

OTC Link FIX Messaging Service – "FIXIE Trade" Client Specification

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Table Of Contents

INTRU	DUCTION	3
	,	
_	<u> </u>	
_		
	· · · · · · · · · · · · · · · · · · ·	
	-	
FIX ME	-SSAGES	
o 4 I-		
	ENTIFICATION AND ROUTING HEADER	8
3.2 M	ENTIFICATION AND ROUTING HEADER	8
3.2 M 3.2.1	ENTIFICATION AND ROUTING HEADER	10 10
3.2 M 3.2.1 3.2.2	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message	10 10 17
3.2 M 3.2.1 3.2.2 3.2.3	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message	10 10 11
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message	10 10 13 13
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message IESSAGES RECEIVED FROM FIXIE TRADE New Trade (Outgoing) Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6 3.3 M	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6 3.3 M 3.3.1	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message ESSAGES RECEIVED FROM FIXIE TRADE New Trade (Outgoing) Message Drop Copy General Confirm/Reject and Counter (Outgoing) Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6 3.3 M 3.3.1 3.3.2	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message ESSAGES RECEIVED FROM FIXIE TRADE New Trade (Outgoing) Message Drop Copy General Confirm/Reject and Counter (Outgoing) Message Cancel Rejected Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6 3.3 M 3.3.1 3.3.2 3.3.3	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message ESSAGES RECEIVED FROM FIXIE TRADE New Trade (Outgoing) Message Drop Copy General Confirm/Reject and Counter (Outgoing) Message	
3.2 M 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5 3.2.6 3.3 M 3.3.1 3.3.2 3.3.3 3.3.4 3.3.5	ENTIFICATION AND ROUTING HEADER ESSAGES SUBMITTED TO FIXIE TRADE New Trade (Incoming) Message Fill Trade Message Cancel Trade Message Decline Trade Message Counter Trade Message Replace Trade Message ESSAGES RECEIVED FROM FIXIE TRADE New Trade (Outgoing) Message Drop Copy General Confirm/Reject and Counter (Outgoing) Message Cancel Rejected Message	
	2.1 D 2.2 B 2.2.1 2.2.2 2.2.3 2.2.4 2.2.5 2.2.6 2.2.7 2.2.8 2.2.9 2.2.10 2.2.11 2.2.12 2.2.13 2.2.14	2.2 BUSINESS RULES 2.2.1 General 2.2.2 Receipt/Delivery Policy 2.2.3 Order Position and Liability 2.2.4 User Specified Trade Message Properties 2.2.5 Trade Message State 2.2.6 Message IDs 2.2.7 Execution ID and Execute Time 2.2.8 Quote Access Payments (QAP)

1 Introduction

The OTC Link FIX Messaging Service allows OTC Link market participants to submit messages and execution requests electronically to *OTC Link*, an Interdealer Quotation system and Message Routing and Executions service for OTCQX, OTCQB and OTC Pink securities.

OTC Link also provides a legacy OTC FIX service: http://www.otcmarkets.com/content/doc/otc-fix-specification.pdf. The Messaging functionality described in the legacy service is being superseded by the new service described in this document. This new service is being introduced to meet subscriber demand for higher messaging throughput and new functionality. Summary of differences to messages from the legacy protocol can be found in <a href="https://chapter.new.orc.new.

This service utilizes the FIX 4.2 protocol standard as defined by www.fixprotocol.org, with some exclusive custom extensions.

Connection to the OTC FIX gateway is typically made through one or more extranet vendors. Please contact techsupport@otcmarkets.com for latest connectivity information.

OTC FIX gateways are configured to talk to a single service per port. Customers who wish to send and receive messages for different services should contact OTC Markets to provision at least one port for every service. The table below describes the OTC Link services currently offered via OTCFIX.

Service	Description
Quotes	OTC Link quotation platform
Trades	OTC Link trade messaging
Volume Feed	OTC Link Volume Feed

If the connection to an OTC FIX session is lost and reestablished later in the day, OTC will deliver all the queued outbound traffic that would have been received if the connection had not been lost. However, when a connection is initially established, even if it's later in the day, only messages generated from time of connection will be delivered. I.e., Messages queued prior to initial connection will not be delivered.

2 OTC Link - Trade Messaging

2.1 Definitions

Message Sender: The subscriber firm sending a FIX message to OTC Markets from an OMS or similar trading application.

Message Receiver. The subscriber firm receiving a FIX message from OTC Markets.

Initiator. The subscriber firm starting a message negotiation by sending a Trade Message.

Respondent: The subscriber firm receiving this Trade Message

Trade Message: A message sent by Initiator to Respondent with a request to trade specific number of shares of a security at a specific price

Counter Message: A response message to negotiate on the price and/or number of shares of the Trade Message or subsequent Counter Messages.

MPID: The FINRA assigned 4 letter ID code for a subscriber firm.

Trader ID: The login ID for a particular user account belonging to a subscriber firm. The specified user account is the one associated with the transaction, the analog of a user logged into a Dealer session.

Transaction: A series of messages that constitute a discrete trading action. Example: Receiving a new order and filling it, followed by an execution confirmation is a discrete trading action.

2.2 Business Rules

2.2.1 General

OTC Link allows two parties to exchange messages, i.e. Trade Messages, Counters and Fills. The opening hours for OTC Link is currently 6:00 am to 5:00 pm. Trade Messages submitted can either have a specific time in force with a minimum of 10 seconds, or they can be day orders. All Trade Messages are cancelled automatically when the service closes.

It's important to note that OTC Link acts as a middleman. OTC Link will acknowledge every message it receives. No submission to OTC Link can be assumed to be successful until a confirmation is returned from OTC Link. A successful message submission results in a Confirmation. A failed submission results in a Reject messages. The confirmation or rejection received depends on the message being submitted. Each response will include a ResultCode tag, which confirms successful submission or explains why it failed. See chapter 5 for a list of Result Codes.

The Initiator starts the Trade Message process by submitting the New Trade Message (FIX New Order) to OTC Link. If OTC Link successfully validates the message it will forward it to the Respondent. It involves a binding commitment on behalf of the Initiator to trade a security at a specified price. The Respondent can Fill, Reject or Counter. While the Trade Message is active and before it's countered, the Initiator can Cancel it.

2.2.2 Receipt/Delivery Policy

Only Preferenced Trade Messages are allowed, i.e. they cannot be broadcast; only sent to a specific firm. The Respondent must have a quote in OTC Link for the security. The Respondent is specified as a market maker; OTC Link will automatically assign the SubID as the Trader at the firm that is owner of the quote in OTC Link.

OTC Link will process messages on first come / first serve basis. That means if two messages arrive for the same Trade Message at almost the same time, the first message received by OTC Link will be processed first. Based on the result of that, the second message may get rejected, for example because a Trade Message has been fully filled, even though the message was sent off in good faith when the Trade Message had not been filled.

2.2.3 Order Position and Liability

All incoming Trade Messages are assigned order position numbers and liability indicator. The order position reflects how many Trade Messages Respondent has received for the security at the same side (i.e. buy or sell) and same price before this Trade Message. For example, order position 1 means this is the first Trade Message Respondent received for the security at the price and side, order position 2 means one similar Trade Message was received before it, etc.

The order position is reset 10 seconds after last Trade Message of same Respondent, security, side and price expires. Using the example from above, an order position 1 is only re-assigned 10 seconds after both previous Trade Messages 1 and 2 have expired.

A Liability indicator is assigned based on the receiver's quote. If the price in the message matches or is better (from the quote owner's perspective) than the quote price, then message gets assigned positive liability.

2.2.4 User Specified Trade Message Properties

Currently, Limit Order is the only type of Trade Message allowed by OTC Link. A price and quantity in actual shares is required. Prices can be up to 5 decimal points with lowest price allowed being .00001 and highest price being \$999,999.99. The full quantity will always be displayed; it's not possible to request that only part of it be displayed. Size may be up to up to (and including) 2 billion shares. It's not permitted to specify the total dollar value in a Trade Messages.

Side must be Buy, Sell or Sell Short. Sell Short gets substituted with Sell when sent to the counter-party unless the two parties have an established QSR relationship. Each trading party can specify their own OrderCapacity as Principal, Agency or Riskless Principal. The OrderCapacity is not revealed to the counter-party unless the two parties have an established QSR relationship. See QUALIFIED Representative (QSR) Relationships

When entering a new Trade Message, the Duration (9559) tag is separate and not mutually exclusive to the TimeInForce (59) tag. Duration specifies, in seconds, how long counter-party has to respond to a Trade Message before it is automatically cancelled on your behalf. Minimum duration is 10 seconds. If not specified, the Trade Message will stay valid until explicitly cancelled or the OTC Link system closes. TimeInForce can be used to specify an optional flag, IOC=3, where the Trade Message is cancelled on your behalf after the first partial execution. They can be used together, individually, or not at all, to define time based conditions under which execution messages from your counter-party will be accepted.

