



FIX ROE (Rules of Engagement) 4.2 MD
Version 2.0.3



Document History

Date	Version	Description	Author
20/01/2012	1.7.0	<p>Changes in this version:</p> <p>The message Market Data Incremental Refresh = X is not supported in this version.</p> <p>Added messages Security Definition Request = c and Security Definition = d.</p> <p>The message Market Data Request = V has the following changes:</p> <p>The field SubscriptionRequestType (tag 263) adds the value 0 (Snapshot).</p> <p>The field AggregatedBook (tag 266) adds the value N (multiples entries per side, per price allowed) and is no longer required.</p> <p>The field MarketDepth admits depth of 1 to 5.</p> <p>The field SecurityExchange (tag 207) is added, not required, and expected value "ROFX".</p> <p>The fields SecurityType (tag 167), MaturityMonthYear (tag 200), MaturityDay (tag 205), PutOrCall (tag = 201), and StrikePrice (tag 202) were deleted.</p> <p>The message Market Data Snapshot Full Refresh = W, adds the field TradeCondition (tag 277) with the option U = Exchange Last.</p> <p><i>Order Routing is not supported any more on 4.2</i></p>	Primary
14/06/2012	2.0.1	<p>Changes in this version:</p> <p>In the message Security Definition = d the field UnderlyingSecurityType (tag 310) was added.</p>	Primary
29/08/2012	2.0.2	<p>Changes in this version:</p> <p>In the Standard Message Header the field OnBehalfOfCompID is no longer required..</p> <p>In the message MarketDataSnapshotFullRefresh = W, the fields SecurityType (tag 167), MaturityMonthYear (tag 200), MaturityDay (tag 205), PutOrCall (tag 201),</p>	Primary



		StrikePrice (202) is not longer sent.	
21/12/2012	2.0.3	Changes in this version: In the message Security Definition Request = c , the values valid for field SecurityRequestType (tag 321) were corrected.	Primary



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Introduction

Purpose and Document Scope

This Rules of Engagement detail the supported and necessary messages used to connect to ROFEX (Mercado a Término de Rosario S.A., Argentina). This document only apply for Market Data messages, currently Order Routing for FIX 4.2 is not supported.



Messages

Exchange Header and Trailer

Standard Message Header

Message Header sent by your company to the Exchange

<i>Standard Message Header</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
8	BeginString	Y	FIX.4.2	String	Identifies beginning of new message and protocol version. <i>Always first field in message. Always unencrypted.</i>
9	BodyLength	Y		Int	Message length, in bytes, forward to the CheckSum field. <i>Always second field in message. Always unencrypted.</i>
34	MsgSeqNum	Y		Int	Message sequence number.
35	MsgType	Y	All msg listed on this document	String	Defines message type. <i>Always third field in message. Always unencrypted.</i>
43	PossDupFlag	N	Y = Possible Duplicate N = Original Transmission	Boolean	Indicates possible retransmission of message with this sequence number. The value for this tag must be set to "Y" when messages are resent as a result of a resend request.
49	SenderCompID	Y		String	Assigned value used to identify firm sending the message. All messages sent by your firm must have one SenderCompID that is agreed upon in advance with Primary.
52	SendingTime	Y		UTC Timestamp	Time message is sent by your company to the Exchange. (always expressed in UTC (Universal Time Coordinated, also known as "GMT"))
56	TargetCompID	Y	ROFX	String (32)	Identifies the company receiving the message. All messages sent by your firm to the Exchange must have one TargetCompID equal to ROFX
97	PossResend	N	Y = Possible resend N = Original transmission	Boolean	Indicates that the message may contain information that has been sent under another sequence number.
115	OnBehalfOfCompID	N		String	A unique identifier assigned by the Exchange to your firm.



Standard Message Header					
Tag	FIX Name	Req	Valid Values	Format	Description
				(32)	This identifier must be present on all order related transactions as a means of identifying the originating source.
122	OrigSendingTime	N		UTC Timesta mp	Required for messages resent as a result of a ResendRequest, including Gap Fill messages. If data is not available, set to same value as SendingTime.
128	DeliverToCompID	Y		String (32)	Identifies the target executing system within Exchange.
116	OnBehalfOfSubId	N		String (32)	Value sent by the client that indicates the screen or user from which it originated.
129	DeliverToSubId	N		String (32)	Value sent by the Client that indicates the specific target to send the msg to.

