

Standard Header

TAG	FieldName	Contents	Comments
8	BeginString	FIX.4.2(.X)	Protocol Version, X is the ECN version number. The ".X" portion is optional and may be altered. Only on the "FIX.4.2" string should be depended upon.
9	BodyLength	99999	Length of Message Body
35	MsgType	Accepted Message Types	0 = HeartBeat 1 = TestRequest 2 = ResendRequest 3 = Reject 4 = SequenceReset 5 = Logout 6 = Indication of Interest 8 = ExecutionReport A = Logon D = NewOrderSingle
34	MsgSeqNum		Message Sequence Number (Resets to 1 at the start of each trading day)
49	SenderCompID	MMID, EDGX	Sender Company ID (MMID of message sender)
56	TargetCompID	EDGX, MMID	Target Company ID (MMID of message receiver)
43*	PossDupFlag		Indicates possible retransmission of this seq num
97*	PossResend		Indicates possible retransmission of msg under a New sequence number
52	SendingTime		GMT Date/Time Message was sent

Standard Trailer

TAG	FieldName	Contents	Comments
10	Checksum		Integer byte count of message length without the CheckSum field

Logon – From Client

TAG	FieldName	Contents	Comments
35	MsgType	A	(Contained in header)
95	RawDataLength		Length of RawData
96	RawData	Password	Password for username SenderSubID
98	EncryptMethod	0	None
108	HeartBtInt		Client Heartbeat Interval (In seconds)

Logon – Response From Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	A	(Contained in header)
98	EncryptMethod	0	None
108	HeartBtInt	60	Direct Edge ECN Heartbeat Interval is 60 seconds. Clients should use a 60 second Heartbeat Interval.

HeartBeat – From Client and Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	0	(Contained in header)
112*	TestReqID		Required in response to a Test Request

* = optional

Test Request – From Client and Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	1	(Contained in header)
112	TestReqID		Auto-Generated Request ID

Resend – From Client and Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	2	(Contained in header)
7	BeginSeqNo		
16	EndSeqNo		0 means +infinity

Reject – From Client and Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	3	(Contained in header)
45	RefSeqNum		MsgSeqNo of Rejected Message
371*	RefTagID		
372*	RefMsgType		
373*	SessionRejectReason		
58*	Text		

Sequence Reset / Gap Fill – From Client and Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	4	(Contained in header)
36	NewSeqNo		Next expected Sequence Number
123*	GapFillFlag	'Y' or 'N' ('Y' is required)	The use of 'Y' is required for common resequencing. 'N' is not recommended, and should only be used in emergency situations that require manual intervention. 'N' causes the SeqNo of the SequenceReset message to be ignored, creating a high possibility of message loss.

Logout – From Client and Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	5	(Contained in header)
58*	Text		Indicates reason for logout

* = optional

Indication of Interest – From Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	6	(Contained in header)
23	IOIID		Indication of Interest ID Alphanumeric and Unique within a trading day.
28	IOI TransType	N	New
21	HandInst	1	Private AutoEx
25	IOIQltyInd	H	
44	Price		See Data Types for Maximum Precision
38	OrderQty		# of Shares
54	Side		1 = Buy 2 = Sell
55	Symbol		Valid Ticker Symbol
65*	SymbolSfx		Valid Ticker Suffix
40	OrdType		2 = Limit
59	TimeInForce		3 = Immediate Or Cancel
110*	MinQty		Minimum quantity of an order to be executed. Orders that are below this qty will be rejected.
167	Security Type	CS	Common Stock
58*	Text		Comments field. 40 chars maximum length

* = Optional

New Order Single – From Client

TAG	FieldName	Contents	Comments
35	MsgType	D	(Contained in header)
11	ClOrdID	Client ID	Client Order ID Alphanumeric and Unique within a trading day. 20 chars maximum length.
23	IOIID		Indication of Interest ID
21	HandInst	1	Private AutoEx
38	OrderQty		# of shares. 0 = Do not want shares
44	Price		See Data Types for Maximum Precision
54	Side		1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt
55	Symbol		Valid Ticker Symbol
65*	SymbolSfx		Valid Ticker Suffix
40	OrdType		2 = Limit
59	TimeInForce		3 = Immediate or Cancel 4 = Fill or Kill
60	TransactTime		Time Order was Initiated
58*	Text		Comments field. 40 chars maximum length

* = Optional

Execution Report – Generic - From Direct Edge ECN

All possible fields that could be sent to the Client in an Execution Report. Not all fields are sent on all messages. Extra fields on all FIX messages should be ignored. The presence of fields beyond this API should not cause message rejects. New fields may be added to the API, and unnecessary fields may be removed from the API.

TAG	FieldName	Contents	Comments
35	MsgType	8	(Contained in header)
11	ClOrdID	Client ID	See "4.1 New Order Single" for specs.
37	OrderID	ClOrdId	Will currently contain same values as ClOrdID. May change in future.
17	ExecID	Execution ID	21 chars maximum length. "None" on an Execution Report for a new order.
20	ExecTransType	Execution Report Type	0 = New
150	ExecType	Execution Type	0 = New 1 = Partial Fill 2 = Fill
39	OrdStatus	Current Order Status	1 = Partially Filled 2 = Filled 8 = Rejected
23	IOIID		Indication of Interest ID
1*	Account	Account ID	Sent by client, and returned to client on all Execution reports for this order. See "4.1 Execution Report" for specs.
55	Symbol		Valid Ticker Symbol
65*	SymbolSfx		Valid Ticker Suffix
54	Side		1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt
38	OrderQty		Order Quantity
40	OrdType	2	2 = Limit
44	Price		Limit Price specified
59	TimeInForce		3 = Immediate Or Cancel 4 = Fill or Kill
32	LastShares	ExeQty	Executed Shares or Cancelled Shares
31	LastPx	ExePrice	Executed Price
58	Text		Rejection reason
60	TransactTime		Time Order was Initiated

* = Optional.

Execution Report – Fills – From Direct Edge ECN

TAG	FieldName	Contents	Comments
35	MsgType	8	(Contained in header)
11	ClOrdID	Client ID	See "4.1 New Order Single" for specs.
37	OrderID		See "4.2 Execution Report" for specs.
17	ExecID	Execution ID	See "4.2 Execution Report" for specs.
20	ExecTransType	0	0 = New
150	ExecType	Execution Type	1 = Partial Fill 2 = Fill
39	OrdStatus	Current Order Status	1 = Partially Filled 2 = Filled 8 = Rejected
1*	Account	Account ID	Sent by client, and returned to client on all Execution reports for this order. 20 chars maximum length.
23	IOIID		Indication of Interest ID
55	Symbol		Valid Ticker Symbol
54	Side		1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt
38	OrderQty	Total	Order Quantity
40	OrdType	2	2 = Limit
44	Price		Limit Price specified
59	TimeInForce		3 = Immediate Or Cancel 4 = Fill or Kill
32	LastShares	0	
31	LastPx	0 or value	Last exec price
58	Text		Rejection reason
60	TransactTime		GMT Date/Time of Execution

Message Flow Traffic

Client will connect to EDGX.

EDGX sends Indication of Interest to Client

Client sends New Order Single to EDGX

EDGX sends Execution Report – Fills/Filled/Rejected