

MIAX Futures Clearing System User Manual

Modified November 2024



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1. Introduction

The MIAX Futures Clearing System ("MCS") is a novel clearing solution designed to be an all-in-one platform for trade, position, and allocation management with an emphasis on usability, interoperability, and scalability by asset class, product type, and venue.

MCS is designed to provide users with rapid, reliable data access and communication features, all delivered via an intuitive user interface (portal). MCS also integrates full-featured, standards-based APIs to enable automation and streamlining of member firm clearing operations.

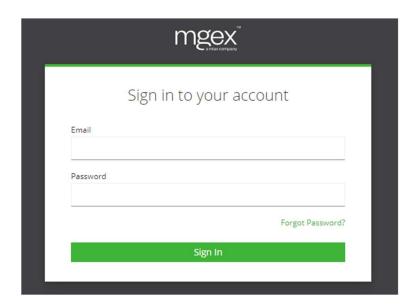
This document will introduce users to the core features of MCS, including general table and query utilities, trade and allocation management, and position reporting.

1.1 Signing In

To access MCS in production:

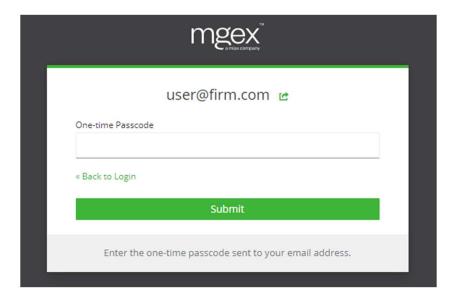
- 1. Enter the URL for MCS, https://portal.mgex.com, in a web browser
- 2. Enter your username/email address and password
 - a. If you are unsure if an account has been created for you in MCS, contact your firm's MIAX Futures

 Clearing Authorized Administrator or main contact with MIAX Futures
 - b. If you have not set or forgotten your password, click the **Forgot Password?** link, check your inbox for a password reset email, and follow the received instructions
- 3. Click Sign In





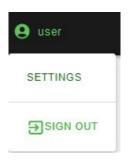
4. Check your inbox for the One-time Passcode (OTP), and type or copy-and-paste it into corresponding field in your web browser



Users will be signed out of MCS upon closing their web browser tab. Alternatively, by clicking the username in the top right of the screen, users can click SIGN OUT in the drop-down list that subsequently appears.

1.2 User Roles

According to the needs of a Member Firm's departments and staff, different user roles can be arranged for each account provided to a firm, each with different permissions within MCS. For each user, firms can either choose from two Aggregate Roles, or select from the Granular Roles to customize their users' access in MCS:



Aggregate Roles include:

- Clearing Member Viewer: Users with this role are granted all Viewer Granular Roles, allowing them to view all areas and functions in the MCS
- Clearing Member Operator: Users with this role are granted all Viewer, Manager, and Administrative Granular Roles, allowing them to view and manage all areas and functions in the MCS

Granular Roles include:

- Viewer Roles: Each viewer role grants a user access to view MCS reference data, as well as any data pertaining to the granted role. Multiple viewer roles can be granted to one account.
 - o Reference Data Viewer
 - Trade Viewer



- o Position Viewer
- o Delivery Viewer
- Settlement Viewer
- o Collateral Viewer
- Margin Viewer
- Manager Roles: Each manager role grants a user access to view MCS reference data, as well as access to view and update data pertaining to the granted role. Multiple manager roles can be granted to one account.
 - o **Trade Manager**: Permissions to submit and manage trades
 - o Position Manager: Permissions to submit and manage position reporting
 - Delivery Manager: Permissions to submit and manage delivery information, warehouse receipts, etc.
- Administrative Role: The administrative role grants a user access to view MCS reference data, add and/or update trade accounts, and manage distribution lists for MCS alerts and reports.

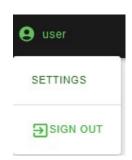
Users can view their permissions from the User Settings screen, described in section 1.3.

1.3 User Settings

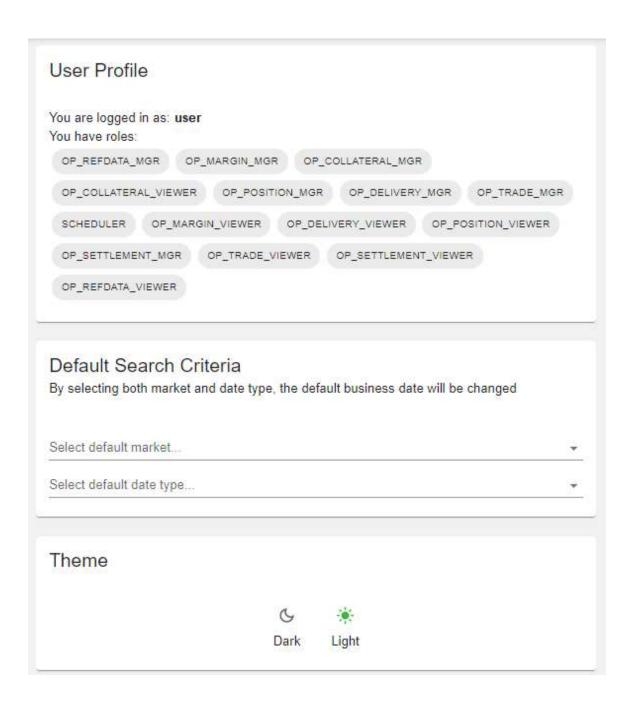
Once a user has logged in, they can view and modify their MCS experience from the User Settings screen.

To Navigate to the User Settings screen:

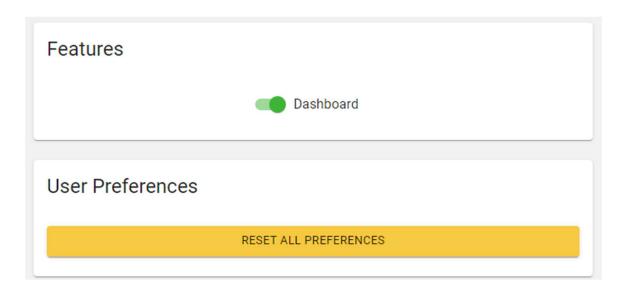
- 1. Click on the username in the upper right of the screen to open a drop-down list
- 2. Select **SETTINGS** from the drop-down











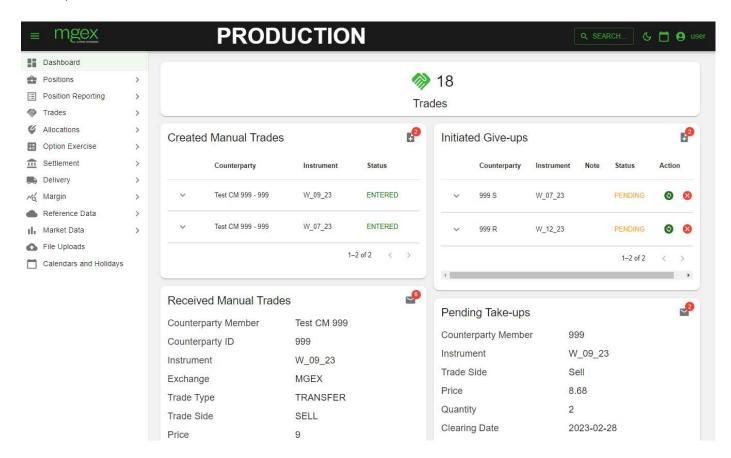
From here, users can:

- View which user permissions they have been granted in MCS
- Adjust Market and Calendar date used by default when searching and viewing MCS data
- Switch between Dark and Light themes for MCS display
- Switch between dashboard layouts
- Reset all User Settings back to the system defaults



2. Dashboard

Upon successful login, the Clearing Member's dashboard will be displayed, featuring a number of useful tools, metrics, and action items.



2.1 Banner



The banner can be found at the top of every screen in MCS portal. It hosts multiple features, including:

- 1. The Navigation Bar Menu: Allows a user to collapse or expand the Navigation Bar
- 2. The MGEX Logo: Serves as a link to the dashboard
- 3. The Search Bar: Allows users to search for screens in MCS by name



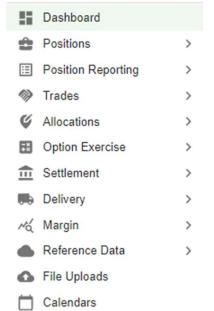
- 4. The Dark Mode Toggle: Allows users to invert MCS portal color scheme for a darker display
- 5. **The Calendar Icon**: Displays the current Trade Date and Clearing Date for each market, and the current Settlement calendar date when clicked
- 6. **The User Icon**: Displays a drop-down when clicked, with options to sign-out, view a user's account information and adjust various settings

2.2 Navigation Bar

The navigation bar, when expanded, can be found on the left side of every screen in the MCS portal. It links to every area in MCS, highlighting the screen currently being viewed in light green. These areas include:

- Dashboard: Displays a summary of a Clearing Member's pending trades, allocations, and reporting
- Positions: Displays positions and trade activity broken down by instrument
- Position Reporting: Allows users to submit gross, expiring, and delivery position reporting
- Trades: Allows users to perform trade queries, trade entry, and trade management
- Allocations: Allows users to mark/unmark trades for allocation, and manage allocation groups and give-up/take-up allocations
- Option Exercise: Allows users to check ITM evaluations and submit exercise intentions
- **Settlement**: Displays settlement amounts, with various breakdowns
- Delivery: Displays warehouse receipts, delivery positions, and delivery assignments
- Margin: Displays information on a Clearing Member's margin requirements and collateral values
- Reference Data: Displays information on all products, markets, Clearing Members, and associated data
- File Uploads: Displays the status of a user's file uploads, including any error messages
- Calendar: Displays holidays for each calendar in use by MCS

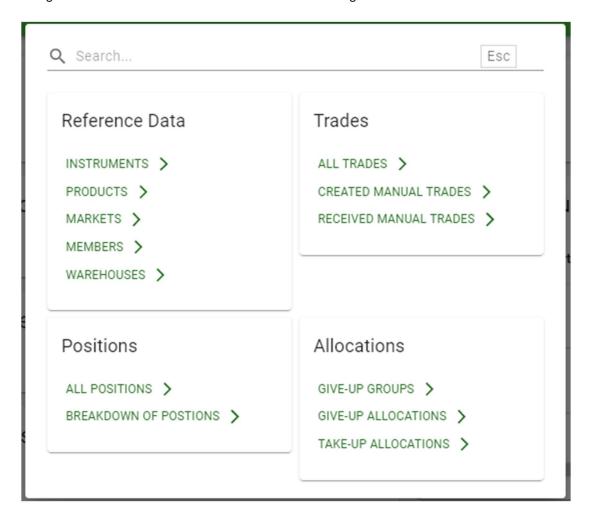
NOTE: Throughout the User Manual, areas in the MCS will be referenced by listing the parent screen and then sub-screen separated by a dash (e.g. Position Reporting – Gross Position Reporting).





2.3 Search Tool

The search tool, found in the banner at the top of every screen in the MCS portal, allows users to search for areas in MCS by name. To optimize limited screen space, users with compact PC displays may choose to collapse the navigation bar and instead utilize the search tool to navigate the MCS.



2.4 Dashboard Metrics and Widgets

At the top of the dashboard, users can find the sum total of all their Clearing Member's trades for the current trade date within MCS. This total also serves as a link to the Trades – Trades screen.

453
Trades

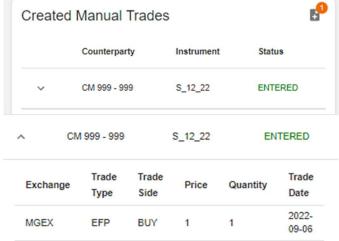
In the center of the screen, users will find several widgets designed to assist with managing trades, allocations, and position reporting.



2.4.1 Created Manual Trades

This widget shows the user all manual trades that their Clearing Member has submitted that have yet to be matched by the opposite Clearing Member on the transaction.

NOTE: Trade legs that were not matched by the end of a Trade Date, and consequently were automatically expired by the system (i.e. marked with status SYSTEM CANCELLED) will also display in this widget for up to two business days after having expired. These trade legs are displayed for reference purposes only, and cannot be updated or matched.



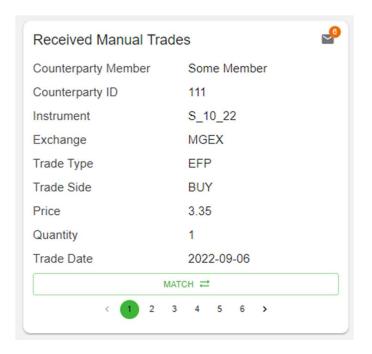
- Clicking the icon in the top right of the widget will link
 the user to the Trades Created Manual Trades screen if the user has any entered manual trades
- Clicking the arrow at the left of any of the manual trade records toggles a drop-down display with additional details on the trade

2.4.2 Received Manual Trades

This widget shows all unmatched manual trades received from other Clearing Members.

NOTE: Trade legs that were not matched by the end of a Trade Date, and consequently were automatically expired by the system (i.e. marked with status SYSTEM CANCELLED) will also display in this widget for up to two business days after having expired. These trade legs are displayed for reference purposes only, and cannot be matched.

- Clicking the icon in the top right of the widget will link the user to the Trades – Received Manual Trades screen if the user has any received manual trades
- Clicking MATCH on any non-expired trade in the widget opens the Match Unmatched Trade pop-up menu also accessible within the Trades – Received Manual Trades screen





2.4.3 Initiated Give-ups

This widget shows the user all give-ups that their Clearing Member has allocated out, as well as its associated non-accepted status (Pending or Rejected).

- Clicking the icon in the top right of the widget will link the user to the Allocations – Give-up Allocations screen if the user has any initiated give-ups
- Clicking the green Action button to the right of any of the give-up allocations will open the Update Give-up Allocation pop-up menu also accessible within the Allocations – Give-up Allocations screen
- Clicking the red Action button to the right of any of the give-up allocations will open the Cancel Give-up Allocation pop-up menu also accessible within the Allocations – Give-up Allocations screen
- Clicking on the arrow at the left of any of the give-up allocations toggles a drop-down display with additional details on the allocation
- Once the allocation has been accepted, the allocation will be removed from widget view

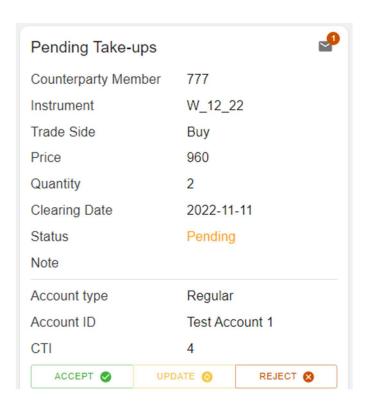
nitiate	d Give-ups			E
	Counterparty	Instrument	Note	Status
~	888 S	S_10_22		CANCELLED
~	999 R	S_11_22		PENDING
~	999 S	S_10_22		ACCEPTED
V	000 D	C 40 22	Toot	CANCELLED
^	999 S	S_11_22	Test GU	PENDING
Price	Quantity	Clearing Date	Last Up	dated At
1	1	2022-09-06	2022-09	-07 11:38:27



2.4.4 Pending Take-ups

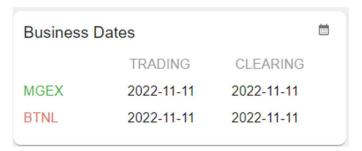
This widget shows all take-up allocations a Clearing Member has received.

