



CBOE Application Programming Interface

CBOE FIX 4.2 Version 3.0a - Release Notes

Provides an overview of the updates and changes to the FIX 4.2 with this version release.

CBOE PROPRIETARY INFORMATION

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Front Matter

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Support and Questions Regarding This Document

Questions regarding this document can be directed to The Chicago Board Options Exchange at 312.786.7300 or via e-mail: api@cboe.com.

The latest version of this document can be found at the CBOE web site <http://systems.cboe.com>.

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Overview

The material presented in this document highlight the upcoming changes for the new release of the FIX API, Version 3.0. Documentation changes are detailed in the sections below. Your feedback or questions regarding this document should be sent to API@cboe.com

Document Changes

FIX-01

- No changes

FIX-03a

- Added important information regarding a new tag in the Logon message
UDFSupportIndicator[tag 9003]: On trading FIX Engines (non CFIX engines), only 9003=3 will be supported and the logon will be rejected if 9003=4. For Logons to the CFIX engines, only 9003 = 4 will be supported and the logon request will be rejected if the tag 9003 is set to 3. Also this would mean that firms doing Market Data via CFIX should have CFIX as their first engine instead of the trading engine.
- Added a Logon example supporting UDFSsupportIndicator[tag 9003]

FIX-03b (Including Tag Dictionary)

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FIX-03c

- ICM orders can receive Quote Trigger messages from CBOE to describe notifications of pending trades. Please refer to the Hybrid Quote Trigger section of the FIX-03d document for more information.
- The MultiLegPositionEffects[9370] and MultiLegCoveredOrUncovered[9371] tags are optional for all new orders and cancel replace requests.

FIX-03d

- Added information about tags CustomerSize [tag 9004] and ProfessionalSize [tag 9005] to the Current Market Response message (35 = "W"). The total of these two tags = total bid size or total offer size. These tags only apply to the W_MAIN session. They will not appear for messages in the CFE_MAIN or ONE_MAIN sessions.
- All products in the repeating group of a single Mass Quote Message must be in the same underlying.
- Added a new tag in the Mass Quote message QuoteUpdateControlId[9006]. This tag is strongly encouraged. Firms should send any value between 1 – 32767 and should increment this value any time the firm sends a quote cancel request (by product, by class, or all quotes), receives a quote cancel report, or receives a quote reject. This value can be reused during the

day. A Mass Quote with invalid quote update control (which cannot be mapped onto the system internally as short such as values above 32767 and below -32767) would be rejected with reject code (tag 300] = 93. Even if one quote has this invalid quote update token then the whole quote block will be rejected. Quotes Rejected because the quote update control id was the same as the previous code will be rejected with a code of tag 300=QUOTE_UPDATE_CONTROL = 95.

- Added a new Mass Quote example using QuoteUpdateControlId[9006]
- Quote Trigger: This process of “being traded” can be n(1) second or more (check with the CBOE Production Help Desk or Trading Operations department for the current value which can vary by class).
- Added two new error codes for Quote Acknowledgements in the QuoteRejectReason tag 300: QUOTE_RATE_EXCEEDED= 91 and SEQUENCE_LIMIT_EXCEEDED= 92
- New Quote Thresholds for W_MAIN are: 20 Quotes (products) per Mass Quote message (all quotes per message must be for the same underlying stock or index), 100 Mass Quote or Quote message calls per user per one (1) second period, 2000 total quotes (products) per user per three (3) second period

FIX-06

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FIX-07

- The new first step of the CFIX engine process is that firms connect to the new CFIX Engine using the Class Display (CD) role UserID+Password (CD001, CD002, etc.). Note: CBOE previously allowed CD roles that planned to use CFIX market data to connect to the trading engines and then get redirected to a CFIX engine. CBOE now requires that CFIX market data CD roles logon directly to CFIX engines.

Test Plan Changes

CMI Phase 2 Test Plans

- No changes

FIX 4.2 Phase 2 Test Plans

- No changes

3a, Security Definition Test Plan

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3b, Market Data Test Plan

- User calls `subscribeCurrentMarketForClassV3` and identifies the *Customer* and *Professional* size

3c, Quote Test Plan - Hybrid-ONE-CFE (includes 3j, Hybrid Sections and 3L, CFE Supplemental Tests)

- (Quote Trigger): CBOE holds order for n(1) second before allocating trade quantity to market-maker. This parameter is configurable by class. The user should check with the CBOE Production Help Desk or Trading Operations Department for this information.
- Added a new strongly encouraged section to test Quote Update Control
- Added step to test user receiving Quote Trigger Notification with reason QUOTE_TRIGGER_BUY or QUOTE_TRIGGER_SELL
- Added a step to test `cancelAllQuotesV3` message
- New Quote Thresholds for W_MAIN are: 20 Quotes (products) per Mass Quote message (all quotes per message must be for the same underlying stock or index), 100 Mass Quote or Quote message calls per user per one (1) second period, 2000 total quotes (products) per user per three (3) second period

3d, RTH Order Test Plan

- This document is no longer part of CBOEdirect test plans.

3e, W_MAIN-ONE-CFE Order Test Plan (includes 3k, CFE Supplemental Tests)

- In-Crowd Market-Maker (“ICM”) Orders: This section is required for Market-Maker, DPM and Broker-Dealer roles who intend to submit orders to Hybrid on the trading floor. Not allowed for Firm, Firm Display, and Class Display roles.

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- Added step to test user receiving Quote Trigger Notification with reason QUOTE_TRIGGER_BUY or QUOTE_TRIGGER_SELL

3f, Clearing Firm, Duplicate Message Test Plan

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3g, Strategy Quote Test Plan - ONE-CFE

- This test plan applies to the CFE_MAIN and ONE_MAIN session only.

3h, RTH Strategy Order Test Plan

- This document is no longer part of CBOEdirect test plans.

3i, W_MAIN-ONE-CFE Strategy Order Test Plan

- Important Considerations for W_MAIN Strategy Orders: CBOE does not allow the firm to send partial cancels using the cancel message for W_MAIN strategy orders. The firm may cancel the entire order for W_MAIN strategy orders. If a W_MAIN strategy order is partially filled, the firm may outright cancel the remaining quantity (cancel the entire order). A firm may increase or decrease the quantity of a W_MAIN strategy order by sending a Cancel Replace. The original order will be completely canceled, and the new order will have the higher or lower quantity. For partial strategy order fills in the W_MAIN session, CBOE will now send a partial fill report message for the entire strategy product as a whole in addition to the partial fill report message for all strategy legs. Previously, CBOE would not send a partial fill report message for the strategy product as a whole during partial fill reports. If a W_MAIN strategy order is partially filled and then the remaining quantity is canceled, the CBOE will now send out a cancel report for the strategy product as a whole in addition to cancel reports for each leg. Previously, if a W_MAIN strategy order was partially filled and then the remaining quantity was canceled, the CBOE would not send out a fill or cancel report for the strategy product as a whole. CBOE does allow partial fills that violate the ratio of the strategy product in W_MAIN. In other words, if a firm enters a 10-contract order in a strategy product that was created with a 1:1 ratio, then firm may receive a partial fill of 3 contracts in leg #1 and 9 contracts in leg #2 in a single fill report event.

3m, Stock Trading On CBOEdirect (STOC) Order Test Plan

- No changes

3n, Stock Trading On CBOEdirect (STOC) Quote Test Plan

- No changes

3o, Stock Trading On CBOEdirect (STOC) DPM Administrative Test Plan

- No changes

Phase 4 Test Plan

- No changes