

FXall Active Trading

FXall Active Trading FIX Interface 1.4.1



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1. Introduction

This document describes the Financial Information Exchange (FIX) interface used by clients who need an industry standard way to access the FX market data and order entry features of the FXall system. FIX is a standard protocol used to communicate between financial institutions. FIX defines the format of messages to be used between trading partners.

The following business functions are supported by the FIX FXall FX Trading interface:

- Delivery of market data to clients. Market data consists of an order book for each currency pair traded over the FXall system. An order book consists of a set of bid quotes and a set of offer quotes.
- Processing of orders from the client. Each order requests the buying or selling of a certain quantity of a currency against another currency.
- Acknowledgement of the execution of customer orders.

The following sections describe the FIX sessions used by clients to communicate with the FXall system and the format of the messages used in this protocol.

1.1 Revision History

Version 1.0 – Initial version.

Version 1.1 – Added some tags for better support of some white label matching engine environments that are not used in the FXall OrderBook ECN.

Added optional tag 880 – TrdMatchID to the execution report. This value is only present with appropriately configured white label matching systems

Added the ability to specify a party ID on an order. A party role value of 61 (QuoteOriginator) is used to indicate that the PartyID should be copied to tag 282 – MDOriginator on the market data incremental refresh. The PartyID must be a positive whole number. The usage of the PartyID is for use by white label matching systems.

Version 1.2 – Added an additional tag for better support of some white label matching engine environments that is not used in the FXall OrderBook ECN.

Added optional, non-standard tag 7108 (ReferenceID). This is an alpha-numeric value that should not exceed 16 characters. If present this value will be copied to tag 282 – MDOriginator on the market data incremental refresh in a similar manner to the PartyID option specified in the section above for version 1.1. If both the PartyID and ReferenceID are specified on the Order than the ReferenceID will be appended to the PartyID and the two values will be pipe '|' delimited. In that case field tag value will be "PartyID + '|' + ReferenceID"

Version 1.4 – Added support for NDF Product. Additional tags to support NDF product include:

- Tag 120 Settlement Currency
- Tag 167 SecurityType

- Tag 541 Maturity Date
- Repeating Group of tags 453-448-452-447 for Market Data Request and New Order Single messages

Version 1.4.1 – The definition of the Tag 64 in the Execution Report has been changed – it should display the exact Settlement Date as a string in YYYYMMDD format.

1.2 Related Documentation

The reader should refer to the following documents for a complete description of the FIX protocol:

• FIX Protocol Limited, "Financial Information Exchange Protocol (FIX)", Version 4.3, Volumes 1 – 7 and Version 4.4

2. FIX Session

FIX sessions are mapped to TCP/IP connections. Clients connect to FXall over previously agreed upon IP addresses and ports. No encryption is performed at the FIX session level. FXall supports FIX version 4.3 and 4.4 protocols. Starting with version 1.3 of *"FXall Active Trading FIX Interface"* specification we will support NDFs trading on FXall Orderbook platform

The interface uses two FIX sessions to communicate between each client and FXall. The sessions are:

- Market Data session. Market data is requested by the client over this session. FXall returns order books and updates over this connection. Messages sent over the Market Data session are not recoverable. When the TCP connection fails and restarts, both the session send and receive sequence numbers are reset to 1. No attempt is made to recover undelivered messages. Clients must request that FXall refresh the order book for each currency symbol.
- Order Execution session. Clients submit orders over this connection and receive executions in return to indicate completion of each trade. Messages sent over the Order Execution session are recoverable. When the TCP connections fails and restarts, each side of the session must recover any potentially lost messages using standard FIX protocols. Sequence numbers are only be reset at the end of the trading session.

For each session, TargetCompId and SenderCompId will be agreed upon, before the FX trading client can communicate with FXall. Each session must have a unique combination of TargetCompId and SenderCompId.

Each client must also have a mechanism for synchronizing its system time with an atomic clock based on GMT. This will help ensure that FXall timestamps are in time sequence relative to client timestamps.

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3. FIX Messages

3.1 Summary of Supported Application Messages

Title	Tag	Description
Execution Report	8	Indication of the execution of a trade
Execution Acknowledgement	BN	Optional acknowledgement of receipt of an execution This message type is supported in FIX v5.0. We are using it in our 4.3/4
		implementation for improved support of FX trading.
Market Data Request	V	Request for market data for a particular currency pair.
Market Data Request Reject	Y	Rejection of request for market data.
Market Data – Snapshot / Full Refresh	W	Complete order book for a currency pair
Market Data Incremental Refresh	Х	Update to current quote for a currency pair.
Security List Request	x	Request for a list of currency pairs supported
Security List	У	List of currency pairs supported
Security Definition Request	С	Request for specific currency pair information such as days until spot
Security Definition	d	Specific currency pair information, such as days until spot
New Order – Single	D	Submit a request that a trade be performed
Order Cancel	F	Cancel an order that has been submitted
Order Cancel / Replace	G	Change the attributes of an order that has been submitted
Order Cancel Reject	9	Reject a request to cancel an order
Business Message Reject	j	General rejection message

3.2 Summary of Supported Session Level Messages

Title	Тад	Description
Heartbeat	0	Monitor status of communication link
Logon	А	Initiate a FIX session
Test Request	1	Force a Heartbeat from receiver
Resend Request	2	Request retransmission of messages
Reject	3	Session level message rejection
Sequence Reset (Gap Fill)	4	Reset the incoming sequence number of the receiver
Logout	5	Terminate a FIX session

3.3 FIX Message Header/Trailer Fields

FXall uses the standard fields of the FIX header and trailer. The presence of optional fields in messages received by FXall is accepted. The optional fields are ignored by FXall.