- Clicking the icon in the top right of the widget will link the user to the Allocations – Take-up Allocations screen if the user has any initiated give-ups
- Clicking Accept, Update, or Reject on any allocation in the widget to open the Accept, Update, or Reject Give-up pop-up menus also accessible within the Allocations – Take-up Allocations screen
- Once the user has acted on a pending take-up allocation, the allocation will be removed from widget view



2.4.5 Business Dates

This widget shows the current Trade Date and Clearing Date for each market that the Clearing Member is active in.





2.4.6 File Uploads

This widget shows the results of a Clearing Member's attempted uploads on the current Clearing Date.

- Clicking the icon in the top right of the widget will link the user to the File Uploads screen
- Clicking the icon to the left of any of the file upload attempts will display the Validation Errors pop-up display also accessible within the File Uploads screen



2.4.7 Report Statuses

This widget shows a Clearing Member's required position reports for each market, including their completion status as marked by the Clearing Member.

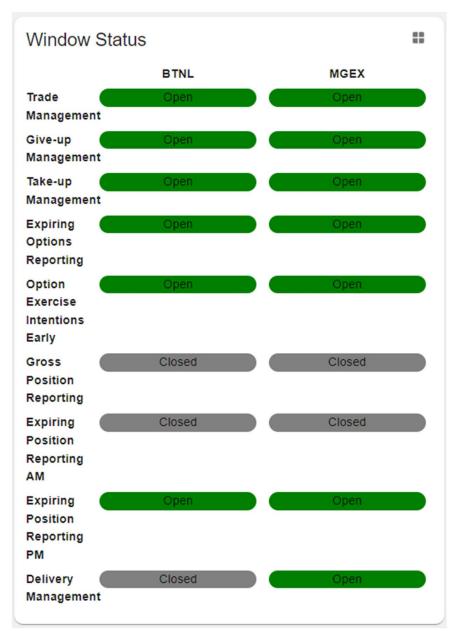
 Clicking the COMPLETED/UNCOMPLETED message on any of the displayed position reports will link the user to the associated MCS screen where the position report can be viewed and updated





2.4.8 Window Status

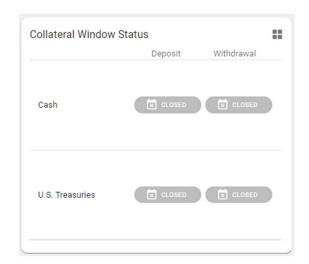
This widget shows what functions are able to be performed within MCS at the current time, based on whether the associated Activity Window Status is Open or Closed for the market. The Window Statuses update according to the reporting deadlines, which can be found in Resolution 2101.00.C of the MIAX Futures rulebook, hosted on the MIAX Futures website.





2.4.9 Collateral Window Status

This widget shows what functions are able to be performed within MCS at the current time, based on whether the associated Collateral Activity Window Status is Open or Closed for the market. The Window Statuses update according to the reporting deadlines, which can be found in Resolution 2101.00.C of the MIAX Futures rulebook, hosted on the MIAX Futures website.





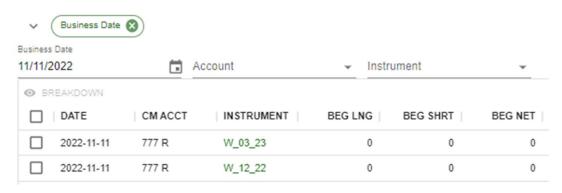
3. Basic System Functionality

3.1 Queries

Most MCS screens have built in query functionality allowing users to narrow and search within a specific data table. Users can find a list of currently applied search criteria listed directly above the table.

NOTE: Some search criteria are automatically set by MCS when the criteria is required to display data, or to present more relevant data to the user (e.g., setting the Trade or Clearing date to the current date).

Positions



To add a search criterion to a query:

- 1. Click on the search criteria
- 2. Select a Filter Value (i.e., data to search for or match on) from the drop-down list
 - a. If no list appears, enter the Filter Value manually

NOTE: When selecting from a drop-down list, users can manually enter the Filter Value to narrow down the list, but must select the option from the drop-down.



3. Repeat steps one and two for all desired search criteria



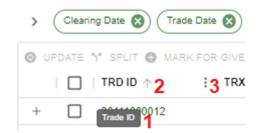
NOTE: If a user has not input a Filter Value for a required search criterion, the search results will not be updated. Instead, MCS will denote the missing field in red, informing the user that it is a "Required field."

3.2 Tables

Additional functionalities are built into each screen's data tables. Each column allows the user to apply multiple filters, sorting criteria, and other display modifications.

To access these filter and sorting features in a table, hover the cursor over the text in a column header. The user's display will resemble the image below:

Trades



- 1. **Tooltip:** Hovering the cursor over the column header text will display the tooltip, which presents additional information about the data in the given column
- 2. **Sort Button:** Hovering the cursor over the column header will display an arrow to the side of the header text. Clicking on this arrow will cycle through the three sorting options for the selected column:
 - a. Unsorted/Default: When selected, the arrow will not be visible until user hovers their cursor over the column header
 - b. Sort in Ascending Order: When selected, the arrow will appear pointing upwards
 - c. Sort in Descending Order: When selected, the arrow will appear pointing downwards

NOTE: Clicking the sort button in one column will undo any previously applied sort(s) in other column(s). **To sort by multiple columns**, hold down the shift key while clicking the sort button in each desired column, taking care to click each column in the order of the user's desired sorting hierarchy.



INSTRUMENT

Sort by ASC

Sort by DESC

Pin to left

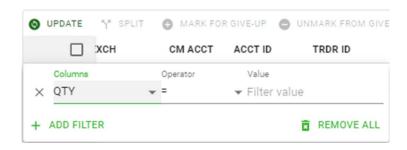
Pin to right

Hide column

Manage columns

Filter

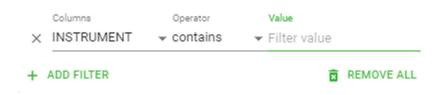
- 3. Column Menu: Hovering the cursor over the column header will display a vertical ellipsis to the side of the header. Clicking on the vertical ellipsis will reveal all additional table functionality, including:
 - a. Unsort, Sort by ASC, and Sort by DESC: Identical sorting options to the sort button in the column header
 - b. Pin to left and Pin to right: Clicking either of these will pin the selected column to the left or right of the table, allowing the user to see the column regardless of where they have scrolled to in the table
 - i. Multiple columns can be pinned at once
 - ii. A user can unpin a column by reopening the column menu, and clicking Unpin where the Pin to left/Pin to
 - right button was before c. Filter: Clicking this opens a pop-up menu for advanced filtering of rows NOTE: This filtering ONLY applies to data visible on the current page of the table.



If the column contains numerics (i.e., the vertical ellipsis to open the column menu appear on the left side of the header), the user will select from one of the following logic operators:

- i. =: Selects rows where the entry equals the Filter Value
- ii. !=: Selects rows where the entry does not equal the Filter Value
- iii. >: Selects rows where the entry is greater than the Filter Value
- iv. >=: Selects rows where the entry is greater than or equal to the Filter Value
- v. <: Selects rows where the entry is less than the Filter Value
- vi. <=: Selects rows where the entry is less than or equal to the Filter Value
- vii. Is empty: Selects rows with null entries
- viii. Is not empty: Selects rows with non-null entries
 - i. Is any of: Selects rows that match any entered Filter Values. To enter multiple Filter **Values**, press the enter key after typing in each individual Filter Value.





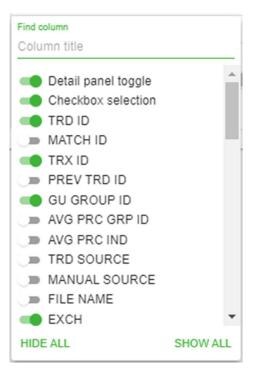
If the column contains **any other data type** (i.e., the vertical ellipsis to open the column menu appear of the right side of the header), the user will select from one of the following logic operators:

- i. **Contains:** Selects rows where the Filter Value is anywhere within the entry
- ii. **Equals:** Selects rows where the Filter Value exactly matches the entry
- iii. Starts with: Selects rows where the Filter Value can be found at the beginning of the entry
- iv. Ends with: Selects rows where the Filter Value can be found at the end of the entry
- v. **Is empty:** Selects rows with null entries for this column
- vi. Is not empty: Selects rows with non-null entries for this column
- vii. Is any of: Selects rows that match any of a list of possible Filter Values. To enter multiple Filter Values, press the enter key after typing in each individual Filter Value.
- d. Hide column: Hides the selected column from the table
- e. Manage columns: Clicking this opens a pop-up menu, allowing the user to toggle which columns to display or hide in the table. Other functionality includes:
 - Find column search field: Narrows pop-up menu list to columns with names matching the Filter Value entered in the search field
 - ii. **Hide all:** When selected, all columns will be hidden
 - iii. Show all: When selected, all columns will be displayed

The top right corner of a table includes additional tools to manage columns and filters in general.



- 1. **Filters**: Opens a pop-up menu for advanced filtering of rows
- 2. Columns: Opens a pop-up menu, allowing the user to toggle which columns to display or hide in the table





3. **Refresh**: Reloads the data table, with the currently applied queries and filters, processing any additional data received by MCS since the page was opened or last reloaded.

Clicking on the three dots reveals the following, additional tools.

- 1. **Export**: Exports the data in a given table, as described in section 3.3
- 2. **Reset**: Resets a table to the system default display, removing any customization applied by a user (e.g. visible columns, column order, column size, pinned columns, etc.



3.3 Exporting Data

Along with the expansive sorting and filtering functionality in MCS, users are also able to export the current page of a data table to a CSV file for additional analysis. Any search criteria or filters can be applied to a table to limit the scope of the exported data.

To export a table:

- 1. Prepare the table to store the desired data to export
 - a. Apply any desired search criteria
- 2. Click the three dots at the top right of the table
- 3. Click the **EXPORT** button in the subsequent drop-down list
- 4. Repeat steps 1-3 for any additional pages to export

NOTE: At the current time, data exports are limited to a maximum of 2000 records.

3.4 Updating Reference Data

3.4.1 Communication Settings

Users granted administrative permissions are able to update their Firm's communication settings, including the email distribution lists for all alerts and reports generated by MCS.



Communication Settings

₹ EXPORT C REFRESH

Member ID Last Updated By Last Updated Time

888 user 2023-06-13 16:08:36

Alerts Trade Position Reports Finanical Reports Delivery Reports
test1@email.com test1@email.com test1@email.com

test2@email.com test2@email.com

UPDATE RESET

To Update a Firm's Communication Settings:

- 1. Navigate to the Reference Data Communication Settings screen
- 2. Click the alert or report list to update
- 3. Enter email addresses as desired
 - a. For single entry, press the enter key to move to the next line and type in the email address to add
 - b. For bulk entry, copy and paste a list of email addresses, with one address per line and no commas
- 4. Click **UDPATE** to finalize all changes

Once complete, the updated lists are stored in MCS, and the user's username along with the current date and time are recorded for reference purposes.

NOTE: If any errors are made prior to finalizing, users can click RESET to revert all changes since the last UPDATE submission.

3.4.2 Trade Accounts

Users granted administrative permissions are able to add to or update their Firm's Trade Accounts,

To Add a Trade Account:

- 1. Navigate to the Reference Data Trade Accounts screen
- 2. Click ADD in the in the top left of the screen to open the Add Trade Account pop-up menu

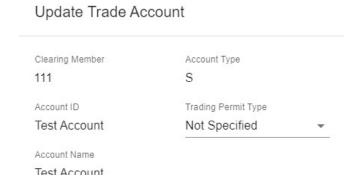


Add Trade Account R/S Account ID Account Name CFTC Reporting Number Contact Person Street Address

- 3. Input the Clearing Member Account type, Account ID, Trading Permit type (formerly known as Member type), and any additional optional fields
- 4. Click SUBMIT

To Update a Trade Account:

- 1. Navigate to the **Reference Data Trade Accounts** screen
- 2. Locate and select the trade account to update
- 3. Click **Update** in the in the top left of the screen to open the Update Trade Account pop-up menu



- 4. Edit any updatable fields as desired
- 5. Click SUBMIT

File Uploads



4. File Upload Management

The file management and file upload capabilities incorporated into MCS provide users the ability to submit various pre-templated files for multiple workflows. Upon navigating to the File Upload screen from the Dashboard, users will be able to upload, query and view successful and unsuccessful file upload attempts.

Business Date 🛭 Business Date 2023-10-04 File Type ▼ Status FILTERS III COLUMNS C REFRESH : FILE NAME FILE TYPE СМ PROCESSED TIME LAST UPDATED TIME ACCEPTED REJECTED PREV RPTD COMPLETED % STATUS 777_transfer_20231004_1.csv Transfer trade file 777 2023-10-26 06:04:08 2023-10-26 06:04:08 777_transfer_20231004_2.csv 2023-10-26 06:08:24 2023-10-26 06:08:24 777_transfer_20231004_3.csv Transfer trade file 777 2023-10-26 06:09:17 2023-10-26 06:09:17

The pre-templated files users can expect include:

- Position reporting files: Users can submit the following files via SFTP and update their position reporting all at once instead of one instrument at a time. Individual file specifications are available at <u>MIAX Futures</u>
 Interface Specifications | MIAX (miaxglobal.com)
 - Position Change Submission (PCS) File
 - o Expiring Position Report File
 - Long Date Position Reporting File
- Trade reporting files: Users can submit the following files via the File Uploads screen and input or update trades all at once instead of one manual trade entry at a time
 - Transfer Trade File: Detailed in section 5.2.3.2 of the MIAX Futures Clearing System User Manual

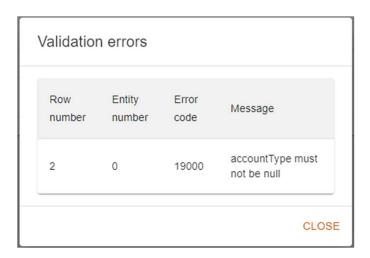
Once a file is uploaded into MCS, a message will be returned to the user indicating the status of the file. These statuses include:

- Processing: File is currently being validated by MCS
- Failed: File upload unsuccessful; indicates one or more critical errors
- Partially Accepted: File accepted with one or more errors, treated as a successful upload by MCS
- Accepted: File uploaded successfully with no errors

Users will also be able to query their file uploads within MCS based on Business Date, File Type, and Status.



If any errors are found during the file upload process, MCS will store the associated error code, location within the file, and a brief error description. Users can view a list of all encountered errors by clicking on the FAILED hyperlink in the Status field of any unsuccessful upload attempts.





5. Trade Management

MCS allows users to query, submit, and update all trades involving their Clearing Member. MCS stores all received trades for the current system date, as well as recent historical trades. This includes electronic trades received for clearing as well as any Ex-Pit transactions entered directly in MCS portal.

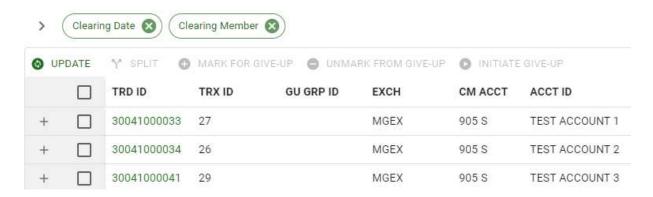


5.1 Trade Search

5.1.1 Matched Trades

All trades successfully processed by MCS are viewable in the Trades – Trades screen, including trades from the current business date and 25 calendar days of historic trades.

Trades



When querying matched trades, Clearing Date and Trade Date default to match the current system date.

NOTE: The current system date is calculated as the oldest Clearing Date and Trade Date between all markets. This is to account for the delay in date rolling between the close of the Trade Date, and the close of the Clearing Date with final Volume and Open Interest the morning of the next business date.

