



MATCHNOWSM
FIX Specification
For Conditional Orders
Version 1.3

UAT Only - SUBJECT TO CHANGE

Supported Versions: 4.2

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Revision History

Date	Version	Author	Description
2018/06/01	1.0	Vince Poil	Initial Document
2018/06/17	1.1	Vince Poil	Rule 80A updates / Diagram Addition/ Price description update / Results update
2018/09/26	1.2	Vince Poil	Spelling mistakes / Currency Required changed to N / Firm order add Tag 50 & 47
2018/10/01	1.3	Vince Poil	Typographical errors

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MATCHNow Conditionals FIX Protocol

This document describes the FIX 4.2 implementation used to access MATCHNow via conditional orders, including:

- General FIX specification required for each transmission.
- User-Defined FIX tags.

FIX 4.2 Support

MATCHNow Conditionals are FIX 4.2 compliant. We use the standard FIX 4.2 protocol published by the FIX Protocol Organization. For complete versions of any of the FIX Protocol Specification manuals, please visit the Specifications page of the FIX web site (<http://www.fixprotocol.org>).

Conditional Order Requirements

The FIX new order type message (35=D) with Conditional Flag (8002=0) is used to send a new conditional order. The OrderQty tag (Tag 38) will contain the number of shares that are available to trade.

As the quantity and/or price change throughout the day, the client should send an Order Cancel/Replace message (35=G) to indicate the new quantity or price.

To cancel, use the Cancel Request message (35=F). If changing the parameters of the conditional or firm order, do not send Cancel Request (35=F) followed by New Single Order (35=D). Send a Cancel/Replace request (35=G) with the new order quantity, new price, etc.

Only a limited number of fields on the Conditional orders may be changed using the Order Cancel/Replace(35=G) message:

- OrderType (40): Use only when changing to or from Market or Limit.
- Price (44): Increase and decrease the value.
 - Price should only be sent on the conditional order if the trader intends to send the firm order with a limit price.
 - Price should not be on the conditional order if the trader intends to send the firm order at market.
- OrderQty (38): Increase and decrease the quantity.
- Min Qty (110): Increase and decrease the minimum quantity to fill. Do not include the tag if there is no minimum.

Note: All other FIX fields must be retransmitted as sent on the previous conditional order. MATCHNow rejects the update if a mandatory tag is not sent.

Firm Order Requirements

Firm Orders must have parameters that match with their corresponding conditional orders. However, OrderQty (38) and Price(44) on the firm order may not always match the conditional order – this is only reasonable due to available quantity not being the same from when the order was first placed or last updated.

Note: All other FIX fields must be retransmitted as sent on the last corresponding conditional order. MATCHNow will reject the firm order if a mandatory tag is not sent or if they do not match those on the conditional.

Conditionals Workflow

The MATCHNow conditional two-step process consists of conditional order matching (uncommitted orders) and firm order crossing (committed orders). Refer to Appendix A for a flow diagram.

Conditional Order

- Conditional orders to MATCHNow represent uncommitted quantity and order parameters that the participant is willing to trade. MATCHNow will only use conditional orders to match participants together and it will only execute trades once firm orders are received.
- Conditional orders must be of “large” size and meet the UMIR requirements of >50 boardlots or >\$100,000 CAD notional value. Any orders submitted below this threshold will be rejected.

Invitation

- When MATCHNow finds a contra to the conditional order, a request is sent inviting the client to firm up. The invitation will always be for the full conditional order quantity sent to MATCHNow so that no size information about the contra-party will be disclosed.
- The firm up request comes in the form of an unsolicited cancel FIX message, of the original conditional order with tag 8005 = 5. The subscriber is expected to send a firm up order on receipt of the invitation, within 1 second.

Response

- The participant responds to the invitation by sending a firm order to the MATCHNow conditionals destination.
- The participant should never send a firm order to the MATCHNow conditionals destination if there is no outstanding invitation. MATCHNow will reject any firm orders that are not in response to a live invitation.

