Alphaledger.

Alpha Ledger Technologies, Inc.

Municipal Bond Primary Market Protocol FIX 5.0

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Version 1.1

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OVERVIEW

Model Summary

This document describes the messaging specifications for counterparties to receive messages from, and transmit messages to, Alphaledger Markets, Inc. (“ALM”), the wholly owned subsidiary of Alpha Ledger Technologies, Inc. (“Alphaledger”). Conceptually, ALM is conducting a Request for Quote (RFQ) process to collect pre-sale orders on competitively underwritten municipal securities leveraging the Financial Information Exchange (FIX) Protocol.

FIX Protocol

Alphaledger is supporting FIX version 5.0 Service Pack 2, incorporating up to Extension Pack 276.

Document Tables

The tables in this document assign a value of “Y” for fields required by FIX Standards, “Y(A)” for fields required by Alphaledger, “C” for fields conditionally required, and “N” for fields not required.

STANDARD FIX PROTOCOLS

Standard Header Fields

The FIX StandardHeader is included on every FIX message sent. The FIX engine will populate most of these fields, except for BeginString(8), SenderCompID(49), TargetCompID(56). Messages sent by Alphaledger will have a SenderCompID(49) and TargetCompID(56) will be set as described in the below table.

Table 1: Standard Header Component Table

Name	Tag	Data Type	Required	Description
BeginString	8	String	Y	Identifies beginning of new message and protocol version. Must be first field in message. <u>Valid Values:</u> FIXT.1.1
BodyLength	9	Length	Y	Message length, in bytes, forward to the CheckSum(10) field.
MsgType	35	String	Y	Identifies the FIX message type. <u>Valid Values:</u> Heartbeat TestRequest Reject Logout 8 ExecutionReport A. Logon R. QuoteRequest S. Quote Z. QuoteCancel AG. QuoteRequestReject AI. QuoteStatusReport AJ. QuoteResponse
SenderCompID	49	String	Y	Messages sent by Alphaledger will set this field to ALPHALEDGERMARKETS in the production environment

				or ALPHALEDGERMARKETS-BETA for the beta environment. Messages sent by the customer will be the same value set in the TargetCompID(56) field of the messages originated by Alphaledger.
TargetCompID	56	String	Y	This field will be set by Alphaledger to a value mutually agreed upon with the customer.
MsgSeqNum	34	SeqNum	Y	Integer message sequence number.
SendingTime	52	UTCTimestamp	Y	Time of message transmission.

Standard Trailer Fields

FIX StandardTrailer is included on every FIX message sent. No optional fields in the Trailer are supported by Alphaledger, only the CheckSum field, which is required. The value for the CheckSum field will be handled by the FIX engine as it is a calculated value.

Table 2: Standard Trailer Component Table

Name	Tag	Data Type	Required	Description
CheckSum	10	String	Y	Three-byte, simple checksum

Logon(A) Message

The Logon(A) message is used to establish a FIX session. It is always sent by the initiator of the session. The respondent of the session will respond with a Logon message.

Table 3: Logon(A) Message Table

Name	Tag	Data Type	Required	Description
<StandardHeader>			Y	MsgType = A
EncryptMethod	98	Int	Y	Method of encryption. Always unencrypted. Valid values: 0 = None/Other
HeartBtInt	108	Int	Y	Heartbeat interval (seconds). Note same value used by both sides. Alphaledger will set this value to 30 seconds by default.
<StandardTrailer>			Y	

Heartbeat (35=0) and Test Request(35=1)

Heartbeat and Test Request messages will be handled per the FIX specification.

Logout (35=5)

Logout out messages will be handled per the FIX specification.

MODEL FOR MUNICIPAL PRIMARY MARKET

Request for Quote based model for Municipal Primary Market

Alphaledger employs an RFQ model for the collection of pre-sale orders on competitively offered municipal securities. In this model, Alphaledger transmits a request for quote (MsgType(35) = R) to one or more customers on one or more securities in the deal. Customers may provide pre-sale orders (MsgType(35) = S) for none, one, or multiple of the securities requested by Alphaledger.

Alphaledger, in the role of an underwriter, will package pre-sale orders into the lowest cost bid and submit to the issuer on the sale date. Upon notice of award by the issuer, Alphaledger will "hit/lift" winning quotes (MsgType = AJ) within the Firm Time. The final order details will be transmitted in MsgType = 8 to conclude the trade process.

Security Identifiers

CUSIPs are not available prior to the award of bonds to the underwriter. To provide unique identifiers for each security in an issue, Alphaledger will provide an Alphaledger Identifier ("ALID") as SecurityID(48) and set SecurityIDSource(22) = Y. Alphaledger will also include a Financial Instrument Global Identifier (FIGI) in SecurityAltID(455) and set SecurityAltIDSource(456) = S (FIGI). FIGIs are an open-source unique identifier for financial instruments. Customers can look up FIGI values via Bloomberg to access descriptive information related to the security. CUSIPs will be provided in the ExecutionReport(8).

Stipulations and Qualifiers

The QuoteRequest(R) message will contain a Stipulation for a trade variance (StipulationType(233)=TRADVAR and StipulationAmount(234)=value) expressed as a percentage of the par amount for each instrument. This variance is set by Alphaledger to account for any potential resizing that may occur at award of the deal to Alphaledger. The final par amount will be transmitted in the ExecutionReport(8).

