FIX 5.0 Rules of Engagement Version 2.0.0

Document Change Log

Date	Version	Description	Authors
09/12/2010	1.0	First version of the R.O.E in which you'll find the market data messages	Primary
11/02/11	1.1	R.O.E is updated to FIX 5.0 SP02	Primary
25/02/2011	1.2	Contains Order Management and Security Definition	Primary
30/02/2011	1.3	Updated messages: Logon, New Order – Single, Market Data – Snapshot / Full Refresh	Primary

31/01/2012	2.0	Added messages:
		• Resend Request
		• Test Request
		• TradingSessionStatus
		• Order Status Request
		• OrderMass Cancel Report
		Changed messages;
		• In Logon message username and password is no longer required
		• News message add URLLink field.
		• Business Message Reject removes the fields BusinessRejectRefID, RefSeqNum and adds the options 1 to 7 and 18 to the BusinessRejectReason field.
		• New order single message adds :
		  ○ the option Market and Market with left over as limit order types.
		  ○ the All or None option to the ExecInst field.
		  ○ the TIFs GTC GTD and FOK.
		  ○ the Security Exchange field.
		• Order Cancel Request message changes the OrderQty was removed and transactime and CLOrdID fields changes to not required, The Security Exchange and Account fields were added, and OrdId and OrigClOrdID are now conditionally required..
		• Order Cancel/Replace Request message adds the transactime required field and Time in Force not required field. Price field changes to not required and the field ExecInst is removed from message.
		• Order Cancel Reject message adds options New, partially filled, filled and canceled to the ordStatus field. TransactTime and text field is not longer required. The field CxlRejReason adds the options Other and To Late To Cancel-.
		• Order Mass Cancel Request adds the fields ClOrdID, TransactTime, Symbol SecurityExchange, Side, CFICode, and Parties Block data.
		• Execution Report adds the market and Market with Left Over as Limit OrderType for some response messages. OrigClOrdID and
			Primary

		price fields are now conditionally required. TIF adds the GTD, GTC and FOK options. • The ExecutionReport message in response to OrderStatus request adds the field OrdStatusReqID. • The Market Data Snapshot full refresh changes the field MDReID to required and adds the fields MDEntryDate, MDEntryTime, TradeCondition, TradeSide, TradingSessionID, LotType, MinLotSize not required or conditionally required. The OrderID, MDEntryBuyer, MDEntrySeller, MDEntryPositionNo, and TrdType fields were removed. The MDEntryType = C, changes the type of entry from MDEntryPx to MDEntrySize, in accordance with the FIX specification. • The Security List message adds the fields MarketID and MarketSegmentID not required, and remove the field Product. The CFICode field adds Bond, Swap and Future Spread options. • The Security List Response message adds the fields MarketID and MarketSegmentID, SecurityExchange, MinTradeVol, MaxTradeVol, UnderlyingSymbol, ExecInstValue and TimeInForce, OrdID not required and the TotNoRelatedSym, and LastFragment fields required. The RofexProps field was removed. The field PriceLowLimit and PriceHighLimit were replaced for LowPriceLimit and HighPriceLimit respectively and changes your tag number id.	

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Introduction

Purpose and Document Scope

ROFEX (*Rosario Futures EXchange*) released this document to provide an entry mechanism for market data subscription on its Electronic Trading Exchange. The ROFEX Trading System provides the hardware and software needed to connect to its Electronic Derivatives Exchange. The goal of this document is to describe the message types and tags supported to interface with ROFEX 5.0 SP2 interface.

References to other documents

For detailed information on each of these fields, please refer to the *FIX Protocol* specifications. ***www.fixprotocol.org***

Common Issues

Identification of the FIX session

The exchange will provide every member with a Exchange Code, Member Code, Login Username and a Password. All messages sent by the member to the exchange should contain the provided Member Code in the *SenderCompID* and *OnBehalfOfCompID* fields. For test connections, the Member will be provided with a separate Exchange Code, Member Code, Login Username and Password. All messages sent by the Member to the exchange should also have the *TargetCompID* field set to the exchange's code provided. No more than one FIX session can exist at the time with the same values for these fields. If a message is received with values that do not correspond with those of the session, it will be rejected and the connection closed. It should be noted that the values of these fields are inverted when the message is sent by the exchange, with respect to those sent by the client.

IP Addresses

All Members connecting to the system will be provided with a production IP address and one or more test IP addresses.

TCP Port Number

The Primary Router listens for Member connections on a TCP specific port number. This port number will be also provided by the exchange.

FIX Session Assignment

FIX comp IDs and IP addresses for connection are assigned by Primary to connecting counterparties. The process is differentiated according to the counterparty category (banks, trading firms, vendors, other exchanges, etc). For more details, please contact the Primary:

soporte@primary.com.ar

Instrument Identification

Instruments are uniquely identified using the block of fields presented below.

Tag		FIX Name	Req	Format	Description
→		***Block Intrument***			Set of “Instruments”
146		NoRelatedSym	Y	NumInGroup (Int)	Specifies the number of repeating symbols (instruments) specified
→→	*55*	***Symbol***	Y	String	The Symbol Name
→→	*207*	***SecurityExchange***	N	String	Security exchange identifier. Value defined **ROFX**

Counter Party Identification

The Parties block is used in many application messages to specify the parties involved in the transaction. In the detailed definition of the messages that contains this block, the block is incorporated exactly as shown below. The list of possible values is restricted by the specific characteristics of the message.

Tag		FIX Name	Req	Valid Values	Format	Description
→		***Block Parties***				Set of "Parties"
453		NoPartyIDs	N	>0, <=2	NumInGroup (Int)	Repeating group below should contain unique combinations of PartyID, PartyIDSource, and PartyRole.
→→	*448*	***PartyID***	N		String	member code
→→	*447*	***PartyIDSource***	C		Char	Required if NoPartyIDs has been specified
→→	*452*	***PartyRole***	C	3 = Client ID 24 = Customer Account	Int	Indicates the role taken by the code specified in PartyID. Required if NoPartyIDs has been specified
→→	*109*	***ClientID***	N		String	ClientID of order sender/modifier, related to ClOrdID field.

OrderQtyData Identification

Set of "OrderQtyData" fields.
Note: OrderQty = CumQty + LeavesQty (see exceptions above)

Tag		FIX Name	Req	Valid Values	Format	Description
→		***Block OrderQtyData***	Y		OrdQty	Insert here the set of "OrderQtyData" fields defined in "Common Components of Application Messages"
→→	*38*	OrderQty	N		Qty	Quantity of order.

Underlying Instrument Identification

Tag		FIX Name	Req	Valid Values	Format	Description
→		***Block UndInstrmt***				Set of “Underlyings”
711		NoUnderlyings	N		NumInGroup (Int)	
→→	*311*	*UnderlyingSymbol*	N		String	Underlying security's Symbol.

Messages

Header and Trailer

Standard Message Header

Message Header sent by your company to the Exchange

Standard Message Header					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
8	BeginString	Y	FIXT.1.1	String	Identifies beginning of new message and protocol version. ALWAYS FIRST FIELD IN MESSAGE. (Always unencrypted)
9	BodyLength	Y		Int	Message length, in bytes, up to the CheckSum field. *Always second field in message.* Always unencrypted. Maximun 500 Kbytes
34	MsgSeqNum	Y		Int	Message sequence number.
35	MsgType	Y	All Msg Types supported	String	Defines message type. *Always third field in message.*
1128	AppVerID	N	9 = FIX50SP2	String	Indicates application version using a service pack identifier.
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 the Exchange.
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 router receiving the message. All messages sent by your firm to the exchange must have one TargetCompID.
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 (32)	A unique identifier assigned by the exchange to your firm. This identifier must be present on all order related transactions as a means of identifying the originating source.
122	OrigSendingTime	N		UTC Timestamp	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	N		String (32)	Identifies the target executing system.

Standard Message Header					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
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 the exchange

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

Message summary

Summary of Session Messages

The following table summarizes the session messages supported by the exchange.

Message	Message Type	Page
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Message	Message Type	Page
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Execution Report: Order Replaced Response	8	41
Execution Report: Order Filled/Partially Filled Response	8	43
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Session Layer Messages

Message Specification

This section details the session management messages used by the exchange.

Logon (MsgType = A)

The FIX Logon message (A) authenticates a user establishing a connection to a remote system. The Logon (A) message must be the first message sent by the application requesting to initiate a FIX session.

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

					Logon (MsgType = A)
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".
553	Username	N		String	Username. Provided by the exchange.
554	Password	N		String	Password. Provided by the exchange.
1137	DefaultApplVerID	Y	9 =FIX50SP2	String	The default version of FIX being carried over this FIXT session
	Standard Trailer	Y			

Heartbeat (MsgType = 0)

The Heartbeat (0) monitors the status of the communication link and identifies when the last of a string of messages was not received.
Possible Exchange's response messages: None.

					Heartbeat (MsgType = 0)
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 0		
112	TestReqID	C		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)

The test request message forces a heartbeat from the opposing application. The test request message checks sequence numbers or verifies communication line status. The opposite application responds to the Test Request with a Heartbeat containing the TestReqID.

Test Request (MsgType = 1)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 1		
112	TestReqID	Y		String	Identifier included in Test Request message to be returned in resulting Heartbeat
	Standard Trailer	Y			

Resend Request (MsgType = 2)

The resend request is sent by the receiving application to initiate the retransmission of messages. This function is utilized if a sequence number gap is detected, if the receiving application lost a message, or as a function of the initialization process.

Resend Request (MsgType = 2)					
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	Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo (7) = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "0" (representing infinity).
	tandard Trailer	Y			

Reject – Session Level (MsgType = 3)

The FIX Reject message should be issued when a message is received but cannot be properly processed due to a session-level rule violation.
This message will be sent by the Exchange when a session level error has occurred.