5.1.2 Trade Log

For each matched trade, MCS will store a record of all trade management updates within the trade log. This log includes information on the time of, the user responsible for, and the reason behind each log record. Trade logs are stored for as long as the associated trade is stored in the system, i.e. up to 25 calendar days.

Log reasons include:

- New (i.e., trade first received by MCS)
- **Updated** (i.e., change made to updatable fields)



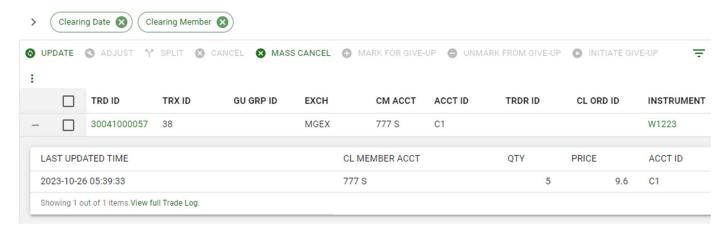
- Split
- TAS Repricing
- Grouped (for give-up)
- **Un-grouped** (for give-up)
- Option exercise
- End of trade management
- Busted (i.e., an invalid or incorrect trade has been removed from the day's records)
- **Backed-out** (i.e., an electronic trade that was incorrectly parsed, or involved in some other technical issue, is being removed from the day's records in order to resubmit the originating trade message)
- Adjusted (i.e., a trade has been updated with a new price after a receipt of an adjustment message is
 received from the CME, or is otherwise required and authorized by clearing house staff)

To find the Trade Log of a particular trade:

- 1. Navigate to the Trades Trades screen
- 2. Locate the desired trade to inspect
- 3. Click on the "+" button in the left most column of a trade record

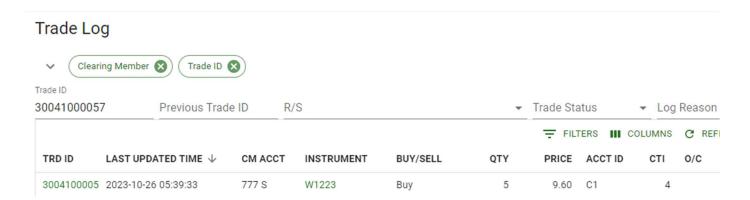
This will reveal a partial log of up to three of the most recent updates received for a given trade

Trades



4. Click on the Trade ID or "View full Trade Log" to view the full list of updates

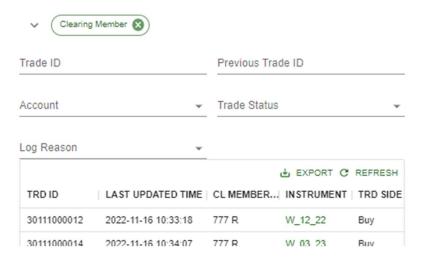




To query Trade Logs in general:

1. Navigate to the **Trades – Trade Log** screen to see all logs stored by MCS, from which a user can query for desired logs

Trade Log



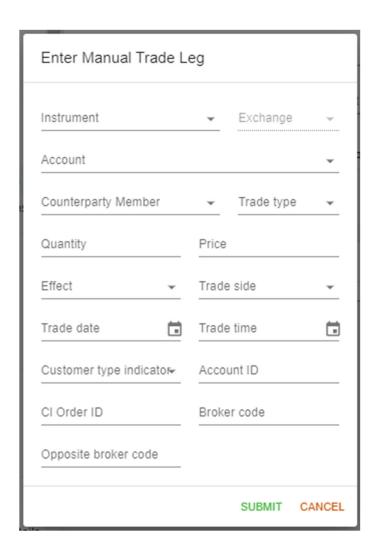
5.2 Trade Entry

5.2.1 Create Manual Trade

To Enter a Trade Manually/via Portal:

- 1. Navigate to the Trades Created Manual Trades screen
- 2. Click ENTER in the top left of the screen to open the Trade Entry pop-up menu





3. Enter trade details into the appropriate fields, either by selecting an option from the drop-down list or, if none appear, completing the field manually

NOTE: When selecting from a drop-down list, users can enter the name of the option they are looking for to narrow the list, but must ultimately select the option from the list.

a. Correct any fields with inappropriate data types or values. MCS will notify users of any fields needing correction, highlighting these fields in red and displaying an error message



4. Click SUBMIT, and review any received error messages



a. Enter trade details for any missing required fields. These will appear highlighted in red with an error message, as in the example below



b. Correct any fields with inappropriate data types or values. Any fields not flagged earlier will display an error message at the bottom of the pop-up menu



Once a manual trade is entered, MCS attempts to match it against one or more unmatched trades received on the current Clearing Date. If successful, these trades are promoted to matched trades, displayed in the Trades – Trades screen. Otherwise, the received manual trade is stored as an unmatched trade, displayed in the Trades – Created Manual Trades screen for the executing Clearing Member, and in the Trades – Received Manual Trades screen for the opposite Clearing Member.

At the end of each Trade Date, any remaining unmatched manual trades will be updated to a SYSTEM CANCELLED state. The trades will no longer be updatable or able to be matched, and will remain for reference purposes for the next two business days.

5.2.2 Receive Manual Trade

When MCS receives a trade where a user's Clearing Member is listed as the counterparty, it is displayed in the Trades – Received Manual Trades screen.

Received Manual Trades

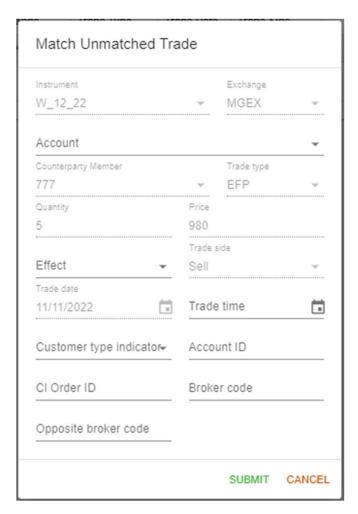


When selecting "match" from this screen, MCS displays a trade entry menu with most fields auto populated for users from the received trade, negating the need to manually reenter these fields.



To Match a Trade via UI:

- 1. Navigate to the Trades Received Manual Trades screen
- 2. Locate and select the received trade to be matched
- 3. Click MATCH in the top left of the table to open the Match Unmatched Trade pop-up menu



- 4. Input values for the following fields:
 - a. Account Type
 - b. Customer Type Indicator
 - c. Account ID
 - d. Effect (for transfer trades)



e. Any optional fields as desired

5. Click SUBMIT

This will promote both the entered matching trade and the received manual trade to matched trades, displayed in the Trades – Trades screen.

At the end of each Trade Date, any remaining unmatched manual trades will be updated to a SYSTEM CANCELLED state. The trades will no longer be updatable or able to be matched, and will remain for reference purposes for the next two business days.

5.2.3 Transfer Trade

MCS allows users to submit transfer trades through one of two ways.

5.2.3.1 Trade Entry via Portal

This method follows the same steps used when creating a manual trade, except for two additional steps.

- 1. Follow the steps outlined in section **5.2.1 Create Manual Trade**, entering the following values in the Trade Entry pop-up menu:
 - a. Trade Type: TRANSFER
 - **b.** Effect: Open/Close to inform MCS if this trade will "Open" the position in the Clearing Member's records or "Close" out an existing position

5.2.3.2 File Upload

This method allows a user to upload multiple transfer trades at once utilizing a CSV file.

- 1. Navigate to the File Uploads screen
- 2. Select Transfer Trade File as the Filter Value for the File Type
- **3.** Click **DOWNLOAD TEMPLATE** in the top left of the screen to download a pre-formatted CSV file.
- 4. Open the downloaded template file
- 5. Enter the trade information of the transfer trade(s) into the appropriate fields, one trade per row. Each column in the template has a header indicating the appropriate information to be entered.

osition Open Close

Trade type

Transfer







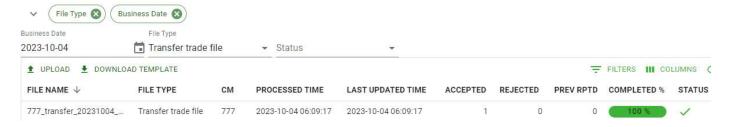
Header	Expected Value for Transfer Trade file (CSV)
Exchange	Exchange ID/MIC code (e.g., XMGE)
Firm Code	Three-digit Clearing Member Code/ID of the Executing Firm
Account Type	"R" for Regular or "S" for Segregated
Commodity	Clearing Code of the Product
Month	Contract Month of the Instrument (MM)
Year	Contract Year of the Instrument (YY)
Strike	Strike Price, in decimal format (e.g., 250.01)
Call/Put	Option type of the Instrument, "P" for Put or "C" for Call
Trade Side	"Buy" or "Sell"
Price	Trade Price, in decimal format (e.g., 123.45)
Quantity	Quantity of contracts
Account ID	Account ID
Cl Order ID	Order Number (Optional)
CTI	Customer Type Indicator (1, 2, 3, 4)
Broker Code	Broker Code of the Primary Broker (Optional)
Opposite Side Broker	Broker Code of the Opposite Broker (Optional)
Trade Time	Date and time the transaction was agreed upon , in ISO 8601 Timestamp format (e.g., 2022-04-30T11:16:54-06:00) (Optional)
Opposite Firm Code	Three-digit Clearing Member Code/ID of the Opposite Firm
Position Effect	"Open" or "Close" if the trade is opening or closing out a position, respectively
Trade Date	Business date the trade was entered for (YYYYMMDD)

6. Save the file

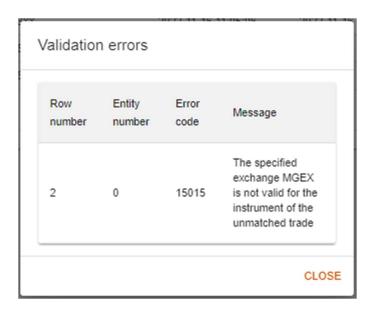
- 7. Click **UPLOAD** in the **Transfer Trade** tab of the **File Uploads** screen to open the Import Transfer Trades pop-up menu
- 8. Select the updated CSV file to upload
- 9. Click **SUBMIT**. The upload attempt should appear in the File Uploads table with a status of SUCCEEDED.



File Uploads



a. If the upload attempt has a status of FAILED, click on the hyperlink in the Status field to open the Validation Errors pop-up window. This will display a table of errors, specifying the row number for each error present, and a detailed message explaining the error.



5.2.4 Trade Split

MCS allows users to split the quantity of a matched trade between multiple Account IDs across their Clearing Member's Regular and Segregated accounts.

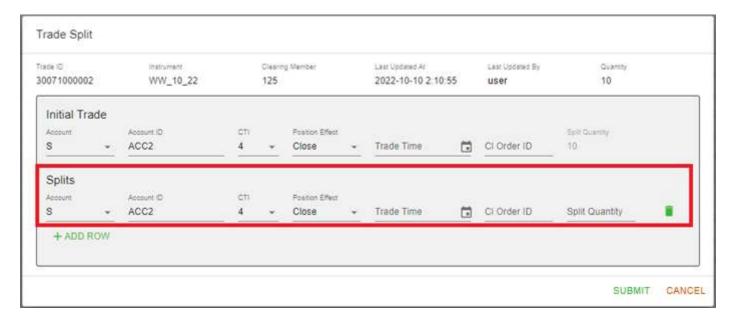
To Perform a Trade Split

- 1. Navigate to the Trades Trades screen
- 2. Locate and select the trade to split
- 3. Click SPLIT in the top left of the screen to open the Trade Split pop-up menu
- 4. (Optional) Update fields on the original trade in the first row





5. Click **ADD ROW** to create a "Split" from the original trade.



- 6. Input the Clearing Member Account and Account ID that will receive the split, the quantity of this split, the Customer Type Indicator, and any additional optional information in the new split row
- 7. Repeat steps 4 and 5 until all desired splits have been created, or the available quantity to split from (the split quantity of the first row) has reached the minimum quantity of 1
- 8. Click SUBMIT

NOTE: All newly created split trades are assigned new Trade IDs. MCS will populate the Previous Trade ID field with the Trade ID of the original trade.

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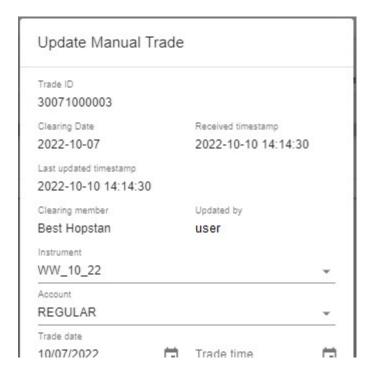
5.2.5 Trade Update

5.2.5.1 Update Unmatched Trades

If MCS has not received all the necessary trade(s) to match a manually entered trade, it remains searchable in the Trades – Created Manual Trades screen where users can update it.

To update an Unmatched Trade:

- 1. Navigate to the Trades Created Manual Trades screen
- 2. Locate and select the trade to modify
- 3. Click UPDATE in the top left of the screen to open the Update Manual Trade pop-up menu
- 4. Edit any updatable fields as desired



5. Click SUBMIT

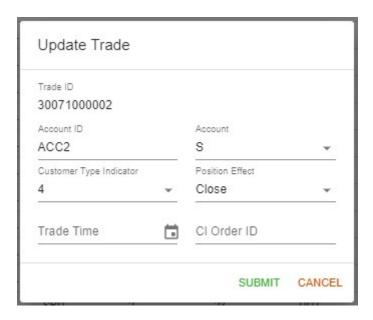
5.2.5.2 Update Matched Trades Individually

Once a trade has been matched, it becomes searchable in the Trades - Trades screen. At this time, most options to edit the trade are made unavailable. However, certain fields may still be updated if the trade is in a manageable state.



To Update a Matched Trade:

- 1. Navigate to the Trades Trades screen
- 2. Locate and select the trade to modify
- 3. Click UPDATE in the top left of the screen to open the Update Trade pop-up menu
- 4. Edit any updatable fields as desired



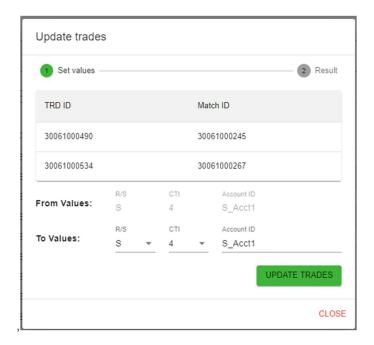
5. Click SUBMIT

NOTE: If a matched trade is updated with a new Clearing Member Account (CMA) type after acceptance, MCS will remove positions from the original CMA and create identical positions for the CMA listed in the update.

5.2.5.3 Mass Update Matched Trades

There are two ways to submit updates to multiple matched trades at once. The first option is to follow the steps in 5.2.5.1 Update Matched Trades Individually, instead selecting multiple trades that are still in a manageable state.





NOTE: Trades selected for mass update must have the same:

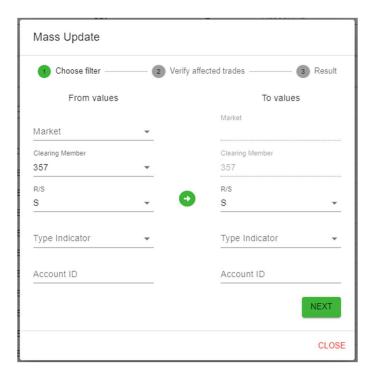
- Trade Date
- Market
- Clearing Member Account
- CTI code
- Account ID

Alternatively, users can use the Mass Update pop-up menu to update all trades sharing the same fields listed above, as long as they are in a manageable state.

