



Reminder - Cboe EDGA and EDGX Equities Exchanges Updates to Midpoint Discretionary Orders and Introduction of Quote Depletion Protection

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Overview

Applicable Cboe Exchanges: EDGA Equities, EDGX Equities

Effective June 10, 2020, Cboe EDGA ("EDGA") and Cboe EDGX ("EDGX") Exchanges will introduce functionality that allows offsets and a new Quote Depletion Protection (QDP) instruction for Midpoint Discretionary Orders (MDO).

Technical Details

Currently, MDOs function as primary peg orders with discretion that automatically extends to the midpoint of NBBO. The MDO order type can be displayed or hidden.

Upon the effective date, the exchange will support the addition of an offset that allows these orders to be ranked at less aggressive (displayed and hidden) or more aggressive (hidden only) prices than the same side NBBO with full discretion to the midpoint of the NBBO. MDOs will have full discretion from the offset ranked price to the less aggressive of their limit price or the midpoint of the NBBO.

To define the offset the *PegDifference* (211) instruction must be provided upon order entry using the FIX or BOE protocol. Previously, the *PegDifference* instruction was not accepted for MDOs.

Quote Depletion Protection (QDP) logic will also be added as an optional feature for MDOs. QDP will be activated when the exchange's own displayed quote is executed below 1 round. Once activated, QDP will shut off the discretionary range of MDOs entered with this instruction for 2 milliseconds. To enable QDP, the *ExecInst* (18) instruction will be updated to include the new 'e' = Midpoint Discretionary Order with Quote Depletion Protection. MDOs with QDP (*ExecInst* (18) = e) will default to hidden with a less aggressive offset of 1 MPV.

Members can submit a Midpoint Discretionary Order by sending the following instructions in the `New Order Single` message.

FIX Tag	BOE Field	Descriptions
18	<i>ExecInst</i>	d = Midpoint Discretionary Order

FIX Tag	BOE Field	Descriptions
		e = Midpoint Discretionary Order with Quote Depletion Protection (NEW)
38	<i>OrderQty</i>	Number of share for order. Valid values are 1 to 999,999.
40	<i>OrdType</i>	P = Peg
44	<i>Price</i>	Specify the optional Cap Price for Pegged Orders.
54	<i>Side</i>	1 = Buy 2 = Sell 5 = Sell Short (client affirms ability to borrow) 6 = Sell Short Exempt
59	<i>TimeInForce</i>	Optional
9479	<i>DisplayIndicator</i>	v = Visible I = Invisible
9303	<i>RoutingInst</i>	B = Book Only (EDGA Only) P = Post Only (EDGX Only)
211	<i>PegDifference</i>	Signed dollar value up to two (four) decimal places is added to result of peg calculation when the peg difference is at or above (below) \$1.00. Default is zero for Midpoint Discretionary Orders with ExecInst (18) = 'd'. Default is \$0.01 for Midpoint Discretionary Orders with ExecInst (18) = 'e'. The offset will be in the less aggressive direction for the order. Displayed Primary Peg orders with non-aggressive offset must have <i>TimeInForce</i> (59) = R (Regular Hours Only) or 0 (Day). Day orders must be submitted after 9:30 a.m. ET. May be an aggressive offset for hidden Primary pegs.

Examples

Example 1: MDO with Less Aggressive Offset

NBBO: 10.00 x 10.10

Order1: Buy 500 @ 10.08 – MDO – Hidden – Offset = -0.01

- Order1 is ranked and hidden at 9.99 with discretion to 10.05

Order2: Sell 100 @ 10.04 IOC

Order3: Sell 100 @ MKT

Order4: Sell 100 @ 9.95 ISO IOC

Result:

- Order1 trades 100 at 10.04 with Order2.
- Order1 trades 100 at 10.00 with Order3.
- Order1 trades 100 at 9.99 with Order4.

Example 2: QDP applied immediately after exchange's quote is executed

NBBO: 10.00 x 10.01

Order1: Buy 100 @ 10.00 Displayed

Order2: Buy 100 @ 10.01 - MDO with QDP, Hidden, Offset= -0.01

- Order2 is ranked at 9.99 hidden with discretion to 10.005.

Order3: Sell 200 @ 10.00 IOC

Result:

- Order1 trades 100 with Order3 at 10.00.
- QDP for Buy MDO orders is activated immediately after Order1 is executed.
- Order2 does not trade with Order3.

Example 3: QDP is extended after a second price level has been breached

NBBO: 10.00 x 10.01

Order1: Buy 100 @ 9.99 Displayed

Order2: Buy 100 @ 10.00 Displayed

Order3: Buy 100 @ 10.01 MDO with QDP, Hidden, Offset= -0.01

- Order3 is ranked at 9.99 hidden with discretion to 10.005.

Order4: Sell 100 @ 10.00 IOC Time=12:00:00:000

Order5: Sell 100 @ 9.99 ISO IOC Time = 12:00:00:001

Result:

- Order2 trades 100 with Order4 at 10.00.
- QDP for Buy MDO orders is activated immediately after Order2 is executed.
- Order5 trades 100 with Order1 at 9.99.
- QDP is extended for 2 milliseconds until 12:00:00:003.

Example 4: MDO order with QDP activated are executable at ranked price

NBBO: 10.00 x 10.01

Order1: Buy 100 @ 10.00 Displayed

Order2: Buy 100 @ 10.01 MDO with QDP, Hidden, Offset= -0.01

- Order2 is ranked at 9.99 hidden with discretion to 10.005.

Order3: Sell 200 @ 10.00 IOC Time=12:00:00:000

Order4: Sell 100 @ 9.99 ISO IOC Time = 12:00:00:001

Result:

- Order1 trades 100 with Order3 at 10.00.
- QDP for Buy MDO orders is activated immediately after Order1 is executed.
- Order2 does not trade with Order3.
- Order2 trades with Order4 at ranked price of 9.99.

Testing Opportunities

Testing of this new functionality is currently available in the EDGA and EDGX certification environments.

Additional Information

Please refer to the following technical specifications for additional information.

- [US Equities FIX Specification](#)
- [US Equities BOE Specification](#)

Please contact the Cboe Trade Desk for support or with any questions.

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Cboe Trade Desk

913.815.7001

tradedesk@cboe.com