Tag	FIX Name	Req	Valid Values	Format	Description
					Reject (MsgType = 3)
	Standard Header	Y	MsgType = 3		
45	RefSeqNum	Y		Int	Reference message sequence number.
371	RefTagID	N		Int	The tag number of the FIX field being referenced
372	RefMsgType	N		String	The MsgType of the FIX message being referenced
373	SessionRejectReason	N	0 = Invalid tag number 1 = Required tag missing 2 = Tag not defined for this message type 3 = Undefined Tag 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag 6 = Incorrect data format for value 7 = Decryption problem 8 = Signature problem 9 = CompID problem 10 = SendingTime accuracy problem 11 = Invalid MsgType 12 = XML Validation error 13 = Tag appears more than once 14 = Tag specified out of required order 15 = Repeating group fields out of order 16 = Incorrect NumInGroup count for repeating group 17 = Non “data” value includes field delimiter (SOH character) 99 = Other	Int	Code to identify reason for a session-level Reject message. The server will report the reason for rejection in all messages
58	Text	N		String	Provides the reason the order was rejected.
	Standard Trailer	Y			

Sequence Reset (MsgType = 4)

The Sequence Reset message has two modes: Gap Fill mode and Reset mode. Gap Fill mode is used in response to a FIX Resend Request when one or more messages must be skipped. Reset mode involves specifying an arbitrarily higher new sequence number to be expected by the receiver of the FIX Sequence Reset message, and is used to reestablish a FIX session after an unrecoverable application failure.

Possible Exchange's response messages: None.

Sequence Reset (MsgType = 4)					
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)

The FIX Logout message initiates or confirms the termination of a FIX session. Disconnection without the exchange Logout messages should be interpreted as an abnormal condition.
Possible **Exchange's** response messages: Logout (MsgType = 5), Resend Request (MsgType = 2) or Reject – Session Level (MsgType = 3).

					Logon (MsgType = 5)
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 5		
58	Text	N		String	Free format text string.
	Standard Trailer	Y			

Common messages

Message Specification

News (MsgType = B)

The news message is a general free format message between the broker and institution. The message contains flags to identify the news item's urgency and to allow sorting by subject company (symbol). The News message can be originated at either the broker or institution side, or exchanges and other marketplace venues.

					News (MsgType = B)
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = B		
61	Urgency	N	0 = Normal 1 = Flash 2 = Background	Char	The default value is 0
42	OrigTime	N		UTCTimestamp	Time of message origination
148	Headline	Y		String	Specifies the headline text
→	***Block LinesOfText***	Y			Set of "Lines of Text"
33	NoLinesOfText			NumInGroup	Specifies the number of repeating lines of text specified
→→ *58*	Text	Y		String	Repeating field, number of instances defined in LinesOfText (33)
149	URLLink	N		String	A URI (Uniform Resource Identifier) or URL (Uniform Resource Locator) link to additional information (i.e. http://www.primary.com/research.html)
	Standard Trailer	Y			

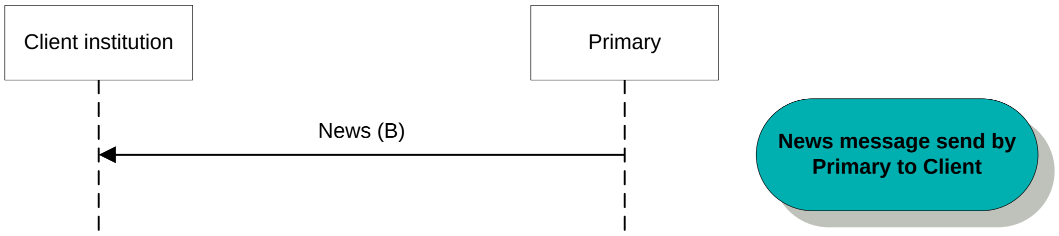
Business Message Reject (MsgType = j)

Message sent by the exchange when it receives a supported message that is syntactically correct in an unsupported situation, and there is no specific rejection message. It is especially used to reject a Network Counterparty System Status Request message.

Business Message Reject (MsgType = j)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = j		
372	RefMsgType	Y		String	MsgType of the rejected message
380	BusinessRejectReason	Y	0 = Other 1 = Unknown ID 2 = Unknown Security 3 = Unsupported Message Type 4 = Application not available 5 = Conditionally required field missing 6 = Not Authorized 7 = DeliverTo firm not available at this time 18 = Invalid price increment	Int	Reason for rejection
58	Text	N		String	Explanation of rejection
	Standard Trailer	Y			

Message Flow – Common messages

News



Mesagge reception

Application Messages - Order Management

This section describes messages exchanged that are relevant to order management, i.e. the sending of orders, cancellations, modifications and reporting of state changes.

Message Specification

Trading Session Status (MsgType = h)

The Trading Session Status provides information on the status of a market. For markets multiple trading sessions on multiple-markets occurring (morning and evening sessions for instance), this message is able to provide information on what products are trading on what market during what trading session.

					TradingSessionStatus (MsgType = h)
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = h		
335	TradSesReqID	N		String	Provided for a response to a specific Trading Session Status Request message.
336	TradingSessionID	Y		String	Identifier for Trading Session
625	TradingSessionSubID	Y	0 = Pre-Trading 1 = Trading 2 = Post-Trading 3 = After Hour 4 = Closed	String	Optional market assigned sub identifier for a trading phase within a trading session.
340	TradSesStatus	Y	2 = Open 3 = Closed	Int	State of the trading session
1301	MarketID	Y	“ROFX”	String	Market for which Trading Session applies
1300	MarketSegmentID	Y	“DDF”, “DDA”	String	Market Segment for which Trading Session applies

TradingSessionStatus (MsgType = h)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
325	UnsolicitedIndicator	N	Y = Message is being sent unsolicited.	Boolean	Set to 'Y' if message is sent unsolicited as a result of a previous subscription request.
	Standard Trailer	Y			

New Order – Single (MsgType = D)

The New Order Single message is used by institutions to electronically submit orders to be executed by the exchange. Orders should have a unique identifier (tag ClOrdID <11>) assigned by the institution for a trading day. Orders with duplicate identifiers will be rejected by the exchange.
The acknowledgment of receipt of a New Order Single message is issued in the form of an Execution Report message.
Possible Exchange's response messages: Execution Report (MsgType = 8) or Reject – Session Level (MsgType = 3)

					New Order - Single (MsgType = D)
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = D		
1	Account	N		String	Executing account mnemonic.
11	ClOrdID	Y		String	Unique identifier for Order as assigned by the client. Single session.
→	***Block OrderQtyData***	Y		Qty	Quantity of order
40	OrdType	Y	1 = Market 2 = Limit K = Market with left over as limit(market order with unexecuted quantity becoming limit order at last price)	Char	Order type
44	Price	C		Price	Order price. Required for limit orders.
54	Side	Y	1 = Buy 2 = Sell	Char	Side of order.
18	ExecInst	Y	Z = Cancel if not Best x=replace previous orders ROFEX indicator. G = All or None (AON)	MultipleValueString	Instructions for order handling, Can contain multiple instructions, space delimited. x = if have to cancel all previous orders when coincides the following fields: account, side, symbol and security exchange.Z = for products with the option of put or not in book, and non bookeable orders. G = for orders in "all or none" products.
→	***Block Instrument***	Y			

Tag	FIX Name	Req	Valid Values	Format	Description
					New Order - Single (MsgType = D)
59	TimeInForce	N	0 = Day (or session) 1 = Good Till Cancel (GTC) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD)	Char	Specifies for how long the order remains in effect. For Bid and Offer: 0 = Day is used commonly For Buy and Sell: 3 = Immediate or Cancel is used commonly. For OrdType = 1 TimeInForce must be 3 = IOC. By default Day Tif.
60	TransactTime	N		UTC Timestamp	Time of order creation.
	Standard Trailer	Y			

Note: Tag 18 -> ExecInst = G, only valid for instruments “all or none” with TIFs GTC and DAY and instruments declared “not all or none” with TIFs IOC and FOK.

Order Cancel Request (MsgType = F)

The Order Cancel Request message requests the cancellation of all of the remaining quantity of an existing order. The request will only be accepted if the order can successfully be pulled back from the exchange book without executing. A cancel request is assigned a ClOrdID and is treated as a separate entity. If rejected, the ClOrdID of the Cancel Request will be sent in the Cancel Reject message, as well as the ClOrdID of the actual order in the OrigClOrdID field. The ClOrdID assigned to the cancel request must be unique amongst the ClOrdID assigned to regular orders and replacement orders. A successful Order Cancel Request is replied to with an Execution Report message.

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

					Order Cancel Request (MsgType = F)
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = F		
11	ClOrdID	N		String	Unique identifier for the order to Cancel as assigned by the client. Unique ID of cancel request as assigned by the institution.
37	OrderId	C		String	Unique identifier for the order as assigned by the server. Conditionaly required if OrigClOrdId is not present.
41	OrigClOrdID	C		String	The last accepted ClOrdID in an order chain. ClOrdID(11) of the previous non-rejected order when canceling or replacing an order generated by user. Conditionaly required if OrderId is not present.
54	Side	Y	1 = Buy 2 = Sell	Char	Side of order
60	TransactTime	N		UTC Timestamp	Time of order creation.
1	Account	N		String	
→	***Block Instrument***	Y			In this case the Security Exchange field is mandatory
	Standard Trailer	Y			

Order Cancel/Replace Request (MsgType = G)

The Order Cancel Replace Request message is used to change the parameters of a previously entered order. It may be used to change attributes of an order (i.e. reduce/increase quantity, change price, etc.). The Cancel/Replace request will only be accepted if the order can successfully be pulled back from the exchange book without executing.
Only the fields that are being changed need to be sent in the replacement. Fields that are not sent are considered to be the same as the cancelled order. An order that is replaced will keep its OrderID.