3.3.1 Inbound Header

Rep	Tag	Field Name	Req'd	Description
	8	BeginString	Y	Value must be set to "FIX.4.3".
	9	BodyLength	Y	Length of the message.
	35	MsgType	Y	Message opcode.
	49	SenderCompID	Y	Identifier of the customer for this session. This value will be previously agreed upon by the customer and FXall Trading.
	56	TargetCompID	Y	Identifier of FXall Trading for this session. This value will be previously agreed upon by the customer and FXall Trading.
	34	MsgSeqNum	Y	Message sequence number.
	52	SendingTime	Y	Timestamp for message transmission.

3.3.2 Inbound Trailer

Rep	Tag	Field Name	Req'd	Description
	10	CheckSum	Y	Value calculated to check integrity of the message. This value is always the last field in the message



3.3.3 Outbound Header

Rep	Tag	Field Name	Req'd	Description
	8	BeginString	Y	Value must be set to "FIX.4.3" or "FIX.4.4"
	9	BodyLength	Y	Length of the message.
	35	MsgType	Y	Message opcode.
	49	SenderCompID	Y	Identifier of FXall Trading. for this session. This value will be previously agreed upon by the customer and FXall Trading.
	56	TargetCompID	Y	Identifier of the customer for this session. This value will be previously agreed upon by the customer and FXall Trading.
	143	TargetLocationID	Ν	Identifier of a group (desk, sub-firm, location) or branch within the firm for the message. The tag value may change throughout a session
	57	TargetSubID	Y	Identifier of a login (trader, user) within the firm which caused the message. For instance, for the execution report, it identifies the trader who performed the trade. The tag value may change throughout a session. This tag is required on the outbound header and the value should never be blank.
	34	MsgSeqNum	Y	Message sequence number.
	52	SendingTime	Y	Timestamp for message transmission.

3.3.4 Outbound Trailer

Rep	Tag	Field Name	Req'd	Description
	10	CheckSum	Y	Value calculated to check integrity of the message. This value is always the last field in the message

3.4 Message Flows

3.4.1 Market Data Session

The following messages are sent by the client to FXall:

- Market Data Request
- Security List Request
- Security Definition Request



The following messages are sent by FXall to the client:

- Market Data Request Reject
- Market Data Snapshot / Full Refresh
- Market Data Incremental Refresh
- Security List
- Security Definition
- Business Message Reject



FX Trading Client FXall Market Data Request Request is invalid (bad symbol, value date, etc) Market Data Request (Snapshot Only) Market Data Snapshot/ Full-Refresh Market Data Request (Snapshot + Updates) Market Data Snapshot / Full-Refresh Market Data Incremental Refresh Market Data Changes Market data Request (Unsubscribe)() No More Market data Sent for Symbol, value date

A typical market data message flow between the client and FXall FX is shown below:



3.4.2 Order Execution Session

The following messages are sent by the client to FXall:

- New Order Single
- Order Cancel
- Order Cancel / Replace
- Execution Acknowledgement

The following messages are sent by FXall to the client:

- Execution Report
- Order Cancel Reject
- Business Message Reject

A typical order message flow between the client and FXall FX is shown below:





3.5 Market Data Messages

FXall has the ability to deliver Market Data using two protocols: FIX and our proprietary ASCII format which is similar to ITCH.

If you wish to connect for Market data using our alternative protocol, please contact your account representative for the specification.

Note that in the following tables repeating groups are indicated by the string "->". In repeating groups, tags must follow the order specified in this document.

3.5.1 Market Data Request

Rep	Tag	Field Name	Req'd	Description
	262	MDReqID	Y	Unique identifier for the market data request.
	263	Subscription RequestType	Y	0 = Snapshot 1 = Snapshot + Updates (Subscribe) 2 = Disable Previous Request (Unsubscribe)
	264	MarketDepth	Y	 0 = Full Book N > 0 = Report best N price tiers of data, amounts aggregated at price points 1 = 1 aggregated price level, "Top of Book" 2 or more = 2 or more aggregated price levels
	265	MDUpdateType	Ν	Required if SubscriptionRequestType (tag 263) = 1: 1 = Incremental Refresh (only supported value)
	267	NoMDEntryTypes	Y	Number of MDEntryTypes
÷	269	MDEntryType	Y	Only these field values are supported: 0 = Bid 1 = Offer
	146	NoRelatedSym	Y	Only 1 symbol is supported per request message
<i>→</i>	55	Symbol	Y	Currency pair for which market data is being requested. This field is encoded according to standard FIX FX standards. See Section 3.8.1 for description of symbol format.
<i>→</i>	64	FutSettDate	N	Specifies the tenor/maturity of the instrument as a string – for instance for a USD/BRL one month NDF the FutSettDate would be "1M". For spot this is specified as "SPOT". If not specified, "SPOT" is implied. The use of this field does not conform to standard FIX. This field is used to better support FX trading.



Rep	Tag	Field Name	Req'd	Description
	167	SecurityType	N	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)
	453	NoPartyIDs	Ν	Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries
÷	448	PartyID	N	 Party identifier/code. Supported values: DCO_ID /e.g. CME001 SEF_ID /e.g. FXALSEF011 The use of this field does not conform to standard FIX. This field is used to better support FX trading.
÷	452	Identifies the type or role of the PartyID (448) specified.	С	Supported values: • 21 – Clearing Organization /e.g. 448 = CME001/ • 16 - Executing System /e.g. 448 = FXALSEF011/ Conditional - Required if PartyID is specified The use of this field does not conform to standard FIX. This field is used to better support FX trading.
÷	447	Identifies class or source of the PartyID (448) value.	С	 Supported values: D – Proprietary Conditional - Required if PartyID is specified The use of this field does not conform to standard FIX. This field is used to better support FX trading.

