CBOE Application Programming Interface

CBOE FIX 4.2 Version 9.0.1 - Release Notes

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

CBOE PROPRIETARY INFORMATION

29 April 2011

Document #[FIX-00]

Front Matter

Disclaimer

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.

Table of Contents

Overview

The material presented in this document highlights documentation changes for a new point release of the FIX 4.2 API, Version 9.0.1. 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, V9.0.1 Highlights

The upcoming CBOEdirect software release provides overall performance improvement on order, quote, cancel and execution report generation and dissemination.

Quote Processing

CBOE has improved its quote processing time by allowing quotes to be submitted concurrently even for a given class. The redefined quote process allows multiple concurrent quote messages up to a configurable limit. FIX users no longer have to choose to use the concurrent thread model through the user defined field, *ConcurrentOrder/QuoteIndicator [9192]* in the *Logon Message (MsgType=A)*. The concurrent thread model is now the standard. The following behavior should be considered by the quoting Firm:

> Due to the asynchronous nature of the concurrent quote message calls; it is very important that the same series not be included in multiple quote blocks. While CBOE will not enforce any restriction with regard to this check, the order of processing of the individual calls is ***not*** guaranteed. The quote processing changes are as follows:

- The fix engine will allow multiple concurrent quote messages up to a configurable limit. The limit at this time is 10.
- Immediately before the quote message is to be dispatched the quote rate limits are checked. If the call or quote rate limits are not exceeded the message is dispatched.
- When the number of concurrent quotes in-flight equals the maximum allowed, any new Quote message calls will be **rejected** with a NotAcceptedException. The error code in this case will be *EXCEEDS_CONCURRENT_QUOTE_LIMIT (tag 368=89*)
- The cancelQuotesByClass and cancelAllQuotes requests will be forwarded to the server immediately without regard to the number of concurrent quote messages currently in progress.
- While any cancelQuotesByClass is in flight to the server, any new quote request calls (includes *SingleQuote, MassQuote and cancelQuote*) will be **rejected** with a NotAcceptedException. The error code in this case will be *QUOTE_CANCEL_IN_PROGRESS (tag 368=88*).
- Block quote cancels (block of 0-0 quotes coming through the MassQuote calls) are considered to be a MassQuote calls and could be rejected if the number of in-flight quote requests to the server exceed the limit or if a cancelQuotesByClass is in-flight.
- A cancelAllQuotes request is always forwarded to the server. Due to the asynchronous nature of the cancel all quotes request, the fix engine will not prevent any new quotes message or quote cancel message (including another cancelAllQuotes) from being forwarded to server while a previous cancel all quotes request is in progress.

Execution Report – Fill Report

The existing Fill Report message has been modified to include a new FIX field, LastMkt [30]. LastMkt [30] provides the market of execution for the last fill.

Tag	Field Name	Comments
30	**LastMkt**	**Market of execution for last fill.**
38	OrderQty	Original order quantity.
39	OrdStatus	"1" (Partial Fill) or “2” (Filled)
150	ExecType	"1" (Partial Fill) or “2” (Filled)
151	LeavesQty	Amount of contracts open for further execution
382	NoContraBrokers	Number of different brokers on the other side of this fill report
	Begin Repeating Group for NoContraBrokers	
375	→ContraBroker	FirmIdentifier of contraparty to trade. Currently not used for all orders.
337	→ContraTrader	Trader or broker acronym of contraparty to trade. Currently not used for all orders.
437	→ContraTradeQty	Quantity traded with this contraparty
438	→ContraTradeTime	UTC Time of trade
	Begin Repeating Group for NoContraBrokers	
	Custom Defined Fields	
9433	*ExecutionInformation*	The acronym of the broker on the floor that executed the trade or the acronym of the system where the order executed. Currently not used for Linkage orders.
9730	*TradeLiquidityIndicator*	Billing type indicators
	Standard Trailer	

Document Changes

FIX-01

- No changes

FIX-03a

- No changes

FIX-03b (Including Tag Dictionary)

- Added the following example for TradingGroupInfo [20010] in the Security Definition message, *MsgType* = d (lowercase). This user defined field contains the business cluster (BC) information for a trade server. Firms should add this field to their data dictionary.

