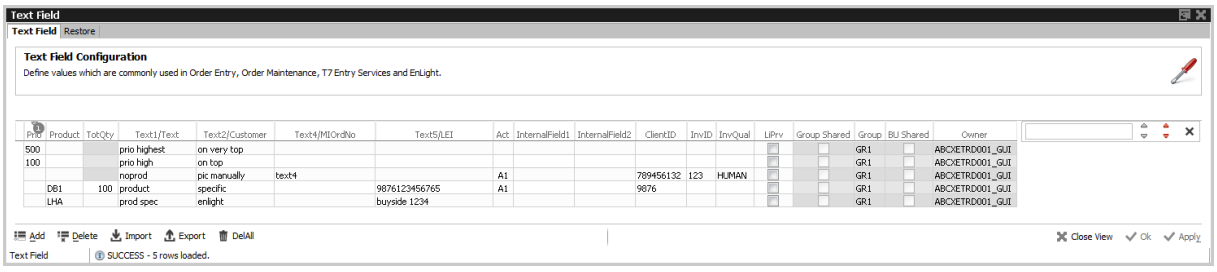


Fig. 44: Screenshot of the *Text Field Configuration* view

This means, if a matching text value was entered in the text field of e.g. the *Order Entry*, all the rest of the above mentioned values (if configured) will be copied into the respective fields of an entry mask. Alternatively the user can right-click into a textfield to get a list of text field configs to chose from.

The ordering in this list can be controlled by prioritizing the text field configs. Simply fill in a numeric value in the *Prio* field: Text field configs with a high *Prio* value appear on top of the selection list.

By filling the *Product* column, the respective text field configuration will be applied automatically once the product is specified in the *Order Entry* mask.

The *TotQty* column allows specifying a default order quantity for automatic prefilling in the *Order Entry* mask, once the specified product has been entered.

The *InternalField* columns allow to enter information for internal use only, i.e. data entered here is only shown to the trader but is never part of the entered order or TES trade.

Suitable entry masks are currently the following:

- Order Entry,
- all TES Entries,
- Cash Enlight Request Details and - Quote Entry.

To ease maintaining bigger amounts of text config records, a text search on the upper right side of the table is available. To search for errornous text entries the red arrows must be used while the grey arrows execute a standard find. Both search modes do not consider upper or lower case, i.e. all variants of the entered text will be found. The search field can be opened again by pressing CTRL+F (STRG+F on german keyboards) if accidently closed.

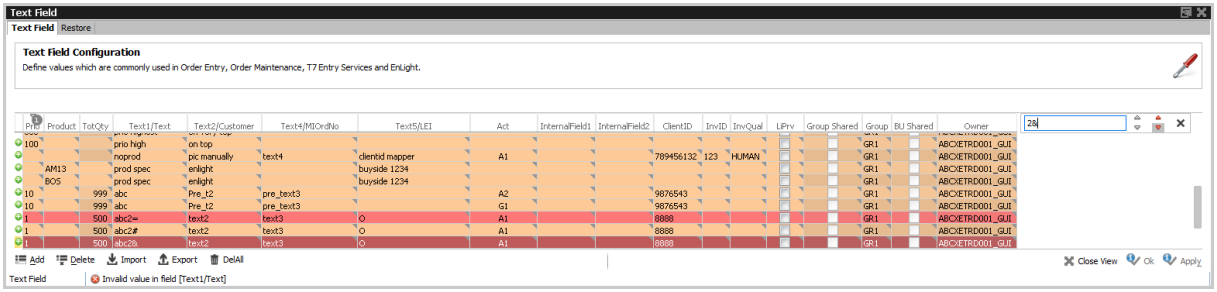


Fig. 45: Screenshot of the *Text Field Configuration* depicting the error search feature

3 Cash Trader GUI

The Cash Trader application is provided to participants for the use by traders, market makers and participant trading view users.

3.1 Overview

Overview of the functions provided by *Cash Trader*. The functions are grouped into the categories Market, Trading, Own and Info & Support (Please refer to the screenshot below):

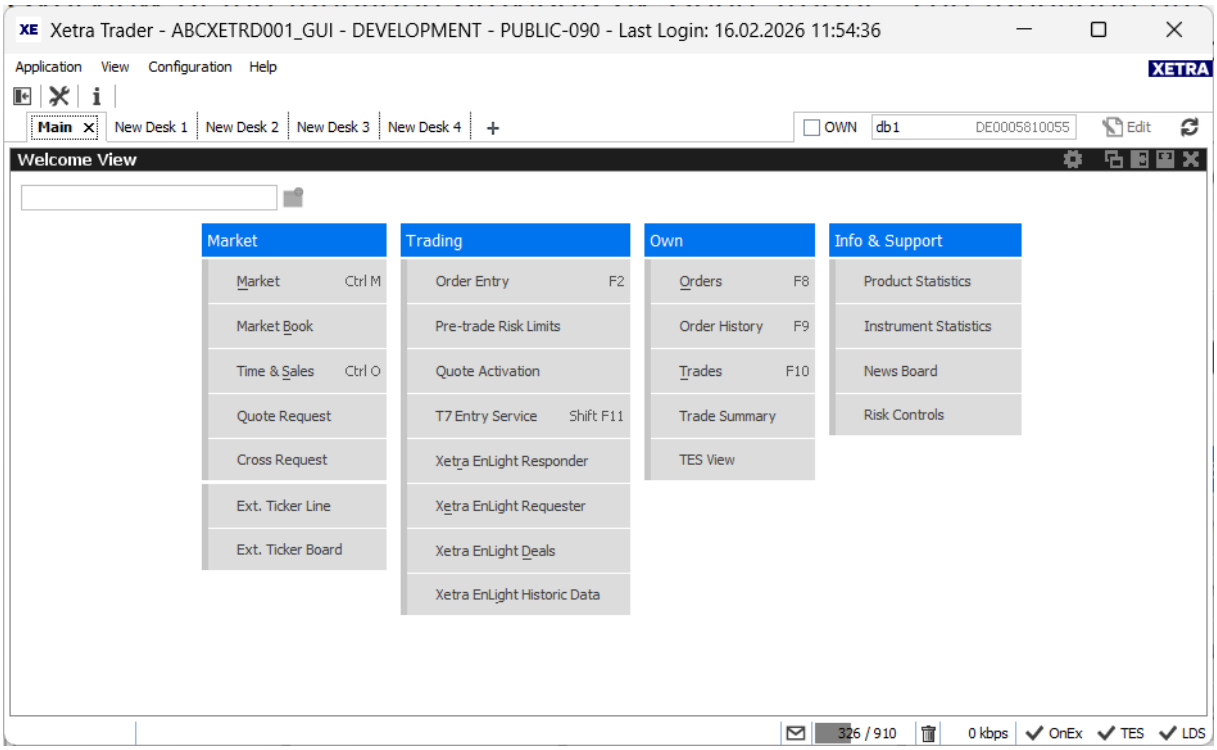


Fig. 46: Screenshot of the *Cash Trader* main window showing the *Welcome* view

These functions are further described in chapter 3.2 Market, 3.3 Trading, 3.4 Own and 3.5 Info & Support.

Please don't miss chapter 2 General GUI Concepts and Functions which describes the general behavior of this application. All the features explained there have been designed to improve your productivity.

3.2 View Descriptions: Market

Market comprises all GUI functions that deal with the display of current or statistical market information on a product and instrument level.

3.2.1 Market

The *Market* view displays the top of book (inside market) and market depth for selected instruments. Additional information which might be relevant for trading is also displayed, for instance settlement price information, quote request and cross request indications, daily high and low price, last price and more. Market Orders are displayed.

At least a product, instrument or profile must be specified, before the view displays any information.

When a single instrument is selected the *Market* view will display an additional instrument information header in a separate row above the *Market* view's main table thereby highlighting important static information at once with dynamic data for the instrument. While default column setting of the static data header displays a ready-to-use data set, both columns set can be customized by using the `Show/Hide` feature from the pop-up when right-clicking on a particular column.

The *Order Entry* can be opened or prefilled by clicks in the *Market* view.

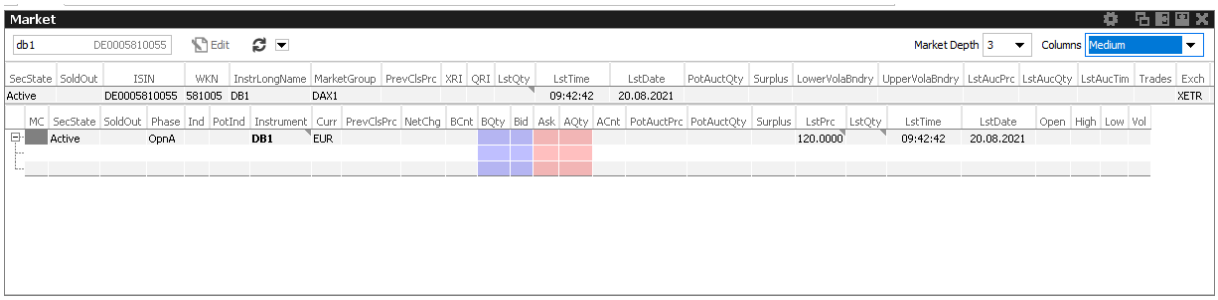


Fig. 47: Screenshot of the Market view (not all columns visible)

Columns Presets

The *Columns* filter controls which set of columns are displayed:

Value	Description
Full profile	Displays all columns
Medium profile	Displays a small set of columns relevant for trading
Low profile	Displays only the minimum required columns for trading
CA profile	Displays a set of columns relevant for *Continous Auction with Specialist*

Description of available columns (including columns of the static data row)

Column	Description
MC	Market Conditions codes on instrument level. Possible values: • F - Fast market • SA - Stressed Auto • SF - Stressed Auto+Fast
SecState	Security status information
SoldOut	Soldout indicator information
Phase	Instrument trading state
Instrument	Instrument ID
InstrLongName	Long name of the instrument
Marketgroup (static)	Name of the market group the instrument belongs to
Ind	The *Interruption indicator* specifies whether a volatility interruption ('V') or an extended volatility interruption ('X') takes place
PotInd	The *Potential interruption indicator* indicates that the current auction price would lead to a volatility interruption at the end of the auction. This column is only filled in case of a scheduled auction (opening-, intraday- or closing auction)
PrevClsPrc	*Previous day closing price*. If no newer price is existing, Previous Closing Price value for an instrument will be kept for more than one business day thus allowing Netchange (NetChg) value always being calculated and displayed in Market view
NetChg	*Netted change* of the last trade price (LstPrc) to the previous day closing price
Vol	Total volume in the instrument traded in the course of the day
Low	Daily low price
High	Daily high price
BAvg	Average bid price of the price level
BAcc	Accumulated bid quantity of the price level
BCnt	Number of buy orders at the price level
BQty	Bid quantity
Bid	Bid price

Ask	Ask price
AQty	Ask quantity
ACnt	Number of sell orders at the price level
AskAcc	Accumulated ask quantity of the price level
AskAvg	Average ask price of the price level
LstPrc	Last price
LstTime	Last trade time
LstDate	Last trade date
LstQty	Last trade quantity
QRI	Quote request indicator
XRI	Cross request indicator
Curr	Currency
Exch	Exchange ID of the instrument
CumEx	CumEx indicator
Surplus	Remaining auction quantity, which can be accepted at the auction price and side of the surplus
LowerVolaBndry	Minimum boundary of allowed price for volatility corridor. Displayed only if instrument's trading phase is setup for Automated Volatility Corridor Expansion Model
UpperVolaBndry	Maximum boundary of allowed price for volatility corridor. Displayed only if instrument's trading phase is setup for Automated Volatility Corridor Expansion Model
LstAucPrc	Last auction price
LstAucQty	Last auction quantity
LstAucTim	Last auction time
Trades	Total number of trades of the day
BAcc	Number of orders in the accumulated bid order volume
AAcc	Number of orders in the accumulated ask order volume
MatDate	Maturity Date
TrdMdl	Trading model type
MinTradeUnit	Minimum trade unit of instrument
Quote Provider	Name of Issuer/ Quote provider

CpnRate	*Coupon Rate*
ULISIN	ISIN of the underlying
StrikePrc	Strike price of Warrant
SecSubTyp	Cash Security Subtype
QuotUnt	*Quotation Unit*, e.g. `POINTS, PERCENT, SHARES`
CovInd	Cover Indicator
LstRetailPrc	Last Retail trade price
LstRetailQty	Quantity of the last Retail trade
LstRetailTim	Time of the last Retail trade
RetailTrades	Total number of trades generated due to the execution of a Retail order against the RLP quote / order
RetailVol	Retail trade volume
LstRetailAuctPrc	Last Retail auction price
LstMidpointPrc	Last midpoint trade price
LstMidpointQty	Last midpoint trade quantity
LstMidpointTime	Last midpoint trade time
LstAVDQty	Last AVD trade quantity
LstAVDTime	Last AVD trade time

Display of the Market Depth

The *Market* view also features the display of the market depth for the displayed instruments. A click on the plus-sign (⊞) of the displayed rows, on the left hand side of the table, opens the display of the best bid/ask limits with accumulated volumes per instrument. The market depth display is described in full detail in the next chapter 3.2.2.

Similar to the *Market* view, the *Order Entry* view can be opened or prefilled by clicks in the market depth row of the Market view.

Actions supported by Market view

The *Market* view supports a number of context driven actions, which can be invoked by a left or right mouse click in the cells of the table:

Preselection of Order Entry

The *Order Entry* will be automatically prefilled by the selected instrument, Buy/Sell side and Limit if one of the following columns is clicked in the Market view: **BQty, Bid, Ask, AQty.**

If the *Order Entry* is currently not open, it will automatically be opened. In case more than one *Order*

Entry is currently in use, the last used *Order Entry* prefilled.

If the clicked cell is the Bid or Ask column, the Limit will be prefilled.

If the clicked cell is the BQty or AQty column, the Qty and Limit will be prefilled.

For an overview of all properties available, just open the properties dialog of the *Order Entry* or refer paragraph *Order Entry properties - presets* of 3.3.3 Order Entry Properties and preferences.

Quote Request and Cross Request

A right click on any of the other cells of the *Market* view opens a context menu that offers some useful actions, including the quote and cross request action (the latter is not supported for Deutsche Börse Frankfurt).

Depending on whether the quote or cross request function is selected, a dialogue opens to ask for the quantity (cross requests) or quantity and side (quote request). For an overview of all properties available, just open the settings menu of the *Order Entry* or refer paragraph 3.3.3 Order Entry Properties and preferences.

3.2.2 Market Depth

The market depth is displayed as part of the *Market* view. In order to see the market depth for a selected instrument, the plus-sign (⊞) on the left hand of the table can be clicked to expand the display of the market depth. The market depth, if opened, is then displayed below the top of book (inside market) row. The market depth can also be collapsed with the minus-sign (⊟).

In the screenshot below the top of book is displayed above the market depth for ALV (DE0008404005). The instrument name is only displayed in rows showing the top of book.

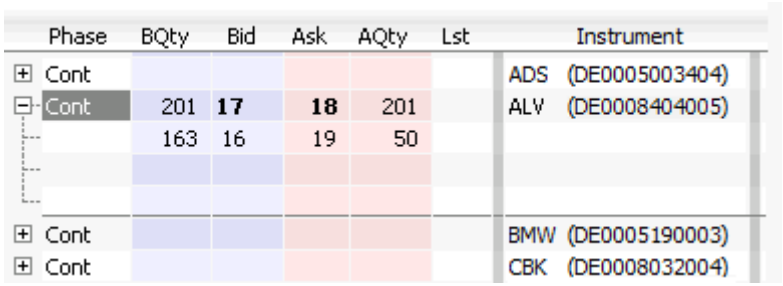


Fig. 48: Screenshot of the top of book and market depth display

The actions made by left or right click in cells of the market depth (prefilling of the Order Entry) are the same as for the rest of the *Market* view. Please refer to the previous chapter 3.2.1 for a description.

The maximum depth of market depth display can be limited via the *Market Depth* action in the Action menu of the Market view. This is the maximum depth which is accepted by the view - the depth might further be limited by the system limitation of the respective product.

3.2.3 Market Book

The *Market Book* view displays the bid and ask limits with volumes for a single instrument, ordered by and aggregated on price level, just like the expanded Market view. However, the key feature of the view is the display of own orders in correspondence to the current market situation (OwnBidQty, OwnAskQty).

The market depth display of the *Market Book* does not need to be expanded by hand - it is always expanded. This allows to setup a trading desktop with multiple *Market Book* views.

Market orders are also displayed.

Limitation: it is not the full depth which is displayed, the depth displayed is defined by the market depth delivered via MDI. Stop orders are not displayed.

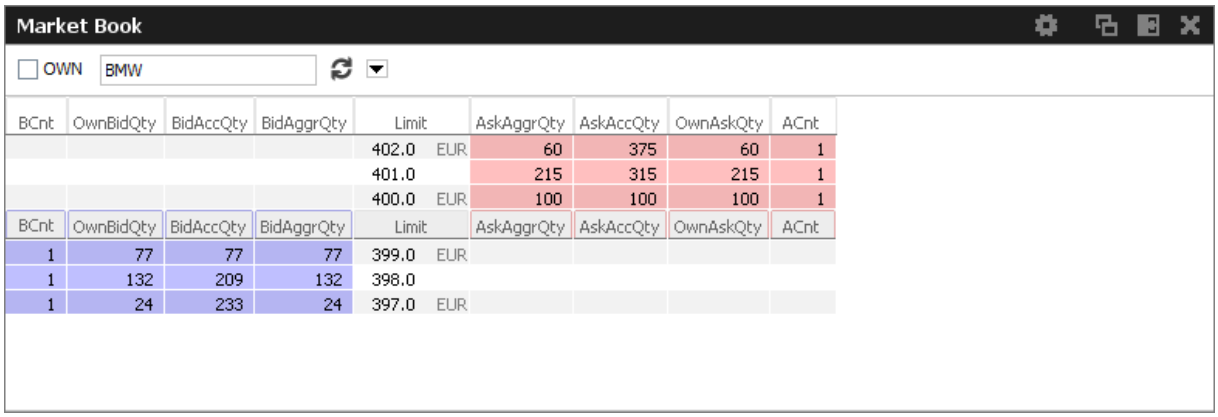


Fig. 49: Screenshot of the Market Book view

Market Book	
Column	**Description**
BCnt	Number of buy Orders
BAccQty	Bid accumulated quantity
BAggrQty	Bid aggregated quantity
Limit	Price
AAggrQty	Ask aggregated quantity
AAccQty	Ask accumulated quantity
ACnt	Number of sell Orders
OwnBQty / OwnAQty	Accumulated quantity of all own standard orders with a limit displayed in the Limit column. For iceberg orders the overall quantity is displayed. Quotes and orders of other traders within the same subgroup are not displayed.

The following fields are only displayed during an auction:

Market Book	
Fields	**Description**
AuctPrc	The *Indicative auction price* is only displayed during an auction phase. In case of yield traded instruments the yield value is displayed
AuctQty	Quantity which can be executed at the indicative price - entries appear only during an auction with an open order book or during an auction with a closed order book with market imbalance indicator set to 'ON'. The order book must be crossed
Surplus	Remaining auction quantity, which can be accepted at the auction price and side of the surplus

If the order book is not crossed, AuctPrc, AuctQty and Surplus are not displayed, instead the top of book is displayed.

3.2.4 Time & Sales

The *Time & Sales* view displays an overview of all trades executed for a particular instrument within the specified time boundaries for the current business day.

Table Description	
Column	**Description**
Instrument	Instrument ID
TrdTime	Date and time Time of the match
Prc	Matched trade limit
Qty	Matched trade quantity
TrdTyp	Trade type; valid values e.g. REGULAR, ICEBERG, AVD and others
TrdInd	*Trade indicator* depicting essential trading conditions under which trade happened, e.g. EXCHANGE_LAST, HIGH-/LOW_PRICE, OPENING_PRICE, OFFICIAL_CLOSING_PRICE
Curr	Currency
Agsr	Aggressor side (B, S or empty)
Buy	Number of Buy orders involved in the match
Sell	Number of Sell orders involved in the match
MatchStepID	Match Step ID of the trade

Exch	Exchange ID

3.2.5 Quote Request

Quote requests are supported via the `QuoteR` button of the *Order Entry* and via the context menu in the Market view.

Quote requests are indicated in the `QRI` column of the *Market* view and listed in the *Quote Request* view:

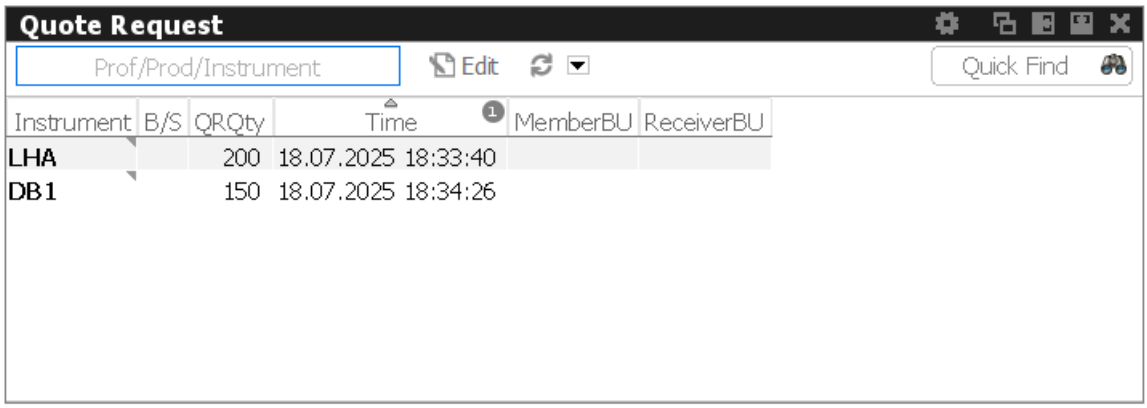


Fig. 50: Screenshot of the *Quote Request* view

Column	Description
Instrument	Instrument ID
B/S	Side of the quote request
QRQty	Quote request quantity
Time	Time stamp of the quote request
MbrBU	BU of the member issuing the request
ReceiverBU	BU of the member receiving the request

3.2.6 Cross Request (not available for Deutsche Börse Frankfurt)

The announcement of a cross request, i.e. the request to announce a pre-arranged trade to the regular market, is provided via a right-mouse click in the *Market* view table, and via the `CrossR` (Cross Request) action in the *Order Entry*. Please refer to the *Market* view (chapter 3.2.1) and *Order Entry* (chapter 3.3.1) respectively.

Cross requests are displayed in the XRI column of the *Market* view and listed in the *Cross Requests* view:

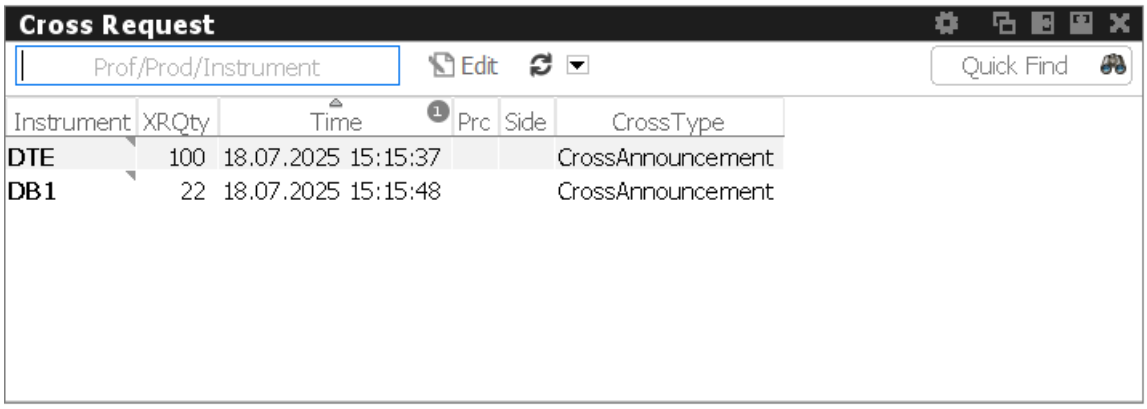


Fig. 51: Screenshot of the *Cross Request* view

Column	Description
Instrument	Instrument ID
XRQty	Cross request quantity
Time	Time stamp of the cross request
Prc	Price of the cross request
Side	Buy/Sell side of the cross request
CrossType	Type of the cross request

3.2.7 Ext. Ticker Line

The *Ext. Ticker Line* displays external index prices of cooperation exchanges using a ticker line.

The *Ext. Ticker Line* displays the following information of the underlying: Underlying ID, Last Time and Last Price. In case the available space to show the data is not sufficient, the *Ticker* will smoothly scroll the content of the underlying ticker, in order to cycle the display for all products of the selected profile.

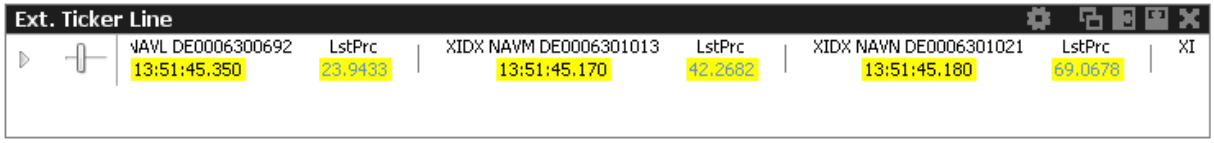


Fig. 52: Screenshot of the *Ext. Ticker Line*

3.2.8 Ext. Ticker Board

The *Ext.Ticker Board* displays external index prices of cooperation exchanges in a tabular view. The display is automatically updated via broadcast.

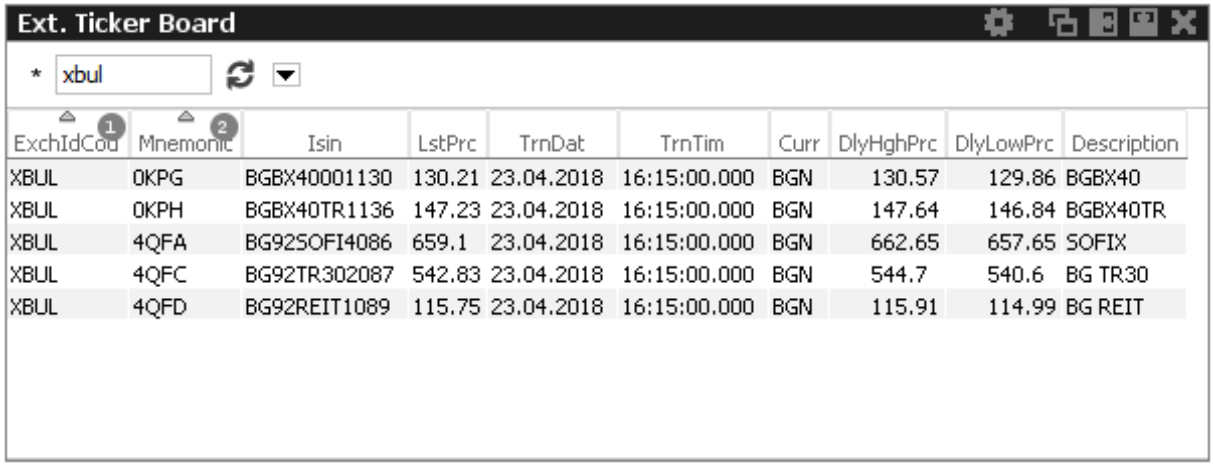


Fig. 53: Screenshot of the *Ext. Ticker Board*

Table Description	
Column	**Description**
Exch	Exchange ID code
Mnemonic	Mnemonic of external index
ISIN	ISIN code of external index
LstPrc	Last Price of external index
TrnDat	Transaction date
TrnTim	Transaction time
Curr	Currency
DlyHghPrc	Highest price of the current day
DlyLowPrc	Lowest price of the current day
Description	Description of external index
Close	Close price of the external index

3.3 View Descriptions: Trading

The Trading area comprises all GUI functions that deal with the entry and maintenance of orders and risk functions for market makers.

3.3.1 Order Entry

The *Order Entry* view allows to enter an order for a single instrument. Traders may open and close as many *Order Entry* views as desired. The *Order Entry* view also supports the maintenance of the

last entered order (that was entered using the current instance of the GUI) and it includes the *Hit*, *Bid*, *Take* and *Ask* functions. Also integrated is the display of the inside market.

Please note: When trading bonds decimals will be displayed if the minimum tradeable unit is less than one. For equities and warrants, quantity decimals will be entered and displayed in the same integer format as before.

The numeric `ClientID` field becomes mandatory for account types A/B/R and must be empty for accounts P/M/Broker-Dealer.

The `ClientID` identifies the trader and serves as a reference to the 35 characters long ESMA Client Identification Code. Additionally, due to MIFID 2 regime validations, based on the account entered mandatory yet not filled fields might be dynamically displayed in compact mode, although they are usually not part of compact mode fields.

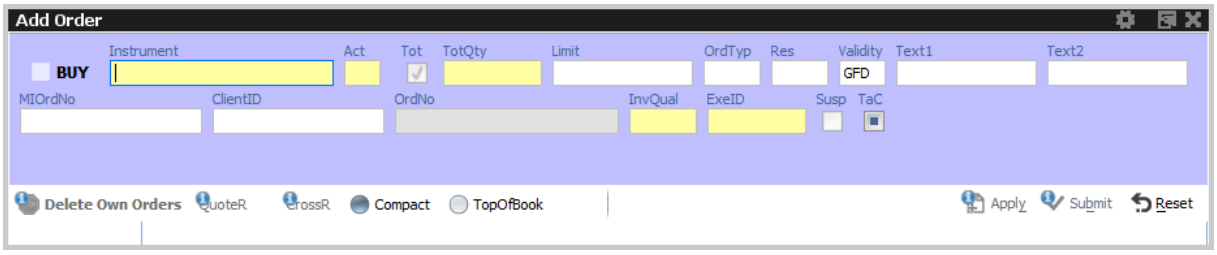


Fig. 54: Screenshot of the *Order Entry* view in compact mode and TopOfBook pane hidden

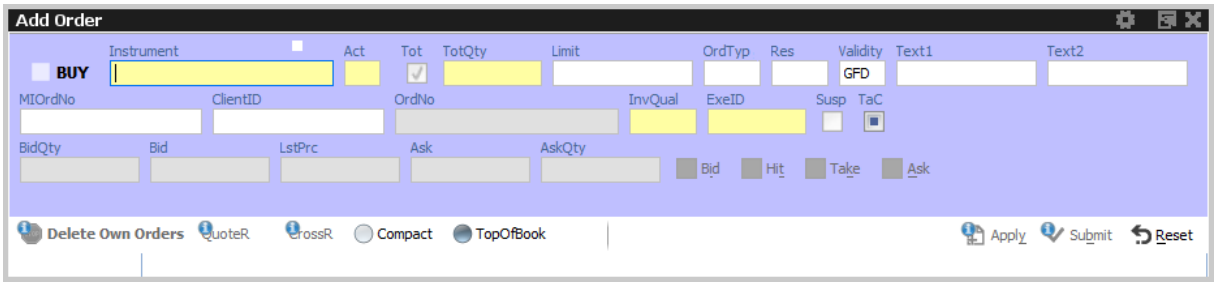


Fig. 55: Screenshot of the *Order Entry* view in compact mode showing the TopOfBook pane

Functions provided:

- Order Entry/Modify/Delete
- Bid/Hit/Take/Ask actions and price information.
- Quote / Cross Request Entry
- Delete Own Orders action (Panic button)

If all mandatory fields of the *Order Entry* are filled, the `Apply` button is enabled to apply the order. The `Apply` button submits the order, and in case the order entry was successful, the view switches into Order Maintenance mode to either re-apply or modify the last submitted order. Reapplying the order by using button `Apply New` or its shortcut allows a frequent entry of the same order - if the order passes the internal price validations.
Particularly noteworthy is the **Maximum Order Value (MOV)** validation that has been integrated to

the Order Entry recently. This validation blocks submitting an order if the value exceeds an exchange defined limit.

For most cases (traders) **it can be skipped with the second click on Apply/Submit.**

The `Submit` button does the same as the Apply button, additionally the Qty and Limit fields are cleared to indicate the order has been successfully submitted, and the view stays in Order Entry mode, not providing the `Apply New` feature. If the Order Entry was opened externally, the view will be closed, if the entry of the order was successful.

If the Apply or Submit button is pressed, the buttons become inactive and will stay inactive as long as the order has been processed (either successful or unsuccessful). Normally it is obvious whether or not a particular order has been successfully submitted or not: the Submit button will clear Qty and Limit if the order was successfully processed, and the Apply button will switch the *Order Entry* into *Order Maintenance* mode in that case.

The *Order Entry* view can be prefilled by a click in the *Market* view and *Orders* view. If more than a single *Order Entry* has been opened in the current desktop, the most recently used one will be prefilled.
Using several properties of the *Order Entry* the behavior can be fine tuned. For example, the *Order Entry*'s property *Accumulate market qty* controls how the quantity gets prefilled:

If not ticked, the *Order Entry* is filled with the exact quantity when clicking the *Qty* column of a certain row of the Market Depth. If ticked (default), the quantity is accumulated as usual.

For an overview of all properties available, just open the properties dialog of the *Order Entry* or refer to paragraph *Order Entry Properties - presets* further below.