Only the following field may change:

- Quantities (OrderQty);

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

Order Cancel/ReplaceRequest (MsgType = G)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = G		
1	Account	N		String(45)	Executing account mnemonic.
11	ClOrdID	Y		String	Unique identifier for the order to Cancel/Replace as assigned by the client.
41	OrigClOrdID	C		String	The last accepted ClOrdID in an order chain.
37	OrderId	C		String	Unique identifier for the order to Cancel/Request as assigned by the server.
→	***Block OrderQtyData***	Y			Quantity of order
40	OrdType	Y	2 = Limit K = Market with left over as limit(market order with unexecuted quantity becoming limit order at last price)	Char	Order type
60	TransactTime	Y		UTCTimestamp	Time this order request was initiated/released by the trader or trading system.
44	Price	N		Price	Order price. For validation.
54	Side	Y	1 = Buy 2 = Sell	Char	Side of order.
→	***Block Instrument***	Y			In this case the Security Exchange field is mandatory
59	TimeInForce	N	0 = Day (or session) 1 = Good Till Cancel (GTC) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD)	Char	Specifies for how long the order remains in effect. By Default Day TIF is assumed. For Bid and Offer 0 = Day is used commonly For Buy and Sell 3 = Immediate or Cancel is used commonly
	Standard Trailer	Y			

Order Cancel Reject (MsgType = 9)

The Order Cancel Reject message is issued by the exchange upon receipt of a Cancel Request, Mass Cancel Request or Order Cancel Replace Request (modification) message which cannot be honored. Filled orders cannot be cancelled or modified. When rejecting an Order Cancel Request, the Order Cancel Reject message will provide the ClOrdID and OrigClOrdID values which were specified on the original Cancel/Mass Cancel/Replace Request message for identification.
This message is sent by the Exchange in order to reject a Cancel Request or Cancel Replace Request sent by the client.

					Order Cancel Reject (MsgType = 9)
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 9		
11	ClOrdID	Y		String	ClOrdID of the Cancel Request or Cancel/Replace that is being rejected.
41	OrigClOrdID	Y		String	The last accepted ClOrdID in an order chain.
37	OrderID	Y		String	If CxlRejReason="Unknown order", specify "NONE".
39	OrdStatus	Y	0 = New 1 = Partially Filled 2 = Filled 4 = Canceled 8 = Rejected	Char	Identifies the current status of the order.
434	CxlRejResponseTo	Y	1 = Order Cancel Request	Char	Identifies the type of request this Cancel Reject is in response to.
102	CxlRejReason	Y	0 = Too late to Cancel 1 = Unknown Order 99 = Other	Int	Code to identify reason for cancel rejection.
58	Text	N		String	Provides the reason why the order was rejected.
	Standard Trailer	Y			

Order Status Request (MsgType = H)

The order status request message is used by the institution to generate an order status message back from the broker.

Order Status Request (MsgType = H)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = H		
790	OrdStatusReqID	N		String	Optional, can be used to uniquely identify a specific Order Status Request message. Echoed back on Execution Report if provided.
11	ClOrdID	C		String	The ClOrdID of the order whose status is being requested.. Either OrderID or ClOrdID must be provided.
37	OrderID	C		String	Conditionally required if ClOrdID(11) is not provided. Either OrderID or ClOrdID must be provided. If CxlRejReason="Unknown order", specify "NONE".
→	***Block Instrument***	Y		Int	Insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages"
54	Side	Y	1 = Buy 2 = Sell	Char	Side of order
	Standard Trailer	Y			

OrderMass Status Request (MsgType = AF)

Message sent by the client to request status of orders meeting certain selection criteria.

Order Mass Status Request (MsgType = AF)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = AF		
584	MassStatusReqID	Y		String (10)	Unique identifier of this Order Mass Status Request message
585	MassStatusReqType	Y	7 = Status for all orders	Int	Mass Status Request Type.
	Standard Trailer	Y			

OrderMass Cancel Request (MsgType =q)

Message sent by the client to request the cancellation of orders that meet certain selection criteria.

Order Mass Cancel Request (MsgType = q)

Tag		FIX Name	Req	Valid Values	Format	Description
		Standard Header	Y	MsgType = q		
530		MassCancelRequestType	Y	1 = Cancel orders for a security 2 = Cancel orders for an underlying security 3 = Cancel orders for a product 4 = Cancel orders for a CFICode 5 = Cancel orders for a SecurityType 6 = Cancel orders for a Trading Session 7 = Cancel all orders 8 = Cancel orders for a market 9 = Cancel orders for a market segment. A = Cancel order for a security group B = Cancel orders for a security Issuer C = Cancel orders for Issuer of Underlying Security	Char	Selection criteria.
11		ClOrdID	Y		String	Unique ID of Order Mass Cancel Request as assigned by the institution.
60		TransactTime	N		UTCTimestamp	Time this order request was initiated/released by the trader or trading system.
→		***Block Instrument***	N		Int	Insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages"
→→	*461*	CFICode	N	"FXXXS" = Future "OPXXXS" = Option Put "OCXXXS" = Option Call "ESXXXX" = Stock "DBXXXX" = Bond "XXWXXX" = Swap “FMXXS” = Futures Spread	String	Indicates the type of security using ISO 10962 standard, Classification of Financial Instruments (CFI code) values. It is recommended that CFICode be used instead of SecurityType for non-Fixed Income instruments.

Order Mass Cancel Request (MsgType = q)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
54	Side	N	1 = Buy 2 = Sell	Char	Optional qualifier used to indicate the side of the market for which orders are to be canceled. Absence of this field indicates that orders are to be canceled regardless of side.
→	***Block Parties***	N			Insert here the set of "Parties"
	Standard Trailer	Y			

OrderMass Cancel Report (MsgType =r)

The Order Mass Cancel Report is used to acknowledge an Order Mass Cancel Request. Note that each affected order that is canceled is acknowledged with a separate Execution Report or Order Cancel Reject message.

Order Mass Cancel Report (MsgType = r)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = r		
11	ClOrdID	N		String (32)	ClOrdID provided on the Order Mass Cancel Request. Unavailable in case of an unsolicited report, such as after a trading halt or a corporate action requiring the deletion of outstanding orders.
37	OrderID	Y		String (32)	Unique Identifier for the Order Mass Cancel Request assigned by the recipient of the Order Mass Cancel Request.
54	Side	N	1 = Buy 2 = Sell	Char	Side of order
530	MassCancelRequestType	Y	1 = Cancel orders for a security 2 = Cancel orders for an underlying security 3 = Cancel orders for a Product 4 = Cancel orders for a CFICode 5 = Cancel orders for a SecurityType 7 = Cancel all orders 8 = Cancel orders for a market 9 = Cancel orders for a segment	Price	Order Mass Cancel Request Type accepted by the system
1369	MassActionReportID	Y		String	Unique Identifier for the Order Mass Cancel Report assigned by the recipient of the Order Mass Cancel Request

Tag	FIX Name	Req	Valid Values	Format	Description
					Order Mass Cancel Report (MsgType = r)
531	MassCancelResponse	Y	0 = Cancel Request Rejected 1 = Cancel orders for a Security 2 = Cancel orders for an Underlying Security 3 = Cancel orders for a Product 4 = Cancel orders for a CFICode 5 = Cancel orders for a Security Type 6 = Cancel orders for a TradingSession 7 = Cancel all orders 8 = Cancel orders for a market 9 = Cancel orders for a segment	Char (1)	Indicates the action taken by the counterparty order handling system as a result of the Cancel Request 0 - Indicates Order Mass Cancel Request was rejected.
532	MassCancelRejectReason	C	0 = Mass Cancel not supported 3 = Invalid or Unknow n product 4 Invalid or Unknow n CFICode 99 = Other	Int	Reason Order Mass Cancel Request was rejected Indicates why Order Mass Cancel Request was rejected Required if MassCancelResponse = 0
→	***Block Instrument***	N			
60	TransactTime	N		UTC Timestamp	Time at which the order is accepted by the exchange.
	Standard Trailer	Y			

Execution Report (MsgType = 8):New

The Execution Report message is used in the following scenarios:

- Confirm the receipt of an order;
- Confirm changes to an existing order (i.e. accept order cancel requests);
- Relay order status information;
- Relay fill information on working orders (trades);
- Reject orders.

Each execution report contains two fields which are used to communicate both the current state of the order as understood by the broker and the purpose of the message: OrdStatus (used to convey the current status of an order) and ExecType (used to identify the purpose of the Execution Report message).

					Execution Report (MsgType = 8): New Response
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 8		
1	Account	Y		String (32)	Executing account mnemonic.
6	AvgPx	Y	0	Price	This tag will always be 0.
11	ClOrdID	Y		String (32)	Unique identifier for New Order, Cancel, or Cancel/Replace that this Execution Report confirms.
14	CumQty	Y	0	Qty	Cumulative quantity.
17	ExecID	Y		String (32)	Unique Exchange identifier for message. This identifier is unique trading session.
31	LastPx	Y	0	Price	Price of this (last) fill. This tag will always be 0.
32	LastQty	Y	0	Qty	Quantity (e.g. shares) bought/sold on this (last) fill. This tag will always be 0.
37	OrderID	Y		String (32)	Unique identifier for order as assigned by Exchange. This identifier is unique per trading session.
→	***Block OrderQtyData***	Y		Qty	OrderQty submitted by the client.
39	OrdStatus	Y	0 = New	Char	Identifies the current status of an order. The value will be 0 for New if the original FIX message was New Order – Single.
40	OrdType	Y	1 = Market 2 = Limit K = Market with Left Over as Limit	Char	Type of order specified by individual entering the order.