Standard Message Trailer

Message Trailer sent by your company to Primary

Standard Message Trailer					
Tag	FIX Name	Req	Valid Values	Format	Description
10	Checksum	Y		String (3)	Three byte, simple checksum. <i>Always last field in message</i>



Exchange Administration Messages

Logon (MsgType = A)

Possible Exchange response messages: Logon (MsgType = A), Logout (MsgType = 5) or Reject – Session Level (MsgType = 3).

<i>Logon (MsgType = A)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = A		
98	EncryptMethod	Y	0 = None	Int	Method of encryption.
108	HeartBtInt	Y	Integer >= 10	Int	Heartbeat Interval in seconds. HeartBtInt must be equal to or greater than "10" and it must be less than or equal to "999".
	Standard Trailer	Y			

Heartbeat (MsgType = 0)

Possible Exchange response messages: None.

<i>Heartbeat (MsgType = 0)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = 0		
112	TestReqID	N		String	Required if heartbeat message is generated in response to a Test Request message. In this case, this tag must contain the TestReqID that was sent in the Test Request message.
	Standard Trailer	Y			



Test Request (MsgType = 1)

Exchange response message: Heartbeat (MsgType = 0).

<i>Test Request (MsgType = 1)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = 1		
112	TestReqID	Y		String	This identifier should be returned in the Heartbeat response.
	Standard Trailer	Y			

Resend Request (MsgType = 2)

Possible Exchange response messages: Execution Report (MsgType = 8), Reject – Session Level (MsgType = 3) or Order Cancel Reject (MsgType = 9).

<i>Resend Request (MsgType = 2)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = 2		
7	BeginSeqNo	Y	Valid sequence number for session	Int	Message sequence number of first message in range to be resent.
16	EndSeqNo	Y	0 = Infinity	Int	This value should be set to "0" and is required on all resend requests.
	Standard Trailer	Y			



Reject – Session Level (MsgType = 3)

This message will be sent by the Exchange when a session level error has occurred.

<i>Reject – Session Level (MsgType = 3)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = 3		
45	RefSeqNum	Y		Int	Reference message sequence number.
58	Text	N		String	Provides the reason the order was rejected.
	Standard Trailer	Y			



Sequence Reset (MsgType = 4)

Possible Exchange response messages: None.

<i>Sequence Reset (MsgType = 4)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = 4		
36	NewSeqNo	Y		Int	New sequence number. This number cannot be lower than the expected incoming sequence number of either the client or the Exchange that originally sent the resend request.
123	GapFillFlag	N	Y = Gap Fill message, MsgSeqNum field is valid N = Sequence Reset, ignore MsgSeqNum	Boolean	Indicates that the Sequence Reset message is replacing administrative or application messages, which will not be resent.
	Standard Trailer	Y			

Logout (MsgType = 5)

Possible Exchange response messages: Logout (MsgType = 5), Resend Request (MsgType = 2) or Reject – Session Level (MsgType = 3).

<i>Logout (MsgType = 5)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = 5		
58	Text	N		String	Free format text string.
	Standard Trailer	Y			



Exchange Security Definition Messages

Security Definition Request (MsgType = c)

Possible Exchange response messages: Security Definition (MsgType = d)

Security Definition Request (MsgType = c)					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = c (lowercase)		
320	SecurityReqID	Y		String (32)	Unique ID of a Security Definition Request.
321	SecurityRequestType	Y	3 = Request List Securities (Can be qualified with Symbol, Security type, MarketSegmentID, SecurityExchange) is provided then only list Securities for the specific type	int	Type of Security Definition Request.
1300	MarketSegmentID	N	E.g.: "DDF", "DDA"	String	Identifies the security's market segment.
55	Symbol	N		String	Symbol of the requested Security
207	SecurityExchange	N	"ROFX"	String	Market used to help identify a security.
167	SecurityType	N	"CS" = Common Stock "CB" = Convertible Bond "FUT" = Future "OPT" = Option "SWAP" = Swap	Int	Must be specified if a Future or Option. If a Future: Symbol, SecurityType, and MaturityMonthYear are required. If an Option: Symbol, SecurityType, MaturityMonthYear, PutOrCall, and StrikePrice are required.
	Standard Trailer	Y			



