

Match Trade Prevention

Avoid unintentional trading with your own firm

U.S. Equities

Cboe Equities' Match Trade Prevention (MTP) functionality helps Members avoid unintentional trading by preventing orders with the same unique identifier from executing against each other.

When using MTP

- > Unique identifiers must be equal.
- > The incoming order MTP modifier controls the interaction between MTP executable orders.
- > There are five optional FIX fields (see below) for cancels and restatements.
- > All MTP functionality is free of charge.

Unique Identifiers Must be Equal (MTP Identifier)

In order to prevent a trade, two orders must be marked at the same MTP unique identifier level (MPID, Cboe Equities Member [Firm] or Port Owner). There are currently five MTP Identifier choices. The default Identifier is none. The other four settings are: N (No MTP); F (Firm); M (MPID); and P (Port Owner). If the orders differ on the specified MTP unique identifier level, they will be allowed to execute against each other.

Trading Groups

A Trading Group ID is an optional function that can be used in conjunction with the MTP identifier to specify more granular Match Trade Prevention.

MTP Modifier Defined

Orders with an MTP modifier will not execute against the opposite side's resting interest that is marked with any MTP modifier originating from the same unique identifier. See MTP Decrement and Cancel description below for more information on the single exception to this rule.

- **1** MTP Cancel Newest (N): Use this modifier to cancel the incoming order and maintain the resting order on the Cboe order book.
- 2 MTP Cancel Oldest (O): This modifier cancels the resting order with an MTP modifier. The incoming order marked O will continue to be handled within the matching engine as instructed by the user.
- **3** MTP Cancel Both (B): The entire size of both orders will be canceled when using this modifier.
- 4 MTP Decrement (D): If both orders are equal in size, both orders will be canceled. For those not equivalent in size, the smaller order will be canceled and the larger order will be decremented by the size of the smaller order with the balance remaining on the Cboe order book. However, both orders will be canceled if the resting order is marked with any MTP modifier other than D, and the incoming order is smaller than the resting order.
 - MTP Decrement remainder only (d): This functions the same as D except that with Decrement remainder only (FIX Tag 38), Order Qty is NOT decremented; the larger order will ONLY have its LeavesQty (remainder) (FIX Tag 151) decremented.
- 5 MTP Decrement and Cancel (MDC): If both orders are equal in size, both orders will be canceled. For those not equivalent in size, the smaller order will be canceled, and the larger order will be decremented by the size of the smaller order with the balance remaining on the Cboe order book. However, both orders will be canceled if the resting order is marked with any MTP modifier other than MDC and the incoming order is smaller than the resting order.
 - MTP Decrement and Cancel (MdC): This functions the same as MDC except that with MdC (FIX Tag 38), OrderQty is NOT decremented, the larger order will ONLY have its LeavesQty (remainder) (FIX Tag 151) decremented.





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Optional FIX Fields

Members may opt-in to receive four additional FIX tags on cancels and restatements triggered by MTP:

- > TradeLiquidityIndicator (9730): A=Add / R=Remove
- > SecondaryOrderID (198): contra Cboe Order ID of prevented trade
- > LastShares (32): number of shares that would have matched if not prevented by MTP
- > LastPx (31): price the match would have occurred at if not prevented by MTP

Sample Order Matrix

The examples that follow demonstrate how MTP operates in the Cboe Equities system.

Resting Order PreventMemberMatch Setting	Incoming Order PreventMemberMatch Setting	Result
Cancel Newest Firm Level	Cancel Newest Firm Level Trading Group X	Trade Prevented Incoming order canceled
Cancel Newest Firm Level Trading Group X	Cancel Oldest Firm Level Trading Group X	Trade Prevented Resting order canceled
Cancel Newest Firm Level Trading Group X	Cancel Newest Firm Level Trading Group Y	Trade occurs
Canel Both MPID Level	unspecified	Trade occurs
Decrement MPID Level Trading Group X	unspecified	Trade occurs
Decrement remainder only Firm Level	Decrement remainder only Firm Level Trading Group X	Trade prevented LeavesQty (FIX Tag 151) is reduced on larger order, smaller order is canceled

Using MTP Functionality

Members may contact the Cboe Trade Desk (913.815.7001) to set up MTP, or can specify which MTP modifier to use at a unique identifier level with PreventMemberMatch (FIX Tag 7928) on a single order basis.

Please refer to the Cboe Equities Technical Specifications for further details on how to use MTP.

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