To Mass Update Matched Trades:

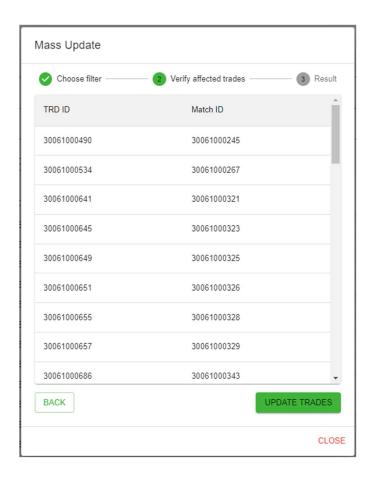
- 1. Navigate to the Trades Trades screen
- 2. Verify that no trades are selected in the Trades table
- 3. Click UPDATE in the top left of the screen to open the Mass Update pop-up menu





- 4. Enter the identifying values for the trades to be updated under "From values"
- 5. Enter the desired values under "To values"
- 6. Click **NEXT** to see a list of the trades that will be updated, based on the selection criteria





- 7. Confirm the list of affected trades is accurate
- 8. Select UPDATE TRADES
- 9. Select **CLOSE** after verifying the results of the mass update

MCS will display the results of the mass update, either informing the user that all trades were successfully updated, or displaying any errors that occurred.





5.2.6 Delete Unmatched Manual Trade

In addition to updating, users have the option to delete a manual trade until MCS receives the matching trade(s).

To Delete an Unmatched Manual Trade:

- 1. Navigate to the Trades Created Manual Trades screen
- 2. Locate and select the trade to modify
- 3. Click **DELETE** in the top left of the screen to open the Delete Manual Trade pop-up window
- 4. Click SUBMIT



6. Allocation Management

MCS allows users to perform give-ups on any transactions from the same Clearing Date. Clearing Members have a 5-day window to allocate trades into a give-up group, initiate the give-up, have either side of the give-up/take-up submit updates, and have the opposite Clearing Member accept the take-up.



MCS also includes new processes to streamline give-up management including:

- Reversals: Users have the option to request a reversal on a give-up, even after they have been fully processed by MCS. If accepted by the opposite Clearing Member, the received quantity of contracts is returned to the originating Clearing Member, and the net value is returned to the receiving Clearing Member.
- **Sub-allocations**: Users can sub-allocate received give-ups (i.e., add take-up allocations to give up groups), allowing users to:
 - Quickly initiate subsequent give-ups
 - Distribute a take-up among multiple accounts
 - Transfer received positions to a third party

To help identify when each of these processes can be run, a status field is displayed when viewing give-up groups and give-ups/take-ups via MCS portal. These statuses will be explained in context throughout this section.

6.1 Trade Assignment for Give-up Grouping

Users can assign or remove trades from a give-up group from the Trades – Trades screen. MCS has two types of give-up groups for users to choose from:

- **1. Allocation groups** consist of one or more matched trades, all with the same price. Allocation groups contain the sub-type **Single Transaction group**, an allocation group with a single trade.
 - a. Allocation groups start with a status of COMPLETE, i.e., allocations can be made from this group
- 2. Average price groups consist of one or more matched trades with varying prices, where a weighted average price accurate to ten decimal places is calculated and applied to the whole group.
 - a. Average price groups start with a status of INCOMPLETE, i.e., allocations cannot be made from this group until all desired trades are added, and the user marks the group complete as instructed in section 6.2



6.1.1 Adding Trades to Give-up Groups

To Add Trades to a Give-up Group:

- 1. Navigate to the Trades Trades screen
- 2. Locate and select the trade(s) to be included in the group
- 3. Click MARK FOR GIVE-UP in the top left of the screen to open the Mark for Give-up pop-up menu

Mark for Give-up

TRD ID	INSTRUMENT	LAST UPDATED TIME	USER ID
30041000057	W1223	2023-10-26 05:39:33	user
30041000060	W1223	2023-10-26 08:10:58	user
Allocation Group	O Single Transaction Grou	up O Average Price Group	
Exclude Client Ord	er ID as part of the grouping	criteria	
			SUBMIT CANCE

- 4. Select the give-up group type to assign the selected trade(s) to:
 - a. Allocation group
 - b. Single transaction group
 - c. Average price group
- 5. If assigning to an average price group, an Average Price Group ID is required



Mark for Give-up

Allocation Group	Single Transaction Group	Average Price Group	Avg price group 1
	_	120 1	Average Price Group ID
30041000060	W1223	2023-10-26 08:10:58	user
30041000057	W1223	2023-10-26 05:39:33	user
TRD ID	INSTRUMENT	LAST UPDATED TIME	USER ID

6. Click SUBMIT

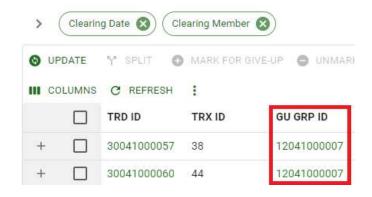
MCS will attempt to automatically match the selected trade(s) to an existing give-up group, except for average price groups that have been marked COMPLETE. If such a matching group cannot be found, a new give-up group will be created for the selected trade(s). MCS identifies a match based upon the following fields:

- Instrument
- · Clearing Member Account
- Clearing Date
- Trade Side
- Trade Type
- · Executing Clearing Member (can be blank)
- Account ID
- Trader ID (can be blank)
- · Price (for allocation groups)
- Client Order ID (for allocation groups, unless selected to be excluded)
- Average Price Group ID (for average price groups)

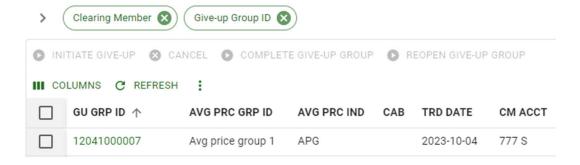
The MCS assigned Group ID will be visible in the Trades – Trades screen under the GU GROUP ID column, serving as an additional search criterion in trade queries, and as a hyperlink to the associated give-up group within the Allocations – Give-up Groups screen.



Trades



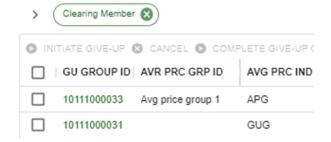
Give-up Groups



Additionally, the Average Price Indicator field on the trade(s) will be populated with the group type for reference.

- APG: Average Price Group
- GUG: Allocation Group

Give-up Groups





Once a trade has been added to a give-up group, trade management from the Trades – Trades screen will be restricted. Users must perform any additional updates using the allocation management processes described in section 6.3, or otherwise remove the trade from the give-up group for further trade management.

6.1.2 Removing Trades from Give-up Groups

To Remove a Trade from a Give-up Group:

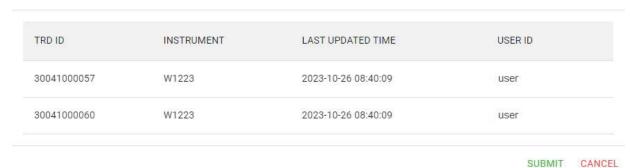
- 1. Navigate to the Trades Trades screen
- 2. Locate and select the trade(s) to remove from the group. Selected trade(s) must:
 - a. All have the same Give-up Group ID
 - b. Belong to an allocation group with a status of COMPLETE, or an average priced group with a status of INCOMPLETE

Trades



3. Click **UNMARK FROM GIVE-UP** in the top left of the screen to open the "Unmark from Give-up" pop-up menu

Unmark from Give-up



4. Click SUBMIT





All selected trades will have their Give-Up Group ID, Average Price Indicator, and (if populated) Average Price Group ID fields reset.

If all trades have been removed from the give-up group, MCS will automatically cancel the give-up group. This prevents any further addition of trades to this group.



6.1.3 Cancelling a Give-up Group

If a user wants to remove all trades from a give-up group, they have the option to cancel the group from the Allocations – Give-up Groups screen.

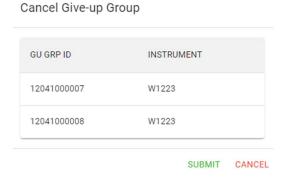
To Cancel a Give-up Group:

- 1. Navigate to the Allocations Give-up Groups screen
- 2. Locate and select the give-up group(s) to cancel





3. Click CANCEL in the top left of the screen to open the "Cancel Give-up Group" pop-up menu



4. Click SUBMIT

All trades within the give-up group(s) will have their Give-Up Group ID, Average Price Indicator, and (if populated) Average Price Group ID fields reset.

MCS will update the status of the group(s) to Cancelled, preventing any further addition of trades to the group(s).

Give-up Groups



6.2 Preparing Give-up Groups for Allocation

Allocation groups starting with a status of COMPLETE can be assigned out at any time. However, average price groups require an additional step before they can be allocated to another Clearing Member.

6.2.1 Marking an Average Price Group as COMPLETE

When an average price group has been populated with all expected trades, the user can toggle the status to COMPLETE via the Allocations – Give-up Groups screen.

- 1. Navigate to the Allocations Give-up Groups screen
- 2. Locate and select the Average Price Group(s) to mark
- 3. Click **COMPLETE** in the top left of the screen to open the "Complete Give-up Groups" pop-up menu **MIAMI INTERNATIONAL HOLDINGS, INC**



4. Click SUBMIT

6.2.2 Reopening an Average Price Group to INCOMPLETE

At any point before a give-up has been accepted by the counterparty, users can toggle the status back to INCOMPLETE to add or remove trades from the average price group.

- 1. Navigate to the Allocations Give-up Groups screen
- 5. Locate and select the Average Price Group(s) to reopen
- 2. Click **REOPEN GIVE-UP GROUP** in the top left of the screen to open the Reopen Give-up Groups pop-up menu
- 3. Click SUBMIT

NOTE: When updating to INCOMPLETE, the Average Price group's Accepted Quantity must equal zero. If the group has any pending allocations when marking INCOMPLETE, these allocations will be cancelled.

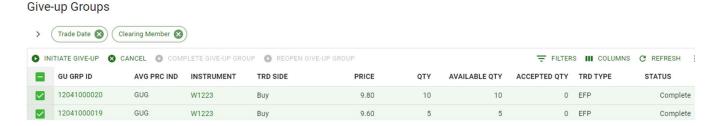
6.3 Give-ups and Take-ups

Once the give-up group has a status of COMPLETE, it can be viewed and assigned out from the Allocations – Give-up Allocations screen.

6.3.1 Initiate a Give-up Allocation

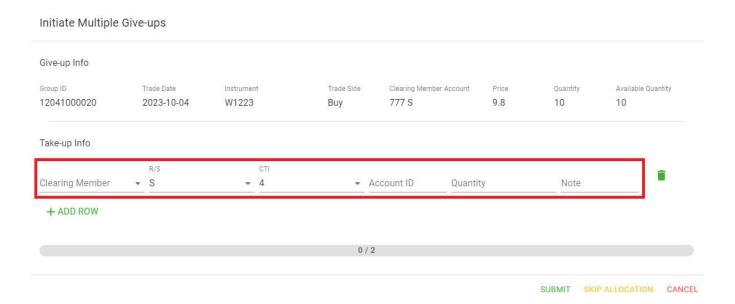
To Initiate a Give-up Allocation:

- 1. Navigate to the Allocations Give-up Groups screen
- 2. Locate and select the desired give-up group(s)



3. Click INITIATE GIVE-UP in the top left of the screen to open the "Initiate Give-up(s)" pop-up menu





- 4. Input the Clearing Member that will receive this give-up, the quantity to give-up, and any additional optional information. If not specified, MCS will default the take-up's Clearing Member Account type to Segregated, the Customer Type Indicator to 4, and the Account ID to match the give-up group's Account ID.
- 5. Click ADD ROW to add another give-up
- 6. Repeat steps 4 and 5 until all desired give-ups have been created, or the available quantity to give-up from (the available quantity of the first row) has reached 0
 - a. Click the Trash Can icon to the right of any unnecessary row/give-up to delete it

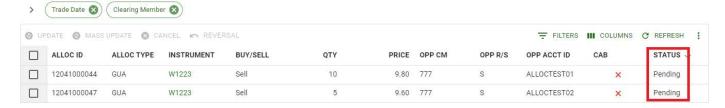
7. Click SUBMIT

- a. Alternatively, if multiple give-up groups were selected, click **SKIP ALLOCATION** to move to the next give-up group without making any edits to the current group
- 8. If initiating from multiple give-up groups, repeat steps 4-7 until allocations from all groups have been completed

MCS will create give-up allocations based on the provided information, displayed in the Allocations – Give-up Allocations screen.



Give-up Allocations



The Give-up Group ID is set to match the original give-up group, and the Allocation Status is initially set to PENDING. This status is distinct and independent from the give-up group status.

6.3.2 Accept a Take-up Allocation

After a Clearing Member has initiated a give-up allocation, it will appear as a take-up allocation in the opposite Clearing Member's Allocations – Take-up Allocations screen. From here, a user can view and ultimately accept the take-up allocation.

To Accept a Take-up Allocation:

- 1. Navigate to the Allocations Take-up Allocations screen
- 2. Locate and select the take-up allocation(s) to accept

Take-up Allocations



- 3. Click ACCEPT in the top left of the screen to open the "Accept Take-up Allocation" pop-up menu
 - a. The status of the allocation(s) must either be in a PENDING or REJECTED state

Accept Take-up Allocation



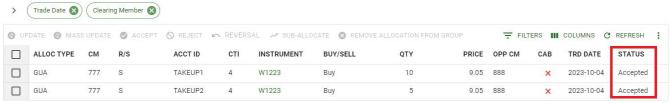
SUBMIT CANCEL



4. Click SUBMIT

a. This will update the give-up/take-up allocation status to ACCEPTED. If no further actions are taken on the give-up/take-up (i.e., reversals) then the give-up group will be executed, giving up the grouped trades from the originating Clearing Member to the receiving Clearing Member.

Take-up Allocations



6.3.3 Update a Give-up/Take-up

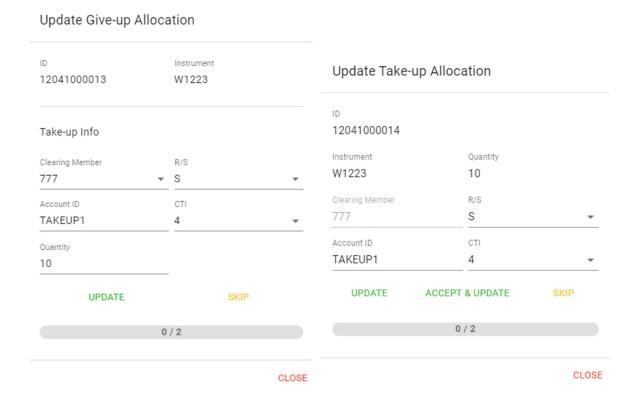
If an executing Clearing Member wishes to make updates to a give-up allocation(s), they can follow the steps below from the Allocations – Give-up Allocations screen. Likewise, a receiving Clearing Member wishing to make updates to a take-up allocation(s) can follow these steps from the Allocation – Take-up Allocations screen.

6.3.3.1 Standard Update

To Update a Give-up/Take-up Allocation:

- 1. Navigate to the Allocations Give-up Groups/Take-up Allocations screen
- 2. Locate and select the give-up/take-up allocation(s) to update
- 3. Click UPDATE in the top left of the screen to open the Update Give-up/Take-up Allocation pop-up menu
 - a. The status of the give-up(s) must either be in a PENDING or REJECTED state, while the status of the take-up(s) must be either in a PENDING or ACCEPTED state. If the take-up allocation(s) has/have been accepted and sub-allocated, then the allocation(s) may no longer be updated.