8=FIX.4.2 9=2310 35=d 34=562 49=PFIX301 56=FF10 52=20110303-16:20:30
320=SECDEFREQIDFF1024 322=0 323=4 22=8 107=OXXSXS 336=C2_MAIN 393=18 146=18
311=JMU4 309=442500395 305=8 310=OPT 313=201206 314=16 315=0 316=40 308=C2OX
307=OPXSXS **20010=ProdBC03x1C2TradeServer4** 311=JMU4 309=442500394 305=8 310=OPT
313=201206 314=16 315=1 316=40 308=C2OX 307=OCXSXS **20010=ProdBC03x1C2TradeServer4**
311=JMU4 309=442500393 305=8 310=OPT 313=201208 314=18 315=0 316=45 308=C2OX
307=OPXSXS 20010=ProdBC03x1C2TradeServer4 311=JMU4 309=442500392 305=8 310=OPT
313=201208 314=18 315=1 316=45 308=C2OX 307=OCXSXS20010=ProdBC03x1C2TradeServer4
311=JMU4 309=442500399 305=8 310=OPT 313=201206 314=16 315=0 316=45 308=C2OX
307=OPXSXS 20010=ProdBC03x1C2TradeServer4 311=JMU4 309=442500398 305=8 310=OPT
313=201206 314=16 315=1 316=45 308=C2OX 307=OCXSXS 20010=ProdBC03x1C2TradeServer4
311=JMU4 309=442500397 305=8 310=OP!
T 313=201206 314=16 315=0 316=42.5 308=C2OX 307=OPXSXS 20010=ProdBC03x1C2TradeServer4
311=JMU4 309=442500396 305=8 310=OPT 313=201206 314=16 315=1 316=42.5 308=C2OX
307=OCXSXS 20010=ProdBC03x1C2TradeServer4 311=JMU4 309=442500387 305=8 310=OPT
313=201211 314=17 315=0 316=45 308=C2OX 307=OPXSXS 20010=ProdBC03x1C2TradeServer4
311=JMU4 309=442500386 305=8 310=OPT 313=201211 314=17 315=1 316=45 308=C2OX
307=OCXSXS 20010=ProdBC03x1C2TradeServer4 311=JMU4 309=442500385 305=8 310=OPT
313=201211 314=17 315=0 316=42.5 308=C2OX 307=OPXSXS 20010=ProdBC03x1C2TradeServer4
311=JMU4 309=442500384 305=8 310=OPT 313=201211 314=17 315=1 316=42.5 308=C2OX
307=OCXSXS20010=ProdBC03x1C2TradeServer4 311=JMU4 309=442500391 305=8 310=OPT
313=201208 314=18 315=0 316=42.5 308=C2OX 307=OPXSXS 20010=ProdBC03x1C2TradeServer4
311=JMU4 309=442500390 305=8 310=OPT 313=201208 314=18 315=1 316=42.5 308=C2OX
307=OCXSXS 20010=ProdBC03x1C2TradeServer4 311=JMU4 309=442500389 305=8 310=OPT
313=201208 314=18 315=! 0 316=40 308=C2OX 307=OPXSXS 20010=ProdBC03x1C2TradeServer4
31! 1=JMU4 309=442500388 305=8 310=OPT 313=201208 314=18 315=1 316=40 308=C2OX
307=OCXSXS 20010=ProdBC03x1C2TradeServer4 311=JMU4 309=442500382 305=8 310=OPT
313=201211 314=17 315=1 316=40 308=C2OX 307=OCXSXS 20010=ProdBC03x1C2TradeServer4
311=JMU4 309=442500383 305=8 310=OPT 313=201211 314=17 315=0 316=40 308=C2OX
307=OPXSXS20010=ProdBC03x1C2TradeServer4 9365=3.0 9367=0.05 9366=0.1 10=000

- Updated the Tag Dictionary as follows:
  - Added LastMkt[30] to the Fill Report message.
  - Removed references of M and N orders from ClearingOptionalData[9324].
  - Added the following to Account[1]:

    -For entering orders of any origin other than “I”, (including “C” = customer), the Account field can contain any value. This field should be left blank for Customer and Firm orders unless the Firm is utilizing Cust/Firm Sub-Accounting at OCC.

    -Clearing account for “M” and “N” orders should always be sent in this field.
  - Modified ClearingAccount[440] to include the following:

    -Market-makers entering orders of origin “M” or “N” should include the sub-account in this field. For Customer orders, the OCC customer ID should be entered in this field.
  - Clarified that OrderOrigin[9465] should be used to specify Market-maker acronym on “M” and ‘N” orders.

FIX-03c

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- Removed references of M and N orders from ClearingOptionalData[9324].
- Added the following to Account[1]:

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FIX-03d

- Updated the Quote Processing section as described above.

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FIX-06

- No changes

FIX-07

- No changes