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CHICAGO BOARD OPTIONS EXCHANGE

CBOE Application Programming Interface

CBOE FIX 4.2 Version 4.2 - Release Notes

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

CBOE PROPRIETARY INFORMATION

15 December 2006

Document #[FIX-00]

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 4.2 API, Version 4.2. Documentation changes are detailed in the sections below. Your feedback or questions regarding this document should be sent to API@cboe.com

V4.2 Highlights

CBOE's User Input Monitor (UIM) is a service that will run in the CBOE trade server to monitor user quote times. The UIM service will limit the CBOE's liability for a user who is unable, due to exchange system issues, to update or cancel their market quotes. An additional benefit is to protect Market Makers when their own system problems prohibit them from quoting.

The UIM service is intended to assist in the detection of problems with a user's quote input stream. The CBOEDirect system services discrete collections of underlying symbols per business server group. If one of these server group detects no inbound quotes for a user for any of the group's serviced underlying symbols during the configured time period, it will declare an error condition for the user. This will result in all of the user's quotes in that group to be removed by the systems. If a user is actively quoting in classes serviced by one business server group and stops streaming quotes in another business group there will be no impact to their quotes in the active group.

Document Changes

FIX-01

- No changes

FIX-03a

- No changes

FIX-03b (Including Tag Dictionary)

- No changes

FIX-03c

- Renamed the heading "Creating and Submitting Stock Order Types" to read: "CBOE Stock Exchange (CBSX)."
- Updated the "Considerations for Internalization" section to read:

    "Both the primary (customer) order and a match (firm) order will be cancelled if, for any reason, the AIM auction cannot be initiated (e.g. fewer than 3 quoters in the series; etc.)."

FIX-03d

- Added a section for the User Input Monitor based on this release.

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- Changed the W_MAIN quote limitations to read: "100 Mass Quote or Quote message calls per user per 1 second period (*not 3 second period*) **(RATE_EXCEEDED)**"

- Add a new section: "Recommended Market Making Guidelines"

It is important to follow the market making guildelines listed below to effectively interact with CBOE's Hybrid Trading System.

1) Waiting on acknowledgements. For FIX users, orders and quotes in particular, <u>please</u> obey the protocol of ***receiving the ack*** from the prior transaction ***before*** sending in another transaction for the same class. Quoters or order flow providers who do not wait for an ack prior to sending another transaction are, in effect, exacerbating perceived slowness within the system and may be exposing themselves to processing stale quotes.

2) Logout implications. The logout is an expensive function. We have observed traders logging out of the system in what appears to be a panic. A less severe method of removing quotes would be to send a ***cancel all quotes*** message. Each firm has the capability to sense whenever they are experiencing slowness by measuring response time on a per quote block basis. Your systems could then automatically send in the cancel quotes on your trader's behalf.

3) Quotes post-logout. We ask that you not send in quotes immediately prior to a logout and certainly not after the logout request. After a logout, CBOEdirect sweeps the firm's books to remove quotes. These post-logout quotes have the distinct possibility of being missed in the sweep and could remain until they become marketable and trade. Each firm should strive to not submit quotes post-logout.

4) Excessive quoting/thrashing. We have observed firms sending in mass quotes, then single cancels, followed by mass quotes again. If there is a perceived reason validating the need for cancels, then they should not be immediately followed by mass quotes. Do not continue to send quotes after the cancel is sent. If CBOE is experiencing slowness, these quotes become meaningless and only serve to exacerbate the problem. If the intent is to update the quote, then the cancel is superfluous.

5) Excessive quoting/duplicate quotes. We have observed firms sending in quotes identical to their existing quote – same price, same size. In some cases, these duplicate quotes are even within the same block. This is unnecessary and adds undue processing to the server.

6) Blocking. There are many single quote blocks entered. It is much more efficient to block multiple quotes together within a single message, when possible.

7) Excessive quoting/improper quote use. We have observed one firm sending in quote quantity changes by plus or minus one in rapid succession presumably to visually confirm that their quotes were being reflected in the market. Please do not use this technique to confirm quotes.

FIX-06

- No changes

FIX-07

- No changes

Test Plan Changes

FIX Phase 2 Test Plans

3a, Security Definition Test Plan

- No changes

3b, Market Data Test Plan

- No changes

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

- No changes

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

- No changes

3f, Clearing Firm, Duplicate Message Test Plan

- No changes

3g, Strategy Quote Test Plan - ONE-CFE

- No changes

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

- No changes

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

- No changes

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

- No changes

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

- No changes

Phase 4 Test Plan

- No changes

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