- 4. Update any fields as desired
- 5. Click UPDATE
- 6. If updating multiple allocations, repeat steps 4-5 until all allocations have been updated

NOTE: If a give-up/take-up allocation is updated with a new Clearing Member Account (CMA) type after acceptance, MCS will update the Clearing Member's position data in one of two ways, depending on when the update was received:

- If updated on the Trade Date of the allocation, MCS will remove the original allocation positions
- If updated after the Trade Date of the allocation, MCS will offset the original allocation positions, allowing Clearing Members to report their original long and short quantities via Gross Position Reporting

NOTE: TRX reports will NOT reflect updates submitted after the trade date when the original allocation was accepted.

6.3.3.2 Mass Update

The mass update tool allows users to update multiple give-up/take-up allocations with a single change.

To Mass Update Give-up/Take-up Allocations:



- 1. Navigate to the Allocations Give-up Groups/Take-up Allocations screen
- 2. Locate and select the give-up/take-up allocation(s) to update



- 3. Click MASS UPDATE in the top left of the screen to open the Update Give-up/Take-up Allocation pop-up menu
 - a. The status of the give-up(s) must either be in a PENDING or REJECTED state, while the status of the take-up(s) must be either in a PENDING or ACCEPTED state. If the take-up allocation(s) has/have been accepted and sub-allocated, then the allocation(s) may no longer be updated.

Mass Update Take-up Allocations

₹	*	ACCT Z	1		▼ Fi	ull Quantity	
R/S		Account ID	CTI		Qu	uantity	
Jpdate To Values							
17031000129	777	W1223	9.86	1	S	ACCT A	4
16031000024	777	W0324	9.9025	20	S	ACCT B	4
17031000132	777	W1223	9.8525	8	S	ACCT C	4
17031000123	777	W1223	9.8525	20	S	ACCT D	4
ALLOC ID	OPP C	M INSTRUMENT	PRICE	QTY	R/S	ACCT ID	CTI

4. Update any fields as desired



5. Click UPDATE

NOTE: If a give-up/take-up allocation is updated with a new Clearing Member Account (CMA) type after acceptance, MCS will update the Clearing Member's position data in one of two ways, depending on when the update was received:

- . If updated on the Trade Date of the allocation, MCS will remove the original allocation positions
- If updated after the Trade Date of the allocation, MCS will offset the original allocation positions, allowing Clearing Members to report their original long and short quantities via Gross Position Reporting

NOTE: TRX reports will NOT reflect updates submitted after the trade date when the original allocation was accepted.

6.3.4 Reject a Take-up

If there is an error in a received take-up allocation which cannot be updated by the receiving Clearing Member, users have the option to reject the take-up allocation from the Allocation – Take-up Allocations screen.

To Reject a Take-up Allocation:

- 1. Navigate to the Allocations Take-up Allocations screen
- 2. Locate and select the take-up allocation(s) to reject





- 3. Click REJECT in the top left of the screen to open the Reject Take-up pop-up menu
 - a. The status of the allocation(s) must be in a PENDING state



Reject Take-up Allocation

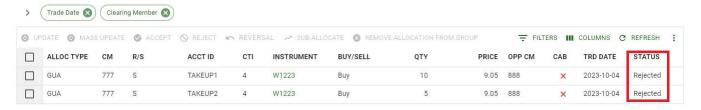
ALLOC ID	OPP CM	INSTRUMENT	BUY/SELL	ALLOC SIDE	PRICE	QTY	NOTE	R/S	ACCT ID	СТІ
12041000014	888	W1223	Buy	Take-up	9.05	10		S	TAKEUP1	4
12041000017	888	W1223	Buy	Take-up	9.05	5		S	TAKEUP2	4

SUBMIT CANCEL

4. Click SUBMIT

a. This will update the status of the allocation(s) to REJECTED. From this state, the give-up/take-up can either be updated (returning it to a PENDING status), accepted (ACCEPTED status), or cancelled (CANCELLED status)

Take-up Allocations



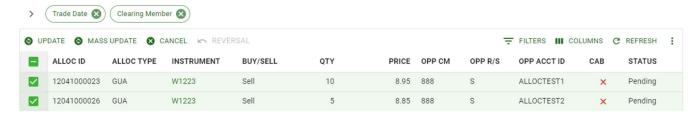
6.3.5 Cancel a Give-up Allocation

If the executing user mistakenly assigned out a give-up allocation, they have the option to cancel the give-up allocation from the Allocation – Give-up Allocations screen.

To Cancel a Give-up Allocation:

- 1. Navigate to the Allocations Give-up Groups screen
- 2. Locate and select the give-up allocation(s) to cancel

Give-up Allocations





- 3. Click CANCEL in the top left of the screen to open the Cancel Give-Up Allocation pop-up menu
 - a. The status of the allocation(s) must be in a PENDING or REJECTED state

Cancel Give-up Allocation

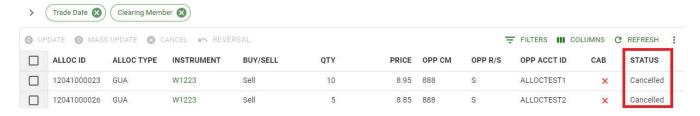
ALLOC ID	OPP CM	INSTRUMENT	BUY/SELL	ALLOC SIDE	PRICE	QTY	NOTE	R/S	ACCT ID	СТІ
12041000023	888	W1223	Sell	Give-up	8.95	10		S	C1	4
12041000026	888	W1223	Sell	Give-up	8.85	5		S	C1	4

SUBMIT CANCEL

4. Click SUBMIT

a. This will update the status of the allocation(s) to CANCELLED. No further modifications or updates to the allocation(s) may be made by the executing or receiving Clearing Member.

Give-up Allocations



6.3.6 Reverse Take-up

If either party to a give-up wishes to make changes to it after it has been accepted, they can submit a reversal request on their side of the allocation. Once the reversal is accepted by the other party, this returns the quantity of the give-up/take-up to the original give-up group, where a Clearing Member is free to be modify and reallocate it.

6.3.6.1 Initiate a Reversal

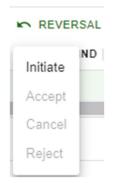
- 1. Navigate to the Allocations Give-up/Take-up Groups screen, depending on whether the user needs to reverse a give-up/take-up respectively
- 2. Locate and select the give-up/take-up allocation(s) to reverse



Take-up Allocations



- 3. Click **REVERSAL** in the top left of the screen to display a drop-down list of possible reversal actions
- **4.** Click **Initiate** in the drop-down to open the Initiate Reversal Give-up/Take-up Allocation pop-up menu



Initiate Reversal Take-up Allocation

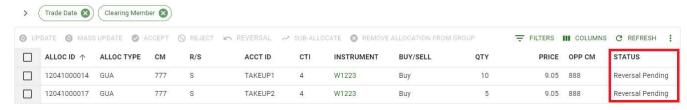


SUBMIT CANCEL

5. Click SUBMIT

a. This will update the status of the allocation(s) to REVERSAL PENDING. From this state, the reversal(s) can either be cancelled by the initiator of the reversal (returning it to its original status), accepted by the opposite party (REVERSED status), or rejected by the opposite party (returning it to its original status).

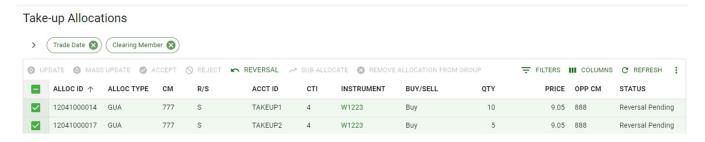
Take-up Allocations



6.3.6.2 Cancel an initiated Reversal Request



- 1. Navigate to the Allocations Give-up/Take-up Groups screen, depending on whether the user needs to reverse a give-up/take-up respectively
- 2. Locate and select the give-up/take-up allocation(s) with a status of "Reversal Pending"



3. Click **REVERSAL** in the top left of the screen to display a drop-down list of possible reversal actions



4. Click **Cancel** in the drop-down to open the Cancel Reversal Give-up/Take-up Allocation popup menu

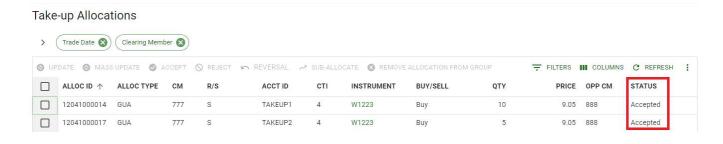
Cancel Reversal Take-up Allocation

ALLOC ID	OPP CM	INSTRUMENT	BUY/SELL	ALLOC SIDE	PRICE	QTY	NOTE	R/S	ACCT ID	СТІ
12041000014	888	W1223	Buy	Take-up	9.05	10		S	TAKEUP1	4
12041000017	888	W1223	Buy	Take-up	9.05	5		S	TAKEUP2	4

SUBMIT CANCEL

5. Click SUBMIT

a. This will return the status of the allocation(s) to ACCEPTED

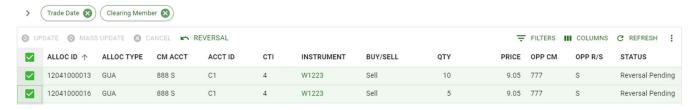




6.3.6.3 Accept/Reject a received Reversal Request

- 1. Navigate to the Allocations Give-up/Take-up Groups screen, depending on whether a request was received to reverse a give-up/take-up respectively
- 2. Locate and select the give-up/take-up allocation(s) with a status of "Reversal Pending"

Give-up Allocations



- 3. Click **REVERSAL** in the top left of the screen to display a drop-down list of possible reversal actions
- 4. Click Accept or Reject in the drop-down to open the Accept Reversal Give-up/Take-up Allocation pop-up menu, or the Reject Reversal Give-up/Take-up Allocation pop-up menu respectively



Accept Reversal Give-up Allocation

ALLOC ID	OPP CM	INSTRUMENT	BUY/SELL	ALLOC SIDE	PRICE	QTY	NOTE	R/S	ACCT ID	СТІ
12041000013	777	W1223	Sell	Give-up	9.05	10		S	C1	4
12041000016	777	W1223	Sell	Give-up	9.05	5		S	C1	4

SUBMIT CANCEL

5. Click SUBMIT

a. If accepted, this will update the status of the allocation(s) to REVERSED. If rejected, this will return the allocation(s) to a status of ACCEPTED.



Give-up Allocations



6.3.6.4 Reversals in Position Data and TRX Reporting

Once a reversal has been accepted, MCS will update each Clearing Member's position data in one of two ways, depending on when the reversal was accepted:

- If reversed on the same Trade Date of the allocation, MCS will remove the original allocation positions and associated TRX records
- If reversed after the Trade Date of the allocation, MCS will add offsetting positions and TRX records,
 allowing Clearing Members to report their original long and short quantities via Gross Position Reporting

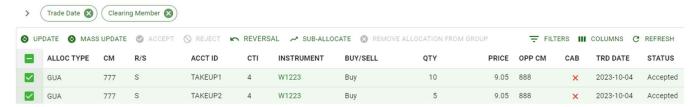
6.3.7 Sub-allocate Take-up

After a Clearing Member has accepted a take-up, they have the option to sub-allocate trades received as part of this allocation.

To Sub-allocate a Take-up:

- 1. Navigate to the Allocations Take-up Allocations screen
- 2. Locate and select the take-up allocation to sub-allocate

Take-up Allocations



- 3. Click SUB-ALLOCATE in the top left of the screen to open the Sub-allocation pop-up menu
 - a. The status of the allocation must be in an ACCEPTED state



Sub-allocation

2041000014	W1223	2023-10-27 13:17:50	user
2041000017	W1223	2023-10-27 13:17:50	user

4. Select the give-up group type to assign the selected trade(s) to; no selection will default to an allocation group, or check the AVG PRC IND box to assign to an average price group.

NOTE: Take-ups originating from average price groups can only be sub-allocated into average price groups.

5. If assigning to an average price group, an Average Group Price ID is required

NOTE: If attempting to add to an existing average price group, the group must be in an INCOMPLETE state.

6. Click SUBMIT

If the user selected the average price group type, MCS will attempt to match the take-up allocation to an existing give-up group. Otherwise, a new give-up group is created from the allocation.

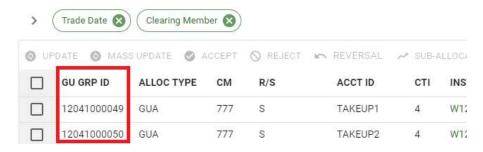
Give-up Groups



In addition, the originating take-up allocation's Give-up Group ID field is updated to match the sub-allocation's Give-up Group ID.



Take-up Allocations



6.3.8 Cancel Sub-allocation on Take-up

Users have two options for cancelling sub-allocations.

6.3.8.1 Cancelling the Give-up Group

Starting from the Allocations – Give-up Allocations screen, users can follow the instructions in section 6.3.5 on the give-up group corresponding to the sub-allocation.

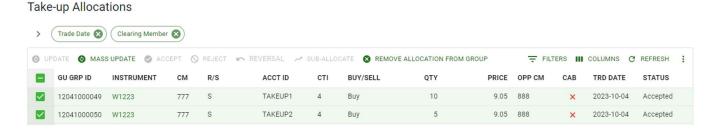
NOTE: If cancelling a sub-allocation from an average price group, then the group's status must be in an INCOMPLETE state and the sub-allocated take-up's quantity must be less than or equal to the Available Quantity on the group.

6.3.8.2 Removing the Take-up

Users have the option to remove take-ups from sub-allocations through a similar process to the initial sub-allocation.

To Remove a Take-up from a Sub-allocation:

- 1. Navigate to the Allocations Take-up Allocations screen
- Locate and select the take-up allocation(s) to remove from any sub-allocation(s)



3. Click **REMOVE ALLOCATION FROM GROUP** in the top left of the screen to open the Remove Allocation from Give-up Group pop-up menu



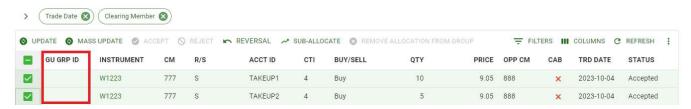
Remove Allocation from Give-up Group

ALLOC ID	INSTRUMENT	LAST UPDATED AT	LAST UPDATED BY
12041000014	W1223	2023-10-27 13:19:13	user
12041000017	W1223	2023-10-27 13:19:13	user

SUBMIT CANCEL

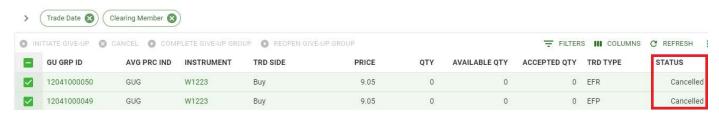
4. Click SUBMIT

Take-up Allocations



Once completed, MCS will reset the take-up allocation's GU GROUP ID. If the quantity of the give-up group that received the sub-allocation is reduced to zero, this give-up group is cancelled.

Give-up Groups



6.4 Initiating Give-ups from the Trades screen

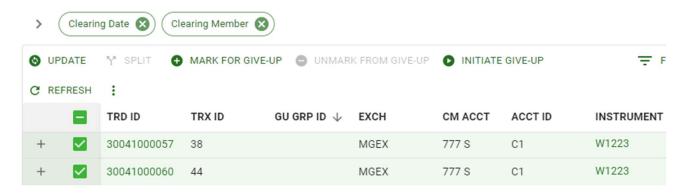
If a user intends to give-up the full quantity of trade(s) to one Clearing Member, MCS allows for simultaneous grouping and give-up allocation creation from the Trades – Trades screen.

