

Tiger FIX Specifications

Session Protocol

Each administrative or application message is preceded by the standard header below. The header identifies the message type, length, destination, sequence number, origination point and time.

Standard Header			
Tag	Field Name	Req	Comments
8	BeginString	Y	FIX.4.2
9	BodyLength	Y	
35	MsgType	Y	Valid values: <ul style="list-style-type: none">• A – Logon• 0 – Heartbeat• 2 – Resend Request• 3 – Reject• 4 – Sequence Reset• 5 – Logout• 8 – Execution Report• 9 – Cancel Reject• D – Order Single• F – Order Cancel Request• G – Order Cancel/Replace Request
34	MsgSeqNum	Y	
43	PossDupFlag	N	Used only during session-level message recovery.
97	PossResend		

49	SenderCompID	Y	Assigned by Tiger, to identify firm sending message
52	SendingTime	Y	
56	TargetCompID	Y	Assigned by Tiger
Trailer			
10	Checksum	Y	

Administrative Messages

HeartBeat

The Heartbeat monitors the status of the communication link and identifies when the last of a string of messages was not received.

HeartBeat			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 0
112	TestReqID	N	Required when the heartbeat is the result of a Test Request message.

Logon

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

Logon			
Tag	Field Name	Req	Comments

35	Standard Header	Y	MsgType = A
98	EncryptMethod	Y	Always be 0
108	HeartBtInt	Y	Indicates the heartbeat interval in seconds
95	RawDataLength	N	
96	RawData	N	

Test Request

The Test Request message forces a heartbeat from the opposing application. The Test Request message checks sequence numbers or verifies communication line status.

Test Request			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 1
112	TestReqID	Y	

Resend Request

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. The resend request can be used to request a single message, a range of messages or all messages subsequent to a particular message.

Resend Request			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 2

7	BeginSeqNo	Y	Beginning sequence number of the message block to be retransmitted.
16	EndSeqNo	Y	Message sequence number of last record in range to be resent. If request is for a single record BeginSeqNo = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "0"

Reject

The Reject message should be issued when a message is received but cannot be properly processed due to a session-level rule violation.

Reject			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 3
45	RefSeqNum	Y	MsgSeqNum (34) of the rejected message.
58	Text	N	Text for reason of the reject. May contain given ClOrdID.

Gap Fill

This message resets the sequence number to a specified value and can be used to gap fill administrative messages that do not need to be resent.

Gap Fill			
Tag	Field Name	Req	Comments

Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 4
36	NewSeqNo	Y	Sequence number of the next message to be transmitted.
123	GapFillFlag	N	<ul style="list-style-type: none"> N - Default value, Ignore MsgSeqnum, tag 34 on this message Y - MsgSeqnum, tag 34, on this message should follow message sequencing

Sequence Reset

A FIX session consists of a series of messages with a continuous set of sequence numbers. Resetting the inbound and outbound sequence numbers back to 1 establishes a new FIX session. A client can establish a new FIX session by setting tag 141 (ResetSeqNumFlag) to “Y” in the login message. Tiger does not initiate sequence number resets.

Sequence Reset			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = A
141	ResetSeqNumFlag	Y	ResetSeqNumFlag=Y

Logout

The Logout message initiates or confirms the termination of a FIX session. Disconnection without the exchange of Logout messages should be interpreted as an abnormal condition.

Logout			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 5

58	Text	N	
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Application Messages

New Order - Single

This message is used for submitting an order to Tiger via FIX.