All Quote(S) transmitted from customer to Alphaledger will be on a "all-or-none" basis by maturity. This will be stated in the QuoteRequest(R) message as a QuoteQualifier(695) = A (All or None). Partial orders per maturity will be supported in future versions of Alphaledger's FIX protocol.

Coupons

Alphaledger will determine the coupon for each security by setting a value for CouponRate(223) in the initial QuoteRequest(R) message.

Countering

Countering will be supported in future versions of Alphaledger's FIX protocol for municipal bond primary market.

TIMERS

Response Time (Due in Time)

The time pre-sale orders are due to Alphaledger. This is set by Alphaledger in ResponseTime(1914) within the initial QuoteRequest(R) message.

Firm Time (Wire Time)

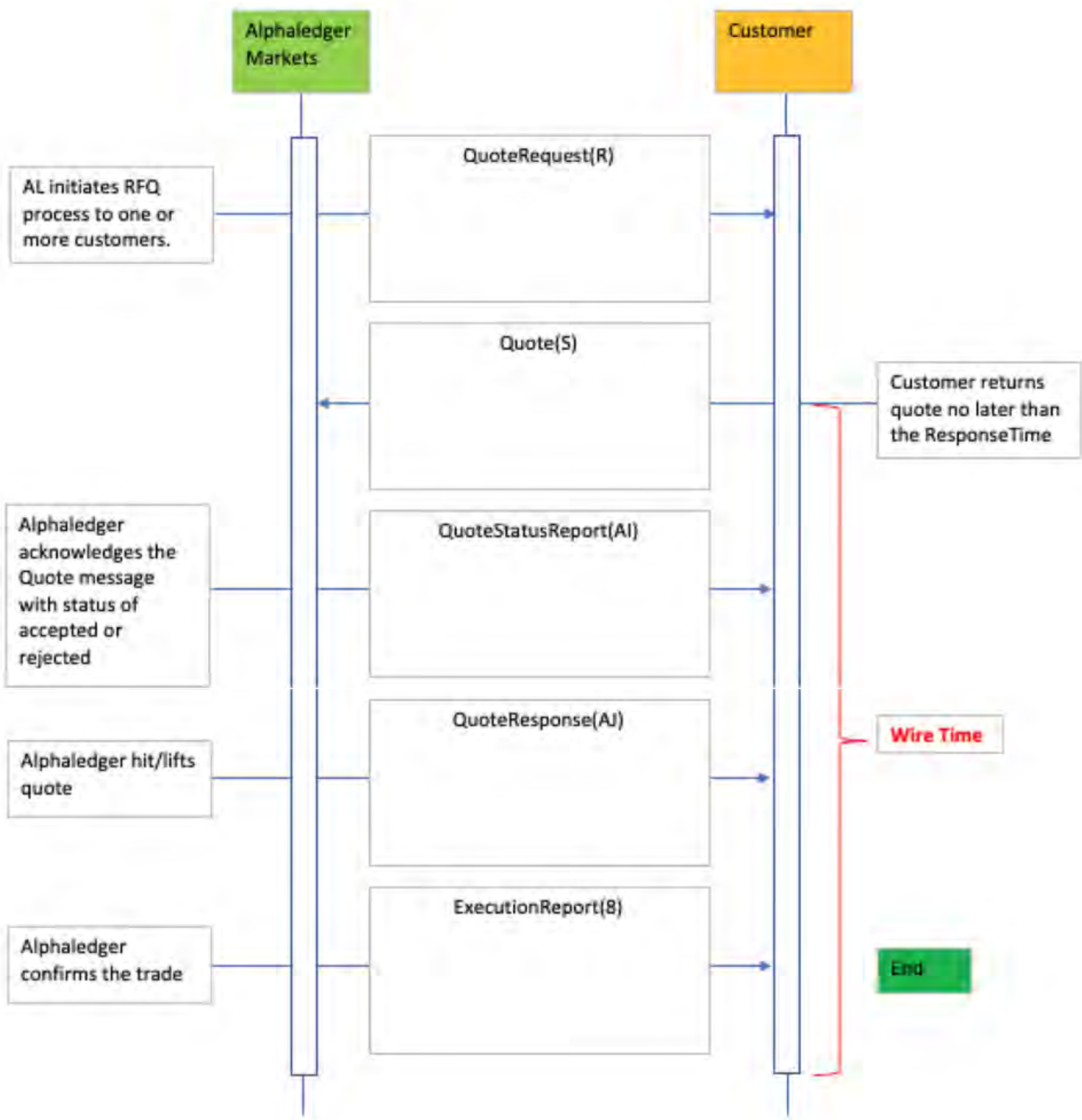
The period of time after the Response Time that the respondent's quote is firm and cannot be updated or cancelled. Alphaledger communicates firm time by setting ExposureDuration(1629) and ExposureDurationUnit(1916) in the initial QuoteRequest(R).

FIX MESSAGE FLOWS

Alphaledger sends quote request, receives quote, hits quote during Firm Time

In this message sequence, Alphaledger establishes a FIX connection with customer, and transmits a request for quote to customer. The customer responds with a quote for each security. Alphaledger hits the quote during the Firm Time. An Execution Report is sent containing final details of the trade.

