NYSE BEST QUOTE AND TRADES CLOUD STREAMING CLIENT SPECIFICATION

NYSE
NYSE AMERICAN
NYSE ARCA
NYSE CHICAGO
NYSE NATIONAL

Version	Date
1.0	May 13, 2024

PREFACE

DOCUMENT HISTORY

VERSION	DATE	CHANGE DESCRIPTION
1.0	May 13, 2024	Initial spec publication for NYSE BQT Cloud Streaming

REFERENCE MATERIAL

The following lists the associated documents, which either should be read in conjunction with this document or which provide other relevant information for the user:

- NYSE Symbology

CONTACT INFORMATION

Service Desk

- Telephone: +1 212 896-2830
- Email: support@nyse.com

FURTHER INFORMATION

For additional information about the product, visit the NYSE BQT Product Page

Table of Contents

1. Connecting to NYSE Cloud Streaming

1.1 HOW TO CONNECT

1.1.1 Privatelink

More details on connecting to NYSE Kafka clusters for various environments can be found below:

- How to connect to NYSE Kafka cluster in Load Test Environment
- How to connect to NYSE Kafka cluster in Production Environment

1.2 KAFKA TOPICS

1.2.1 NYSE BQT Kafka Topics

East-1 Region

CHANNEL	TOPIC	PARTITION	TYPE	PROTO MESSAGE	RECOMMENDED BANDWIDTH
Trade	bqt_trd_str_1	**0**	Stream	Trade, TradeCorrection, TradeCancelBust, TrfPriorDayTrade, TrfPriorDayTradeCancel	0.5MB/sec
Quote	bqt_qte_str_1	**0**	Stream	Quote, SingleSidedQuote	1MB/sec
Quote	bqt_qte_str_2	**0**	Stream	Quote, SingleSidedQuote	1MB/sec
Quote	bqt_qte_str_3	**0**	Stream	Quote, SingleSidedQuote	1MB/sec
Quote	bqt_qte_str_4	**0**	Stream	Quote, SingleSidedQuote	1MB/sec
Stock Summary	ssm_cvol_str	**0**	Stream	StockSummary	0.2MB/sec
CTA Consolidated Volume	ssm_cvol_str	**1**	Stream	ConsolidatedVolume	1MB/sec
CTA Consolidated Volume	ssm_cvol_str	**2**	Stream	ConsolidatedVolume	1MB/sec
CTA Consolidated Volume	ssm_cvol_str	**3**	Stream	ConsolidatedVolume	1MB/sec
CTA Consolidated Volume	ssm_cvol_str	**4**	Stream	ConsolidatedVolume	1MB/sec
UTP Consolidated Volume	ssm_cvol_str	**5**	Stream	ConsolidatedVolume	1MB/sec

CHANNEL	TOPIC	PARTITION	TYPE	PROTO MESSAGE	RECOMMENDED BANDWIDTH
UTP Consolidated Volume	ssm_cvol_str	**6**	Stream	ConsolidatedVolume	1MB/sec
UTP Consolidated Volume	ssm_cvol_str	**7**	Stream	ConsolidatedVolume	1MB/sec
UTP Consolidated Volume	ssm_cvol_str	**8**	Stream	ConsolidatedVolume	1MB/sec

2. NYSE CLOUD STREAMING BQT Message Structures

2.1 OVERVIEW

NYSE BQT is a real-time market data product that provides a consolidated view of the Best Bid & Offer and Trades for all equities and ETPs traded on the NYSE Group equities markets (NYSE, NYSE American, NYSE Arca, NYSE Chicago and NYSE National), as well as the ATS trades published by the NYSE Trade Reporting Facility.

NYSE BQT is especially useful for portfolio managers, wealth managers, online brokerages, and back office employees who need a real time source of indicative prices for US securities.

NYSE BQT consists of the following independent data feeds:

1. **Best Quotes (BBO)**, derived from the BBO feeds of the NYSE Group exchanges
2. **Trades**, derived from the Trades feeds of the NYSE Group exchanges and NYSE TRF
3. **Consolidated Volume**, derived from the SIP (CTA and UTP) Trades datafeeds
4. **Stock Summary**, derived from the underlying bbo trades and sip dataset

To view the individual client specifications for the proprietary feeds that serve as the input for BQT, see the website for the NYSE Group proprietary data feeds.

