# Taker\_FIX44 API Specification – PrimeXM Help Center

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# Rules of Engagement for PrimeXM\_FIX44 TAKER API

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#### ChangeLog

### **Change log 1.5.1** → **1.5.2**

OrderQty field (tag #38) added to Market Data Request message

#### **Change log 1.5.2** → **1.5.3**

- TTL field (tag #10000): added support for pending orders by extending allowed ttl values
- Added order type Stop (tag 40=3) to New Order Single and Execution Report
- Added new application message type: Order Cancel Request

#### **Change log 1.5.3** → **1.5.4**

Added new application message type: Order Status Request

#### **Change log 1.5.4** → **1.5.5**

Added examples for all message types

#### **Change log 1.5.5** → **1.5.6**

Removed support tag for GTC orders (tag 10000 cannot be set to -1)

#### Change log $1.5.6 \rightarrow 1.5.7$

- Removed SubscriptionRequestType Snapshot option (263 = 3) from MarketDataRequest message type
- Added Market Data-Snapshot/Full Refresh (35=W) message type
- Added Tag 106 Issuer in the Market Data-Snapshot/Full Refresh (35=W) message type and in the Mass Quote message type

#### **Change log 1.5.7** → **1.5.8**

- Added Tag 59 (Time In Force) to support pending orders
- Update TTL logic so client TTL will always take precedence over XCore Connector Account Settings
- Added Tag 7533 (Stream Name) in 35=W message to identify specific streams for multi-stream connectors
- Added Tag 541 (FixingDate) in execution report for NDFs.

### Change log 1.5.8 → 1.5.9: supported in connector type PrimeXM\_FIX44\_V2

- Added support for MDUpdateType=FULL REFRESH (tag 265=0)
- Added support for SecurityListRequest and SecurityList
- **Important upgrade note for TAKERS:** With PrimeXM\_FIX44\_V2, FULL\_REFRESH support is introduced.

#### Contents

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### **Introduction**

Scope of this document

This document is intended to serve software developers as an implementation guide for the PrimeXM FIX API.

FIX version

PrimeXM supports FIX version 4.4. For further information about this version please refer to the specifications published by the FIX Protocol Organization under <a href="http://www.fixprotocol.org/specifications/FIX.4.4">http://www.fixprotocol.org/specifications/FIX.4.4</a>

FIX sessions

For better separation of pricing and trading data, clients need to establish two separate FIX connections (with two separate login credentials) to the PrimeXM FIX Server, one for pricing and one for trading data.

# Connectivity

#### Connection type

Connection to PrimeXM's FIX engine is available over the Internet, VPN tunnel or cross-connect to our data center facilities in UK (London), US (New York), and JP (Tokyo). Please contact us for further details.

#### Hours of operations

Connectivity to PrimeXM's FIX engine is available from FRI 17:05:30 till FRI 17:05:00 (America/New\_York).

#### Sequence number reset

There is a weekly sequence reset window on FRI 17:05:00 – 17:05:30 (America/New\_York) on all connections (pricing and trading). Trading connections have to be configured to persist sequence numbers on logon (141=N). Pricing connections have to be configured to reset sequence numbers on logon (141=Y).

### Security and authentication

PrimeXM uses SSL to secure the FIX trading sessions. SSL is turned on if you set one particular flag to ON. As a result of SSL, a self-signed certificate should be used, there is no need to use a dedicated SSL certificate. The applications handle this among themselves. The following SSL versions are supported: TLS 1.2 and TLS 1.3.

Pricing sessions are not SSL encrypted in general. Once the connection to the PrimeXM FIX server is established the client has to authenticate against the server with a username and password added to the logon (MsgType=A) message.

# Messages

As defined in the FIX protocol, the PrimeXM FIX server is using two different data levels: Session and Application. The Session level handles the delivery of data and the Application level defines the business-related data content. The following session and application messages are supported by the PrimeXM FIX Engine: Session messages:

- Heartbeat (Client ↔ PrimeXM)
- Test Request (Client ↔ PrimeXM)
- Logon (Client → PrimeXM)
- Logout (Client ↔ PrimeXM)
- Resend Request (Client ↔ PrimeXM)
- Reject (Client ↔ PrimeXM)
- Sequence Reset (Client ↔ PrimeXM)

### Application messages:

- Market Data Request (Client → PrimeXM)
- Market Data Request Reject (Client ← PrimeXM)
- Mass Quote (Client ← PrimeXM)
- Mass Quote Acknowledgement (Client → PrimeXM)
- New Order Single (Client → PrimeXM)
- Order Status Request (Client → PrimeXM)
- Execution Report (Client ← PrimeXM)