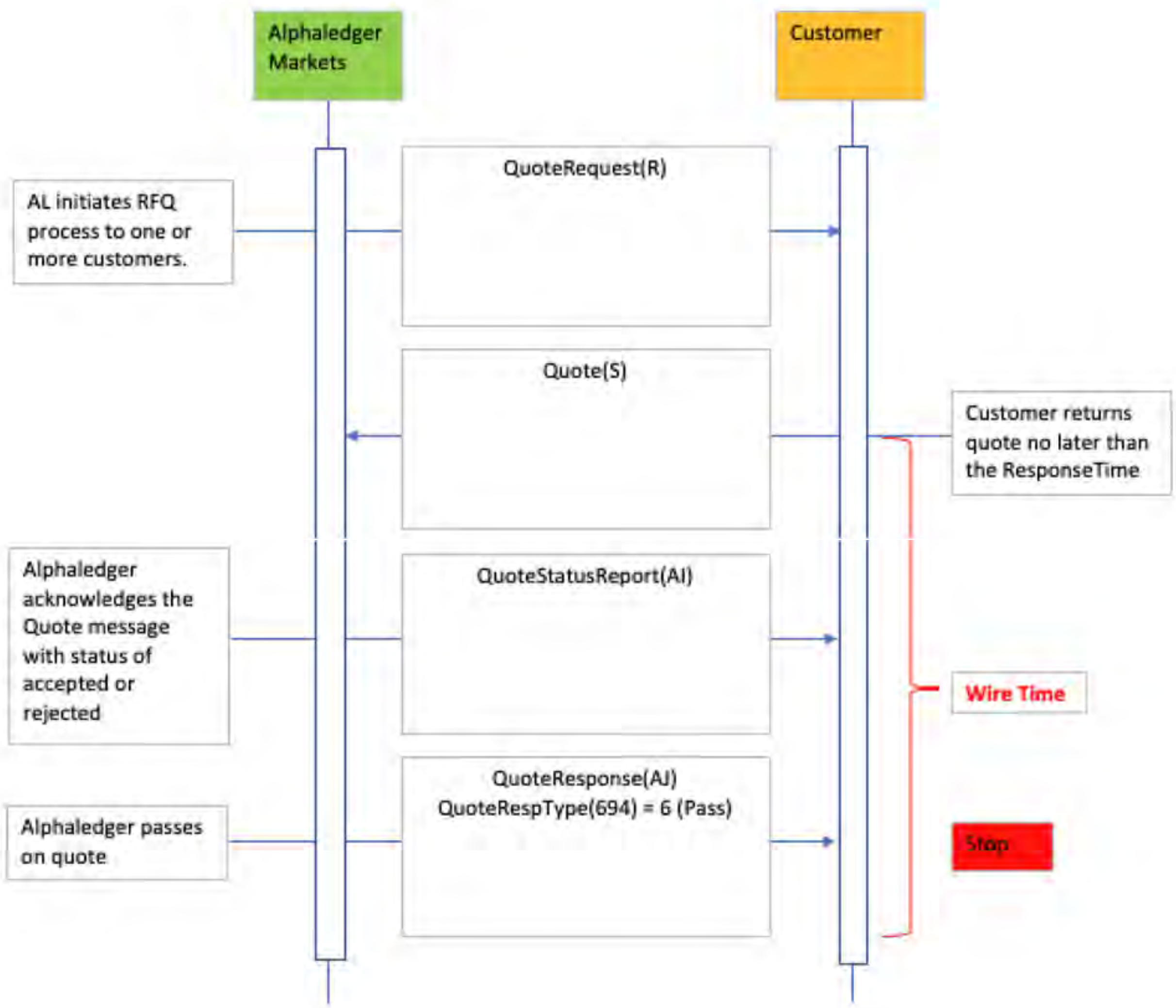
Figure 1: Alphaledger requests quote from customer, receives quote, hits quote during wire time.



Alphaledger sends quote request, receives quote, ends negotiation during Firm Time

In this message sequence, Alphaledger establishes a FIX connection with customer, transmits a QuoteRequest(R), and the customer responds with a Quote(S) for each security receiving a pre-sale order. Alphaledger acknowledges receipt of the Quote(S) with a QuoteStatusReport(AI) containing QuoteStatus(297) = 0 (accepted). The Quote(S) is not the winning quote, and Alphaledger sends a QuoteResponse(AJ) message with QuoteResponseType(694) = 6 Pass within the Firm Time.