Security Definition (MsgType = d)

Security Definition (MsgType = d)						
Tag	FIX Name	Req	Valid Values	Format	Description	
	Standard Header	Y	MsgType = d			
320	SecurityReqID	Y		String (32)	Unique ID of a Security Definition Request.	
322	SecurityResponseID	Y		String	Identifier for the Security Definition message	
323	SecurityResponseType	N	1 = Accept security proposal as is 2 = Accept security proposal with revisions as indicated in the message 3 = List of security types returned per request 4 = List of security returned per request 5 = Reject security proposal 6 = <u>Cannot</u> match selection criteria.	int	Type of Security Definition Request.	
393	TotalNumSecurities	Y		int	Total number of securities.	
146	NoRelatedSym	N		Int	Specifies the number of repeating symbols specified.	
→	308	UnderlyingSecurityExchange	N	"ROFX"	String	Underlying security's SecurityExchange. Can be used to identify the underlying security.
→	305	UnderlyingIDSource	N	E.g.: "DDF", "DDA"	String	Underlying security's IDSource.



<i>Security Definition (MsgType = d)</i>						
Tag	FIX Name		Req	Valid Values	Format	Description
→	310	UnderlyingSecurityType	N	"CS" = Common Stock "CB" = Convertible Bond "FUT" = Future "OPT" = Option "SWAP" = Swap	String	Underlying security types.
→	311	UnderlyingSymbol	N		String	Must be specified as the first field in the repeating group. Required if NoRelatedSym > 0.
→	313	UnderlyingMaturityMonthYear	N		MonthYear	Month and Year of the maturity for SecurityType=FUT or SecurityType=OPT. Required if UnderlyingMaturityDay is specified.
→	307	UnderlyingSecurityDesc	N		String	Underlying security's SecurityDesc.
→	315	UnderlyingPutOrCall	N	0 = Put 1 = Call	Int	Underlying security's PutOrCall.
→	316	UnderlyingStrikePrice	N		Price	Underlying security's StrikePrice.
→	318	UnderlyingCurrency	N	E.g: ARS, USD	(String) Currency	Underlying security's Currency.
	Standard Trailer		Y			



Exchange Market Data Messages

Market Data Request (MsgType = V)

Possible Exchange response messages: Market Data – Snapshot / Full Refresh (MsgType = W) or Market Data Request Reject (MsgType = Y)

<i>Market Data Request (MsgType = V)</i>					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = V		
262	MDReqID	Y		String (32)	Must be unique, or the ID of previous Market Data Request to disable if SubscriptionRequestType = Disable previous Snapshot + Updates Request.
263	SubscriptionRequestType	Y	0 = Snapshot 1 = Snapshot Plus Updates 2 = Disable Previous Snapshot Plus Update	Char	SubscriptionRequestType indicates to the other party what type of response is expected.
264	MarketDepth	Y	1 = Top of Book 2.. 5 = depth 2 to 5.	Int	Depth of market for Book Snapshot, accepts from depth 1 to 5.
265	MDUpdateType	N	0 = Full Refresh	Int	Specifies the type of Market Data update. Required if SubscriptionRequestType = Snapshot + Updates (1), by default 0= Full Refresh.
266	AggregatedBook	Y	Y = one book entry per side per price N = multiple entries per side per price allowed.	Boolean	Specifies whether or not book entries should be aggregated.
267	NoMDEntryTypes	Y		Int	Number of MDEntryType fields requested.