# **Standard messages**

#### Standard header

Tag	Field name	Req'd	Comments
8	BeginString	Y	Identifies beginning of new message and protocol version (always first field in message)
9	BodyLength	Y	Message length (in bytes) forward to the CheckSum field (always second field in message)
35	MsgType	Y	Defines message type (always 3rd tag in message)
49	SenderCompID	Y	Assigned value used to identify the client sending messages (will be provided by PrimeXM)
56	TargetCompID	Y	Assigned value used to identify receiving party (will be provided by PrimeXM)
34	MsgSeqNum	Y	Integer message sequence number
50	SenderSubID	N	Optional. Assigned value used to identify specific message originator (desk, trader, etc.) (will be provided by PrimeXM if necessary)
52	SendingTime	Y	Message transmission time in UTC/GMT

### Standard trailer

Tag	Field name	Req'd	Comments
10	Checksum	Υ	Three digit character representing the checksum value of the message

# **Session Messages**

#### Heartbeat

Tag	Field name	Req'd	Comments
	Standard Header	Y	MsgType=0
112	TestReqID	N	Req'd when the heartbeat is the result of a Test Request message
	Standard Trailer	Υ	

# **Heartbeat Example**

8=FIX.4.4 9=80 **35=0** 49=T01 56=XCxxx 34=23667 52=20151105-12:26:48.467 10=252

## **Test Request**

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=1
112	TestReqID	Υ	A unique identifier for this test message
	Standard Trailer	Υ	

## **Test Request Example**

8=FIX.4.4 9=103 35=1 49=T01 56=XCxxx 34=23675 52=20151105-12:30:53.466 112=500041853466910000 10=132

### Logon

Tag	Field name	Req'd	Comments
	Standard Header	Y	MsgType=A
98	EncryptMethod	Y	Use of Encryption, set to "0"
108	HeartBtInt	Υ	Heartbeat interval in seconds
141	ResetSeqNumFlag	N	Indicates both sides of a FIX session should reset sequence numbers
553	Username	Y	Username (provided by PrimeXM)
554	Password	Υ	Password (provided by PrimeXM)
	Standard Trailer	Υ	

### **Logon Example**

Request (Client  $\rightarrow$  PrimeXM): 8=FIX.4.4 9=101 **35=A** 34=1 49=Q0XX 52=20150513-09:13:42.342 56=XCxxx 98=0 108=30 141=Y 553=name\_q 554=password 10=108

Reply (Client  $\leftarrow$  PrimeXM): 8=FIX.4.4 9=91 **35=A** 34=3 49=Q0XX 52=20150513-09:13:42.343 56=XCxxx 98=0 108=30 10=117

### Logout

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=5
58	Text	N	Reason for logout
	Standard Trailer	Υ	

## **Logout Example**

Request (Client  $\rightarrow$  PrimeXM): 8=FIX.4.4 9=51 **35=5** 34=148 49=Q0XX 52=20150513-09:13:42.343 56=XCxxx 10=224

Reply (Client  $\leftarrow$  PrimeXM): 8=FIX.4.4 9=50 **35=5** 34=53 49=Q0XX 52=20150513-09:13:42.344 56=XCxxx 10=170

### **Resend Request**

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=2
7	BeginSeqNo	Y	
16	EndSeqNo	Y	
	Standard Trailer	Υ	

# **Resend Request Example**

8=FIX.4.4 9=68 **35=2** 34=89279 49=T01 52=20151102-09:11:56.650 56=XCxxx 7=93784 16=0 10=002

## Reject

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=3
45	RefSeqNum	Y	MsgSeqNum of rejected message
371	RefTagID	N	The tag number of the FIX field being referenced
372	RefMsgType	N	The MsgType of the FIX message being referenced
373	SessionRejectReason	N	Code to identify reason for a session-level

Standard Trailer Y

### Reject Request Example

8=FIX.4.4 9=68 **35=3** 34=89279 49=T01 52=20151102-09:11:56.650 56=XCxxx 7=93784 16=0 10=002

#### Sequence Reset

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=4
123	GapFillFlag	N	
36	NewSeqNo	Y	
	Standard Trailer	Υ	

### **Sequence Reset Example**

8=FIX.4.4 9=97 **35=4** 34=93784 43=Y 49=XCxxx 52=20151102-09:11:50.760 56=T01 122=20151102-09:11:50 36=93786 123=Y 10=184

#### Sequence Reset Example Full

# **Application Messages**

# Market Data Request

Tag	Field name	Req'd	Comments
	Standard header	Υ	MsgType = V
262	MDReqID	Υ	Unique request id. This value will be reflected in tag 302 of the MassQuote message.
263	SubscriptionRequestType	Υ	1 = Subscribe (Snapshot plus updates)
			2 = Unsubscribe
265	MDUpdateType	N	<ul> <li>0 = Full Refresh: In this mode, the system will stream         MarketDataSnapshotFullRefresh messages (35=W).</li> <li>1 = Incremental Refresh: In this mode, the system will stream MassQuote messages (35=i).</li> <li>The default setting is Incremental Refresh.</li> <li>When set to Full Refresh, the streamed depth is limited to 5.</li> </ul>
264	MarketDepth	N**	Specifies the number of layers requested.
			0 = full book
			>0 = number of layers
			Note: The depth is limited to 3 for MDUpdateType = Full Refresh

