SpiderRock V8 Reference

Liquidity Request/Response

FIX Specification

Version 1.0

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Introduction

This document provides a description of the tags, field names, types, and comments for the SpiderRock to Client application FIX messages (LiquidityRequest, ExecutionReport, and OrderCancelReject) and the Client to SpiderRock application FIX messages (NewOrderSingle, NewOrderMultileg, and OrderCancelRequest).

Repeating group tags are highlighted in yellow, such as the legs for multileg orders. Tags identifying the security details are highlighted in green.

User Support

Production support is available at 312-256-9602.

Please email questions or comments regarding this document to: cs@spiderrock.net

Application Messages

LiquidityRequest (SpiderRock to Client)

QuoteRequest<R> messages are used to notify responders about liquidity response opportunities. The same message is used for both flash (20ms) and block (up to 5 minutes) auctions.

Tag	Field Name	Req'd	Type	Comments
	Standard Header	*Y*		*MsgType = R*
131	QuoteReqID	Y	string	Must be included as SRCrossNoticeID (24-character max) on New Order Single and New Order Multileg responses.
55	Symbol	Y	string	If 167=OPT: OSI Option Code If 167=MLEG: Exchange Symbol
167	SecurityType	Y	string	OPT = Equity Option MLEG = Multileg Spread
38	OrderQty	Y	int	Executable quantity
44	Price	N	float	Will exist if initiator is disclosing a public price
54	Side	N	char	1 = Buy 2 = Sell Initiator Side; will exist if initiator is disclosing a public side
104	IOIQualifier	N	char	L = UpToQty A = AllOrNone M = QtyOrMore
303	QuoteReqType	Y	char	B = Block F = Flash
60	TransactTime	Y	utcDttm	YYYYMMDD-HH:MM:SS.sss

Tag	Field Name	Req'd	Type	Comments
5022	SRClientFirm	N	string	SRClientFirmCode of the initiating client firm (if disclosed)
555	NoLegs	N	int	Number of legs (MLEG Only)
=> 600	LegSymbol	Y	string	If 609=CS: Leg Exchange symbol If 609=OPT: Option OSI code
=> 609	LegSecurityType	Y	string	OPT = Equity Option CS = Equity
=> 624	LegSide	Y	char	1 = Buy 2 = Sell
=> 623	LegRatioQty	Y	int	The ratio of quantity for this individual leg relative to the entire multileg security

NewOrderSingle (Client to SpiderRock)

NewOrderSingle<D> messages are used to submit responses to single security liquidity requests. Note, liquidity responses are cancelable and will be automatically terminated by SR at the end of the auction sequence that they are responsive to.

Tag	Field Name	Req'd	Type	Comments
	Standard Header	*Y*		*MsgType = D*
11	ClOrdId	Y	string	Client order ID (24 character max)
5208	SRCrossNoticeID	Y	string	QuoteRequestID from LiquidityRequest
5094	SROrderHandling	Y	int	23 = BlockResponse
1	Account	Y	string	SR account acronym
461	CFICode	N	string	OC = Option - Call [OPT] OP = Option - Put [OPT]
201	PutOrCall	N	int	Alternative to CFICode<461> 0 = Put 1 = Call
167	SecurityType	N	string	Alternative to CFICode<461> OPT – Equity Option
55	Symbol	Y	string	Exchange symbol • May incorporate symbol suffix (e.g. VIA.A) • For OPRA options, SpiderRock accepts an OSI code
65	SymbolSfx	N	string	Symbol suffix
541	MaturityDate	N	string	For Options YYYYMMDD
200	MaturityMonthYear	N	string	Alternative to MaturityDate<541> YYYYMM

Tag	Field Name	Req'd	Type	Comments
205	MaturityDay	N	int	Alternative to MaturityDate<541> 1-31
202	StrikePrice	N	float	Option strike price
54	Side	Y	char	1 = Buy 2 = Sell Must be opposite of the side in the liquidity request
38	OrderQty	Y	int	Executable quantity
77	OpenClose	N	char	For Options O = Open C = Close A = Auto (SR determines whether child orders should be marked open or closed by looking up account/aggregate group position when child orders are created).
44	Price	Y	double	Liquidity response price (4 decimals; does not need to be in normal price increments).
5098	SROrderLimitType	N	int	2 = Price (static price) 3 = PriceDeGa (delta/gamma adjusted price; uMid reference) 4 = PriceDeGaX (delta/gamma adjusted price; uCross reference) Default is Price
5104	SRTakeReachRule	Y	char	5 = FullSize 10 = AtMost25 11 = AtMost50
5108	SROrderRefUPrc	N	float	The initial reference price for PriceDeGa and PriceDeGaX order limit types. Default is SR supplied underlier reference at time of order arrival.
5110	SROrderRefDelta	N	float	The reference delta for PriceDeGa and PriceDeGaX order limit types. Default is SR supplied delta at time of order arrival.
5112	SROrderRefGamma	N	float	The reference gamma for PriceDeGa and PriceDeGaX order limit types. Default is SR supplied gamma at time of order arrival.
60	TransactTime	Y	utcDttm	YYYYMMDD-HH:MM:SS (message must arrive within 15 seconds to be considered valid).
	Standard Trailer	*Y*		

NewOrderMultileg (Client to SpiderRock)

NewOrderMultileg<AB> messages are used to submit responses to single security liquidity requests. Note, liquidity responses are cancelable and will be automatically terminated by SR at the end of the auction sequence that they are responsive to.