3.5.2 Market Data Request Reject

Rep	Tag	Field Name	Req'd	Description
	262	MDReqID	Y	Unique identifier for the market data request
	281	MDReqRejReason	Ν	Reason for rejection.
	58	Text	Ν	Further explanatory text

3.5.3 Market Data – Snapshot / Full Refresh

Rep	Tag	Field Name	Req'd	Description
	262	MDReqID	Y	Unique identifier for the market data request
	55	Symbol	Y	Currency pair for which the market data applies
	64	FutSettDate	Y	Specifies the tenor/maturity of the instrument as a string – for instance for a USD/BRL one month NDF the FutSettDate would be "1M". For

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Rep	Tag	Field Name	Req'd	Description
				spot this is specified as "SPOT". If not specified, "SPOT" is implied.
				The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	268	NoMDEntries	Y	Number of entries that follow
\rightarrow	269	MDEntryType	Y	0 = Bid 1 = Offer
\rightarrow	278	MDEntryID	Y	Unique identifier for this market data quote. Updates to this market data bid/offer will use this ID to reference the quote.
\rightarrow	270	MDEntryPx	Y	Price being quoted
\rightarrow	271	MDEntrySize	Y	Size in base currency available at the quoted price
→	537	QuoteType	N	Indentifies the type of quote 0 - Indicative 1 - Tradable This is a standard FIX field for v5.0 used by FXall in our FIX 4.3/4.4 implementation to better support FX trading.
>	282	MDEntryOriginator	Ν	 Text field indicating the originator of the market data order. Normally this field will be empty, except in one of two cases. 1) When an order was placed by a related FIX order entry session for the trading firm. In this case the field will simply state "FIRM" in order to flag the market data as being an order belonging to the firm. 2) When an order is entered in a white label matching engine environment with a party role value of 61. The PartyID value on such an order will be copied to tag 282 when that order is published as market data. 3) When an order is entered in a white label matching engine environment with a ReferenceID, the ReferenceID value on such an order will be copied to tag 282 when that order is published as market data. 4) When an order is entered in a white label matching engine environment with both a party role value of 61 and a ReferenceID value, the PartyID value and ReferenceID



Rep	Tag	Field Name	Req'd	Description
				will be appended together and populated in tag 282 when that order is published as market data. The fields will be pipe delimited. So format will be "PartyID + ' ' + ReferenceID"
→	110	MinQty	N	Minimum quantity of an order to be executed. The value will only be specified when the MarketDepth on the market data request was set to FullBook.
\rightarrow	290	MDEntryPositionNo	Y	Numerical entry represented as a long value. Can be used to determine time-priority.
÷	120	SettlCurrency	Ν	Currency code of settlement denomination. Required for NDF Currency Pairs and must be presented in the terms of deliverable currency in the pair.
<i>→</i>	167	SecurityType	N	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)
<i>→</i>	541	MaturityDate	N	Tenor/maturity date of the instrument relative to spot. For NDFs this represents the fixing date of the contract.



3.5.4 Market Data Incremental Refresh

Rep	Tag	Field Name	Req' d	Description
	262	MDReqID	Y	Unique identifier for market data request
	55	Symbol	Y	Currency pair for which the market data refresh entries apply.
	268	NoMDEntries	Y	Number of entries that follow (Will be 1 or more)
→	279	MDUpdateAction	Y	Type of market data update action 0 = New 1 = Change 2 = Delete
<i>→</i>	269	MDEntryType	Y	Type of market data entry. 0 = Bid 1 = Offer
→	278	MDEntryID	Y	Unique identifier for this market data quote. Updates to this market data bid/offer will use this ID to reference the quote.
<i>→</i>	280	MDEntryRefID	Ν	If MDUpdateAction = 1 (Change) and MDEntryRefID is specified then an existing market data entry with ID MDEntryRefID will have its ID changed to the value of MDEntryID. Otherwise MDEntryID must remain the same for subsequent refreshes of the same market data entry.
→	270	MDEntryPx	Ν	Current value of bid/offer for currency pair. Required if MDUpdateAction = $0/1$
<i>></i>	271	MDEntrySize	Ν	Current quantity for quoted rate. Required if MDUpdateAction = 0/1
>	537	QuoteType	N	Indentifies the type of quote 0 - Indicative 1 - Tradable This is a standard FIX field for v5.0 used by FXall in our FIX 4.3/4.4 implementation to better support FX trading.
>	282	MDEntryOriginator	Ν	 Text field indicating the originator of the market data order. Normally this field will be empty, except in one of two cases. 1) When an order was placed by a related FIX order entry session for the trading firm. In this case the field will simply state "FIRM" in order to flag the



Rep	Tag	Field Name	Req' d	Description
				 market data as being an order belonging to the firm. 2) When an order is entered in a white label matching engine environment with a party role value of 61. The PartyID value on such an order will be copied to tag 282 when that order is published as market data. 3) When an order is entered in a white label matching engine environment with a ReferenceID, the ReferenceID value on such an order will be copied to tag 282 when that order is published as market data. 4) When an order is entered in a white label matching engine environment with both a party role value of 61 and a ReferenceID value, the PartyID value and ReferenceID will be appended together and
				populated in tag 282 when that order is published as market data. The fields will be pipe delimited. So format will be "PartyID + ' ' + ReferenceID"
<i>></i>	110	MinQty	Ν	Minimum quantity of an order to be executed. The value will only be specified when the MarketDepth on the market data request was set to FullBook.
<i>></i>	290	MDEntryPositionNo	Ν	Date/time of entry represented as a long value. Can be used to determine time-priority.
→	64	FutSettDate	Y	Specifies the tenor/maturity of the instrument as a string – instance for a USD/BRL one month NDF the FutSettDate would be "1M". For spot this is specified as "SPOT". If not specified, "SPOT" is implied. The use of this field does not conform to standard FIX. This field is used to better support FX trading.
>	120	SettlCurrency	Ν	Currency code of settlement denomination. Required for NDF Currency Pairs and must be presented in the terms of deliverable currency in the pair.
<i>→</i>	541	MaturityDate	Ν	Tenor/maturity date of the instrument relative to spot. For NDFs this represents the fixing date of the contract.
→	167	SecurityType	Ν	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)