<i>Market Data Request (MsgType = V)</i>						
Tag	FIX Name		Req	Valid Values	Format	Description
→	269	MDEntryType	Y	0 = Bid *** 1 = Offer *** 2 = Trade* 4 = Opening Price 5 = Closing Price 6 = Settlement Price 7 = Trading Session High Price 8 = Trading Session Low Price C = Open Interest**	Char	Must be the first field in this repeating group. This is a list of all the types of Market Data Entries that the firm requesting the Market Data is interested in receiving.
146	NoRelatedSym		Y		Int	Number of symbols requested
→	55	Symbol	Y		String	Ticker symbol of an instrument
→	207	Security Exchange	N	"ROFX"	String	Market used to help identify a security.
	Standard Trailer		Y			

SPECIAL HANDLING OF MARKET DATA ENTRIES

* Trade entries reflect the last trade executed for the given symbol at the moment of generating the market data message. This entry type is not employed to inform every trade executed for the symbol.

** Open interest will be sent upon request or subscription. It will be present in the message only if the information for the given Symbol is available.

*** AgreggatedBook = Y, will impact on the inputs: Bid – Offer, each of which returns a list with multiple entries per side for the price and account.



Market Data – Snapshot / Full Refresh (MsgType = W)

Market Data – Snapshot / Full Refresh (MsgType = W)						
Tag	FIX Name	Req	Valid Values	Format	Description	
	Standard Header	Y	MsgType = W			
262	MDReqID	Y		String (32)	Conditionally required if this message is in response to a Market Data Request.	
55	Symbol	Y		String	Ticker symbol of an instrument	
207	Security Exchange	N		String	Can be used to identify the security.	
387	TotalVolumeTraded	N			Total volume traded in this trading session for this security.	
268	NoMDEntries	Y		Int	Number of entries following.	
→	269	MDEntryType	Y	0 = Bid 1 = Offer 2 = Trade* 4 = Opening Price 5 = Closing Price 6 = Settlement Price 7 = Trading Session High Price 8 = Trading Session Low Price C = Open Interest**	Int	Must be the first field in this repeating group. Identifies the type of this entry
→	270	MDEntryPx	Y		Price	Price of the Market Data Entry.
→	271	MDEntrySize	N		Qty	Conditionally required if MDEntryType = Bid(0), Offer(1), or Trade(2)
→	272	MDEntryDate	N		UTC DateOnly	Date of Market Data Entry.
→	273	MDEntryTime	N		UTC TimeOnly	Time of Market Data Entry.
→	275	MDMkt	N		String	Market posting quote / trade
→	59	TimelnForce	N			For optional use when this Bid or Offer represents an order



Market Data – Snapshot / Full Refresh (MsgType = W)						
Tag	FIX Name		Req	Valid Values	Format	Description
→	37	OrderID	N		String	For optional use when this Bid, Offer, or Trade represents an order
→	288	MDEntryBuyer	N		String	For optional use in reporting Trades, values are delimited by “ ”
→	289	MDEntrySeller	N		String	For optional use in reporting Trades, values are delimited by “ ”
→	346	NumberOfOrders	N		Int	In an Aggregated Book, used to show how many individual orders make up an MDEntry
→	290	MDEntryPositionNo	N		Int	Display position of a bid or offer, numbered from most competitive to least competitive, per market side, beginning with 1
→	277	Trade Condition	N	U =Exchange Last	String	Space-delimited list of conditions describing a trade.
	Standard Trailer		Y			

SPECIAL HANDLING OF MARKET DATA ENTRIES

* Trade entries reflect the last trade executed for the given symbol at the moment of generating the market data message. This entry type is not employed to inform every trade executed for the symbol.

** Open interest will be sent upon request or subscription. It will be present in the message only if the information for the given Symbol is available.



Market Data Request Reject (MsgType = Y)

Market Data Request Reject (MsgType = Y)					
Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = Y		
262	MDReqID	Y		String (32)	Conditionally required if this message is in response to a Market Data Request..
281	MDReqRejReason	N	0 = Unknown symbol 1 = Duplicate MDReqID 2 = Insufficient Bandwidth 3 = Insufficient Permissions 4 = Unsupported Subscription Request Type 5 = Unsupported MarketDepth 6 = Unsupported MDUpdateType 7 = Unsupported AggregatedBook 8 = Unsupported MDEntryType	Char	Reason for the rejection of a Market Data request.
58	Text	N		String	
	Standard Trailer	Y			