38	OrderQty	N**	Specifies the cumulative sum of liquidity (i.e. quantity) of the layers to be sent to the client.
			A sufficient number of layers will be sent, to cover the requested quantity. If a value larger than the sum of all available layers is requested, the full book will be sent.
			The number of layers can be restricted by specifying the upper limit in the MarketDepth field.
			**) MarketDepth and OrderQty can be used independently or together. It is recommended that OrderQty is used, as it offers a more meaningful approach to requests.
7533	StreamReference	N	Used as a unique identifier for each stream when uniqueness cannot be determined by the instrument name (Tag 55). The value of Tag 7533 corresponds to the name of the connection stream.  Example:  Stream 1: 55=EUR/USD 7533=stream_test Stream 2: 55=EUR/USD 7533=stream_test2
			Note: If Tag 7533 is omitted, the system will automatically find the correct stream based on the value of Tag 55.
146	NoRelatedSym	Υ	Always set to 1
$\rightarrow$	55 Symbol	Υ	Name of the symbol
	Standard Trailer	Υ	

# Market Data Request Example

Single Stream:

8=FIX.4.4 9=86 **35=V** 34=4 49=Q047 52=20150415-06:56:14.952 56=XCxxx 262=3 263=1 264=0 146=1 55=EUR/USD 10=008

Multiple Streams:

8=FIX.4.4 9=114 **35=V** 34=2 49=Q006 52=20151204-21:05:44.224 56=XCxxx **7533=stream\_1** 146=1 55=AUD/CAD 262=0 263=1 264=1 267=2 269=0 269=1 10=071

8=FIX.4.4 9=114 **35=V** 34=2 49=Q006 52=20151204-21:05:44.224 56=XCxxx **7533=stream\_2** 146=1 55=AUD/CAD 262=0 263=1 264=1 267=2 269=0 269=1 \*\* 10=071

### **Market Data Request Reject**

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=Y
262	MDReqID	Υ	ID of the market data request
58	Text	N	Reason for market data request being rejected
	Standard Trailer	Υ	

# Market Data Request Reject Example

8=FIX.4.4 9=105 **35=Y** 34=1567 49=T01 52=20151105-13:08:06.797 56=XCxxx 58=symbol not found 262=0 10=081

#### **Mass Quote**

Sent to the client if MarketDataRequest.MDUpdateType is omitted or set to Incremental\_Refresh.

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=i
117	QuoteID	N	If QuoteID is set the client has to respond immediately with a MassQuoteAcknowledgement reflecting this value in tag 117
296	NoQuoteSets	Υ	Number of Quote sets following

$\rightarrow$	302	Quo	teSetID		The MDReqID (tag 262 of the MarketDataRequest). Use this value to identify the symbol to which the data in this specific QuoteSet refers to.
$\rightarrow$	295	NoQ	uoteEntries		Number of quote entires
$\rightarrow$	$\rightarrow$	299	QuoteEntryID	Υ	Unique Market Data Identifier (0 <= x < depth).
					The current QuoteSet data replaces prior QuoteSet data received under the same QuoteEntryID
					Note: Tag 299 is only a key denoting the individual stream and is used to replace the most up-to-date information in that stream. It does not denote the position of the price update in the book.
$\rightarrow$	$\rightarrow$	106	Issuer	N	Name/ID of security issuer
					Note: This tag is generally not sent and is populated <b>only</b> in case the pricing/streaming mode on the connector stream settings is set to <b>aggregate</b> .
					Tag 106 updated accordingly <b>only</b> when bid (188) or ask (189) price are updated.
					The tag 106 represents always Ask provider and will represent the Bid provider in case only the Bid price is updated.
					The volumes tags (134/135) do not affect any update on the tag 106.
					Examples of how specific tags updates affect tag 106 result
					In case bid price (188) updated only then tag 106 is populated with update bid provider.
					In case ask price (190) updated only then tag 106 is populated with update ask provider.
					In case both bid price (188) and ask price (190) are updated then the tag 106 is populated with update ask provider.

In case bid size (134) updated only then tag 106 remains same and it's not updated.

In case ask size (135) updated only then tag 106 remains same and it's not updated.

In case both bid size (134) and ask size (135) are updated only then tag 106 remains same and it's not updated.

In case bid size (134) and bid price (188) updated only then the tag 106 is populated with update bid provider.

In case ask size (135) and ask price (190) updated only then the tag 106 is populated with update ask provider.