3.5.5 Security List Request

Rep	Tag	Field Name	Req'd	Description
	320	SecurityReqID	Y	Unique identifier for this security list request
	559	SecurityListRequestType	Y	Type of security list request being made. The only supported value is 4 – "All Securities".
	55	Symbol	Ν	If specified, filters the returned instrument list to only include those instruments which match the supplied Symbol.
	64	FutSettDate	Ν	Specifies the tenor/maturity of the instrument as a string – for instance for a USD/BRL one month NDF the FutSettDate would be "1M". For spot this is specified as "SPOT". If not specified, "SPOT" is implied. The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	167	SecurityType	Ν	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)

3.5.6 Security List

Rep	Tag	Field Name	Req'd	Description
	320	SecurityReqID	Y	Unique identifier for the security list request that created this message
	322	SecurityResponseID	Y	Identifier for this security list message
	560	SecurityRequestResult	Y	Result of the Security Request identified by the SecurityReqID – possible values are as follows: "SUCCESS" – one or more instruments are returned which meet criteria specified in the security list request "NO MATCH" – due to filtering criteria no instruments were returned "ERROR" – an error occurred which prevented the symbols from being returned
	146	NoRelatedSym	Ν	Specifies the number of repeating symbols (instruments) returned in this security list. Required if SecurityRequestResult is "SUCCESS"
→	55	Symbol	Ν	Symbol of the instrument (currency pair) returned in this list. For instance "EUR/JPY".
<i>→</i>	64	FutSettDate	Ν	Specifies the tenor/maturity of the instrument as a string – for instance for a USD/BRL one month NDF the FutSettDate would be "1M". For spot this is specified as "SPOT". If not specified, "SPOT" is implied. The use of this field does not conform to standard FIX. This field is used to better
				support FX trading.
→	541	MaturityDate	Ν	Tenor/maturity date of the instrument relative to spot. For NDFs this represents the fixing date of the contract.
→	167	SecurityType	N	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)

3.5.7 Security Definition Request

Rep	Tag	Field Name	Req'd	Description
	320	SecurityReqID	Y	Unique identifier for this security definition request
	321	SecurityRequestType	Y	Type of request being issued. The only supported value is 0 = "Request Security identity and specifications".
	55	Symbol	Y	Symbol of the instrument (currency pair) for which information is being requested. For instance "EUR/JPY".
	64	FutSettDate	Ν	Specifies the tenor/maturity of the instrument as a string – for instance for a USD/BRL one month NDF the FutSettDate would be "1M". For spot this is specified as "SPOT". If not specified, "SPOT" is implied.
				The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	167	SecurityType	Ν	Indicates type of security. If not presented the Security Type is FXSPOT.
				FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)



3.5.8 Security Definition

Rep	Tag	Field Name	Req'd	Description
	320	SecurityReqID	Y	Unique identifier for the security definition request that created this message
	322	SecurityResponseID	Y	Identifier for this security definition message
	323	SecurityResponseType	Y	Type of response that is embodied in this security definition message. Valid values are Type of Security Definition message response. Valid values: 1 = Accept security proposal as is 5 = Reject security proposal 6 = Can not match selection criteria
	55	Symbol	Y	Symbol of the instrument (currency pair) returned in this definition. For instance "EUR/JPY".
	64	FutSettDate	Y	Specifies the tenor/maturity of the instrument as a string – for instance for a USD/BRL one month NDF the FutSettDate would be "1M". For spot this is specified as "SPOT". If not specified, "SPOT" is implied. The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	7100	Currency1	N	ISO Currency code indicating the first currency in the currency pair represented by Symbol. For instance for "EUR/JPY" Currency1 is "EUR". This is a non-standard FIX field used by FXall Trading . to better support FX trading.
	7101	Currency2	N	ISO Currency code indicating the second currency in the currency pair represented by Symbol. For instance for "EUR/JPY" Currency2 is "JPY". This is a non-standard FIX field used by FXall Trading. to better support FX trading.
	7102	DaysToSpot	Ν	Integer value representing the number of days until spot settlement for the Symbol specified. This is measured from the current trade date as determined at the time the Security Definition message is generated. This is a non-standard FIX field used by FXall



Rep	Tag	Field Name	Req'd	Description
				Trading to better support FX trading.
,	7103	BasisPoint	Ν	 Integer value representing the decimal position of one point, or pip used to deal in the currency. For instance for EUR/JPY a point (pip) is represented by decimal place 2, whereas for EUR/GBP a pip is represented at decimal place 4. This is a non-standard FIX field used by FXall Trading to better support FX trading.
7	7104	RatePrecision	N	Integer value representing the highest decimal precision used to show prevailing prices in the currency pair specified by Symbol. For instance for EUR/JPY the rate precision is typically 2, whereas for EUR/GBP the rate precision is typically 5. This is a non-standard FIX field used by FXall
				Trading to better support FX trading.
7	7105	RateTerm	N	ISO Currency code indicating the currency in terms of which the price for the currency pair represented by Symbol is expressed. For instance for "EUR/JPY" RateTerm is "JPY".
				This is a non-standard FIX field used by FXall Trading. to better support FX trading.
,	7106	Currency1AmtDecimals	N	Integer value representing the decimal precision with which the quantity of Currency1 will be measured for executions in the currency pair specified by Symbol. This is typically 2. This is a non-standard FIX field used by FXall Trading. to better support FX trading.
7	7107	Currency2AmtDecimals	N	Integer value representing the decimal precision with which the quantity of Currency2 will be measured for executions in the currency pair specified by Symbol. This is typically 2. This is a non-standard FIX field used by FXall Trading to better support FX trading.
1	167	SecurityType	Ν	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)