After an order has been submitted using the Apply button, the view will switch into Order Maintenance mode, and the button group changes to `Delete`, `Modify`, `Apply New` and `Reset` buttons:

- `Delete` will delete the selected order.
- `Modify` will update the order which has been entered last on this view.
- `Apply New` will enter a new order with the current values.
- `Reset` will clear all fields and will then apply the saved view properties.

Additional fields that are not required in the current context are automatically hidden if the *Order Entry* is in compact mode (which is the default). The underlying fields and top of book fields are displayed on request of the user:

Field Option	Function
Compact	Toggles the display of additional order fields
TopOfBook	Provides the informational top-of-book display fields for quick trading actions: Hit, Bid, Take, Ask

The optional forms can be expanded, by default these forms open in the collapsed state. The

collapsible state can be saved.

Order Entry - Standard Fields:

Field	Description
Buy/Sell	Buy/Sell code button
Instrument	*Instrument short name* (symbol), or WKN / ISIN for multi currency instruments as `<ISIN.CUR>` The context menu offers the following columns of information: Instrument short name, WKN, ISIN, CURR and Instrument long name. The entry field allows the entry of any one of these items, as long as the selected value refers to exactly one single instrument, e.g. for multi currency instruments the ISIN is only unique with the currency
Act	Account
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
Tot	A ticked *Total Quantity* checkbox indicates that the `TotQty` field will represent the **total** order quantity, disregarding any partial matches A default setting an be defined in the Order Entry properties
Qty/TotQty	Quantity of the order If the `Tot` field is checked, this is the total quantity of the order
Limit	Limit and currency of the order *Market* orders are characterized by a blank limit field
OrdTyp	Order type - valid values include: • ICE - Iceberg Order • MIDP - Midpoint Order • MIDPS - Midpoint Sweep Order • OCO - One Cancels the Other Order • STP - Stop Order

Res	Order restriction - valid values include: • AOO - Auction only • AVD_CAO - AVD Closing Auction • AVD_IAO - AVD Intraday Auction • AVD_OAO - AVD Opening Auction • BOC - Book or Cancel • CAO - Closing Auction • CRT - Counter Party Resting Time • CRT_MBO - Counter Party Resting Time & Midpoint Book only • IAO - Intraday Auction • MBO - Midpoint Book only • MTH - Main Trading Hours only • OAO - Opening Auction • SAO - Special Auction
MAQ	*Minimum Acceptable Quantity* of Midpoint orders
StopPrc	Trigger price for OCO and Stop orders Only displayed for `OrdTyp=STP` or `OrdTyp=OCO`
TrailStopPct	Trailing stop order, trailing distance in percentage of last price
TrailStopAbs	Trailing stop order, trailing distance price value
RndLowQty	Iceberg order lowest random quantity value
RndHighQty	Iceberg order highest random quantity value
InitQty	Initial iceberg display quantity
Validity	The validity of the order: FOK - Fill Or Kill GFD - Good For Day GTC - Good Till Canceled GTD - Good Till Date IOC - Immediate Or Cancel
Date	Date of the validity in case of GTD
Text1	Free format text field 1

Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
OrdNo	Order number generated by Cash Markets application
Susp	If checked, order is entered as suspended for later activation from *Order Entry* view
TaC	Optional order attribute for *Trade At Close*. It depicts following settings: • ☑ : Order does participate in Trade-At-Close phase • ☐ : Order does not participate in Trade-At-Close phase • ▣ : user specific default value as defined in *User Maintenance* will be used.

Order Entry - Extended Fields:

Field	Description
StopPrc	Trigger price for OCO and Stop orders. Only enabled for `OrdTyp=STP` or `OrdTyp=OCO`
Date	Date field. Enabled only for validity GTD
CrossID	The CrossID used for both Self-Match Prevention (SMP) in the regular order book and Self-Cross Prevention (SCP) in the Midpoint order book • *SMP:* Both orders and/or quotes originating from the same business unit must contain the same CrossID value for a SMP action (cf. *SmpInst* below) to take place. Orders and quotes actively participating in the order book are verified for SMP during the instrument state “Continuous” only. • *SCP:* Both orders originating from the same business unit must contain the same CrossID value for a SCP action to take place. Orders resting in the Midpoint order book are verified for SCP during the instrument state “Continuous” only.

SmpInst	*SMP Instruction* - determines the deletion action in case of an SMP event: • Cancel aggressive - cancel of the incoming order/quote • Cancel passive - cancel the entire book order(s)/quote(s) with the same SMP ID • Cancel aggressive and passive - reduce the quantity of both incoming and book orders/quotes until at least one is completely canceled
AVDBrokerIntID	*AVD Broker Internalization ID* - if set and identical, this ID allows broker of the same BU to match their own buy / sell AVD orders with priority
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.

Order Entry - TopOfBook:

Field	Description
Bid, BidQty	Best bid limit and bid qty
LstPrc	Last trade price
Ask, AskQty	Best ask limit and ask qty

Order Entry - Actions:

Field	Description

Delete Own Orders	Deletes all types of own orders (standard, lean and short order message layout) for the currently selected instrument in all Account types
CrossR	Button: Trigger cross trade announcement for the selected instrument and Qty of the Order Entry (not available in Deutsche Börse Frankfurt)
QuoteR	Button: Trigger quote request for the selected instrument and Qty of the Order Entry
Bid	Enter a Buy order at the best bid limit
Hit	Enter a Sell order at the best bid limit
Take	Enter a Buy order at the best ask limit
Ask	Enter a Sell order at the best ask limit
Compact	Button: Toggle the display of the hidden fields and the extended fields
TopOfBook	Button Toggle the display of the TopOfBook field group
Reset	The `Reset` action completely clears the *Order Entry*, and applies default settings, if available

Order Modify

Since with Cash Trader the *Order View* can also modify an order, no special *Order Modify* view window is used to change details of an existing order. Please refer to the description of the *Order Entry* window for details of the order modification.

The persistence indicator will not be changed on the modification of an order - this applies especially to orders which have been entered using a third party application.

Suspend/Resume of Orders

Suspend/resume of orders is supported in *Cash Trader*:

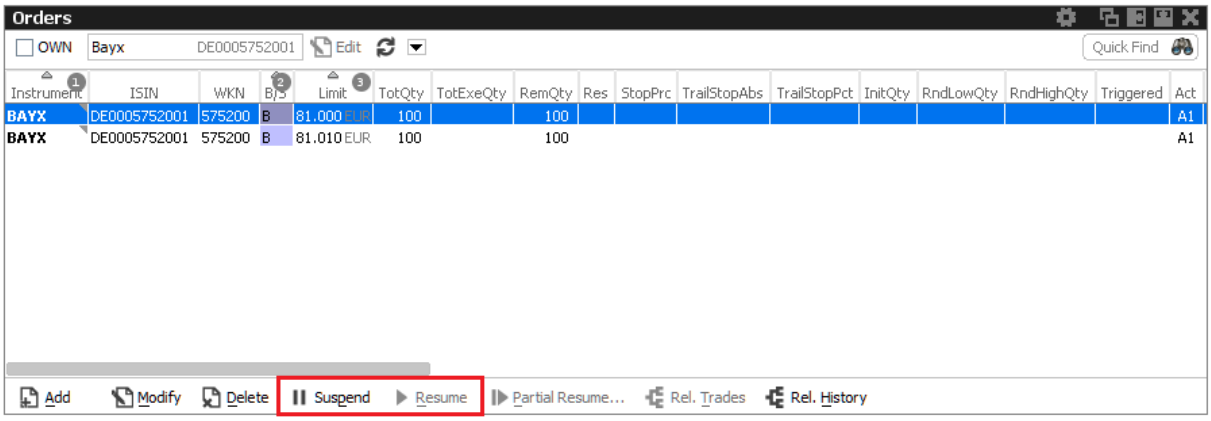


Fig. 56: Screenshot of the *Orders* view showing the *Suspend* and *Resume* actions

Suspending an order technically deletes that order from the market, and resuming of an order is technically the entry of a new order with identical properties.

The suspend flag `Susp` of the *Order Entry* can be selected for new orders, but is display only for the maintenance of an order. Please toggle the suspension state of the order via the `Suspend` and `Resume` buttons of the *Orders* view.

Suspended orders will not be removed immediately from the *Orders* view if the user logs out or closes the GUI. These orders will be removed:

- at the end of the day
- in the event of a technical problem of the GUI/GMC server

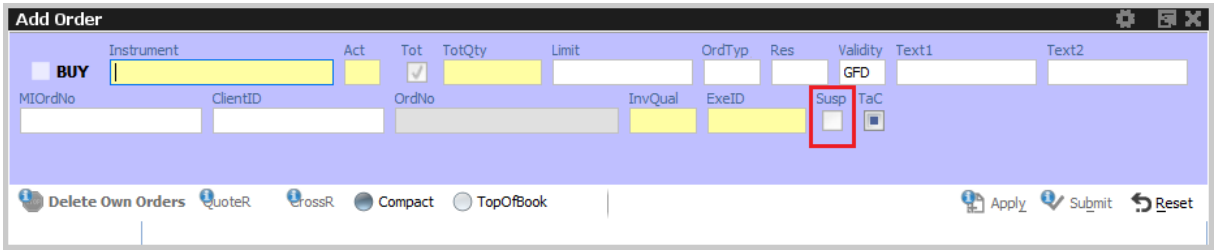


Fig. 57: Screenshot of the *Order Entry* showing the *Susp* checkbox

3.3.2 Self-Match Prevention (SMP) and Self Cross Prevention (SCP)

Self-Match Prevention (SMP) allows members to prevent unintended crossing of their orders and quotes while Self-Cross Prevention (SCP) allows members to prevent unintended crossing of their *Midpoint* orders. For both SMP and SCP, the `CrossID` field of the order entry is utilized.

SMP and SCP are explained in the following two sub chapters.

Self-Cross Prevention

Every Midpoint order in T7 Cash GUI may be entered with a filled `CrossID` field.

For Midpoint matching, this CrossID will be taken into account to avoid orders with an identical CrossID matching each other, i.e. achieving a Midpoint Self-Cross Prevention. All sitting Midpoint orders in the Midpoint order book will be checked for the given CrossID and once they are crossed with other orders with the same CrossID (regardless of the current Midpoint price and MAQs), the sitting Midpoint orders will be canceled (deleted). For Midpoint Sweep orders, once they reach the CLOB, the CrossID will be used for the already existing Self-Match Prevention process (see below for details).

The Order Entry features the `CrossID` field in the extended layout so the user simply presses the `Compact` button of the Order Entry for this field to be displayed:

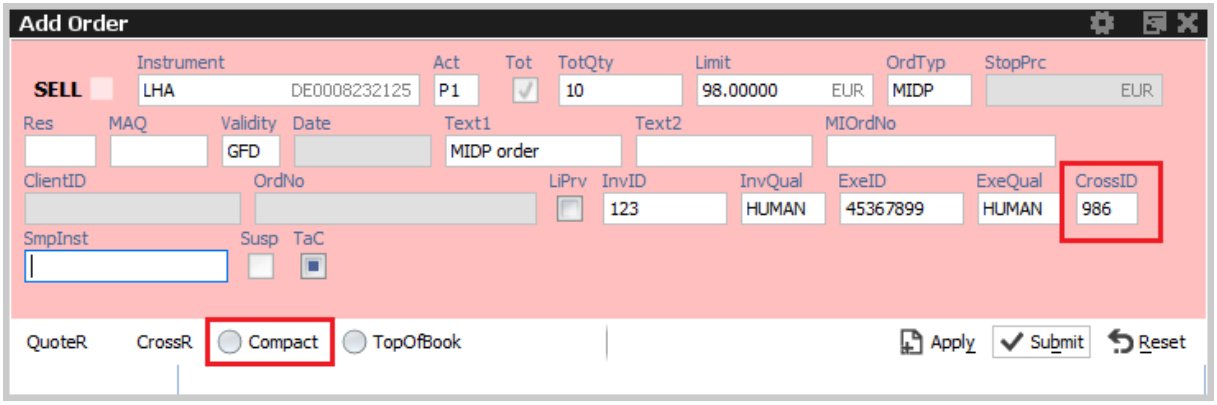


Fig. 58: Screenshot of the *Order Entry* in extended layout highlighting disabled Compact Mode to show the `CrossID` field

This field is also provided in the Orders and Order History view.

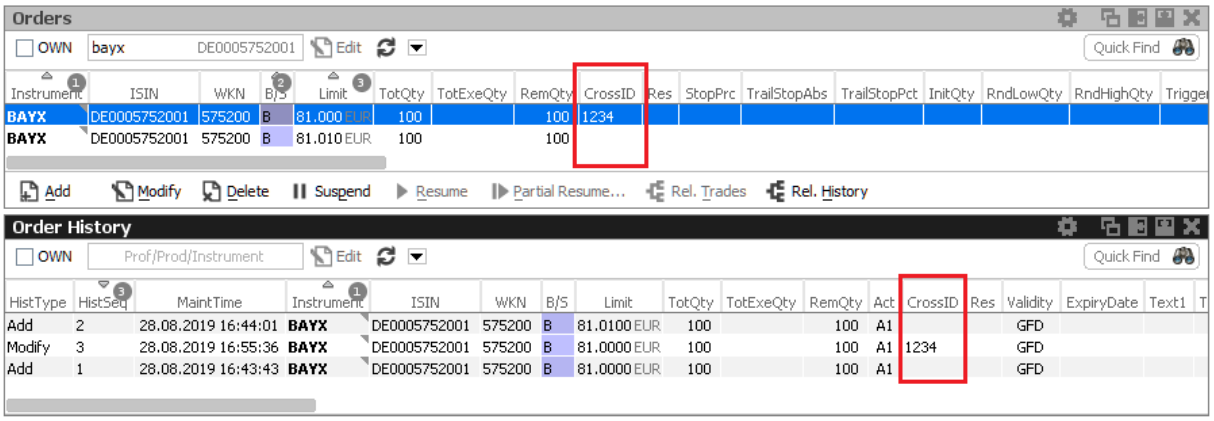


Fig. 59: Screenshots showing the *CrossID* column of the *Orders* and *Order History* view

Self-Match Prevention (SMP)

With the *Self-Match Prevention* functionality participants are able to avoid the execution of an order/quote against another order or quote from the same business unit in the same instrument.

For intended crossing, the cross request functionality is offered by Cash Markets T7. By using it an exchange participant is allowed to enter relating orders and quotes which can immediately match against each other. The precondition is that the participant enters a cross request prior to entering orders or quotes which can match immediately signaling its intention to the market. However, the legal situation in the origin country of several exchange participants does not allow crossing at all.

To use the SMP functionality the optional fields `CrossID` and `SmpInst` need to be filled. The `CrossID` must be identical for both orders and/or quotes that origin from the same business unit. By filling the `SmpInst` field the trader controls what deletion instruction will be applied in case of an SMP event:

- Cancel aggressive - cancel the remaining quantity of the incoming order or quote
- Cancel passive - cancel the entire book order(s) or quote(s) of the match price level, regardless of the size of the incoming aggressive order

- Cancel both (aggressive and passive) - reduce the quantity of both incoming and book order/quote until at least one is completely canceled

Both fields are located next to each other and get visible by disabling the compact mode of the *Order Entry* view.

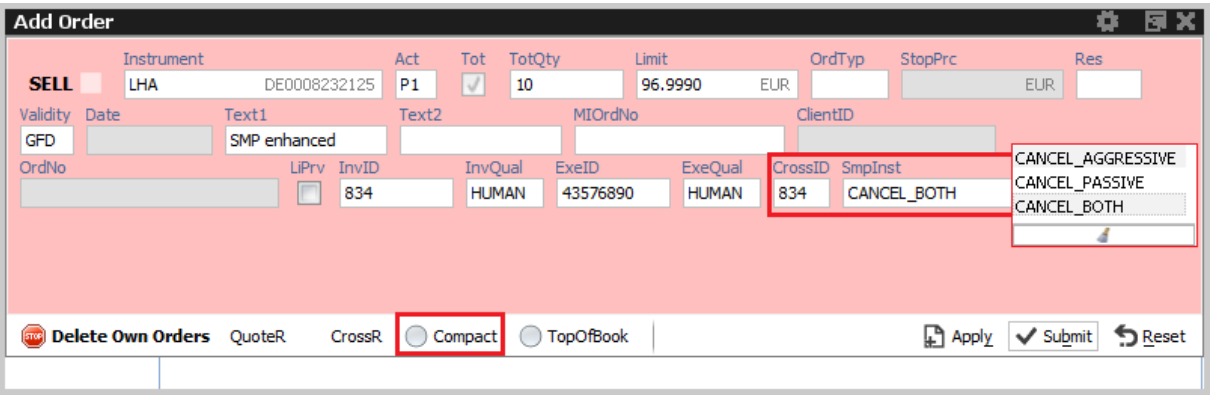


Fig. 60: Screenshot of the *Order Entry* highlighting the fields needed for SMP

Orders and quotes actively participating in the order book are verified for SMP during the instrument state “Continuous” only.

The fields `CrossID` and `SmpInst` are also displayed in the views *Orders* and *Order History*. Additionally, these *History Type* values inform about the SMP event:

- Self Match Cancel: This event is set for an incoming order which triggers the SMP.
- Self Match Delete: This event is set for an order already in the book, which is triggered by the SMP.

3.3.3 Order Entry Properties and preferences

The *TotQty* preset in the *View Properties* of the *Order Entry* controls whether or not the `Tot` checkbox is selected on the modification of an order from the *Orders* view.

Close on Submit controls whether or not the *Order Entry* should close, if an order has been successfully submitted using the *Submit* button.

Close on Modify controls whether or not the *Order Entry* should close, if an order has been successfully modified using the *Modify* button.

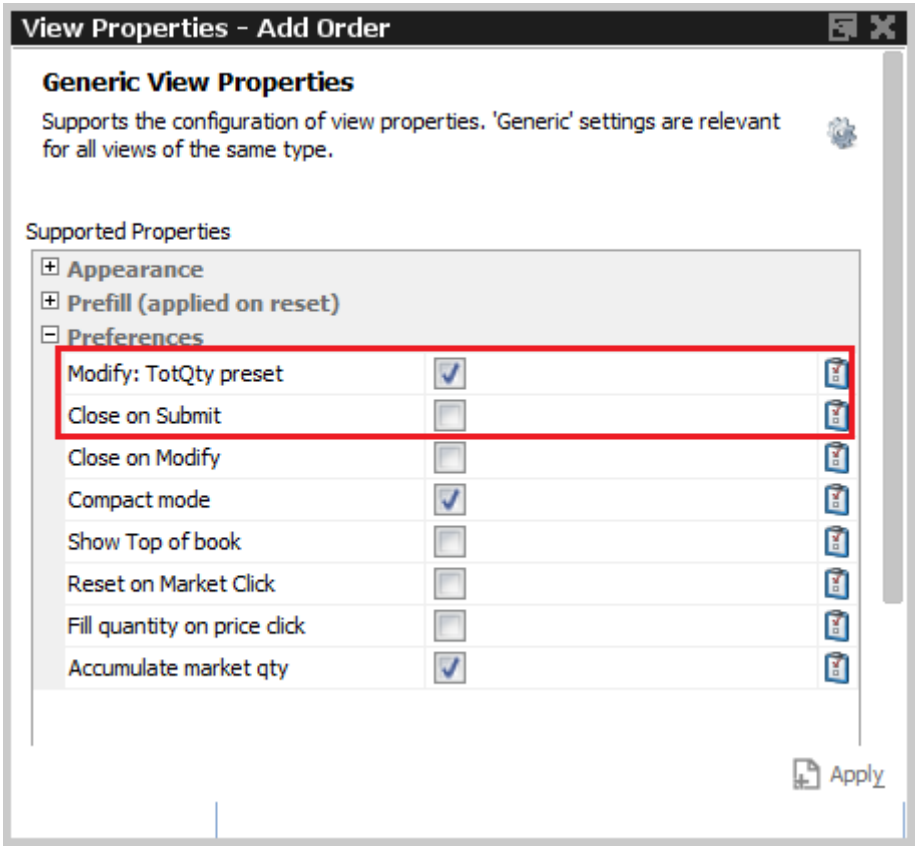


Fig. 61: Screenshot of the *View Properties* view

Reset on Market click controls whether or not the *Order Entry* is reset before filling data from Market view.

Fill Quantity on Prc Click controls whether or not the *Order Entry* is filled with the related quantity as well when clicking on a Bid/Ask cell in market view.

Accumulate Market Quantity controls how the how the quantity gets prefilled when clicking in the market view: If not ticked, the *Order Entry* is filled with the exact quantity as displayed in the *Qty* column of a certain row of the Market Depth. If ticked (default) the quantity is accumulated as usual.

In order to save changes, press *Apply* in the *View Properties* and press *Save Settings* in the *Application* menu.

3.3.4 Pre-trade Risk Limits

The *Pre-trade Risk Limits* view allows entitled participants to define and maintain limits for the daily maximum notional value of all entries, modifications and executions of orders and quotes per product and trading side.

Only products that have been defined to be eligible for the Pre-Trade Risk Limit check can be viewed and maintained. Viewing and adding action for this view are controlled by two different entitlements.

This view is not updated automatically.

In general, Pre-trade risk limits can be set for three risk limit types (-levels), separately for the buy and sell side:

1. Exchange level (EXCH_FOR_BU): Cash Market Supervision defines PTRLs for any Business Unit (BU) using the Cash Controller GUI.
2. Clearer level (CM_FOR_BU): Clearing members define PTRLs for their related non-clearing member using the Cash Clearer GUI. *Kindly note,* a Settlement Institute (SI) member will not be able to define PTRLs for its non-clearing members.
3. BU level (BU_RISK_GROUP): Properly entitled (admin) participant defining risk limits for its User Risk groups using the Cash Admin GUI.

The newly entered Pre-trade risk limits will be enabled on the date specified in the field *Activation-Date*, i.e activating limits intraday is not permitted. If *ActivationDate* is empty, the limits are active. To then have the limit figures take effect, any positive number greater '0' needs to be entered. If no value is set, trader can enter transactions without any limit. Contrary, a value of '0' restricts the trader completely.

A full description of this view can be found in Cash Admin GUI, chapter 4.2.1 Pre-trade Risk Limits and Cash Clearer GUI, chapter 5.2.1 Pre-trade Risk Limits.

3.3.5 Quote Activation

The *Quote Activation* view enables market makers for a specified product or profile:

- to review the current quote activation status
- to change the quote activation status

In order to aid market makers in the configuration of the activation status, bulk-edit operations can be performed by filtering on the view. Please note, this view is not updated automatically but needs to be refreshed manually.

The *Quote Activation* view understands the scope session $\times$ product for the activation status.

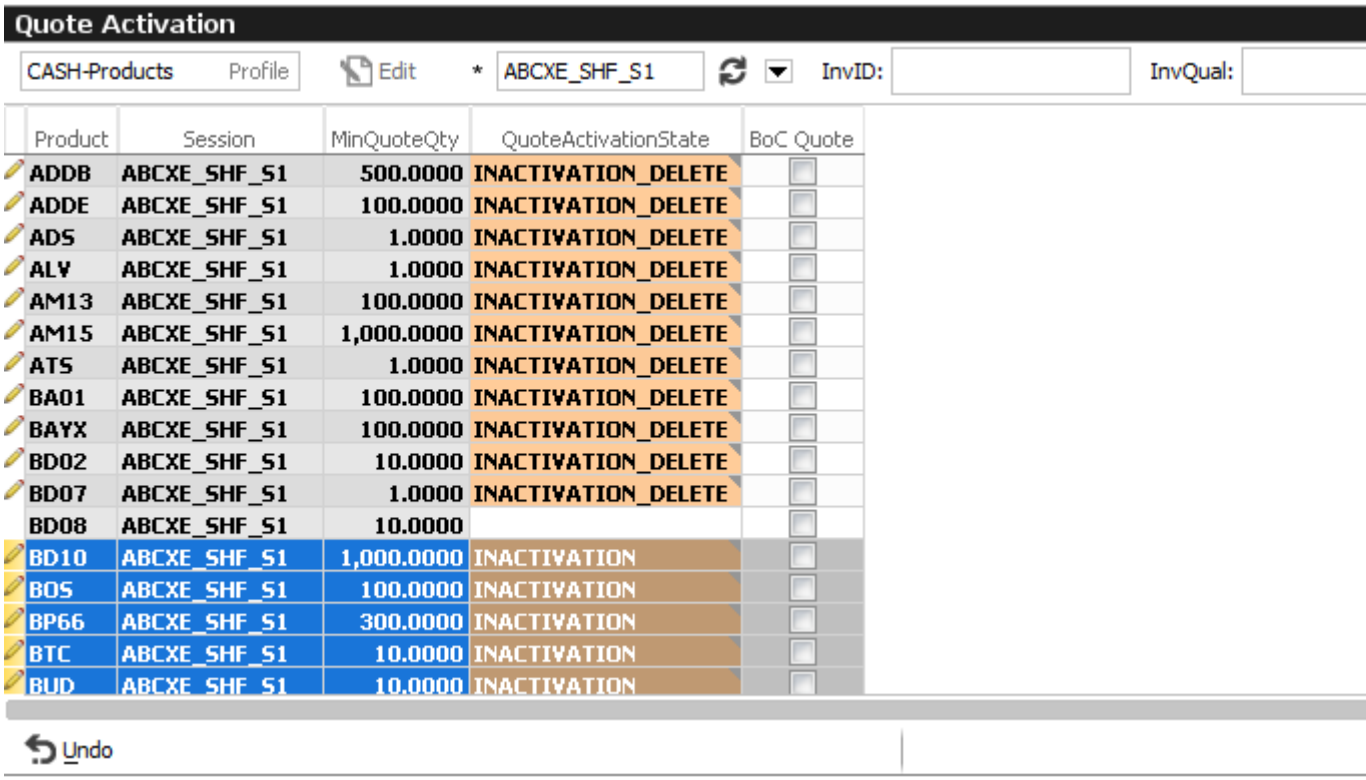


Fig. 62: Screenshot of the *Quote Activation* view

It is possible to change the quote activation state by right-clicking into the respective *QuoteActive* cell of the table and select one of the listed valid values - INACTIVATION_DELETE, REACTIVATION or INACTIVATION.

It is not possible to define the quote activation status for both multiple sessions and multiple products. One of the two argument need to yield a single item.

Important: in the Quote Activation view only the rows in bold are active. The greyed out rows are inactive and should be considered as non-existent.

The *Quote Activation* scope parameters:

Field	Description
Product	Product
Session	A session identifier
MinQuoteQty	Minimum quote quantity

QuoteActivationState	Displays the current activation state of the quote: • INACTIVATION_DELETE - quotes gets inactivated and deleted • REACTIVATION - quotes get reactivated • INACTIVATION - quotes get inactivated only Please note, the status is not updated automatically but needs to be refreshed manually
BoC Quote	*Not supported currently*

Values can be changed by a double click on the respective cell. The change of multiple lines is supported using the *Modify* button.

Changes are immediately effective.

3.3.6 T7 Entry Services

The *T7 Entry Services* (TES) view supports the entry of bilateral off-book transactions in tradeable instruments. With this service, participants benefit from the customized trading in Cash markets and the advantages of standardized settlement services provided by Deutsche Börse Group.

For details on the pre-approved bilateral OTC Trade Upload feature please refer to chapter 3.3.7.

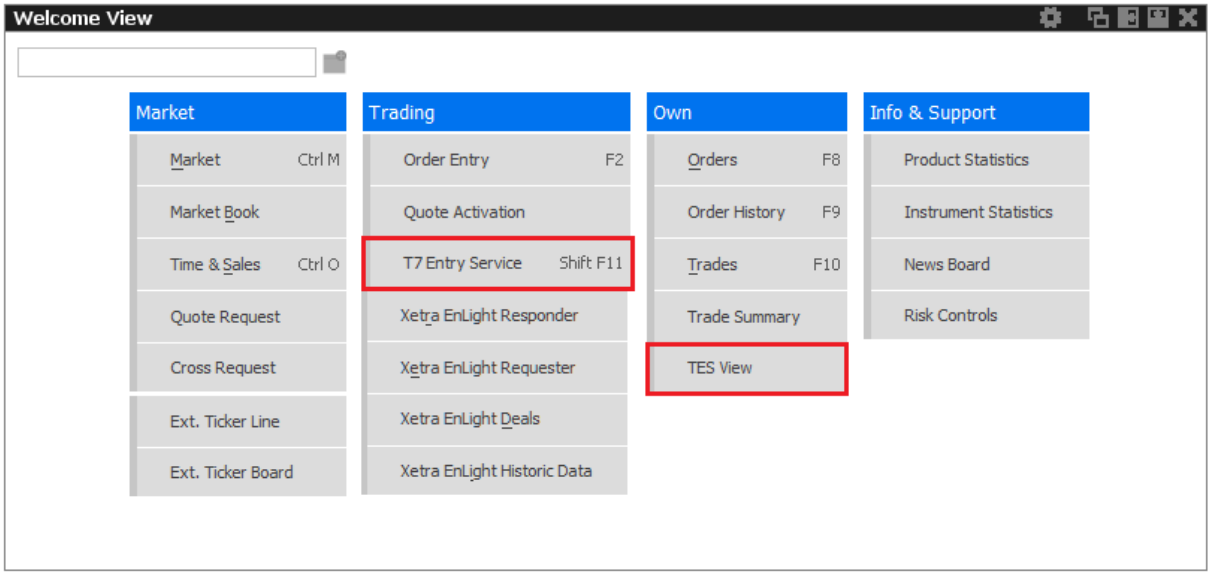


Fig. 63: Screenshot of the *Welcome View* highlighting *T7 Entry Services* views

The *T7 Entry Services* view offers entry of two TES Types, OTC and LIS:

- TES LIS: execution of pre-arranged trades (on-exchange off-book trade entry). TES Type LIS must fulfill *large in scale* requirement, specific block size and price validation for Cash Market.

- TES OTC: bilateral off-book trading functionality for Cash Market without any price and quantity validation and with no reporting obligation.

T7 Entry Services facts in short:

- The person entering a TES trade is called the *Initiator* of the trade. The counterparty is called the Approver.
- The full user ID is required to specify the approving (counterparty) trader of a TES trade.
- Bilateral trades can be started on the Buy and on the Sell side.
- By ticking the checkbox `Publish` TES trades are flagged for being publishing in CEF after approval.
- In order to inquire on a TES trade, the traded product must be specified along with the `TESTrdID`. However, tt is recommended to easily prefill the TES Entry by double-clicking the respective trade in the *TES View*.
- Completed TES Trades, i.e. in state `EXECUTED`, are displayed in the *Trades* view as well. TES Trades in other states only in TES View.
- Two entry modes - *Simple* (default) and *Broker*. The former allows quick entry of mandatory TES data while Broker mode allows to view and change more (clearing) data.
- Due to regulatory requirements, Regulatory Market Makers are obliged to flag orders and quotes entered under a market making agreement for liquidity provision (liquidity provision activity). Flagging is done by setting the **`LiPrv`** field accordingly.

  According to related ESMA guidelines for MiFID II, following scenarios of *liquidity provision activities* are defined:

  - Participant performing algorithmic trading to pursue a market making strategy (Trading Capacity set to M or P).
  - Participant performing a *liquidity provision activity* (not denoted as a market making strategy), dealing on own account (Trading Capacity set to M or P).
  - Participant performing a *liquidity provision activity* executes orders on behalf of clients (Trading Capacity set to A).

- **When using GUI defined TES Auto Approval Rules**, clearing data entered for an auto approval rule definition will **overwrite** clearing data which is entered during manual TES Entry. If the latter should persist, modify needs to be pressed again by the user entering the TES trade.

TES Trade states

The following trade states of TES trades can be observed which inform about the current state of the TES transaction:

TES State	Description
Pending	The TES trade has been entered and is waiting for approval of the counterparty
Approved	The TES trade has been ratified by the counterparty, but approval of other counterparties are still outstanding
Auto_Approved	The TES trade has been automatically approved by executing an Auto-Approval rule defined for a particular trader and product
Executed	The TES trade has been fully ratified
Deleted	The TES trade has been deleted
Suspended	The TES trade has been entered in suspended state, for activation at a future point in time
Reversed	The TES trade has been reversed

T7 Entry Services - Bilateral, Simple & Broker Mode

The T7 Entry Service view supports the entry of regular block trades of the TES types *OTC* and *LIS* of bilateral TES trades in a single view.

The TES Entry view is split into two sections, the first section describing the kind of tradeable which is dealt with (the red box of the following screenshot depicting this area), and the second section describing the counterparties which take part on the trade (the blue box below):

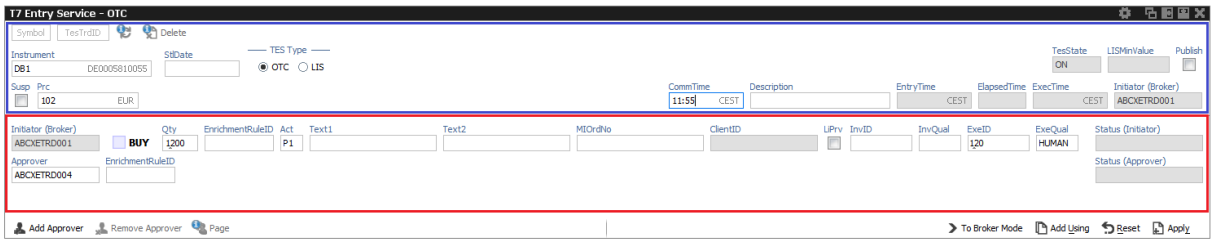


Fig. 64: Screenshot of TES Entry view in Simple Mode highlighting tradeable section and counterparty section

This bottom area in blue is switchable, in order to allow for addressing multiple counterparties.