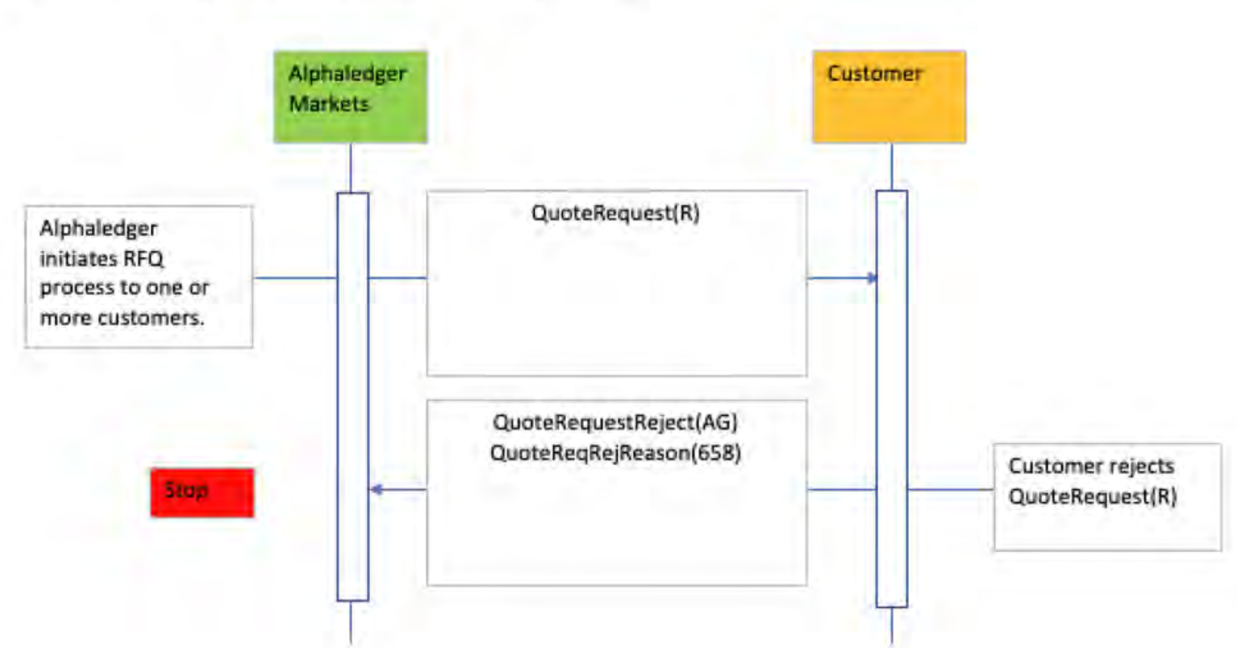
Figure 2: Alphaledger requests quote from customer, receives quote, then ends negotiation.



Alphaledger sends quote request, customer rejects request

Alphaledger establishes a FIX connection with customer, transmits a QuoteRequest(R), and the customer responds with a QuoteRequestReject(AG) message stipulating the reason for the reject in QuoteReqRejReason(658).

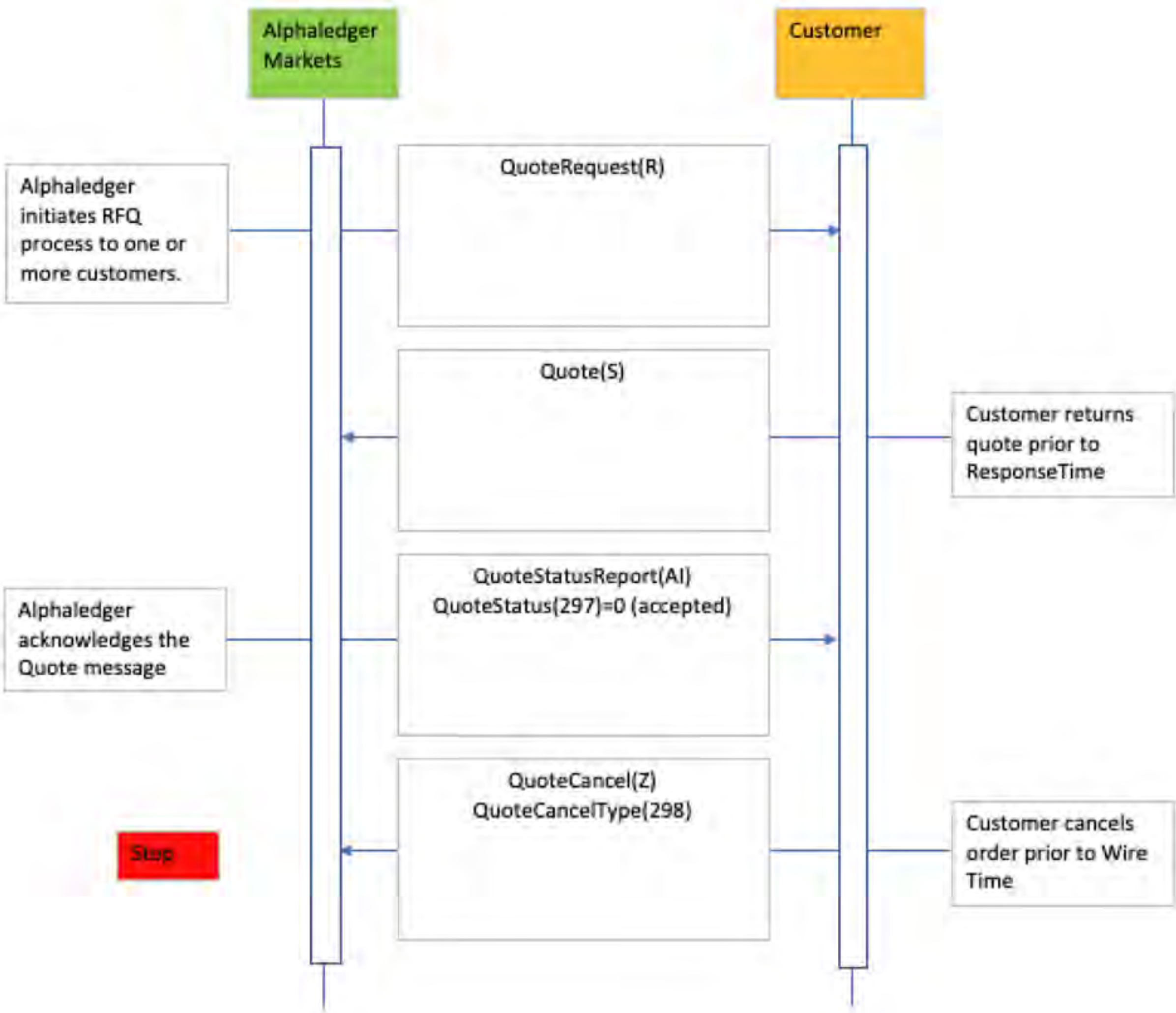
Figure 3: Alphaledger requests quote, customer rejects request