3.6 Order Entry Messages

3.6.1 New Order – Single

Rep	Tag	Field Name	Req' d	Description
	11	ClOrdID	Y	Unique identifier assigned by the FX trading client.
	453	NoPartyIDs	Ν	Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries
÷	448	PartyID	N	 Party identifier/code. Supported values: DCO_ID /e.g. CME001 SEF_ID /e.g. FXALSEF011 The use of this field does not conform to standard FIX. This field is used to better support FX trading.
>	452	Identifies the type or role of the PartyID (448) specified.	С	Supported values: • 21 – Clearing Organization /e.g. 448 = CME001/ • 16 - Executing System /e.g. 448 = FXALSEF011/ Conditional - Required if PartyID is specified The use of this field does not conform to standard FIX. This field is used to better support FX trading.
÷	447	Identifies class or source of the PartyID (448) value.	С	 Supported values: D – Proprietary Conditional - Required if PartyID is specified The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	7108	ReferenceID	N	This is an alpha-numeric value that should not exceed 16 characters. If present this value will be copied to tag 282 – MDOriginator on the market data incremental refresh as documented in that messages specification.
	1	Account	Y	Account on which order is being placed. This can be a prior-defined FXall FX account alias, as well. When the order is placed on behalf of a client (AccountType = 1), the account is set in tag 115 (in the header) instead, and this tag (1) specifies the prime broker associated with that account.
	55	Symbol	Y	Currency pair for which the order is being requested. This field is encoded according to standard FIX FX standards. See Section 3.8.1 for description of symbol format.
	64	FutSettDate	Y	Specifies the tenor/maturity of the instrument as a string – for instance for a USD/BRL one month NDF the

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Rep	Tag	Field Name	Req' d	Description
				FutSettDate would be "1M". For spot this is specified as "SPOT". If not specified, "SPOT" is implied.
				The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	15	Currency	N	Identifies the currency used to specify quantity, also known as the "dealt" currency. For instance if Symbol = USD/JPY and Currency = JPY then OrderQty should be specified as an amount of Japanese Yen. If omitted then the dealt currency is assumed to be the base currency (CCY1) of the CCY1/CCY2 Symbol specified.
	54	Side	Y	Side of the trade from the perspective of the submitter of the New Order. The side reflects whether or not the originator of the order wishes to buy or sell the "dealt" currency, specified in Tag 15, Currency. For OrdType = FX – Swap the side specified for Tag 54 is assumed to be reversed in the second leg. 1 = Buy Dealt Currency (also Sell Counter Currency) 2 = Sell Dealt Currency (also Buy Counter Currency)
	38	OrderQty	Y	Amount of currency (Tag 15) that is requested for the order. The OrderQty for the second leg of an FX – Swap is assumed to be the same as that of the first leg, although the side will be reversed.
	40	OrdType	Y	Type of the order: 1 = Market 2 = Limit
	44	Price	N	Worst exchange rate at which the currency pair order can be executed by FXall FX. Required for Limit and Pegged Orders. Represents the most aggressive price allowed (top or bottom) for a pegged order.
:	388	DiscretionInst	N	Indicates the price to which the discretion offset applies. This value must always be set to 0 = Related to displayed price. The tag is required if DiscretionOffset is supplied.
	389	Discretion Offset	N	Amount (signed) added to the "related to" price specified via DiscretionInst. This tag is not allowed for market orders.
	110	MinQty	N	Minimum fill quantity of an order to be executed. Default value is 0. This value must be less than or equal to the minimum show quantity for the dealt currency specified on the order. The minimum-show-quantities for currencies are published in a separate document and subject to
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Rep	Tag	Field Name	Req' d	Description
				change.
	111	MaxFloor	N	Maximum quantity of Currency (tag 15) to be shown for this order in the FXall FX book and market data at any time. If this tag value is 0, the order will be a hidden order. If this tag is omitted, the full quantity of the order will be shown.
	59	TimeInForce	N	Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. Valid values: 0 = Day 3 = Immediate or Cancel (IOC)
	18	ExecInst	N	Instructions for order handling on exchange trading floor. If more than one instruction is applicable to an order, this field can contain multiple instructions separated by space. Valid values: FXall currently does not support any ExecInst. The contents of this field will be ignored.
	60	TransactTime	Y	Time expressed in UTC
	58	Text	Ν	Explanatory text optionally used for ExecType = 8 (Rejected) or Free Form Text from Order – Maximum size is 255 characters
	541	MaturityDate	Ν	Tenor/maturity date of the instrument relative to spot. For NDFs this represents the fixing date of the contract.
	120	SettlCurrency	Ν	Currency code of settlement denomination. Required for NDF Currency Pairs and must be presented in the terms of deliverable currency in the pair.
	167	SecurityType	Ν	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)

3.6.2 Execution Report

Rep	Tag	Field Name	Req' d	Description
	37	Orderld	Y	Unique value assigned to order. Must be unique for trading day. Assigned by FXall Trading.
	11	ClOrdID	Y	Unique identifier assigned by the FX trading client.
	41	OrigClOrdID	Ν	Usage as per FIX standards for FIX 4.3.
	527	USI	С	Each swap (NDF, FWD, SWAP) is required to be identified in all data reporting and recordkeeping by a Unique Swap Identifier ("USI").
	453	NoPartyIDs	Ν	Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries
÷	448	PartyID	Ν	 Party identifier/code. Supported values: DCO_ID /e.g. CME001 SEF_ID /e.g. FXALSEF011 LEI /e.g.12345678/ The use of this field does not conform to standard FIX. This field is used to better support FX trading.
>	452	PartyRole	С	Supported values: • 21 – Clearing Organization /e.g. 448 = CME001/ • 16 - Executing System /e.g. 448 = FXALSEF011/ • 1 - LEI /e.g.448 = 12345678/ Conditional - Required if PartyID is specified The use of this field does not conform to standard FIX. This field is used to better support FX trading.
<i>→</i>	447	Identifies class or source of the PartyID (448) value.	С	 Supported values: D – Proprietary Conditional - Required if PartyID is specified The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	7108	ReferenceID	Ν	This is an alpha-numeric value that should not exceed 16 characters. If present this value will be copied to tag 282 – MDOriginator on the market data incremental refresh as documented in that messages specification.
	880	TrdMatchID	N	Unique value assigned to both trades in a matched pair. Assigned by FXall. <u>This tag is only present with appropriately configured white</u> <u>label matching systems.</u>