New Order Single			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = D
1	Account	N	Tiger configures your connection to receive orders on a default account. The client can submit order to a specified account instead of default account.
11	ClOrdID	Y	
38	OrderQty	Y	
40	OrdType	Y	1 - Market 2 - Limit 3 - Stop 4 - Stop limit
44	Price	N	Limit price
99	StopPx	N	Stop price
54	Side	Y	Valid values: 1 - Buy 2 - Sell

55	Symbol	Y	Ticker symbol
59	TimeInForce	Y	Valid values: 0 - Day 1 - Good Till Cancel (GTC) 2 - At the Opening (OPG) used for both pre-open and closing auction period in HKEx.
167	SecurityType	N	CS - Common Stock OPT - Option Defaults to CS if omitted
200	MaturityMonthYear	N	
201	PutOrCall	N	Indicates whether an option(or other derivative) is for a put or call. 0 - PUT 1 - CALL
202	StrikePrice	N	
205	MaturityDay	N	
541	MaturityDate	N	
5001	FillOutsideRTH	N	Only used for US market equity. Valid values: Y - Yes N - No Defaults to N if omitted

Order Cancel Request

Order Cancel Request			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = F
1	Account	Y	
11	ClOrdID	Y	
41	OrigClOrdID	Y	ClOrdID of the order to be cancelled.
58	Text	N	Comment

Order Cancel Replace Request

The order cancel replace request message is used to cancel and replace with a new order according to the attributes in the request. Fields that can be modified on an order are:

1.OrderQty

2.Price

3.StopPx

Order Cancel Replace Request			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = G
1	Account	Y	
11	ClOrdID	Y	
40	OrdType	Y	Order type.
41	OrigClOrdID	Y	ClOrdID of the order to be cancelled.

38	OrderQty	N	Cannot be less than executed quantity.
44	Price	N	
58	Text	N	Comment
99	StopPx		Stop price.

Execution Report

The Execution Report <8> message is used to:

1. confirm the receipt of an order
2. confirm changes to an existing order (i.e. accept cancel and replace requests)
3. relay fill information on working orders
4. reject orders

Execution Report			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 8
1	Account	Y	
6	AvgPx	N	Calculated average price of all fills on this order.
11	ClOrdID	Y	As specified on the original order.
14	CumQty	Y	Total number of shares filled.
15	Currency	Y	Identifies currency used for price.
17	ExecID	Y	Unique identifier for each Execution Report.

19	ExecRefID	N	Reference identifier used with Cancel and Correct transaction types.
20	ExecTransType	Y	Identifies transaction type Valid values: 0 - New 1 - Cancel 2 - Correct 3 - Status
31	LastPx	N	Price of the last fill
32	LastShares	N	Number of contracts/shares executed on the last fill
37	OrderID	Y	Tiger's internal reference number
38	OrderQty	Y	Number of contracts/shares on the original order.
39	OrdStatus	Y	Describes current status of the order.
40	OrdType	Y	
41	OrigClOrdID	N	ClOrdID of the order being cancelled or modified.
44	Price	N	
54	Side	Y	
55	Symbol	Y	
58	Text	N	Extra information.

60	TransactTime	N	Time of execution/order creation (expressed in UTC (Universal Time Coordinated, also known as 'GMT'))
99	StopPx	N	Stop price.
150	ExecType	Y	
151	LeavesQty	Y	Amount of shares open for further execution.
167	SecurityType	N	
201	PutOrCall	N	Indicates whether an option(or other derivatives) is for a put or call.
202	StrikePrice	N	Strike price for an option(or other derivatives) series.
200	MaturityMonthYear	N	
205	MaturityDay	N	
541	MaturityDate	N	

Order Cancel Reject

The order cancel reject message is used to reject a cancel or cancel/replace request that cannot be honored.

Order Cancel Reject			
Tag	Field Name	Req	Comments
35	Standard Header	Y	MsgType = 9

1	Account	N	
11	ClOrdID	Y	
41	OrigClOrdID	Y	ClOrdID of the order to be cancelled.
39	OrdStatus	Y	
58	Text	N	Comment
434	CxlRejResponseTo	Y	Identifies the type of request that a Cancel Reject is in response to. Valid values: 1 – Order Cancel Request. 2 – Order Cancel/Replace Request.