To perform a Give-up Allocation from the Trades – Trades screen:

1. Locate and select the desired trade(s) to use for a give-up allocation

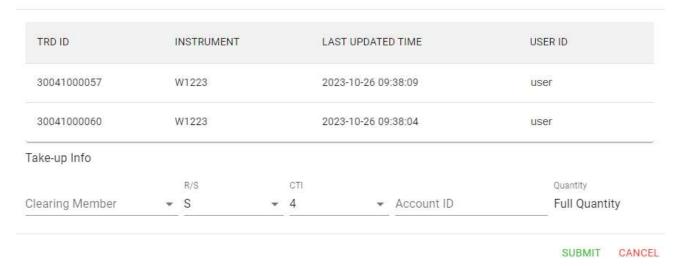


Trades



2. Click **INITIATE GIVE-UP** in the top left of the screen to open the Remove Allocation from Give-up Group popup menu

Initiate Give-up for Selected Trades



- 3. Input the Clearing Member, Clearing Member Account, CTI code, and Account ID of the account that will receive this give-up.
- 4. Click SUBMIT

The selected trade(s) will now be added to their own Single Transaction Allocation Group(s) and allocated out using the information provided by the user.

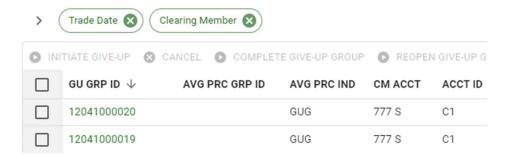
NOTE: Allocations initiated from the Trades – Trades screen must be for the full quantity of the selected trade(s).



Trades



Give-up Groups



Give-up Allocations



6.5 Allocations Log

The Allocations – Allocation Log screen features a record of all the updates MCS has received to a Clearing Member's give-ups and take-ups. This log includes information on the time of, the user responsible for, and the reason behind each log record.



Allocation Logs



ALLOC ID	LAST UPDATED TIME $ \downarrow $	ALLOC TYPE	ALLOC SIDE	GU GRP ID	FIRM ALLOC ID	TRX ID	CM ACCT	ACCT ID	CL ORD ID
12041000017	2023-10-27 13:19:13	GUA	Take-up	12041000050		119	777 S	TAKEUP2	
12041000014	2023-10-27 13:19:13	GUA	Take-up	12041000049		117	777 S	TAKEUP1	
12041000017	2023-10-27 13:17:50	GUA	Take-up			119	777 S	TAKEUP2	

								= FILTERS III COLUMNS C REFRESH			
OPP CM	OPP R/S	OPP ACCT ID	OPP CTI	INSTRUMENT	BUY/SELL	PRICE	QTY	USER ID	STATUS	REASON	
888				W1223	Buy	9.05	5	user	Accepted	Sub-allocated	^
888				W1223	Buy	9.05	10	user	Accepted	Sub-allocated	
888				W1223	Buy	9.05	5	user	Accepted	Sub-allocation Cancelle	ed

Log Reasons include:

- Initiated
- Allocation Updated
- Accepted
- Rejected
- Cancelled
- Sub-allocated
- Sub-allocation Cancelled
- Reversal Initiated
- Reversal Rejected
- Reversal Cancelled
- Reversed
- System Closed (if give-up not fully processed by MCS deadlines)

In addition, each record in the Allocations Log screen has links to the associated:

- Allocation, linked on the Allocation ID field, as found in the Give-up/Take-up Allocations screens
- Give-up group, linked on the Give-up Group ID, as found in the Give-up Groups screen



7. Position Management

MCS allows users to submit position reporting, query existing positions and view position data for instruments their Clearing Member is party to. MCS's calculation of position data is based on all received trades for the current business date, as well as prior gross position reporting.

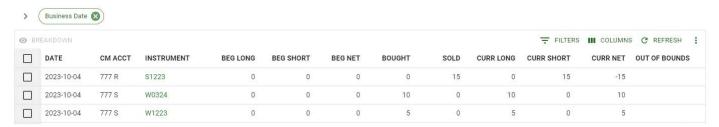
7.1 Positions

The Positions screens allow a Clearing Member to view current position data in multiple formats.



7.1.1 Positions

Positions



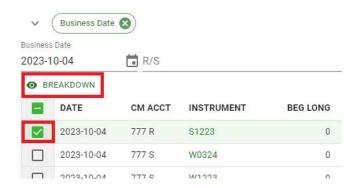
This screen displays all position data for a Clearing Member by account type and instrument. In this menu, users can view:

- Beginning Long/Short/Net: Clearing Member Account (CMA)'s positions at the start of a Trade Date
- Bought/Sold Today: Quantity of contracts a CMA traded on the current Trade Date
- Current Long/Short/Net: CMA's current positions, including adjustments from gross position reporting, calculated as:
 - o Current Long = Beginning Long + Bought Today + Gross Position Adjustments
 - Current Short = Beginning Short + Sold Today + Gross Position Adjustments
 - Current Net = Current Long Current Short
- Extended Bought/Sold (hidden by default): Quantity of contracts a CMA will trade on the next Trade
 Date (overnight)
- Preview Long/Short/Net (hidden by default): CMA's expected positions, calculated as:
 - Preview Long = Current Long + Bought Tomorrow (overnight trades)
 - Preview Short = Current Short + Sold Tomorrow (overnight trades)
 - Preview Net = Preview Long Preview Short
- Out of Bounds: Alerts raised by differences in position reporting and MCS position data, including:



- o (Blank): No issues
- Offset / Reinstatement: Long positions in gross position reporting are higher than expected in MCS records solely from trading activity. If intentional, no action necessary.
- Warning: Long positions in gross position reporting do not match Long Date position reporting. This
 MUST be corrected either in gross position reporting or by contacting MIAX Futures Clearing staff.

Positions



Selecting a specific instrument and account type also allows the user to transfer to the Positions Breakdown screen by clicking on the Breakdown button in the top left of the screen. The instrument field also serves as a hyperlink to the instrument record in the Reference Data – Instruments screen.

7.1.2 Position Breakdown

Position Breakdown



DATE	СМ АССТ	INSTRUMENT	TRD SOURCE	TRD TYPE	BOUGHT QTY	SOLD QTY
2023-10-04	777 R	S1223	Manual	EFP	0	15
2023-10-04	777 S	W0324	Manual	EFP	10	0
2023-10-04	777 S	W1223	Manual	EFP	5	0

Position Breakdown displays the number of contracts a Clearing Member has bought and sold in an instrument, broken down by Trade Source and Trade Type, for the current Trade Date.

7.2 Position Reporting



Clearing Members are required to submit daily gross position reporting after each Trade Date. Users will be able to submit, edit, and finalize their reporting from the Position Reporting screens.



7.2.1 Gross Positions

The Position Reporting – Gross Positions screen lists every instrument for which a Clearing Member has positions, broken down by account type.

Gross Positions



To offset or reinstate positions in any instrument, MCS only requires a user to report the updated long quantity for the instrument. The short quantity is calculated automatically by the system, using the net quantity as a constant.

Users have the option of submitting gross position reports in one of two ways.

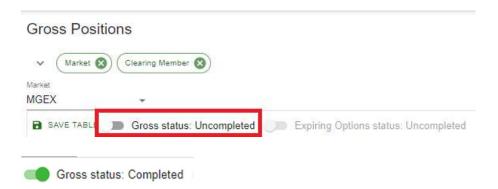
7.2.1.1 Reporting via Portal

- 1. Navigate to the **Position Reporting Gross Positions** screen
- 2. Select a position report. Verify:
 - a. That the long quantity for each position is as expected
 - b. That the Errors column is blank
- 3. If a position needs to be updated:
 - a. Verify the gross status is set to Uncompleted
 - i. Toggle the status if necessary
 - b. Double click on the gray Long Quantity cell and edit the value





- 4. Repeat steps 1 and 2 until all reports are updated
- 5. Click SAVE TABLE in the top left of the screen to open the Save Changes pop-up menu
- 6. Click SUBMIT
- 7. Check for any Errors/Out of Bounds exceptions on submitted reports. Make any necessary corrections.
 - (Blank): No issues
 - Offset / Reinstatement: Long positions in gross position reporting are higher than expected in MCS records solely from trading activity. If intentional, no action necessary.
 - Warning: Long positions in gross position reporting do not match Long Date position reporting, MUST be corrected either in gross position reporting or by contacting MIAX Futures Clearing staff.
- 8. Select the Market to complete reporting for
- **9.** Click the **Gross Status** toggle in the top left of the screen to mark that gross position reports have been finalized.



7.2.1.2 PCS File Upload

Users will have the option to upload a Position Change Submission (PCS) FixML file via SFTP to fulfill their gross position reporting obligations. The file specification is available at MIAX Futures Interface Specifications | MIAX (miaxglobal.com)

7.2.2 End-of-Lifecycle Position Reports



For instruments at the end of their lifecycles, different position reports are expected to be submitted depending on the instrument type:

- Financially Settled Future
 - Expiring Position Report
- Physical, Compulsory Delivery Future
 - o Expiring Position Report
 - Consolidated Expiring Position Report
- · Physical, Intention-based Delivery Future
 - Long Date Position Report
- · Option on Future
 - o Expiring Options Report



7.2.2.1 General Position Reporting Instructions

The reports listed above use the same functions to submit, update, and delete reports, as well as marking reporting as complete. These functions are described below.

To Submit a Position Report:

- 1. Verify the report status is set to Uncompleted in the Reconciliation screen
 - a. Toggle the status if necessary
- 2. Navigate to the Reporting screen
- 3. Click ADD in the top left of the screen to open the Add Position pop-up menu
- 4. Enter position details in the appropriate fields
- 5. Click SUBMIT

To Update Position Reports:

- 1. Navigate to the Reporting screen
- 2. Find the desired report to update
- 3. Double click on the gray cells within the report and edit the values to update
- 4. Repeat Steps 1 and 2 until all reports are updated
- 5. Click SAVE in the top left of the screen to open the Save Changes pop-up menu



6. Click SUBMIT

To Delete a Position Report:

- 1. Navigate to the Reporting screen
- 2. Locate and select the report to delete
- 3. Click **DELETE** in the top left of the screen to open the Delete Position pop-up menu
- 4. Click SUBMIT

To mark the Position Reporting Status for your Clearing Member as Completed:

- 1. Navigate to the Reconciliation screen
- 2. Verify that all records have a State or Reconciliation Result of SUCCESSFUL
- 3. Click the Position Reporting Status toggle in the top left of the screen to update the status to Completed

NOTE: If any errors are encountered while performing these steps, MCS will display explanatory messages to help the user correct position reporting as necessary.

7.2.2.2 Expiring Positions Reporting

When a financially settled future has reached its expiration date, or a physical compulsory delivery future has reached its reporting period, users must submit expiring position reports in the Position Reporting – Expiring Positions – Reporting screen.

Add Expiring Position Account Instrument Account ID Long Quantity Short Quantity SUBMIT CANCEL



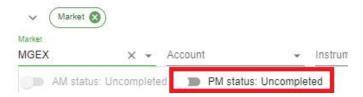
7.2.2.3 Expiring Positions Reconciliation

The Position Reporting – Expiring Positions – Reconciliation screen reconciles the current MCS position data, as displayed in the Positions – Positions screen, with the quantities reported by the Clearing Member, as displayed in the Position Reporting – Expiring Positions – Reporting screen.

If any expiring instruments have not been reported on yet, or the reported quantities do not match MCS position data, the reconciliation result for these instruments will have a state of FAILED. Once reporting has been completed and matches MCS position data, the state will change to SUCCESSFUL.

Once all expiring position reports have been submitted and all reconciliation states are SUCCESSFUL, a user can finalize their reporting for the day by clicking the appropriate "AM status" and/or "PM status" toggle in the top left of the screen corresponding to the expiration time(s) established in the instruments' contract specifications.

Expiring Position Reconciliation



7.2.2.4 Consolidated Expiring Positions Reporting

When a physical compulsory delivery instrument has reached its reporting period, users must submit consolidated expiring position reports for each Trade Account holding positions in the Position Reporting – Consolidated Positions – Reporting screen.

To report these positions for a Trade Account, a user must:

- Calculate the long and short quantities for all positions held by the Trade Account in the expiring physical compulsory delivery instruments
- 2. Identify which instrument is approved for consolidated expiring position reporting for each group of expiring instruments sharing the same underlying asset
- 3. Submit a Consolidated Expiring Position Report, converting long and short position quantities to the equivalent number of contracts in the instrument from Step 2, and netting as applicable/desired.



Add Consolidated I	Expiring Position	
Account	*	
Instrument	*	
Account ID		
Long Quantity	Short Quantity	
	SUBMIT CANCEL	

7.2.2.5 Consolidated Expiring Positions Reconciliation

The Position Reporting – Expiring Positions – Reconciliation screen reconciles, for all physical compulsory delivery instruments being reported on, the net amount of the underlying asset calculated from expiring position reports (i.e. Unconsolidated Net Delivery Quantity) with the amount reported within consolidated expiring position reports (i.e. Consolidated Net Delivery Quantity).

Records in the Reconciliation screen will only appear after either type of expiring position report has been submitted for the physical compulsory delivery instrument.

If either position report has not yet been completed, or the quantities between the two reports do not match, the reconciliation result for these instruments will have a state of FAILED. Once reporting for both has been completed and the reported quantities match, the state will change to SUCCESSFUL.

In addition, the Consolidated Short and Long Delivery quantities are compared to the Pre-Validation and Post-Validation quantities respectively.

- The Pre-Validation check verifies whether a Clearing Member has pledged enough of the underlying asset to cover their short positions. If the Pre-Validation (pledged) quantity is
 - ≥ the Consolidated Short Delivery Quantity, the **Pre-Validation Check = OK**
 - < the Consolidated Short Delivery Quantity, the Pre-Validation Check = Warning</p>
- The Post-Validation check verifies whether a Clearing Member has received the amount of the underlying asset equal to their long positions. If the Post-Validation quantity is
 - Not populated in the Delivery Accounts page, the Post-Validation Check is left blank
 - = the Consolidated Long Delivery Quantity, the Post-Validation Check = OK
 - \$\neq\$ the Consolidated Long Delivery Quantity, the Post-Validation Check = Warning



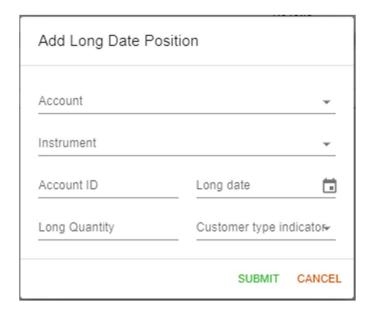
Once all consolidated expiring position reports have been submitted, and all reconciliation states are SUCCESSFUL, a user can finalize their reporting for the day by clicking the appropriate "AM status" and/or "PM status" toggle corresponding to the expiration time(s) established in the instruments' contract specifications.

Consolidated Expiring Position Reconciliation



7.2.2.6 Long Date Position Reporting

When a physical intention-based delivery instrument enters its delivery period, Clearing Members with long positions will have to submit long date position reports to MCS from the Position Reporting – Long Date Positions – Reporting screen.



In addition to the aforementioned method of submitting position reports, users have the option to reuse a previous day's long date position reporting. This process automatically removes any long date position reports that were previously assigned, accurately reflecting a Clearing Member's remaining long date positions provided that no trade activity occurred in the reported instruments.

To Reuse a Previous Long Date Position Report:

1. Click **REUSE** to open the Reuse Long Date Position pop-up menu



- 2. Select the account and instrument for which long date position reporting will be reused
- 3. Click SUBMIT

7.2.2.7 Long Date Positions Reconciliation

The Long Date Positions – Reconciliation screen validates whether the quantities reported by the Clearing Member, as displayed in the Long Date Positions – Reporting screen, lie between the maximum and minimum acceptable long quantities, determined based on MCS position and trade data displayed in the Positions – Positions screen.