Rep Tag	Field Name	Req' d	Description
17	ExecID	Y	Unique value assigned to this execution. Assigned by FXall Trading.
19	ExecRefID	Ν	Required for Trade Cancel and Trade Correct ExecType messages.
			Describes the purpose of the execution report. Supported values:
			0 = New
			3 = Done for day
			4 = Canceled
			5 = Replace
150	ExecType	Y	6 = Pending Cancel (e.g. result of Order Cancel Request)
	,,		8 = Rejected
			A = Pending New
			C = Expired
			E = Pending Replace (e.g. result of Order Cancel - Replace
			Request) E = Trade (partial fill or fill)
			F = Trade (partial fill or fill)
			Describes the current state of the order. Supported values:
			0 = New
			1 = Partially filled
			2 = Filled
			3 = Done for day
39	OrdStatus	Y	4 = Canceled
			6 = Pending Cancel (e.g. result of Order Cancel Request)
			8 = Rejected
			A = Pending New
			C = Expired
			E = Pending Replace (e.g. result of Order Cancel - Replace
103	OrdPaiPasson	N	Request) For optional use with ExecType = 8
102	OrdRejReason	IN	Explanatory text optionally used for ExecType = 8
	Text	_	(Rejected) or
58		Ν	Free Form Text from Order – Maximum size is 255
			characters
1	Account	Ν	Account mnemonic identifying the submitter of the original order.
55	Symbol	Y	Currency pair for which the execution is being performed.

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Rep T	Гад	Field Name	Req' d	Description
				This field is encoded according to standard FIX FX standards with additional FXall requirements. See Section 3.8.1 for description of symbol format.
6	64	FutSettDate	N	Contains the exact settlement or "value date" for the first (or only) leg of an execution. This is not a tenor. The settlement date is specified as a string in YYYYMMDD format and represents either a spot or forward transaction. The use of this field does not conform to standard FIX. This field is used to better support FX trading.
1	15	Currency	Ν	Identifies the currency used to specify quantity, also known as the "dealt" currency. For instance if Symbol = USD/JPY and Currency = JPY then OrderQty should be specified as an amount of Japanese Yen. If omitted then the dealt currency is assumed to be the base currency (CCY1) of the CCY1/CCY2 Symbol specified.
5	54	Side	Y	Side of the trade from the perspective of the submitter of the original New Order. The side reflects whether or not the originator of the order bought or sold the "dealt" currency, specified in Tag 15, Currency. For OrdType = FX – Swap to the side specified for Tag 54 is assumed to be reversed in the second leg. 1 = Bought Dealt Currency (also Sold Counter Currency) 2 = Sold Dealt Currency (also Bought Counter Currency)
3	38	OrderQty	Y	Amount of currency (Tag 15) that was requested to be executed. The OrderQty for the second leg of an FX – Swap is assumed to be the same as that of the first leg, although the side will be reversed.
Ĺ	40	OrdType	Ν	Order type as specified on original order (see New Order message). Typically Market, Limit, etc.
4	44	Price	Ν	Price at which the trade was requested. Required if the price was indicated in the order.
3	888	DiscrectionInst	Ν	Required if specified on the original order.
3	89	Discretion Offset	Ν	Required if specified on the original order.
1	10	MinQty	Ν	Required if specified on the original order.
1	11	MaxFloor	Ν	Required if specified on the original order.
5	59	TimeInForce	Ν	Required if value specified on the order is not DAY.
1	18	ExecInst	Ν	Required if specified on the original order.
10	057	AggressorIndicator	Ν	Used to identify whether the order initiator is an aggressor

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Rep Tag	Field Name	Req' d	Description
			or not in the trade. Valid Values: Y - Order initiator is aggressor N - Order initiator is passive
382	NoContraBrokers	Ν	Required if ContraBroker is specified. Always NoContraBrokers=1 as a FXall FX execution has one counterparty.
375	ContraBroker	Ν	Specifies the counterparty broker of the opposing side for the execution. Only supplied if the trading client does not have a sponsoring prime broker bank.
32	LastQty	N	Quantity traded on this fill in terms of Currency (Tag 15). For FX-Swap orders the quantity of the second leg is the same for LastQty, although LastQtyContra2 (quantity of counter-currency) will be different. Required if ExecType = F (fill or partial fill).
7000	LastQtyContra	N	Indicates the size of the trade as measured in the second currency (i.e. the currency not indicated in the Currency field). This is provided as a confirmation of the spot rate and to ensure rounding errors do not occur. Required if ExecType = F (fill or partial fill). This is a non-standard FIX field used by FXall Trading to better support FX trading.
31	LastPx	N	Rate for the execution. Should represent the "all-in" (LastSpotRate + LastForwardPoints) rate for F/X orders.) For swaps this is the all-in price for the first leg of the execution. Required if ExecType = F (fill or partial fill). Not required for FX Swap when ExecType = Trade or Trade Correct as there is no "all-in" rate that applies to both legs of the FX Swap.
194	LastSpotRate	N	FX Spot rate for the execution. Required if ExecType = F (fill or partial fill).
30	LastMkt	N	Market of execution of this fill. Valid values are XFXALLFXECN or XFXALLFXIB.
151	LeavesQty	N	Amount of the overall order left for further execution, specified in terms of Currency, Tag 15.
14	CumQty	Ν	Currently executed amount for the overall order, specified in terms of Currency, Tag 15.
6	AvgPx	Ν	Rolling average price of all fills for the order up to and including the current fill. If the OrdStatus = Filled or Cancelled then this is the AvgPx for the entire order

