



Update: Cboe Options Technology Integration Feature Pack 5 – Simple Order Auctions

Reference ID: C2019031300

Overview (UPDATED)

Effective **March 21, 2019**, Cboe will introduce multiple enhancements to simple order auction functionality for the EDGX Options (“EDGX”) Exchange, *subject to regulatory review*. The addition of support for SAM Auctions on EDGX will be postponed to April 29, 2019.

- Automated Improvement Mechanism (AIM) Harmonization with Bats Auction Mechanism (BAM)
- Addition of Sweep & AIM Auctions
- ~~Addition of Solicitation Auction Mechanism (SAM) Auctions~~
- Update to Qualified Contingent Cross (QCC) to Support Sending Executed Stock Leg Information

All enhancements are in preparation for migration of Cboe Options Exchange (“C1”) to Bats technology.

AIM Harmonization with BAM (UPDATED)

On the effective date, the auction functionality currently named BAM will be renamed to AIM. In addition to the harmonization of nomenclature, the following functionality will be introduced to EDGX Options.

- The Contra order allocation entitlement will be based on the quantity remaining after customer interest.
- The Contra order will be guaranteed at least one contract when it is at the final auction price after customer interest.
- Customer to customer AIM orders will be rejected if there is a same side resting customer order with the same price as the agency.

Addition of Sweep & AIM Auctions

On the effective date, EDGX Options will add new functionality to support the Sweep & AIM auction. Upon receipt of a Sweep & AIM order, the Exchange will sweep better-priced displayed away quotes and better-priced local interest before the AIM auction is initiated.

Sweep & AIM can be initiated by submitting a two-sided *New Order Cross* message using either FIX or Binary Order Entry (BOE) protocol and setting *ExecInst (FIX Tag 18) = 's'*. Sweep & AIM order requirements are otherwise identical to AIM order entry requirements with respect to agency side and contra-side configuration.

Addition of SAM Auctions (UPDATED)

Effective April 29, 2019 EDGX Options will add new functionality supporting SAM auctions. The SAM auction is an electronic crossing mechanism, similar to AIM, which allows an All-Or-None allocation to solicited, but not facilitating, contra order(s).

The initiating agency-side order must include a minimum of 500 contracts, and be submitted with a contra-side order(s) totaling an equal number of contracts. A maximum of ten contra-orders will be accepted per order. The price on the contra order(s) must be at or inside the local BBO and must improve the price of any local customer.

SAM orders can optionally include the ISO flag, which will allow the auction to commence outside the displayed price of away markets. It is the responsibility of the initiating member to clear away markets that are priced better than the contra order's price.

Initiating SAM Orders

A SAM auction can be initiated by submitting a two-sided `New Order Cross` message using either FIX or Binary Order Entry (BOE) protocol and setting `CrossType (FIX Tag 549) = '3'`.

Early Termination and Execution

Opposite side orders received after the start of the auction will **not** cause early termination but may be eligible to trade with the agency-side order at the end of the auction. At the auction's conclusion, the agency order will execute against the contra order(s) unless the full quantity of the agency order can be satisfied by any combination of: (A) better-priced displayed and non-displayed (reserve) orders and auction responses; and (B) displayed customer orders equal to the contra order's price. In such cases where allocation is to responses and/or orders other than the contra order, allocation is generally pro-rata with customer priority at a given price.

Update to Qualified Contingent Cross (QCC) to Support Sending Stock Leg Information

A QCC Auction is an unexposed cross comprised of an initiating order for at least 1,000 option contracts which is identified as being part of a Qualified Contingent Trade (QCT), coupled with a contra-side order or orders totaling an equal number of options contracts. QCC orders are the options portion of a strategy that involves a separate underlying stock component which is executed separately. Previously, Members trading QCC orders on EDGX Options were required to provide stock leg information via the Customer Web Portal. On the effective date, users will be able to provide stock leg information in `New Order Cross` messages by sending the following instructions:

FIX Tag	BOE Field	Descriptions
22011	<i>EquityTradePrice</i>	Price at which the equity associated with a QCC trade. Valid when <i>CrossType (549) = '2'</i> .
22012	<i>EquityTradeSize</i>	Number of shares executed in the equity associated with a QCC trade. Valid when <i>CrossType (549) = '2'</i> .

FIX Tag	BOE Field	Descriptions
22013	<i>EquityTradeVenue</i>	Exchange venue where equity associated with a QCC traded. Valid when <i>CrossType (549)</i> = '2'. A = NYSE American B = Nasdaq BX C = NYSE National I = Investors Exchange J = Cboe EDGA Exchange K = Cboe EDGX Exchange M = CHX N = NYSE P = NYSE Arca Q = Nasdaq X = Nasdaq PSX Y = Cboe BYX Exchange Z = Cboe BZX Exchange
22014	<i>EquityBuyClearingFirm</i>	Clearing firm on buy side of the equity trade associated with a QCC trade. Valid when <i>CrossType (549)</i> = '2'.
22015	<i>EquitySellClearingFirm</i>	Clearing firm on sell side of the equity trade associated with a QCC trade. Valid when <i>CrossType (549)</i> = '2'.
22060	<i>EquityTransactTime</i>	Time of equity trade associated with a QCC trade. Valid when <i>CrossType (549)</i> = '2'.

Testing Opportunities

Testing of the new simple order auction enhancements is currently available in the EDGX Options certification environment.

Additional Information

For more information, refer to the following technical specifications:

- [US Options Auction Process Specification](#)
- [US Options FIX Specification](#)
- [US Options BOE Specification](#)

Please contact the Cboe Trade Desk, for support or with any questions. Additionally, you may refer to the C1 integration website for more details at <http://batsintegration.cboe.com/c1>.

We appreciate your business and remain committed to powering your potential with Cboe products, technologies, and solutions.

Cboe Trade Desk

913.815.7001

tradedesk@cboe.com