Tag	FIX Name	Req	Valid Values	Format	Description
					Execution Report (MsgType = 8): New Response
41	OrigClOrdID	C		String (32)	Conditionally required for response to a Cancel or Cancel/Replace request (ExecType=PendingCancel, Replace, or Canceled) when referring to orders that where electronically submitted over FIX or otherwise assigned a ClOrdID(11). ClOrdID of the previous accepted order (NOT the initial order of the day) when canceling or replacing an order.
44	Price	C		Price	Order Price submitted by the client
54	Side	Y	1 = Buy 2 = Sell	Char (1)	Side submitted by the client
→	***Block Instrument***	Y			In this this case the Security Exchange field is mandatory
59	TimeInForce	N	0 = Day (or session) 1 = Good Till Cancel (GTC) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD)	Char	Specifies how long the order remains in effect. If not present, DAY order is the default.
60	TransactTime	Y		UTC Timestamp	Time at which the order is accepted by the exchange.
150	ExecType	Y	0 = New	Char	The value will be 0 for New if the original FIX message was New Order – Single.
151	LeavesQty	Y		Qty (9)	Amount of stocks units open for further execution.
58	Text	N		String	
	Standard Trailer	Y			

Execution Report (MsgType = 8): Order Canceled Response

Tag	FIX Name	Req	Valid Values	Format	Description
					Execution Report (MsgType = 8): Order Canceled Response
	Standard Header	Y	MsgType = 8		
1	Account	Y		String (32)	Executing account mnemonic.
6	AvgPx	Y		Price	AvgPx submitted with Cancel order. Calculated average price of all fills on this order.
11	ClOrdID	Y		String (32)	Unique identifier for Cancel order that this Execution Report confirms
14	CumQty	Y		Qty	CumQty submitted with Cancel order.
17	ExecID	Y		String (32)	Unique Exchange's identifier for message. This identifier is unique per trading session.
31	LastPx	Y		Price	Price of this fill.
32	LastQty	Y		Qty	Quantity of stocks units bought/sold on this fill.
37	OrderID	Y		String (32)	Unique identifier for order as assigned by the exchange. This identifier is unique per trading session.
→	***Block OrderQtyData***	Y		Qty	OrderQty submitted with Cancel order.
39	OrdStatus	Y	4 = Canceled	Char	Identifies the current status of an order.
40	OrdType	Y	2 = Limit K = Market with Left Over as Limit	Char	Type of order specified by individual entering the order.
41	OrigClOrdID	N		String (32)	The last accepted ClOrdID in an order chain.
44	Price	N		Price	Price submitted with Cancel order.
54	Side	Y	1 = Buy 2 = Sell	Char	Side submitted with Cancel order.
→	***Block Instrument***	Y			In this this case the Security Exchange field is mandatory
59	TimeInForce	N	0 = Day (or session) 1 = Good Till Cancel (GTC) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD)	Char	Specifies how long the order remains in effect. If not present, DAY order is the default.
60	TransactTime	Y		UTC Timestamp	Time at which the order is cancelled by the exchange.

Execution Report (MsgType = 8): Order Canceled Response					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
150	ExecType	Y	4 = Canceled	Char	Describes the nature of the execution report while OrdStatus identifies the status of the trade.
151	LeavesQty	Y		Qty (9)	Amount of stocks units open for further execution.
58	Text	N		String	It always returns Canceled
	Standard Trailer	Y			

Execution Report (MsgType = 8): Order Replaced Response

Tag	FIX Name	Req	Valid Values	Format	Description
					Execution Report (MsgType = 8): Order Replaced Response
	Standard Header	Y	MsgType = 8		
1	Account	Y		String (32)	Executing account mnemonic.
6	AvgPx	Y		Price	AvgPx submitted with Cancel/Replace order.
11	ClOrdID	Y		String (32)	Unique identifier for Cancel/Replace order that this Execution Report confirms
14	CumQty	Y		Qty	CumQty submitted with Cancel/Replace order.
17	ExecID	Y		String (32)	Unique exchange identifier for message. This identifier is unique per trading session.
31	LastPx	Y		Price	Price of this fill.
32	LastQty	Y		Qty	Quantity of stocks units bought/sold on this fill.
37	OrderID	Y		String (32)	Unique identifier for order as assigned by the exchange. This identifier is unique per trading session.
→	***Block OrderQtyData***	Y		Qty	OrderQty submitted with Cancel/Replace order.
39	OrdStatus	Y	0= New 1 = Partially Filled 2= Filled	Char	Identifies the current status of order.
40	OrdType	Y	2 = Limit K = Market with Left Over as Limit	Char	Type of order specified by individual entering the order.
41	OrigClOrdID	N		String (32)	The last accepted ClOrdID in an order chain.
44	Price	N		Price	Price submitted with Cancel/Replace order.
54	Side	Y	1 = Buy 2 = Sell	Char	Side submitted with Cancel/Replace order.
→	***Block Instrument***	Y			In this this case the Security Exchange field is mandatory
60	TransactTime	Y		UTC Timestamp	Time at which the order is cancelled by the exchange.
150	ExecType	Y	5 = Replaced	Char	Describes the nature of the execution report while OrdStatus identifies the status of the trade.
151	LeavesQty	Y		Qty	Amount of stocks units open for further execution.

Execution Report (MsgType = 8): Order Replaced Response					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
58	Text	N		String	
	Standard Trailer	Y			

Execution Report (MsgType = 8): Order Filled/Partially Filled Response

This message will be sent to the customer as a result of an order matching leading to trade creation.

Tag	FIX Name	Req	Valid Values	Format	Description
					Execution Report (MsgType = 8): Order Fill/Partially Filled Response
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 8		
1	Account	Y		String (32)	Executing account mnemonic.
6	AvgPx	Y		Price	Calculated average price of all fills on this order.
11	ClOrdID	Y		String (32)	Unique identifier for the order that this Execution Report references.
14	CumQty	Y		Qty	Total number of shares filled.
17	ExecID	Y		String (32)	Unique Exchange identifier for message. This identifier is unique per trading session.
31	LastPx	Y		Price	Price of this fill.
32	Last Qty	Y		Qty	Quantity of stocks units bought/sold on this fill.
37	OrderID	Y		String	Unique identifier for Order as assigned by the Exchange. This identifier is unique per trading session.
→	***Block OrderQtyData***	Y		Qty	OrderQty submitted by the client.
39	OrdStatus	Y	1 = Partially Filled 2 = Filled	Char	Identifies the current status of an order.
40	OrdType	Y	1 = Market 2 = Limit K = Market with Left Over as Limit	Char	Type of order specified by individual entering the order.
41	OrigClOrdID	N		String (32)	The last accepted ClOrdID in an order chain.
44	Price	N		Price	Price per share.
54	Side	Y	1 = Buy 2 = Sell	Char	Side submitted by the client.
→	***Block Instrument***	Y			In this case the Security Exchange field is mandatory
59	TimeInForce	N	0 = Day (or session) 1 = Good Till Cancel (GTC) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD)	Char	Specifies how long the order remains in effect. If not present, DAY order is the default.

Execution Report (MsgType = 8): Order Fill/Partially Filled Response					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
60	TransactTime	Y		UTC Timestamp	Time at which the order was filled.
150	ExecType	Y	F = Trade (Partial Fill or Fill)	Char	Describes the nature of the execution report while OrdStatus identifies the status of the order.
151	LeavesQty	Y		Qty	Amount of instrument units open for further execution.
58	Text	N		String	
	Standard Trailer	Y			

Execution Report (MsgType = 8): Order Status Response – No orders

This message will be sent to the customer as the reply of an order mass status request in the case that the Account has no orders associated.

Execution Report (MsgType = 8): Order Status Response					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 8		
790	OrdStatusReqID	C		String	Required if responding to and if provided on the Order Status Request message. Echo back the value provided by the requester.
911	TotNumReports	C		Int	Can be used when responding to an Order Mass Status Request to identify the total number of Execution Reports which will be returned. It is related with the amount of active orders.
584	MassStatusReqID	C		Int	When responding to an Order Mass Status Request, corresponds to the unique identifier of Order Mass Status Request message
912	LastRpRequested	Y	Y = Last message	Boolean	Indicates that this is the last Execution Reports which will be returned as a result of the request.
6	AvgPx	Y		Price	Calculated average price of all fills on this order.
14	CumQty	Y		Qty	Total number of shares filled.
17	ExecID	Y	0	String (32)	Unique identifier for message. This identifier is unique per trading session.
37	OrderID	Y	0	String	Unique identifier for order as assigned by the exchange. This identifier is unique per trading session.
39	OrdStatus	Y	4 = Cancelled	Char	Identifies the current status of an order.
41	OrigClOrdID	N		String (32)	The last accepted ClOrdID in an order chain.
54	Side	Y	1 = Buy	Char	Side submitted by the client.

Execution Report (MsgType = 8): Order Status Response					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
→	***Block Instrument***	Y			Symbol(55)="N/A" and no Security Exchange
60	TransactTime	Y		UTC Timestamp	Time at which the order was filled.
150	ExecType	Y	I = Order Status	Char (1)	Describes the nature of the order status report while OrdStatus identifies the status of the order.
151	LeavesQty	Y		Qty	Amount of instrument units open for further execution.
58	Text	N		String	
	Standard Trailer	Y			

Execution Report (MsgType = 8): Order Status Response – With orders

This message will be sent to the customer as the reply of an order mass status request in the case that the Account has at least one order associated.

