



DROP COPY

FIX Message Reference – Fixed Income - Trademate

Version 1.3
Last modified: 03/21/2024

Contacts

- B3 Support

 produtosrendafixa@b3.com.br

 +55 11 2565-7464

Attention Point

This document is a preliminary version that may change. The structure of data here is to assist B3 clients in the beginning of the development of market data connectivity for the new fixed income platform.

Indexb

Contacts	2
1. Standard Messages	5
2. Session Level Messages.....	5
2.1. Logon (35=A).....	5
2.2. Logout (35=5).....	6
2.3. Heartbeat (35=0).....	6
2.4. TestRequest (35=1).....	6
2.5. ResendRequest (35=2)	6
2.6. Reject (35=3).....	6
2.7. SequenceReset (35=4)	7
3. Application Level Message.....	8
3.1. ExecutionReport (35=8)	8

Change Log

Date	Version	Description	Author
October 23rd, 2023	1.0	- Initial version	IMKY
November 07th, 2023	1.1	- Added messages Logon (35=A), Heartbeat (35=0), TestRequest (35=1), ResendRequest (35=2), Reject (35=3), SequenceReset (35=4) and Logout (35=5).	IMKY
January 31st, 2024	1.2	- Added tag SenderSubID (50) in Standard Message Header. - ExecutionReport (35=8): <ul style="list-style-type: none"> • added tags that are used for Voice: RegistID (513), Designation (494), CrossId (548), OrigCrossId (551), SettIType (63), SettIDate(64) and SolicitedFlag (377) • added tag Execlnst (18) • removed tags PositionEffect (77) and CrossedIndicator (2523). 	IMKY
March 21st, 2024	1.3	- Added tags in message ExecutionReport (35=8) that indicate the Legs of an execution: <ul style="list-style-type: none"> • NoLegs (555), LegSymbol (600), LegSide (624), LegQty (687), LegPrice (566), LegRefID (654). 	IMKY

1. Standard Messages

Standard Message Header

Tag	Tag name	Req	Data Type	Comment
8	BeginString	Y	String (7)	"FIX.4.4".
9	BodyLength	Y	Length (6)	(Always unencrypted, must be second field in message)
35	MsgType	Y	String (4)	(Always unencrypted, must be third field in message) Valid values: 8 - Execution Report
49	SenderCompID	Y	String (50)	Please contact B3 for appropriate CompID assignment.
50	SenderSubID	Y	String (50)	User that is performing the action. Usually used on Voice Approvel (35=BN ExecutionAcknowledge).
56	TargetCompID	Y	String (50)	Please contact B3 for appropriate CompID assignment.
34	MsgSeqNum	Y	Seqnum (9)	Integer message sequence number.
52	SendingTime	Y	UTCTimestamp (21)	Expressed in UTC (Universal Time Coordinated)

Standard Message Trailer

Tag	Tag name	Req	Data Type	Comment
10	Checksum	Y	String (3)	Always unencrypted, always last field in message

2. Session Level Messages

2.1. Logon (35=A)

Tag	Tag name	Req	Data Type	Comment
[Standard Message Header]				
98	EncryptMethod	Y	Int (1)	Must be "0"
108	HeartBtInt	Y	Int	Recommended: "30"
141	ResetSeqNumFlag	N	Boolean (1)	Indicates that both sides of the FIX session should reset sequence numbers.
553	Username	N	String	CAU username
554	Password	N	String	CAU Password
35002	CancelOnDisconnectType	N	Int	Indicates whether orders should remain active on disconnection. Values valid: 0 – Doesn't cancel on disconnection 1 – Cancel on disconnection
35003	CancelOnDisconnectTimeoutWindow	N	Int	Timeout in seconds to trigger cancellation after disconnection
[Standard Message Trailer]				

2.2. Logout (35=5)

Tag	Tag name	Req	Data Type	Comment
[Standard Message Header]				
58	Text	Y	String (250)	Explanation for Logout reason (if any).
[Standard Message Trailer]				

2.3. Heartbeat (35=0)

This message is sent over the instrument definition, snapshot recovery and incremental streams to notify customers that the multicast channel join was successful and that B3 will send the data when available.

There is no body for this message, only the standard header with tag 35=0.

