



CBOE Application Programming Interface

CBOE API Version 2.52 - 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 2.63a. 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

- If a user ID (SenderSubId) wishes to establish multiple user sessions, they all must be on the same FIX Engine. A user ID cannot logon with multiple user sessions using different engines. This is regardless of the logon session mode (primary, secondary), the API used (FIX, CMi), etc.

FIX-03b (Including Tag Dictionary)

- No changes

FIX-03c

- Added a new section about sending new multi-leg (strategy) orders.
- Possible values: “O” or “C” (“N” is not supported by FIX). Required for Customer (“C”) options orders. Ignored for Firm (“F”) orders. For orders of origin “M” or “T” in the W_MAIN session, this tag must not appear in the order. Orders of all other origins in W_MAIN may use this tag or leave it out of the order. Orders of all origins in non-W_MAIN sessions may use this tag or leave it out of the order.
- Added new sections describing important considerations for FIX 4.2 single-leg and multi-leg cancel replace orders.
- Corrected the order origin descriptions by adding “M” as supported for OneChicago.
- Removed CBOE and ONE and added CFE to the section “Firm Identification on Orders in ExecBroker[76] and ClearingFirm[439]”.
- Added acceptable values for the CoveredOrUncovered[203] tag.
- Tags 9370 and 9371 are required for multi-leg strategy orders and strategy cancel replace orders in the W_MAIN session. Enhanced the descriptions for both tags.
- Enhanced the description for the ClOrdID tag.

FIX-03d

- CBOE does not support the QuoteResponseLevel[301] tag.

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- FIX 4.2 Specification requires the UnderlyingSymbol[311] tag, but the CBOE ignores the value that the firm sends. The firm should use the Symbol[55] tag to specify the symbol.
- CBOE requires that firms must use a Class Display (CD) role in a separate user session to get CFE current market (top of book), recap, and ticker market data. CBOE will not allow a market-maker or broker-dealer role to obtain CFE market data. The CD role would logon to the CFE FIX trading engines, not the CFIX engines (for Hybrid users). The CD role needs to have a SenderCompId set up on the CFE FIX trading engines.
- Added QuoteRejectReason[tag 300] value of SERVER_NOT_AVAILABLE = 96 in the Quote Acknowledgement message.
- Added QuoteText[tag 9008] value of FAILOVER in the Quote Status message (MsgType[35] = S).

FIX-06

- No changes

FIX-07

- No changes

Test Plan Changes

FIX 4.2 Phase 2 Test Plans

- Added a new testing step for sending and receiving heartbeats.

3a, Security Definition Test Plan

- Added a step to test the error condition of downloading products in a session that the user is not authorized to download.
- Added a new sub-section “Important W_MAIN Product State Considerations” within the “Trading Sessions and Product Downloads” section.

3b, Market Data Test Plan

- Added new testing steps for EOP type PRICE_NOT_IN_QUOTE_RANGE.
- CBOE publishes the underlying index market data for index classes (such as OEX, S&P500, Dow Jones, NDX etc.). CBOE does not publish the market data for the futures contract that mirrors the index. For example, CBOE does publish the underlying market data for the S&P 500 *index*, but CBOE does not publish the market data for the S&P 500 *futures* contract.
- Added minimum tick information for CFE.

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

- Test plan now requests that the user identifies the contra-party acronym and contra-party clearing firm in fill reports.
- Electronic quote busts are not supported in W_MAIN (Hybrid or non-Hybrid) for market-makers or DPMs. CBOE does, however, manually bust trades in W_MAIN. Therefore, the firm’s application should allow the traders to manually change their positions on the fly.
- CBOE does not consider quote or mass quote cancels when calculating quote thresholds.
- Added CFE quote threshold amounts (same as ONE_MAIN).
- The Hybrid Quote Threshold limits are 10 quotes per Mass Quote message, 100 Mass Quote or Quote message calls per user per one (1) second period, and 1000 total quotes (products) per user per five (5) second period.
- The CFE and OneChicago Quote Threshold limits are 4 quotes per Mass Quote message, 50 Mass Quote or Quote message calls per user per one (1) second period, and 1000 total quotes (products) per user per five (5) second period.
- Reintroduced the Hybrid Quote Trigger section and added two error condition steps to send a quote cancel and update request during a Hybrid Quote Trigger.
- Added a step to test a shorter Quote Lock time period of 4 seconds after the quote is entered.