Trade Messages may be partially Filled, unless the Initiator has specified All Or Nothing (AON). Non AON Trade Message can have multiple partial Fills until no more shares are remaining. Initiator can also specify Immediate or Cancel (IOC), where message expires immediately after receiving first partial Fill, even if expire time has not been reached. When submitting a Trade Message the Initiator can specify whether it is negotiable or non-negotiable (cannot be countered). If negotiation is allowed it can be countered and counter-countered up to 26 times.

Unless Initiator specifies the Strict Limit option, price improvement in Fills is allowed. The rule for price improvement can be found at the link below. OTC Link does not enforce that this rule is fulfilled; only that price in execution has been improved, i.e. price is increased on sell Trade Message and decreased on buy Trade Message.

http://www.finra.org/Industry/Compliance/MarketTransparency/OTCBB/

2.2.5 Trade Message State

A Trade message must be in one of different states. After being submitted initially it is in New state and is Live. Other Live states are Partially Filled, Replaced and Countered. While Live, a Trade message can move between any live States, except a message cannot go back to New state.

Expired states are Filled, Cancelled, Declined and Timed Out. A Live Trade message can move to Expired state from any Live state. Once Expired it cannot become Live again.

The message state is indicated in the OrdStatus tag when available.

2.2.6 Message IDs

OTC Link will assign a unique Message ID to each successful Trade Message. The Message ID is an incremental numeric. When a Trade Message is countered it retains the Message ID and gets an additional subID. The subID is sequential one character lower case alphanumerical value, i.e. first Counter is "a", second "b" etc.

The Message ID is passed on to both sides of a Message dialog in the OrderID (37) tag. All subsequent references to the Trade Message must refer to it with this Message ID.

Both sides may pass their own ID in the ClOrdID (11) tag in all incoming messages. The ID can be any text up to 40 characters long. All subsequent messages will echo back this ID in the ClOrdID tag. Though it is not enforced, it is encouraged that this ID be unique for the day for each subscriber.

2.2.7 Execution ID and Execute Time

Executing side can provide their own Execution ID when executing a Trade Message. The ID must be numeric up to 9 digits in length. If not supplied, OTC Link will insert its own Execution ID in the DropCopy message. OTC Link's own Execution ID is an incremental numeric.

It is advised that the Execution ID supplied by the executing side should be unique for the day for that subscribing firm. However, OTC Link will not verify this uniqueness constraint.

Executing side can specify the Execute Time when executing a Trade Message. If no time is specified, OTC Link will assign the time of processing message as the Execute Time.

2.2.8 Quote Access Payments (QAP)

FINRA rule 6450 allows broker-dealers to charge access fees that are not displayed in the quotation price. See http://www.sec.gov/rules/sro/finra/2010/34-62359.pdf

OTC Link implements this with *Quote Access Payments*, or QAP. QAP allows OTC Link quote subscribers to specify access fees or rebates on a scale of integer values from -30 through +30, where negative values represent net fee from quote taker and positive values represents rebates.

The QAP rate from Respondent's quote is assigned to the message at the time it is processed by OTC Link. Should the message get filled, the dollar amount of the fee or rebate will be calculated based on the following formula, where price is the fill price:

If price is at least 1 dollar

QAP amount = (QAP rate/100) x 0.01 x number of shares
else if price is less than 1 dollar but at least 1 cent

QAP amount = (QAP rate/100) x 0.0001 x number of shares
Else when price is less than 1 cent

QAP amount = (QAP rate/100) x (price/100) x number of shares

The Initiator of the messaging process is subject to paying the access fee or receiving the rebate as calculated above. Respondent has the option of waiving the QAP on fill, provided QAP rate is negative representing a fee. QAP fee or rebate is always dismissed should Respondent counter the message.

2.2.9 OTC Link Negotiations and Replace Message

Trading negotiations are possible with OTC Link. The Initiator can specify whether the Trade Message is negotiable or non-negotiable (cannot be countered). If negotiable and the Respondent counters the Trade

Message, it is now up to the Initiator to Fill, Reject or Counter the Counter Trade Message. The counter on Counter can continue up to 26 times at maximum.

When countering, the price and/or size must differ from previous message. The security must be the same and the side must be the opposite of message being countered. The party countering can set most other properties that are available for a New Trader Message.

Upon successfully countering a Trade Message both sides receive an Execution Report message with ExecType "C", indicating the new price and/or size. This message will have the same Message ID as the message that was countered, but has an additional subID as previously discussed. The countered message is acted on with exactly the same messages as a non-countered message; except that sides have been switched, i.e. original Initiator of a countered message is now the one that can execute, etc. Tag CounterState in message indicates which side can execute.

Initiator can at any time while message is in Live state reduce the number of available shares by submitting a Replace Message. Respondent will receive a Replace type Execution Report message notifying of the reduced amount of shares.

2.2.10 MAX Messages

MAX (*Maximum Acceptable eXecution*) is an extension to the regular Trade Message. A MAX Trade Message is actually a group of identical Trade Messages, collectively referred to as a MAX group, which can be sent to multiple receivers, but execution across all Trade Messages is limited to a maximum number of shares.

To send a MAX Trade Message, Initiator submits a single Trade Message, but instead of just one Respondent it has a space delimitated list of multiple Respondents. Initiator will receive a confirmation message for each Respondent, each having its own Message ID. All Respondents receive an identical Trade Message, apart from the Message ID, the only difference from a regular Trade Message being that the quantity is now shared between all Respondents. The Trade Message contains a MAX identifier tag to indicate this.

The first Respondent to Fill will get an execution but subsequent attempts to Fill may result in a rejection if none or not enough shares are available. If the first response is a partial Fill, responses after that will receive an execution as long as there are shares remaining that are available to be Filled.

A Drop Copy message for a Trade Message in a MAX Group will only show how much was Filled on that particular Trade Message. It does not tell how many shares others have Filled or who did the Fills. When other Trade Messages in the MAX Group get an execution, those not part of the Fill will be informed that fewer shares are available through a Replace type Execution Report message.

Once the maximum number of the shares is filled, any remaining live Trade Messages in the MAX group will be automatically Cancelled and all further execution attempts on Trade Messages in the MAX group will be rejected.

If Initiator Cancels one Trade Message of a MAX group, by including the OrderID of the Trade Message, all other remaining live Trade Messages in the group will also be Cancelled. Alternatively, the Initiator can also include the MAXOrderID of the MAX Trade Message to cancel all the remaining live Trade Messages in the group. Some OrderID is still needed, since OrderID is a required field. Attempts to Cancel the other Trade Messages in the MAX group will be rejected as they are already in a Cancelled state. A Respondent Declining an incoming Trade Message that is part of a MAX group will only Decline the one Trade Message.

Additionally, if an ECN Subscriber that is not participating in the MAX Order type is listed as a recipient of a MAX Order, that specific trade message will be rejected with result code 264.

Also, when a MAX message is sent to OTCN, this process works differently because OTCN is a separate IDQS and not an OTC Link ATS quoting participant. When OTCN is included as a MAX recipient, an IOC order is first sent to OTCN, and any remaining quantity is sent as a traditional MAX trade message to the other intended MAX recipients.

2.2.11 OTC Feed - Trade Data and Volume Feed

The OTC Link Volume Feed service has replaced Advertisements. The Volume Feed does not show individual trades, but an aggregate buy and sell for each executing market maker (i.e., Respondent) for each security. Trades on OTC Link will be automatically included in Volume Feed. Trades outside OTC Link can be reported through OTC Dealer or FIX Interface using the OTC Link FIX Volume Feed specs.

The executing trading side has the option to include individual trades to be aggregated during the day or have them remain anonymous until 4:00 pm. The default is not to be anonymous. The Respondent specifies his identity preference in the *Anonymous* tag when submitting a Fill.

At 4:00 pm and again at 5:00 pm all market maker aggregates are displayed, independent of the individual Fill anonymous preference.