2.4. TestRequest (35=1)

Tag	Tag Name	Req'd	Datatype	Comment
[Standard Message Header]				
112	TestReqID	Y	String	Identifier required for testing. Field included in the test request message to be returned without resulting flag
[Standard Message Trailer]				

2.5. ResendRequest (35=2)

Tag	Tag Name	Req	Datatype	Comment
[Standard Message Header]				
17	BeginSeqNo	Y	SeqNum (9)	Message sequence number of first message in range to be resent
16	EndSeqNo	Y	SeqNum (9)	Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo = EndSeqNo If request is for all messages subsequent to a particular message, EndSeqNo = 0 (representing infinity).
[Standard Message Trailer]				

2.6. Reject (35=3)

Tag	Tag Name	Req	Datatype	Comment
[Standard Message Header]				
45	RefSeqNum	Y	SeqNum (9)	Message sequence number of first message in range to be resent
58	Text	N	String (250)	Where possible, message to explain reason for rejection

Tag	Tag Name	Req	Datatype	Comment
371	RefTagID	N	Int	The tag number of the FIX field being referenced.
372	RefMsgType	N	String (2)	The MsgType of the FIX message being referenced.
373	SessionRejectReason	Y	Int (6)	Code to identify reason for a session-level <u>reject</u> message. Valid values: 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 = ComplID problem 10 = Sending time 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
[Standard Message Trailer]				

2.7. SequenceReset (35=4)

Tag	Tag Name	Req	Datatype	Comment
[Standard Message Header]				
43	PossDupFlag	N	Boolean (1)	Indicates possible retransmission of message with this sequence number Valid values: Y = Possible duplicate N = Original transmission
122	OrigSendingTime	N	UTC Timestamp (21)	Original time of message transmission (always expressed in UTC) when transmitting orders as the result of a resend request.
123	GapFillFlag	N	Boolean (1)	Indicates that the sequence reset message is replacing administrative or application messages which will not be resent. Valid values: Y = Gap fill message, MsgSeqNum field valid N = Sequence ignore MsgSeqNum

Tag	Tag Name	Req	Datatype	Comment
36	NewSeqNo	Y	SeqNum (9)	New sequence number
[Standard Message Trailer]				

3. Application Level Message

3.1. ExecutionReport (35=8)

Tag	Tag name	Req	Data Type	Comment
[Standard Message Header]				
37	OrderID	Y	String (26)	Unique identifier for Order as assigned by the exchange. Uniqueness is guaranteed within a single trading day/instrument. Value is "NONE" if order is rejected.
198	SecondaryOrderID	N	String (26)	Exchange-generated order identifier that changes for each order modification event, or quantity replenishment in disclosed orders.
11	ClOrdID	Y	String (38)	Unique identifier of the order as assigned by the mBarket participant.
41	OrigClOrdID	N	String (38)	Contains the ClOrdID of the replacement order. Conditionally required when ExecType = 5 (Replace).
31	LastPx	N	Price (20)	Price of this (last) fill.
32	LastQty	N	Qty (9)	Quantity of shares bought/sold on this (last) fill. Conditionally required when ExecType = F (Trade).
5149	Memo	N	String (50)	Free format text field. This field may be used to convey client's relevant info. It's always echoed in the reports.
111	MaxFloor	N	Qty (9)	Maximum number of shares or contracts within an order to be shown on the match engine at any given time. Echo from original order's MaxFloor.
382	NoContraBrokers	N	NumInGroup (1)	Repeating group below should contain one item that correspond to execution counterparty. Required only for ExecType = F (Trade).
→	448	PartyID	Y	String (50) Used to identify source of PartyID. Conditionally required if NoPartyID > 0.
→	447	PartyIDSource	Y	Char (1) Identifies class or source of the PartyID (448) value. Conditionally required if NoPartyID > 0. Valid values: D - Proprietary Custom Code