In case both bid size (134) and ask size (135) as well both bid price (188) and ask price (190) are updated the tag 106 is populated with updated ask provider.

$\rightarrow$	$\rightarrow$	134	BidSize	Ν	Maximum bid size. Not set = no changes.
					-1 = quote cancel
$\rightarrow$	$\rightarrow$	135	OfferSize	N	Maximum offer size. Not set= no changes.
					-1 = quote cancel
$\rightarrow$	$\rightarrow$	188	BidSpotRate	N	Spot bid rate. Not set = no changes
$\rightarrow$	$\rightarrow$	190	OfferSpotRate	N	Spot ask rate. Not set = no changes
	Star	ndard T	railer	Υ	

#### Mass Quote Example

8=FIX.4.4 9=266 **35=i** 34=1113826 49=XCT 52=20171106-14:57:08.528 56=Q001 296=5 302=32 295=1 299=0 106=1 134=1250000 188=1.80699 190=1.80709 302=35 295=1 299=0 106=1 190=148.051 302=40 295=1 299=0 106=1 190=1.30712 302=37 295=1 299=0 106=1 190=1.95713 302=34 295=1 299=0 135=500000 10=245

#### Mass Quote Acknowledgement

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=b
117	QuoteID	Υ	QuoteID copy from MassQuote message
	Standard Trailer	Υ	

#### Mass Quote Acknowledgement Example

Acknowledgement Request (Client ← PrimeXM): 8=FIX.4.4 9=116 **35=i** 34=2 49=PXMD 52=20150415-06:56:07.387 56=Q047 117=1 296=1 302=1 295=1 299=0 106=1 134=0 135=0 188=0.76036 190=0.7605 10=004

Acknowledgement Reply (Client → PrimeXM): 8=FIX.4.4 9=58 **35=b** 34=10 49=Q047 52=20150415-06:56:15.001 56=PXMD 117=1 10=098

#### Market Data-Snapshot/Full Refresh

The behavior of this message varies based on the value set for MarketDataRequest.MDUpdateType:

- Full Refresh: The MarketDataSnapshotFullRefresh message provides market data to the client.
- Incremental Refresh: Roughly every five minutes, following the release of a Massquote message for a given symbol, a FullRefresh message is sent out. This message provides an accurate snapshot of the client's book after the previous Massquote has been processed. It aids in verifying the client's adherence to the Massquote protocol. Moreover, the FullRefresh message serves as a practical point for reconstructing the entire book from the FIX logs, eliminating the need to sift through all Massquote messages since the last subscription. However, unless for these specific purposes, the FullRefresh can be safely disregarded by the client's FIX engine.

Tag	Field name	Req'd	Comments
	Standard Header	Y	MsgType=W
55	Symbol	Y	Subscribed symbol
262	MDReqID	Y	ID of the market data request

117	QuoteID		N	If QuoteID is set the client has to respond immediately with a MassQuoteAcknowledgement reflecting this value in tag 117
7533	Strea	amName	N	The name of the Connector Stream
				Note: Only applicable for multi-stream connectors. Single-stream connectors will not have tag 7533 populated
268	NoMDEntries		Y	Specifies the number of entries in the Market Data message. A value of <i>NoMDEntries</i> = 0 indicates that there are no entries, i.e., the book is empty.
$\rightarrow$	269	MDEntryType	Υ	Type of market data entry
				0 = Bid 1 = Ask
$\rightarrow$	270	MDEntryPx	Υ	Price of the market data entry
$\rightarrow$	271	MDEntrySize	Υ	Quantity of the market data entry
$\rightarrow$	299	QuoteEntryID	С	Mandatory if MarketDataRequest.MDUpdateType = Incremental Refresh.
				Unique Market Data Identifier (0 <= x < depth).
				Note: Tag 299 is only a key denoting the individual stream and is used to replace the most up-to-date information in that stream. It does not denote the position of the price update in the book.
$\rightarrow$	106	Issuer	N	Name of security issuer
	Stan	dard Trailer	Υ	

### Market Data-Snapshot/Full Refresh Example

8=FIX.4.4 9=173 **35=W** 34=136232 49=XCT1 52=20200603-12:00:00.106 56=Q004 55=EUR/USD 262=10 7533=stream1 268=2 269=0 270=1.11941 271=1000000 299=0 106=7 269=1 270=1.11944 271=1000000 299=0 106=7 10=060

Note: A Market Data-Snapshot/Full Refresh message will be sent every 5 minutes for every subscribed symbol.