Alphaledger sends quote request, receives quote, customer cancels quote prior to Response Time

Alphaledger establishes a FIX connection with customer, transmits a QuoteRequest(R) message to customer. The customer responds with a Quote(S) for each security receiving a pre-sale order. Alphaledger acknowledges receipt of the Quote(S) with a QuoteStatusReport(AI) containing QuoteStatus(297) = 0 (accepted). Prior to the Response Time, customer cancels quote by sending a QuoteCancel(Z) message for each canceled quote. The customer may send a new Quote(S) prior to the Respond Time.

Figure 4: Alphaledger requests quote, receives quote, then customer cancels quote prior to Response Time.



FIX MESSAGE TABLES

Table 4: QuoteRequest(R)

This message is used by Alphaledger to solicit pre-sale orders (quotes) from customers.

Field Name	Tag	Req'd	Comments
<StandardHeader> component		Y	MsgType = R
QuoteReqID	131	Y	
<QuotReqGrp> component		Y	Repeating Group
NoRelatedSym	146	Y(A)	Number of related symbols (instruments) in request
<Instrument> component		Y	
Symbol	55	N	Common, "human understood" representation of the security.
SecurityID	48	Y(A)	Security identifier value of SecurityIDSource(22) type. Requires SecurityIDSource. Alphaledger will list the ALID here.
SecurityIDSource	22	C	Identifies class or source of the SecurityID(48) is specified. <u>Valid values:</u> 1 = CUSIP S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
<SecAltIDGrp> component		N	Repeating Group
NoSecurityAltID	454	N	Number of SecurityAltID <455> entries
SecurityAltID	455	N	Alternate Security Identifier value for this security of SecurityAltIDSource(456) type. Requires SecurityAltIDSource.
SecurityAltIDSource	456	C	Identifies class or source of the SecurityAltID(455) value. <u>Valid values:</u> 1 = CUSIP S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
Product	460	N	Indicates the type of product the security is associated with (high-level category) <u>Valid value:</u> 11 = Municipal
SecurityType	167	N	Indicates type of security. <u>Valid values:</u> AN = Other Anticipation Notes (BAN, GAN, etc.) COFO = Certificate of Obligation COFP = Certificate of Participation GO = General Obligation Bonds MT = Mandatory Tender RAN = Revenue Anticipation Note

			REV = Revenue Bonds SPCLA = Special Assessment SPCLO = Special Obligation SPCLT = Special Tax TAN = Tax Anticipation Note TAXA = Tax Allocation TECP = Tax Exempt Commercial Paper TMCP = Taxable Municipal CP TRAN = Tax & Revenue Anticipation Note VRDN = Variable Rate Demand Note WAR = Warrant MCPIB = Municipal Interest-Bearing Commercial Paper TMB = Taxable Municipal Bond VRDO = Variable Rate Demand Obligation
CouponType	1946	C	Conditionally required when 223 is present. Coupon type of the bond. Valid value: 1 = Fixed rate
CouponRate	223	N	The rate of interest that, when multiplied by the principal, par value, or face value of a bond, provides the currency amount of the periodic interest payment. The coupon is always cited, along with maturity, in any quotation of a bond's price. Alphaledger will set the coupon it is requesting a quote on.
<EvntGrp> component		N	
NoEvents	864	N	Number of repeating EventType entries
EventType	865	C	Required if NoEvents(864) > 0. Code representing event type. Valid values: 1 = Put 2 = Call 3 = Tender 4 = Sinking fund call
EventDate	866	N	Date of event
EventPx	867	N	Predetermined price of issue at event.
QuoteType	537	N	Identifies the type of quote being requested. Valid values: 1 = Tradeable 2 = Restricted Tradable
Side	54	N	Side of transaction from Alphaledger perspective. Valid value: 2 = Sell
SettlType	63	N	Indicates order settlement period. Mutually exclusive with SettlDate(64). Alphaledger will use this field to indicate that primary market is a “when and if issued” market.