2.2 FORMAT

The messages within this feed are protocol buffer format. Unless noted otherwise, fields within the messages should be considered as optional. Details of the corresponding proto file containing all messages outlined in this specification can be found here. Format details below:

- uint64 - 64 bit unsigned integer
- uint32 - 32 bit unsigned integer
- double - double precision floating point type
- string - UTF - 8 encoded or 7-bit ASCII text

2.3 CONTROL MESSAGE TYPES

The set of control messages used in NYSE BQT.

DESCRIPTION
Symbol Index Mapping Message
Consolidated Symbol Clear Message
Consolidated Security Status Message

3. Common Client Messages

3.1 SYMBOL INDEX MAPPING MESSAGE

This message is published at system startup or in the context of a refresh sequence after a Matching Engine or XDP Publisher failover. It provides referential data for a single specified symbol.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
Symbol Index	symbolid	uint32	The unique ID of this symbol. Provided for reference only. Not needed to process feed messages
Symbol	symbol	string	Symbol for this message. Null-terminated ASCII symbol in NYSE Symbology.
Market ID	marketid	string	ID of the Originating Market: • none – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF
System ID	systemid	uint32	ID of the Originating matching engine server.
Exchange Code	exchcode	string	For listed equity markets, the market where this symbol is listed: ▪ XASE – NYSE American ▪ LTSE- LTSE ▪ XNYS – NYSE ▪ ARCX – NYSE Arca ▪ XNAQ – NASDAQ ▪ IEXG - IEX ▪ BATZ – BATS
Price Scale Code	pricescale	uint32	Only for reference. Not needed to process feed messages
Security Type	securitytype	string	Type of Security used by Pillar-powered markets - Arca, National, American, NYSE and Chicago: ▪ american_depository_receipts ▪ common_stock ▪ debentures ▪ exchange_traded_funds ▪ foreign ▪ american_depository_shares ▪ units_i ▪ index_linked_notes ▪ misc ▪ ordinary ▪ preferred ▪ rights ▪ shares_beneficiary_interest ▪ test ▪ units_u ▪ warrant
Lot Size	lotsize	uint32	Round lot size in shares.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
PrevClosePrice	precloseprice	double	The previous day's closing price for this security.
PrevCloseVolume	preclosevol	uint32	The previous day's closing volume for the security.
Price Resolution	priceres	string	▪ all_penny ▪ penny_nickel ▪ nickel_dime
Round Lot	roundlotac	string	Round Lots Accepted: ▪ yes ▪ no
MPV	mpv	double	The minimum increment for a trade price, in 100ths of a cent. Typically 1, or $0.0001, but for some Tick Pilot stocks, can be 500, or $0.05.
Unit of Trade	unitoftrade	uint32	This field specifies the security Unit of Trade in shares. Valid values are 1, 10, 50 and 100

3.2 SECURITY STATUS MESSAGE

This message informs clients of changes in the status of a specific security, such as Trading Halts, Short Sale Restriction state changes, etc.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
SourceTime	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	Symbol for this message.
Security Status	securitystatus	string	The new status that this security is transitioning to. The following are Halt Status Codes: ▪ trading_halt ▪ resume ▪ suspend The following are Short Sale Restriction Codes (published for all symbols traded on this exchange): ▪ ssr_activated ▪ ssr_continued ▪ ssr_deactivated Market Session values: ▪ begin_accepting_orders ▪ pre_opening ▪ early ▪ core ▪ late ▪ closed If this security is not halted at the time of a session change, the Halt Condition field = ~. If this security is halted on a session change, Halt Condition is non-~, and the security remains halted into the new session. The following values are the Price Indication values: ▪ price_indication ▪ pre_op_price_indication
Halt Condition	haltcond	string	▪ not_applicable ▪ not_halted ▪ news_dissemination ▪ order_imbalance ▪ news_pending ▪ luld_pause ▪ equipment_changeover ▪ additional_information_requested ▪ regulatory_concern ▪ merger_effective ▪ etf_price_not_available ▪ corporate_action ▪ new_security_offering ▪ intra_indicative_value_not_available ▪ suspend Market Wide Circuit Breakers: ▪ mwcb1 ▪ mwcb2

