CBOE Application Programming Interface

CBOE FIX 4.2 Version 9.0.2 - Release Notes

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

CBOE PROPRIETARY INFORMATION

July 15, 2011

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 highlights documentation changes for a new point release of the FIX 4.2 API, Version 9.0.2. 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, V9.0.2 Highlights

The upcoming CBOEdirect software release includes new interfaces for Cancel/Replace of Light orders. Wash Trade Prevention (WTP) contingency orders are also supported in this release.

Cancel/Replace for Light Orders

The CBOE will provide an order interface to allow Cancel/Replace for Light Orders through FIX. The Cancel/Replace has been implemented such that it is processed in the trade engine as a single transaction and is specifically designed to prevent overfills. For this purpose, the FIX user is required to specify the cancel quantity of the previous order – the specified cancel quantity must match the remaining order quantity on the previous order. The user should be aware of the following scenarios:

- If a user tries to cancel a quantity that is greater than the remaining quantity (suggesting an in-flight fill), CBOEdirect will cancel the remaining quantity and cancel the replace order.
- If a user tries to cancel a quantity that is less than the remaining on the order and replace it, the cancel request quantity will be canceled and the replace order will also be canceled.
- Light Order Cancel Replace of IOC contingency orders is not supported. The Cancel/Replace request with this contingency type will be rejected.

Users will submit Light Order Cancel Replace Requests using the FIX Order Cancel Replace Request Message *(MsgType=G)*.

Users are required to map to the following User Defined Fields (UDF):

- *OrderTypeLogonIndicator* [9318] in the Logon message, *MsgType[35] = A* to specify whether entering light orders, regular orders or both.
- *LightOrderIndicator* [9317] in the FIX Cancel/Replace message to specify light order cancel replace.
- *CancelOpenQty* [9310] in the FIX Cancel/Replace message to specify the required cancel quantity on the light order cancel replace. This is a new UDF.

Light Order Cancel Replace Request Message

Tag	Field Name	FIX Red'd	CBOE Req'd	Comments
	Standard Header	Y	Y	MsgType[35] = G
11	ClOrdId	Y	Y	Unique identifier of this cancel replace request (new order, not the original order). Will be used as the ClOrdId of the replacement order. This order ID should

Tag	Field Name	FIX Red'd	CBOE Req'd	Comments
				be different than the OrigClOrdID[41]
				Format: `AAA9999-YYYYMMDD`.
41	OrigClOrdId	Y	Y	ClOrdId of the original order that is being cancelled.
37	OrderId	N	N	Can be specified to find cancel original order. If specified, it must match the CBOE OrderId from the execution report, which is of the form highCBOEId:lowCBOEId
48	SecurityId	N	Y	SecurityId (ProductKey) must be specified. Must match ProductKey of the original order.
54	Side	Y	Y	Must match original order
38	OrderQty	N	Y	Replacement order volume (the volume of the new order)
40	OrdType	N	Y	For replacement order
44	Price	N	Y	For replacement order
47	Rule80A	N	Y	Specifies order capacity (origin) on replacement order
77	OpenClose	N	Y	For replacement order (see requirements for "New Order")
386	NoTradingSession	N	Y	Used to specify trading session other than the primary trading session for a product for the replacement order.
Begin Repeating Group for NoTradingSession				
336	→ TradingSessionID	N	Y	Required if NoTradingSessions > 0 TradingSessionID of the replacement order.
End Repeating Group for NoTradingSession				
CBOE Custom Fields				
9317	LightOrderIndicator	N	Y	Must be 1
9310	CancelOpenQty	N	Y	Specify the desired cancel quantity of the original order. Must match the remaining quantity on the original order.
9321	SecondaryClOrdId	N	N	8 character user generated Id

Light Order Cancel Replace – Execution Reports

New Execution Reports will not be sent if the new order is filled or cancelled right away. In that case, the new UDF's – PendingFillQty [20102] and PendingCxlQty [20103], will provide this information.

Light Order New Replace Order Execution Report

Tag	Field Name	Comments
	Standard Header	*MsgType[35] = 8*

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Tag	Field Name	Comments
37	OrderID	Will be set to the CBOE OrderID which is of the form highCBOEId:lowCBOEid.
11	ClOrdId	Unique identifier of this cancel replace request (new order, not the original order). Will be used as the ClOrdId of the replacement order. This order ID should be different than the OrigClOrdID[41] Format: AAA9999-YYYYMMDD.
41	OrigClOrdId	ClOrdId of the original order that is being cancelled.
17	ExecID	Each execution report will contain a unique ExecID to identify the message.
20	ExecTransType	This value will always = 0 (new).
150	ExecType	0 = New
39	OrdStatus	0 = New
55	Symbol	Will be the same value as entered in the order
48	SecurityID	CBOEdirect product key
54	Side	Will be the same value as entered in the order
151	LeavesQty	Quantity open for further execution.
14	CumQty	For options and futures this refers to the total number of contracts filled on the order during the life time of the order.
6	AvgPx	CBOEdirect does not calculate this value. Will always be 0.00.
Custom Defined Fields		
9321	SecondaryClOrdId	8 character user generated Id
20102	PendingFillQty	If the order is filled right away this field will be filled with the fill quantity and will be followed by a normal fill report
20103	PendingCxlQty	If the order is cancelled right away this field will have the cancelled quantity and a cancel report will follow this.
	Standard Trailer	

The CBOE will no longer be sending out Execution Report with OrderStatus of Pending Cancel/Replace [Tag 39 = 6] for Light Order Cancel Replace. Instead, users will receive only an Execution Report for the cancel of the original order.

In case the Light Order Cancel Replace is rejected because of a mismatch between the remaining quantity on the original order, and the cancel quantity specified by the user on the cancel replace, the CBOE will reject the Light Order Cancel Replace message with the reason specified on the Text [Tag 58] field as "Quantity Mismatch". In such a case, the remaining quantity on the Original Order will also be cancelled, and a separate cancel execution report sent out.

Users can receive two types of Rejects on the Cancel Replace message:

1. The complete message is rejected – i.e. both the cancel and replace parts of the message are rejected due to exceptions in the data contained in the message, or the format of the message etc. In such a case, both OrdStatus [Tag 39] and ExecType [Tag 150] fields on the execution report are set to "REJECTED".

2. Only the Replace part of the message is rejected, whereas the original order that this order intended to replace is cancelled. In such a case, the OrderId [Tag 37] and OrdStatus [Tag 39] will both refer to the original order, and the OrdStatus is set to "CANCELLED". The ExeType [Tag 150] refers to this Execution Report and is set to "REJECTED".

Wash Trade Prevention

The Wash Trade Prevention (WTP) contingency type prevents users from trading against themselves. When marked with this contingency, the order will be cancelled if it is about to trade against another order or quote from the same user. Additionally, the resting quote or order will be cancelled.

CBOE's FIX engine will support WTP contingency orders. FIX users must use the combination of ExecInst[18]=w and TimeInForce[59]=3 to enter a WTP order. WTP tradable resting orders that get cancelled, will deliver the cancel reason message, Text [tag 58] = **WASH_TRADE_PREVENTION**

Document Changes

FIX-01

- Removed references to Compass in the Exchange diagram.

FIX-03a

- No changes

FIX-03b (Including Tag Dictionary)

- Included UDF CancelOpenQty [9310] to the Tag dictionary.

FIX-03c

- Added new interfaces for Light Orders Cancel Replace messages based on this release.

- Modified the Contingeny Mapping table to include Wash Trade Prevention with TimeInForce[59]=3.

FIX-03d

- No changes

FIX-06

- No changes

FIX-07

- No changes