			Valid value: 7 = When and If Issued
SettlDate	64	N	Specific date of trade settlement in YYYYMMDD format.
<Stipulations> component		N	Repeating group
NoStipulations	232	N	Number of stipulation entries
StipulationType	233	C	Required if NoStipulations > 0. Type of Stipulation set by Alphaledger. Valid values: AMT = Alternative Minimum Tax BANKQUAL = Bank Qualified TRDVAR = Trade Variance (value in % maximum over/under allocation allowed).
StipulationValue	234	C	Required if StipulationType(233) is present. Value of stipulation. Stipulation: Values AMT: YES/NO BANKQUAL: YES/NO TRADVAR: value (%)
<QuotQualGrp> component		N	(Repeating group)
NoQuoteQualifiers	735	N	Number of quote qualifiers
QuoteQualifier	695	C	Required if NoQuoteQualifiers > 0 Valid value: A = All or None (AON)
QuotePriceType	692	N	Specifies the price type the quote needs to be quoted at. Valid value: 10 = Yield
ResponseTime	1914	Y(A)	The time by which a response should be received by Alphaledger. Commonly known as the "Due-in-time". Always expressed in UTC.
ExposureDuration	1629	Y(A)	The value representing the minimum period of time, starting at the ResponseTime, a quoted price is tradeable (firm) before it becomes indicative. Commonly known as the "wire time" or "firm time." This value will be set by Alphaledger based on the competitive sale bid criteria.
ExposureDurationUnit	1916	Y(A)	Time unit in which the ExposureDuration(1629) is expressed. Valid values: 0 = Seconds 10 = Minutes
<StandardTrailer> component		Y	

Sample Message: QuoteRequest(R)

8=FIXT.1.1|9=300|35=R|34=169|49=ALPHALEDGERMARKETS1-BETA|52=20230504-13:55:24.976|56=TESTBETA01|131=VqwBN9|146=1|55=BBG01GHWH782|48=ALMUSC000076CF9|22=Y|454=1|455=BBG01GHWH782|456=S|460=11|167=GO|1946=1|223=3.00|537=2|54=2|63=7|232=1|233=BANKQUAL|234=YES|735=1|695=A|692=10|1914=20230512-06:00:00.000|1629=60|1916=10|10=248|

Table 5: QuoteRequestReject(AG)

This message is used by customers of Alphaledger to communicate they will not be providing a pre-sale order (quote)

Field Name	Tag	Req'd	Comments
<StandardHeader> component		Y	MsgType = AG
QuoteReqID	131	Y	QuoteReqID(131) of the original QuoteRequest(35=R)
QuoteRequestRejectReason	658	Y	Reason for rejection. 1 = Unknown symbol (Security) 2 = Exchange (Security) closed 3 = Quote request exceeds limit 4 = Too late to enter 5 = Invalid price 6 = Not authorized to request quote 7 = No match for inquiry 8 = No market for instrument 9 = No inventory 10 = Pass 11 = Insufficient credit 12 = Exceeded clip size limit 13 = Exceeded maximum notional order amount 14 = Exceeded DV01/PV01 15 = Exceeded CS01 limit 99 = Other
<QuotReqRejGrp> component		Y	Repeating group
NoRelatedSym	146	N	Number of related symbols (instruments) in request
<Instrument> component		Y	
Symbol	55	N	Common, "human understood" representation of the security.
SecurityID	48	Y(A)	Security identifier value of SecurityIDSource(22) type. Requires SecurityIDSource.
SecurityIDSource	22	C	Identifies class or source of the SecurityID(48) is specified. Valid values: 1 = CUSIP S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
<SecAltIDGrp> component			Repeating group
NoSecurityAltID	454	N	Number of SecurityAltID <455> entries
SecurityAltID	455	N	Alternate Security Identifier value for this security of SecurityAltIDSource(456) type. Requires SecurityAltIDSource. Alphaledger will list the ALID here.

SecurityAltIDSource	456	C	Identifies class or source of the SecurityAltID(455) value. <u>Valid values:</u> 1 = CUSIP S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
<StandardTrailer> component		Y	

Sample Message: QuoteRequestReject(AG)

8=FIXT.1.1|9=171|35=AG|34=2|49=TESTBETA01|52=20230504-13:55:24.976|56=ALPHALEDGERMARKETS1-BETA|131=VqwBN9|658=10|146=1|55=BBG01GHWH782|48=ALMUSC000076CF9|22=Y|454=1|455=BBG01GHWH782|456=S|10=082|

Table 6: Quote(S)

This message is used by customers of Alphaledger to provide a pre-sale order (quote) in response to a QuoteRequest.

Field Name	Tag	Req'd	Comments
<StandardHeader> component		Y	MsgType = S
QuoteReqID	131	N	QuoteReqID(131) of the original QuoteRequest(35=R)
QuoteID	117	Y	Unique identifier for quote
QuoteType	537	Y(A)	Identifies type of quote. <u>Valid values:</u> 1 = Tradeable 2 = Restricted tradable
<Instrument> component		Y	
Symbol	55	N	Common, “human understood” representation of the security.
SecurityID	48	Y(A)	Security identifier value of SecurityIDSource(22) type. Requires SecurityIDSource.
SecurityIDSource	22	C	Identifies class or source of the SecurityID(48) is specified. <u>Valid values:</u> 1 = CUSIP S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
<SecAltIDGrp> component			Repeating group
NoSecurityAltID	454	N	Number of SecurityAltID <455> entries
SecurityAltID	455	N	Alternate Security Identifier value for this security of SecurityAltIDSource(456) type. Requires SecurityAltIDSource. Alphaledger will list the ALID here.
SecurityAltIDSource	456	C	Identifies class or source of the SecurityAltID(455) value. <u>Valid values:</u> 1 = CUSIP