The view has two main operating modes. A *Simple Mode* for the entry of a bilateral TES trade (which is the default), and a *Broker Mode* which is used for a more verbose view on the (clearing) data of participants. In *Broker Mode* it is also possible to enter a bilateral trade, and in fact you can switch between these two modes to allow for different representations of the trade you are about to enter. The following screenshot shows the TES Entry view in the more flexible *Broker Mode*:

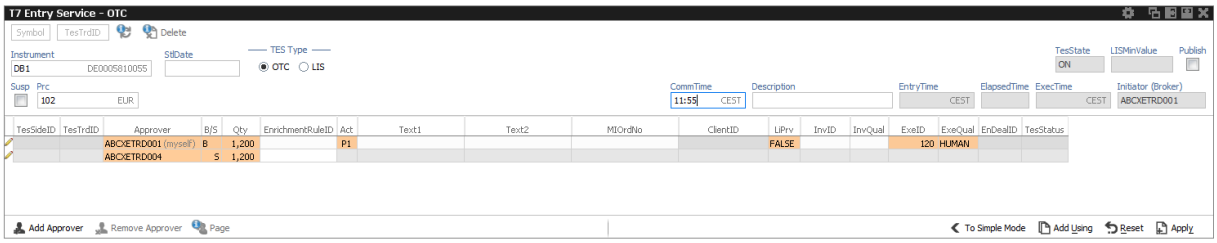


Fig. 65: Screenshot of the TES Entry view in Broker Mode

In this mode, each counterparty is displayed as a single row in the table of this window.

The TES Trade Entry provides a view property to allow to set the default mode to Simple or Broker mode. The default mode is Simple.

The table can be edited directly: a double click on a cell puts the table into edit mode and starts the editing of the clicked cell.

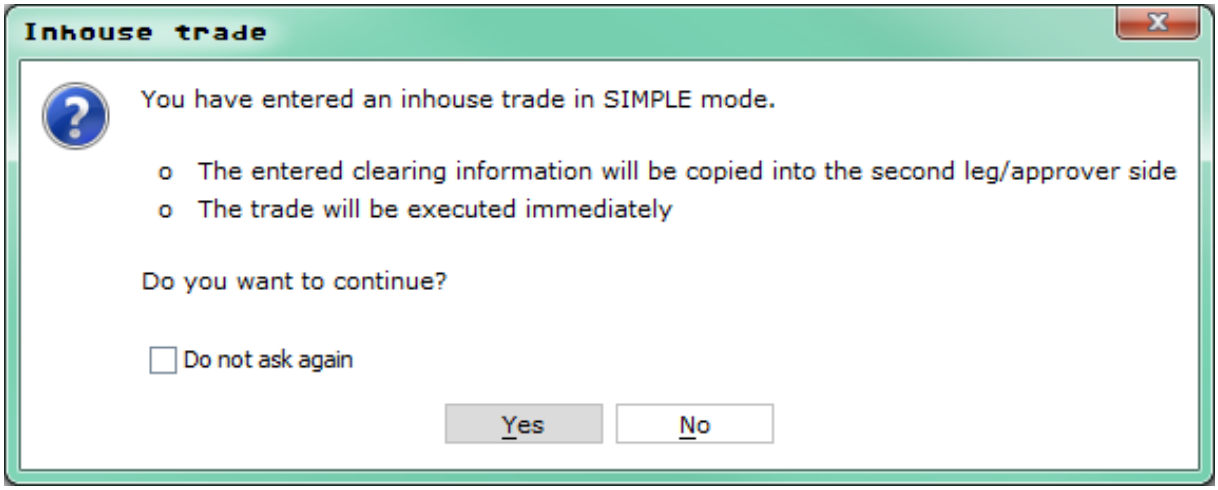
Approver column

The Approver column on the T7 Entry Services tabs indicate the Approver of this counterparty row. The approver is identical to the owner of that row.

TES: In-house trades in Simple mode

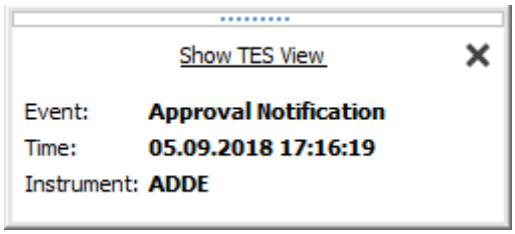
The TES Trade Entry supports the entry of in-house block trades also in Simple entry mode.

Please be aware that the trade is automatically approved and executed immediately at the push of the Apply button. The implication of the Simple entry mode is that the clearing information provided will also be used for the approver side. This can be desirable. However, the user is warned about this fact via this dialogue, and can choose to accept that and enter the trade (Yes) or stop and switch into the Broker mode instead (No):



TES Alert: Approval Notification

Once a TES trade has been entered, an approval broadcast is submitted to the target traders. As long as a trader has the T7 Trader GUI open at that time, the corresponding TES trade will be indicated in the Trader GUI of the Approver via a confirmation popup:



The Approver can then click the *Show TES View* button to show the trade in the *TES View*. A double click on the trade then opens the TES Entry, ready for approval of the TES trade.

TES: Full UserID Required for Approver field

The full UserID needs to be specified for the counterparty side. Instead of a UserID, a nickname may be chosen instead, if the nickname has already been registered using the *TES Counterparty* view.

For convenience, the context popup of the Approver field provides a list of traders which are already registered by the TES Counterparty view. It is also possible to type the member ID or the first letters of a nickname while the popup is open to quickly find the respective counterparties from that list. The popup provides the following information: Counterparty, Nickname and Comment.

TES: User Group and User Level

The User Group and User Level concept of the T7 trading system also apply to TES trades. The currently assigned user level and user group of a trader which currently impacted the on-exchange trading activities therefore also effects the TES trading activities of this user.

Overview of the user levels in the light of TES trading:

Trader	A trader is an individual admitted for trading at the exchange. Unlike a head trader and supervisor, a regular trader cannot see the TES trades of other traders from the same user group or any other user group or business unit.
Head trader	A head trader is part of a user group and may see, maintain or approve TES trades of traders in the same user group in the Trader GUI - granted, that the required entitlements are assigned.
Supervisor	The supervisor user level may see, maintain or approve TES trades of all users of the same business unit - granted, that the required entitlements are assigned.

TES: Trade Commencement, Entry, Approval and Execution Time

Introduction of TES Times: Time of Commencement, TES Entry Time, TES Execution Time:

- The Time of Commencement is the time of trade agreement (outside the system) between the counterparties and can be entered manually by the initiator. The Time of commencement cannot be in the previous day and cannot be more than 24 hours older than the TES entry time for TES types *LIS* and *OTC*.

- The TES Entry Time is the time of the technical entry of the TES trade into the T7 system, and will be automatically assigned by the exchange.
- The Side Approval Time is automatically assigned by the exchange at the time of the respective side's approval.
- The TES Execution Time is given to all executed sides once the trade is fully approved.

The Time of Commencement is the only time which can be entered manually. The time zone must be CET/CEST. Since it is foreseeable that some users from other time zones can mistake their local time with the system time, the TES Trade Entry displays the difference of the given time to the current system time:

Fig. 66: Detail of TES Entry screen highlighting Commencement Time field

A quick look onto that special display ("diff: 44 minutes ago") reduces the possibility of an error.

TES: Bulk Load (Import)

The *TES* facility features a special import function to upload TES trades. This import view is accessible via the view's import function - either by clicking the settings icon and choosing *Import* or via the GUI menu *View -> Import*

Using the *Import*-button on the *Import* view, a csv-file can be selected for import (the separator character being the semicolon, regardless of any regional settings in the operating system used). The *GUI* then reads the file and displays the to be imported TES trades in the table for review. Errors that are found while reading the import file are indicated by a red background color. A click on such a red line will show a detailed message about the problem in the status bar. The data in the table is not directly editable - errors should be fixed in the file to be imported.

After the table has been checked for errors, the imported file can be applied using the *Apply* button.

Please note: Fitting template files for this bulk load functionality can be downloaded from the GUI menu *Help -> Export Bulk Templates*.

TES Bulk Load: Auto Approval

TES trades will be automatically approved during the import, if the fields required for approval are filled in the import file for the counterparty side: Act (S) and TraderID (S). For details Please refer to 4.2.6 TES Auto Approval Rule.

TES: Page Broker

Once the TES trade is approved by all participants, neither the initiator nor any counterparty can do any change to the TES trade anymore. Since to err is human, we provide a means to let the counterparty inform the broker in the event the trade details are incorrect.

In that event a popup will open in the T7 Trader GUI of the initiator displaying the request of the counterparty to update details of the trade.

In order to indicate that message was received by the counterparty, a green checkbox icon (✔) is displayed next to the delivered message:

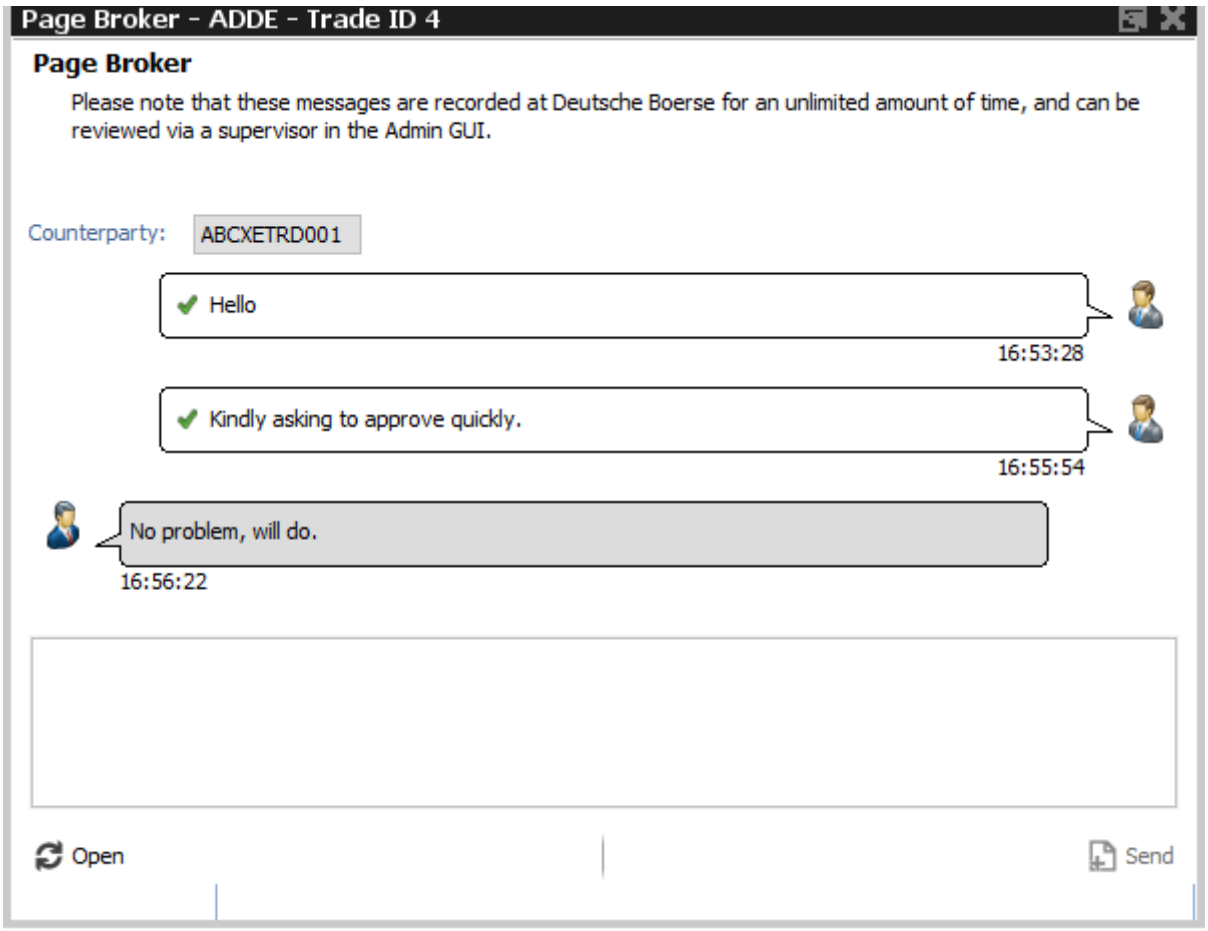


Fig. 67: Screenshot of the *Page Broker* dialogue

Please note that these messages are recorded at Deutsche Boerse and are provided to the member on request.

TES: Description Field

The Initiator of a TES trade can not specify the clearing information fields for the counterparty, e.g. Text1, Text2, MIOrdNo. In order to compensate for that, a Description field is provided, which allows the initiator to give a hint to the counterparty about the background of the trade:

Fig. 68: Screenshot of the *TES Trade Entry* view highlighting the *Description* field

TES: Display of *LIS Minimum value*

Every TES trade of type LIS must fulfill instrument specific block size validation. For each TES trade side the TES trade price multiplied by the side quantity must be equal or higher than the

LISMinValue. *LISMinValue* is filled for TES Trade Type LIS only.

Fig. 69: Screenshot of the *TES Trade Entry* view highlighting the *LISMinValue* field

Trade IDs (TES ID, TES Side ID, TesTrdID)

While the TES ID and TES Side ID are valid for a not ratified TES Trade, the Deal IDs and Deal Item IDs are assigned once a TES trade has been executed (fully ratified).

The following table gives an overview and description of these IDs:

Field	Description
TES ID	This ID references the whole TES trade with all counterparties involved for a given product
TES Side ID	The TES Side ID refers to a specific TES trade approving side of the TES trade
Deal ID	one unique Deal ID is assigned for the whole TES Trade
Deal Item ID	a unique Deal Item ID is assigned for each TES trade side.

TES: Entry of suspended Block Trades

GUI supports entry of suspended TES trades. The suspended checkbox must be ticked for that during entry of the TES trade. It is possible (but not mandatory) to specify a Price for a suspended TES trade.

Fig. 70: Screenshot of the *TES - Trade Entry* view showing the entry of a suspended TES OTC trade

This trade is then visible in the TES View in state SUSPENDED, and can later be un-suspended, which then starts the approval process.

Field description of the TES Trade Entry view:

Field	Description
Product TESTrdID	The TES Product in combination with the TESTrdID is used to identify a TES trade. The TESTrdID is assigned by the system after the trade has been entered. After the TES Trade has been entered, the trade can be retrieved using these fields
TESState	The TES activity state: • `On` Enable all TES activities (TES trading, TES deal cancellation) • `Halted` Disable TES trading activities (TES entry and side approval) TES deal cancellation is still possible `Halted` will be used in exceptional situations and indicates that TES trading is stopped temporarily • `ENDED` Disable TES trading activities i.e. TES entry and side approval. TES deal cancellation is still possible Uploads of pre-approved OTC Trades is still enabled). State `ENDED` will be used at the end of the day. It is used to indicate the end of the current trading day • `Off` Disable **all** TES activities (TES trading, TES deal cancellation)
LISMinVal	**L**arge **I**n **S**cale minimum value, usually a result of *price* × *quantity* Used for TES Type LIS only
Publish	*TES TradePublishIndicator*. If ticked, executed TES trade will be published
Instrument	*Instrument short name* (symbol), or WKN / ISIN for multi currency instruments as `<ISIN.CUR>` The context menu offers the following columns of information: Instrument short name, WKN, ISIN, CURR and Instrument long name. The entry field allows the entry of any one of these items, as long as the selected value refers to exactly one single instrument, e.g. for multi currency instruments the ISIN is only unique with the currency
Settlementdate	Settlement date (optional)
TES Type	Type of the TES Trade - OTC or LIS
Susp	Checkbox to mark or unmark a TES trade as suspended
Prc	The price of the TES trade, only multiples of the tick size of the product are allowed

CommTime	*Time of commencement*. The day and time an Off-Book trade has been prearranged outside the T7 System Needs to be entered in central European (summer) time (CET/CEST)
Description	The Description field allows the Initiator to pass some background information about the TES trade to the counterparties
EntryTime	The TES Trade entry time
TimeLeft	Countdown timer for the remaining duration that starts with the TES Trade entry. Display of time interval may vary depending on the specific product
ExecTime	The TES Trade execution time
Initiator	The person entering the TES trade
TESTrdID	Trade ID of an executed TES trade
Approver	The approver (owner) of the trade
B/S	Buy or sell code of the counterparty
Qty	Quantity of the counterparty
Act	Position account
Text1, Text2	These fields are mandatory or optional according to the settings in the *Preferences* and can be filled with an up to 12 characters user defined text
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*

ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.

3.3.7 OTC Trade Upload Service – Bilateral and Broker Mode

This view that is only visible to entitled users supports the handling of pre-approved OTC Trade Uploads in the context of cross exchange OTC trading of German Stock Exchanges within the trading venue Deutsche Börse Frankfurt. The OTC trades will remain bilateral, but the counterparties may belong to the same or different markets (the latter referred to as “PUEV trades”) within the same OTC trade.
A pre-approved bilateral OTC Uploaded Trade will be visible in *TES View* and *Trade* view. Please note that is possible to upload pre-approved OTC Trades also in the TES state `END`.

If needed, a pre-approved bilateral OTC Uploaded Trade can be reversed. A click on the button `Request TES Reversal` reverses a pre-approved bilateral OTC Uploaded Trade.

The *OTC Trade Upload* view is split into two sections, the upper denoting the kind of tradeable, individual trade details and supportive information and the lower section describing the involved counterparties of the trade - either in *Simple* or *Broker* format.

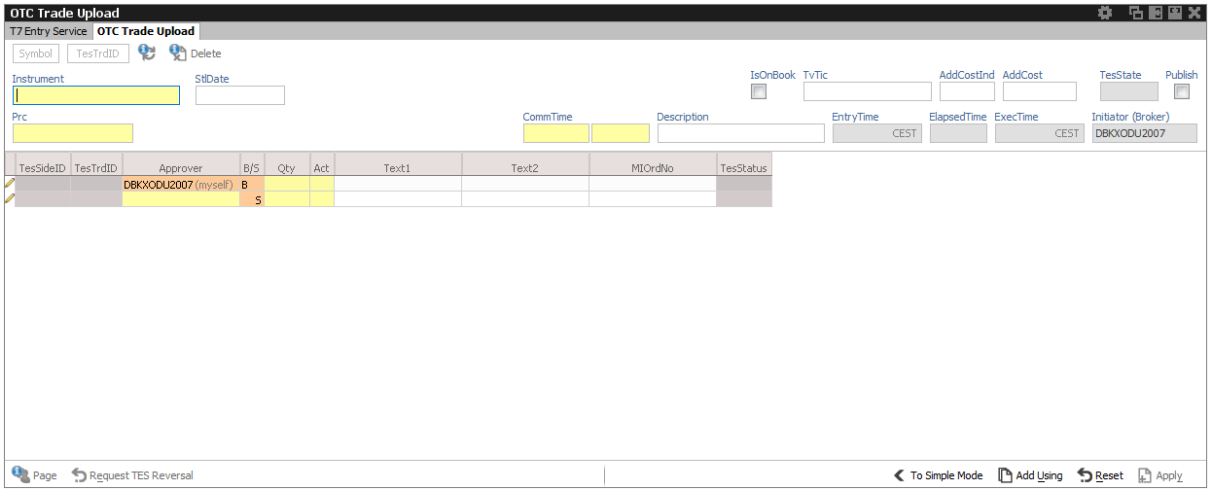


Fig. 71: Screenshot of the *OTC Trade Upload* view in *Broker mode*

Available actions, specific to the *OTC Trade Upload* view:

Field	Description
Page	Opens the page broker (message tool) in a separate window
Request TES Rerversal	Start the reversal process of an executed, pre-approved bilateral OTC Uploaded Trade

Description of the available fields on the *OTC Trade Upload* view:

Field	Description
Symbol TESTrdID	The *Symbol* in combination with the TESTrdID is used to identify a TES trade. The TESTrdID is assigned by the system after the trade has been entered. After the TES Trade has been entered, the trade can be retrieved using these fields
Instrument	*Instrument short name* (symbol), or WKN / ISIN for multi currency instruments as `<ISIN.CUR>` The context menu offers the following columns of information: Instrument short name, WKN, ISIN, CURR and Instrument long name. The entry field allows the entry of any one of these items, as long as the selected value refers to exactly one single instrument, e.g. for multi currency instruments the ISIN is only unique with the currency
StlDate	Settlement date (optional)
IsOnBook	Marks an OTC trade as on-exchange trade
TvTic	Trading Venue Transaction Code
AddCostInd	Indicates the type of additional cost. Valid Values (right-click): • BLANK - No additional cost • FC - Franco Courtage • FR - Franco Rechnung • AC - Abweichendes Cortage • SP - Spesen • PR - Provision
AddCost	Denotes the additional cost for OTC upload trades
Publish	*TES TradePublishIndicator*. If ticked, executed TES trade will be published
Prc	The price of the TES trade. Only multiples of the tick size of the product are allowed

TESState	The TES activity state: • On Enable all TES activities (TES trading, TES deal cancellation) • Halted Disable TES trading activities (TES entry and side approval). TES deal cancellation is still possible. This state will be used in exceptional situations. It is used to indicate that the TES trading is stopped temporarily. • Ended Disable TES trading activities (TES entry and side approval). TES deal cancellation is still possible. This state will be used at the end of the day. It is used to indicate the end of the current trading day. • Off Disable all TES activities (TES trading, TES deal cancellation).
CommTime	*Time of commencement*. The day and time an Off-Book trade has been prearranged outside the T7 System
Description	Share additional information about the TES trade to the counterparties
EntryTime	The TES Trade entry time
ElapsedTime	The elapsed time since the entry of the TES trade
ExecTime	The TES Trade execution time
Initiator	The person entering the TES trade

3.3.8 Xetra EnLight the selective RFQ Service

Xetra EnLight is the *Selective Request for Quote* service to negotiate on-exchange off-book transactions electronically in the T7 trading system. After a negotiation with one counterparty or several ones, a resulting deal is directly sent to the clearing and settlement systems without any further interaction from the participants, providing straight-through-processing for the participants.

The Cash Trader GUI implementation of Xetra EnLight is the reference implementation of this Request for Quote service. It comprises a set of use-case tailored GUI views that interact with each other.

Cash Trader GUI supports entering Xetra EnLight RfQ below the Large-in-Scale (LIS) value, down to an instrument-specific, exchange-defined threshold. This threshold is denoted as *RfQMinValue* in Xetra EnLight views. Accordingly, the respondent's quotes may be below LIS but not below the *RfQMinValue*. Xetra EnLight quotes below LIS will be published to ensure pre-trade transparency in accordance with the MiFID II regulation.

For the general Xetra EnLight RfQ handling the starting point differs, depending on the perspective of the user:

The *Xetra EnLight Requester* will start from the *Xetra EnLight Requester view* to create a new Xetra EnLight Request add one or more respondents.

The *Xetra EnLight Respondent* on the other hand would start with the *Xetra EnLight Responder view* to check for any currently running or newly incoming Xetra EnLight requests. For users to take part in Xetra EnLight as a respondent, a registration at the exchange is required on an individual ISIN basis.

As it is expected to have more respondents than requester, the Xetra EnLight Responder is considered the main view of the whole Xetra EnLight service in the GUI, and for that reason we will start with that view.

Definitions and Abbreviations

Term	Description
Xetra EnLight Request	Xetra EnLight Request for Quote (RfQ) is sent by the requester to get quotes from respondents.
Xetra EnLight Negotiation Event	This is the name of the lifecycle of an Xetra EnLight Request.
Xetra EnLight Requester	The user who starts the Negotiation Event and sends an Xetra EnLight is the requester.
Xetra EnLight Respondent	The user(s) to whom the Xetra EnLight Request is targeted to by the requester.
Xetra EnLight Quote	A quote sent by the respondents in response of the Xetra EnLight Request.
Xetra EnLight Deal	The Xetra EnLight requester may target a specific Xetra EnLight Quote using an Xetra EnLight Deal.

Ownership

The T7 user level group concept of User, Head Trader and Supervisor user also applies to Xetra EnLight. This means that a Head Trader of the same user group or a Supervisor user of the owning user's business unit is allowed to view or perform actions on an Xetra EnLight Request, which is currently owned by different trader within that user group or business unit, granted that such user has the correct entitlement.

The ownership however does not change.

Visibility

A Head Trader of the same user group or a Supervisor user of the owning user's business unit is allowed to view or perform actions on an Xetra EnLight Request, which is currently owned by different trader within that user group or business unit, granted that such user has the correct entitlement.

3.3.9 Xetra EnLight Responder

The *Xetra EnLight Responder* view is the core component and the starting point of the Xetra EnLight functionality from the viewpoint of respondents. Respondents can see all currently active Xetra EnLight requests targeted at the logged in user.

The respondent can check the status and details of any already sent quote.

This view is dynamically updated. The following screenshot illustrates the Xetra EnLight Responder type of GUI view:

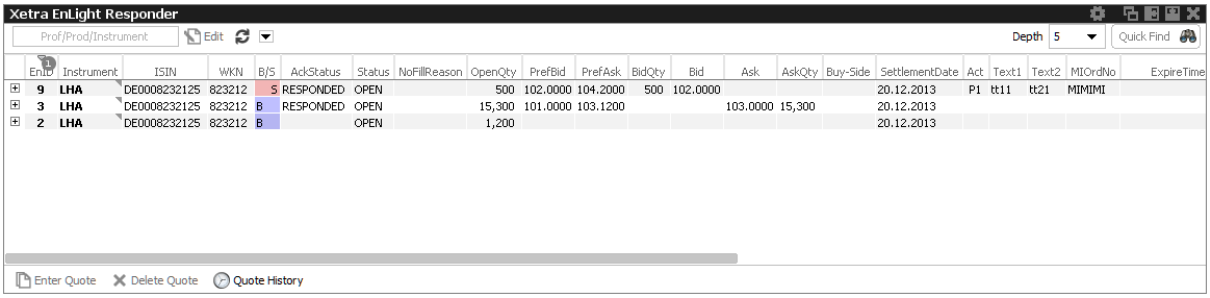


Fig. 72: Screenshot of the Xetra EnLight Responder

The view displays data in two levels of depth:

- Level 1: The list of all currently running Xetra EnLight requests for which the logged in user is chosen as a respondent, together with any potential quote that might be submitted by that respondent.
- Level 2: The quote history for the selected Xetra EnLight request, the most recent quote is shown at the top of the list.

The maximum depth in display of level 2 can be directly controlled in the view via the Depth control. Incoming Xetra EnLight requests are displayed automatically. Please check also the section about Xetra EnLight alerts (→ 3.3.17 Xetra EnLight Alerts), since a default Xetra EnLight alert is already set up by default as a convenience for the user. This Xetra EnLight alert notifies the Xetra EnLight respondent about any incoming Xetra EnLight request.

Xetra EnLight requests are displayed as long as they are active. Once the Xetra EnLight quote has been matched, its Status changes. Xetra EnLight deals as a result of matched Xetra EnLight Quote are displayed in the Xetra EnLight deals view. This is also the case for pending Xetra EnLight deals which require to be confirmed by the Xetra EnLight respondent in order to become final.

Xetra EnLight requests which are set to Closed or are expired are removed from this view.

Functions provided on the Xetra EnLight Responder:

- The Xetra EnLight request from the perspective of the respondent features a timestamp. This timestamp is used to highlight requests that are '*hot*'. An already existing Xetra EnLight request that becomes *hot* again indicates, that the requester has changed parameters of the request, or wants to a see an updated quote from the respondent (or both). It is also possible to pick the Time column as a sort criteria in the table.

Available actions of the Xetra EnLight Responder:

Action	Description
Enter Quote (Double Click)	Opens the Xetra EnLight Quote Entry for the selected Xetra EnLight RfQ.
Delete Quote	Deletes the Xetra EnLight quote. The respondent can delete the own quote as long as it is active i.e. not deleted by Xetra EnLight. Both quote sides as part of the Xetra EnLight Quote are deleted at once. When quote is deleted and the Xetra EnLight Negotiation Event is still 'Open', the respondent can enter a new quote again.
History	Opens the Xetra EnLight Response History view

Available filter fields on the Xetra EnLight Responder:

Field	Description
Profile/Product/Instrument	The profile, product or instrument filter.
Depth	Controls the number of level 2 rows in the table

Available fields of the Xetra EnLight Responder table level 1:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	Instrument mnemonic
WKN	WKN of the instrument
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
QuoteID	ID of the Xetra EnLight Quote
B/S	Buy or Sell side of the Xetra EnLight Request as entered by the requester

NegStatus	*Display only* • Open: The initial status of a Xetra EnLight request is Open and implies that it is possible to place quotes and deals • Expired: Expiry duration (product specific or defined by requester) has been exceeded • Closed: The Xetra EnLight Request status is changed to Closed in following scenarios: The requester closes the Xetra EnLight Request manually or any pending Xetra EnLight deals have been confirmed • Suspended: Staged negotiation which is not yet active
AckStatus	*Acknowledgment status* of the respondent. e.g. RESPONDED, DECLINED.
Firm/Indic	*Negotiationtype.* *Firm:* no deal approval required *Indicative:* deal approval required
MySellLimit	Requesters sell limit
MyBuyLimit	The preferred price of the Xetra EnLight Request. Half ticks are supported Requesters buy limit
BidQty	Quote Bid Quantity
Bid	The Quote Bid Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
Ask	The Quote Ask Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
AskQty	Quote Ask Quantity
Buy-Side	A free text message which can be used by the requester to provide additional information to the respondent
SettlementDate	Settlement date of instrument.
Act	Position Account
Text1	Free format text field 1
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
ExpireTime	Expiry duration of negotiation event

ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
Requester	The user name of the requester *Display only*
EnteringRequester	The user that entered the respective Xetra EnLight request, not the user owning that request. In the context of Xetra EnLight there is no takeover of ownership
Respondent	The Xetra EnLight request can be targeted to numerous users. The same user cannot be targeted more than once for the same Xetra EnLight request. For each selected respondent the login name including the Business unit name and the user name i.e. 'ABCFRTRD001' will be provided. When *SmartRfQ* is active, the request is sent additionally to respondents not known to the requester. During the lifetime of the Xetra EnLight Request additional respondents can be added but existing respondents cannot be removed by the requester.
EnteringRespondent	The user that entered the respective Xetra EnLight quote, not the user owning that quote. In the context of Xetra EnLight there is no takeover of ownership
LstUpdTime	Timestamp of the last change by the responder.
Pull-InTime	*Quote Expiry time*. Displays the time(stamp) when quote did expire or was hit.
Pull-InCntDown	*Quote Expiry countdown*. *display only*

Buy-Side	A free text message which can be used by the requester to provide additional information to the respondent

Available fields of the Xetra EnLight Responder table level 2:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	Instrument mnemonic.
WKN	WKN of the instrument
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
QuoteID	ID of the Xetra EnLight Quote
B/S	The side of the Xetra EnLight request as specified by the requester
NoFillReason	Reason why quote was not chosen
Qty	Quantity of quote
MySellLimit	Requesters sell limit
MyBuyLimit	Requesters buy limit
BidQty	Quote Bid Quantity
Bid	The Quote Bid Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
Ask	The Quote Ask Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
AskQty	Quote Ask Quantity
Text	A free text message which can be used by the requester to provide additional information to the respondent
SettlementDate	Settlement date of instrument.
Act	Position Account
Requester	The user name of the requester *Display only*
EnteringRequester	The user that entered the respective Xetra EnLight request, not the user owning that request. In the context of Xetra EnLight there is no takeover of ownership

Respondent	The Xetra EnLight request can be targeted to numerous users. The same user cannot be targeted more than once for the same Xetra EnLight request. For each selected respondent the login name including the Business unit name and the user name i.e. 'ABCFRTRD001' will be provided. When *SmartRfQ* is active, the request is sent additionally to respondents not known to the requester. During the lifetime of the Xetra EnLight Request additional respondents can be added but existing respondents cannot be removed by the requester.
EnteringRespondent	The user that entered the respective Xetra EnLight quote, not the user owning that quote. In the context of Xetra EnLight there is no takeover of ownership
LstUpdTime	Timestamp of the last change by the responder.

3.3.10 Xetra EnLight Requester

The *Xetra EnLight Requester* view is the starting point for the Xetra EnLight functionality from the viewpoint of an Xetra EnLight requester. The view displays all currently existing Xetra EnLight requests that have been submitted by that broker, or that are visible to that broker. It serves as a quick overview of all currently running Xetra EnLight requests.

From here, the most interesting functions are the *Add Xetra EnLight* and view *Details* actions, which lead to the Requester (Broker) Details view, which is the core Xetra EnLight functionality used by Xetra EnLight requesters. A new Xetra EnLight Request can be started or the progress of existing one can be tracked or maintained from here.

The Xetra EnLight Requester view has also a link to the Xetra EnLight Request *History*, which has the history of all past Xetra EnLight requests of the current business day. Apart from audit purposes, the history can be used to start a new Xetra EnLight Request on the basis of a historic one, which is then used as template. To inquire older historic data (up to two years) Please use the *Xetra EnLight Historic Data* view, chapter 3.3.16.