					Execution Report (MsgType = 8): Order Status Response
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 8		
790	OrdStatusReqID	C		String	Required if responding to and if provided on the Order Status Request message. Echo back the value provided by the requester.
911	TotNumReports	Y		Int	Can be used when responding to an Order Mass Status Request to identify the total number of Execution Reports which will be returned.
584	MassStatusReqID	C		Int	When responding to an Order Mass Status Request, corresponds to the unique identifier of Order Mass Status Request message
912	LastRpRequested	Y	N = Not last message Y= Last message	Boolean	Can be used when responding to an Order Mass Status Request to indicate that this is the last Execution Reports which will be returned as a result of the request.
1	Account	Y		String (32)	Executing account mnemonic.
6	AvgPx	Y		Price	Calculated average price of all fills on this order.
11	ClOrdID	Y		String (32)	Unique identifier for the order that this Execution Report references.
17	ExecID	Y	0	String (32)	Unique identifier for message. This identifier is unique per trading session.
31	LastPx	Y		Price	Price of this fill.
32	LastQty	Y		Qty	Quantity of stocks units bought/sold on this fill.
37	OrderID	Y		String	Unique identifier for order as assigned by the exchange. This identifier is unique per trading session.
→	***Block OrderQtyData***	Y		Qty	OrderQty submitted by the client.
39	OrdStatus	Y	0 = New 1 = Partially Filled 2 = Filled 4 = Canceled 5 = Replaced	Char	Identifies the current status of an order.
40	OrdType	Y	1 = Market 2 = Limit K = Market with Left Over as Limit	Char	Type of order specified by individual entering the order.

Execution Report (MsgType = 8): Order Status Response					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
41	OrigClOrdID	N		String	The last accepted ClOrdID in an order chain.
44	Price	Y		Price	Price per share.
54	Side	Y	1 = Buy 2 = Sell	Char	Side submitted by the client.
→	***Block Instrument***	Y			In this this case the Security Exchange field is mandatory
60	TransactTime	Y		UTC Timestamp	Time at which the order was filled.
150	ExecType	Y	I = Order Status	Char (1)	Describes the nature of the order status report while OrdStatus identifies the status of the order.
151	LeavesQty	Y		Qty	Amount of instrument units open for further execution.
14	CumQty	Y		Qty	Total number of shares filled.
58	Text	N		String	Order Updated
	Standard Trailer	Y			

Execution Report (MsgType = 8): Reject Message Response

(The original FIX message sent by the customer was New Order – Single request.)

					Execution Report (MsgType = 8): Reject Message Response
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = 8		
1	Account	Y		String (32)	Executing account mnemonic.
6	AvgPx	Y	0	Price	This tag will always be 0.
11	ClOrdID	Y		String (32)	Unique identifier for the order that the Execution Report references.
14	CumQty	Y	0	Qty	This tag will always be 0
17	ExecID	Y		String (32)	Unique Exchange identifier for message. This identifier is unique per trading session.
31	LastPx	Y	0	Price	Price of this fill. It will always be 0
32	LastQty	Y		Qty	Quantity of stocks units bought/sold on this fill.
37	OrderID	Y	“NONE”	String (32)	Unique identifier for order as assigned by the Exchange. This identifier is unique per trading session. “NONE” in case of rejected order.
→	***Block OrderQtyData***	Y		Qty	OrderQty submitted by the client.
39	OrdStatus	Y	8 = Rejected	Char	Identifies the current status of an order.
40	OrdType	Y	1 = Market 2 = Limit K = Market with Left Over as Limit	Char	Type of order specified by individual entering the order.
44	Price	N		Price	Price per share.
54	Side	Y	1 = Buy 2 = Sell	Char	Side submitted by the client.
→	***Block Instrument***	Y			Security Exchange field is always present
59	TimeInForce	N	0 = Day (or session) 1 = Good Till Cancel (GTC) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD)	Char	Specifies how long the order remains in effect. If not present, DAY order is the default.
60	TransactTime	Y		UTC Timestamp	Time at which the order was rejected.
150	ExecType	Y	8 = Rejected	Char (1)	The value will always be 8 for Rejected because the original FIX message was New Order – Single.

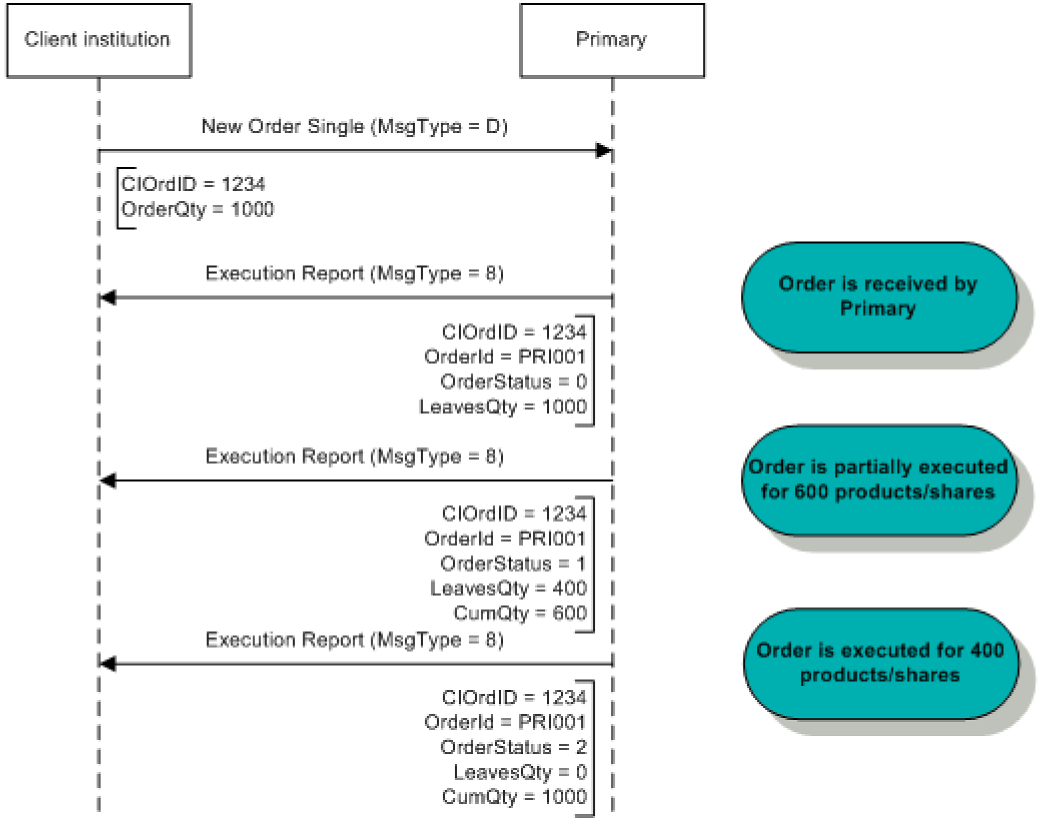
PRIMARY

Execution Report (MsgType = 8): Reject Message Response					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
151	LeavesQty	Y		Qty	Amount of instrument units open for further execution.
58	Text	N		String	
	Standard Trailer	Y			

Message Flow - Order Management

New Order – Single

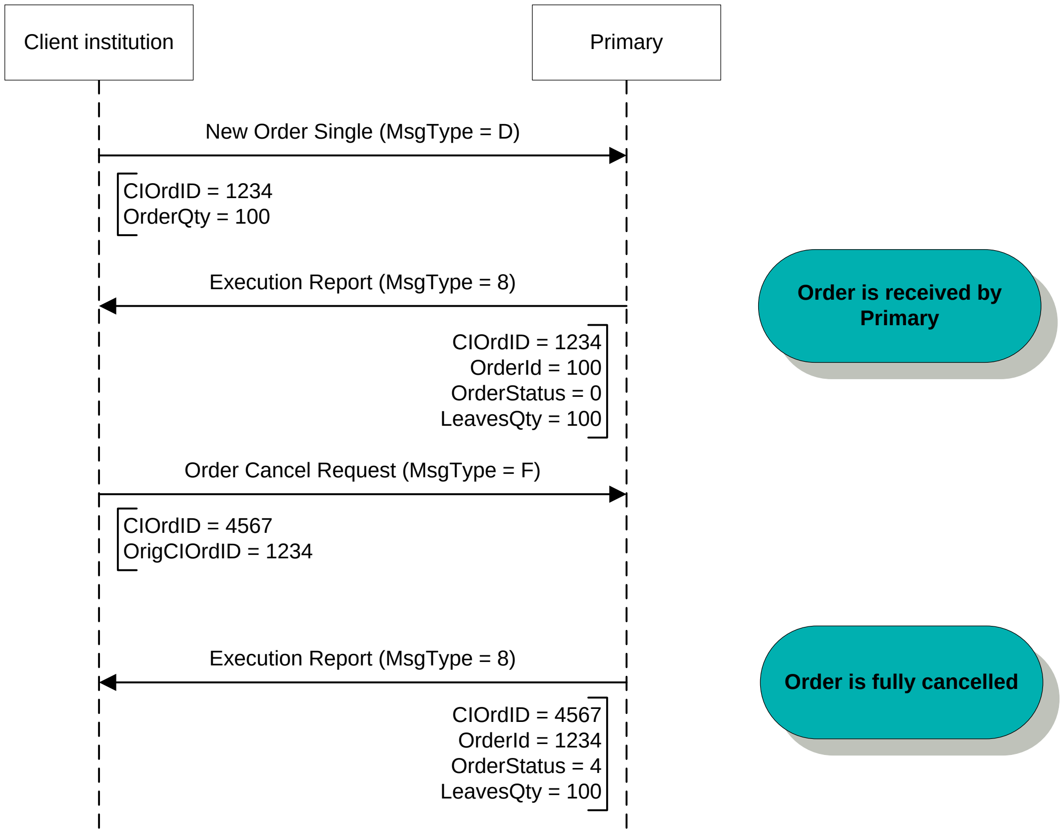
In this example, an order is sent by the client institution. This order is partially filled and is completely filled afterwards.



