



CBOE Application Programming Interface

CBOE FIX 4.2 Version 5.2 - 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 4.2 API, Version 5.2. Documentation changes are detailed in the sections below. Your feedback or questions regarding this document should be sent to API@cboe.com

FIX 4.2, V5.2 Highlights

The highlights discussed below will be available in the October 2008 CBOEdirect software release.

COB and Auction Enhancements

The format of the Quote Request Message used to solicit participation in an auction will be enhanced to provide additional information about the auction. This will be done by the addition of a new UDF (User Defined Field),

- 9221 – AuxAuctionInfo

This new UDF may not always be present, and may contain multiple data values concerning the auction. Specifically, in the case of a COA auction, the NBBO Bid and NBBO Ask values at the time of the auction solicitation may be provided. For COA and other auction types; each of the executing firm, correspondent firm, and CMTA firm values of the order(s) being auctioned may be provided (these settings are configurable by firm). In order to present these new data values, AuxAuctionInfo will be formatted as a comma-delimited series of name=value pairs, where the names will be:

- NBBOBID
- NBBOASK
- FIRM
- CORRESFIRM
- CMTAFIRM

The comma-delimited list will be surrounded by “{” “}” characters. Below are some examples of auction solicitation that include the new AuxAuctionInfo UDF.

Examples

```
8=FIX.4.2^A9=0277^A35=R^A34=292^A49=DFIX501^A56=TEST501^A52=20080630-
19:25:36^A131=65044:436400020^A146=1^A55=C^A48=499151539^A22=8^A167=MLEG^A
201=0^A202=0^A207=W^A336=W_MAIN^A38=100^A60=00260805-
20:25:36^A9383=2^A9384=1^A9743=1^A9302=0.0000^A
```

```
9221={NBBOBID=0.2000,NBBOASK=0.2000,FIRM=325,CORRESFIRM=PAX,CMTAFIRM=
671}^A10=166^A
```

```
8=FIX.4.2^A9=0249^A35=R^A34=209^A49=DFIX501^A56=TEST501^A52=20080630-
18:41:58^A131=65044:436400017^A146=1^A55=C^A48=499151539^A22=8^A167=MLEG^A
201=0^A202=0^A207=W^A336=W_MAIN^A38=100^A60=00260805-
19:41:52^A9383=2^A9384=1^A9743=1^A9302=0.0000^A
```

9221={NBBOBID=0.2000,NBBOASK=0.2000,FIRM=325}^A10=006^A

8=FIX.4.2^A9=0264^A35=R^A34=401^A49=DFIX501^A56=TEST501^A52=20080630-
20:19:57^A131=65044:436400025^A146=1^A55=C^A48=499151539^A22=8^A167=MLEG^A
201=0^A202=0^A207=W^A336=W_MAIN^A38=100^A60=00260805-
21:19:57^A9383=2^A9384=1^A9743=1^A9302=0.0000^A

9221={NBBOBID=0.2000,NBBOASK=0.2000,FIRM=325,CORRESFIRM=PAX}^A10=074^A

8=FIX.4.2^A9=0262^A35=R^A34=454^A49=DFIX501^A56=TEST501^A52=20080630-
20:46:27^A131=65044:436400028^A146=1^A55=C^A48=499151539^A22=8^A167=MLEG^A
201=0^A202=0^A207=W^A336=W_MAIN^A38=100^A60=00260805-
21:46:27^A9383=2^A9384=1^A9743=1^A9302=0.0000^A

9221={NBBOBID=0.2000,NBBOASK=0.2000,FIRM=325,CMTAFIRM=671}^A10=089^A

8=FIX.4.2^A9=0240^A35=R^A34=11^A49=DFIX501^A56=TEST501^A52=20080701-
15:05:08^A131=65044:480871748^A146=1^A55=C^A48=477236851^A22=8^A167=OPT^A20
0=200801^A205=19^A201=1^A202=15^A207=W^A336=W_MAIN^A54=1^A38=10^A60=000
40806-16:05:06^A9383=1^A9384=1^A9743=1^A9302=1.1000^A

9221={FIRM=325}^A10=173^A

8=FIX.4.2^A9=0253^A35=R^A34=33^A49=DFIX501^A56=TEST501^A52=20080701-
15:15:42^A131=65044:480871759^A146=1^A55=C^A48=477236851^A22=8^A167=OPT^A20
0=200801^A205=19^A201=1^A202=15^A207=W^A336=W_MAIN^A54=1^A38=10^A60=000
40806-16:15:42^A9383=1^A9384=1^A9743=1^A9302=1.1000^A

9221={FIRM=325,CMTAFIRM=671}^A10=017^A

Order Contingency Types

Flash enhancements will be available through new contingency types. Users responding to the flash will respond using the AuctionContingency [9384] field.

(1) NBBO_FLASH_THEN_CANCEL = 25

Orders marked NBBO_FLASH_THEN_CANCEL will be flashed through the flash process if they cannot be executed immediately at the NBBO. Any part of the order that is not filled will be cancelled after the flash.

(2) DO_NOT_ROUTE = 26

Orders marked DO_NOT_ROUTE will trade immediately or book as long as they do not violate the NBBO. If a DO_NOT_ROUTE order cannot be booked or traded without violating the NBBO, it will be cancelled. This contingency type will be available for any origin type, including "I" orders.

(3) NBBO_FLASH_RESPONSE = 27

When a marketable order is received that cannot trade against the CBSX quote due to NBBO restrictions, the order will be flashed at the NBBO.

New Stock Exchange

CBOEDirect will support a new stock exchange, the “Better Alternative Trading System (BATS).” BATS will be represented in ExDestination [tag100] with a value of 54 (tag100=54) and will be available outbound (via REDI) to BATS.

Document Changes

FIX-01

- No changes

FIX-03a

- No changes

FIX-03b (Including Tag Dictionary)

- Added the following UDFs to the tag dictionary:
 - AuxAuctionInfo [9221]
 - ApplicationQueueDepth [6699]
 - ApplicationQueueActionRequest [6700]
 - ApplicationQueueActionTaken [6701]

FIX-03c

- Added new flash responses to AuctionContingency [9384],
NBBO_FLASH_RESPONSE = 27
DO_NOT_ROUTE = 26
NBBO_FLASH_THEN_CANCEL = 25
- Added a new exchange “BATS” to ExDestination [100] with a value of 54 (tag100=54), which will be available outbound (via REDI) to BATS.
- Removed the references to “customer” and “firm” in the sentence below found in the section: Internalization and Automated Auction for Strategy Orders

“Firms will use the FIX *New Order – List* message to submit paired strategy orders for internalization. The message must contain a primary (~~customer~~) order and a match (~~firm~~) order.”

FIX-03d

- Based on this release, updated the Quote Request Message *MsgType[35] = R* to include the new UDF, *AuxAuctionInfo [9221]*.
- Removed the value “Booked” from the Quote Status [9312] message.

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

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

- No changes

Phase 4 Test Plan

- No changes