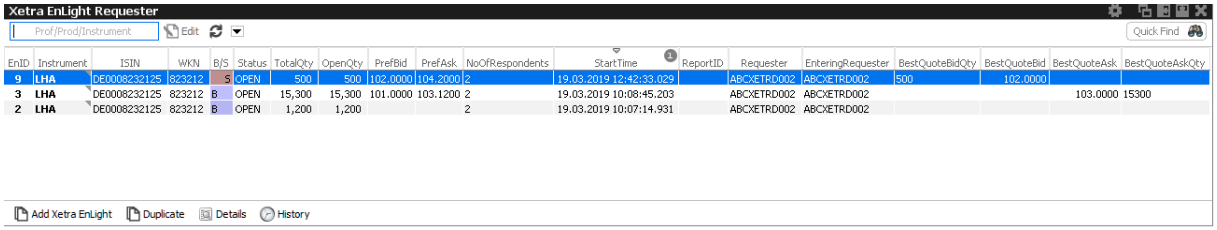


Fig. 73: Screenshot of the Xetra EnLight Requester view

Available actions on the Xetra EnLight Requester view:

Action	Description
Add Xetra EnLight	Opens the Xetra EnLight Request Details view.

Duplicate	Opens the Xetra EnLight Request Details view, the selected request will be used as template for the creation of a new Xetra EnLight request.
Details (Double click)	Opens the Xetra EnLight Request Details prefilled, allows to make modifications to the Xetra EnLight Request.
History	Opens the Xetra EnLight Request History to show a history log of all past Xetra EnLight requests that are not currently active.

Available filter fields on the Xetra EnLight Requester view:

Field	Description
Product/Instrument/Profile	The profile, product or instrument filter.

Available fields of the Xetra EnLight Requester table:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	Instrument mnemonic.
WKN	WKN of the instrument
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
SmartRfQ	*Anonymous negotiation request*. Apart from manually selected respondents, request is sent anonymously to respondents unknown to the requester. Respondents quoting is done anonymously as well
B/S	Buy or Sell side of the Xetra EnLight Request as entered by the requester
NegStatus	*Display only* • Open: The initial status of a Xetra EnLight request is Open and implies that it is possible to place quotes and deals • Expired: Expiry duration (product specific or defined by requester) has been exceeded • Closed: The Xetra EnLight Request status is changed to Closed in following scenarios: The requester closes the Xetra EnLight Request manually or any pending Xetra EnLight deals have been confirmed • Suspended: Staged negotiation which is not yet active

Firm/Indic	*Negotiationtype.* *Firm:* no deal approval required *Indicative:* deal approval required
Qty	Total quantity of Xetra EnLight negotiation
MySellLimit	Requesters sell limit
MyBuyLimit	Requesters buy limit
NegExpIn	Remaining time until expiry of Negotiation
ExpireTime	Timestamp of expiration
NoOfRespondents	Number of respondents in this Xetra EnLight negotiation
StartTime	Start time of the Xetra EnLight Request
ReportID	A report ID which can be used for in-house purposes
LstUpdTime	Timestamp of the last change
Requester	The user name of the requester *Display only*
RequesterBU	Name of Business Unit the requester belongs to *Display only*
RequesterBUID	Numeric ID of the BU the requester belongs to *Display only*
EnteringRequester	The user that entered the respective Xetra EnLight request, not the user owning that request. In the context of Xetra EnLight there is no takeover of ownership
BestQuoteBidQty	Quantity of best bid Quote
BestQuoteBid	Best bid Quote
BestQuoteAsk	Best ask Quote
BestQuoteAskQty	Quantity of best ask Quote

AutoExType	Price criterion of AutoExecution, consisting of the reference price and an offset on it. The reference price can be as follows: • *MidPointBBO*: the midpoint of the published order book of the corresponding market • *BestBid*: BestBid of the published order book of the corresponding market • *BestAsk*: BestAsk of the published order book of the corresponding market • *LimitPrice*: Requester defined limit price • *None*: AutoExecution disabled
ShowSide	Reveal side to responders if ticked. Valid for *Auto Execution* only
AutoExExp	Time when AutoExecution period expires. Entered in mm:ss time format. When submitted displays absolute time(stamp). Must be entered by requester, can be saved in properties. *Please also note the tooltip of the entry field*
AutoExIn	Remaining time (mm:ss) until AutoExecution expires
AutoExLimit	Limitprice value for AutoExecution
MinNoOfQuotes	Minium number of quotes for AutoExectution
AutoExPrcOffset	Price offset for AutoExecution in product specific ticks (negative value allowed)
Act	Position Account
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
Text1	Free format text field 1
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
Buy-Side	A free text message which can be used by the requester to provide additional information to the respondent
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy

InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
DEA	*Direct Electronic Access*: specifies the type of electronic access, e.g `Direct Market Access` or `Sponsored Access`

3.3.11 Xetra EnLight Request Details

The *Xetra EnLight Request Details* view serves as basis to start an Xetra EnLight Negotiation Event workflow.

Cash GUI supports entering Xetra EnLight RfQ below the Large-in-Scale (LIS) value, down to an instrument-specific, exchange-defined threshold. This threshold is denoted as *RfQMinValue* in Xetra EnLight views.

To successfully submit an Xetra EnLight negotiation, a "MaxValueCheck" must be successful. It checks that the requested size of the RfQ must not be lower than the *RfQMinValue*. The requested size is calculated as *"quantity times reference price"* for unit quoted instruments (e.g. equities) and quantity alone for percentage quoted instruments (Bonds).

AutoEx Midpoint BBO

Using one of the *AutoExType* parameter, the requester can define a price criterion for the quotes, which if fulfilled leads to automatic execution with the corresponding quotes by the system. For details Please refer to the AutoEx Midpoint feature further below.

Staging of RfQ

A requester may enter an Xetra EnLight negotiation using an external interface, specifying only few basic data of the RfQ. Such a negotiation is marked by an ticked checkbox *SUSP* and *NegStatus SUSPENDED* in this view. To submit such a negotiation,

- all entered data needs to be validated,
- possibly missing data needs to be added,
- the *SUSP* checkbox must not be ticked.

The *Xetra EnLight Request Details* can be split into two sections. The upper area is dealing with instrument related information and actions while the lower area is focusing on responded related information and interaction.

In the upper area the instrument can be specified and the *Smart RfQ* mode can be activated (cf. *Smart RfQ Mode-anonymous mode* further below). To the upper right additional supportive information is displayed. Examples are the ***Neg**otiation **Stat**us*, the current TES state of the specified instrument and the ***RFQ Min**imum **Val**ue* threshold for negotiations below the LIS value.

This area also features an top-of-book view (CLOB - *C*entral *L*imit *O*rder *B*ook) which gets filled as soon as an instrument has been specified. Furthermore the Buy or Sell side can be selected and the quantity can be specified. For any Xetra EnLight negotiation request an expiry duration time may be set. If it is not provided the product specific maximum duration is used which is defined by the exchange.

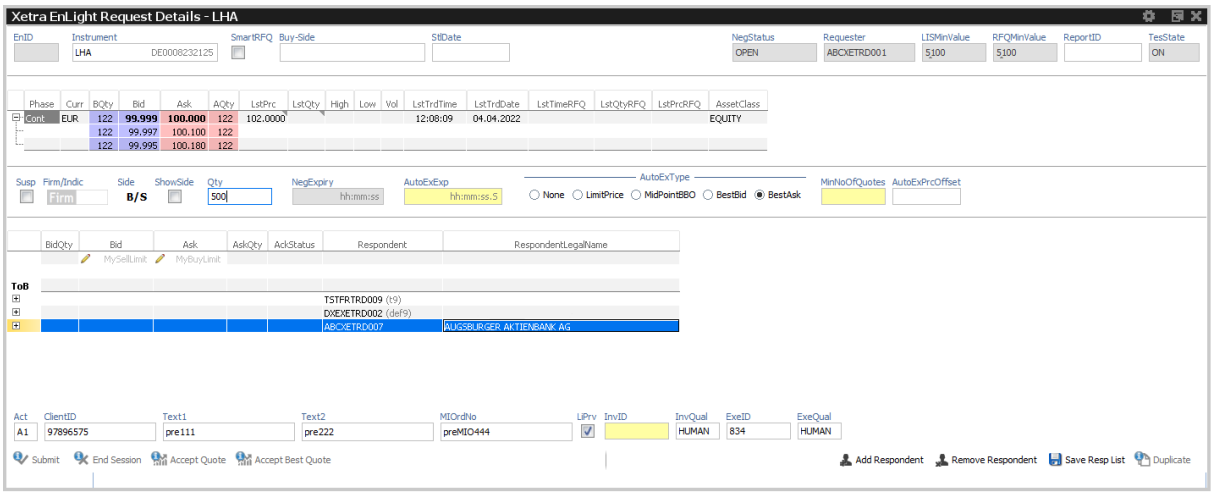


Fig. 74: Screenshot of the Xetra EnLight Request Details view depicting enabled AutoExType

The lower area of the *Xetra EnLight Request Details* features the respondent table, favorites row and the Requester's clearing fields. In the respondent table, current (and historic) quotes ot the participating respondents are displayed. The requester may specify preferred values for bid and ask (clicks on CLOB prices get copied in). To allow for a compact display, initially some fields of the respondents table are hidden, e.g. *RespondentsCount, QuoteID*. These can be displayed by right-clicking on any column header of the table clicking Show/Hide and the desired column name. Respondents can be saved in a favorite list for quick retrieving for upcoming negotiations. The favorites row below the respondent table can hold up to five entries. Start and stop editing this list is done by clicking on the pencil icon right off this list. Below the favorites, the requester may enter the clearing details which are mandatory for completing a negotiation. Those data can be saved in the respective properties of the view.

Functions provided on the Xetra EnLight Request Details:

- **AutoEX Midpoint:** Support the requester by automatically comparing the available quotes against a specified price criterion. If a quote fulfills the price criterion at the end of the users defined quote collection duration (*AutoExExp* timer) it is matched automatically. If more than one quote would match, one is chosen randomly. For *AutoEX Midpoint* the side must be specified while ticking *ShowSide* (to the respondents) is optional. The requester can specify

following criteria:

  - Minimum number of quotes
  - Price criterion – consisting of the reference price and an offset (in product specific ticks) on it, where the reference price can be
    * MidpointBBO - midpoint of the best bid and best ask of the CLOB (*C*entral *L*imit *O*rder *B*ook) of the corresponding market
    * Best Bid or Best Ask of the CLOB
    * Requester defined limit price

  All *AutoEX Midpoint* parameters may be defined in the respective properties of the view.

- **Smart RfQ Mode - *anonymous mode*:** Send an anonymous Negotiation Request to registered participants. Additionally to manually selected known respondents the request will be sent to those participants who have agreed to be part of Smart RfQ program and selected via a specific exchange algorithm. The requester as well as the respondents will get no private information of the counterparty during the negotiation, i.e. all fields with trader / BU related information of the counterparty will be empty. Whether *Smart RfQ* is available for an instrument is configurable and decided by the Exchange.

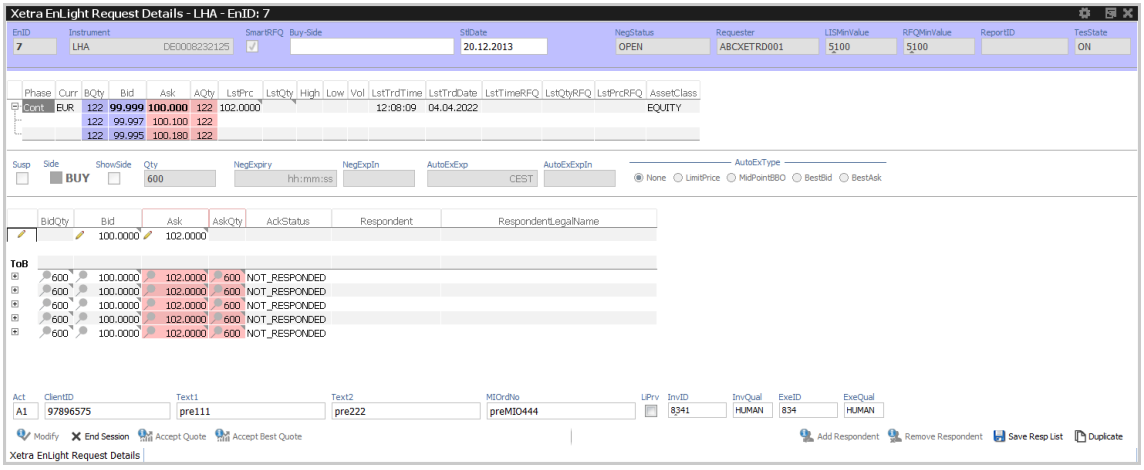


Fig. 75: Screenshot of Xetra EnLight Request Details view of a running negotiation in Smart RfQ (anonymous) mode

- Display and dynamic update of top of book for the chosen instrument.
- Display of buy/sell side to selected respondents. Can be triggered directly from the respondent table via the *Shown Side* command. *Shown Side* can be executed as soon as an Side has been selected and already before the request has been submitted!
- Re-Quote request: Re-quote basically resets the Xetra EnLight Request time from the perspective of a Xetra EnLight respondent, to indicate that the requester wants to receive a new (better) quote from that respondent. Multiple respondents can be selected for this action.
- Pinning: If requester has specified preferred value for Bid or Ask, the *Pinning* feature gets activated. It is a visual help to compare the requester´s preferred values with responder´s quotes. When *Pinning* is active, a pin icon will appear in the respondents rows, next to bid, ask or quantity cells. A grey pin indicates that no response or a response with a price worse than the preferred price has been received. A red pin indicates that a response with a price equal or better than the preferred price has been received.

- Automatic display of Xetra EnLight deals: Once the first deal was submitted by the requester, the Xetra EnLight deals display opens automatically as part of the Xetra EnLight Request Details view, to show all available deals in the context of the current Xetra EnLight request. Please refer to Xetra EnLight deals (→ 3.3.15 Xetra EnLight Deals) for a description of that view.

Available fields of the Xetra EnLight Request Details entry form:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	*Instrument short name* (symbol), or WKN / ISIN for multi currency instruments as `<ISIN.CUR>` The context menu offers the following columns of information: Instrument short name, WKN, ISIN, CURR and Instrument long name. The entry field allows the entry of any one of these items, as long as the selected value refers to exactly one single instrument, e.g. for multi currency instruments the ISIN is only unique with the currency
SmartRfQ	*Anonymous negotiation request*. Apart from manually selected respondents, request is sent anonymously to respondents unknown to the requester. Respondents quoting is done anonymously as well
BuySide	A free text message which can be used by the requester to provide additional information to the respondent
SettlementDate	Settlement date of instrument.
NegStatus	*Display only* • Open: The initial status of a Xetra EnLight request is Open and implies that it is possible to place quotes and deals • Expired: Expiry duration (product specific or defined by requester) has been exceeded • Closed: The Xetra EnLight Request status is changed to Closed in following scenarios: The requester closes the Xetra EnLight Request manually or any pending Xetra EnLight deals have been confirmed • Suspended: Staged negotiation which is not yet active
Requester	The user name of the requester *Display only*
LISMinValue	**L**arge **I**n **S**cale minimum value, usually a result of *price* × *quantity*
RfQMinValue	Exchange defined minimum value of the negotiation
ReportID	Report ID
TESState	TES State of the product

Susp	Negotiation is suspended (staged) and needs yet to be activated.
ShowSide	Reveal side to responders if ticked. Valid for *Auto Execution* only
Side	Buy or Sell Side of Xetra EnLight negotiation request.
NegExpiry	Expiry duration of negotiation event. If not entered by requester a system default is used. Can be saved in properties.
AutoExExp	Time when AutoExecution period expires. Entered in mm:ss time format. When submitted displays absolute time(stamp). Must be entered by requester, can be saved in properties. *Please also note the tooltip of the entry field*
AutoExType	Price criterion of AutoExecution, consisting of the reference price and an offset on it. The reference price can be as follows: • *MidPointBBO*: the midpoint of the published order book of the corresponding market • *BestBid*: BestBid of the published order book of the corresponding market • *BestAsk*: BestAsk of the published order book of the corresponding market • *LimitPrice*: Requester defined limit price • *None*: AutoExecution disabled
MinNoOfQuotes	Minium number of quotes for AutoExectution
AutoExPrcOffset	Price offset for AutoExecution in product specific ticks (negative value allowed)

Available fields of the Xetra EnLight respondents table:

Field	Description
BidQty	Quote Bid Quantity
Bid	The Quote Bid Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote. In first row of respondent table the requester might specify a *preferred* Bid price
Ask	The Quote Ask Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote. In first row of respondent table the requester might specify a a *preferred* Ask price
AskQty	Quote Ask Quantity

AckStatus	*Acknowledgment status* of the respondent. e.g. RESPONDED, DECLINED
Respondent	The Xetra EnLight request can be targeted to numerous users. The same user cannot be targeted more than once for the same Xetra EnLight request. For each selected respondent the login name including the Business unit name and the user name i.e. 'ABCFRTRD001' will be provided. When *SmartRfQ* is active, the request is sent additionally to respondents not known to the requester. During the lifetime of the Xetra EnLight Request additional respondents can be added but existing respondents cannot be removed by the requester.
RespondentLegal Name	Legal name of respondent
QuoteID	ID of the Xetra EnLight Quote This field is hidden by default

Following fields are displayed (filled) after Xetra EnLight request has been submitted:

Field	Description
Act	Position Account
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
Text1	Free format text field 1
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*

ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.

3.3.12 Xetra EnLight Request History

The *Xetra EnLight Request History* view shows a history log of all past Xetra EnLight requests of the current business day that are not currently active.

The view is a table with two levels of depth:

- Level 1: The request summary as formerly shown in the Xetra EnLight Requester view.
- Level 2: The list of respondents for the selected request, including the quote details in the same row. This display is similar to what was formerly shown in the Xetra EnLight Request Details view on level 1. Please note that there is no third level provided here, to show also the quote history.

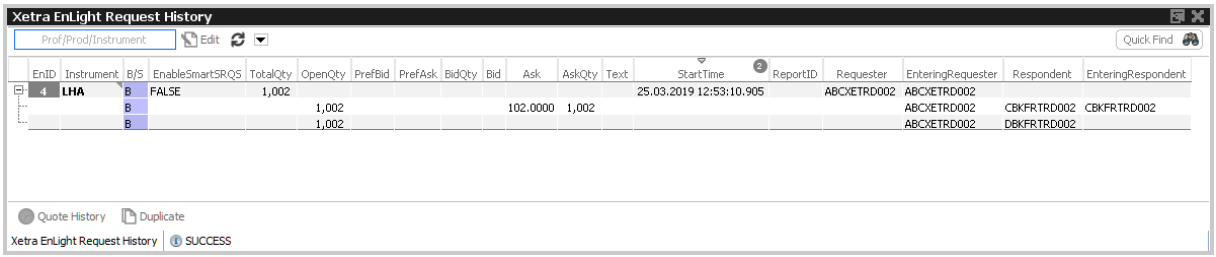


Fig. 76: Screenshot of the Xetra EnLight Request History view

Available actions on the Xetra EnLight Request history view:

Action	Description
History	Opens the Xetra EnLight Response History view to display the quote history for the selected Xetra EnLight request.
Request Details (Double click)	Opens the Xetra EnLight Request Details of selected Xetra EnLight Request.
Duplicate	Selected Xetra EnLight Request will be used as template for the creation of a new Xetra EnLight request.

Available filter fields of the Xetra EnLight Request History view:

Field	Description
Product/Instrument/Profile	The product, instrument or profile filter.

Available fields of the Xetra EnLight Request History table, level 1:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	Instrument which has been chosen by the Xetra EnLight requester.
B/S	Buy or Sell side of the Xetra EnLight Request as entered by the requester
Status	*Display only* • Open: The initial status of a Xetra EnLight request is Open and implies that it is possible to place quotes and deals • Expired: Expiry duration (product specific or defined by requester) has been exceeded • Closed: The Xetra EnLight Request status is changed to Closed in following scenarios: The requester closes the Xetra EnLight Request manually or any pending Xetra EnLight deals have been confirmed • Suspended: Staged negotiation which is not yet active
SmartRfQ	*Anonymous negotiation request*. Apart from manually selected respondents, request is sent anonymously to respondents unknown to the requester. Respondents quoting is done anonymously as well
TotalQty	Total Quantity of the Xetra EnLight request. Can't be changed anymore once the request has been submitted
PrefBid	Bid price of the Xetra EnLight request
PrefAsk	Ask price of the Xetra EnLight request
BidQty	Quote Bid Quantity
Bid	The Quote Bid Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
Ask	The Quote Ask Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
AskQty	Quote Ask Quantity
NoFillReason	Reason why quote was not chosen
Text	A free text message which can be used by the requester to provide additional information to the respondent
StartTime	Start time of the Xetra EnLight Request
QuoteID	Quote ID. This field is hidden by default
ReportID	A report ID which can be used for in-house purposes

LstUpdTime	Timestamp of the last change
Requester	The user name of the requester *Display only*
EnteringRequester	The user that entered the respective Xetra EnLight request, not the user owning that request. In the context of Xetra EnLight there is no takeover of ownership
Respondent	The Xetra EnLight request can be targeted to numerous users. The same user cannot be targeted more than once for the same Xetra EnLight request. For each selected respondent the login name including the Business unit name and the user name i.e. 'ABCFRTRD001' will be provided. When *SmartRfQ* is active, the request is sent additionally to respondents not known to the requester. During the lifetime of the Xetra EnLight Request additional respondents can be added but existing respondents cannot be removed by the requester.
EnteringRespondent	The user that entered the respective Xetra EnLight quote, not the user owning that quote. In the context of Xetra EnLight there is no takeover of ownership
RespondentBU	Name of user group the entering respondent belongs to inside the business unit *Display only*
RequesterBU	Name of Business Unit the requester belongs to *Display only*
ShowSide	Reveal side to responders if ticked. Valid for *Auto Execution* only
AutoExExp	Time when AutoExecution period expires. Entered in mm:ss time format. When submitted displays absolute time(stamp). Must be entered by requester, can be saved in properties. *Please also note the tooltip of the entry field*
AutoExLimit	Limitprice value for AutoExecution
MinNoOfQuotes	Minium number of quotes for AutoExectution
AutoExPrcOffset	Price offset for AutoExecution in product specific ticks (negative value allowed)
ClosureReason	Reason why a negotiation didn't create a deal for AutoExecution scenarios
Text1	Free format text field 1
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
ExpireTime	Expiry duration of negotiation event

ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.

Available fields of the Xetra EnLight Request History table, level 2:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	(not displayed.)
B/S	Buy or Sell side of the Xetra EnLight Request as entered by the requester
EnableSmartSRQs	(not displayed.)
TotalQty	(not displayed.)
PrefBid	Bid price of the Xetra EnLight request
PrefAsk	Ask price of the Xetra EnLight request
BidQty	Quote Bid Quantity
Bid	The Quote Bid Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
Ask	The Quote Ask Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
AskQty	Quote Ask Quantity

NoFillReason	Reason why quote was not chosen
Text	A free text message which can be used by the requester to provide additional information to the respondent
StartTime	(not displayed.)
QuoteID	This field is hidden by default
ReportID	(not displayed.)
LstUpdTime	(not displayed.)
Requester	(not displayed.)
EnteringRequester	The user that entered the respective Xetra EnLight request, not the user owning that request. In the context of Xetra EnLight there is no takeover of ownership
Respondent	The Xetra EnLight request can be targeted to numerous users. The same user cannot be targeted more than once for the same Xetra EnLight request. For each selected respondent the login name including the Business unit name and the user name i.e. 'ABCFRTRD001' will be provided. When *SmartRfQ* is active, the request is sent additionally to respondents not known to the requester. During the lifetime of the Xetra EnLight Request additional respondents can be added but existing respondents cannot be removed by the requester.
EnteringRespondent	The user that entered the respective Xetra EnLight quote, not the user owning that quote. In the context of Xetra EnLight there is no takeover of ownership
RespondentBU	Name of Business Unit the respondent belongs to *Display only*
RequesterBU	Name of Business Unit the requester belongs to *Display only*

3.3.13 Xetra EnLight Quote Entry

The *Xetra EnLight Quote Entry* view allows the Xetra EnLight respondent to send a single or two sided Xetra EnLight quote. At a time, only one Xetra EnLight quote (consisting of single or two quote sides) from a respondent can be present for a particular Xetra EnLight request. Once the requester sends a (matching) Xetra EnLight deal for the Bid or Ask side of the Xetra EnLight Quote, the other side of the quote (if available) still remains. The screen also supports the deletion of the Xetra EnLight quote.

A quote can be sent only for an open Xetra EnLight request by the user who is specified as the respondent in the Xetra EnLight request. The *Xetra EnLight quote* entered by the respondent is only visible to that respondent, and to the requester. An "auto-pulling" of a sent quote, i.e. an time-based quote expiry may be enabled by entering a duration into the *Pull-InTimer* field, whose value must not be smaller than the value of the related property.

Cash GUI supports entering Xetra EnLight RfQ below the Large-in-Scale (LIS) value down to an instrument-specific, exchange-defined threshold. This threshold is denoted as *RfQMinValue* in Xetra EnLight views. Xetra EnLight quotes below LIS value will be published to ensure pre-trade transparency in accordance with the MiFID II regulation. To successfully submit an Xetra EnLight quote in a running negotiation, the size of the quote must not be lower than the *RfQMinValue*. The quote size is calculated as "quantity * quote price" for unit quoted instruments (e.g. equities) and quantity alone for percentage quoted instruments (Bonds).

In addition to the *RfQMinValue* the *Notional* (quantity * reference price) is displayed on the Quote Entry view.

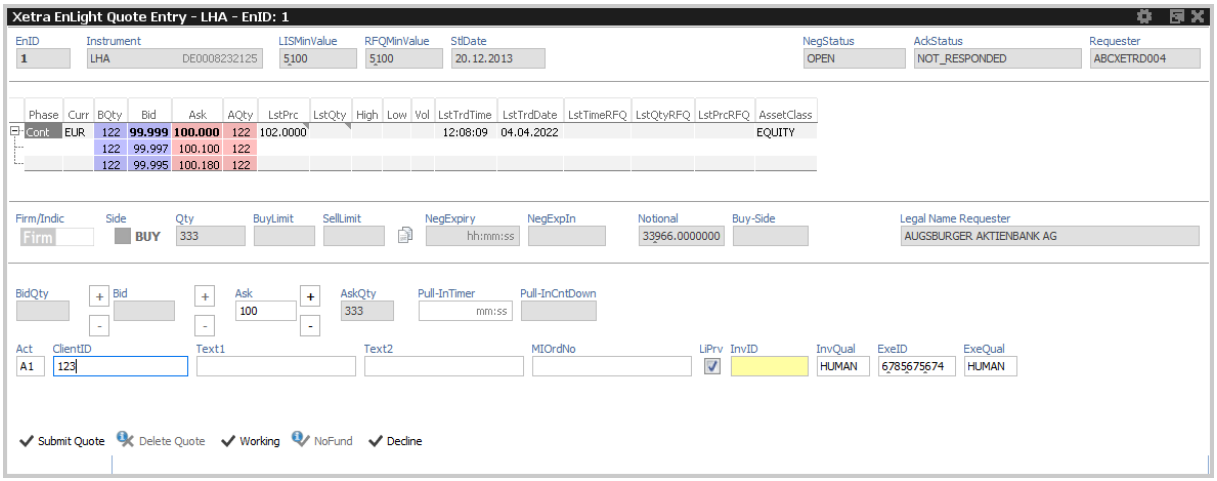


Fig. 77: Screenshot of the Xetra EnLight Quote Entry view

Functions provided on the Xetra EnLight Quote Entry:

- Copy Requester's negotiation data: Clicking copies requested prices and quantities into the respective bid/ask quote fields.
- If one of the given prices does not match the price step table, an information is shown to inform about that fact.
- If one of the given quantities is below the block trade minimum size of the TES profile, an information is shown to inform about that fact.
- Automatic display of Xetra EnLight deals: Once the first deal was submitted by the requester, the Xetra EnLight deals display opens automatically as part of the Xetra EnLight Quote Entry view, to show all available deals in the context of the current Xetra EnLight request. Please refer to Xetra EnLight Deals (→ 3.3.15 Xetra EnLight Deals) for a description of that view.

Following actions are available on *Xetra EnLight Quote Entry* view:

Action	Description
Submit Quote	Apply the new Xetra EnLight Quote, or apply changes to the Xetra EnLight Quote. All the quote sides as part of the Xetra EnLight Quote will be updated together by the respondent. The Xetra EnLight Quote update is in essence a quote deletion and entry of new quote.

Delete Quote	Deletes the Xetra EnLight Quote.
Working	Indicates respondent's general interest in the current negotiation request to the requester.
Decline	Declines any quoting for the current negotiation event.

Available fields of the *Xetra EnLight Quote Entry*:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	Instrument mnemonic and ISIN as specified by the requester. *Display only*
LISMinValue	**L**arge **I**n **S**cale minimum value, usually a result of *price* × *quantity*
RfQMinValue	Exchange defined minimum value of the negotiation
SettlementDate	Settlement date.
NegStatus	*Display only* • Open: The initial status of a Xetra EnLight request is Open and implies that it is possible to place quotes and deals • Expired: Expiry duration (product specific or defined by requester) has been exceeded • Closed: The Xetra EnLight Request status is changed to Closed in following scenarios: The requester closes the Xetra EnLight Request manually or any pending Xetra EnLight deals have been confirmed • Suspended: Staged negotiation which is not yet active
AckStatus	*Acknowledgment status* of the respondent. e.g. RESPONDED, DECLINED.
Requester	The user name of the requester *Display only*
Side	Buy or Sell side of the Xetra EnLight Request as entered by the requester
Qty	(open) Quantity of the negotiation request as specified by requester.
PrefBid	Preferred Bid price as specified by the requester.
PrefAsk	Preferred Ask price as specified by the requester.
NegExpiry	Expiry duration of negotiation event.
NegExpIn	Remaining expiry duration of negotiation event.
Notional	Notional value (quantity * reference price) of the request.

BuySide	A free text message which can be used by the requester to provide additional information to the respondent
Legal Name Requester	Legal name of the requester.
BidQty	Quote Bid Quantity
Bid	The Quote Bid Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
Ask	The Quote Ask Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
AskQty	Quote Ask Quantity
Pull-InTimer	*Quote Expiry timer*. Entered as a duration which must not be smaller than the value of its property. Submitting a new quote restarts the timer.
T Pull-InCntDown	*Quote Expiry countdown*. *display only*
Act	Position Account
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
Text1	Free format text field 1
Text2	Free format text field 2
OrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*

ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.

3.3.14 Xetra EnLight Response History

The *Xetra EnLight Response History* view allows to review all past quotes in the context of a distinct Xetra EnLight requester and respondent. Additionally, negotiation events are displayed for which the Responder did not enter any quote. This allows for a complete overview of the daily RfQs for the Responder. From the viewpoint of an Xetra EnLight respondent the sent quote and quote updates are displayed together with any potential messages, in the correct chronological order.

The view is aggregated by the Enlight ID *EnID*. A click on the plus sign displays all quotes for the expanded negotiation event.

The following Screenshot indicates the Xetra EnLight Response History type of view:

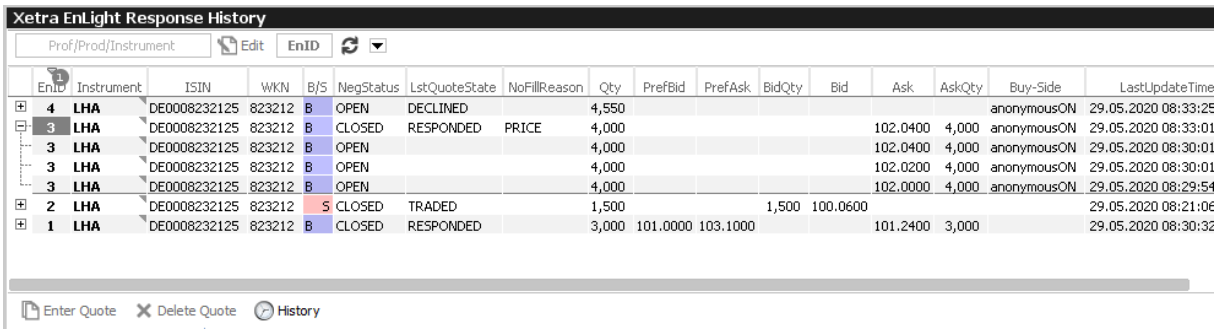


Fig. 78: Screenshot of the *Xetra EnLight Response History* view

Available actions on the Xetra EnLight Response History view:

No actions available - this view is display only.

Available fields of the Xetra EnLight Response History view:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
Instrument	Instrument mnemonic as specified by the requester. *Display only*
B/S	Buy or Sell side of the Xetra EnLight Request as entered by the requester
LstQuoteState	Last state of quote. Valid values: *Responded*: Quote was sent, but not selected *Traded*: Quote was sent and was selected *Declined*: RFQ was declined by responder *Expired*: Responder didn't sent quote in time

NoFillReason	Reason why quote was not chosen
PrefBid	Bid price of the Xetra EnLight request
PrefAsk	Ask price of the Xetra EnLight request
BidQty	Quote Bid Quantity
Bid	The Quote Bid Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
Ask	The Quote Ask Price. The price of the Bid side should be lower than or equal to the Ask side price of the Xetra EnLight Quote
AskQty	Quote Ask Quantity
Buy-Side	A free text message which can be used by the requester to provide additional information to the respondent
QuoteID	ID of the Xetra EnLight Quote. *Display only*
LstUpdTime	Timestamp of the last change of quote.
Requester	The user name of the requester *Display only*
EnteringRequester	The user that entered the respective Xetra EnLight request, not the user owning that request. In the context of Xetra EnLight there is no takeover of ownership
RequesterGrp	Name of user group inside the business unit the requester belongs to *Display only*
Respondent	The Xetra EnLight Respondent.
EnteringRespondent	The user that entered the respective Xetra EnLight quote, not the user owning that quote. In the context of Xetra EnLight there is no takeover of ownership
RespondentGrp	Name of user group inside the business unit the respondent belongs to *Display only*

3.3.15 Xetra EnLight Deals

The *Xetra EnLight Deals* view provides an overview of all deals that the logged-in user takes part in. Xetra EnLight deals are shown to the requester and also to the involved respondent.