#### **Pricing Session Example FULL**

in : 8=FIX.4.4 9=125 **35=A** 34=1 49=Q01 52=20151109-20:20:33.208 56=XCxxx 98=0 108=20 141=Y 553=client 554=password 10=244

out: 8=FIX.4.4 9=94 **35=A** 34=1 49=XCxxx 52=20151109-20:20:33.219 56=Q01 98=0 108=20 141=Y 10=178

in: 8=FIX.4.4 9=118 **35=V** 34=2 49=Q01 52=20151109-20:20:33.231 56=XCxxx 262=3 263=1 264=0 146=1 55=GBP/USD 15=GBP 10=236

in: 8=FIX.4.4 9=118 **35=V** 34=3 49=Q01 52=20151109-20:20:33.232 56=XCxxx 262=5 263=1 264=0 146=1 55=EUR/USD 15=EUR 10=022

in: 8=FIX.4.4 9=118 **35=V** 34=4 49=Q01 52=20151109-20:20:33.232 56=XCxxx 262=7 263=1 264=0 146=1 55=USD/SGD 15=USD 10=011

in: 8=FIX.4.4 9=119 **35=V** 34=5 49=Q01 52=20151109-20:20:33.232 56=XCxxx 262=10 263=1 264=0 146=1 55=USD/TRY 15=USD 10=088

out: 8=FIX.4.4 9=264 **35=i** 34=2 49=XCxxx 52=20151109-20:20:33.240

56=Q01 **117=1** 296=1 302=3 295=4 299=0 106=1 134=1000000 135=1000000 188=1.51218 190=1.51223 299=1 134=500000 135=50000 188=1.51218 190=1.51223 299=2 135=500000 190=1.51225 299=3 135=2000000 190=1.51226 10=203

in: 8=FIX.4.4 9=83 **35=b** 34=27 49=Q01 52=20151109-20:20:33.244 56=XCxxx **117=1** 10=202

in: 8=FIX.4.4 9=120 **35=V** 34=13 49=Q01 52=20151109-20:20:33.253 56=XCxxx 262=121 263=1 263=1 264=0 146=1 55=AED/USD 15=AED 10=099

out: 8=FIX.4.4 9=104 **35=Y** 34=6 49=XCxxx 52=20151109-20:20:33.253 56=Q01 58=symbol not found 262=121 10=010

out: 8=FIX.4.4 9=436 **35=i** 34=7 49=XCxxx 52=20151109-20:20:33.253 56=Q01 296=2 302=43 295=4 299=0 106=1 134=1000000 135=50000 188=186.129 190=186.14 299=1 106=1 134=500000 135=1000000 188=186.127 190=186.141 299=2 135=500000 190=186.141 299=3 135=3000000 190=186.143 302=47 295=4 299=0 106=1 134=500000 135=1000000 188=0.70516 190=0.70517 299=1 106=1 134=1000000 135=2000000 188=0.70514 190=0.70518 299=2 106=1 134=50000 188=0.70514 299=3 106=1 134=2000000 188=0.70513 10=109

#### **New Order Single**

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=D

11	ClOrdID	Υ	Must be a unique identifier sent by the client. Used for response  Note: The special character colon: is not accepted by the system
1	Account	N	Specifies the trading account (connector_account.name) for execution. It is required only when the connector is configured with multiple trading accounts. For connectors configured with a single trading account, execution automatically defaults to that account, irrespective of the value provided in tag 1.
55	Symbol	Υ	Symbol to trade on
15	Currency	N	The system currently supports trading exclusively in the base currency of a symbol, meaning both the side and size of trades refer to the base currency. The specified tag is intended as a safety feature, ensuring trades are rejected if there is an attempt to trade on the quote currency instead. Consequently, if <i>Currency</i> is set to the quote currency for symbols in securities of type FX and NDF, the NewOrderSingle message will be rejected. It is generally recommended to omit this tag to avoid unintended trade rejections.
54	Side	Υ	Side of order in reference to tag 15: 1 = Buy 2 = Sell
38	OrderQty	Υ	The order amount in reference to tag 15
40	OrdType	Y	Type of order: 1 = Market 2 = Limit 3 = Stop
44	Price	С	Conditional if tag 40=1, required if tag 40=2 or tag 40=3
60	TransactTime	Υ	Timestamp of order request

110	MinQty	N	Minimum accepted fill size. Defaults to 0.0
			0.0 <= x <= OrderQty
			If MinQty = OrderQty (tag #38) then the trade will either be fully filled or rejected.  If MinQty is set to x, with 0.0 < x < OrderQty, then the trade can be partially filled in multiple deals, each deal not smaller than x.
			Note: if 59 = FOK then MinQty = OrderQty
10000	ttl	N	Time in milliseconds an open order will stay active in the system. As the ttl expires the remaining amount of an open order will be cancelled and the order will be closed. The valid values for ttl are:
			>= 0 : ttl value in ms -1 : ttl set to max value (expires at next XCore restart)
			Note: if 59 = GTC then ttl = -1 Note: Where Tag 10000 is not specified, ttl will be taken as the ttl defined in the Connector Account Setting
10001	deviation	N	Double value. Specified in Points.
			For Limit orders (40=2): This setting defines the permissible deviation (slippage) from the price submitted in tag 44. The default value is 0.0. Supported values are any non-negative number (>= 0). The value of deviation is considered in points.
			For Market and Stop Orders (40=1 or 40=3): This setting defines the permissible deviation at the time of execution from the current top of book (ToB) price in the liquidity_pool. The default is -1.0, implying unlimited deviation. Supported values are -1, or any non-negative number (>= 0).