2.2.12 Best Execution Instructions (BXI)

OTC Link supports the following Best Execution instructions:

Messages in OTC Securities will be validated against the inside price at the time of the
message. Messages priced more aggressive than the opposite inside will be rejected unless
Best Execution flag is set. The Best Execution flag is set by including 'f' in the Execution (18).

2.2.13 Qualified Special Representative (QSR) Relationships

Subscribers can provide OTC Link with QSR relationship information where it exists. If OTC Link has been informed of a QSR relationship between Subscribers then some information in New Trade and Drop Copy messages is revealed to the counterparty, where it would normally be not disclosed. This includes, Sell-Short and the Trade Capacity of the Counterparty.

2.2.14 Ping OTC Link ECN

Enabled subscribers, who sends a Link trade message to one or more Link quoting subscribers, will be able to automatically first ping OTC Link ECN with an IOC ECN order. An option will allow the ping price to be either the trade message limit price, or the inside midpoint.

3 FIX Messages

3.1 Identification and Routing Header

All inbound messages to or outbound messages from FIXIE Trade contain some or all of the following tags to identify the Type, Message Identifiers, Sender and Receiver of the message:

Tag	Tag Name	Messages inbound to OTCFIX Outbound from OTCFIX		Comments
8	BeginString	FIX.4.2	FIX.4.2	Standard FIX message type.
9	BodyLength	Message length in bytes	Message length in bytes	Standard FIX message type.
11	ClOrdID	Sender's own message ID	Echoes back own ID	Standard FIX message type.
34	MsgSeqNum	Message sequence number	Message sequence number	Standard FIX message type.
35	MsgType	Message Type Code	Message Type Code	Standard FIX message type.
37	OrderID	The OTC Markets issued Message ID (not on New Trade message)	The OTC Markets issued Message ID	Standard FIX message type.
49	SenderCompID	The identity of the gateway submitting the message	The identity of the gateway receiving the message	Standard FIX session IDs. Assigned per- connection.
52	SendingTime	Date and time that message was sent. All times are GMT	Date and time that message was sent. All times are GMT	Standard FIX message type.
56	TargetCompID	The identity of the gateway receiving the message	The identity of the gateway submitting the message	Standard FIX session IDs. Assigned per- connection.
115	OnBehalfOfCompID	The FINRA issued MPID of your firm	The FINRA issued MPID of counterparty	Always 4 characters
116	OnBehalfOfSubID	Trader ID of message sender at your firm	Trader ID of counterparty	Up to 10 characters
128	DeliverToCompID	FINRA issued MPID(s) of firm(s) receiving New Trade message	The FINRA issued MPID of your firm	To OTCFIX: New Trade message only (ignored in other messages)
129	DeliverToSubID	(not used)	Trader ID at your firm message is directed at	

Notes:

- **Message Type**: Always tag 35 (MsgType). The value of this tag is present on every FIX message and indicates the message content and tag structure.
- Message Identifiers: Subscribers can submit an option private trade ID on tag 11 when sending
 messages to OTC Link. This ID value will be echoed back on acks and drop copies. This ID will
 not be shared with the counter party. When submitting a message against an existing Trade
 Message, the message must be identified using the OTC Market's message ID in tag 37. This
 applies to all inbound messages except the New Trade message.

- **Session IDs**: Always tags 49 (SenderCompID) and 56 (TargetCompID). These tags are present on every message and a core part of the FIX protocol. They are typically handled automatically by the FIX messaging engine on either side of a connection. OTC Markets will assign the appropriate ID values as part connection provisioning. They have no effect on how the message is processed beyond the immediate FIX session.
- Inbound Firm Account IDs: Tags 115 (OnBehalfOfCompID) and 116 (OnBehalfOfSubID) are optional for a generic FIX implementation but mandatory for OTC Market's implementation. All transactions on OTC Market's systems are associated with at least one trader account. In the OTC Dealer application, a user logs in with an assigned MPID and trader ID. For FIX sessions, the FINRA issued MPID and trader ID of the firm and user submitting the message should be sent on these tags instead. Because some FIX connections may handle messaging for multiple firms, these tags are always required to be sent. While FIX 4.2 does not support a password for authorization, the FIX gateway maintains a list of firms that are authorized for every connection and will reject any messages with MPIDs that are not authorized. Tag 128 is also used on the Inbound New Order message to specify which firm(s) a New Trade message should be delivered to.
- Outbound Firm Account IDs: Tags 128 (DeliverToCompID) and 129 (DeliverToSubID) are used
 on outbound messages to identify the MPID and trader ID the message is being sent to. For the
 OTC Dealer application, these values determine the particular users who would see a message,
 notification, or some other action that appears on Dealer screens. For FIX sessions, the firm and
 trader identification values are placed on these tags instead so that the receiving system can
 process and route as appropriate. Tags 115 and 116 specify the counterparty of the Trade
 message.

Tags for the Routing and Identification header are highlighted in yellow in the message detail tables. For inbound messages, highlighted tags are those that subscribers are expected to send. For outbound messages, highlighted tags are those that OTC Markets will send as part of the message.

With the exception of ClOrdID (11), all tags of the Identification header are requited. If ClOrdID is omitted, then no Client Order ID will be echoed back to the subscriber.

3.2 Messages Submitted to FIXIE Trade

For a list of tags added, dropped or changed for each message since last version, see chapter 3.

3.2.1 New Trade (Incoming) Message

A New Trade is initiated by sending a FIX NewOrder (35=D) message to OTC Markets on your subscriber FIX line. Sender of New Trader Message gets back an Execution Report (35=8) message confirming success or failure, Receiver receives a New Trade (35=D) message.

Tag ID	Tag Name	Required	Description
35	MsgType	Yes	Should be "D"
49	SenderCompID	Yes	Assigned
56	TargetCompID	Yes	Assigned
115	OnBehalfOfCompID	Yes	FINRA issued MPID
116	OnBehalfOfSubID	Yes	OTC Link Trader ID
128	DeliverToCompID	Yes	The 4 character market participant ID of the
			Respondent. When sending a MAX trade message
			then separate multiple receivers by a single space.
11	ClOrdID	No	A unique identifier, max 40 characters.

55	Symbol	Cond	Identifying symbol for security. If the optional 48/22 tags are not sent, this tag will be required. If the optional 48/22 tags are sent as well, this tag will be
65	SymbolSfx	No	ignored. Optional Symbol Suffix
48	SecurityID	Cond	Optional CUSIP identifier
22	IDSource		
22	iDSource	Cond	Should contain "1" if a CUSIP was passed in SecurityID
40	OrdType	Yes	Valid value:
40	OldType	165	2 = Limit
54	Side	Yes	Valid values:
54	Side	163	1 = Buy
			2 = Sell
			5 = Sell short
44	Price	Yes	
			The price
38	OrderQty	Yes	Number of shares
18	ExecInst	No	Valid values, in multiple combination:
			f = BXI (see chapter 2.2.12)
			G = All or none (AON)
			N = Non-negotiable (cannot be countered)
			b = Strict Limit (no price improvement allowed)
			s = Saturate on Expiration
59	TimeInForce	No	Valid values:
			3 = Immediate or Cancel (IOC, message has expire
			time, either specified or default, but will cancel
			immediately following a partial execution)
9559	Duration	No	The duration until message expires, in whole seconds.
			The minimum is 10 seconds. If no duration is specified
			then message will expire at 5:00:00 PM EST.
9377	SolicitedFlag	No	Valid values:
			Y = Order is solicited - Default
			N = Order is not solicited
9528	OrderCapacity	No	Valid values:
			A = Agency
			P = Principal - Default
			R = Riskless Principal
9600	PingECN	No	Indicates an IOC ECN order will first ping OTC Link
			ECN, before a trade message is sent to the selected
			MPID(s).
			Valid values:
			L = Ping at Trade Msg Limit Price
			M = Ping at CBBO Midpoint

3.2.2 Fill Trade Message

Receiver of New Trade message or Counter submits the Fill Trade message to execute the message. Both sides receive a Drop Copy if successful, Receiver (message submitter) receives a Trade Rejected message if unsuccessful.