This view is updated dynamically.

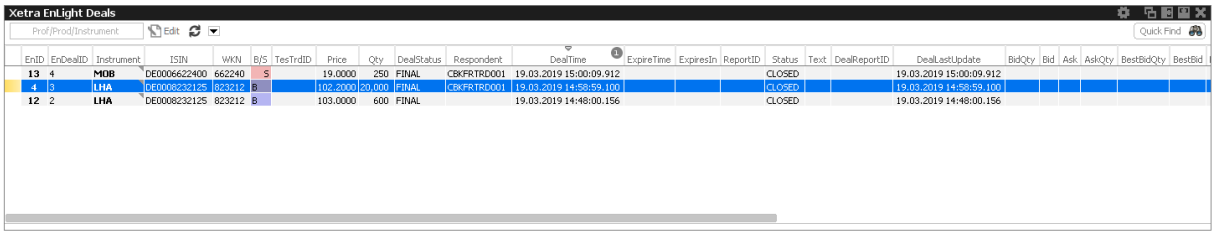


Fig. 79: Screenshot of the Xetra EnLight Deals view

Available fields of the Xetra EnLight Deals view:

Field	Description
EnID	The ID of this Xetra EnLight Request *Display only*
EnDealID	Xetra EnLight deal ID.
Instrument	Instrument mnemonic.
WKN	WKN of the instrument
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
SmartRfQ	*Anonymous negotiation request*. Apart from manually selected respondents, request is sent anonymously to respondents unknown to the requester. Respondents quoting is done anonymously as well
Buy-Side	A free text message which can be used by the requester to provide additional information to the respondent
B/S	Buy or Sell Side of Xetra EnLight negotiation request.
Prc	Price of the Xetra EnLight deal.
Qty	Quantity of the deal.
DealStatus	Status of the Xetra EnLight deal e.g. Pending, Final.

AutoExType	Price criterion of AutoExecution, consisting of the reference price and an offset on it. The reference price can be as follows: • *MidPointBBO*: the midpoint of the published order book of the corresponding market • *BestBid*: BestBid of the published order book of the corresponding market • *BestAsk*: BestAsk of the published order book of the corresponding market • *LimitPrice*: Requester defined limit price • *None*: AutoExecution disabled
Respondent	The Xetra EnLight request can be targeted to numerous users. The same user cannot be targeted more than once for the same Xetra EnLight request. For each selected respondent the login name including the Business unit name and the user name i.e. 'ABCFRTRD001' will be provided. When *SmartRfQ* is active, the request is sent additionally to respondents not known to the requester. During the lifetime of the Xetra EnLight Request additional respondents can be added but existing respondents cannot be removed by the requester.
DealTime	Time when deal was established.
ReportID	A report ID which can be used for in-house purposes
NegStatus	*Display only* • Open: The initial status of a Xetra EnLight request is Open and implies that it is possible to place quotes and deals • Expired: Expiry duration (product specific or defined by requester) has been exceeded • Closed: The Xetra EnLight Request status is changed to Closed in following scenarios: The requester closes the Xetra EnLight Request manually or any pending Xetra EnLight deals have been confirmed • Suspended: Staged negotiation which is not yet active
Firm/Indic	*Negotiationtype.* *Firm:* no deal approval required *Indicative:* deal approval required
BidQty	Quote Bid Quantity

Bid	Bid price of the request.
Ask	Ask price of the request.
AskQty	Quote Ask Quantity
BestBidQty	Quantity of the Best bid of the request.
BestBid	Best bid price of the request.
BestAsk	Best ask price of the request.
BestAskQty	Quantity of the Best ask of the request.
Bid_VWA	*Volume waged average* of all bid prices for this request.
Ask_VWA	*Volume waged average* of all ask prices for this request.
OwningGroup	BU Group Name of user who owns the Deal.
Requester	The user name of the requester *Display only*
RequesterLegal Name	Legal name of requester.
RespondentLegal Name	Legal name of respondent.
RequesterGrp	Name of user group inside the business unit the requester belongs to *Display only*
RespondentGrp	Name of user group inside the business unit the respondent belongs to *Display only*
StlDate	Settlement date of instrument.
Act	Account
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
Text1	Free format text field 1
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy

InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.

3.3.16 Xetra EnLight Historic Data

The *Xetra EnLight Historic Data* view allows a requester to inquire historic Xetra EnLight negotiations for up to two years. To display data for the current business day Please use the *Xetra EnLight Request History* view, chapter 3.3.12.

A requester has to provide at least a date before any information is shown, but may also filter for deal status and respondent name. Only fully completed transactions, e.g. that have reached the status FINAL are displayed. From the negotiation event only the final record is shown, i.e. only the last quote of each respondent available at the end of the negotiation event. The *Xetra EnLight Historic Data* view lists the hierarchy of requests as root (level1). Expanding the root will bring the participating respondent(s) and deal (of the last quote) of the selected request to display. The displayed data items comprise data from the views Xetra EnLight Request (History), Xetra EnLight Responder and Xetra EnLight Deals.

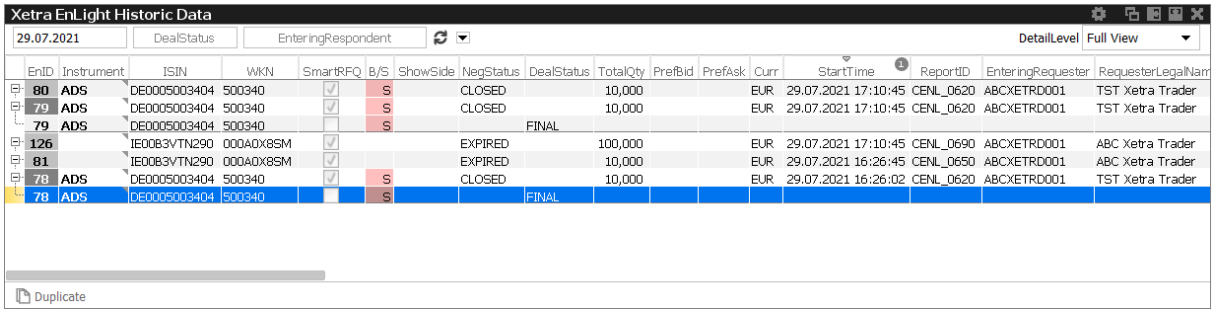


Fig. 80: Illustrative screenshot of *Xetra EnLight Historic Data* view

The *Xetra EnLight Historic Data* view lists the hierarchy of requests as root (level1). Expanding the root will bring the respondent and deal (of the last quote) of the selected request to display.

- Level 1: Historic negotiation request from the requester entry

- Level 2: The list of respondents for the selected request, including the quote details in the same row.

When clicking a requester row twice (or use *Duplicate*), a *Xetra EnLight Request Details* view opens pre-filled with the associated deals display. Please note that this functionality is limited as e.g. instruments and users might not exist anymore, leading to missing fields in the new request.

Available filter fields of the Xetra EnLight Historic data view:

Field	Description
RptDate	Mandatory filter for the creation date of the historic negotiation, at maximum 2 years back in time.
DealStatus	Filter according to the status of the deal, e.g. only select fully completed transactions (e.g. FINAL).
EnteringRespondent	Allows to filter for negotiations with a specific responder.

Available actions on the Xetra EnLight Request history view:

Action	Description
Duplicate	Selected Xetra EnLight Request will be used as template for a new Xetra EnLight negotiation. May function limited only as instruments or respondents may not exist anymore.

For a description of fields of this view Please refer to the aforementioned views Xetra EnLight Requester, Xetra EnLight Responder, Xetra EnLight Deals.

3.3.17 Xetra EnLight Alerts

The *Alert Configuration* is extended by a new pre-configured *Xetra EnLight Alert* configuration entry to inform both the Xetra EnLight requester about incoming Xetra EnLight quotes and Xetra EnLight respondents about new Xetra EnLight requests via a pop-up. Please note that this alert cannot be deleted but deactivated or modified if required.

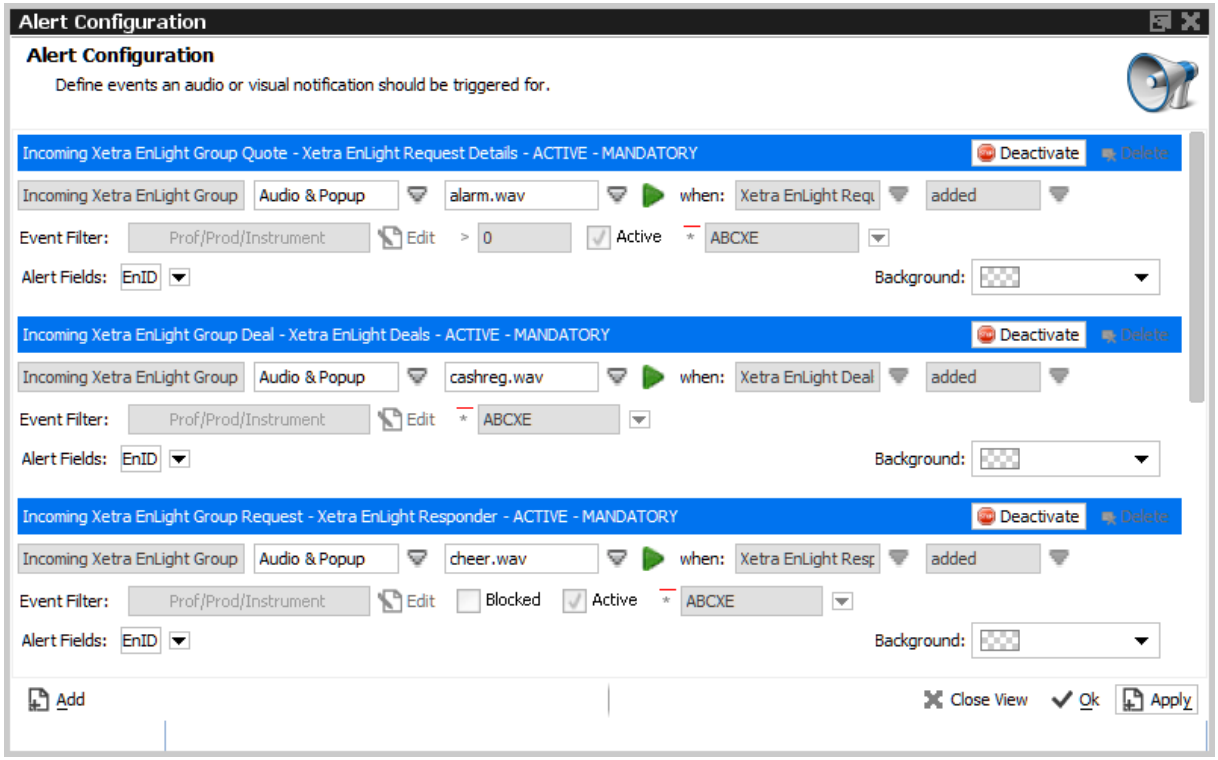


Fig. 81: Screenshot of the Xetra EnLight Alerts view showing pre-configured Xetra EnLight Alerts

If one of these alerts is triggered, a pop-up opens:

A single click into the pop-up headline opens the *Xetra EnLight Responder* filtered to the specific event ID.

3.4 View Descriptions: Own (Orders and Trades)

The Own area provides an overview on own orders and trades.

3.4.1 Orders

The *Orders* view shows an overview of all own standard orders of the logged in user (or user group / business unit, depending on the user level and filter). It is possible to open an *Order Maintenance* view for a selected order, delete selected orders, open the *Related Trades* view or the *Order History* view for the selected order.

Display Name	Description

ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
WKN	WKN of the instrument (if available)
Instrument	Instrument short name
InstrumentID	Numeric ID of the instrument
B/S	Buy or Sell code
Limit, Curr	Limit and Currency of the Order
TotQty	Total order quantity
TotExeQty	Total executed order quantity
RemQty	Remaining unmatched qty
OrdTyp	Order type - valid values include: • ICE - Iceberg Order • MIDP - Midpoint Order • MIDPS - Midpoint Sweep Order • OCO - One Cancels the Other Order • STP - Stop Order
MIDPTyp	Type of the Midpoint order: • MIDP - Midpoint • MIDPS - Midpoint Sweep • <blank> - no Midpoint
DispQty	Displayed order quantity

Res	Order restriction - valid values include: • AOO - Auction only • AVD_CAO - AVD Closing Auction • AVD_IAO - AVD Intraday Auction • AVD_OAO - AVD Opening Auction • BOC - Book or Cancel • CAO - Closing Auction • CRT - Counter Party Resting Time • CRT_MBO - Counter Party Resting Time & Midpoint Book only • IAO - Intraday Auction • MBO - Midpoint Book only • MTH - Main Trading Hours only • OAO - Opening Auction • SAO - Special Auction
StopPrc	Stop price of a stop limit order
Triggered	Indicates whether the current order originates from a triggered OCO or stop order
Act	Account
PInd	Persistency indicator. Orders entered by *Cash Trader* will always be entered as persistent orders. However, orders that have been entered using a third party application will retain their persistency state, when modified by *Cash Trader.*
Validity	The validity of the order: FOK - Fill Or Kill GFD - Good For Day GTC - Good Till canceled GTD - Good Till Date IOC - Immediate Or Cancel
Inactive	This indicator is set for a Closing Auction only orders, Opening auction only orders and Auction only orders, if the current instrument phase does not match the trading phase for which the order was intended
Text1	Free format text field 1

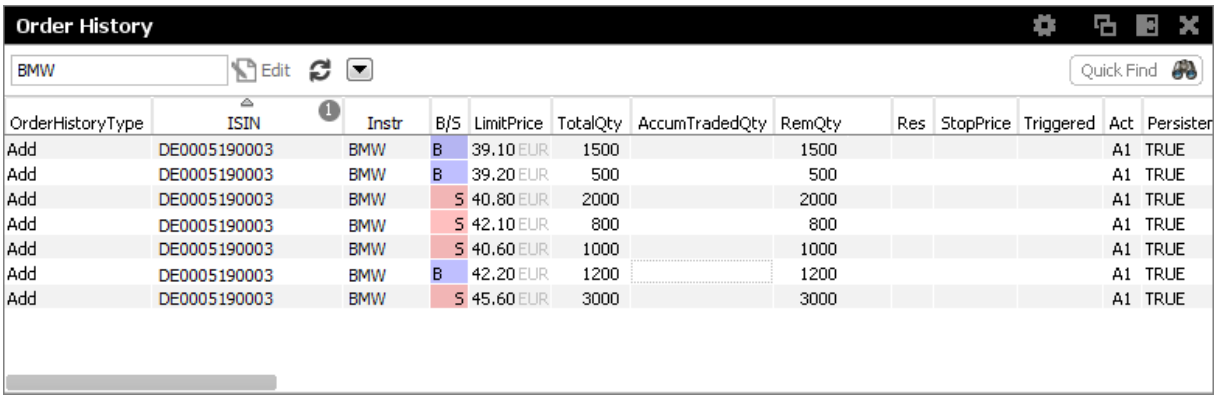
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
ClientOrdID	Client order number
OrdNo	Order number generated by Cash Markets application
OrdVer	Order version number
BU	Owning business unit
BUID	Numerical ID of Owning business unit
Grp	User group of the owning user
Session	Owning SessionID
Trader	Owner of the order (refers to the user name of the exchange account of the respective trading system)
EnteringBU	Entering business unit
EnteringUser	Entering user ID
ExecutingUser	EName of the *executing Uuser ID*
OrdEntryTime	Time of the entry of the order
OrdPrioTime	Order matching priority time
OrdStatus	Status of the order: new, partial filled or suspended
Date	Date of the entry of the order
Exch	Exchange Identifier
CrossID	The CrossID used for both Self-Match Prevention (SMP) and Self-Cross Prevention (SCP)
SmpInst	*SMP Instruction* - determines the deletion action in case of an SMP event: • Cancel aggressive - cancel of the incoming order/quote • Cancel passive - cancel the entire book order(s)/quote(s) with the same SMP ID • Cancel aggressive and passive - reduce the quantity of both incoming and book orders/quotes until at least one is completely canceled
CapacityGroup	Capacity group
ESMA	European Securities and Markets Authority Action Code

LiPrv	Flag to indicate whether an order is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
TaC	Optional order attribute for *Trade At Close*. It depicts following settings: • ☑ : Order does participate in Trade-At-Close phase • ☐ : Order does not participate in Trade-At-Close phase • ■ : user specific default value as defined in *User Maintenance* will be used.
BBO	*Best Bid or Offer Price* flag. TRUE, if an order or quote sets a strictly best bid / best ask price in the orderbook
AVDBrokerIntID	*AVD Broker Internalization ID* - if set and identical, this ID allows broker of the same BU to match their own buy / sell AVD orders with priority

3.4.2 Order History

The *Order History* view shows an overview of all order changes of own standard orders of the logged in user for the current business day.

Lean orders (which cannot be entered via the Cash Trader) are not displayed. For head traders or supervisors, orders of all traders of the own user group or business unit can also be inquired.



OrderHistoryType	ISIN	Instr	B/S	LimitPrice	TotalQty	AccumTradedQty	RemQty	Res	StopPrice	Triggered	Act	Persister
Add	DE0005190003	BMW	B	39.10 EUR	1500		1500				A1	TRUE
Add	DE0005190003	BMW	B	39.20 EUR	500		500				A1	TRUE
Add	DE0005190003	BMW	S	40.80 EUR	2000		2000				A1	TRUE
Add	DE0005190003	BMW	S	42.10 EUR	800		800				A1	TRUE
Add	DE0005190003	BMW	S	40.60 EUR	1000		1000				A1	TRUE
Add	DE0005190003	BMW	B	42.20 EUR	1200		1200				A1	TRUE
Add	DE0005190003	BMW	S	45.60 EUR	3000		3000				A1	TRUE

Fig. 82: Screenshot of the *Order History* view

The table is dynamically updated whenever there is a change for orders which are visible or which apply to the filter criteria. New orders, order modifications, full or partial matches and order deletions are reflected in this window dynamically.

The Related History is also available from the Order History view. Use the double click or right mouse context menu for a selected order to open the Related History:

Please refer to chapter 3.4.1 for a description of the table fields, except for the following:

Display Name	Description
HistType	Displays the type of order change. e.g. Add, Modify, Delete, MatchPartial, MatchFull, Cancel
HistSeq	Displays the sequence number of order change
DeleteReason	Reason for deleting orders, e.g. PANIC_CANCEL
MarketSeg	Legal Market segment code

3.4.3 Trades

The *Trades* view displays information about own trades for the current business day, for a selected instrument, product or profile. If the user is a head trader or supervisor, the *Trades* view also displays all the trades belonging to their user group or their own business unit. All on exchange trades are shown, including those which originated from lean orders.

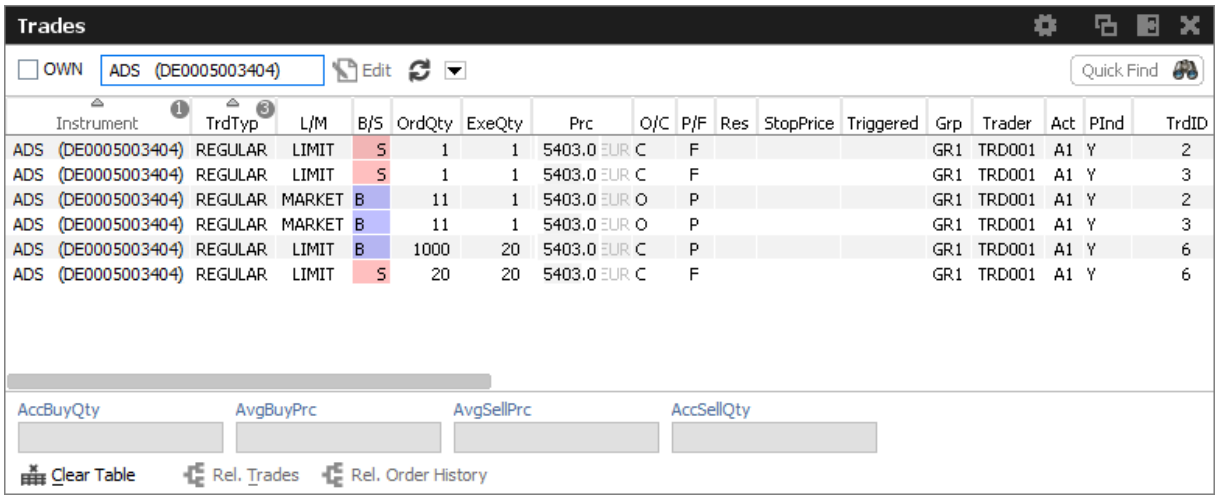


Fig. 83: Screenshot of the *Trades* view

The *Own* checkbox allows to filter the result to the login user id, which means to show only those order which are currently owned by the logged in user.

Table description:

Field	Description
Instrument	Instrument short name
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
WKN	WKN of the instrument (if available)
B/S	Buy/Sell identifier
ExeQty	Executed quantity of this order ID
OrdQty	Order quantity of this order ID
Prc	Order Limit
P/F	Partial or Filled
TrdTyp	Trade type; valid values e.g. REGULAR, ICEBERG, AVD and others
OrdTyp	Order type - valid values include: • ICE - Iceberg Order • MIDP - Midpoint Order • MIDPS - Midpoint Sweep Order • OCO - One Cancels the Other Order • STP - Stop Order

Res	Order restriction - valid values include: • AOO - Auction only • AVD_CAO - AVD Closing Auction • AVD_IAO - AVD Intraday Auction • AVD_OAO - AVD Opening Auction • BOC - Book or Cancel • CAO - Closing Auction • CRT - Counter Party Resting Time • CRT_MBO - Counter Party Resting Time & Midpoint Book only • IAO - Intraday Auction • MBO - Midpoint Book only • MTH - Main Trading Hours only • OAO - Opening Auction • SAO - Special Auction
Act	Account type
StopPrc	Stop price of a stop limit order
Triggered	Indicates whether the current order originates from a triggered OCO or stop order
TrdItemID	Trade item ID
TrdState	Indicates whether the trade is new or reversed
TrdID	Trade ID
TrdReportID	*Trade number* or *tradeNumber* when used on e.g. Reports
MatchStepID	Match Step ID
OrdNo	Order number generated by Cash Markets application
Text1	Free format text field 1
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
ClientOrdID	Client order number

BU	Owning Business Unit
Grp	User group of the owning user
Trader	Owner of the trade (refers to the user name of the exchange account of the respective trading system)
Session	Owning SessionID
OrdEntryTime	OnExchange: Date and time of the order entry
OrdPrioTime	OnExchange: Date and time of the order priority
TrdTime	OnExchange: Date and time of the order match
StlCurr	Settlement currency
StlAmnt	Settlement amount
StlDate	Settlement date
ExchRat	Exchange Rate
ESMA	European Securities and Markets Authority Action Code
CCPCM	CCP clearing member
KVNo	Kassenvereins-Nummer
StlLoc	Settlement location
StlAct	Settlement account
Cpty	Counterparty member
CptyKVNo	Counterparty Kassenvereins-Nummer
CptyStlLoc	Counterparty settlement location
CptyStlAct	Counterparty settlement account
CtpyCM	Counterparty clearing member
CapacityGroup	Capacity group
Exch	Exchange Identifier
LiPrv	Flag to indicate whether an order/transaction is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*

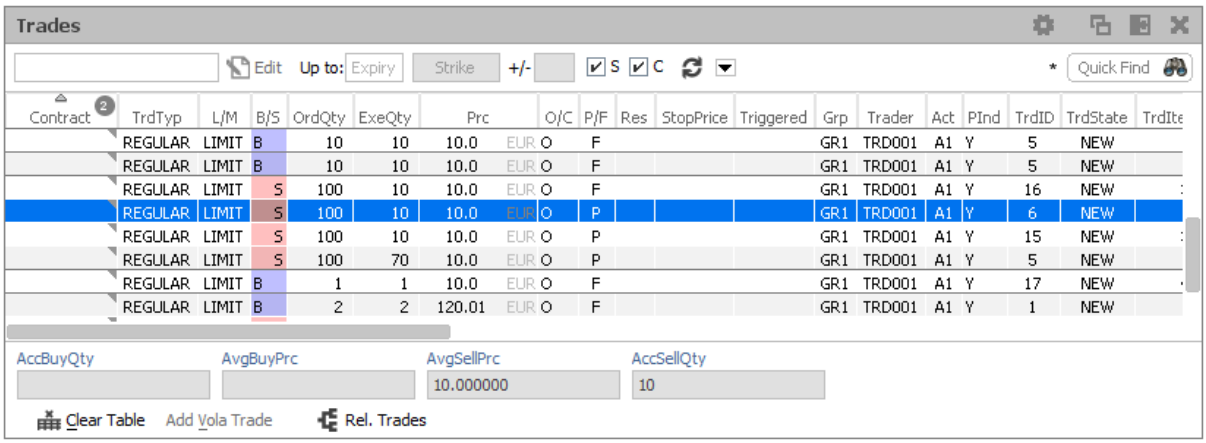
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
IncOrdInd	*Incoming Order Indicator*. Describes role of order in matching procedure, e.g. INCOMING: Incoming Order or Quote Side, RESTING: Order or Quote in Book, RESTING_PEAK_REFILL: Resting (iceberg) order with (peak) display qty refilled,
TargetCCPName	name of Target CCP
TargetCCPInd	Target CCP Indicator
MktVal	Bonds Market Value
AccrIntAMnt	Accrued Interest Amount
IntBearDays	Number of Interest bearing Days
TVTic	Trading Venue Transaction Code
IsDispo	Dispo Flag
LstCpnDeviatInd	Last Coupon Deviation Indicator
CpnRate	*Coupon Rate* may be empty if there are multiple ones which were used for the accrued interest calculation
SegmMic	Market Identifier Code of the Segment
MatDate	Maturity Date
FlatInd	Flat Indicator
DEA	*Direct Electronic Access*: specifies the type of electronic access, e.g `Direct Market Access` or `Sponsored Access`
ClrInstruct	*Clearing Instruction* indicates whether a non-CCP trade is internalized or aggregated

FeeIdntCode	T7 Fee Identifier Code. Meaning of the first seven positions: 1. Fee Sub Product Qualifier 2. Fee Maturity Qualifier 3. Fee Beneficial Owner Disclosure Qualifier 4. Fee Trade Originator Qualifier 5. Fee Trade Type Qualifier 6. Fee Trade Publication Qualifier 7. Fee Member Specific Qualifier Remaining characters filled with 'X'
CommTime	*Time of commencement*. The day and time an Off-Book trade has been prearranged outside the T7 System
LstMkt	Dedicated market of the OTC trade
Agrs	Aggressor indicator
AVDBrokerIntID	*AVD Broker Internalization ID* - if set and identical, this ID allows broker of the same BU to match their own buy / sell AVD orders with priority

3.4.4 Related Trades

The *Orders* view as well as the *Trades* view features a *Rel. Trades* button to bring up a *Related Trades* view which is filtered to display all trades for the selected order number. This view is automatically updated by broadcast.

The *Related Trades* view is useful to quickly check all related trades of an order. The summary display at the bottom of that view displays the accumulated and average price and quantity, just like the *Trades* view. The benefit to use the related trades function to check the accumulated and average price and quantity compared to the *Trades* view is, that the user does not need to select all trades that belong to a certain order.



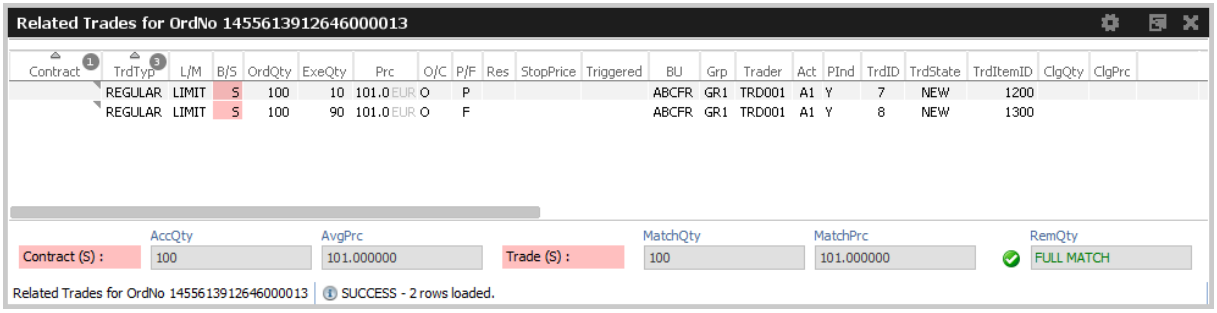


Fig. 84: Screenshots showing how to open the *Related Trades* view from the *Trades* or *Orders* view

The RemQty field quickly informs about whether or not the selected order has been filled.

Be careful when opening the *Related Trades* from the Trades view: The indication “Full Match” when displayed for matched lean orders or quotes, is misleading.

3.4.5 Trade Summary

The *Trade Summary* view shows the same information as the *Trades* view with an extra feature to aggregate the trades according to the selected aggregation criteria, i.e. *Summary Option*.

Currently one of the following aggregations can be chosen:

- Instrument
- OrderNo
- MIOrdNo
- Text1 / Text2

By default the view opens in collapsed mode, displaying the aggregated values. The rows can be expanded to display the trades which are the basis for the aggregation:

Display of trade executions and trade summary

The *Trades* view offers two kinds of display options for the display of own trades, which can be switched by a toggle button:

- The display of trade summary rows (which can be expanded), or
- The display of trade execution rows.

In the trade summary display, the trade executions are summarized on order level to inform about the average price, accumulated quantity, and whether or not the order has been fully executed. In this display, one summary row is displayed per original order. That row can be expanded by a click onto the plus-sign (⊞) to show all the executions belonging to that order.

In the trade execution display, each execution is displayed per row. No special summary row is shown to display the average price.

Depending on whether the displayed data is the trade summary or trade execution, one of the following table descriptions applies:

Trade summary columns:

Field	Description
Instrument	Instrument short name
Trades	Total number of trades for the instrument
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
WKN	WKN of the instrument (if available)
B/S	Buy/Sell identifier
AvgPrc	Average price of underlying executions (Volume Weighted Average)
AccQty	Accumulated order quantity
P/F	Partial or Filled of the last execution
Res	Order restriction - valid values include: • AOO - Auction only • AVD_CAO - AVD Closing Auction • AVD_IAO - AVD Intraday Auction • AVD_OAO - AVD Opening Auction • BOC - Book or Cancel • CAO - Closing Auction • CRT - Counter Party Resting Time • CRT_MBO - Counter Party Resting Time & Midpoint Book only • IAO - Intraday Auction • MBO - Midpoint Book only • MTH - Main Trading Hours only • OAO - Opening Auction • SAO - Special Auction
Act	Account type
StopPrc	Stop price of a stop limit order

Triggered	Indicates whether the current order originates from a triggered OCO or stop order
TrdItemID	Trade item ID. Also known as deal item ID by the Cash system
TrdState	Indicates whether the trade is new or reversed
TrdID	Trade ID. Also known as deal ID by the Cash system
TrdReportID	*Trade number* or *tradeNumber* when used on e.g. Reports
MatchStepID	Match Step ID
OrdNo	Order number generated by Cash Markets application
Text1	Free format text field 1
Text2	Free format text field 2
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
ClientOrdID	Client order number
BU	Owning Business Unit
Grp	User group of the owning user
Trader	Owner of the trade (refers to the user name of the exchange account of the respective trading system)
Session	Owning SessionID
OrdEntryTime	OnExchange: Date and time of the order entry
OrdPrioTime	OnExchange: Date and time of the order priority
TrdTime	OnExchange: Date and time of the order match
StlCurr	Settlement currency
StlAmnt	Settlement amount
StlDate	Settlement date
ExchRat	Exchange Rate
CM	Clearing member
CCPCM	CCP clearing member
KVNo	Kassenvereins-Nummer
StlLoc	Settlement location
StlAct	Settlement account
Cpty	Counterparty member

CptyKVNo	Counterparty Kassenvereins-Nummer
CptyStlLoc	Counterparty settlement location
CptyStlAct	Counterparty settlement account
CtpyCM	Counterparty clearing member
CapacityGroup	Capacity group
Exch	Exchange Identifier

Trade executions columns:

The trade execution columns are identical to the columns of the *Trades* view.

3.4.6 TES View

TES View is provided as a display for all own approved as well as unapproved TES trades.