			S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
CouponType	1946	N	Coupon type of the bond. <u>Valid value:</u> 1 = Fixed rate
CouponRate	223	N	The rate of interest that, when multiplied by the principal, par value, or face value of a bond, provides the currency amount of the periodic interest payment. The coupon is always cited, along with maturity, in any quotation of a bond's price. Alphaledger will set the coupon it is requesting a quote on.
QuoteType	537	N	Identifies the type of quote being requested. <u>Valid values:</u> 1 = Tradeable 2 = Restricted Tradable
Side	54	Y	Side of transaction from customer of Alphaledger Market perspective. <u>Valid value:</u> 1 = Buy
<OrderQtyData> component			
OrderQty	38	Y(A)	The par amount ordered.
BidYield	632	Y(A)	Bid yield
<StandardTrailer> component		Y	

Sample Message: Quote(S)

8=FIXT.1.1|9=205|35=S|34=99|49=TESTBETA01|52=20230504-13:55:24.976|56=ALPHALEDGERMARKETS1-BETA|131=VqwBN9|117=346658|537=2|55=BBG01GHWH782|48=ALMUSC000076CF9|22=Y|454=1|455=BBG01GHWH782|456=S|537=2|54=1|38=365000|632=2.36|10=149|

Table 7: QuoteStatusReport(AI)

Alphaledger will use this message to acknowledge receipt of pre-sale order (quote) messages from customers.

Field Name	Tag	Req'd	Comments
<StandardHeader> component		Y	MsgType = AI
QuoteReqID	131	Y(A)	QuoteReqID(131) of the original QuoteRequest(35=R)
QuoteID	117	Y(A)	Contains the quote identifier of a single Quote(S).
QuoteStatus	297	Y(A)	Identifies status of the QuoteID. Alphaledger will use a value of 0 (Accepted) to acknowledge receipt of a Quote(S) or a value of 5 (Rejected) for Quote(S) with invalid parameters defined in QuoteRejectReason(300). <u>Valid values:</u> 0 = Accepted. 5 = Rejected.

QuoteRejectReason	300	C	If QuoteStatus(297) = 5, reason quote was rejected. Valid values: 1 = Unknown Symbol (security) 3 = Quote Request exceeds limit 4 = Too late to enter 5 = Unknown Quote 6 = Duplicate Quote 9 = Not authorized to quote security 11 = Quote Locked - Unable to Update/Cancel 12 = Invalid or unknown Security Issuer 14 = Notional value exceeds threshold 19 = Exceeded maximum notional order amount
<StandardTrailer> component		Y	

Sample Message: QuoteStatusReport(AI)

8=FIXT.1.1|9=108|35=AI|34=169|49=ALPHALEDGERMARKETS1-BETA|52=20230504-13:55:24.976|56=TESTBETA01|131=VqwBN9|117=346658|297=0|10=142|

Table 8: QuoteCancel(Z)

Customers may use this message to cancel a pre-sale order (quote) transmitted to Alphaledger prior to the Response Time.

Field Name	Tag	Req'd	Comments
<StandardHeader> component		Y	MsgType = Z
QuoteReqID	131	Y(A)	QuoteReqID(131) of the original QuoteRequest(35=R)
QuoteID	117	Y(A)	Quote identifier of a single quote transmitted to Alphaledger.
QuoteCancelType	298	Y	Identifies the type of quote cancel. Valid value: 4 = Cancel All Quotes 5 = Cancel quote specified in QuoteID (117)
<StandardTrailer> component		Y	

Sample Message: QuoteCancel(Z)

8=FIXT.1.1|9=107|35=Z|34=599|49=TESTBETA01|52=20230504-13:55:24.976|56=ALPHALEDGERMARKETS1-BETA|131=VqwBN9|117=346658|298=5|10=106|

Table 9: QuoteResponse(AJ)

Alphaledger will use this message to hit/lift a pre-sale order (quote) or pass during the Firm Time.

Field Name	Tag	Req'd	Comments
<StandardHeader> component		Y	MsgType = AJ
QuoteRespID	693	Y	Unique ID assigned by Alphaledger.
QuoteID	117	Y(A)	Quote identifier of a single quote received by Alphaledger.
QuoteRespType	694	Y	Type of quote response from Alphaledger. Valid values: 1 = Hit/Lift 3 = Expired 4 = Cover 6 = Pass 7 = End Trade 8 = Timed Out
<Instrument> component		Y	
Symbol	55	N	Common, "human understood" representation of the security.
SecurityID	48	Y(A)	Security identifier value of SecurityIDSource(22) type. Requires SecurityIDSource.
SecurityIDSource	22	C	Identifies class or source of the SecurityID(48) is specified. Valid values: 1 = CUSIP S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
<SecAltIDGrp> component			Repeating group
NoSecurityAltID	454	N	Number of SecurityAltID <455> entries
SecurityAltID	455	N	Alternate Security Identifier value for this security of SecurityAltIDSource(456) type. Requires SecurityAltIDSource. Alphaledger will list the ALID here.
SecurityAltIDSource	456	C	Identifies class or source of the SecurityAltID(455) value. Valid values: 1 = CUSIP S = Financial Instrument Global Identifier (FIGI) Y = Digital Token Identifier
ClOrdID	11	Y	Unique ID for order assigned by Alphaledger.
Side	54	Y(A)	Side of transaction from Alphaledger Market perspective. Valid value: 2 = Sell
<StandardTrailer> component		Y	