- Minimum Long Quantity = MAX (Beginning Long quantity Today's Sold quantity (Total) + MAX (Today's Bought quantity (Total) - Beginning Short quantity; 0); 0)
- Maximum Long Quantity = Beginning Long Quantity + Today's Bought Quantity (Total) Today's Bought Quantity (Delivery) - Today's Sold Quantity (Delivery)

If a Clearing Member is net long in an instrument, but has reported a lower quantity in their long date position reconciliation than in any expiring instruments have not been reported on yet, or the reported quantities are outside of the acceptable range, the reconciliation result for these instruments will have a state of FAILED. Once reporting has been completed and is within the acceptable range, the state will change to SUCCESSFUL.

Once all long date position reports have been submitted, and all reconciliation states are SUCCESSFUL, a user can finalize their reporting for the day by **toggling the status to Completed**.



7.2.2.8 Expiring Options Position Reporting

When an option contract has reached its expiration date, users must report their current held positions in the Position Reporting – Gross Positions screen. All expiring option instruments requiring reporting will be identified with a green check in the EXP OPTION column.



Gross Positions



Once positions for all expiring options have been submitted, a user can finalize their reporting for the day by selecting the Market to finalize reporting for, followed by toggling the Expiring Options status to Completed.

Gross Positions





8. Option Exercise

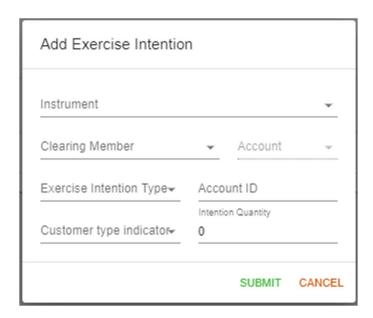
8.1 Early Option Exercise

To complete an early exercise of an American-style option, Clearing Members must submit exercise intentions from the Positions - Exercise Intentions screen.

Option Exercise ITM Evaluations Exercise Intention

To Add an Exercise Intention:

- 1. Navigate to the Option Exercise Exercise Intention screen
- 2. Click ADD to open the Add Exercise Intention pop-up menu



- 3. Complete all fields with information on the option to be exercised
- 4. Click SUBMIT

If any errors are made an exercise can be selected to "UPDATE," or "DELETE" and can be re-entered if necessary.

NOTE: Updates and Deletions can only be made on the same Trade Date that the original intention was received.

To Update an Exercise Intention:

- 1. Navigate to the Option Exercise Exercise Intentions screen
- 2. Locate and select the exercise intention to modify



- 3. Click **UPDATE** to open the Update Exercise Intention pop-up menu
- 4. Edit any updatable fields as desired
- 5. Click SUBMIT

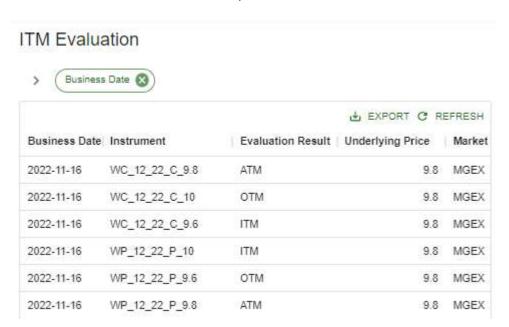
To Delete an Exercise Intention:

- 1. Navigate to the Option Exercise Exercise Intentions screen
- 2. Locate and select the exercise intention to delete
- 3. Click **DELETE** to open the Delete Exercise Intention pop-up menu
- 4. Click SUBMIT

8.2 Option Expiration

On the expiration date of an option, MCS will run an In the Money (ITM) Evaluation, taking the settlement price of the underlying future and calculating which options are in, at, or out of the money compared to the received settlement price.

The results of this calculation are then published in the ITM Evaluation screen.



MCS will default to exercising all options that are In the Money (ITM), and abandoning all At the Money (ATM) and Out of the Money (OTM) options.

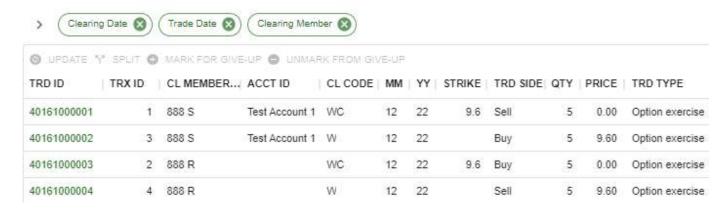


Users will only be able to submit exercise intentions for expiring options that supersede this default (i.e., exercising ATM or OTM options, and/or abandoning ITM options). **Exercise intentions that match what MCS is prepared to submit by default will not be accepted to prevent duplicate entries**.

8.3 Exercise Generated Trades

As part of exercising an option, MCS automatically generates trades in the underlying future and offsetting trades closing out the exercised option. Except where pulled from an exercise intention, the Account ID field on these trades is left blank.

Trades



It is the obligation of each Clearing Member to update the new futures trades with the correct Account ID(s), and if necessary to split the trades between their customers, by the end of the Clearing Date on which the option exercise took place. The schedule of deadlines can be found in Resolution 2101.00.C of the MIAX Futures rulebook, hosted on the MIAX Futures website.



9. Settlements

After each Intraday, End-of-Day, and Delivery settlement run, the resulting credits and debits to a Clearing Member's Accounts are searchable in the Settlement screens, broken down in multiple formats to assist users in monitoring their financial activities.

9.1 Settlement Runs

Settlement Runs



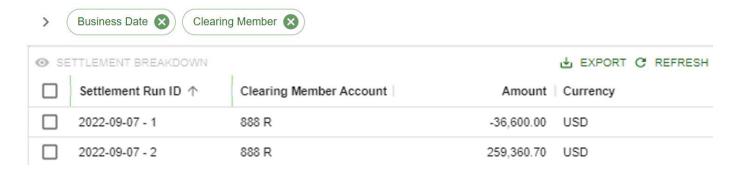
This screen displays a record of all settlement runs that have been executed on the current Clearing Date, storing information on the run type (i.e., Intraday, End-of-Day, or Delivery), market, and the time that the settlement run was triggered.

To see additional information on a Settlement Run:

- 1. Select the desired settlement run
- 2. Click SETTLEMENT INSTRUCTIONS to view all associated records in the Settlements Instructions screen

9.2 Settlement Instructions

Settlement Instructions





This screen displays the net credits and debits from each settlement run, on each of a Clearing Member's Accounts. These credits/debits serve as the instructions submitted to the Clearing Member's settlement bank as part of the Mark to Market process.

To see additional information on a Settlement Instruction:

- 1. Select the desired settlement instruction
- 2. Click SETTLEMENT BREAKDOWN to view all associated records in the Settlements Breakdown screen

9.3 Settlement Breakdown

Settlement Breakdown



This screen displays the results of each settlement run, broken down by settlement run, Clearing Member Account, reason for the settlement calculation, and market.

Reasons for settlement calculations include:

- Position Variation:
- Trade Variation
- Option Premium
- Option Exercise
- Expiration
- Margin Excess/Deficit
- Delivery
- Fee

To see additional information on a Settlement Breakdown:

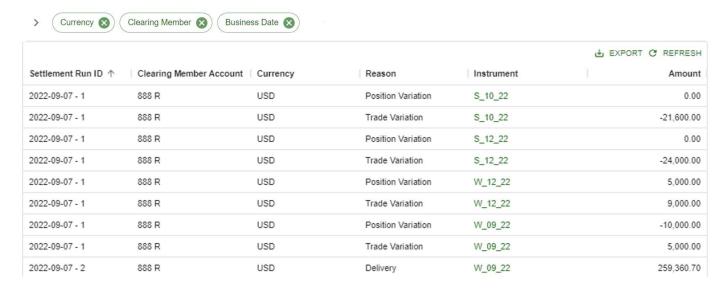
1. Select the desired settlement breakdown



2. Click SETTLEMENT POSITION to view all associated records in the Settlements – Positons screen

9.4 Settlement Positions

Settlement Positions



This screen displays in-depth results of each settlement run, broken down by each instrument that a Clearing Member has positions in.



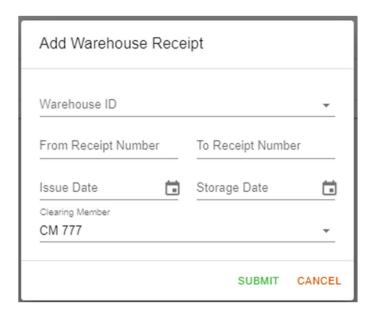
10. Delivery

10.1 Warehouse Receipts

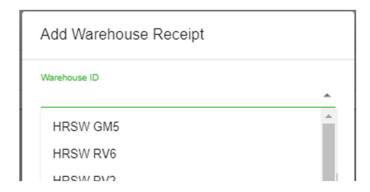
During a physical intention-based delivery instrument's delivery period, Clearing Members must submit or update their warehouse receipts in the Delivery – Warehouse Receipts screen for all units of the underlying asset that they intend to deliver.

To Submit a Warehouse Receipt:

- 1. Navigate to the **Delivery Warehouse Receipts** screen
- 2. Click ADD in the top left of the screen to open the Add Warehouse Receipt pop-up menu

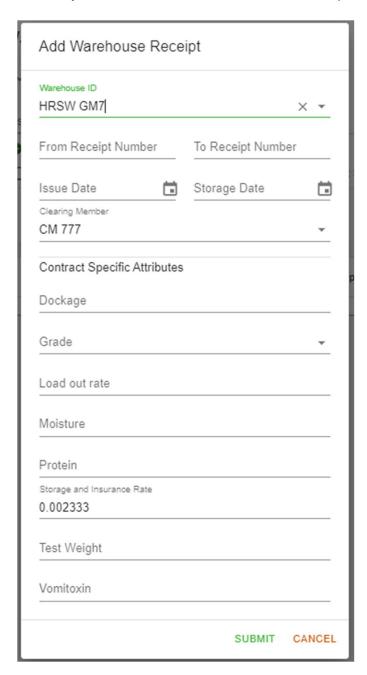


3. Select the appropriate Warehouse ID from the drop-down list. Once selected, the pop-up menu updates with fields corresponding to the contract specific attributes for products stored at this warehouse.





- a. The Warehouse ID field references MCS's list of Warehouses for each type of asset, as stored in the Reference Data Warehouses screen. Query this screen to identify which Warehouse ID to input.
- 4. Complete all fields to match the warehouse receipt to be entered



5. Click SUBMIT



Warehouse Receipts

> No active search criteria



Once a warehouse receipt has been part of a delivery transaction, it is searchable by any user with access to the Warehouse Receipt ID and issue date, by using the Delivery – Warehouse Receipt Details screen

Warehouse Receipt Details



Receipt Attributes

Receipt Number 116 Issue Date 2021-11-29

Storage Date 2021-12-01

Warehouse ID

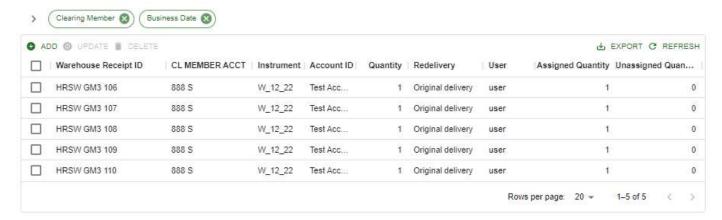
Contract Specific Attributes

Name	Value
Dockage	1
Grade	NS2
Load Out Rate	0.05
Moisture	12
Protein	14.5
Storage and insurance rate	0.002333
Test Weight	55
Vomitoxin	1



10.2 Delivery Intentions

Delivery Intentions

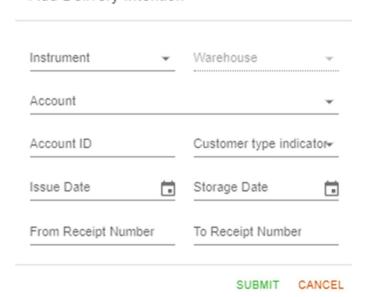


Clearing Members with short positions in any physical intention-based delivery futures (e.g., Hard Red Spring Wheat Futures) will have to submit delivery intentions to MCS at some point during the instrument's delivery reporting period.

To Submit a Delivery Intention:

- 1. Navigate to the **Delivery Delivery Intentions** screen
- 2. Click ADD in the top left of the screen to open the Add Delivery Intention pop-up menu

Add Delivery Intention





- 3. Enter all delivery intention details based on the applicable warehouse receipt
- 4. Click SUBMIT

To Update Delivery Intentions:

- 1. Navigate to the **Delivery Delivery Intentions** screen
- 2. Click UPDATE in the top left of the screen to open the Update Delivery Intention pop-up menu
- 3. Edit updatable fields as desired
- 4. Click SUBMIT

To Delete a Delivery Intention:

- 1. Navigate to the **Delivery Delivery Intentions** screen
- 2. Locate and select the report to delete
- 3. Click **DELETE** to open the Delete Delivery Intention pop-up menu
- 4. Click SUBMIT

10.3 Delivery Intention Validations

Delivery Intention Validations



The Delivery – Delivery Intention Validation screen displays useful information for Clearing Members that hold short positions in an intention-based delivery future that has reached its delivery period. By taking the net delivery quantity from submitted delivery intentions, and a Clearing Member's current short positions in the instrument, MCS calculates the remaining short quantity a Clearing Member is expected to deliver upon.

In addition, if delivery intentions exceed a Clearing Member's current short positions, or the expected short quantity has not been zeroed out by the end of the delivery period, the Validation Result column will display a WARNING in the record requiring correction.



10.4 Delivery Positions

The Delivery – Delivery Positions screen lists the possible deliveries and receipts for the current Business Date. It includes data on the Delivery Type, Delivery Side, Instrument, Asset, Trade Account ID, and Quantity being transacted. This page is automatically populated by MCS with data from the Clearing Member's delivery reporting, once the report status has been marked as completed. This includes:

- Consolidated Expiring Position Reports
- Long Date Position Reports
- Delivery Intentions

Delivery Positions



If a user notices an error in these delivery positions before delivery reporting closes for the day, they can return the position reporting status to uncompleted to remove these delivery positions, and modify their Clearing Member's position reporting as needed.

10.5 Delivery Assignments

Delivery Assignments



Delivery assignment is initiated by MCS once delivery position reporting is closed for the day. The process randomly matches deliveries to receipts, the results of which are viewable in the Delivery – Delivery Assignments screen.



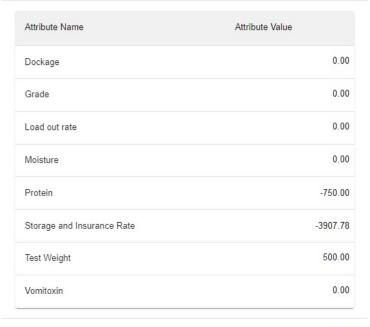
10.6 Delivery Settlement Amounts



Once delivery assignments have been created, the Delivery – Settlement Amounts screen will display the credit/debit calculations for each of a Clearing Member's assignments. Ultimately, Clearing Members with Delivery Side = Deliver are credited the net settlement amount, while Clearing Members with Delivery Side = Receive are debited the net settlement amount.