Columns of the *TES View*:

Field	Description
Instrument	Instrument identifier
WKN	WKN of the instrument (if available)
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
TrdTyp	Type of the TES trade: OTC or LIS
Prc	TES Trade Limit; Price is displayed together with the currency
Curr	Currency of a TES Trade
B/S	Buy/Sell identifier
Qty	Quantity volume of the TES trade
Act	Account type
TESTrdID	Trade ID of the TES Trade
Text1,Text2	Free format text field
MIOrdNo	*MemberInternalOrderNo* - text field for special purposes that can be filled up to 16 characters
Description	The Initiator of a TES trade can no longer use the text fields to pass on information to the Approver. In order to compensate for that, the *Description* field is provided, which allows the initiator to give a hint to the counterparty about the background of the trade

TESStatus	The current status of the TES trade: • Pending The TES trade has been entered and is waiting for approval of the counterparty. • Approved The TES trades has been ratified by the counterparty, but approval of other counterparties are still outstanding. • Auto_Approved The TES trades has been auto_approved according to defined auto-approval rule. • Executed The TES trades has been fully ratified. • Deleted The TES trade has been deleted. • Suspended The TES trade has been entered in suspended state, for activation at a future point in time. • Reversed The TES trade has been reversed.
Initiator	Initiator of the TES trade (the person entering the trade)
Approver	Approver of the TES trade (the owner of the trader)
CommTime	*Time of commencement*. The day and time an Off-Book trade has been prearranged outside the T7 System
EntryTime	Entry time, the time the trade has been entered
Elapsed	The elapsed time since the entry of the trade
ApprTime	Approval time
ExecTime	Execution time
ApprovedBy	Trader ID of Approver
ApproverBU	Approver business unit
ApproverUserGrp	Approver user group
InitiatorBU	Initiator business unit
InitiatorUserGrp	Initiator user group

DeleteReason	Reason for deletion of TES Trade, e.g. USER ACTION
Issuer	Name of Issuer
RegID	Regulatory ID
SettlDate	The settlement date of the TES trade; has to be greater than the current business date
SettlInst	Settlement institution
SettlStyle	Settlement style
SkipQtyCheck	If this flag is set to True, validations related to Maximum Order Quantity are not executed. Only for TES type LIS
SkipValueCheck	If this flag is set to True, validations related to Maximum Order Value are not executed. Only for TES type LIS.
TrdCapacity	Trading Capacity / Account type; valid values include: Agency Proprietary Market Making Retail Member Organisation Riskless Principle
MaturityDate	Maturity of the bond, expiration date of the Reference Financial Future or expiration date of the Futures contract with longest term in case of Short Term Interest Rate Futures
CustUndrPrc	Customer Underlying price
Nominal	Equivalent value of the futures leg to be traded (in units of one thousand)
LiPrv	Flag to indicate whether an order/transaction is submitted as part of a market making strategy
InvID	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
ExeID	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExeQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.

ClientID	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
ESMA	European Securities and Markets Authority Action Code
MktVal	Bonds Market Value
IntBearDays	Number of Interest bearing Days
UserCurrExchRate	Currency Exchange Rate
EnrRuleID	Unique Enrichment rule ID for TES approval
TradeReportID	User's identifier of a TES trade when entered outside the GUI - *display only*

3.5 View Descriptions: Info & Support

Info & Support provides a display of trading attributes and statistical information on product and instrument level, a display of market and other news, and risk control functions.

3.5.1 Product Statistics

Statistical market data on product level is displayed in the *Product Statistics* view.

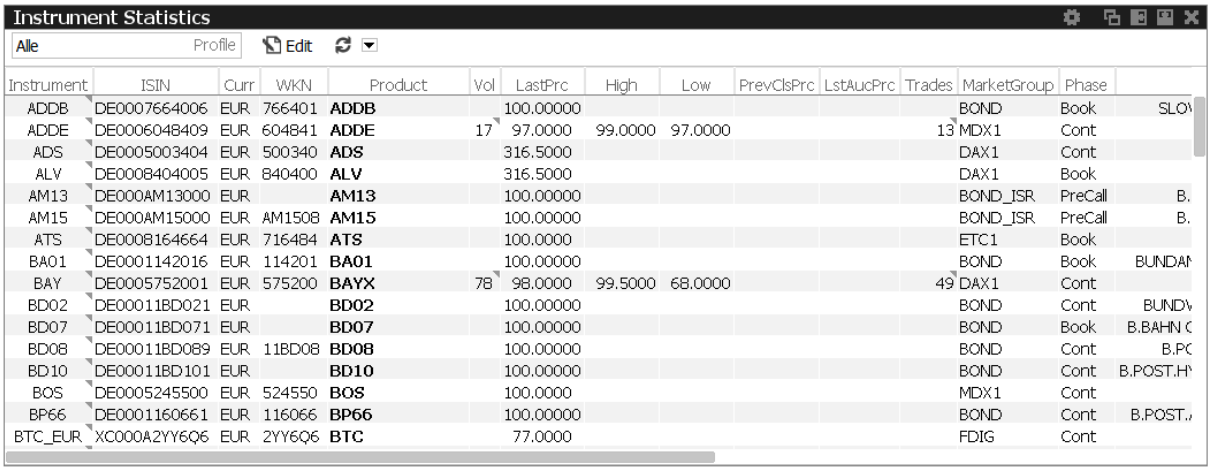
Field description of the *Product Statistics* view:

Field	Description
Product	Product ID
LongName	Product long name
Exch	Exchange code
Curr	Currency of the product
Vol	Total volume of all instruments associated to the product in the course of the day. When hovering over the number figures for on-Exchange and Retail are displayed
Trades	Total number of trades (counted match steps) of all instruments associated to the product. When hovering over the number figures for on-Exchange and Retail are displayed
Exch	Exchange ID of the product

MC	Market conditions indicator for product
Phase	Trading phase of the product
TESProductState	TES state of the product
Partition	(technical) partition ID the product is hosted on
Capacitygroup	(technical) capacity group ID the product belongs to
CurrentBusDay	Current business day

3.5.2 Instrument Statistics

Statistical market data on instrument level is displayed in the *Instrument Statistics* view. Statistical data comprises of a daily total volume, last traded price, daily high and low price and previous day closing price.



Instrument	ISIN	Curr	WKN	Product	Vol	LastPrc	High	Low	PrevClsPrc	LstAucPrc	Trades	MarketGroup	Phase	
ADDB	DE0007664006	EUR	766401	**ADDB**		100.00000						BOND	Book	SLO
ADDE	DE0006048409	EUR	604841	**ADDE**	17	97.0000	99.0000	97.0000			13	MDX1	Cont	
ADS	DE0005003404	EUR	500340	**ADS**		316.5000						DAX1	Cont	
ALV	DE0008404005	EUR	840400	**ALV**		316.5000						DAX1	Book	
AM13	DE000AM13000	EUR		**AM13**		100.00000						BOND_ISR	PreCall	B.
AM15	DE000AM15000	EUR	AM1508	**AM15**		100.00000						BOND_ISR	PreCall	B.
ATS	DE0008164664	EUR	716484	**ATS**		100.0000						ETC1	Book	
BA01	DE0001142016	EUR	114201	**BA01**		100.00000						BOND	Book	BUNDAI
BAY	DE0005752001	EUR	575200	**BAYX**	78	98.0000	99.5000	68.0000			49	DAX1	Cont	
BD02	DE00011BD021	EUR		**BD02**		100.00000						BOND	Cont	BUNDV
BD07	DE00011BD071	EUR		**BD07**		100.00000						BOND	Book	B.BAHN C
BD08	DE00011BD089	EUR	11BD08	**BD08**		100.00000						BOND	Cont	B.PC
BD10	DE00011BD101	EUR		**BD10**		100.00000						BOND	Cont	B.POST.H
BOS	DE0005245500	EUR	524550	**BOS**		100.0000						MDX1	Cont	
BP66	DE0001160661	EUR	116066	**BP66**		100.00000						BOND	Cont	B.POST./
BTC_EUR	XC000A2YY6Q6	EUR	2YY6Q6	**BTC**		77.0000						FDIG	Cont	

Fig. 85: Screenshot of the *Isntrument Statistics* view

Field description of the *Instrument Statistics* view:

Field	Description
ISIN	ISIN of the instrument. For multi currency instruments in format `ISIN.CUR`
WKN	WKN of the instrument (if available)
Instrument	Instrument short name
Curr	Currency of the instrument
Product	Product name
InstrLongName	Long name of the instrument

TickSize	Tick size
Vol	Total volume in the instrument traded in the course of the day. When hovering over the number figures for on-Exchange and Retail are displayed
Trades	Total number of trades (counted match steps) of the instrument. When hovering over the number figures for on-Exchange and Retail are displayed
LastPrc	Last traded price in the instrument
High	Day's highest price in the instrument
Low	Day's lowest price in the instrument
PrevClsPrc	Previous day's closing price
LastAuctPrc	Last Auction Price
MarketGroup	Associated market group of the instrument
Phase	Trading phase of the product
MC	Market Condition codes for the instrument - possible values: • F - Fast market • SA - Stressed Auto • SF - Stressed Auto+Fast
MinTradeUnit	Minimum tradeable unit
QuotationUnit	Quotation Unit - e.g. `POINTS, PERCENT, SHARES`
MatDate	Maturity Date
FlatInd	Flat Indicator
LstRetailPrc	Last Retail trade price
LstMidpointPrc	Last midpoint trade price

3.5.3 Risk Controls

The *Risk Controls* view provides *Panic Cancel* actions which delete orders and/or quotes for a single user or Business Unit. To access all functions provided by the view, a user must have the `Supervisor` user level and the `Emergency Trading Stop` role assigned. A step-by-step wizard guides the user through the deletion process.

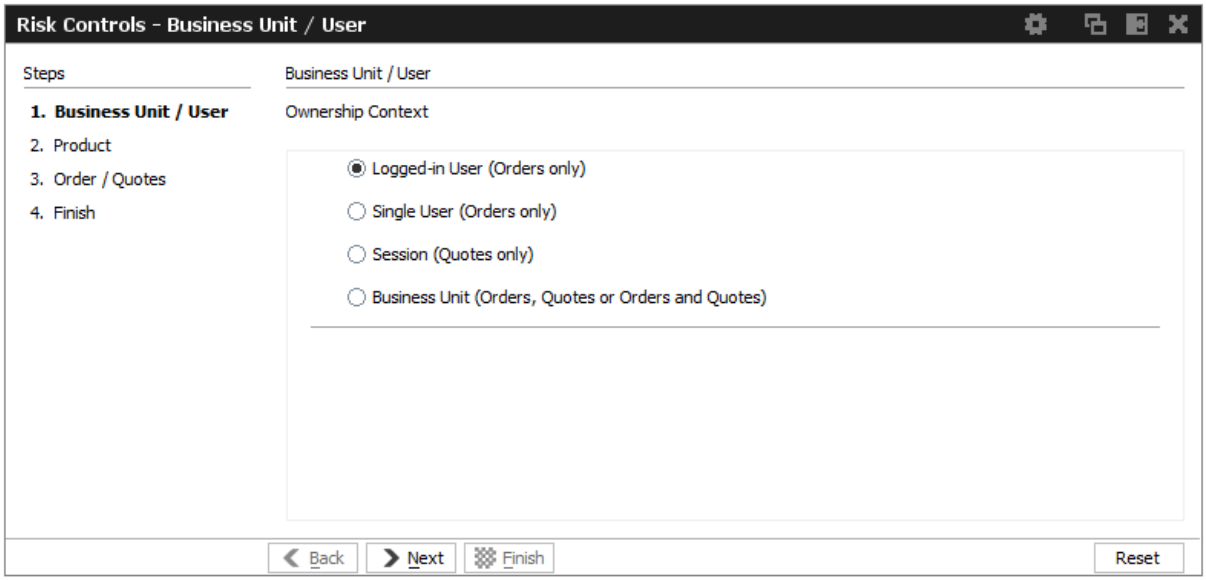


Fig. 86: Screenshot of the *Risk Controls* view

Please note that a single action in this view will, in most cases, lead to the deletion of multiple orders and/or quotes. Consequently, that single action may produce multiple positive and/or negative results. Only the last result is displayed in the status bar. In order to see all results double-click on the status bar to open the *Risk Controls - Log Messages*.

3.5.4 News Board

The *News Board* view displays important public and private trading relevant messages. The messages can be filtered according to their privacy type, source and category.

The most important news are *System-News* and *Market News*, the latter displays market news for the exchange published by market supervision, e.g. information about delay in trading start, suspension of a product). Whenever an instrument is suspended, a system news is published at the same time.

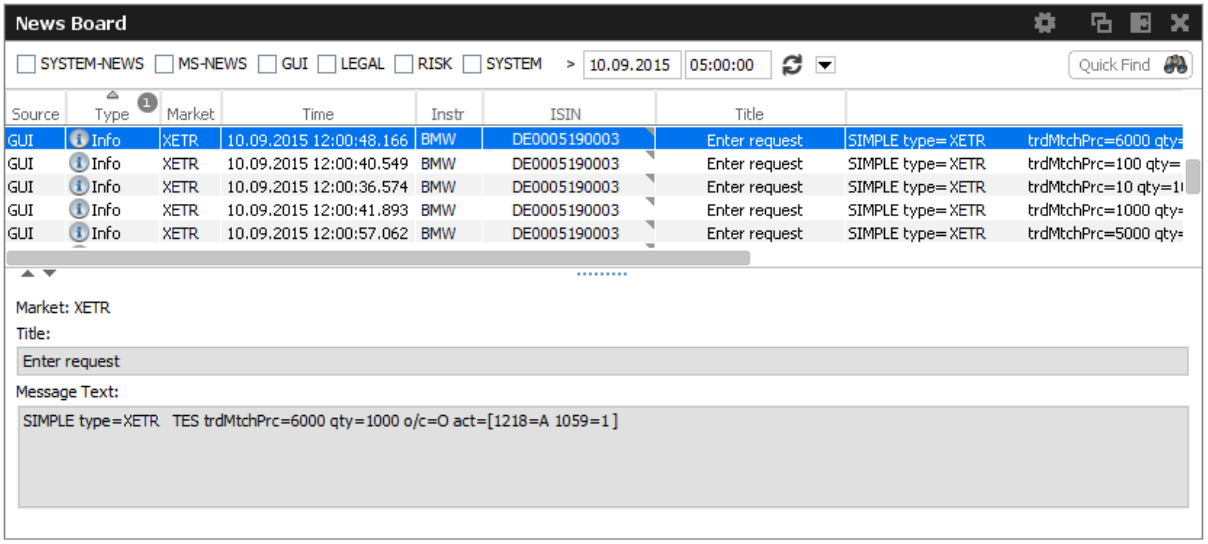


Fig. 87: Screenshot of the *News Board* view

The *News Board* view displays the following information:

- System-News: system generated news like e.g. Fast_Market or Instrument_Suspension scenarios. For the latter Please note that ISINs are released in case an instrument is suspended from trading.
- MS-News: Market Operation messages, published by the exchange
- GUI: Messages which originate from all GUI views as a result of user interaction. These are the messages that are also displayed in the status bar of the respective view.
- Legal: Notification about the stop/release trading of a user or business unit

The view is updated automatically. Messages are sorted descending by date and time.

The message column of the table shows the headlines of any messages received. A click on a headline in the upper table displays the entire message in the detail box below.

4 Cash Admin GUI

The *Cash Admin* application is provided to participants for the use by the service administrator and user data view users.

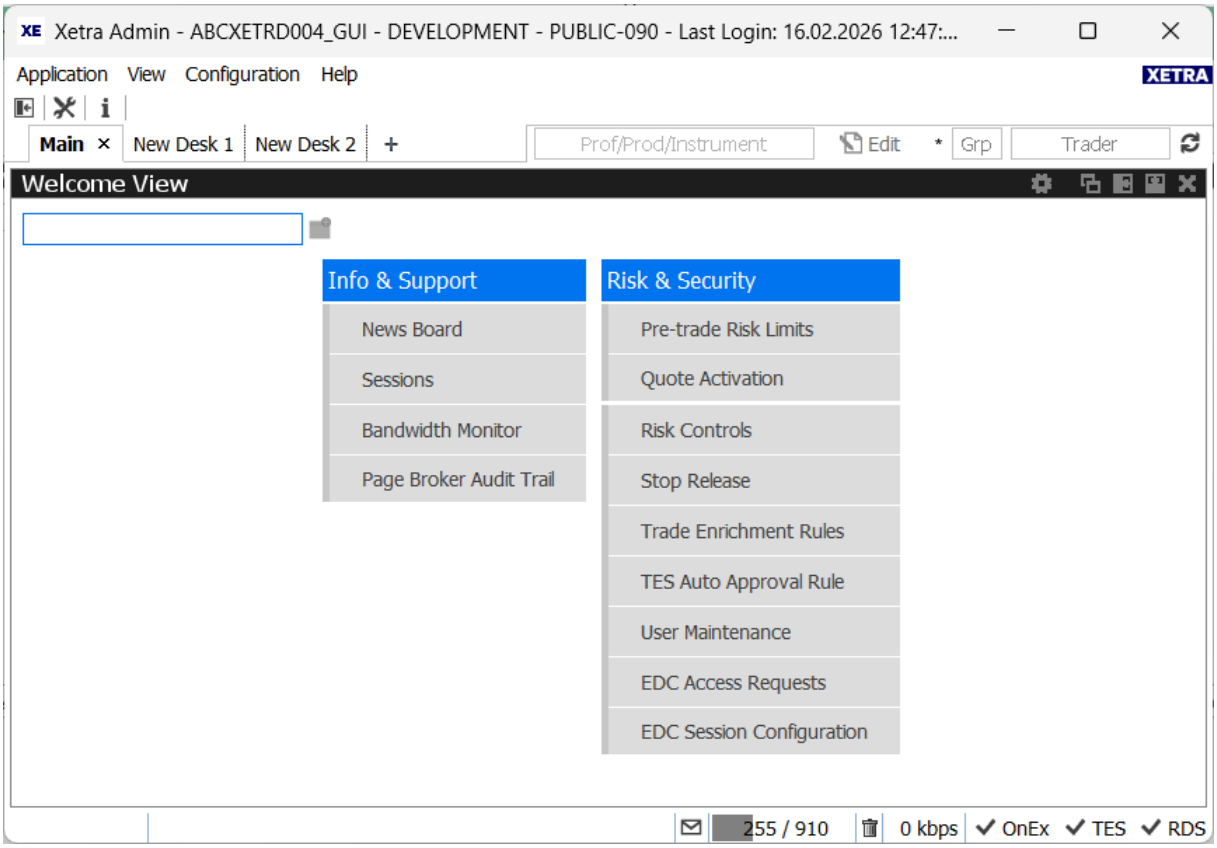


Fig. 88: Screenshot of the *Cash Admin* main window showing the *Welcome* view

Please refer to section 2 General GUI Concepts and Functions for a general description on how to use the application and how to access these functions using the *Welcome* view.

4.1 View Descriptions: Info & Support

4.1.1 News Board

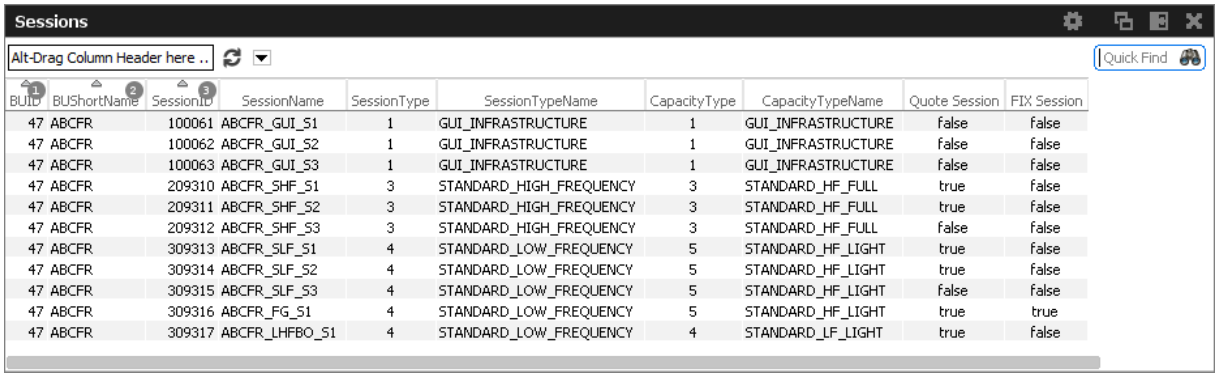
The *News Board* window displays important public and private trading relevant messages. The messages can be filtered according to their privacy type, source and category. The view is updated automatically. Messages are sorted descending by date and time.

This view is identical to Cash Trader, for more details Please refer to section 3.5.4 News Board.

4.1.2 Sessions

The *Sessions* view provides an overview of all sessions of the own business unit. The view also provides the mapping between SessionID, SessionName and displays the SessionType along with

the CapacityType of the respective session.



BUID	BUShortName	SessionID	SessionName	SessionType	SessionTypeName	CapacityType	CapacityTypeName	Quote Session	FIX Session
47	ABCFR	100061	ABCFR_GUI_S1	1	GUI_INFRASTRUCTURE	1	GUI_INFRASTRUCTURE	false	false
47	ABCFR	100062	ABCFR_GUI_S2	1	GUI_INFRASTRUCTURE	1	GUI_INFRASTRUCTURE	false	false
47	ABCFR	100063	ABCFR_GUI_S3	1	GUI_INFRASTRUCTURE	1	GUI_INFRASTRUCTURE	false	false
47	ABCFR	209310	ABCFR_SHF_S1	3	STANDARD_HIGH_FREQUENCY	3	STANDARD_HF_FULL	true	false
47	ABCFR	209311	ABCFR_SHF_S2	3	STANDARD_HIGH_FREQUENCY	3	STANDARD_HF_FULL	true	false
47	ABCFR	209312	ABCFR_SHF_S3	3	STANDARD_HIGH_FREQUENCY	3	STANDARD_HF_FULL	false	false
47	ABCFR	309313	ABCFR_SLF_S1	4	STANDARD_LOW_FREQUENCY	5	STANDARD_HF_LIGHT	true	false
47	ABCFR	309314	ABCFR_SLF_S2	4	STANDARD_LOW_FREQUENCY	5	STANDARD_HF_LIGHT	true	false
47	ABCFR	309315	ABCFR_SLF_S3	4	STANDARD_LOW_FREQUENCY	5	STANDARD_HF_LIGHT	false	false
47	ABCFR	309316	ABCFR_FG_S1	4	STANDARD_LOW_FREQUENCY	5	STANDARD_HF_LIGHT	true	true
47	ABCFR	309317	ABCFR_LHFBO_S1	4	STANDARD_LOW_FREQUENCY	4	STANDARD_LF_LIGHT	true	false

Fig. 89: Screenshot of the *Sessions* view

4.1.3 Bandwidth Monitor

The *Bandwidth Monitor* view provides an overview of the current and maximum bandwidth consumption and connection latency for currently logged in users of *Cash Trader*, *Cash Admin* and *Cash Clearer*. Bandwidth charts per user are available, that can be toggled with a click into the respective cell of the chart column.

The bandwidth figure displays the net amount of bytes/s delivered to the client application (not counting any transport layer overhead). In addition Incoming traffic from the client application is not counted.

Following actions are available on *Bandwidth Monitor* view:

Action	Description
Force GUI Shutdown	Send a freetext warning message and shutdown this session. A time interval for shutdown can be specified in the message.
Send Admin Message	Send a freetext message to the selected GUI session.
Reset	Displayed maximum figures for bandwidth and latency can be set to 0 for the selected rows.

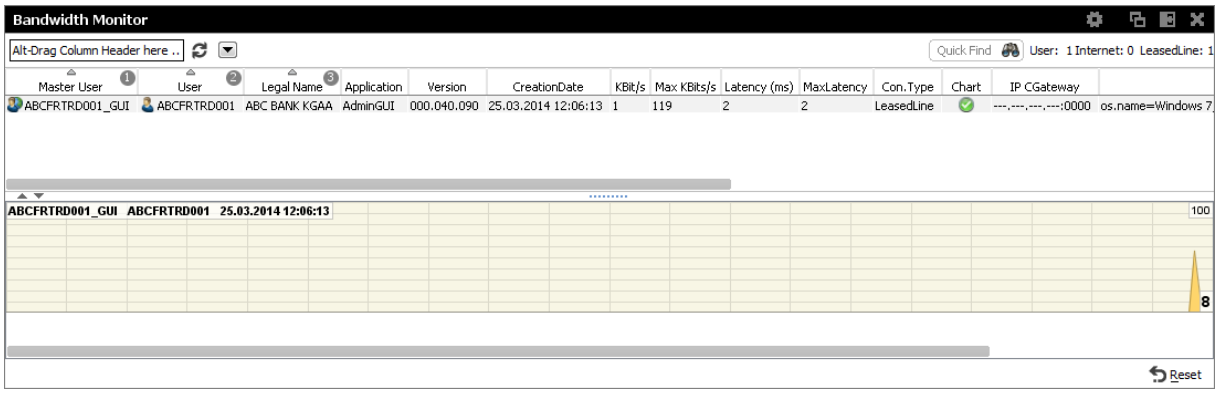


Fig. 90: Screenshot of the *Bandwidth Monitor* view

4.1.4 Page Broker Audit Trail

The *Page Broker Audit Trail* view provides an overview of all messages which have been sent using *Page* feature when using T7 Entry Services. In order to get existing messages displayed, a start date and an end date must be entered or selected from the calendar pop-up.

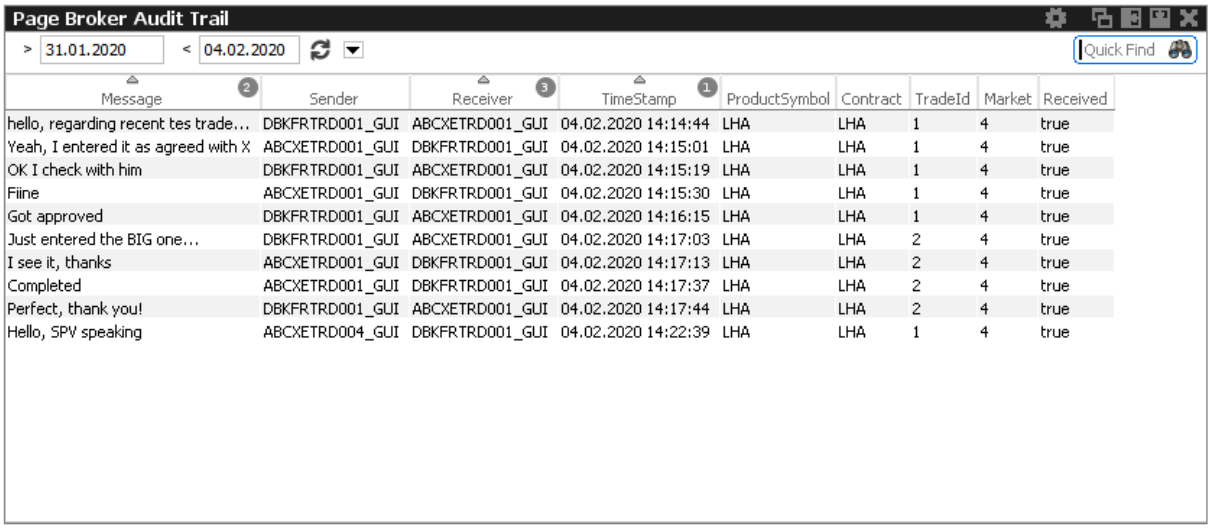


Fig. 91: Screenshot of the *Page Broker Audit Trail* view showing TES messages

4.2 View Descriptions: Risk & Security

4.2.1 Pre-trade Risk Limits

The *Pre-trade Risk Limits* view allows entitled participants to define and maintain limits for the daily maximum notional value of all entries, modifications and executions of orders and quotes per product and trading side.

Only products that have been defined to be eligible for the Pre-Trade Risk Limit check can be viewed

and maintained. Viewing and adding action for this view are controlled by two different entitlements.

This view is not updated automatically.

In general, Pre-trade risk limits can be set for three risk limit types (-levels), separately for the buy and sell side:

1. Exchange level (EXCH_FOR_BU): Cash Market Supervision defines PTRLs for any Business Unit (BU) using the Cash Controller GUI.
2. Clearer level (CM_FOR_BU): Clearing members define PTRLs for their related non-clearing member using the Cash Clearer GUI. *Kindly note,* a Settlement Institute (SI) member will not be able to define PTRLs for its non-clearing members.
3. BU level (BU_RISK_GROUP): Properly entitled (admin) participant defining risk limits for its User Risk groups using the Cash Admin GUI.

The newly entered Pre-trade risk limits will be enabled on the date specified in the field *Activation-Date*, i.e activating limits intraday is not permitted. If *ActivationDate* is empty, the limits are active. To then have the limit figures take effect, any positive number greater '0' needs to be entered. If no value is set, trader can enter transactions without any limit. Contrary, a value of '0' restricts the trader completely.

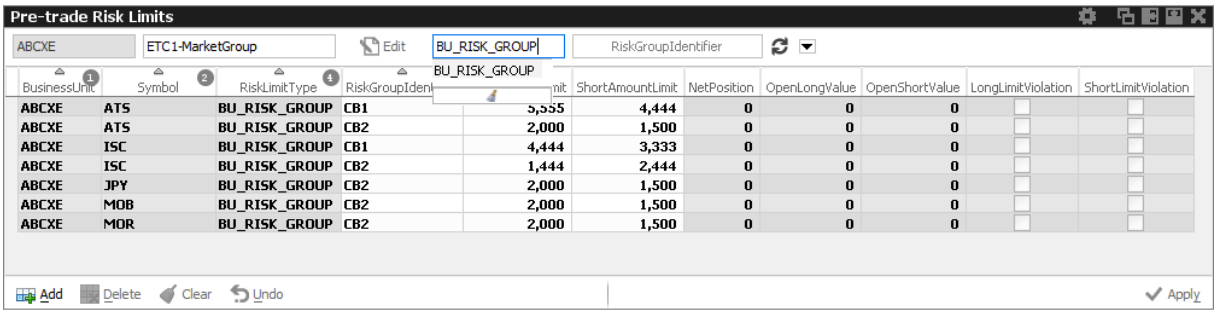


Fig. 92: Screenshot of the *Pre-trade Risk Limit* view, showing on-book limits filtered for a specific PAG and risk limit type

The entitled Admin member can maintain pre-trade risk limit on different risk group levels - denoted here as *RiskGroupIdentifier* - and define values for them.

The *User Maintenance* view is used to assign the fitting risk group level (denoted there as *User-RiskGroup*) to an individual user.

New limits can be created by adding them manually or by importing them. When adding manually, Cash GUI provides a convenience feature **by duplicating all data entered for the first record** to all displayed records below. To achieve this, the view will display "empty" records, ie. records of PTRL eligible products without defined limit values. To quickly add PTRL values for another *RiskGroupIdentifier*, it is recommended to filter for that *RiskGroupIdentifier* and use the duplicate feature when entering the actual values.

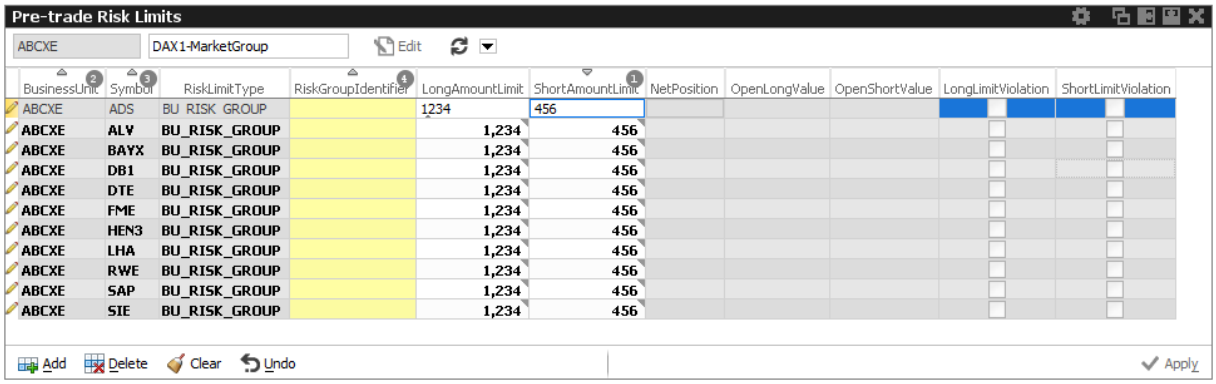


Fig. 93: Screenshot of the *Pre-trade Risk Limit* view, depicting how GUI duplicates data entry on first record

The view supports incremental updates, i.e. new limits can be added or existing limits can be amended without affecting existing records which are supposed to remain unchanged. One example would be to set limits on Product Assignment Group (PAG) level by

1. using the *Prof/Prod/Instrument* filter to display records for a specific PAG,
2. export this subset,
3. import the amended subset without affecting other records.

After an import the view needs to be refreshed to display all limits records again. Deleting limits has to be done manually in the view itself which is eased again by filtering the limits accordingly.

Columns of the *Pre-trade Risk limits* view:

Field	Description
BU	Business unit name of the user.
Product	Product name.
RiskLimitType	Risk group level, e.g. EXCH_FOR_BU CM_FOR_BU BU_RISK_GROUP
LongAmountLimit	Maximum long amount allowed. '0' means trader is restricted; no value means no limits are set at all.
ShortAmountLimit	Maximum short amount allowed. '0' means trader is restricted; no value means no limits are set at all.
NetPosition	Current market position for this limit. *Display only*.
OpenLongValue	Current open long value. *Display only*.
OpenShortValue	Current open short value. *Display only*.
ActivationDate	Newly entered PTRL will become valid at *ActivationDate.* If the field is empty, the limits are active.