59	TimeInForce	N	Valid values:
			1 = Good Till Cancel (GTC) 3 = Immediate Or Cancel (IOC) 4 = Fill Or Kill (FOK)
			Note: For FIX connectors GTC orders will be automatically cancelled at XCore restart.  Note: Tag 59 takes precedence over Tags 110 and 10000.
			Please see "How to configure TTL functionality in the XCore" for more information.
115	OnBehalfOfCompID	N	String value. This attribute can be used to pass on additional information which will be stored in the order.subID1.
116	OnBehalfOfSubID	N	String value. This attribute can be used to pass on additional information which will be stored in the order.subID2.
526	SecondaryClOrdID	N	String value. This attribute can be used to pass on additional information which will be stored in the order.subID3.
527	SecondaryExecID	N	String value. This attribute can be used to pass on additional information which will be stored in the order.subID4.
	Standard Trailer	Υ	

# **New Order Single Example**

8=FIX.4.4 9=148 35=D 34=11 49=T014 56=XCT1 52=20200602-13:29:25.255 11=1 1=test 55=EUR/USD 54=1 38=1000 40=2 44=1.0 60=20200602-13:29:25.000 59=3 10000=100 110=500 10=024

## **Order Cancel Request**

Tag	Field name	Req'd	Comments

	Standard Header	Υ	MsgType=F
11	ClOrdID	Υ	Must be unique identifier sent by the client, the same as the value of tag 11 in the New Order Single message originally sent by the client

### **Order Cancel Request Example**

8=FIX.4.4 9=67 **35=F** 34=10987 49=T003 52=20151029-11:16:50.014 56=XCxxx 11=2025301 10=233

#### **Order Status Request**

Tag	Field name	Req'd	Comments		
	Standard Header	Y	MsgType=H		
11	ClOrdID	Y	Must be unique identifier sent by the client, the same as the value of tag 11 in the New Order Single message originally sent by the client		

### Order Status Request Trade Scenario

- 1) A client sends an NewOrderSingle with ClOrdID=xyz to the XCore.
- 2) Connectivity of the clients FIX engine to the xcore is lost before receiving any ExecutionReports with CIOrdID=xyz
- 3) The clients FIX engine re-establishes connectivity to the XCore.
- 4) The XCore (re) sends any outgoing messages which the client did not receive yet.
- 4) The client is now fully connected and synchronized but did still not receive any ExecutionReports with ClOrdID=xyz
- 5) The client sends an OrderStatusRequest with ClOrdID=xyz
- 6) The XCore responds to the OrderStatusRequest with ClOrdID=xyz and
  - a) OrderStatus=NEW: The order is currently open in the XCore.

• b) OrderStatus=REJECT: The order is currently not open in the XCore.

# **Order Status Request Example**

8=FIX.4.4 9=67 **35=H** 34=10987 49=T003 52=20151029-11:16:50.014 56=XCxxx 11=2025301 10=233

# **Execution Report**

Tag	Field name	Req'd	Comments
	Standard Header	Y	MsgType=8
11	ClOrdID	Y	Must be unique identifier sent by the client. Used for response
17	ExecID	С	Unique identifier of execution message.
			Note: If ExecType in tag 150 = F and OrdStatus in tag 39 = 1 or 2, this tag will be populated
150	ExecType	Y	The execution report's type.  0 = New 4 = Canceled 8 = Rejected F = Trade I = Order Status
55	Symbol	С	Name of the Symbol.
			Note: If ExecType in tag 150 = I, this tag will not be populated
54	Side	С	Side of order. 1 = Buy 2 = Sell
			Note: If ExecType in tag 150 = I, this tag will not be populated

38	OrderQty	С	Quantity ordered.
			Note: If ExecType in tag 150 = I, this tag will not be populated
110	MinQty	С	Minimum quantity ordered.
			Note: If ExecType in tag 150 = F, this tag will be populated
40	OrdType	С	Type of the Order.
			1 = Market 2 = Limit 3 = Stop
			Note: If ExecType in tag 150 = I, this tag will not be populated
15	Currency	Υ	Dealt currency
			Note: If ExecType in tag 150 = F, this tag will be populated
44	Price	С	Requested price
			Note: If ExecType in tag 150 = F, this tag will be populated (in case it was provided by the client in the order request)
37	OrderID	С	PrimeXM XCore order ID
			Note: If ExecType in tag 150 = F, this tag will be populated