Rep	Tag	Field Name	Req' d	Description
				because the order is complete.
	75	TradeDate	Ν	Trade date for the execution. Required if ExecType = F (fill or partial fill).
	60	TransactTime	Ν	Time expressed in UTC.
	541	MaturityDate	Ν	Tenor/maturity date of the instrument relative to spot. For NDFs this represents the fixing date of the contract.
	120	SettlCurrency	Ν	Currency code of settlement denomination. Required for NDF Currency Pairs and must be presented in the terms of deliverable currency in the pair.
	167	SecurityType	N	Indicates type of security. If not presented the Security Type is FXSPOT. FOR NDFs must be presented with the value of FXNDF (NonDeliverableForward)

3.6.3 Execution Acknowledgement

Note: Clients are required to send Execution Acknowledgement messages whenever they receive an Execution Report for a fill, 150=F.

Rep	Tag	Field Name	Req'd	Description
	37	OrderId	Y	Unique value assigned to the order. Assigned by FXallFX
	11	ClOrdID	Y	Unique identifier assigned by the FX trading client.
	1036	ExecAckStatus	Y	Indicates the status of the Execution Acknowledgement 1 – Accepted
	17	ExecID	Y	Unique value assigned to this execution. Assigned by FXallFX.
	55	Symbol	Y	Currency pair for which the execution is being performed. This field is encoded according to standard FIX FX standards with additional FXall requirements. See Section 3.6.1 for description of symbol format.
	64	FutSettDate	Y	Specifies the tenor/maturity of the instrument as a string - for instance for a USD/BRL one month NDF the FutSettDate would be "1M". For spot this is specified as "SPOT". If nor specified, "SPOT" is implied.
				The use of this field does not conform to standard FIX. This field is used to better support FX trading.
	15	Currency	Ν	Identifies the currency used to specify quantity, also known as the "dealt" currency. For instance if Symbol = USD/JPY and Currency = JPY then OrderQty should be
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Rep	Tag	Field Name	Req'd	Description	
				specified as an amount of Japanese Yen. If omitted the dealt currency is assumed to be the base currer (CCY1) of the CCY1/CCY2 Symbol specified.	
	54	Side	Y	Side of the trade from the perspective of the submit the original New Order. The side reflects whether of the originator of the order bought or sold the "deal currency, specified in Tag 15, Currency. For OrdType Swap to the side specified for Tag 54 is assumed to reversed in the second leg. 1 = Bought Dealt Currency (also Sold Counter Curre 2 = Sold Dealt Currency (also Bought Counter Curre	r not t" e = FX – be ncy)
	38	OrderQty	Y	Amount of currency (Tag 15) that was requested executed. The OrderQty for the second leg of an FX is assumed to be the same as that of the first leg, a the side will be reversed.	to be – Swap
	382	NoContraBroke rs	Ν	Required if ContraBroker is specified. Always NoContraBrokers=1 as a FXall FX execution has one counterparty.	
	375	ContraBroker	N	Specifies the prime broker of the opposing side for execution.	the
	32	LastQty	Y	Quantity traded on this fill in terms of Currency (Tag For FX-Swap orders the quantity of the second leg is same for LastQty, although LastQtyContra2 (quantitic counter-currency) will be different.	s the
	31	LastPx	Y	Rate for the execution. Should represent the "all-in" (LastSpotRate + LastForwardPoints) rate for F/X ord For spot-only executions will be the same as the LastSpotRate. For swaps this is the all-in price for th leg of the execution.	ers.)
	14	CumQty	Y	Currently executed amount for the overall order, sp in terms of Currency, Tag 15.	pecified
	194	LastSpotRate	Ν	FX Spot rate for the execution.	
	120	SettlCurrency	Ν	Currency code of settlement denomination. Require NDF Currency Pairs and must be presented in the te deliverable currency in the pair.	
	541	MaturityDate	Ν	Tenor/maturity date of the instrument relative to s For NDFs this represents the fixing date of the cont	
	167	SecurityType	N	Indicates type of security. If not presented the Type is FXSPOT. FOR NDFs must be presented with the value of FXN (NonDeliverableForward)	-
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3.6.4 Order Cancel Request

Rep	Tag	Field Name	Req'd	Description
	37	OrderID	Ν	Unique identifier for the order as assigned by FXall
	11	ClOrdID	Y	Unique identifier for the cancel request as assigned by the FX trading client
	41	OrigClOrdID	Y	Unique identifier for order as assigned by FX trading client. This id refers to the previous non-canceled order.
	55	Symbol	Y	This value must be the same as for the original order.
	64	FutSettDate	Y	This value must be the same as for the original order.
	60	TransactTime	Y	Time expressed in UTC
	167	SecurityType	Ν	Indicates type of security. If not presented the Security Type is FXSPOT.
				FOR NDFs must be presented with the value of FXNDF
				(NonDeliverableForward)

3.6.5 Order CancelReplace Request

Rep	Tag	Field Name	Req'd	Description
	37	OrderID	Ν	Unique identifer for the overall order assigned by FXall. Should be the same for a Cancel/Replace.
	11	ClOrdID	Y	Unique identifier for the replacement order assigned by the FX trading client.
	41	OrigClOrdID	Y	Unique identifier assigned by the FX trading client for the previous non-rejected order.
	1	Account	Y	This value must be the same as for the original order.
	55	Symbol	Y	This value must be the same as for the original order.
	64	FutSettDate	Y	This value must be the same as for the original order.
	193	FutSettDate2	Ν	This value must be the same as for the original order.
	15	Currency	Y	This value must be the same as for the original order.
	54	Side	Y	This value must be the same as for the original order.
	38	OrderQty	Y	Absolute amount of currency (Tag 15) that is requested for the replacement order. The OrderQty can represent either a reduction or an increase from the original order. The OrderQty for the second leg of an FX – Swap is assumed to be the same as that of the first leg, although the side will be reversed. When a Cancel/Replace occurs, the size of both first and second legs is changed.