New Order, Partial Fill and Complete Fill

Order Cancel Request

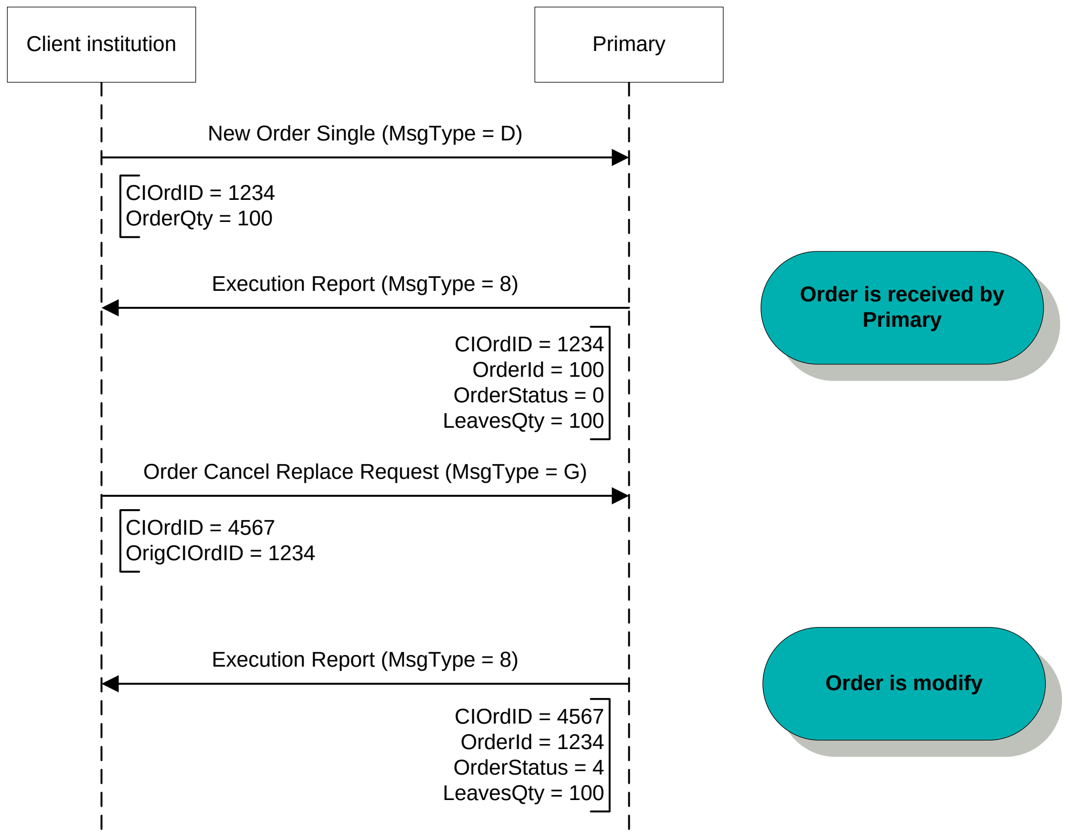
Once an order is accepted by the exchange, it is assigned a unique internal identifier by instrument, sent to the client in the tag OrderID in each Execution Report message. The client may take action on that order using the OrderID instead of the ClOrdID.



Order Cancellation

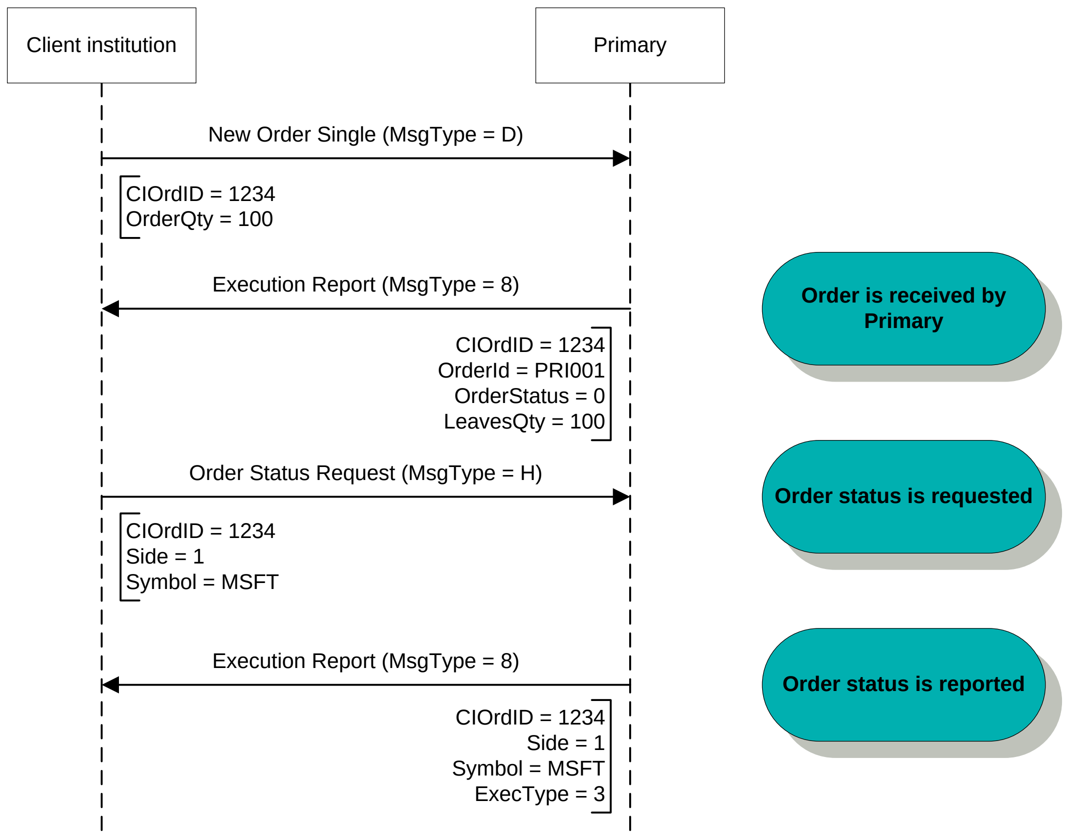
Order Cancel/Replace Request

Once an order is accepted by the exchange, it is assigned a unique internal identifier by instrument, sent to the client in the tag OrderID in each Execution Report message. The client may take action on that order using the OrderID instead of the ClOrdID.



Order Modification

Order Status Request



Order Status Request

Application Messages – Market Data

Message specification

Market Data Request (MsgType = V)

A Market Data Request is a general request for market data on a specific security. A successful Market Data Request returns one Market Data Full Snapshot message containing one or more Market Data Entries.

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

					Market Data Request (MsgType = V)
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 + Updates 2 = Disable Previous Snapshot + Update	Char	SubscriptionRequestType indicates to the other party what type of response is expected.
264	MarketDepth	Y	0 = Full Book 1 = Top of Book N >1 = Report best N price tiers of data	Int	Depth of market for Book Snapshot. Maximun depth 5.
265	MDUpdateType	C	0 = Full Refresh	Int	Conditional field when SubscriptionRequestType = 1 Specifies the type of Market Data update.
266	AggregatedBook	Y	Y = one book entry per side per price N = Multiple entries per side per price	Boolean	Specifies whether or not book entries should be aggregated.
→	***Block MDReq***	Y			Number of MDEntryType fields requested
267	NoMDEntryTypes	Y		NumInGroup (Int)	Number of MDEntryType fields requested.

Market Data Request (MsgType = V)						
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 B = TradeVolume 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.
→		***Block InstrumentMDReq***	Y			
146		NoRelatedSym	Y		NumInGroup (Int)	Number of symbols requested
→→		***Block Instrument***	Y			
		Standard Trailer	Y			

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

The Market Data Snapshot/Full Refresh messages are sent as the response to a Market Data Request message. The message refers to only one Market Data Request. It will contain the appropriate MDReqID tag value to correlate the request with the response.

						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)	Unique identifier for Market Data Request
→		***Block Instrument***	Y			
→		***Block MDFullGrp***	Y			Number of entries following.
268		NoMDEntries	Y		NumInGroup (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 B = TradeVolume C = Open Interest	Int	Must be the first field in this repeating group. Identifies the type of this entry
→→	*270*	***MDEntryPx***	C		Price	Price of the Market Data Entry. Conditional field when MDEntryType is 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

Market Data – Snapshot / Full Refresh (MsgType = W)						
Tag		FIX Name	Req	Valid Values	Format	Description
→→	*271*	***MDEntrySize***	C		Qty	Conditionally required if MDEntryType is 0 = Bid 1 = Offer 2 = Trade B = TradeVolume y C= Open Interest
→→	*272*	***MDEntryDate***	N		UTCDateOnly	Date of Market Data Entry.
→→	*273*	***MDEntryTime***	N		UTCTimeOnly	Time of Market Data Entry.
→→	*277*	***Trade Condition***	N	U = Exchange Last	String	For optional use in reporting Trades, MDEntryType=2.
→→	*7201*	***Trade Side***	N	1 = Buy 2 = Sell	Char	Side of the trade.
		Standard Trailer	Y			

