

FIX API v1.2.2

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1 Version History

Version	Date	Description
1.0	June 2014	Initial Version
1.1	March 2016	Added market depth support
1.2	August 2019	Changed SecondaryClOrdID from ticket only to ticket-
		account-group
1.2.1	December 2019	Removed tag 526 from NewOrderSingle and added tag 583
1.2.2	March 2020	Added Limit order type support (only IOC)

2 FIX Technical Details

2.1 Version

The FXT FIX API utilizes version 4.3 of the FIX Protocol.

2.2 SSL Support

The FXT FIX API natively supports SSL. It is recommended that at least the trading session is secured using SSL within the transport. If not available through a hardware SSL termination endpoint, the easiest approach to implementing this is to deploy the open source 'stunnel' solution.

Your IT Representative should be able to help you with this. FXT can also provide consultancy on this service if required.

2.3 Symbol format

The format for symbols depends on the individual case and Maker preference, but usually in the EURUSD format.

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3 FIX Session Details

3.1.1 Multi-Session

The FXT FIX API should be configured to provide two sessions per client, one for pricing and a separate one for trading.

Both sessions should be configured to reset sequence numbers on login, and not to persist messages to facilitate maximum throughput.

3.1.2 Login

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = Logon (A)
98	EncryptMethod	Y	(Always unencrypted)
108	HeartBtInt	Υ	Heartbeat interval in seconds
141	ResetSeqNumFlag	N	Set to 'Y' to Indicate both sides of a FIX session should reset sequence numbers. Must be 'Y' on pricing session
553	Username	Υ	Required to authenticate the client.
554	Password	Y	Required to authenticate the client.
	Standard Trailer	Υ	

3.1.3 Heartbeat

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = Heartbeat (0)
112	TestReqID	С	Required when the heartbeat is the result of a Test Request message.
	Standard Trailer	Υ	

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3.1.4 Logout

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 5
58	Text	N	
	Standard Trailer	Y	

Either a logout message followed by a disconnect, or a disconnect will suffice to logout.

4 FIX Application Messages

4.1 Pricing

- API Client submits a Market Data Request
- API will respond initially with Market Data Snapshot
- If a subscription request is supplied, a stream of market data refresh updates will be initiated.
- API Client can cancel an existing subscription by sending another Market Data Request, or via termination of the pricing session.

4.1.1 Market Data Request

Tag	Field	Name	Req'd	Comments
	Standard Header		Υ	MsgType = MarketDataRequest (V)
262	262 MDReqID		Y	For SubscriptionRequestType = 1, must be unique ID per subscription For SubscriptionRequestType = 2, specifies the MDReqID of previous Market Data Request to disable
263	Subso	criptionRequestType	Y	Snapshot + Updates (1) Cancel subscription (2)
264	Mark	etDepth	N	Top of Book (1)
267	NoM	DEntryTypes	Υ	
→	269	MDEntryType	Y	Bid (0) Offer (0) (Both should be specified)
146	NoRe	latedSym	Y	Number of symbols (instruments) requested. One symbol per MarketDataRequest is recommended.
\rightarrow	55	Symbol	Υ	
	Stand	dard Trailer	Υ	

4.1.2 Market Data Request Reject

Tag Field Name	Req'd Comments	
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	Standard Header	Y	MsgType = MarketDataRequestReject (Y)
262	MDReqID	Y	Refers to MDReqID specified on Market Data Request
281	MDReqRejReason	Y	Unknown symbol (0) Duplicate MDReqID (1)
58	Text	N	Reason of Reject
	Standard Trailer	Y	

4.1.3 Market Data Snapshot / Full Refresh

Tag	Field N	ame	Req'd	Comments
	Standard Header		Υ	MsgType = MarketDataSnapshotFullRefresh (W)
262	MDReqID		Y	Refers to MDReqID from request
55	Symbo	l	Y	
268	NoMD	Entries	Υ	
→	269	MDEntryType	Y	Bid (0) Offer (1)
\rightarrow	270	MDEntryPx	Y	
	271	MDEntrySize	N	Represents the maximum size available to order at corresponding price.
	299	QuoteEntryID	N	Specified for top-of-book only
	290	MDEntryPositionNo	С	Specified for Professional variant only (where market depth is supported)
	Standa	rd Trailer	Y	

4.2 Trading

- API Client submits an order with New Order Single
- FXC API responds with Execution Report

4.2.1 New Order Single

Tag	Field Name	Req'd	Comments
	Standard Header	Υ	MsgType = NewOrderSingle (D)
11	ClOrdID	Υ	Unique ID for the session
1	Account	N	Account ID of client side customer (may be required in some cases depending on the client)
583	ClOrdLinkID	N	Used to indicate client side customer Account, Ticket ID and Group name (eg. string "1000-12384-DemoGrp1"). Account and Ticket ID have to be numbers. All three fields must be populated with a default value even if it is not used/available.

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55	Symbol	Υ	EURUSD
54	Side	Y	1=Buy 2=Sell
60	TransactTime	Y	Time this order request was initiated/released by the trader, trading system, or intermediary.
38	OrderQty	Y	Quantity of order.
40	OrdType	Υ	1 = Market 2 = Limit
44	Price	С	Required on OrdType Limit or Previously Quoted. Price combined with Slippage (if any) represents the worst price the client will accept.
59	TimeInForce	Υ	Immediate or Cancel (3)
21	HandInst	Υ	1
	Standard Trailer	Y	

4.2.2 Execution Report

Tag	Field Name	Req'd	Comments
	Standard Header	Υ	MsgType = ExecutionReport (8)
37	OrderID	Υ	Represents the unique order ID
11	ClOrdID	Υ	
17	ExecID	Υ	Represents the unique execution ID
150	ЕхесТуре	Y	New (0) Pending New (A) Fill (2) Rejected (8)
39	OrdStatus	Y	New (0) Pending New (A) Filled (2) Rejected (8)
58	Text	N	Provided for information purposes on a rejection
103	OrdRejReason	N	
55	Symbol	Υ	
54	Side	Υ	
38	OrderQty	Υ	Order quantity from order (in same denomination)
44	Price	N	Order price from order
32	LastQty	N	Fill quantity if ExecType=F, in same denomination as OrderQty
31	LastPx	N	Fill price if ExecType=F
151	LeavesQty	Υ	Unfilled quantity remaining (0 if ExecType=F, OrderQty otherwise)
14	CumQty	Υ	Filled quantity (OrderQty if ExecType=F, 0 otherwise)
6	AvgPx	Υ	Filled price.
60	TransactTime	N	Time the transaction represented by this ExecutionReport occurred
526	SecondaryClOrdID	N	Additional order ID, used for reporting purposes
	Standard Trailer	Υ	

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