LongLimitViolation	Flag indicating long limit violated. *Display only*.
ShortLimitViolation	Flag indicating short limit violated. *Display only*.
DisableMbr	If ticked, all order/quotes for the selected member and product will be deleted and entry of new transactions will be blocked. Only Clearing Member may change this flag.

4.2.2 Quote Activation

The *Quote Activation* view allows the user to both deactivate and to re-activate quotes for a specified product or profile and session. This view is identical to Cash Trader, please refer for more details to chapter 3.3.5 Quote Activation.

4.2.3 Risk Controls

The *Risk Controls* view comprises of *Panic Cancel* actions to delete orders and/or quotes for a given product for a user or Business Unit.

Users with active `Emergency Trading Stop` role and `Supervisor` level are entitles to mass-delete orders and/or quotes in a particular market.

This view is identical to Cash Trader, for a description please refer to 3.5.3 Risk Controls.

4.2.4 Stop Release

The *Stop Release* view in the Cash Markets T7 GUI allows administrators to manage *Stop Trading* and *Release Trading* actions.

A *Stop Trading* action immediately prevents a user or an entire Business Unit (BU) from entering further orders and quotes. Additionally, it triggers the Risk Controls ("Panic Cancel") function, which deletes:

- all active orders for the stopped user, or
- all active orders and quotes for the stopped Business Unit.

For more information on Risk Controls please refer to 3.5.3 Risk Controls.

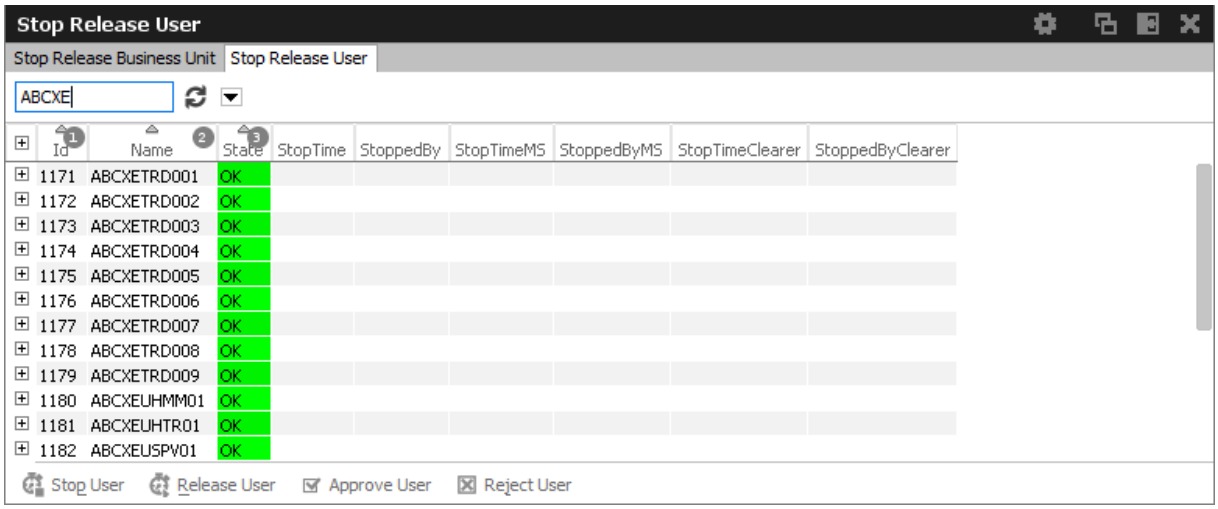


Fig. 94: Screenshot of the *Stop Release* view showing the *Stop Release User* tab

Stop Release BU always requires a Four-Eyes Principle (4EP) workflow. To facilitate this, the view provides `Approve` and `Reject` actions for the approving administrator.

Stop Release User requires either the 4EP or the Two-Eyes Principle (2EP) workflow, depending on the member's setup. The default is 4EP.
An administrator can enable the 2EP workflow for a user by assigning the `EMERGENCY TRADING STOP USER 2EP` entitlement role within the *User Maintenance* view. Under the 2EP workflow, no explicit `Approve` and `Reject` actions by a second administrator are needed.

To enable a `Stop` action, select the row of the required user or business unit. After the action has been processed, the row is expanded, giving detail of the `ActionType`, as well as who triggered the stop action and when. A stopped user is indicated by a red indicator in the State column. The Release action follows the same logic.

This view is updated automatically to reflect the current state of all stop and release actions.

4.2.5 Trade Enrichment Rules

Trade Enrichment Rules are a mechanism to enrich the missing clearing fields of trades resulting from executed quotes and orders with short order message layout during the trade enrichment process of the trade manager. Each enrichment rule is identified by a participant-defined number, ranging from 1 to 10,000.

The view is split into two different tabs - the *Trade Enrichment Rules Rules Current* tab showing the currently active rules, and the *Trade Enrichment Rules Preview* tab which allows adding and deleting rules. Both actions become active on the next trading day only.

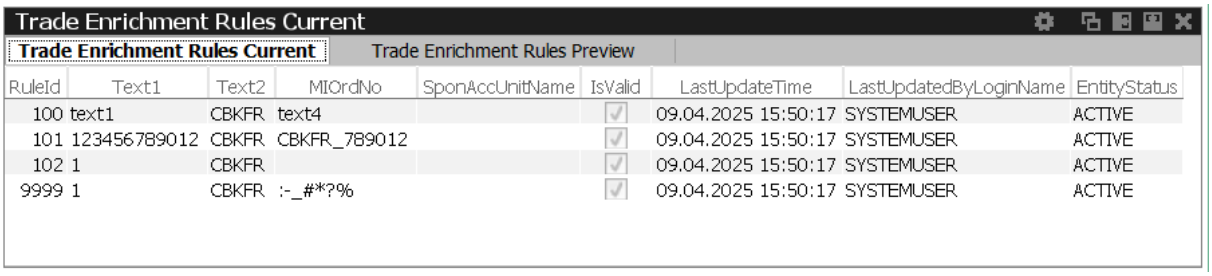


Fig. 95: Screenshot of the *Trade Enrichment Rules* view showing the **`Current`** tab

When the order/quote is executed, Cash Exchange's T7 will use the Trade Enrichment Rule ID supplied by the participant to look up the rule and then apply the corresponding clearing fields to the trade information sent to the clearing system and returned to the participant. Trade enrichment will be done by Cash Exchange's T7 trade manager and will be supplied on the trade confirmation to participants (not on the execution information from the matching engine).

For each trade enrichment rule, participants must define a Trade Enrichment `RuleID` and the following clearing fields:

- Free Text 1 (`Text1`)
- Free Text 2 (`Text2`)
- MemberInternalOrderNo (`MIOrdNo`)

Changes of trade enrichment rules can be done on the *Preview* tab of the *Trade Enrichment* view. Updates take effect only on the next business day.

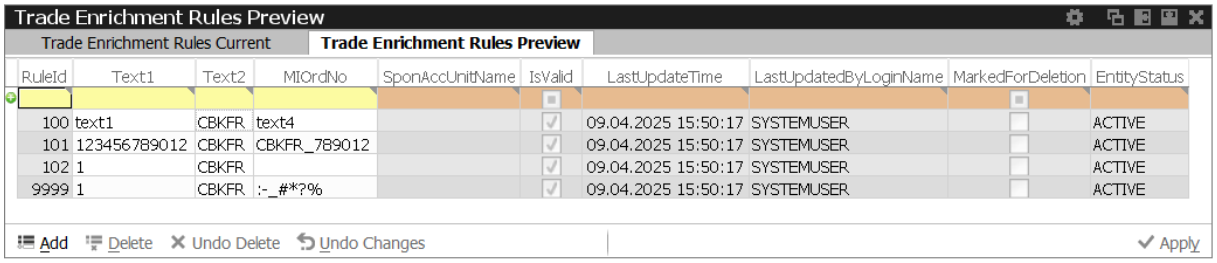


Fig. 96: Screenshot of the *Trade Enrichment Rules* view showing an **`Add`** action on the preview tab

Users of the Cash ETI will specify the exact trade enrichment rule to be used at the time of execution of the quote or order entered using the short layout.

If the trade enrichment rule is missing or not valid, the clearing system will assign defaults, according to pre-defined logic. The default rules for the clearing account are described in the document "Cash Functional and Interface Overview".

4.2.6 TES Auto Approval Rule

The *TES Auto Approval Rule* functionality allows participants to approve TES trades automatically according to pre-defined data. This view has been enhanced to reflect that the selection key for an auto approval rule has been enhanced with more attributes.

A TES Auto Approval Rule functionally consists of three parts:

- Unique name of the rule,
- Selection key,
- Prefilled approval fields.

The **selection key** consists of mandatory and optional attributes for specifying the rule. If an *optional* attribute is specified, the approval rule has an higher priority to be matched than the same rule without this attribute being specified. The *optional* attributes are listed here **in order of matching priority** from high to low, e.g. the Enrichment Rule ID has the lowest priority among other specified attributes.

- User ID (Mandatory): The approving user for which the record is present
- Initiating User Name (Mandatory): Login name of the initiating user
- Product Assignment Group ID (Mandatory): ID of the product assignment group or the market wide group
- Product ID (Optional) - if a product is provided then it has higher priority than a rule without a product for the same market and product assignment group.
- TES Type (Optional)
- Instrument Type (Optional)
- Enrichment Rule ID (Optional) - approver side can specify it in its rules and initiator can provide an enrichment key in TES Trade Entry (unique in context of approving user).

The **approval fields** consisting of Clearing and MiFID fields and *additional criteria* fields. Thus the initiator is able to define clearing and MiFID data which gets automatically applied if the Auto Approval Rule is matching during TES entry. On setting up a approval rule, conditional validations on optional approval fields are done e.g. when the Trading Capacity is set to Agency, the Client IDentifier must be provided as well. An *additional criteria* is e.g. field MaxTradeValue, as its value is evaluated before applying a possibly matching rule. Please refer to below table for a full list of optional fields and their validation rules.

TES Auto Approval Rule view, columns that are displayed:

Field	Description
AutoApprovalRuleID	Auto approval Rule ID. *Display only*
EnrRuleID	Unique Enrichment rule ID for TES approval
AutoApproval RuleName	Unique Name of auto approval rule Id
TESType	Type of TES Trade, e.g. BLOCK
Product	Product name

InitiatingUser	LoginName of the initiating user (of a possibly different BU)
ExecQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
TradingCapacity	Trading Capacity. Example for valid values: Agency Proprietary Market Making Riskless Principle
MarketGroup	MarketGroup Symbol, Category and OwnedBy data set
User	User name of the approving user for which the record is present
SpAUnit	Name of the Sponsored Access Business unit - filled automatically if `User` is a SpA User
ClientIdentifier	Numeric code used to identify the client of the member of the Trading Venue. Serves as a reference to the 35 characters long ESMA Client Identification Code Usually mandatory for account type A/B/R, must be empty for P/M/Broker-Dealer
ExecIdentifier	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
Text1,Text2, Text4	Free format text field
InvestIdentifier	The *Investment Identifier* identifies a person or algorithm responsible for the investment decision within a company. Can be defined in *Application Preferences*
InvestQual	The *Investment Qualifier* determines the business logic of the investment decision: `ALGO` if *InvQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
LiPrv	Tick(ed) to indicate whether an order is submitted as part of a market making strategy
SkipQtyCheck	If this flag is set to True, validations related to Maximum Order Quantity are not executed. Only for TES type LIS
SkipValueCheck	If this flag is set to True, validations related to Maximum Order Value are not executed. Only for TES type LIS.
MaxTradeValue	If provided, then it is validated that price multiplied by quantity is less than or equal to the value provided in this field. If the validation fails, then auto approval is not applied

DEA	*Direct Electronic Access*: specifies the type of electronic access, e.g `Direct Market Access` or `Sponsored Access`
ExecIdentifier	The *Execution Identifier* identifies a person or algorithm responsible for executing the transaction within the company. Can be defined in *Application Preferences*
ExecQual	The *Executing Trader Qualifier* determines the business logic of the execution decision: `ALGO` if *ExeQual* represents an algorithmic identifier or `HUMAN` otherwise Can be defined in *Application Preferences*.
DEA	*Direct Electronic Access*: specifies the type of electronic access, e.g `Direct Market Access` or `Sponsored Access`

4.2.7 Settlement Account - specific to Deutsche Börse Frankfurt

The view *Settlement Account* lists the associated settlement accounts of the business unit to provide an quick overview about the associated trading venue and the trading entitlement for PUEV (Cross Market OTC trade).

4.2.8 User Maintenance

The *User Maintenance* view provides an overview of the users that are set up in the business unit of the logged in service administrator.

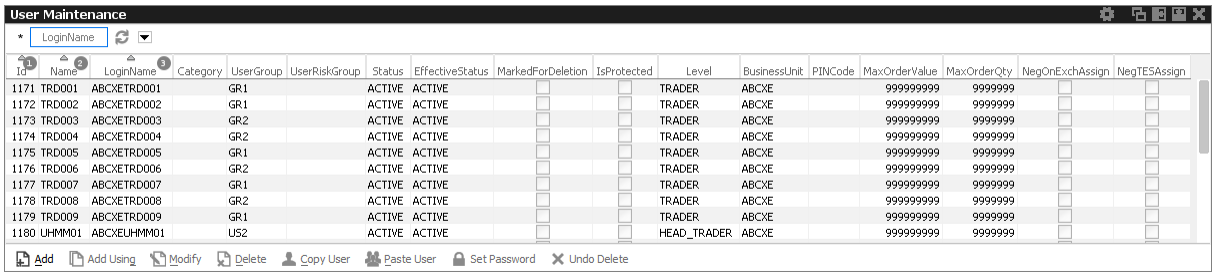


Fig. 97: Screenshot of the *User Maintenance* view

Actions are provided on the *User Maintenance* view that allows the modification and creation of users, also the creation on the basis of a selected user (Add Using) is supported. Deletion of a user is also provided, but user deletions will not be processed immediately - instead, a deleted user is marked for deletion, and will be removed during the nightly batch. New users will be setup, and existing users can be maintained using the *User Maintenance Wizard*, which opens for the *Add* and *Modify* function.

User Maintenance view, columns that are displayed (some columns might be hidden by default):

Field	Description
Id	Id number of the user, provided by the system
Name	The Name is the LoginName minus the Business Unit name
LoginName	Login Name, this is the ID of the exchange account to Cash Markets Exchange's T7
Category	If applicable this field should be set by the service administrator when setting up a user. Trader with names starting with "OR" or "UR" must be marked with the category "OrderRoutingSystem". Trader with names starting with "TLP" or "ULP" must be marked with the category "TraderDevelopmentProgram".
UserGroup	The name of the user group the user belongs to inside the business unit. Every group can define their own name. Each user is assigned to maximum one user group. Also referred to as user group
UserRiskGroup	The name of the User Risk Group the user belongs to inside the business unit. Every user can only belong to one group
Status	The current trading status of the user. This status reflects whether or not the user has been suspended from trading using the Stop Trading function. This status does not reflect the trader examination status: • Active – if the user is not suspended from trading. • Suspended – the user is temporarily suspended from trading.
EffectiveStatus	The EffectiveStatus describes the effective trading status of the user. This status combines the trading status of the selected user and the trading status of the user's business unit. The status can be: • Active – if the user is not suspended from trading. • Suspended – either the user or the business unit is suspended from trading.
MarkedForDeletion	Indicates whether the user is marked for deletion
IsProtected	Indicates whether user is protected from deletion. Via this flag it is prevented that the last service administrator deletes the own account

Level	The level determines if the user may see orders and trades of other users of the same user group or business unit: The trader level may not see orders and trades of other traders of the same trader group. The head trader can see orders and trades of all users within the same user group. The supervisor can see orders and trades of all users within the same business unit
BU	Business unit of the user. Identical to the BU of the logged in service administrator
PINCode	Encrypted four character code needed when contacting Cash Market Supervision to authorize a "Mass Deletion" of orders/quotes
MaxOrderValue	Maximum order value for user. Based on calculation *Qty* $\times$ *Orderlimit*
MaxOrderQty	Maximum order quantity for user. Conditional mandatory based on market parameter OrderQtyValidationRule
NegOnExchAssgn	Flag indicates whether negative Trader examination is still active for user
NegTESAssign	Flag indicates whether negative TES role assignment is still active for user
NonCCP	Indicates whether trading a non-CCP instrument is allowed.

User Maintenance Wizard

The *User Maintenance Wizard* is a step by step process of setting up a new user or maintaining an existing user. The setup workflow consists of the following steps, in the order of appearance. Each step is displayed in a separate tab of the *User Maintenance Wizard*. Some tabs are described in separate chapters, Please check the references:

1. General Attributes tab: definition of the user attributes
2. On-Exch Attributes & Roles tabs: assignment of entitlement roles
3. On-Exch Roles: assign On-Exchange roles to Market Groups
4. TES Attributes: maintain entitlement of TES trade types and TES roles
5. TES Roles: assign TES roles to Market Groups

Please note that in contrast to the handling of user attributes in Derivative Markets, the user group of a Cash Markets user is a mandatory field (in the GUI).

Entitlement View, Roles and GUIs

During the *User Maintenance Wizard* process entitlement roles and attributes are granted or revoked. For a better understanding some helpful details on entitlement are provided prior to explaining the individual setup steps .

A user which is set up using the setup process is automatically assigned with a role containing negative entitlements which effectively prevents the user from trading until this role has been removed by Cash Markets Exchange. The role containing negative entitlements will be displayed on this tab if assigned - but in case it is displayed, it cannot be changed or removed by the service administrator.

The following table gives a detailed overview about the available combinations of view and maintenance access for the different roles in the applications:

	Trader, Market Maker, Trading View User	**Service Administrator**
Cash Admin	View only at a user level	Maintenance access on user level

Fig. 98: Access levels for different users for the *Entitlement* tab

Entitlement is the combination of a product assignment group with a role - the *Entitlement* tab looks at the entitlements from the perspective of the product assignment groups to see their roles assigned.

In the example below, the column *MarketGroup* denotes the product assignment group where the columns (TRADING VIEW, CASH TRADER etc.) denote the respective role. A set checkbox for the combination of a role and market group indicates that this combination of market group and role is assigned to the user.

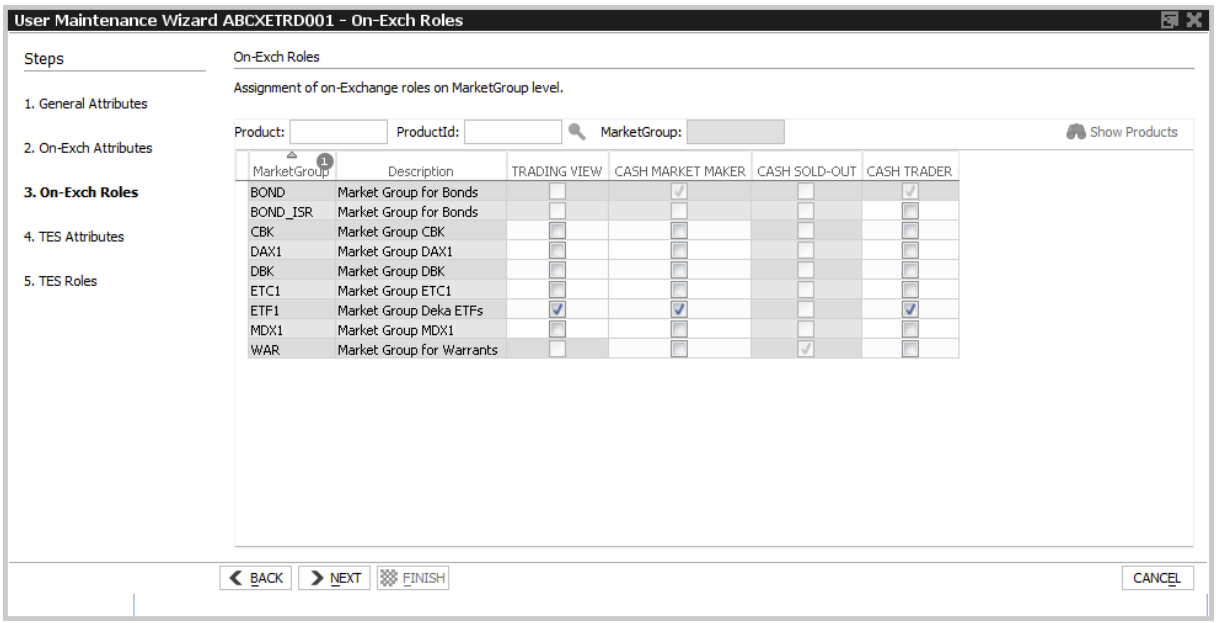


Fig. 99: Screenshot of the *User Maintenance Wizard* showing the entitlement roles on the *On-Exch Roles* tab

In this example the roles “Cash Market Maker” and “Cash Trader” are assigned to the respective market group(s), often also referred to as product assignment group(s). The assignment can be given or taken away by clicking on the respective checkbox in the role columns.

Please note: Changes to the entitlement profile of the user will be effective in the next time the user logs in. However, changes are immediately effective on the ETI interface. In case entitlements have been removed from the user, those changes will also immediately prevent the entry of orders

in the Cash Trader GUI.

Table of the *Entitlement* tab, *MarketGroup* level:

Field	Description
MarketGroup	Market group
Description	Description of the market group
TRADER	Entitlement role "Trader"
MARKET MAKER	Entitlement role "Market Maker"
...	Entitlement roles

Table of the *Entitlement* tab, *Product* level:

Field	Description
Product	Product
LongName	Product long name

User Maintenance - General Attributes

The *General Attributes* tab features a list of mandatory fields that need to be maintained for the setup of the user. As soon as all mandatory fields are correctly filled, the *Next* button is enabled to provide access to the next step of the user setup process.

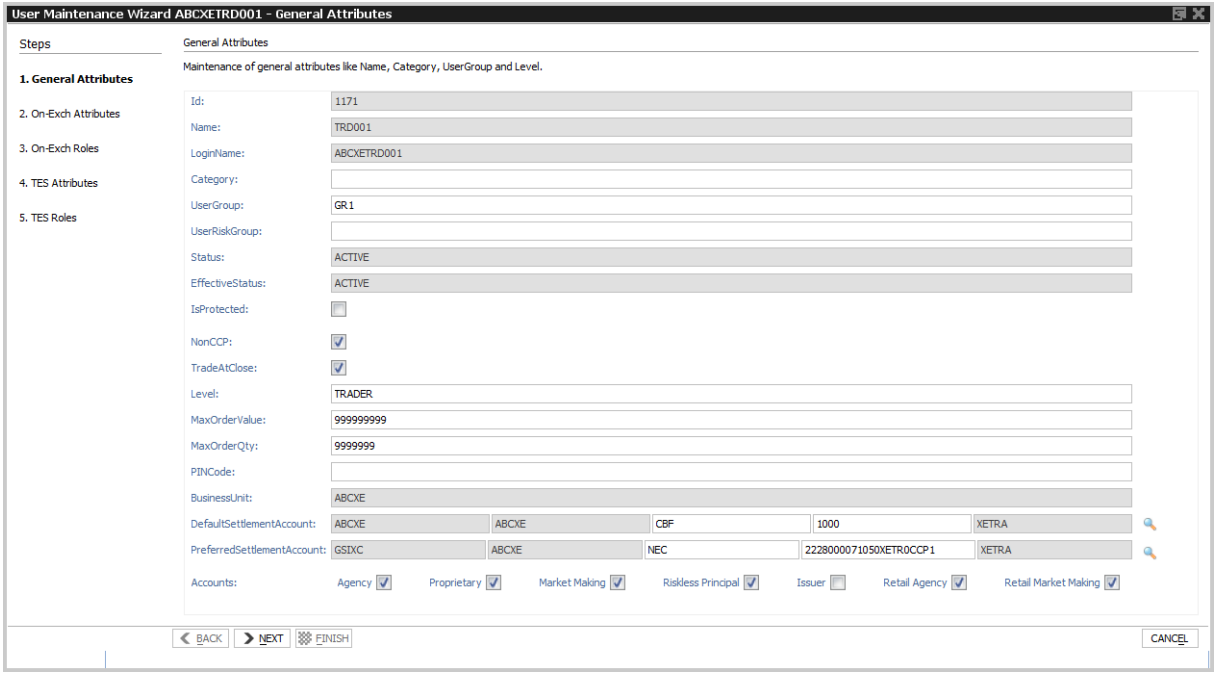


Fig. 100: Screenshot of the *User Maintenance Wizard* showing the *General Attributes* tab

Field description of *General Attributes* :

Field	Description
Id	Id number of the user, provided by the system
Name	The LoginName is constructed by adding this Name to the BusinessUnit
LoginName	LoginName, this is the ID of the exchange account to Cash Markets Exchange's T7. For a new user the LoginName is automatically created by adding the Name to the BusinessUnit
Category	If applicable this field should be set by the service administrator when setting up a user. Trader with names starting with "OR" or "UR" must be marked with the category "OrderRoutingSystem". Trader with names starting with "TLP" or "ULP" must be marked with the category "TraderDevelopmentProgram".
UserGroup	The name of the user group the user belongs to inside the business unit. Every group can define their own name. Each user is assigned to maximum one user group. Also referred to as user group. This field is mandatory.
UserRiskGroup	The name of the User Risk Group the user belongs to inside the business unit. Every user can only belong to one group
Status	The current trading status of the user. This status reflects whether or not the user has been suspended from trading using the Stop Trading function. This status does not reflect the trader examination status: • Active – if the user is not suspended from trading. • Suspended – the user is temporarily suspended from trading.
EffectiveStatus	The EffectiveStatus describes the effective trading status of the user. This status combines the trading status of the selected user and the trading status of the users business unit. The status can be: • Active – if the user is not suspended from trading. • Suspended – either the user or the business unit is suspended from trading.
IsProtected	Marks the user as to be protected from deletion. If this flag is set, the last service administrator is prevented from deleting their own account
NonCCP	*Allow Non-CCP trading*. If ticked, the user is allowed to trade non-CCP instruments. Flag can be changed intraday with changes taking effect on the next business day

TradeAtClose	Abbreviated as `TaC` in Order Entry. Defines the default value for order entry if the individual flag per order is neither true nor false. If ticked, all regular orders that fulfill the opt-in constraints will participate in TaC phase. Can be changed intraday with immediate effect
Level	The level determines if the user may see orders and trades of other users of the same user group or business unit: The trader level may not see orders and trades of other traders of the same trader group. The head trader can see orders and trades of all users in their own user group. The supervisor can see orders and trades of all users in their own business unit
MaxOrderValue	Maximum order value for user. Based on calculation *Qty* $\times$ *Orderlimit*
MaxOrderQty	Maximum order quantity for user. Conditional mandatory based on market parameter `OrderQtyValidationRule`
PINCode	Encrypted four character code needed when contacting Cash Market Supervision to authorize a "Mass Deletion" of orders/quotes
BU	Business Unit
Default Settlement Account	Default & mandatory settlement account information for multiple CCP: *MemberID SettlementInstitute - MemberID Trading Participant - Settlement Location - Settlement Account* By clicking the icon, associated settlement accounts are listed in a seperate view.
Preferred Settlement Account	Preferred & optional settlement account information for multiple CCP: *MemberID SettlementInstitute - MemberID Trading Participant - Settlement Location - Settlement Account* By clicking the icon, associated settlement accounts are listed in a seperate view
Agency	Allow the entry of orders for the trading capacity A
MarketMaking	Allow the entry of orders for the trading capacity M
Proprietary	Allow the entry of orders for the trading capacity P
RisklessPrincipal	Enables usage of Riskless Principal account.
Issuer	Enables usage of Issuer account, i.e. specific actions for Cash Specialist.
RetailAgency	Entitles the participant to submit Retail orders (B1) as Retail Member Organization (RMO)

RetailMarketMaking	Entitles the participant to submit Retail Liquidity Quotes/Orders as Retail Liquidity Provider (RLP)

User Maintenance - On-Exchange Attributes and Roles

The *On-Exchange Attributes* and *On-Exch Roles* tabs support the maintenance (assignment & de-assignment) of entitlement roles to a user. These tabs are provided in *Cash Admin* and *Cash Clearer* to the service administrator for maintenance access at user level.

The difference of the On-Exchange Attributes and On-Exch Roles tab is that the On-Exchange Attributes control the generic user entitlement free of market context, whereas the On-Exch Roles control the entitlements per market group.

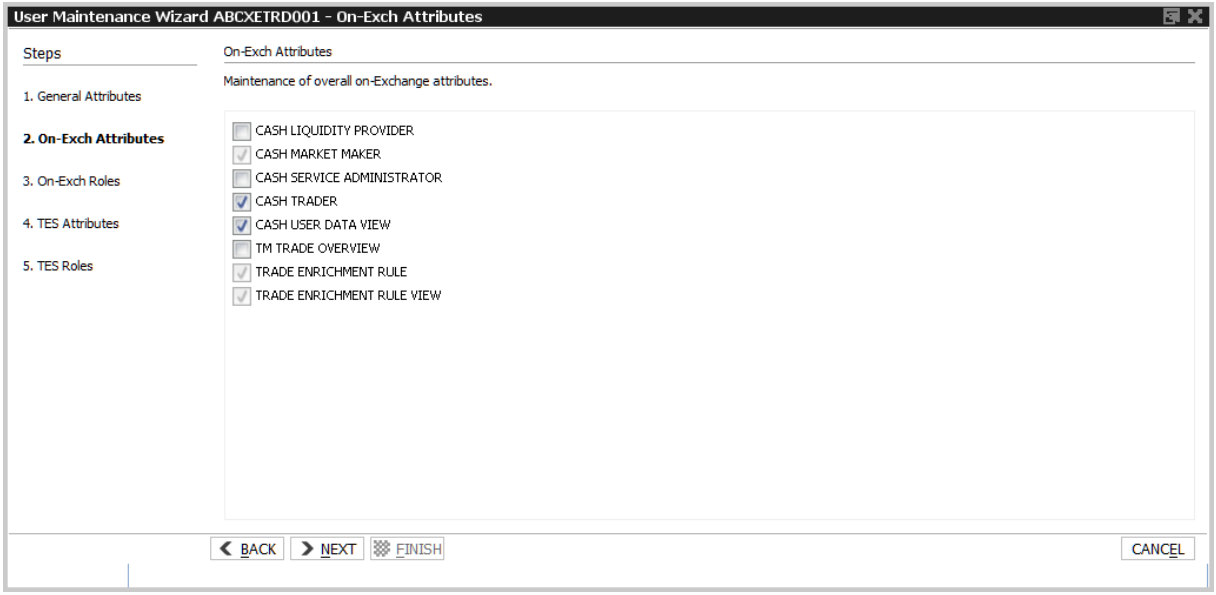


Fig. 101: Screenshot of the *User Maintenance Wizard* showing the *Attributes* tab

User Maintenance - TES Attributes

The *TES Attributes* and *TES Roles* tabs support the maintenance (assignment & deassignment) of TES specific entitlement attributes and roles to a user.

The TES Attributes tab allows to maintain the T7 Entry Service eligibility per TES type free of market context.

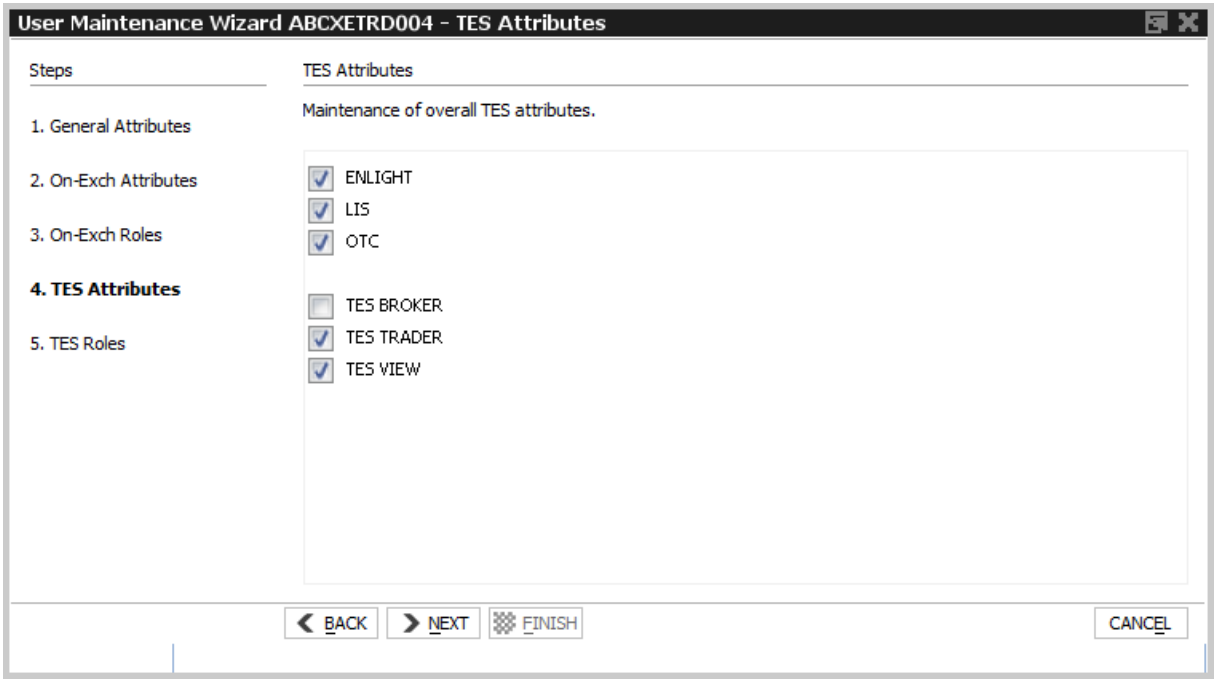


Fig. 102: Screenshot of the *User Maintenance Wizard* showing the *TES attributes* tab

User Maintenance - TES Roles

The *TES Roles* tab supports assigning TES specific roles to a user in a market group specific context. A Product or Product ID can be searched for to reveal the Market group which contains the product.