- Gross Settlement Amount = Assignment Quantity x Settlement Price x Contract Value Factor
- **Net Settlement Amount** = Gross Settlement Amount + Warehouse Adjustment Value + Sum of all adjustment values for each Contract Specific Attribute
- Warehouse Adjustment Value = (Premium or Discount from the Warehouse) x Assignment Quantity x Contract Value Factor

Attribute Adjustments



CLOSE



- Attribute Adjustments (Non-storage) = (Premium or Discount from the Contract Specific Attribute) x Assignment Quantity x Contract Value Factor
- Attribute Adjustments (Storage) = (-1) x Storage Rate from the warehouse receipt x Assignment Quantity x Contract Value Factor x Number of Days Stored
 - Number of Days Stored = Accrual Date Storage Date on the warehouse receipt (including weekends and holidays)
 - Accrual Date = Current Clearing Date + 2



11. Margin and Guaranty Fund

Firms are required to meet and maintain Margin and Guaranty Fund (Security Deposit) requirements using acceptable collateral types as set by MIAX Futures. These requirements and any changes to them can be monitored within the Margin and Guaranty Fund screens.

11.1 Margin

In the Margin – Margin screen users can find a summary of their firm's margin requirements and any relevant adjustments as well as posted cash and non-cash collateral broken down by account.



Margin



Clicking on the "+" symbol to the left of any of the records will display a drop-down list, breaking down the margin information by market.



When margin requirements are updated by the Clearing House, MCS calculates and records any subsequent deficits and cash excesses for each of a Clearing Member's accounts. The results of this process are displayed within the Settlement – Breakdown and Settlement – Positions screens described in 9.3 and 9.4, and can be identified by querying for records where the Reason equals "Margin."

- · Margin deficits are stored as debits
- · Cash excesses are stored as credits, up to the amount of cash collateral available to the account

11.2 Margin Requirements

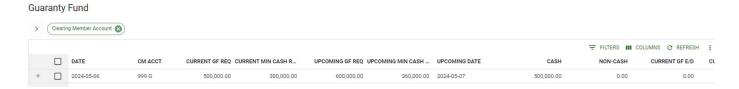


From the Margin – Margin Requirements screen firms can view margin requirements including the risk-based margin, any margin adjustments, ESMA, and SPAN risk for the current and previous business dates.



11.3 Guaranty Fund

In the Guaranty Fund – Guaranty Fund screen users can find a summary of their firm's security deposit requirements as well as posted cash and non-cash collateral pledged to meet those requirements.



Clicking on the "+" symbol to the left of any of the records will display a drop-down list, breaking down the security deposit information by market.



When security deposit requirements are updated by the Clearing House, MCS will display any subsequent deficits and excesses for the Clearing Member's Guaranty Fund account within this screen.

11.4 Guaranty Fund Requirements

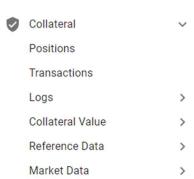
From the Guaranty Fund – Guaranty Fund Requirements screen firms can view security deposit requirements for the current and previous business dates. The breakdown also includes upcoming Guaranty Fund requirement changes if applicable.





12. Collateral

Collateral is used to meet margin and security deposit requirements set by MIAX Futures. Similar to the Margin screens, the Collateral screens allow the user to monitor their firm's collateral positions, make necessary deposits and withdrawals, adjust the composition of collateral positions, and view collateral values and market data.



12.1 Collateral Positions

The Collateral – Collateral Positions screen displays current collateral positions, including "Cash" or "Non-Cash" collateral broken down by specific collateral instrument (e.g. USD Cash, Treasury Bills, etc.). The screen also displays any applicable haircuts and the pre and post haircut market value of a firm's collateral positions.



12.2 Collateral Transactions

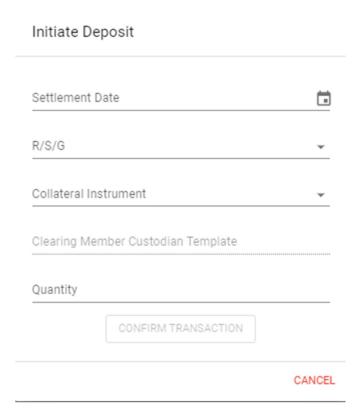
The Collateral – Collateral Transactions screen allows firms to view previous collateral transactions as well as initiate new ones, including deposits and withdrawals. Any errors from recent submissions will display in the error column.

12.2.1 Initiate Deposit

To Initiate Deposit:

- 1. Navigate to the Collateral Transactions screen
- 2. Click INITIATE DEPOSIT in the top left of the screen to open the Initiate Deposit pop-up menu





3. Enter deposit details into the appropriate fields, either by selecting an option from the drop-down list or, if none appear, completing the field manually

NOTE: When selecting from a drop-down list, users can enter the name of the option they are looking for to narrow the list, but must ultimately select the option from the list.

a. Correct any fields with inappropriate data types or values. MCS will notify users of any fields needing correction, highlighting these fields in red and displaying an error message



- 4. Click SUBMIT, and review any received error messages
 - **a. Enter trade details for any missing required fields.** These will appear highlighted in red with an error message, as in the example below





b. Correct any fields with inappropriate data types or values. Any fields not flagged earlier will display an error message at the bottom of the pop-up menu

Request failed with 1 error:

The quantity 10 is not a multiple of the minimum quantity 100, specified by sub-asset class Short Term U.S. Treasuries

12.2.1.1 Collateral Transaction Statuses

Once a Collateral Transaction has been initiated in the MCS, the current status will be displayed along with other transaction details in the Collateral – Transactions screen. Refer to the statuses below to identify next steps, if applicable. These statuses include:

- Pending Settlement: When a collateral transaction is first entered, the status will be set to PENDING SETTLEMENT if the quantity of the transaction is below the collateral approval threshold set by your firm and does not require secondary user approval. Pending clearing house approval and processing.
- Pending Approval: Transaction Quantity requires secondary user approval. See 12.2.3 for more detailed instruction on this process. Once approved, the status will update to PENDING SETTLEMENT or QUEUED if designated for a future settlement date.
- **Needs Review:**
 - Collateral withdrawal quantity exceeds current collateral positions
 - Clearing member is not eligible to process the collateral transaction
 - Withdrawal would reduce collateral below current margin requirement
 - Withdrawal results in breach of minimum cash requirement
 - Withdrawal exceeds the maximum allowed quantity
- Queued: If the transaction is submitted with a future settlement date the status will be set to QUEUED. Once the activity window opens on the designated settlement date, any QUEUED transactions will update to PENDING SETTLEMENT or other status described in this section.
- Settled: Upon Clearinghouse approval of the transaction and confirmation of receipt of the collateral deposit, or release of the collateral withdrawal, the status will be updated from PENDING SETTLEMENT to SETTLED. All SETTLED transactions are promoted to current collateral positions, displayed in the Collateral – Positions screen described in section 12.1.
- Created: New collateral transaction created. Primarily only shown in logs.

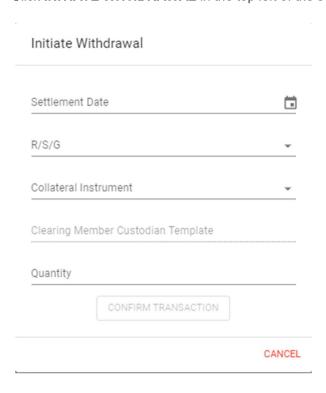


- **Validating:** System determines if the collateral transaction requires secondary user approval or needs review as described above. Primarily only shown in logs.
- **Failed:** Collateral transaction unable to be processed. See transaction log for further details. Instructions to query transaction log outlined in section 12.3.2.
- Cancelled: MCS users can cancel a collateral transaction while the status is still pending before it has
 reached the settlement process (e.g. Created, Pending Approval, Queued, Validating, or Needs Review).
 This will result in a status of cancelled. See 12.2.4 and 12.2.5 for more detailed instruction on this process.
- System Cancelled: At the end of each Trade Date, any collateral transactions remaining in a pending approval or needs review status will be updated to a SYSTEM CANCELLED state. The transactions will no longer be able to be approved, and will remain for reference purposes in the system for the next two business days.

12.2.2 Initiate Withdrawal

To Initiate a Withdrawal:

- 1. Navigate to the Collateral Transactions screen
- 2. Click INITIATE WITHDRAWAL in the top left of the screen to open the Initiate Withdrawal pop-up menu





3. Enter withdrawal details into the appropriate fields, either by selecting an option from the drop-down list or, if none appear, completing the field manually

NOTE: When selecting from a drop-down list, users can enter the name of the option they are looking for to narrow the list, but must ultimately select the option from the list.

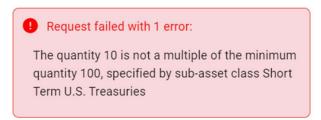
a. Correct any fields with inappropriate data types or values. MCS will notify users of any fields needing correction, highlighting these fields in red and displaying an error message



- 4. Click SUBMIT, and review any received error messages
 - **a. Enter trade details for any missing required fields.** These will appear highlighted in red with an error message, as in the example below



b. Correct any fields with inappropriate data types or values. Any fields not flagged earlier will display an error message at the bottom of the pop-up menu



12.2.3 Approve Transaction

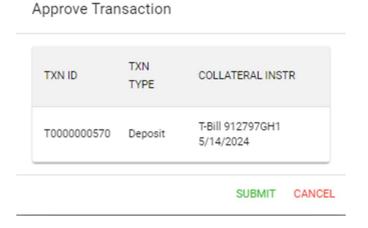
To ensure accuracy and security, the MCS utilizes a two-party approval process for collateral transactions. This means, a user who did not initiate the deposit or withdrawal must log in separately and approve the transaction if the quantity is above the collateral approval threshold set by your firm.

To Approve a Collateral Transaction

- 1. Navigate to the Collateral Transactions screen
- 2. Locate and select the relevant transaction(s) to approve



3. Click APPROVE in the top left of the screen to open the Approve Collateral Transaction pop-up menu

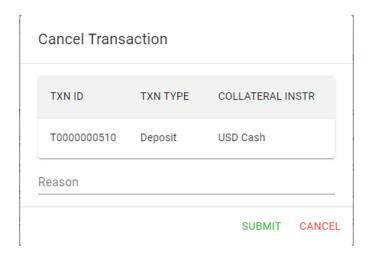


4. Click SUBMIT

12.2.4 Cancel Transaction

To Cancel a Collateral Transaction

- 1. Navigate to the Collateral Transactions screen
- 2. Locate and select the relevant transaction(s) to cancel
- 3. Click CANCEL in the top left of the screen to open the Cancel Collateral Transaction pop-up menu



4. (Optional) **Enter the reason for cancelling the collateral transaction.** If provided, the reason will be stored in the Collateral Position Log for the collateral transaction cancellation

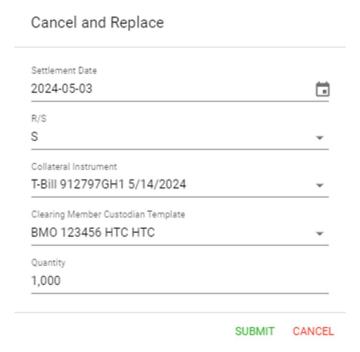


5. Click SUBMIT

12.2.5 Cancel and Replace Transaction

To Cancel and Replace a Collateral Transaction

- 1. Navigate to the Collateral Transactions screen
- 2. Locate and select the relevant transaction(s) to cancel and replace
- 3. Click **CANCEL AND REPLACE** in the top left of the screen to open the Cancel and Replace Collateral Transaction pop-up menu



4. Enter details for the new transaction in the appropriate fields, either by selecting an option from the dropdown list or, if none appear, completing the field manually.

NOTE: When selecting from a drop-down list, users can enter the name of the option they are looking for to narrow the list, but must ultimately select the option from the list.

a. Correct any fields with inappropriate data types or values. MCS will notify users of any fields needing correction, highlighting these fields in red and displaying an error message

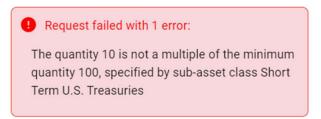


Quantity		
0		

- 5. Click SUBMIT, and review any received error messages
 - **a. Enter details for any missing required fields.** These will appear highlighted in red with an error message, as in the example below



b. Correct any fields with inappropriate data types or values. Any fields not flagged earlier will display an error message at the bottom of the pop-up menu



12.3 Collateral Logs

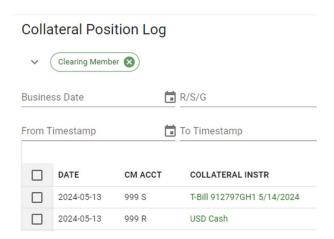
12.3.1 Collateral Position Log

For each Collateral Position, MCS will store a record of all updates within the collateral position log. This log includes information on the time of, the user responsible for, and the reason behind each log record as well as before/after value updates. Collateral position logs are stored in the system for up to 25 calendar days.

Log reasons include: To query Collateral Position Logs:

1. Navigate to the **Collateral – Logs – Position Log** screen to see all logs stored by MCS, from which a user can query for desired records





12.3.2 Collateral Transaction Log

For each Collateral Transaction, MCS will store a record of all updates within the collateral transaction log. This log includes information on the status (e.g. Created, Pending approval, Pending Settlement, Settled, and Canceled), time of, the user responsible for, and the reason behind each log record. Collateral transaction logs are stored in the system up to 25 calendar days.

Log reasons include:

- New transaction
- Approval not required (i.e. Transaction amount is below approval threshold)
- Approval required (i.e. Transaction amount requires secondary approval)
- Withdrawal accepted
- Settlement confirmed
- Transaction completed
- Cancelled due to new margin date (i.e. Pending transaction not approved prior to deadline)

To find the Collateral Transaction Log of a particular transaction:

- 1. Navigate to the Collateral Transactions screen
- 2. Locate the desired transaction to inspect
- 3. Click on the hyperlinked "TXN ID" on the record to navigate to the transaction log displaying all updates for the associated transaction.



Collateral Transaction Log



To query Collateral Position Logs in general:

Navigate to the Collateral – Logs – Transaction Log screen to see all logs stored by MCS, from which a
user can query for desired records

Collateral Transaction Log No active search criteria Transaction ID From Timestamp Ċ TXN ID CM ACCT REASON T0000000590 999 S New transaction T0000000590 999 S Approval required

Note: By clicking on the hyperlinked TXN ID users can instantly navigate to the collateral transactions screen to view that specific transaction. By clicking the hyperlinked TXN ID again, the user can return to the Collateral Transaction Log.

12.4 Collateral Value

Distinct from the Collateral Positions screen, the Collateral Values screens allow users to view their collateral values broken down by account and sub-asset class for a more streamlined overview of their pledged collateral.

12.4.1 Collateral Value Per Account

The Collateral - Collateral Values - Account screen allows the firm to view their current cash and non-cash collateral value by account.





12.4.2 Collateral Value Per Sub-asset class

The Collateral - Collateral Values – Sub-asset Class screen allows the firm to see their total pre-haircut market value, total applied market value, and capped applied market value by sub-asset class and account.

DATE	CM ACCT	SUB-ASSET CLASS	TOTAL PRE-HAIRCUT MV	TOTAL APPLIED MV	CAPPED APPLIED MV
2024-05-03	999 R	USD Cash	10,000,000.00	10,000,000.00	10,000,000.00
2024-05-03	999 S	Short Term U.S. Treasuries	10,000,000.00	9,900,000.00	9,900,000.00
2024-05-03	999 S	USD Cash	2,000,000.00	2,000,000.00	2,000,000.00



Appendix A: Revision History

Revision Date	Version	Description
December 2022	0.1	Initial draft version
January 2023	0.2	Addition of section 7.2.2 - 11
February 2023	0.3	Addition of Mass Update instructions, TRX handling of extended give-up window
April 2023	0.4	Updates to sections 6.3.1, 7.2.2.8
November 2023	1.0	First draft for system as it exists in production. Updates to incorporate feedback from go-live
November 2024	1.1	Updates and additions to sections 11 – 12. MIAX Futures rebrand



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