Tag	Tag name	Req	Data Type	Comment	
→	452	PartyRole	Y	Int (5)	Identifies the type or role of the PartyID (448) specified. Conditionally required if NoPartyID > 0. Valid values: 36 - Entering Trader 54 - Sender Location 58 - Entering Desk 59 - Executing Desk 76 - Desk Id
17	ExecID	Y	String (32)	Unique identifier of execution message as assigned by the exchange – unique per instrument.	
19	ExecRefID	N	String (32)	Reference identifier used with Cancel and Correct transaction types.	
150	ExecType	Y	Char (1)	Describes the action that triggered this specific Execution Report - see the OrdStatus (39) tag for the current order status (e.g, Partially Filled). Valid values: 0 - New 4 - Canceled 5 - Replace 8 - Rejected A - Pending New D - Restated F - Trade G - Trade Correct H - Trade Cancel	
18	ExecInst	N	String (5)	Execution Instruction used to report voice intermediate state during cancel workflow: Valid values: PCC – Pending Cancel Counterparty PCM – Pending Cancel Market Surveillance CRM – Cancel Reject Counterparty CRC – Cancel Reject Market Surveillance	
39	OrdStatus	Y	Char (1)	Order status. Valid values: 0 - New 1 - Partially Filled 2 - Filled 4 - Canceled 5 - Replaced 8 - Rejected	
55	Symbol	Y	String (20)	B3 requires that this field is properly set. It contains the human readable form of the SecurityID tag, available in the Security List message in Market Data feed.	
48	SecurityID	N	String (12)	Security ID as defined by B3. For the SecurityID list, see the Security List message in Market Data feed.	

Tag	Tag name	Req	Data Type	Comment
54	Side	Y	Char (1)	Side of order. Valid values: 1 - Buy 2 - Sell
38	OrderQty	Y	Qty (15)	Quantity ordered.
40	OrdType	Y	Char (1)	Conditionally required when ExecType != 8 (Reject) or ExecType != H (Trade bust). Valid values: 2 - Limit
423	PriceType	N	Int (2)	Code to represent the price type. Valid values: 2 - Per Unit 9 - Yield
44	Price	N	Price (20)	Price per share or contract. Conditionally required if the order type requires a price (not market orders and RLP).
59	TimeInForce	N	Char (1)	Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. Valid values: 0 - Day L - Liquidity Seeking
151	LeavesQty	Y	Qty (9)	Amount of shares open for further execution, or unexecuted. LeavesQty = OrderQty - CumQty.
14	CumQty	Y	Qty (9)	Total number of shares or contracts filled.
6	AvgPx	Y	Price (1)	Always 0 (zero).
75	TradeDate	N	LocalMktDate (8)	Indicates date of trade referenced in this message in YYYYMMDD format (expressed in local time at place of trade). Absence of this field indicates current day (expressed in local time at place of trade).
60	TransactTime	N	UTCTimestamp (21)	Time of execution/order creation; expressed in UTC.
6032	UniqueTradeID	N	String (10)	Contains the unique identifier for this trade, per instrument + trading date, as assigned by the exchange. Conditionally required if ExecType = F (Trade).
1180	ApplID	N	String (50)	Identifies the application with which a message is associated. Used only if application sequencing is in effect.
58	Text	N	String (250)	Free format text string
494	Designation	N	String (38)	Supplementary registration information for this Order (used for Voice)

Tag	Tag name	Req	Data Type	Comment	
513	RegistID	N	String (38)	Reference to Registration Instructions message for this Order (Blotter Trade ID)	
548	CrossID	N	String (38)	CrossID for the replacement order (used for Voice)	
551	OrigCrossID	N	String (38)	Must match original cross order. Same order chaining mechanism as ClOrdID/OrigClOrdID with single order Cancel/Replace (used for Voice)	
382	NoContraBrokers	N	NumInGroup (2)	Number of ContraBrokers repeating group instances.	
→	375	ContraBroker	N	String (38)	Counterparty Desk Id
→	337	ContraTrader	N	String (38)	Used in voice to inform the counterparty trader (used only for Voice)
63	SettlType	N	Char (1)	Indicates order settlement period (used for Voice). Valid values: 0 - Regular 1 - T + 1 2 - T + 2 3 - T + 3 B - BrokenDate	
64	SettlDate	N	LocalMktDate	Specific date of trade settlement (SettlementDate) in YYYYMMDD format (used for Voice)	
377	SolicitedFlag	N	Boolean	Indicates whether or not the order was solicited (It is used on Voice to indicates if an action is required by Participant)	
555	NoLegs	N	NumInGroup (2)	For structure products, the corresponding legs will be return at this repeating group. Required only for strucuted products and ExecType = G (Trade Correct)	
→	600	LegSymbol	N	String (20)	Leg concerned Symbol
→	624	LegSide	N	Char (1)	Side of order. Valid values: 1 - Buy 2 - Sell
→	687	LegQty	N	Qty (9)	Leg concerned executed Quantity.
→	566	LegPrice	N	Price (20)	Leg concerned executed Price.
→	654	LegRefID	N	String (20)	Leg concerned TradeID.
[Standard Message Trailer]					