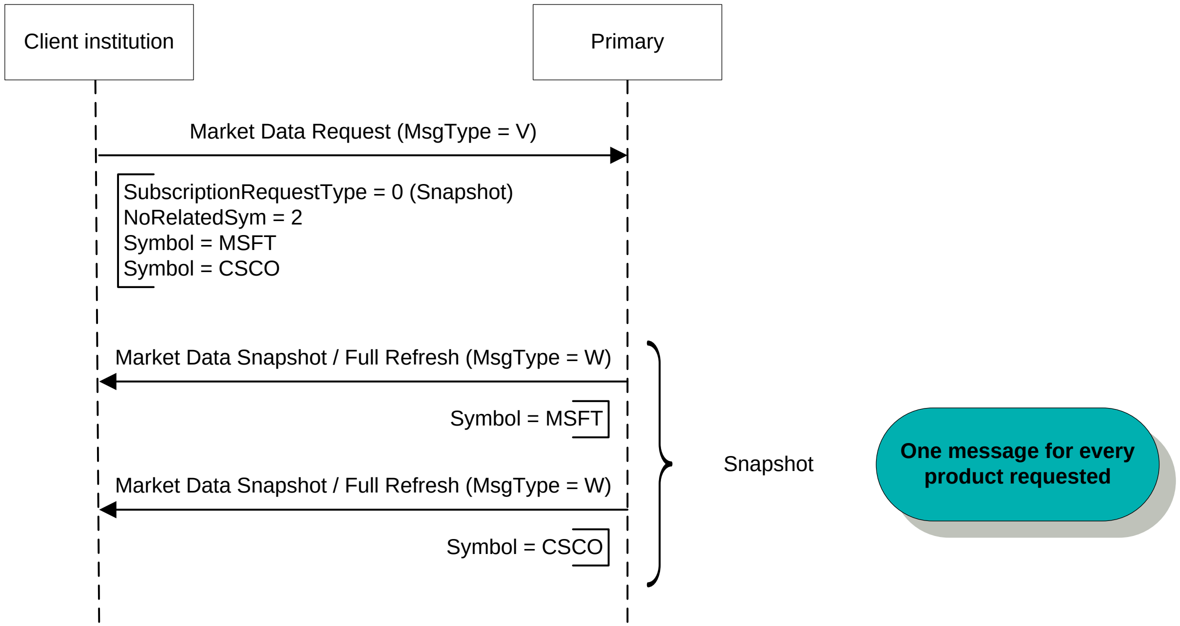
Market Data Request Reject (MsgType = Y)

The Market Data Request Reject will be issued by the Exchange when it cannot honor the Market Data Request, due to business or technical reasons.

Market Data Request Reject (MsgType = Y)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
	Standard Header	Y	MsgType = Y		
262	MDReqID	Y		String (32)	Must refer to the MDReqID of the 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			

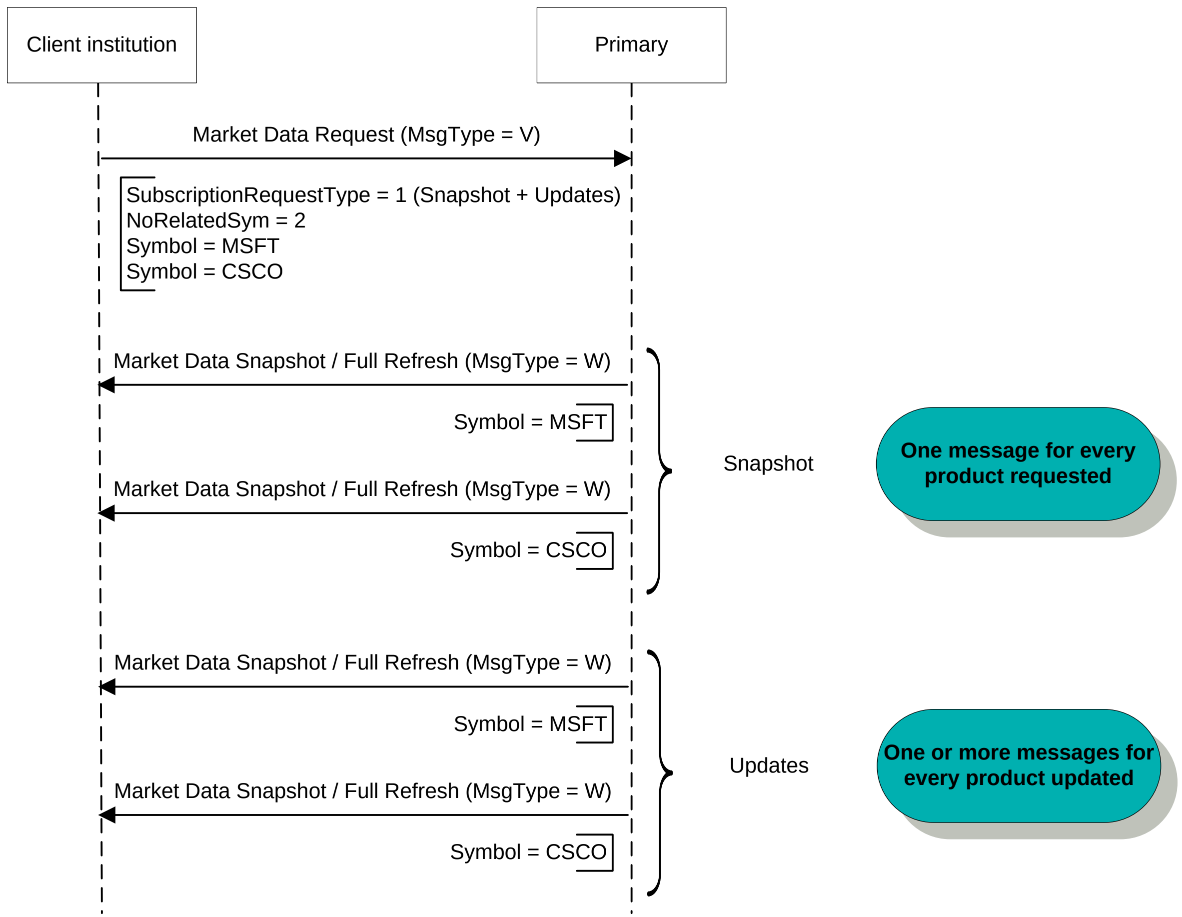
Message Flow - Market Data

Market Data Request (Full Refresh) without updates



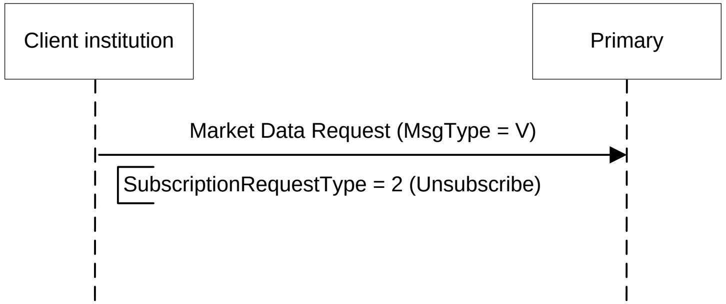
Market Data Request (Full Refresh) without updates

Market Data Request (Full Refresh) with updates



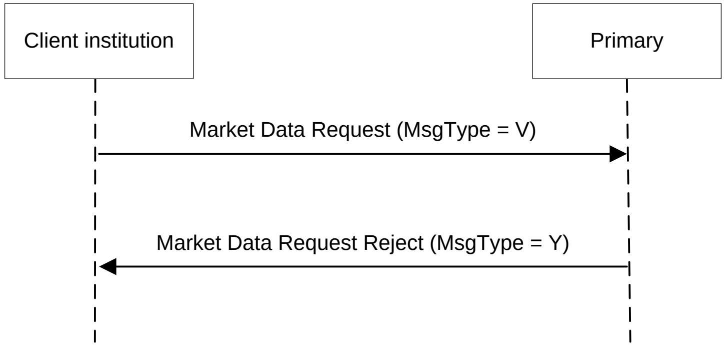
Market Data Request (Full Refresh) with updates

Market Data Unsubscribe



Market Data unsubscribe

Market Data Request Incorrect



Market Data Request Incorrect

Application Messages – Security Definition

FIX messages are utilized so that the connecting parties are able to determine which instruments are negotiated at the Exchange. Instrument definition messaging is based on a subscription model, in which the client institutions subscribe to receive instrument definitions according to specific criteria, and optionally receive updates afterwards. The subscription may be cancelled at any time.

Message specification

Security List Request (MsgType = x)

User by the client to request the instrument definitions, with the option of requesting instrument status.
Possible exchange's response messages: Security List (MsgType = y)

Security List Request (MsgType = x)

Tag	FIX Name	Req	Valid Values	Format	Description
	Standard Header	Y	MsgType = x		
320	SecurityReqID	Y		String	Unique identifier for each Security List Request message
559	SecurityListRequestType	Y	0 = Symbol 1 = SecurityType or CFICode 2 = Product 4 = All Securities	Int	Selection criteria used
1301	MarketID	N	"ROFX"	String	Identifies the market which lists and trades the instrument
1300	MarketSegmentID	N	"DDF", "DDA"	String	Identifies the market segment
→	***Block Instrument***	C			Conditional field where SecurityListRequestType is 0 = Symbol , in this case the security exchange-field is also expected.
→→ *461*	***CFICode***	C	FXXXS = Future OPXXXS = Option Put OCXXXS = Option Call DBXXXX= Bond XXWXXX = Swap FMXXS = Futures Spread	String	Conditional field where SecurityListRequestType is 1 = CFICode

Security List Request (MsgType = x)					
Tag	**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
263	SubscriptionRequestType	N	0 = Snapshot 1 = Snapshot + Updates 2 = Disable Previous Snapshot + Update	Char	Defines the type of subscription. By default Snapshot subscription.
	Standard Trailer	Y			

Security List (MsgType = y)

The Security List message is used to return a list of securities that matches the criteria specified in a Security List Request.