Tag ID	Tag Name	Required	Description
35	MsgType	Yes	Should be "8"
49	SenderCompID	Yes	Assigned
56	TargetCompID	Yes	Assigned
115	OnBehalfOfCompID	Yes	FINRA issued MPID
116	OnBehalfOfSubID	Yes	OTC Link Trader ID

37	OrderID	Yes	The OTC Link order ID being executed
11	ClOrdID	No	A unique identifier, max 40 characters.
150	ExecType	Yes	Valid values:
			1 = Partial Fill
			2 = Fill
17	ExecID	No	A numerical execution ID, max 9 digits. This must be
			unique for each customer for the day.
60	TransactTime	No	Respondent may submit a TransactTime. Value should
			be in GMT in format YYYYMMDD-HH:MM:SS.sss;
			where sss = milliseconds
54	Side	Yes	Should be opposite of the value of Side in message or
			counter being executed. Valid values:
			1 = Buy
			2 = Sell
			5 = Sell short
32	LastShares	Yes	Quantity executed
31	LastPx	Yes	Execution price, must match or better order price
18	ExecInst	No	Valid values:
			g = No Partial (only execute if all shares requested are
			available).
9377	SolicitedFlag	No	Valid values:
			Y = Execution is solicited - Default
			N = Execution is not solicited
9528	OrderCapacity	No	Valid values:
			A = Agency
			P = Principal - Default
0500	Δ.		R = Riskless Principal
9583	Anonymous	No	Used for showing or hiding identity of firm on <u>Trade</u>
			Data and Volume Feed. Valid values:
			Y = do not show identity of firm on Trade Data feed /
			do not forward trade to Volume Feed
			N = show identity of firm on Trade Data feed / forward
0666	O A D\Maiyad	No	trade to Volume Feed - Default
9666	QAPWaived	INO	Valid values:
			Y = Respondent waives QAP fee (not allowed when
			QAP is rebate)
			N = Respondent charges/gives rebate QAP - Default

3.2.3 Cancel Trade Message

While Trade Message is still live, Sender of New Trader message or Counter may Cancel by submitting below message. Sender may enter OrderID, ClOrdID of the original Trade Message, or MAXOrderID, if original Trade Message was a MAX Trade Message. Both sides receive an <u>Execution Report</u> confirming cancellation; Sender gets back Cancel Reject if unsuccessful. Note, if canceling using ClOrdID or MAXOrderID, some value of OrderID (even zero) must still be entered, since OrderID is a required field.

Tag ID	Tag Name	Required	Description
35	MsgType	Yes	Should be "F"
49	SenderCompID	Yes	Assigned
56	TargetCompID	Yes	Assigned
115	OnBehalfOfCompID	Yes	FINRA issued MPID
116	OnBehalfOfSubID	Yes	OTC Link Trader ID
37	OrderID	Yes	The OTC Link message ID being cancelled
9580	MAXOrderID	No	MAX ID of MAX trade message
11	ClOrdID	No	A unique identifier, max 40 characters.

3.2.4 Decline Trade Message

Receiver of New Trade Message or Counter may decline it by submitting the below message. Both sides receive an <u>Execution Report</u> confirming decline, Receiver (message submitter) gets back <u>Decline Reject</u> if unsuccessful.

Tag ID	Tag Name	Required	Description
35	MsgType	Yes	Should be "8"
49	SenderCompID	Yes	Assigned
56	TargetCompID	Yes	Assigned
115	OnBehalfOfCompID	Yes	FINRA issued MPID
116	OnBehalfOfSubID	Yes	OTC Link Trader ID
37	OrderID	Yes	The OTC Link message ID being declined
11	ClOrdID	No	A unique identifier, max 40 characters.
150	ExecType	Yes	Valid values:
			8 = Rejected

3.2.5 Counter Trade Message

Receiver of New Trade Message or Counter may counter it by submitting the below message. Both sides receive an <u>Execution Report</u> confirming the counter; Receiver (message submitter) gets back <u>Counter Reject</u> if unsuccessful.

Tag ID	Tag Name	Required	Description
35	MsgType	Yes	Should be "8"
49	SenderCompID	Yes	Assigned
56	TargetCompID	Yes	Assigned
115	OnBehalfOfCompID	Yes	FINRA issued MPID
116	OnBehalfOfSubID	Yes	OTC Link Trader ID
37	OrderID	Yes	The OTC Link message ID being countered
11	ClOrdID	No	A unique identifier, max 40 characters.
150	ExecType	Yes	Valid values: S = Countered
54	Side	No	Should only be used when countering a Buy with Short Sell. Valid values: 5 = Sell short
44	Price	Yes	The counter price
38	OrderQty	Yes	Number of shares
18	ExecInst	No	Valid values: f = BXI (see chapter 2.2.12).
59	TimeInForce	No	Valid values: 3 = Immediate or Cancel (IOC, message has specified expire time but will cancel immediately following a partial execution)
9559	Duration	No	The duration until message expires, in whole seconds. The minimum is 10 seconds. If no duration is specified then message will expire at 5:00:00 PM EST.
9377	SolicitedFlag	No	Valid values: Y = Order is solicited - Default N = Order is not solicited
9528	OrderCapacity	No	Valid values: A = Agency P = Principal - Default R = Riskless Principal

3.2.6 Replace Trade Message

While Trade Message is still live, Sender of New Trade Message may Update the number of available shares for execution by submitting below message. Both sides receive an Execution Report confirming message replace with updated LeavesQty tag, Sender gets back Replace Reject if unsuccessful. Note, if replacing using MAXOrderID, some value of OrderID (even zero) must still be entered, since OrderID is a required field

Tag ID	Tag Name	Required	Description
35	MsgType	Yes	Should be "8"
49	SenderCompID	Yes	Assigned
56	TargetCompID	Yes	Assigned
115	OnBehalfOfCompID	Yes	FINRA issued MPID
116	OnBehalfOfSubID	Yes	OTC Link Trader ID
37	OrderID	Yes	The OTC Link message ID being replaced
9580	MAXOrderID	No	MAX ID of MAX trade message
11	ClOrdID	No	A unique identifier, max 40 characters.
150	ExecType	Yes	Valid values:
			5 = Replace
151	LeavesQty	Cond	The remaining shares available for execution. If
			optional tag 38 is not sent, this tag will be required. If
			optional tag 38 is sent as well, this tag will be ignored.
38	OrderQty	Cond	Total number of shares of order. If optional tag 151 is
			not sent, this tag will be required.

3.3 Messages Received from FIXIE Trade

For a list of tags added, dropped or changed for each message since last version, see chapter 3.

3.3.1 New Trade (Outgoing) Message

Both sides receive a confirmation of a New Trade Message. Respondent gets a New Trade message (message type D), while Initiator gets an Execution Report message (message type 8), see chapter 3.3.3.

Tag ID	Tag Name	Present	Description
35	MsgType	Always	Will be "D"
49	SenderCompID	Always	Assigned
56	TargetCompID	Always	Assigned
115	OnBehalfOfCompID	Always	The Counterparty's FINRA issued MPID
116	OnBehalfOfSubID	Always	OTC Link Trader ID
128	DeliverToCompID	Always	Your FINRA issued MPID
129	DeliverToSubID	Always	OTC Link Trader ID
37	OrderID	Always	The OTC Link message ID
		COR	E TAGS
9552	CounterOrdID	Sometimes	Contains latest counter ID if message has been
			countered
55	Symbol	Always	The trading symbol of the security
65	SymbolSfx	Sometimes	Optional Symbol Suffix
48	SecurityID	Sometimes	Optional CUSIP identifier
22	IDSource	Sometimes	Should contain "1" if a CUSIP was passed in
			SecurityID
40	OrdType	Always	Valid value:
			2 = Limit
			? = Ping (reserved for future use)
54	Side	Always	Valid values:

			1 = Buy
			2 = Sell
			5 = Sell short (See Qualified Special Representative
			(QSR) Relationships)
60	TransactTime	Always	Time when message was processed
44	Price	Always	The price
38	OrderQty	Always	Number of shares
9665	QAPRate	Always	Specifies the access fee or rebate rate for the trade.
			Set to 0 if no fee or rebate.
18	ExecInst	Sometimes	Valid values, in multiple combination:
			f = BXI
			G = All or none (AON)
			N = Non-negotiable (cannot be countered)
			b = Strict Limit (no price improvement allowed)
59	TimeInForce	Sometimes	Valid values:
			3 = Immediate or Cancel
9559	Duration	No	The duration until message expires, in whole
			seconds. If not included then message will expire at
			5:00:00 PM EST.
9547	LiabilityFlag	Always	Indicates if message's price matches or is better than
			Respondent's quote. Valid values:
			Y = matches or is better
0554	Onder Over a Desition	A h	N = does not match or is worse
9551	OrderQueuePosition	Always	The number of trade messages the Respondent has
9549	RestrictToRoundLots	Sometimes	received for this security at this price and side. Valid values:
9049	Restrict ToroundLots	Sometimes	N = executions of odd lots allowed - Default
			Y = only executions of round lots are allowed
9580	MaxOrderID	Sometimes	Only when a MAX message. A unique ID for the MAX
3300	WaxOrderib	Sometimes	trade group.
9593	CounterParty-	Sometimes	Only when a QSR relationship between the two
0000	OrderCapacity	Comounico	parties exists. Valid values: see OrderCapacity.
	o . do. o apacity	USER OP	TIONAL TAGS
9561	InsBidRcvd	Sometimes	The Inside Bid when the Trade Message was
			received
9562	InsAskRcvd	Sometimes	The Inside Ask when the Trade Message was
			received
9563	InsBidSizeRcvd	Sometimes	The Inside Bid size when the Trade Message was
			received
9564	InsAskSizeRcvd	Sometimes	The Inside Ask size when the Trade Message was
			received
9565	ReceiverBid	Sometimes	The Receiver's Bid price when the Trade Message
			was received
9566	ReceiverAsk	Sometimes	The Receiver's Ask price when the Trade Message
			was received
9567	ReceiverBidSize	Sometimes	The Receiver's Bid size when the Trade Message
			was received
9568	ReceiverAskSize	Sometimes	The Receiver's Ask size when the Trade Message
			was received

3.3.2 Drop Copy

The Drop Copy message is sent to each side when a Fill is successful. Both sides get an identical Execution Report message having ExecType="1" or "2" with ExecID not "0", although value of some tags may differ depending on the side receiving message.

The message contains a set of Core Tags which all customers will receive. Customers can option in to receive additional tags in the message, mainly consisting of quote and inside quote information.

Tag ID	Tag Name	Present	Description
35	MsgType	Always	Will be "8"
49	SenderCompID	Always	Assigned
56	TargetCompID	Always	Assigned
115	OnBehalfOfCompID	Always	The Counterparty's FINRA issued MPID
116	OnBehalfOfSubID	Always	OTC Link Trader ID
128	DeliverToCompID	Always	FINRA issued MPID
129	DeliverToSubID	Always	OTC Link Trader ID
37	OrderID	Always	The OTC Link message ID
11	ClOrdID	Sometimes	Echoed back from latest submission from each side
		COR	RE TAGS
150	ExecType	Always	Type of last execution. Valid values: 1 = Partial fill 2 = Fill
17	ExecID	Always	A numerical identifier to this execution. This ExecID is obtained from the Fill message sent by the ExecutingParty, or if none submitted in the fill, is generated by OTCMarkets. If the OrderInitiatorFlag(9577) is N, then the recipient of this Drop Copy message is the Executing Party. Otherwise, the counterparty is the Executing Party. The combination of ExecID, OnBehalfOfCompID, OrderInitiatorFlag should be unique for the day, as long as ExecutingParty has submitted a unique ExecID.
9552	CounterOrdID	Sometimes	Contains the latest counter ID when message has been countered
9577	OrderInitiatorFlag	Always	Valid values: Y = Receiver of message was the Initiator N = Receiver of message was the Respondent
39	OrdStatus	Always	State of Trade Message after execution. Valid values: 1 = Partially filled 2 = Filled
55	Symbol	Always	The trade symbol
65	SymbolSfx	No	Optional Symbol Suffix
48	SecurityID	Sometimes	Optional CUSIP identifier
22	IDSource	Sometimes	Will contain "1" if a CUSIP was passed in SecurityID
54	Side	Always	Indicates the side of the execution. Valid values: 1 = Receiver of drop copy bought 2 = Receiver of drop copy sold 5 = Receiver of drop copy sold short
9592	CounterPartySide	Sometimes	Only when a QSR relationship between the two parties exists. Valid values: 1 = Counter party bought 2 = Counter party sold 5 = Counter party sold short
38	OrderQty	Always	The original number of shares
44	Price	Always	The original price
32	LastShares	Always	Number of shares being executed now
31	LastPx	Always	The execution price.

9664	QAPAmount	Always	Specifies total dollar amount of access fee charged
3004	QAI AIIIOUIII	Always	(negative number) or rebate offered (positive
			number) for this trade. Will be rounded to 2 decimal
			places (i.e. nearest cent).
9665	QAPRate	Always	Copied over from message being filled.
9666	QAPWaved	Always	Valid values:
0000	g/ ii wavaa	/ iiiiayo	Y = Respondent waived QAP fee
			N = Respondent charges/gives rebate QAP -
			Default
18	ExecInst	Sometimes	Contains values from New Trade or latest Counter
			(NT) and Fill (F) messages. Valid values, in multiple
			combination:
			f = BXI (from NT)
			G = AON / All or none (from NT)
			N = Non-negotiable (from NT)
			b = Strict Limit (from NT)
			g = No Partial (from F)
			s = Saturate on Expiration (from NT)
151	LeavesQty	Always	Number of shares remaining for execution. This
			equals OrderQty – CumQty.
14	CumQty	Always	Total number of shares executed in order
60	TransactTime	Always	Time the execution was processed
113	ReportToExch	Always	Indicates who is the "Executing Broker" for reporting
			purposes. Valid values:
			Y = receiver is the "executing broker"
	D 10 1		N = receiver is not the "executing broker"
9548	ResultCode	Sometimes	When present, will be "54". Only sent to side
50	T	0	submitting the Fill. See Result Codes.
58	Text	Sometimes	Message corresponding to ResultCode
9377	SolicitedFlag	Sometimes	Initiator gets the SolicitedFlag as submitted in New
			Trade Message. Respondent will get the
			SolicitedFlag as submitted in the most recent execution.
9528	OrderCapacity	Sometimes	Initiator gets the OrderCapacity flag as submitted in
9320	OrderCapacity	Sometimes	New Trade Message. Respondent will get the
			OrderCapacity flag as submitted in the most recent
			execution.
9593	CounterParty-	Sometimes	Only when a QSR relationship between the two
3030	OrderCapacity	Cometines	parties exists. Valid values: see OrderCapacity.
9581	OATSReported	Always	Indicates if receivers should report to OATS. Valid
0001	O/ (1 O/ toportod	/ iiiiayo	values:
			N = Receiver of Drop Copy should not report to
			OATS
			Y = Receiver of Drop Copy should report to OATS
9580	MaxOrderID	Always	Only non-zero when a MAX message. A unique ID
		Í	for the MAX trade group.
9582	MAXCumQty	Always	Only non-zero when MAXOrderID is not null. The
			total number of shares executed in the MAX order
			group.
9583	Anonymous	Sometimes	Used for showing or hiding identity of firm on Trade
			Data and Volume Feed. Valid values:
			Y = do not show identity of firm on Trade Data feed
			/ do not forward trade to Volume Feed
	1	1	N = show identity of firm on Trade Data feed /
			forward trade to Volume Feed - Default

USER OPTIONAL TAGS			
9561	InsBidRcvd	Sometimes	The Inside Bid when the Trade Message was
			received
9562	InsAskRcvd	Sometimes	The Inside Ask when the Trade Message was
			received
9563	InsBidSizeRcvd	Sometimes	The Inside Bid size when the Trade Message was
			received
9564	InsAskSizeRcvd	Sometimes	The Inside Ask size when the Trade Message was
			received
9565	ReceiverBid	Sometimes	The executing receiver's Bid price when the Trade
			Message was received
9566	ReceiverAsk	Sometimes	The executing receiver's Ask price when the Trade
			Message was received
9567	ReceiverBidSize	Sometimes	The executing receiver's Bid size when the Trade
			Message was received
9568	ReceiverAskSize	Sometimes	The executing receiver's Ask size when the Trade
0500		0 "	Message was received
9569	FillerBid	Sometimes	The executing receiver's Bid when Trade Message
9570	FillerAsk	Sometimes	was executed
9570	FillerASK	Sometimes	The executing receiver's Ask when Trade Message was executed
9571	FillerBid Size	Sometimes	The executing receiver's Bid size when Trade
9571	I lilei bid Size	Sometimes	Message was executed
9572	FillerAskSize	Sometimes	The executing receiver's Ask size when Trade
3072	T IIICI7 (SKOIZC	Comcumes	Message was executed
9573	InsBidEx	Sometimes	The Inside Bid when Trade Message was executed
9574	InsAskEx	Sometimes	The Inside Ask when Trade Message was executed
9575	InsBidSizeEx	Sometimes	The Inside Bid size when Trade Message was
			executed
9576	InsAskSizeEx	Sometimes	The Inside Ask size when Trade Message was
			executed
		Reser	ved TAGS
9584	reserved	Sometimes	reserved
9585	reserved	Sometimes	reserved
9586	reserved	Sometimes	reserved
9587	reserved	Sometimes	reserved
9588	reserved	Sometimes	reserved
9589	reserved	Sometimes	reserved
9594	reserved	Sometimes	reserved

3.3.3 General Confirm/Reject and Counter (Outgoing) Message

In addition to the Drop Copy, the Execution Report (ER) message is used to report back to Submitter confirmations or rejects of some submitted messages, as well as state updates to both sides of a Trade Message. It is also used to deliver a Counter to a previous Trade Message.