Rep	Tag	Field Name	Req'd	Description
	40	OrdType	Y	Order type for the replacement order: 1 = Market 2 = Limit
	44	Price	Ν	Replacement exchange rate (price) at which the currency pair order can be executed by FXallFX. Required for Limit Orders. Represents the most aggressive price allowed (top or bottom) for a pegged order.
	388	DiscrectionInst	Ν	Indicates the price to which the discretion offset applies. This value must always be set to 0 = Related to displayed price. The tag is required if DiscrectionOffset is supplied.
	389	Discretion Offset	Ν	Amount (signed) added to the "related to" price specified via DiscretionInst. This tag is not allowed for market orders.
	110	MinFillQty	Ν	Minimum fill quantity of an order to be executed. Default value is 0. This value must be less than or equal to the minimum show quantity for the dealt currency specified on the order. The minimum-show-quantities for currencies are published in a separate document and subject to change
	111	MaxFloor	Ν	Maximum quantity of Currency (tag 15) to be shown for this order in the FXall FX book and market data at any time. If this tag value is 0, the order will be a hidden order. If this tag is omitted, the full quantity of the order will be shown.
	59	TimeInForce	Ν	Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. Valid values: 0 = Day 3 = Immediate or Cancel (IOC)
	18	ExecInst	N	Instructions for order handling on exchange trading floor. If more than one instruction is applicable to an order, this field can contain multiple instructions separated by space. Valid values: FXall currently does not support any ExecInst. The contents of this field will be ignored.
	60	TransactTime	Y	Time expressed in UTC
	58	Text	Ν	Free Form Text – Maximum size is 255 characters
	167	SecurityType	Ν	Indicates type of security. If not presented the Security Type is FXSPOT.

Rep	Tag	Field Name	Req'd	Description
				FOR NDFs must be presented with the value of FXNDF
				(NonDeliverableForward)

3.6.6 Order Cancel Reject

Rep	Tag	Field Name	Req'd	Description
	37	OrderID	Y	Unique identifier for the order as assigned by FXall
	11	ClOrdID	Y	Unique identifier of cancel request as assigned by the FX trading client
	41	OrigClOrdID	Y	ClOrdID which could not be canceled/replaced.
	39	OrdStatus	Y	Order Status value after the cancel reject is applied
	434	CxlRej	Y	Identifies the type of request that has been rejected
		ResponseTo		1 = Order Cancel Request
				2 = Order Cancel/Replace Request
	102	CxlRej	Ν	Reason for rejection
		Reason		
	58	Text	Ν	Explanatory Text



3.7 Miscellaneous

3.7.1 Business Message Reject

Rep	Tag	Field Name	Req'd	Description
	45	RefSeqNum	Ν	Sequence number of rejected message.
	372	RefMsgType	Y	The message type of the FIX message being rejected.
	379	BusinessRejectRefID	Ν	When this message is generated in response to a New, Amend, or Cancel order message the ClOrdID will appear in this field.
	380	Business Reject Reason	Y	Code to identify the reason for the Business Message Reject: 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.
	58	Text	Ν	Explanation of reason for rejection



3.8 Message Field Semantics

3.8.1 Symbols

The FIX field symbol (tag 55) is defined in EBS (Electronic Banking System) format: "CCY1/CCY2". Rates are expressed as "currency 1 in currency2" (or "currency2 per currency1"). For example, "GBP/USD" represents a rate expressed as USD per GBP. FXall FX only supports standard convention for EBS currency pairing, e.g. EUR/USD, USD/JPY. Reverse currency pairs, such as USD/EUR, JPY/USD are not supported and orders using this convention will be rejected as having an invalid symbol.

3.8.2 Currency

Only ISO 4217 Standard currency codes will be accepted for the FIX currency field (tag 15). The value of the currency field represents the denomination of the quantity field. The FIX side field (tag 54) is also interpreted based on the specified currency.

3.9 Use of FXall Custom Order Types

3.9.1 Iceberg Orders

3.9.1.1 Example 1: Limit order to buy GBP \$50M but show only \$5M at a time

Tag Name	Tag	Value	Description
ClOrdID	11	ORDER1234	
Account	1	TEST	
Symbol	55	GBP/USD	
FutSettDate	64	SPOT	
Currency	15	GBP	
Side	54	1	Buy
OrderQty	38	50,000,000	
Order Type	40	2	Limit Order
Price	44	1.9555	Bid Price
MaxFloor	111	5,000,000	Show GBP 5M of the 50M
TimeInForce	59	1	GTC – Good Till Cancelled
TransactTime	60	20080222 12:45:55.453	Current Time



3.9.2 Hidden Orders

3.9.2.1 Example 1: Limit order to buy GBP \$5M but hide the order, show	
nothing	

Tag Name	Tag	Value	Description
ClOrdID	11	ORDER1234	
Account	1	TEST	
Symbol	55	GBP/USD	
FutSettDate	64	SPOT	
Currency	15	GBP	
Side	54	1	Buy
OrderQty	38	5,000,000	
Order Type	40	2	Limit Order
Price	44	1.9555	Bid Price
MaxFloor	111	0	Show Nothing
TimeInForce	59	1	GTC – Good Till Cancelled
TransactTime	60	20080222 12:45:55.453	Current Time

4. Fault Tolerance and Recovery

FXall Trading provides two IP addresses and ports for connectivity by FX trading clients. One IP address and port is for the primary connection. The second IP address and port is for the backup connection. If the primary connection fails, the TCP connection should be established using the backup IP address and port. In future versions of this interface, virtual IP addresses may be supported.