Tag	Field Name	Req'd	Type	Comments
	Standard Header	*Y*		*MsgType = AB*
11	ClOrdId	Y	string	Client order ID (24-character max)
5208	SRCrossNoticeID	Y	string	QuoteRequestID from LiquidityRequest
5094	SROrderHandling	Y	int	23 = BlockResponse
1	Account	Y	string	SR account acronym
555	NoLegs	Y	int	Number of legs
=> 654	LegRefId	Y	string	Used to identify a specific leg
=> 608	LegCFICode	N	string	ES = Equity Common Shares [CS] F = Future [FUT] OC = Option - Call [OPT] OP = Option - Put [OPT]
=> 609	LegSecurityType	N	string	Alternative to LegCFICode<608> for Equities and Futures only. • Must be specified for Futures and Options • If not specified, Equity assumed OPT – Equity Option CS or <empty> - Equity
=> 600	LegSymbol	Y	string	Leg Exchange symbol • May incorporate symbol suffix, e.g. VIA.A • For OPRA options, SpiderRock accepts an OSI code in this field. • For standardized futures products, maturity information can be included in this field, (e.g. GCZ22 [for the Dec-22 Comex Gold Future]).
=> 601	LegSymbolSfx	N	string	Leg Symbol Suffix
=> 611	LegMaturityDate	N	string	For Futures and Options YYYYMMDD
=> 612	LegStrikePrice	N	float	Option strike price

Tag	Field Name	Req'd	Type	Comments
=> 624	LegSide	Y	char	1 = Buy 2 = Sell 5 = Sell short 6 = Sell short exempt Y = Sell auto (SR determines whether child orders should be selling long or short by looking up account/aggregate group position when child orders are created).
=> 623	LegRatioQty	Y	int	The ratio of quantity for this individual leg relative to the entire multileg security
=> 564	LegPositionEffect	N	char	For Option leg: O = Open C = Close For Stock leg when 624=1 (Buy) and 54=2 (Sell): 2 = Sell long 5 = Sell short 6 = Sell short exempt A = Auto (SR determines whether child orders should be marked open or closed by looking up account/aggregate group position when child orders are created). Default is A (Auto) if not supplied. Note: Auto is only allowed if the trading account is configured for auto-marking.
54	Side	Y	char	1 = Buy 2 = Sell Must be opposite of the side in the liquidity request
38	OrderQty	Y	int	Executable quantity
44	Price	Y	double	Liquidity response price (up to 4 decimals; does not need to be in normal price increments)
5098	SROrderLimitType	N	int	2 = Price (static price) 3 = PriceDeGa (delta/gamma adjusted price; uMid reference) 4 = PriceDeGaX (delta/gamma adjusted price; uCross reference) Default is Price
5104	SRTakeReachRule	Y	char	5 = FullSize 10 = AtMost25 11 = AtMost50
5108	SROrderRefUPrc	N	float	The initial reference price for PriceDeGa and PriceDeGaX order limit types. Default is SR supplied underlier reference at time of order arrival.
5110	SROrderRefDelta	N	float	The reference delta for PriceDeGa and PriceDeGaX order limit types. Default is SR supplied delta at time of order arrival.

Tag	Field Name	Req'd	Type	Comments
5112	SROrderRefGamma	N	float	The reference gamma for PriceDeGa and PriceDeGaX order limit types. Default is SR supplied gamma at time of order arrival.
60	TransactTime	Y	utcDttm	YYYYMMDD-HH:MM:SS (message must arrive within 15 seconds to be considered valid)
	Standard Trailer	*Y*		

ExecutionReport (SpiderRock to Client)

SpiderRock follows FIX 4.4 rules for ExecutionReport handling but can switch to FIX 4.2 on request.

Tag	Field Name	Req'd	Type	Comments
	Standard Header	*Y*		*MsgType = 8*
37	OrderID	Y	string	Unique ID for order chain assigned by SpiderRock
11	ClOrdID	Y	string	Value from client request
41	OrigClOrdID	N	string	Conditionally required for response to a Cancel or Cancel/Replace request • (ExecType=PendingCancel, Replaced, or Canceled)
76	ExecBroker	N	string	Value from executing venue
5036	SRUsername	N	string	Used for customer service and futures compliance
5012	SRAltAccnt	N	string	
5410	SRExtTraderId	N	string	
5350	SRExecBrokerMPID	N	string	Executing broker MPID
17	ExecID	Y	string	Unique ID assigned by SpiderRock
20	ExecTransType	Y	int	
19	ExecRefID	N	string	
150	ExecType	Y	char	
60	TransactTime	Y	utcDttm	YYYYMMDD-HH:MM:SS.sss Time the transaction represented by this ExecutionReport occurred
39	OrdStatus	Y	char	
103	OrdRejReason	N	int	For optional use with ExecType = 8 (Rejected)
378	ExecRestatementReason	N	int	If replaced in the SpiderRock System using another order entry method
1	Account	Y	string	Assigned by SpiderRock