						Security List (MsgType = y)
Tag		**FIX Name**	**Req**	**Valid Values**	**Format**	**Description**
		Standard Header	Y	MsgType = y		
320		SecurityReqID	Y		String	Identifier of Security List Request message that it is replying to
322		SecurityResponseID	Y		String	Identifier for each Security List message
560		SecurityRequestResult	Y	0=Valid request 1=Invalid or unsupported request 2=No instruments found that match selection criteria 5=Request was rejected because the CFICode specified is not supported	Int	Result of request identified by SecurityReqID
1301		MarketID	N	“ROFX”	String	Identifies the market which lists and trades the instrument
1300		MarketSegmentID	N	“DDF”, “DDA”	String	Identifies the market segment
393		TotNoRelatedSym	Y		Int	Total number of securities. Now is equals to NoRelatedSym. For future use in fragmented messages.
893		LastFragment	Y	N = Not Last Message Y = Last Message	Boolean	Indicates whether this is the last fragment in a sequence of message fragments. Only required where message has been fragmented.
→		***Block SecList***				Specifies the number of repeating symbols (instruments) specified
146		NoRelatedSym	C	> = 1	NumInGroup (Int)	Indicates the number of instruments contained in this message. It is omitted when there are no instruments that meet the selection criteria
→→		***Block Instrument***	Y			Security Exchange is always present
→→→	*15*	*Currency*	N	ARS = Argentine pesos USD = U.S. dollars	String	Identifies currency used for price. Absence of this field is interpreted as the default for the security. It is recommended that systems provide the currency value whenever possible
→→→	*107*	*SecurityDesc*	Y		String	Security description . Can be used to provide an optional textual description for a financial instrument.

Tag		FIX Name	Req	Valid Values	Format	Description
						Security List (MsgType = y)
→→→	*461*	*CFICode*	Y	FXXXS = Future OPXXXS = Option Put OCXXXS = Option Call DBXXXX = Bond XXWXXX = Swap FMXXS = Futures Spread	String	Classification of Financial Instruments values. If an Option: StrikePrice and StrikePrice are required
→→→	*200*	*MaturityMonthYear*	C	YYYYMM	Month-Year	Month and Year of the maturity.Applicable for standardized derivatives which are typically only referenced by month and year
→→→	*541*	*MaturityDate*	C	YYYYMMDD	LocalMktDate	Specifies date of maturity (a full date). Present when MaturityMonthYear (=200) is present. Enrich the information in Field 200.
→→→	*202*	*StrikePrice*	C		Price	Required when, CFICode is OPXXXS or OCXXXS
→→→	*947*	*StrikeCurrency*	C	ARS = Argentine pesos USD = U.S. dollars	String	Currency in which the StrikePrice is denominated. Required when, CFICode is OPXXXS or OCXXXS.
→→→	*969*	*MinPriceIncrement*	Y		Float	Minimum Pricing Increment.
→→→	*5023*	*TickSize*	Y		Qty	Minimum permitted size change. Cannot be 0 (zero)
→→→	*1148*	*LowLimitPrice*	C		Price	Minimum authorized price at which an instrument can trade. Present if the security has this information associated.
→→→	*1149*	*HighLimitPrice*	C		Price	Maximum authorized price at which an instrument can trade. Present if the security has this information associated.
→→→	*5514*	*InstrumentPricePrecision*	Y		Int	Number of decimals in prices.
→→→	*7117*	*InstrumentSizePrecision*	Y		Int	Number of decimals in size.
→→→	*1140*	*MaxTradeVol*	N		Float	The maximum order quantity that can be submitted for a security.
→→→	*562*	*MinTradeVol*	N		Float	The minimum order quantity that can be submitted for a security.
→→→	*231*	*ContractMultiplier*	C		Float	Indicates the ratio or multiplier to convert "nominal" units to total units. Present if the security has this information associated.
→→		***Block UndInstrmt***	N			Underlying security's Symbol.
→→		***Block BaseTradingRules***	N			This block contains the base trading rules
→→→		***Block LotTypeRules***	N			
1234		NoLotTypeRules			NumInGroup (Int)	Number of Lot Types

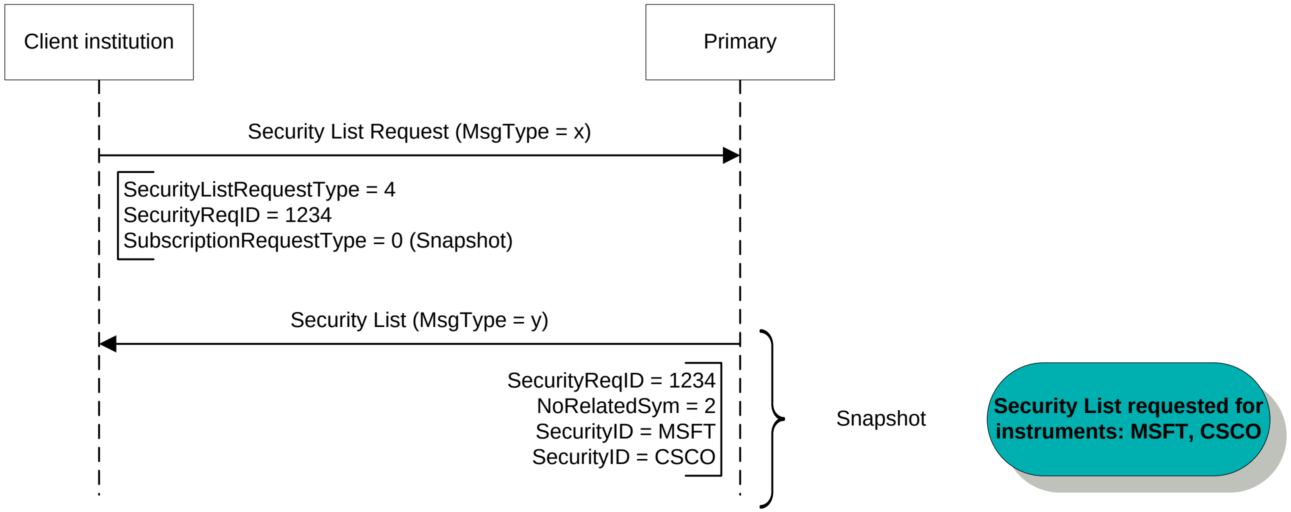
PRIMARY

Tag		FIX Name	Req	Valid Values	Format	Description
						Security List (MsgType = y)
→→→→	*1093*	*LotType*	N	3 = Block Lot	Char	Defines the lot type assigned to the order.
→→→→	*1231*	*MinLotSize*	C		Qty	Minimum lot size allowed based on lot type specified in LotType(1093) If LotType=3 means the min lot size for Block Trade orders.
→→		***Block TradingSessionRules***				
1309		NoTradingSessionRules			NumInGroup (Int)	
→→→	*336*	*TradingSessionID*	N		String	Identifier for the trading session Must be provided if NoTradingSessions > 0 Set to [N/A] if values are not specific to trading session.
→→→		***Block TradingSessionRules***				
→→→→		***Block TimeInForceRules***	N			specifies the time in force rules that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is trading session
1239		NoTimeInForceRules	N	1	NumInGroup (Int)	Number of time in force techniques
→→→→→	*59*	*TimeInForce*	N	0 = Day 1 = Good Till Cancel 3 = Inmediate or Cancel 4 = Fill or Kill 6 = Good Till Date	Char	Indicates time in force techniques that are valid for the specified market segment
→→→→		***Block ExecInstRules***	N			Specifies the execution instructions that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is trading session
1232		NoExecInstRules	N	1	NumInGroup (Int)	Number of execution instructions
→→→→→	*1308*	*ExecInstValue*	N	G = All or None	Char	Indicates execution instructions that are valid for the specified market segment

Security List (MsgType = y)						
Tag		FIX Name	Req	Valid Values	Format	Description
→→→→		***Block OrdTypeRules***	N			Specifies the order types that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is trading session.
1237		NoOrdTypeRules	N		NumInGroup (Int)	Number of order types
→→→→→	*40*	*OrdType*	N	1 = Market 2 = Limit K = Market With Left Over as Limit	Char	Indicates order types that are valid for the specified market segment.
		Standard Trailer	Y			

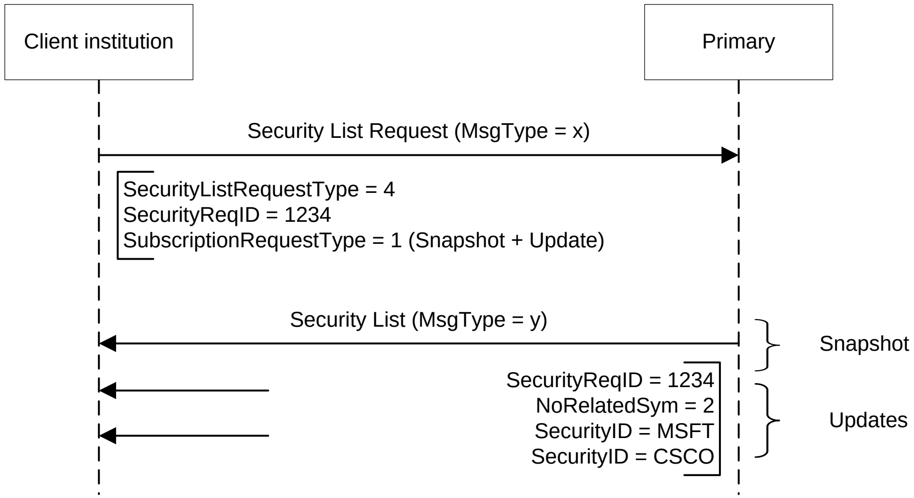
Message Flow - Security Definition

Security List without updates



Security List without updates

Security List with updates



Security List with updates