39	OrdStatus	Y	Current order state.  0 = New 1 = Partially filled 2 = Filled 4 = Canceled 8 = Rejected
			In the case of replies to New Order Single messages, an Execution Report message with OrdStatus "New" (39 = 0) will always be followed by another order state. OrdStatus "Partially filled" will be followed by either "Filled" or "Canceled". "Filled", "Canceled" and "Rejected" are final order states.
			In the case of replies to Order Status Request messages, the Execution Report message (will have type ExecType = I) will reply with OrdStatus "New" (39 = 0) if the requested order is currently being processed. If the order is not currently being processed by the system, the Execution Report message will reply with OrdStatus "Rejected" (39 = 8).
32	LastQty	С	Quantity of this fill.
			Note: If ExecType in tag 150 = F and OrdStatus in tag 39 = 1 or 2, this tag will be populated
31	LastPx	С	Price of this fill.
			Note: If ExecType in tag 150 = F and OrdStatus in tag 39 = 1 or 2, this tag will be populated
151	LeavesQty	С	Remaining quantity open for execution
			Note: If ExecType in tag 150 = I, this tag will not be populated
14	CumQty	С	Cumulative quantity executed
			Note: If ExecType in tag 150 = I, this tag will not be populated
6	AvgPx	С	Average price of executed quantity
			Note: If ExecType in tag 150 = F and OrdStatus in tag 39 = 1 or 2, this tag will be populated

64	SettlDate	С	ValueDate of execution.
			Note: If ExecType in tag 150 = F and OrdStatus in tag 39 = 1 or 2, this tag will be populated
58	Text	N	Free format text string
60	TransactTime	С	Time the transaction represented by this ExecutionReport occurred
			Note: If ExecType in tag 150 = F, this tag will be populated
541	FixingDate	N	Fixing Date for NDFs. Format: YYYYMMDD.
	Standard Trailer	Y	

#### **Execution Report Example**

8=FIX.4.4 9=234 **35=8** 34=11067 49=XCxxx 52=20151029-12:08:20.030 56=T01 6=1.09493 11=2025301 14=10000 15=EUR 17=79407\_0\_0 31=1.09493 32=10000 37=79407 38=10000 39=2 40=2 44=1.095 54=1 55=EUR/USD 60=20151029-12:08:20.030 64=20151102 110=0 150=F 151=0 10=166

#### **Full Order Execution Example**

#### Filled order:

in: 8=FIX.4.4 9=198 **35=D** 49=T01 56=XCxxx 34=12183 52=20151029-14:30:35.809 115=CLIENT 11=12345 1=5629910 55=GBP/AUD 54=1 38=2000 44=2.15843 40=2 10000=300 60=20151029-14:30:35.809 10=207 out: 8=FIX.4.4 9=221 **35=8** 34=14285 49=XCxxx 52=20151029-14:30:35.843 56=T01 11=12345 14=0.0 15=GBP 37=7570913 38=2000 39=0 40=2 44=2.15843 54=1 55=GBP/AUD 60=20151029-14:30:35.843 110=0 150=0 151=2000 526=n/a 10=242 out: 8=FIX.4.4 9=293 **35=8** 34=14286 49=XCxxx 52=20151029-14:30:35.849 56=T01 6=2.15543 11=12345 14=2000 15=GBP 17=7570913\_0\_0 31=2.15543 32=2000 37=7570913 38=2000 **39=2** 40=2 44=2.15843 54=1 55=GBP/AUD 60=20151029-14:30:35.849 64=20151102 76=broker\_live\_feed 110=0 150=F 151=0 526=n/a 10=209

### Rejected order:

in: 8=FIX.4.4 9=194 **35=D** 49=T01 56=XCxxx 34=12290 52=20151029-14:31:39.811 115=CLIENT 11=12345 1=5629910 55=XPT/USD 54=1 38=2 44=1026.5 40=2 10000=300 60=20151029-14:31:39.811 10=022

out: 8=FIX.4.4 9=195 **35=8** 34=14516 49=XCxxx 52=20151029-14:31:39.845 56=T01 11=12345 14=0.0 38=2 **39=8** 40=2 44=1026.5 54=1 55=XPT/USD 58=reject: eur conversion not found 150=8 151=0.0 10=201