Sample Message: QuoteResponse(AJ)

```
8=FIXT.1.1|9=204|35=AJ|34=169|49=ALPHALEDGERMARKETS1-BETA|52=20230504-13:55:24.976|56=TESTBETA01|693=11243|694=1|131=VqwBN9|117=346658|11=Abk78942|55=BBG01GHWH782|48=ALMUSC000076CF9|22=Y|454=1|455=BBG01GHWH782|456=S|54=2|10=013|
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Table 10: ExecutionReport(8)

Alphaledger will send this message post award to communicate final trade details.

Field Name	Tag	Req'd	Comments
<StandardHeader> component		Y	MsgType = 8
OrderID	37	Y	Unique Order ID assigned by Alphaledger.
ClOrdID	11	N	Mapped to ClOrdID in QuoteResponse(AJ)
TradeOriginationDate	229	Y(A)	Used in Muni New Issue market for the agreement in principle between counterparties prior to actual trade date.
ExecID	17	Y	Unique identifier of execution message as assigned by Alphaledger, as sell-side broker.
ExecType	150	Y	Describes purpose of the execution report. Valid values: F = Trade (partial fill or fill)
OrdStatus	39	Y	Identifies current status of order. Valid values: 2 = Filled 4 = Canceled 8 = Rejected C = Expired
SettlDate	64	N	Settlement Date
<Instrument> component			
Symbol	55	N	Common, "human understood" representation of the security.
SecurityID	48	Y	Identifier for the security
SecurityIDSource	22	Y	Source of identifier for security. Valid values: 1 = CUSIP S = FIGI Y = Digital Token Identifier
<SecAltIDGrp> component			Repeating group
NoSecurityAltID	454	N	Number of alternate identifiers
SecurityAltID	455	N	Alternate identifier value. Alphaledger will use this field to provide the AL_ID number for the security.
SecurityAltIDSource	456	N	Alternate identifier source. Valid values: 1 = CUSIP S = FIGI

			Y = Digital Token Identifier
Product	460	N	Indicates the type of product (high-level category). <u>Valid value:</u> 11 = Municipal
SecurityType	167	N	<u>Valid values:</u> AN = Other Anticipation Notes (BAN, GAN, etc.) COFO = Certificate of Obligation COFP = Certificate of Participation GO = General Obligation Bonds MT = Mandatory Tender RAN = Revenue Anticipation Note REV = Revenue Bonds SPCLA = Special Assessment SPCLO = Special Obligation SPCLT = Special Tax TAN = Tax Anticipation Note TAXA = Tax Allocation TECP = Tax Exempt Commercial Paper TMCP = Taxable Municipal CP TRAN = Tax & Revenue Anticipation Note VRDN = Variable Rate Demand Note WAR = Warrant MCPIB = Municipal Interest-Bearing Commercial Paper TMB = Taxable Municipal Bond VRDO = Variable Rate Demand Obligation
MaturityDate	541	N	Date of maturity.
CouponRate	223	Y(A)	Rate of interest on the security.
CouponType	1946	Y(A)	Coupon type of the bond. <u>Valid value:</u> 1 = Fixed rate
DatedDate	873	N	Dated date of security
Side	54	Y	Side of transaction from Alphaledger Market perspective. <u>Valid value:</u> 2 = Sell
<OrderQtyData> component			
OrderQty	38	Y(A)	The order quantity amount in par.
CumQty	14	Y	Currently executed quantity for chain of orders.
LeavesQty	151	Y	Quantity open for further execution. If the OrdStatus (39) is Canceled, DoneForTheDay, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty (38) - CumQty (14).
PriceType	423	N	Code representing price type. <u>Valid value:</u> 1 = Percentage (i.e. percent of par).

Price	44	N	Dollar price of order
TradeDate	75	Y(A)	Used for reporting other than current day trades.
TransactTime	60	Y(A)	Time the transaction represented on this execution report occurred.
<YieldData> component		Y(A)	
YieldType	235	Y(A)	Type of yield. <u>Valid values:</u> ATISSUE = Yield at issue (municipals) CALL = Yield to next call MATURITY = Yield to maturity WORST = Yield to Worst
Yield	236	Y(A)	Yield percentage
GrossTradeAmt	381	N	Total amount traded expressed in units of currency (quantity * price).
<StandardTrailer> component		Y	

Sample Message: ExecutionReport(8)

8=FIXT.1.1|9=365|35=8|34=169|49=ALPHALEDGERMARKETS1-BETA|52=20230504-13:55:24.976|56=TESTBETA01|37=AL58915|11=Abk78942|229=20230516|17=677|150=F|39=2|64=20230525|55=BBG01GHWH782|48=ALMUSC000076CF9|22=Y|454=1|455=BBG01GHWH782|456=S|460=11|167=GO|541=20260515|223=3.00|1946=1|873=20230525|54=2|38=365000|14=365000|151=0|423=1|44=101.826|75=20230517|235=ATISSUE|236=2.36|381=371664.90|10=176|