- QRM is now required for all Market-Makers and DPMs. If the firm decides to not code to the QRM in CMI or FIX, the CBOE Administrator will create QRM settings in the CBOEdirect Administrator terminal for the user to test.

3d, RTH Order Test Plan

- No changes

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

- “DAY” orders will persist in the production environment for the day that the order is entered and the following day. In the test environment, “DAY” orders will persist throughout the entire week until the system is recycled (usually every Wednesday).
- In the production environment, “GTC” orders will persist through the end of the day following the completion of the order (e.g. filled or canceled). In the test environment, “GTC” orders will persist throughout the entire week until the system is recycled (usually every Wednesday).
- Test plan now requests that the user identifies the contra-party acronym and contra-party clearing firm in fill reports.
- Enhanced the bust section and added a step to cancel a reinstated order.
- Added all order origins for CBOE, CFE, and ONE.
- CBOE does cancel the user's "I" orders when the user logs out. (CBOE formerly did not cancel them).
- Note: when a firm enters an order into the W_MAIN session (Hybrid or non-Hybrid) and the order rejects, it will reject to the firm's booth on the trading floor. The CMi or FIX 4.2 application **will not** receive an error message.
- Enhanced the description of the Quote Lock timer for additional traders that join a trade after the initial Quote Lock takes place.
- Added a testing step to enter the Originator field. Originator is required for all Broker-Dealer users entering orders of origin “M” or “I” in all sessions. The value of the originator field must be an actual, valid MM badge in membership and the CBOEdirect system. The Originator exchange must be the exchange that the user is a member of (CBOE, CFE, ONE, etc.)
- Electronic order busts or order bust reinstates are not supported in W_MAIN (Hybrid or non-Hybrid) for all order origins. CBOE does, however, manually bust trades in W_MAIN. Therefore, the firm’s application should allow the traders to manually change their positions on the fly.
- Changed the CFE minimum tick from 0.01 to 0.10.
- Added a step at the beginning of the test plan to do a straight cancel on an order that has not been modified yet.
- Added an error condition step to send an ICM order cancel request during a Hybrid Quote Trigger.

- Added a step to test a shorter Quote Lock time period of 4 seconds after an ICM order is entered.

3f, Clearing Firm, Duplicate Message Test Plan

- The Firm and Firm Display roles are currently not implemented. Nevertheless, Market-Makers, DPMs, and Broker-Dealers must complete the “Market-Maker and Broker-Dealer Possible Resends” section of this test plan.

3g, Strategy Quote Test Plan - ONE-CFE

- CBOE does not support quote strategy busts electronically in any session. In W_MAIN, however, CBOE can manually bust a strategy trade. Therefore, you should allow your traders to manually change their positions on the fly. In purely electronic sessions that do not interact with the trading floor, CBOE does not support strategy busts in any fashion, manually or electronically.
- Changed the CFE minimum tick from 0.01 to 0.10.
- Diagonal strategies have to have a ratio of 1:1.
- The sides of the option and stock legs for buy_writes do not have to be opposite sides
- Pricing for buy_writes is calculated as if the stock leg were an even round lot, whether it is an odd-lot or not.

3h, RTH Strategy Order Test Plan

- No changes

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

- Added a section “Important Considerations for W_MAIN Strategy Orders”.
- Changed the CFE minimum tick from 0.01 to 0.10.
- Diagonal strategies have to have a ratio of 1:1.
- The sides of the option and stock legs for buy_writes do not have to be opposite sides.
- Pricing for buy_writes is calculated as if the stock leg were an even round-lot, whether it is an odd-lot or not.
- Added a section for FIX cancel replaces for enhanced certification functionality.

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

- “DAY” orders will persist in the production environment for the day that the order is entered and the following day. In the test environment, “DAY” orders will persist throughout the entire week until the system is recycled (usually every Wednesday).
- In the production environment, “GTC” orders will persist through the end of the day following the completion of the order (e.g. filled or canceled). In the test environment,

“GTC” orders will persist throughout the entire week until the system is recycled (usually every Wednesday).

- User identifies the contra-party acronym and contra-party clearing firm.

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

- User identifies the contra-party acronym and contra-party clearing firm.

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

- No changes

Phase 4 Test Plan

- No changes