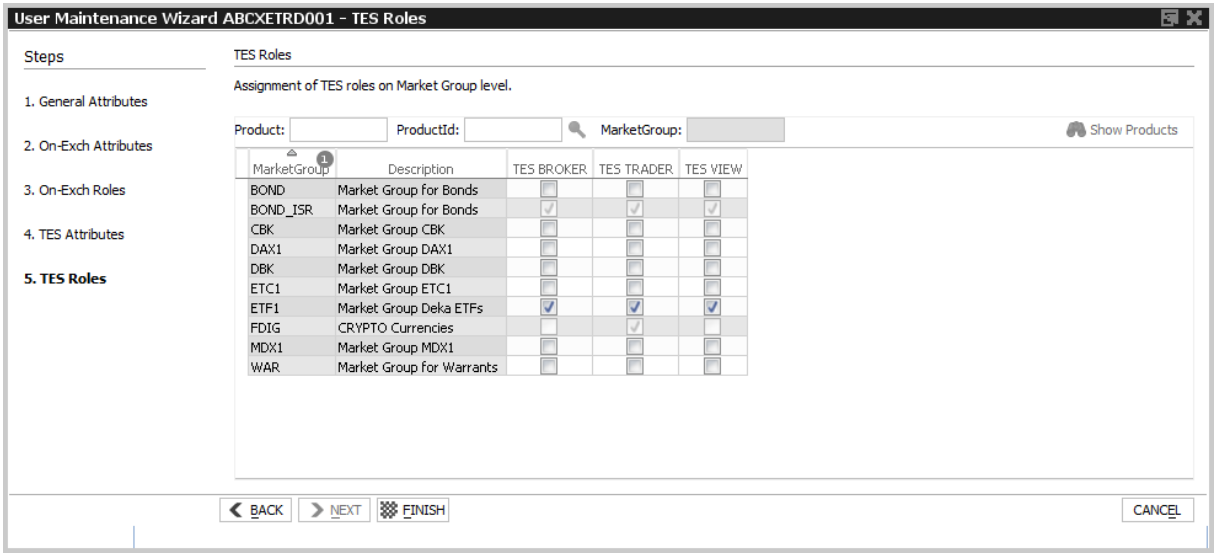


Fig. 103: Screenshot of the *User Maintenance Wizard* showing the *TES roles* tab

Entitlement View, Roles and GUIs

A user which is set up using the setup process is automatically assigned with a role containing negative entitlements which effectively prevents the user from trading until this role has been removed

by Cash Markets Exchange. The role containing negative entitlements will be displayed on this tab if assigned - but in case it is displayed, it cannot be changed or removed by the service administrator.

The following table gives a detailed overview about the available combinations of view and maintenance access for the different roles in the applications:

	Trader, Market Maker, Trading View User	**Service Administrator**
Cash Admin	View only at a user level	Maintenance access on user level

Fig. 104: Access levels for different users for the *Entitlement* tab

Entitlement is the combination of a product assignment group with a role - the *Entitlement* tab looks at the entitlements from the perspective of the product assignment groups to see their roles assigned.

In the example below, the column *MarketGroup* denotes the product assignment group where the columns USER DATA VIEW, TRADING VIEW, etc. denote the respective role. A set checkbox for the combination of a role and market group indicates that this combination of market group and role is assigned to the user.

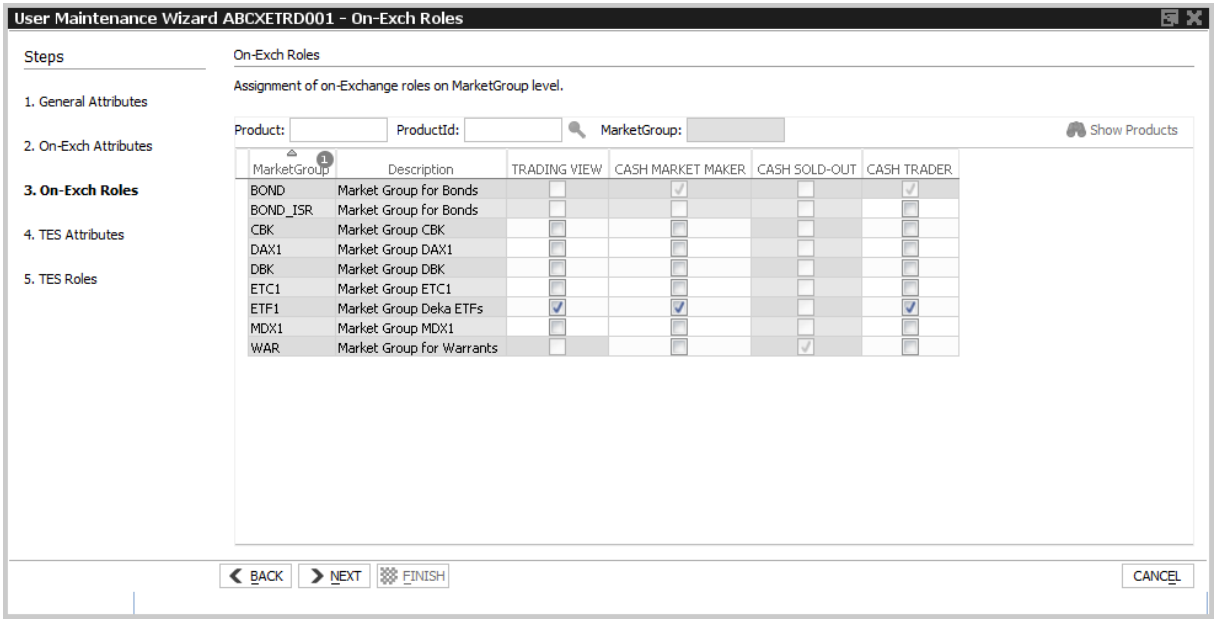


Fig. 105: Screenshot of the *User Maintenance Wizard* showing the entitlement roles on the *On-Exch Roles* tab

In this example the roles “Cash Market Maker” and “Cash Trader” are assigned to the respective market group(s), often also referred to as product assignment group(s).

The assignment can be given or taken away by clicking on the respective checkbox in the role columns.

Please note: Changes to the entitlement profile of the user will be effective in the next time the user logs in. However, changes are immediately effective on the ETI interface. In case entitlements have been removed from the user, those changes will also immediately prevent the entry of orders in the Cash Trader GUI.

Table of the *Entitlement* tab, *MarketGroup* level:

Field	Description
MarketGroup	Market group
Description	Description of the market group
TRADER	Entitlement role "Trader"
MARKET MAKER	Entitlement role "Market Maker"
...	Entitlement roles

Table of the *Entitlement* tab, *Product* level:

Field	Description
Product	Product
LongName	Product long name

User Maintenance - Set User Password

The *Set User Password* dialog allows you to set or change the password of a user.

The *Master User* and *Master Password* need to be filled with the credentials of the operating service administrator. The *On Behalf* field displays the login name of the user which is currently being maintained. The *Generate Password* button allows you to generate a new password. This generated password is then displayed in clear text in the Generated Password field, it is also populated in the *New Password* and *Confirm Password* fields.

As a convenience, the password is also copied into the clipboard, which allows pasting it.

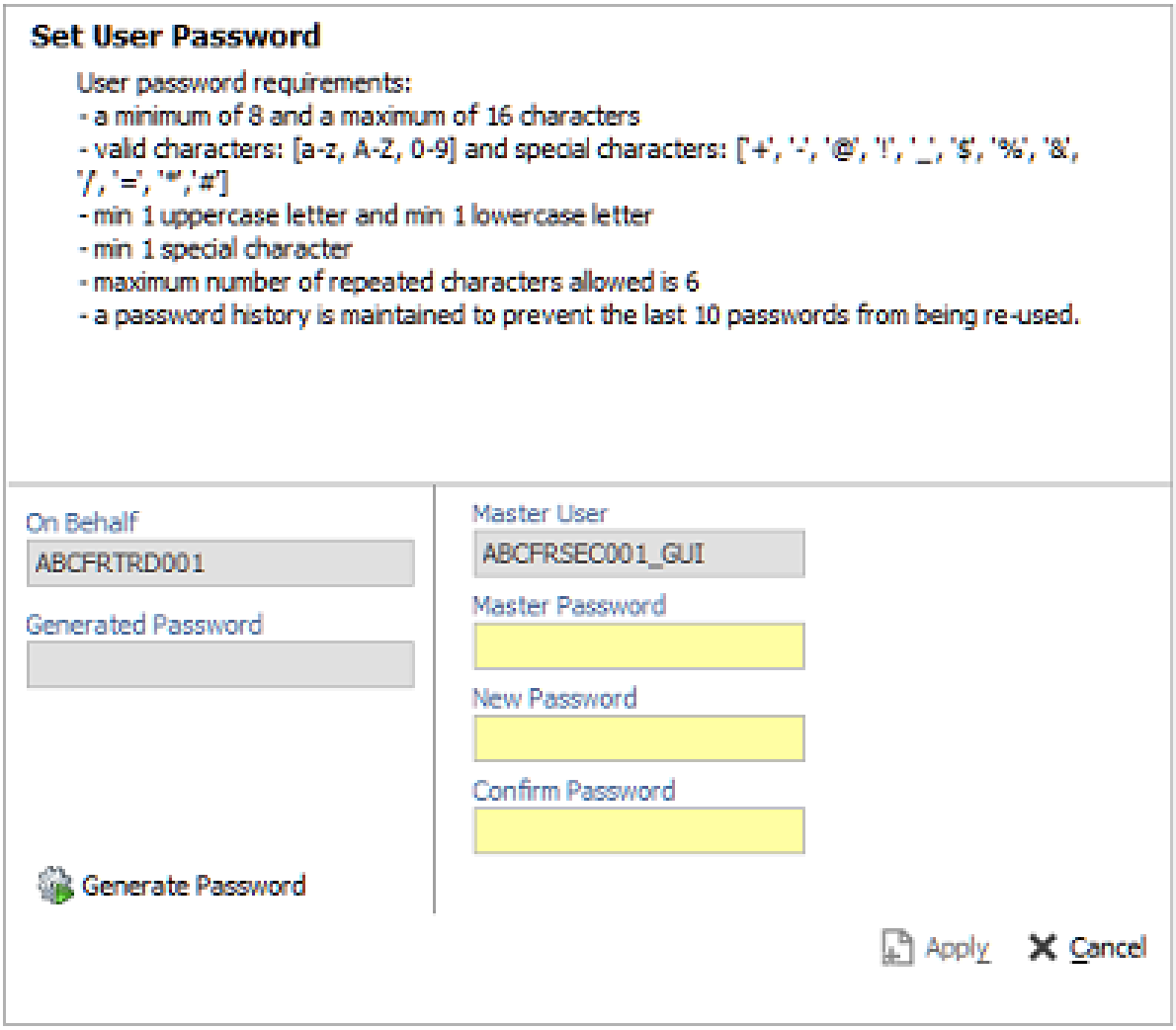


Fig. 106: Screenshot of the *User Setup Dialog*

4.2.9 EDC Access Requests

The view *EDC Access Requests* supports the admin member in approving or rejecting requests to share order broadcasts by using the Enhanced Drop Copy interface.

The view is split into two tabs - the *EDC Access Requests* ***Current*** and the *EDC Access Requests* ***Preview***. The former displays the currently active requests while the latter is used to approve or revoke Access Requests from a CM.

The admin user first selects a request and then one of the available actions before submitting the choice by pressing *Apply*. Approving a request additionally requires to accept a legal notice. If an request has been revoked by mistake it can be undone by clicking *Undo Revoke*.

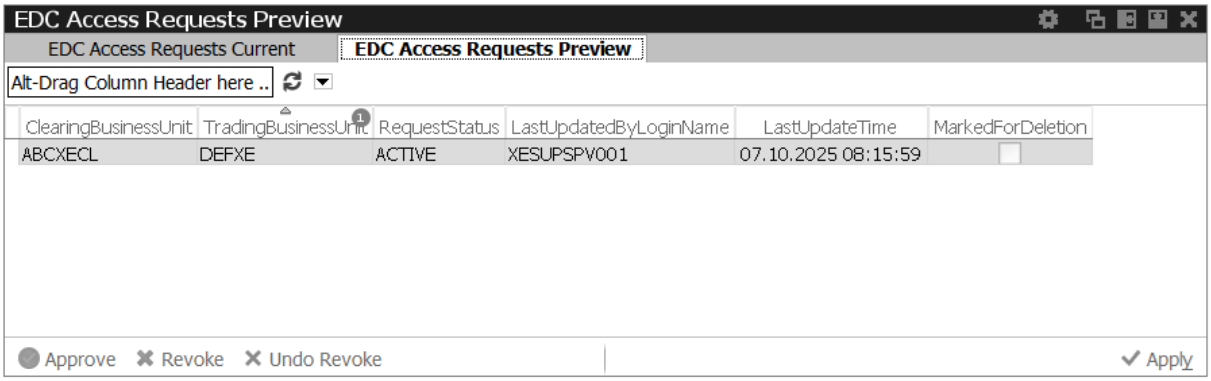


Fig. 107: Screenshot of the *EDC Access Requests* view depicting the preview tab

Available actions on the *EDC Access Requests* view:

Action	Description
Approve	Prepare to approve the selected EDC request
Revoke	Prepare to revoke the selected EDC request
Undo Revoke	Prepare to undo a previous revoke action
Apply	Submits the prepared action

4.2.10 EDC Session Configuration

The *EDC Session Configuration* view allows to inquire, add and delete (disable) EDC session configuration(s) for which the order broadcast should be shared.

The view is split into two tabs - the *EDC Session Configuration Current* and *EDC Session Configuration Preview*. The former displays the currently active session configurations while the latter is used to display and create sessions which become active on the next trading day.

A new record can be added manually or imported via the view's import function - either by clicking the settings icon and choosing *Import* or via the GUI menu *View -> Import*. An active session configuration (i.e. the order broadcast) can be disabled or fully deleted. A deletion by mistake may be revoked by *Undo Delete*. A deletion of a configuration created on the same day will be removed instantly from the view. Otherwise the flag *MarkedForDeletetion* is set and indicates the pending deletion operation (becomes effective the next day).

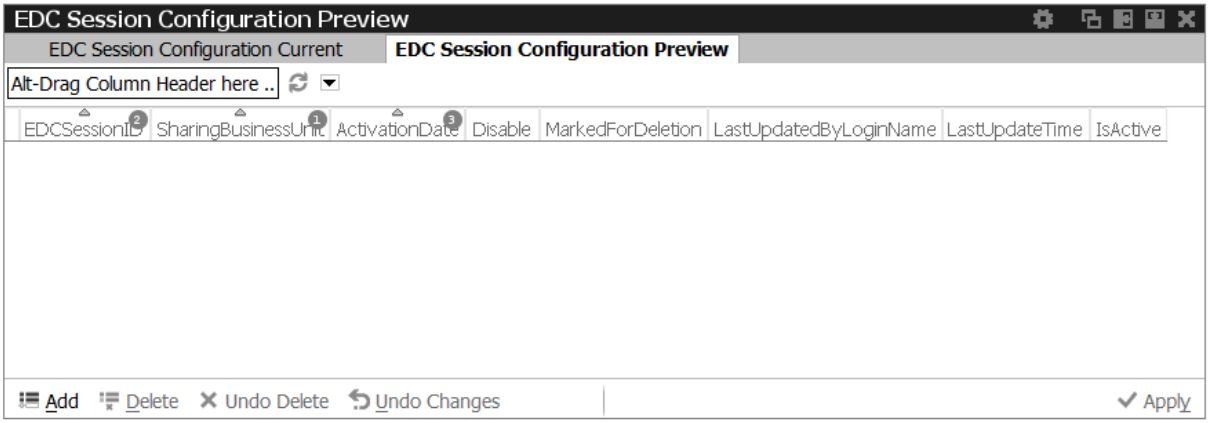


Fig. 108: Illustrative Screenshot of the *EDC Session Configuration* view depicting the preview tab

5 Cash Clearer GUI

The *Cash Clearer* application is provided to clearing participants for the use by the back office and risk staff and user data view users.

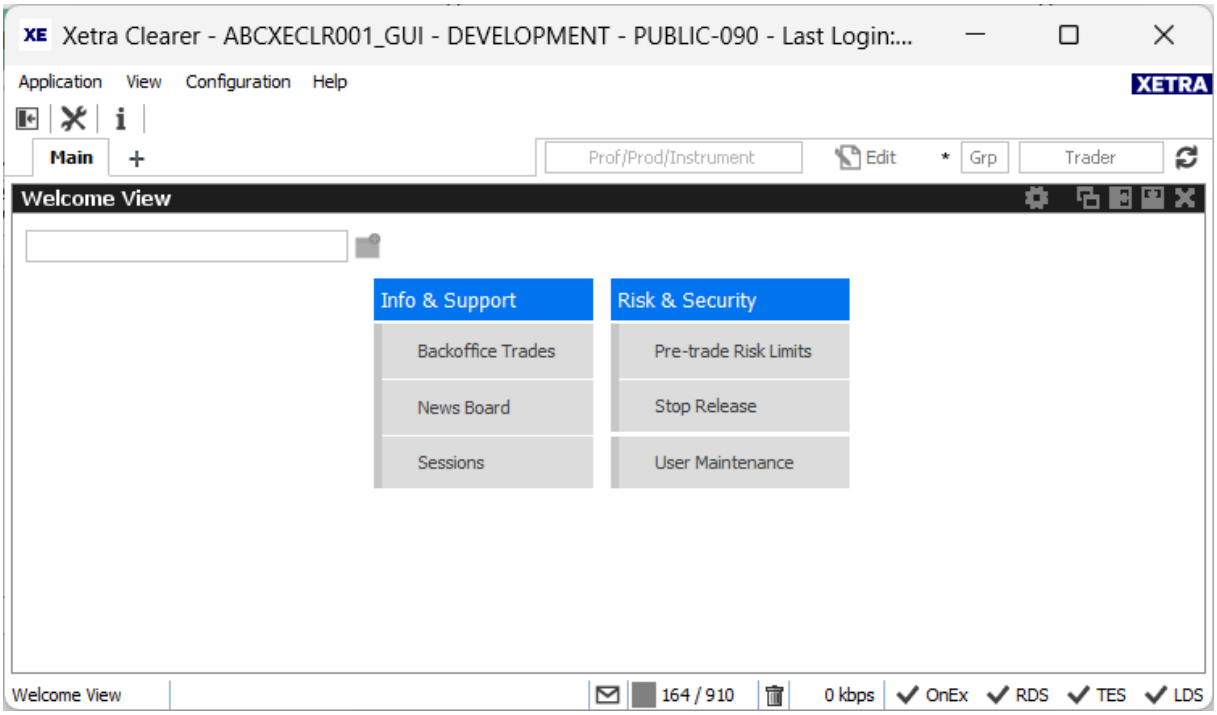


Fig. 109: Screenshot of the *Cash Clearer* main window showing the *Welcome* view

Please refer to section 2 General GUI Concepts and Functions for a general description on how to use the application and how to access these functions using the *Welcome* view.

Only properly entitled users have access to functions provided in this member GUI.

5.1 View Descriptions: Info & Support

5.1.1 Backoffice Trades

The *Backoffice Trades* view is almost identical to the Trades view of Cash Trader, with the exception that the trade summary rows cannot be expanded, e.g. the partial matches are not displayed in this view.

For a description of this view Please refer to chapter 3.4.3 Trades.

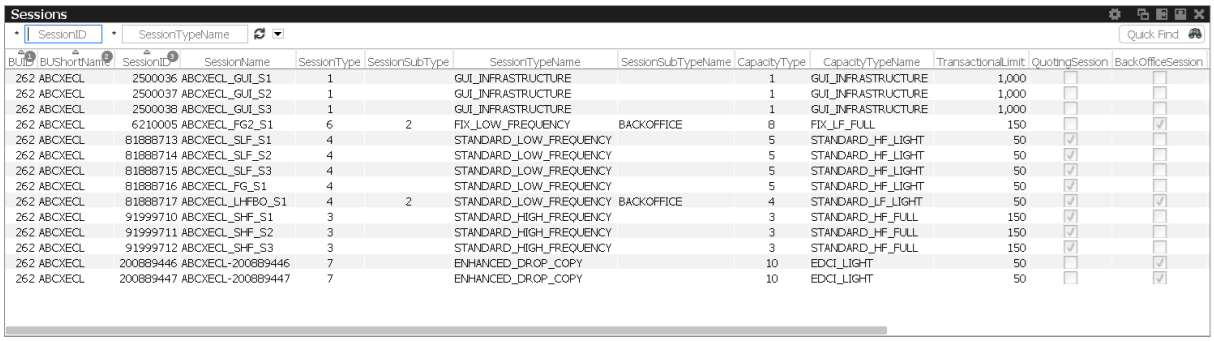
5.1.2 News Board

The *News Board* view displays important public and private trading relevant messages. The messages can be filtered according to their privacy type, source and category. The view is updated automatically. Messages are sorted descending by date and time.

This view is identical to Cash Trader, for more details Please refer to section 3.5.4 News Board.

5.1.3 Sessions

The *Sessions* view provides an overview of all active sessions of the Clearing Member. The view also provides the mapping between SessionID, SessionName and displays the SessionType along with the CapacityType of the respective session.



BUID	BUShortName	SessionID	SessionName	SessionType	SessionSubType	SessionTypeName	SessionSubTypeName	CapacityType	CapacityTypeName	TransactionalLimit	QuotingSession	BackOfficeSession
262	ABCXECL	2500036	ABCXECL_GUI_S1	1		GUI_INFRASTRUCTURE		1	GUI_INFRASTRUCTURE	1,000		
262	ABCXECL	2500037	ABCXECL_GUI_S2	1		GUI_INFRASTRUCTURE		1	GUI_INFRASTRUCTURE	1,000		
262	ABCXECL	2500038	ABCXECL_GUI_S3	1		GUI_INFRASTRUCTURE		1	GUI_INFRASTRUCTURE	1,000		
262	ABCXECL	6210005	ABCXECL_FG2_S1	6	2	FIX_LOW_FREQUENCY	BACKOFFICE	8	FIX_LF_FULL	150		✓
262	ABCXECL	81888713	ABCXECL_SLF_S1	4		STANDARD_LOW_FREQUENCY		5	STANDARD_HF_LIGHT	50	✓	
262	ABCXECL	81888714	ABCXECL_SLF_S2	4		STANDARD_LOW_FREQUENCY		5	STANDARD_HF_LIGHT	50	✓	
262	ABCXECL	81888715	ABCXECL_SLF_S3	4		STANDARD_LOW_FREQUENCY		5	STANDARD_HF_LIGHT	50	✓	
262	ABCXECL	81888716	ABCXECL_FG_S1	4		STANDARD_LOW_FREQUENCY		5	STANDARD_HF_LIGHT	50	✓	
262	ABCXECL	81888717	ABCXECL_LHFBO_S1	4	2	STANDARD_LOW_FREQUENCY	BACKOFFICE	4	STANDARD_LF_LIGHT	50	✓	✓
262	ABCXECL	91999710	ABCXECL_SHF_S1	3		STANDARD_HIGH_FREQUENCY		3	STANDARD_HF_FULL	150	✓	
262	ABCXECL	91999711	ABCXECL_SHF_S2	3		STANDARD_HIGH_FREQUENCY		3	STANDARD_HF_FULL	150	✓	
262	ABCXECL	91999712	ABCXECL_SHF_S3	3		STANDARD_HIGH_FREQUENCY		3	STANDARD_HF_FULL	150	✓	
262	ABCXECL	200889446	ABCXECL-200889446	7		ENHANCED_DROP_COPY		10	EDCI_LIGHT	50		✓
262	ABCXECL	200889447	ABCXECL-200889447	7		ENHANCED_DROP_COPY		10	EDCI_LIGHT	50		✓

Fig. 110: Screenshot of the *Sessions* view (not all columns visible)

5.2 View Descriptions: Risk & Security

5.2.1 Pre-trade Risk Limits

The *Pre-trade Risk Limits* view allows entitled participants to define and maintain limits for the daily maximum notional value of all entries, modifications and executions of orders and quotes per product and trading side.

Only products that have been defined to be eligible for the Pre-Trade Risk Limit check can be viewed and maintained. Viewing and adding action for this view are controlled by two different entitlements.

This view is not updated automatically.

In general, Pre-trade risk limits can be set for three risk limit types (-levels), separately for the buy and sell side:

1. Exchange level (EXCH_FOR_BU): Cash Market Supervision defines PTRLs for any Business Unit (BU) using the Cash Controller GUI.
2. Clearer level (CM_FOR_BU): Clearing members define PTRLs for their related non-clearing member using the Cash Clearer GUI. *Kindly note,* a Settlement Institute (SI) member will not be able to define PTRLs for its non-clearing members.
3. BU level (BU_RISK_GROUP): Properly entitled (admin) participant defining risk limits for its User Risk groups using the Cash Admin GUI.

The newly entered Pre-trade risk limits will be enabled on the date specified in the field *Activation-Date*, i.e activating limits intraday is not permitted. If *ActivationDate* is empty, the limits are active.

To then have the limit figures take effect, any positive number greater '0' needs to be entered. If no value is set, trader can enter transactions without any limit. Contrary, a value of '0' restricts the trader completely.

The *Pre-trade Risk Limits* view allows entitled Clearing members to maintain Pre-Trade risk limits on product level for the traded notional value of on-book transactions. Properly entitled Clearing Members can maintain risk limits for their NCMs and own BU NCMs.

New limits can be created by adding them manually or by importing them. When adding manually, Cash GUI provides a convenience feature **by duplicating all data entered for the first record** to all displayed records below. To achieve this the view will display "empty" records, ie. records of PTRL eligible products without defined limit values.

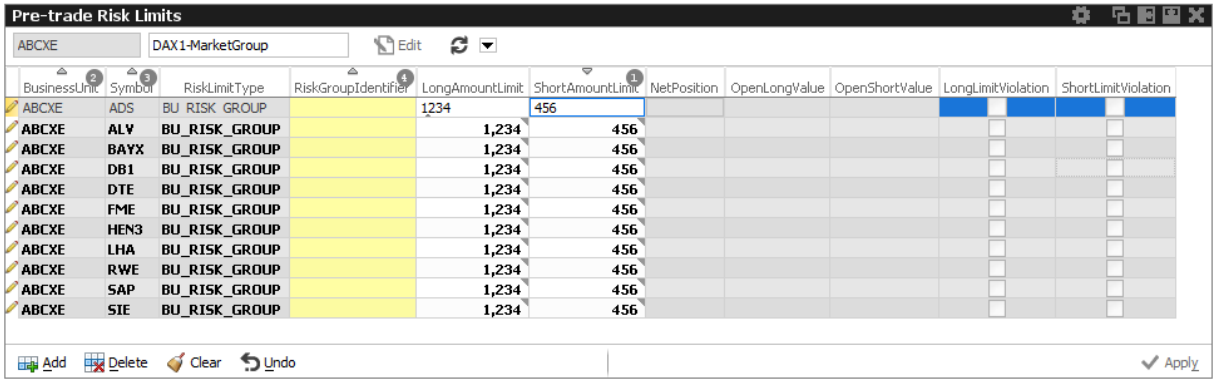


Fig. 111: Screenshot of the *Pre-trade Risk Limit* view, depicting how GUI duplicates data entry on first record

The view supports incremental updates, i.e. new limits can be added or existing limits can be amended without affecting existing records which are supposed to remain unchanged. One example would be to set limits on Product Assignment Group (PAG) level by

1. using the *Prof/Prod/Instrument* filter to display records for a specific PAG,
2. export this subset,
3. import the amended subset without affecting other records.

After an import the view needs to be refreshed to display all limits records again. Deleting limits has to be done manually in the view which is eased again by using the filtering on top of the view. Besides deleting individual limits, the Clearing Member may stop a dedicated member in a specific product by ticking the `DisableMbr` flag. This disables entering orders/quotes and deletes existing ones.

Columns of the *Pre-trade Risk limits* view:

Field	Description
BU	Business unit name of the user.
Product	Product name.

RiskLimitType	Risk group level, e.g. EXCH_FOR_BU CM_FOR_BU BU_RISK_GROUP
LongAmountLimit	Maximum long amount allowed. '0' means trader is restricted; no value means no limits are set at all.
ShortAmountLimit	Maximum short amount allowed. '0' means trader is restricted; no value means no limits are set at all.
NetPosition	Current market position for this limit. *Display only*.
OpenLongValue	Current open long value. *Display only*.
OpenShortValue	Current open short value. *Display only*.
ActivationDate	Newly entered PTRL will become valid at *ActivationDate.* If the field is empty, the limits are active.
LongLimitViolation	Flag indicating long limit violated. *Display only*.
ShortLimitViolation	Flag indicating short limit violated. *Display only*.
DisableMbr	If ticked, all order/quotes for the selected member and product will be deleted and entry of new transactions will be blocked. Only Clearing Member may change this flag.

5.2.2 Stop Release

The *Stop Release* functionality in the Cash Markets Clearer T7 GUI provides `Stop` and `Release` actions to authorized users. The *Stop Release* view also serves as an overview of the current status of all NCMs the clearing member has a clearing relation with.

Fig. 112: Screenshot of the *Stop Release Business Unit* view

The `Stop` and `Release` actions are effective for an entire business unit in a particular market. They

can only be performed by a `Supervisor` user with the `Clearing Member Stop` role assigned. A successful `Stop` action prevents a business unit from entering any orders or quotes. To prevent any existing orders and quotes from matching, *Stop Business Unit* additionally triggers the Risk Controls ("Panic Cancel") function, which deletes all active orders and quotes for the stopped business unit.

Field	Description
ID	Business unit Id
BU	Business unit name
State	Stop/Release state: OK / Stopped
StopTime	Timestamp of the effective stop action (after approval)
StoppedBy	Member stopped by user Id
OnBehalfOf	On behalf of user Id
StopTimeClearer	Time when stopped by Clearer
StoppedByClearer	Stopped by Clearer user Id
StopTimeMS	Time when stopped by Market Supervision
StoppedByMS	Stopped by MOps user Id

5.2.3 User Maintenance

The *User Maintenance* view provides an overview of the users that are set up in the business unit of the logged in Clearing member.

This view is identical to Cash Admin, for a description of this view Please refer to chapter 4.2.8 User Maintenance.

5.2.4 Backoffice Trades

The *Backoffice Trades* view is almost identical to the Trades view of Cash Trader, with the exception that the trade summary rows cannot be expanded, e.g. the partial matches are not displayed in this view.

For a description of this view Please refer to chapter 3.4.3 Trades.

6 Change Log

$$dis \tag{1}$$

Rel.	Chapter	Date	Change
11.1	4.2.7,5.2.3	10-FEB-2023	New field *ActivationDate* for PTRL
12.0	3.4.1	13-MAR-2023	BBO flag for orders
12.0	3.2.x, 3.4.1/3, 3.5.1	21-APR-2023	Decommision of Volume Discovery Orders
12.0	(Whole document)	21-APR-2023	Changes due to MIFID 2 regime
12.0	3.2.1, 3.5.1/2,4.2.7	16-JUN-2023	Xetra Retail Execution
12.0	3.3.4, 3.4.6	30-JUN-2023	TES TradePublishIndicator added
12.0	2.6	06-OCT-2023	Exe* and Inv* fields added
12.0	2.8.4	01-DEC-2023	Textfield Config: *Delete All* & *Save Path* added
13.0	3.2.1, 3.3.1, 3.4.x	07-JUN-2024	Midpoint matching
13.0	1.3, 3.3.1, 3.4.x	03-SEP-2024	New field for Midpoint order type
13.0	3.3.1, 3.4.1	09-SEP-2024	Midpoint Self-Cross Prevention (SCP)
13.0	3.3.3	07-OCT-2024	Quote Activation State enhanced
13.1	4.2.7, 4.2.8	22-NOV-2024	Display Settlement Accounts
13.1.	3.4.6	07-APR-2024	TES View: *TradeReportID* added
14.0	3.3.1, 3.4.1	16-APR-2025	Retail: Extension of Trading Hours
14.0	2.x	13-JUN-2025	Update *General GUI Concepts* screenshots
14.0	3.3.1, 3.4.1	09-JUL-2025	SMP enhancements
14.0	1.3, 3.3.6, 3.3.7	20-AUG-2025	*OTC Trade Upload* enhancements
14.1	4.2.9, 4.2.10	5-DEC-2025	Enhanced Drop Copy (EDC)
14.1	3.2.1, 3.3.1, 3.4.x	30-JAN-2026	Auction Volume Discovery
14.1	3.3.1	20-MAY-2026	MOV validation added to Order Entry
15.0	4.2.4.	30-JUN-2026	Optional 2EP workflow added for Stop user
15.0	3.3.1, 3.4.x	10-JUL-2026	New order restrictions for Midpoint orders