#### Partial fill:

in: 8=FIX.4.4 9=201 **35=D** 49=T01 56=XCxxx 34=12181 52=20151029-14:30:34.357 115=CLIENT 11=12345 1=5629910 55=EUR/USD 54=2 38=1000000 44=1.09443 40=2 10000=300 60=20151029-14:30:34.357 10=077 out: 8=FIX.4.4 9=227 **35=8** 34=14280 49=XCxxx 52=20151029-14:30:34.456 56=T01 11=12345 14=0.0 15=EUR 37=7570908 38=1000000 39=0 40=2 44=1.09443 54=2 55=EUR/USD 60=20151029-14:30:34.456 110=0 150=0 151=1000000 526=n/a 10=044 out: 8=FIX.4.4 9=305 **35=8** 34=14281 49=XCxxx 52=20151029-14:30:34.459 56=T01 6=1.09743 11=12345 14=150000 15=EUR 17=7570908\_0\_0 31=1.09743 32=150000 37=7570908 38=1000000 **39=1** 40=2 44=1.09443 54=2 55=EUR/USD 60=20151029-14:30:34.459 64=20151102 76=broker\_live\_feed 110=0 150=F 151=850000 526=n/a 10=058 out: 8=FIX.4.4 9=301 **35=8** 34=14282 49=XCxxx 52=20151029-14:30:34.459 56=T01 6=1.09742 11=12345 14=1000000 15=EUR 17=7570908\_1\_0 31=1.09742 32=850000 37=7570908 38=1000000 **39=2** 40=2 44=1.09443 54=2 55=EUR/USD 60=20151029-14:30:34.459 64=20151102 76=broker\_live\_feed 110=0 150=F 151=0 526=n/a 10=108

# Position Report (request)

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=AP
710	PosReqID	Y	Unique identifier for the Request for Positions associated with this report.
1	Account	Υ	The account.
263	SubscriptionRequestType	Υ	0 = Snapshot
			1 = Subscribe (Snapshot plus updates)
			2 = Unsubscribe

9001	AccountNotificationType	N	0 = Real-time updates on deposits and withdrawals.
			1 = In addition to the above, periodic updates every 5 seconds if calculated values, such as free margin, change.
			The default value is 0.
9002	PositionNotificationType	N	0 = Real-time updates on position changes.
			1 = In addition to the above, periodic updates every 5 seconds if calculated values, such as open P&L, change.
			The default value is 0.
	Standard Trailer	Υ	

# Position Report (response)

Tag	Field name	Req'd	Comments
	Standard Header	Υ	MsgType=AP
710	PosReqID	Y	Identical to tag 710 provided in the Position Report request
1	Account	Y	Identical to tag 1 provided in the Position Report request
721	PosMaintRptID	Y	Combination of account name and the account's latest sequence ID.
$\rightarrow$	5001 Balance	Y	This represents the accumulated operations conducted on the account including deposits, withdrawals, settlements, commissions, swaps and so on
$\rightarrow$	5002 Equity	Y	The current equity of the account which includes the unrealized PnL  Equity = Balance + running PnL

$\rightarrow$	5003	Exposure	Υ	The total, live exposure of all open positions on the XCore account converted to the account currency.
				Current Exposure = $\Sigma$ (Base of account position * spot conversion rate)
$\rightarrow$	5004	Margin Used	Υ	The Sum of Margins reserved by open trades.
$\rightarrow$	5005	Margin Limit	Y	The margin limit is the maximum amount of margin usage allowed for an XCore account, expressed in nominal value.
$\rightarrow$	5010	Position Sequence		Unique position record identifier.
$\rightarrow$	5011	Symbol		Symbol name in XCore.
$\rightarrow$	5012	Base		The base amount change in a position.
$\rightarrow$	5013	Quote		Volume exposure in quote currency.
$\rightarrow$	5014	Total PnL		Net profit or loss from both realized (closed) and unrealized (open) positions. Expressed in Quote currency.
$\rightarrow$	5015	Closed PnL		Net profit or loss from closed (realized) position, following FIFO principle. Expressed in Quote currency.
	Stand	ard Trailer	Υ	

# Position Report (reject)

Tag	Field name	Req'd	Comments
	Standard Header	Y	MsgType=AP
710	PosReqID	Y	Identical to tag 710 provided in the Position Report request

728	PosReqResult	Y	Indicates the result of a Position Report request.
58	Text	Υ	Reject reason.
	Standard Trailer	Υ	

# **Data Dictionary**

Download the data dictionary from here.

# **Support and FAQs**

For support or questions about the PrimeXM FIX Engine, please contact us via email to <a href="mailto:support@primexm.com">support@primexm.com</a>. Please always visit our website <a href="www.primexm.com">www.primexm.com</a>, for the most up to date contact information.

### PrimeXM Taker - Test and Conformance Process

In order to be able to connect to PrimeXM as a Taker in the system, it's required to proceed with a conformance test in order to check and verify accordingly that all the messages are correct for the connectivity, pricing and order process.

Below you can find a spreadsheet with simple conformance test to be carried by Taker and PrimeXM.

Conformance Test between Taker and PrimeXM

#### **PREVIUPIINEXT**

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