Result

- By the end of the 1 second time-out window or earlier, the participant will receive an execution report with a fill, partial fill, or Done for Day order status. Any unfilled quantity will be cancelled back to the user. Orders may not trade due to constraints placed on the firm order(s) such as limit price, min quantity or the contra-side not responding in time to their own invitation.
- The participant should send a new conditional order after the cross to represent the remaining quantity in the MATCHNow conditional venue.
- All trades will be priced at the Mid-Point of the current Protected National Best Bid/Offer (‘PNBBO’)
- All trades will be broker preferenced

FIX Protocol

Conditional Orders

Inbound Message

Participant sends conditional order to MATCHNow Conditionals destination

- Conditional orders represent un-committed order quantity that a participant is willing to trade in MATCHNow if there is a natural contra party.
- All conditionals expire at 16:00:00.

Field Name	FIX Tag	Mandatory	Valid Values	Comments
MsgType	35	Yes	D	D = New Order
ClOrdID	11	Yes		Client Order ID
Currency	15	No	See Comments	Currency value must be the industry standard valid value (or native currency)
Symbol	55	Yes	See Comments	Ticker Symbol.
SenderSubID	50	Yes	See Comments	Must contain "BrokerNumber:TSXTraderID" i.e. 50=090:IT999IS
Side	54	Yes	1, 2, 5	1 = Buy 2 = Sell 5 = Sell Short
Price	44	See Comments		Price per share. Mandatory if OrdType(40) = Limit(2). If present, the value must be greater than zero.
OrderQty	38	Yes		Quantity that the user is indicating to MATCHNow that they are willing to trade.
MinQty	110	No		
OrdType	40	Yes	1, 2	1 = Market 2 = Limit
TimeInForce	59	No	0	Only Day orders. 0 = Day
HandlInst	21	Yes	1	

Field Name	FIX Tag	Mandatory	Valid Values	Comments
Rule80A	47	Yes	IN / NC / CL / ST / MP / OF / OT / BU	CL Client ST Specialist NC Non-client IN Inventory MP ME Pro Order OF Options Firm Account OT Options Market Maker BU Bundled
Conditionals Msg Flag	8002	See Comments	0	Signifies if the order is conditional or firm. 0 = Conditional order message

Cancel / Replace Conditional order

Inbound Message

Participant sends a cancel / replace message to change parameters on an outstanding conditional order. The following modifications are allowed:

- Increase and decrease OrderQty (38).
- Increase decrease in Price (44)
- Change in OrderType (40) such as from MKT to LMT and vice versa.

MATCHNow responds to the Cancel / Replace with a standard FIX Replaced report

Field Name	FIX Tag	Mandatory	Valid Values	Comments
MsgType	35	Yes	G	G = Order Cancel/Replace Request
CIOrdID	11	Yes		Client Order ID
OrigCIOrdID	41	Yes		Original client order ID.
Currency	15	No	See Comments	Currency value must be the industry standard valid value (or native currency)
Symbol	55	Yes	See Comments	Ticker Symbol.
SenderSubID	50	Yes	See Comments	Must contain "BrokerNumber:TSXTraderID"
Side	54	Yes	1, 2, 5	1 = Buy 2 = Sell 5 = Sell Short

Field Name	FIX Tag	Mandatory	Valid Values	Comments
Price	44	See Comments		Price per share. Mandatory if OrdType(40) = Limit(2). If present, the value must be greater than zero.
OrderQty	38	Yes		Order quantity that the user is indicating to MATCHNow that they are willing to trade.
MinQty	110	No		
OrdType	40	Yes	1, 2	1 =Market 2 = Limit
TimeInForce	59	No	0	Only Day orders. 0 = Day
HandInst	21	Yes	1	
Rule80A	47	Yes	IN / NC / CL / ST / MP / OF / OT / BU	CL Client ST Specialist NC Non-client IN Inventory MP ME Pro Order OF Options Firm Account OT Options Market Maker BU Bundled
Conditionals Msg Flag	8002	See Comments	0	Conditionals Msg Flag signifies if the order is conditional or firm. 0 = Conditional order message

Cancel Request for Conditional

Inbound Message

Participant sends cancel request message to MATCHNow Conditional destination to cancel an outstanding conditional order.