The table below shows all reasons the ER message may be received. Subsequent chapters show other messages that may be received for other failed submissions that are not mentioned in the table. Tag ExecType is key to identifying the purpose of the message.

ExecType	Message Purpose	
0	Confirming a successful New Trade Message	
1 or 2	Drop Copy. See chapter 3.3.2	
4	Trade Message was Cancelled by Initiator, or	
	An IOC message is Cancelled following a partial fill, or	

	Message was Cancelled because it is part of a MAX group and the maximum number of executed shares has been reached
5	Available number of shares for execution has been reduced. Either Initiator submitted a Replace message or Message is part of a MAX group and another message in the group got a fill
8	New Trade message submission is Rejected, or Confirming Decline Trade Message is accepted
С	Trade Message has timed out
S	Trade Message has been countered

SenderCompID	Tag ID	Tag Name	Present	Description
TargetCompID	35	MsgType	Always	Will be "8"
115	49	SenderCompID	Always	Assigned
116	56	TargetCompID	Always	Assigned
DeliverToCompID Always FINRA issued MPID			Sometimes	The Counterparty's FINRA issued MPID
DeliverToSubID Always OTC Link Trader ID	116	OnBehalfOfSubID	Sometimes	OTC Link Trader ID
Sometimes The OTC Link message ID			Always	
ClOrdID Sometimes Echoed back from latest submission from each side		DeliverToSubID	Always	OTC Link Trader ID
Sometimes Always Indicates what message is for. Valid values: O = New	37	OrderID	Sometimes	
0 = New 4 = Cancel 5 = Replaced 8 = Reject C = Expires / Times out S = Countered 9552		ClOrdID	Sometimes	Echoed back from latest submission from each side
4 = Cancel 5 = Replaced 8 = Reject C = Expires / Times out S = Countered 9552	150	ExecType	Always	
S = Replaced 8 = Reject C = Expires / Times out S = Countered				
8 = Reject C = Expires / Times out S = Countered 9552 CounterOrdID Sometimes Contains latest counter ID if message has been countered 39 OrdStatus Sometimes Identifies current status of trade message, if known. Valid values: 0 = New (message is live without any fills) 4 = Cancelled 5 = Replaced (message is live) 8 = Rejected C = Expired S = Countered (message is live) 151 LeavesQty Sometimes Indicates the number of shares available for execution 38 OrderQty Sometimes Total number of shares of order, if included on Replace message. 60 TransactTime Always Time the message was processed 9548 ResultCode Sometimes Only sent to side submitting the message being acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent				
C = Expires / Times out S = Countered Contains latest counter ID if message has been countered OrdStatus Sometimes Contains latest counter ID if message has been countered Identifies current status of trade message, if known. Valid values: O = New (message is live without any fills) 4 = Cancelled 5 = Replaced (message is live) 8 = Rejected C = Expired S = Countered (message is live) Indicates the number of shares available for execution Replace message. OrderQty Sometimes Total number of shares of order, if included on Replace message. Only sent to side submitting the message being acknowledged/rejected. See Result Codes. See Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse OrderQueuePosition Cond The number of trade messages the Respondent				• • • • • • • • • • • • • • • • • • •
S = Countered Sometimes S = Countered Contains latest counter ID if message has been countered Sometimes Identifies current status of trade message, if known. Valid values: 0 = New (message is live without any fills) 4 = Cancelled 5 = Replaced (message is live) 8 = Rejected C = Expired S = Countered (message is live)				
Sometimes Contains latest counter ID if message has been countered				
Countered Countered				
OrdStatus	9552	CounterOrdID	Sometimes	_
Valid values: 0 = New (message is live without any fills) 4 = Cancelled 5 = Replaced (message is live) 8 = Rejected C = Expired S = Countered (message is live) 151				
0 = New (message is live without any fills) 4 = Cancelled 5 = Replaced (message is live) 8 = Rejected C = Expired S = Countered (message is live) 151	39	OrdStatus	Sometimes	
4 = Cancelled 5 = Replaced (message is live) 8 = Rejected C = Expired S = Countered (message is live) 151				
5 = Replaced (message is live) 8 = Rejected C = Expired S = Countered (message is live) 151				
8 = Rejected C = Expired S = Countered (message is live) 151 LeavesQty Sometimes Indicates the number of shares available for execution 38 OrderQty Sometimes Total number of shares of order, if included on Replace message. 60 TransactTime Always Time the message was processed 9548 ResultCode Sometimes Only sent to side submitting the message being acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent				
C = Expired S = Countered (message is live) 151 LeavesQty Sometimes Indicates the number of shares available for execution 38 OrderQty Sometimes Total number of shares of order, if included on Replace message. 60 TransactTime Always Time the message was processed 9548 ResultCode Sometimes Only sent to side submitting the message being acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values:				
S = Countered (message is live) LeavesQty Sometimes Indicates the number of shares available for execution 38 OrderQty Sometimes Total number of shares of order, if included on Replace message. 60 TransactTime Always Time the message was processed 9548 ResultCode Sometimes Only sent to side submitting the message being acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent				
LeavesQty Sometimes Indicates the number of shares available for execution				
execution	151	LoovooOtv	Comotimos	
Sometimes Total number of shares of order, if included on Replace message.	131	LeavesQty	Sometimes	
Replace message. 60 TransactTime Always Time the message was processed 9548 ResultCode Sometimes Only sent to side submitting the message being acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent	38	OrderOty	Sometimes	
60 TransactTime Always Time the message was processed 9548 ResultCode Sometimes Only sent to side submitting the message being acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent	30	OrderQty	Sometimes	
9548 ResultCode Sometimes Only sent to side submitting the message being acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent	60	TransactTime	Alwaye	
acknowledged/rejected. See Result Codes. 58 Text Sometimes Message corresponding to ResultCode Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent		I .		
Following tags are only included when confirming a successful New Trade message (See * below) LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse OrderQueuePosition Cond The number of trade messages the Respondent	3040	Nesulloud	Sometimes	
Following tags are only included when confirming a successful New Trade message (See * below) 9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent	58	Toyt	Sometimes	
9547 LiabilityFlag Cond Indicates if message matches or is better than Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse 9551 OrderQueuePosition Cond The number of trade messages the Respondent				
Respondent's quote. Valid values: Y = matches or is better N = does not match or is worse OrderQueuePosition Cond The number of trade messages the Respondent				
Y = matches or is better N = does not match or is worse OrderQueuePosition Cond The number of trade messages the Respondent	3341	Liabilityi lag	John	
N = does not match or is worse OrderQueuePosition Cond The number of trade messages the Respondent				
9551 OrderQueuePosition Cond The number of trade messages the Respondent				
	9551	OrderQueuePosition	Cond	
	300 /	S. GOI GGOGOI OOILIOII	30110	has received for this security at this price and side.

9665	QAPRate	Cond	Specifies the access fee or rebate rate charged by quote owner.
9580	MaxOrderID	Cond	Only when a MAX message. A unique ID for the MAX trade group.
Following t	tags are only included in a	Counter messa	ge
54	Side	Cond	The side specified by sender of Counter message: 1 = Buy 2 = Sell 5 = Sell Short
38	OrderQty	Cond	The countered number of shares
44	Price	Cond	The countered price
18	ExecInst	Sometimes	Valid values: "f" = BXI
9559	Duration	No	The duration until message expires, in whole seconds. The minimum is 10 seconds. If not included then message will expire at 5:00:00 PM EST.
9553	CounterState	Cond	Indicates who can execute counter. Valid values: 1 = Receiver of message can now execute 2 = Receiver of message cannot execute
9593	CounterParty- OrderCapacity	Sometimes	Only when a QSR relationship between the two parties exists. Valid values: see OrderCapacity.

^{*} For subscribers whose FIX sessions are configured for Enhanced Confirmation Messages, the following tags are also included when confirming a successful New Trade message.