Tag	Field Name	Req'd	Type	Comments
54	Side	Y	char	Value from executing venue • Value may differ from client's order if execution order is sold short.
38	OrderQty	Y	int	
40	OrdType	Y	char	Order type of this execution
77	OpenClose	N	char	Value from client's order
44	Price	N	double	Value from client's order
528	OrderCapacity	N	char	Value from order to venue
32	LastShares	Y	int	
31	LastPx	Y	double	
30	LastMkt	N	string	Value from executing venue
29	LastCapacity	N	string	Value from executing venue
151	LeavesQty	Y	int	0 if order is not active, not (OrderQty-Cum)
14	CumQty	Y	int	
6	AvgPx	Y	double	Execution price
58	Text	N	string	
5605	SRRejectCode	N	int	See Appendix C for a list of SR reject codes
442	MultiLegReportingType	N	char	Used to indicate what an Execution Report represents (e.g. used with multi-leg securities, such as option strategies, spreads, etc.). 1 = SINGLE_SECURITY 2 = INDIVIDUAL_LEG 3 = MULTI_LEG_SECURITY
654	LegRefID	N	string	Used to identify a specific leg for multileg order execution reports
439	ClearingFirm	N	string	Value from client's order, or SpiderRock account config
440	ClearingAccount	N	string	Value from client's order, or SpiderRock account config
167	SecurityType	N	string	Value from client's order
55	Symbol	Y	string	Value from client's order
65	SymbolSfx	N	string	Value from client's order
461	CFICode	N	string	Value from client's order
201	PutOrCall	N	int	Value from client's order
541	MaturityDate	N	string	Value from client's order YYYYMMDD

Tag	Field Name	Req'd	Type	Comments
200	MaturityMonthYear	N	string	Value from client's order YYYYMM
205	MaturityDay	N	int	Value from client's order 1-31
202	StrikePrice	N	price	Value from client's order
	Standard Trailer	*Y*		

OrderCancelRequest (Client to SpiderRock)

SpiderRock natively follows FIX 4.4 rules for OrderCancelRequest handling but can switch to FIX 4.2 on request.

Tag	Field Name	Req'd	Type	Comments
	Standard Header	*Y*		*MsgType = F*
11	ClOrdId	Y	string	Client order ID of the cancel request (24-character max)
41	OrigClOrdID	Y	string	ClOrdID<11> of the previous order (NOT the initial order of the day) when canceling an order (24-character max)
58	Text	N	string	User supplied text such as a cancel reason
60	TransactTime	Y	utcDttm	YYYYMMDD-HH:MM:SS.sss
	Standard Trailer	*Y*		

OrderCancelReject (SpiderRock to Client)

SpiderRock FIX Gateways follow FIX 4.4 style rules for CancelReject handling but can switch to FIX 4.2 on request.

Tag	Field Name	Req'd	Type	Comments
	Standard Header	*Y*		*MsgType = 9*
37	OrderID	Y	string	Unique ID for order chain assigned by SpiderRock
11	ClOrdID	Y	string	Value from client request
41	OrigClOrdID	Y	string	Conditionally required for response to a Cancel or Cancel/Replace request (ExecType=PendingCancel, Replaced, or Canceled)
434	CxlRejResponseTo	Y	char	Valid values: 1 = OrderCancelRequest <F> 2 = OrderCancel/Replace Request <G>
102	CxlRejReason	N	int	

Tag	Field Name	Req'd	Type	Comments
39	OrdStatus	Y	char	OrdStatus value after this cancel reject is applied
58	Text	N	string	
	Standard Trailer	*Y*		

Appendix

Standard Header

Tag	Field Name	Req'd	Type
8	BeginString	Y	FIX.4.2 (Always unencrypted, must be second field in message) FIX.4.4
9	BodyLength	Y	(Always unencrypted, must be second field in message)
35	MsgType	Y	(Always unencrypted, must be third field in message)
49	SenderCompID	Y	(Always unencrypted)
56	TargetCompID	Y	(Always unencrypted)
97	PossResend	N	Required when message may be duplicate of another message sent under a different sequence number. (Can be embedded within encrypted data section.)
52	SendingTime	Y	(Can be embedded within encrypted data section.)
122	OrigSendingTime	N	Required for message resent as a result of a ResendRequest. If data is not available set to same value as SendingTime <52> (Can be embedded within encrypted data section.)

Standard Trailer

Tag	Field Name	Req'd	Type
10	CheckSum	Y	(Always unencrypted, always last field in message)

Reject Codes

Tag	Field Name	Req'd	Type	Comments
5605	SRRejectCode	N	string	*TBD*

Version History

Version	Date	Comment
1.0	2023-12-15	Initial specification