- Conditional orders should be cancelled when there is no longer interest in trading the order
- If participant is updating parameters of the order, do not update in form of Cancel Request and New Order Messages. Instead, send the Cancel Replace Request (35=G)
- MATCHNow responds to the Cancel Request with a standard FIX Canceled report. It will not have Conditionals message flag (8005) present

Field Name	FIX Tag	Mandatory	Valid Values	Comments
MsgType	35	Yes	F	F = Cancel Request
ClOrdID	11	Yes		Client Order ID
OrigClOrdID	41	Yes		Original client order ID.
Symbol	55	Yes	See Comments	Ticker Symbol.
SenderSubID	50	Yes	See Comments	Must contain "BrokerNumber:TSXTraderID"
Side	54	Yes	1, 2, 5	1 = Buy 2 = Sell 5 = Sell Short
OrderQty	38	Yes		Order quantity that the user is indicating to MATCHNow that they are willing to trade.
Conditionals Msg Flag	8002	See Comments	0	Conditional Msg Flag signifies if the order is conditional or firm. 0 = Conditional order message

Firm Up Request

Outbound Message

When MATCHNow finds a marketable contra for a conditional order, the conditional participants are informed of the opportunity to trade.

MATCHNow invites the participant to send a firm order.

- The request is an unsolicited cancel message on the execution report, with Conditionals Msg flag 8002=0 and Conditionals Status flag 8005=5

Field Name	FIX Tag	Mandatory	Valid Values	Comments
MsgType	35	Yes	8	8 = Execution Report
CIOrdID	11	Yes		Same as CIOrdID on the conditional order
IDSource	22	Yes	2, 5	Valid values are: 2 = SEDOL 5 = RIC
SecurityID	48	Yes	See Comments	The valid value corresponding to the IDSource (Tag 22) value
Currency	15	No	See Comments	Currency value must be the industry standard valid value (or native currency)
Symbol	55	Yes	See Comments	Ticker Symbol.
OrdStatus	39	Yes	4	4 = Canceled
ExecType	150	Yes	4	4 = Canceled
CumQty	14	Yes	0	0
LastPx	31	Yes	0	0
LastShares	32	Yes	0	0
Side	54	Yes	1, 2, 5	1 = Buy 2 = Sell 5 = Sell Short
ExecTransType	20	Yes	0	0 = New
Price	44	See Comments		Same as Price on the conditional order
OrderQty	38		See Comments	Same as OrderQty on the conditional order.

Field Name	FIX Tag	Mandatory	Valid Values	Comments
OrdType	40	Yes	1, 2, P	1 = Market 2 = Limit P = Pegged
Conditionals Msg Flag	8002	See Comments	0	Msg Flag signifies if the order is conditional or firm. 0 = Conditional order message
Conditionals Status Flag	8005	See Comments	5	Describes the status of the order. 5 = Firm order request message

Submit Firm Order

Inbound Message

Participant sends firm order to MATCHNow Conditional destination

- Firm order sent in response to a firm up request only
- MATCHNow will respond to the Firm Up Order with a standard FIX Acknowledgement report

Note that the Conditionals Msg flag should be set to say this is a firm order (tag 8002 = 1). Also, the firm order should set IOlid tag 23 to the ClOrdID (11) of the invited conditional order.

Field Name	FIX Tag	Mandatory	Valid Values	Comments
MsgType	35	Yes	D	D = New Order
ClOrdID	11	Yes		Client Order ID
IOlid	23	Yes		Same as the Client Order ID (11) of the invited conditional order. This is used as a reference for the firm order.
Currency	15	No	See Comments	Currency value must be the industry standard valid value (or native currency)
Rule80A	47	Yes	IN / NC / CL / ST / MP / OF / OT / BU	CL Client ST Specialist NC Non-client IN Inventory MP ME Pro Order OF Options Firm Account OT Options Market Maker BU Bundled
Symbol	55	Yes	See Comments	Ticker Symbol.

Field Name	FIX Tag	Mandatory	Valid Values	Comments
SenderSubID	50	Yes	See Comments	Must contain "BrokerNumber:TSXTraderID"
OrderQty	38	Yes		Order quantity that is intended to be traded. Value should be as close as possible to the order quantity on the corresponding conditional order.
OrdType	40	Yes	1, 2	1 = Market 2 = Limit
Price	44	See Comments		Price per share. Mandatory if OrdType(40) = Limit(2). If present, the value must be greater than zero.
Side	54		1, 2, 5	1 = Buy 2 = Sell 5 = Sell Short
TimeInForce	59	No	0	Only Day orders. 0 = Day
MinQty	110	No		Minimum quantity to be executed on an order. Must be less than or equal to value in OrderQty(38).
Conditionals Msg Flag	8002	See Comments	1	Conditionals Msg Flag signifies if the order is conditional or firm. 1 = Firm order message

Appendix A