Tag ID	Tag Name	Present	Description
55	Symbol	Always	The trading symbol of the security.
65	SymbolSfx	Sometimes	Optional Symbol Suffix
48	SecurityID	Sometimes	Optional CUSIP identifier
22	IDSource	Sometimes	Will contain "1" if a CUSIP was passed in
			SecurityID
54	Side	Always	Valid values:
			1 = Buy
			2 = Sell
			5 = Sell short
44	Price	Always	The price
38	OrderQty	Always	Number of shares

3.3.4 Cancel Rejected Message

This message is sent to Submitter when a Cancel Request is rejected.

Tag ID	Tag Name	Present	Description
35	MsgType	Always	Will be "9"
49	SenderCompID	Always	Assigned
56	TargetCompID	Always	Assigned
115	OnBehalfOfCompID	Sometimes	The Counterparty's FINRA issued MPID
116	OnBehalfOfSubID	Sometimes	OTC Link Trader ID
128	DeliverToCompID	Always	FINRA issued MPID
129	DeliverToSubID	Always	OTC Link Trader ID
37	OrderID	Always	The OTC Link message ID

11	ClOrdID	Sometimes	Echoed back from latest submission from each side
9552	CounterOrdID	Sometimes	Contains the latest counter ID when message has been countered
60	TransactTime	Always	Time the reject message is processed
9548	ResultCode	Always	See Result Codes.
58	Text	Always	Message corresponding to ResultCode

3.3.5 Fill, Decline, Counter or Replace Rejected

This message is sent to Submitter when a Fill, Decline, Counter or Replace Message is rejected by Trex.

Tag ID	Tag Name	Present	Description
35	MsgType	Always	Will be "Q"
49	SenderCompID	Always	Assigned
56	TargetCompID	Always	Assigned
115	OnBehalfOfCompID	Sometimes	The Counterparty's FINRA issued MPID
116	OnBehalfOfSubID	Sometimes	OTC Link Trader ID
128	DeliverToCompID	Always	FINRA issued MPID
129	DeliverToSubID	Always	OTC Link Trader ID
37	OrderID	Always	The OTC Link message ID
11	ClOrdID	Sometimes	Echoed back from latest submission from each side
9552	CounterOrdID	Sometimes	Contains the latest counter ID when message has
			been countered
60	TransactTime	Always	Time the reject message is processed
9548	ResultCode	Always	See Result Codes.
58	Text	Always	Message corresponding to ResultCode

4 Revision Change History

Version	Description of Version	Date Completed
1.11.4	Changed presence of Cancel Reject message tags 115 and 116 to 'Sometimes'.	2023.12.14
1.11.3	Clarified behavior when OTCN is part of a MAX trade message.	2023.2.7
1.11.2	Added error code 303, 303, 305.	2023.1.4
	Removed references to NMS.	
	Clarified the Best Ex instruction is not required on Counters.	
1.11.1	Added error code 265 for MAX trade messages that include both OTCN and ARCA.	2022.5.20
	Modified error code 269.	
1.11	Clarified if trade message is canceled using CliOrdID or MAXOrderID, some value of OrderID (even zero) must still be entered, since OrderID is a required field	2021.6.16
	Corrected MAXOrderID tag number in Cancel and Replace Trade Messages	
1.10	Indicated that Trade Messages can be canceled using OrderID, ClOrdID of the original Trade Message, or MAXOrderID, if original Trade Message was a MAX Trade Message.	2021.6.03
1.9	Removed CAT phase 2d quoteID and quoteKeyDate from Drop Copy message. Placed tags 9584 and 9585 in reserve.	2021.5.10
	Added result code 57 for successful trade replace message.	
1.8.1	Indicated Drop Copy quoteKey quoteID and quoteKeyDate requirements are now in CAT Phase 2d.	2021.1.15
	Clarified quoteKeyDate is in Eastern Time.	
	Added error code 302 for trade message to a receiver that cannot accept price with entered number of decimal places	
1.8	Added MAXOrderID to Cancel Trade Message, Replace Trade Message and Drop Copy.	2020.10.22
	Added that the Initiator of a MAX Trade Message can use the	
	MAXOrderID of the MAX Trade Message to cancel all the remaining live Trade Messages in the group.	
1.7	Added CAT Phase 2c quoteID and quoteKeyDate to Drop Copy message.	2020.7.29
	Added reserve fields to Drop Copy message	
1.6.7	Added error code 301 for trade message to a receiver that does not accept AON trade messages.	
1.6.6	Added Ping OTC Link ECN feature.	2020.1.13
	Clarified that an ECN Subscriber may or may not participate in the MAX Order type.	

	Corrected tag 48 is the optional CUSIP identifier.	
	Added error code 300 for fill price precision	
	Clarified tags 9580 and 9582 are Always present in Drop Copy. They will be zero for non-MAX messages.	
1.6.5	Removed RestrictToRoundLots (tag 9549) from New Trade (Incoming), Counter Trade, and General Confirm/Reject and Counter (Outgoing) Messages, Removed OnlyLiabilityOne (tag 9591) from New Trade (Incoming)	2018.2.28
	Message	
	Removed Saturate on Expiration ExecInst (tag 18) value from New Trade (Outgoing) Message	
	Removed Pink FIX revision references	
1.6.4	Added 'Saturate on Expiration' execution instruction to New Trade message.	2017.8.31
	Added optional tag 38 to Replace Trade Message and General Confirm	
	Indicated tags 115 and 116 are not required in Fill, Decline, Counter or Replace Rejected message.	
1.6.3	Added milliseconds to TransactTime (tag 60).	2017.3.17
	Removed requirement that trader must be present to receive trade messages.	
1.6.2	Corrected liability order reset timer from 30 seconds to 10 seconds.	2016.6.2
	Indicated Symbol, SecurityID and IDSource are conditional fields in Quote and Quote Cancel messages.	
	Indicated IDSource is required if SecurityID us used, and only valid value is 1 = CUSIP.	
	In Message Tag Change History table, moved tag 126 from Changed column to Dropped column.	
1.6.1	Indicated 9666 in Drop Copy message will Always be present.	2016.4.1
	Added to Revision and Message Tags Change History the removal of tags 50 & 57 from Logon message	
1.6	Added Enhanced Confirmation Message fields	2016.3.4
1.5.6	Clarified OTC Link Volume Feed service	2015.11.12
	Enhanced readability of document	
	Removed tag 39 = 1 from section 3.3.3 General Confirm/Reject and Counter (Outgoing) Message	
1.5.5	Added standard FIX 4.2 header fields	2015.10.30
	Added error codes 285, 286, 287, 290 for NMS rules	
	Removed Anonymous (tag 9583) from New Trade (Incoming) and Counter Trade Messages	

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	Indicated tags 115/116 in 'General Confirm/Reject and Counter (Outgoing) Message' are present Sometimes	
	Removed error code 292 for trade risk level reject	
1.5.4	Corrected some Result Codes and Messages.	2015.6.10
1.5.3	Clarified how messages are delivered at time of FIX Gateway connection. Modified miscellaneous wording for readability.	2015.3.16
1.5.2	Added text related to QSR disclosure. QSR disclosure can only be set as a predetermined relationship between two firm and not on a per message basis, thus removed QSRDisclosure flag (5990) from all incoming messages	
1.5.1	Updated text for error codes 293 and 294	2015.1.16
1.5	New Trade (Outgoing) and Confirm/Reject (Counter outgoing) messages now can have side (54) set to 5 for sell short. This is when there is a QSR agreement between the two sides and one side specified sell short. Field 9592 which previously would carry this information has been dropped.	2014.12.18
1.4	Changed definition of Execlnst in the Fill and Drop Copy message. It now uses "g" instead of "G" to specify NoPartial in order to distinguish it from AON. Added OTC Link Volume Feed information to the specs.	2014.11.21
1.3	Added field ExecInst to the Drop Copy message.	2014.09.30
1.2	Changed rules on ISO flag; it is no longer required (in the ExecInst tag), but if not set then message must be at or better than the inside to be accepted. Added tag ExecInst to the Counter message for specifying the BXI / Directed ISO on counters and to the Confirm/Reject message when receiving a Counter	2014.09.24
	Countering NMS securities requires Directed ISO to be set	
	Added new error codes 293 and 294 to cover above changed behavior	
1.1a	Functionality unchanged, minor edits to text	2014.09.02
1.1	Updates to outgoing messages to add counterparty side and capacity for QSR disclosure	2014.07.31
1.0	Added error codes 291 and 292 to cover above changes	22442242
1.0	Initial version, converted from Pink FIX Version 3.5 October, 2012	2014.02.12

5 Result Codes and Messages

Code	Reason sent	Message
0	Successful command, unspecified	Your command was successful
51	Successfully processed a New Trade Message.	Success: New Message for [symbol], message number [order#]
52	Successfully processed a Decline Trade Message.	Success: Decline Message for [symbol], message number [order#]
53	Successfully processed a Cancel Trade Message.	Success: Cancel Message for [symbol], message number [order#]
54	Successfully processed a Trade Message Execution.	Success: Fill for [symbol], message number [order#]
55	Successfully processed a Counter Trade Message	Success: Counter for [symbol], message number [order#]
57	Successfully processed a Replace Trade Message.	Success: Replace Message for [symbol], message number [order#]
200	Unspecified error.	Internal error. Action could not be completed.
201	Side value invalid.	Invalid side for [symbol] New Message
202	Buy/Sell side not set in new message.	Buy/Sell not specified for [symbol] New Message
203	Price of message or execution not sent or invalid	Missing or invalid price specified for [symbol] message.
204	Size of message or execution not sent or invalid	Missing or invalid size specified for [symbol] message.
205	Price precision check.	Price for [symbol] message cannot have more than 5 decimal places
207	Fill rejected because quantity too large.	Fill quantity [execute_size] for [symbol] exceeds remaining size [rem_size]
211	Expiration interval cannot be less than <i>MinTime</i> seconds on Good Till Date message.	Expiration time for [symbol] message must be at least <i>MinTime</i> seconds
213	Can't find a quote in Pink Quote by the receiver of a new trade message.	Receiver [MPID:traderID] for New Message is not quoting security [symbol]
215	Can't find the security referenced in a new trade message.	Could not find security [symbol]
218	Security referenced in a new trade message is not active.	Security [symbol] is not active
220	Receiver of message is not entitled to use Pink Link.	Receiver [MPID:traderID] for [symbol] message is not a user of messaging service
221	Sender of message is not entitled to use Trex.	Sender [MPID:traderID] for [symbol] message is not a user of messaging service
222	Sender of message is suspended.	Sender [MPID:traderID] of [symbol] message is suspended
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Code	Reason sent	Message
223	Receiver of new message is suspended.	Receiver [MPID:traderID] for [symbol] message is suspended
225	Receiver of new message has closed quotes in Pink Quote.	Receiver [MPID:traderID] for [symbol] message is closed
228	Sender and receiver are the same.	Sending and receiving firm [MPID] for [symbol] message cannot be the same
229	No sender trader id in Trex message.	No sending trader at [MPID] specified for [symbol] message
230	Sender of message not found in Pink Quote market.	Sender [MPID:traderID] for [symbol] message not found
231	Couldn't find the receiver of a Pink Link message in Pink Quote market.	Replace for [symbol] message does not come from original sender [MPID:traderID-sender]
232	Sender of cancel was not the sender of the new message.	Cancel for [symbol] message does not come from original sender [MPID:traderID-sender]
233	Sender of Fill Message is not the receiver of the originating New Message.	Fill for [symbol] message does not come from original receiving Market Maker [MPID:trader-received] for message
234	MAX Message referenced in a Pink Link message not found.	MAX group number [MaxOrderID] from [MPID] not found
235	Attempt to fill, decline, cancel or counter a message that is in an invalid state, i.e. expired, suspended, etc.	Cannot process the [TYPE OF Pink Link MESSAGE] because [order#] is in [ORDER STATE] state
236	Message referenced in a Pink Link message not found.	Message number [order#] from [MPID] not found
237	Attempt to partial fill All Or Nothing (AON) message.	Fill for [symbol] All-Or-Nothing message must be for all shares
238	The maximum number of times a message can be countered (26 times) has been reached.	Maximum number of counters allowed for this message has been reached
239	The price or quantity of a counter message, relative to the message being countered, must be different.	When countering, the price and/or the quantity must be different from the current trade message
242	Trex messaging service is closed	OTC Link market is closed
243	The receiving market maker is missing from a new message.	Missing a MMID for receiver for [symbol] message
245	The sender of a counter message is not the receiver of the original new trade message.	Sender of counter message must be receiver of original message
246	A counter was sent against a message that is non-negotiable.	Message [messageID] is non-negotiable and cannot be countered
248	The price of a new trade message, execution or counter exceeds 99,999,999.	The price [order price] exceeds maximum allowed price of 99,999,999
251	Attempt to execute a message with price improvement was unsuccessful	The price [order price] for [symbol] must equal or improve the quoted price [quote price]
252	Attempt to send in a new message with RoundLot tag set and shares not an even multiple of 100	Round Lot message for [symbol] must contain shares in multiples of 100

Code	Reason sent	Message
253	Attempt to execute a round lot message with shares not an even multiple of 100	Execution of round lot message for [symbol] must have shares in multiple of 100
254	The size of a new message or counter exceeds 2,000,000,000 shares.	Message size exceeds allowed max value of 2,000,000,000 shares
256	Invalid side when countering	Invalid side for [symbol] Counter message
258	Inappropriate use of ExecInst in the Execution Report message. Only "G" is supported for AON execution of incoming message.	Invalid value in ExecInst field of an execution order message
260	Illegal market maker when rejecting a message	Reject for <i>symbol</i> message does not come from original receiver market maker [MPID]
263	Sender of MAX trade message is on the exclude list for MAX trade messages	MAX trade message for [symbol] rejected because sender is not allowed to send MAX trade messages
264	Receiver of MAX trade message is on the exclude list for MAX trade messages	MAX trade message was not sent to receiver [MPID] because receiver is not allowed to receive MAX trade messages
265	MAX trade message includes both OTCN and ARCA	MAX trade message was not sent to receiver [MPID] because multiple external venues cannot receive MAX trade messages at the same time
267	Attempt to price improve on a strict limit order	Price improvement for [symbol] is not allowed because message is Strict Limit
268	User submitted message capacity other than P, R or A	Invalid message capacity flag of [value] specified
269	Price not passing Inferior Price Rule	Sender [traderID] unable to trade at equal or inferior price on [symbol]
270	User submitted an Execution ID with length exceeding the maximum allowed	Execution ID missing or exceeds maximum allowable length of 9
271	User submitted a message for a bond while bond trading was disabled	Bond trading has been disabled for bond [symbol]
272	Sender submitting message is disabled	Sender [traderID] has been disabled
273	Receiver of message is disabled	Receiver [traderID] has been disabled
274	User submitted a message for a security on OTC Red while OTC Red trading was disabled	Red trading has been disabled for security [symbol]
275	User submitted a Client Message ID with length exceeding the maximum allowed as specified by a system property	Client Message ID exceeds maximum allowable length of [value]
279	User submitted a message for a security that is flagged as 144A, which are not allowed for messaging	The 144A security [symbol] can only accept quotes
280	User's firm has requested not to accept messages that are not number 1 liability	Trading for symbol [symbol] is not liability one
282	Illegal or missing quantity in a Replace message	Replace quantity [value] is not valid

Code	Reason sent	Message
283	Submitting quantity in a Replace message is that higher than remaining shares	New quantity [value] must be less than original [value]
284	Attempting to submit a Replace to a message that has been countered	Cannot replace quantity [value] for Countered Trade Message [value]
298	Tried to counter broker-preference message	Cannot counter broker-preferenced message for Trade Message [value]
299	Tried to set side as sell short exempt in new message or fill message for an OTC security	Cannot sell short exempt OTC security [Symbol]
300	Attempt to execute a message with price precision greater than 6 decimals	Price for [symbol] fill message can not have more than 6 decimal places
301	Attempt to send a trade message to a receiver that does not accept AON trade messages.	Receiver [MPID] does not accept AON trade messages
302	Attempt to send a trade message to a receiver that does not accept the entered number of price decimal places.	Receiver [MPID] cannot accept price with entered number of decimal places
303	Attempt to send a MAX trade message to more than one external venue.	MAX trade message was not sent to receiver [TraderID] because multiple external venues cannot receive MAX trade messages at the same time.
304	Attempt to send a MAX trade message when MAX orders to IDQS are currently disabled.	Trade message was not sent to receiver [TraderID] because MAX orders to IDQS are currently disabled.
305	Sending trader not entitled to trade Digital Asset security	Sender [TraderID] for [Symbol] message is not entitled to send a message in this Digital Asset security