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
			▪ mwcb3
Market ID	marketid	string	ID of the Originating Market: • nyse_group – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF
Price 1	price1	double	Default value is 0. ▪ If securityStatus = ssr_activated and this security is listed on this exchange, then this field is the SSR Triggering Trade Price ▪ If securityStatus = price_indication ▪ or pre_op_price_indication, then this field is the Indication Low Price.
Price 2	price2	double	Default value is 0 ▪ If securityStatus = price_indication ▪ or pre_op_price_indication, then this field is the Indication High Price.
SSR Triggering Exchange ID	ssrexch	string	This field is only populated when securityStatus = A and this security is listed on this exchange. Otherwise it is defaulted to 0x20. Valid values are: ▪ nyse_mkt ▪ nasdaq_omx_bx ▪ nsx ▪ finra ▪ miami_pearl ▪ ise ▪ edga ▪ edgx ▪ ltse ▪ nyse_chx ▪ nyse ▪ nyse_arca ▪ nasdaq ▪ cts ▪ nasdaq_omx ▪ memx ▪ iex ▪ cbsx ▪ nasdaq_omx_psx ▪ bats_y ▪ bats
SSR Triggering Volume	ssrvol	uint32	Default value is 0. This field is only populated when securityStatus = ssr_activated and this security is listed on this exchange
Time	time	uint32	Default value is 0. Format : HHMMSSmmm (mmm = milliseconds)

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
			▪ If securityStatus = ssr_activated and this security is listed on this exchange, then this field is the SSR Trigger Time
SSRState	ssrstate	string	The current SSR state, which this msg updates if the Security Status field contains an SSR Code. Valid values: ▪ not_in_effect ▪ in_effect
MarketState	marketstate	string	The current Market State, which this msg updates if the Security Status field contains a Market State Code. Valid values: ▪ pre_opening ▪ early ▪ core ▪ late ▪ closed

3.3 SYMBOL CLEAR MESSAGE

In case of a failure and recovery of a Matching Engine or an XDP Publisher, the publisher may send a full state refresh for every symbol affected. This kind of unrequested refresh is preceded by a Symbol Clear message. The client should react to receipt of a Symbol Clear message by clearing all state information for the specified symbol in anticipation of receiving a full state refresh.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
SourceTime	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	The unique ID of the symbol in the Symbol Index msg
NextSourceSeqNum	nextsourceseq	uint32	The sequence number in the next message for this symbol
Market ID	marketid	string	ID of the Originating Market: • nyse_group – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF

4. BQT Quote Messages

4.1 NYSE BQT QUOTE

The BQT Quotes data includes best bid and offer information from the underlying NYSE Group BBO feeds:

- New York Stock Exchange LLC (NYSE) BBO datafeed
- NYSE Arca, Inc. (NYSEArca) BBO datafeed
- NYSE American LLC (NYSEAMER) BBO datafeed
- NYSE Chicago, Inc. (NYSECHX) BBO datafeed
- NYSE National, Inc. (NYSENAT) BBO datafeed

The following criteria applies for determining the best quote:

- Price: the exchange with the highest bid or the lowest offer has overall priority;
- Size: the largest size takes precedence when multiple exchanges submit the same bid and/or offer price; and
- Time: the earliest time takes precedence when multiple exchanges submit the same bid and/or offer price with the same sizes.

4.2 BEST QUOTES MESSAGE

This message is sent when an event causes a change in one or both sides of the BBO. The output shows changes to BBO only. Individual market quotes that do not affect the BBO are not disseminated.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uin64	The unique ID of this message
Symbol	symbol	string	Symbol for this message
Ask Price	askprice	double	The Ask price. Use the Price scale from the symbol mapping index.
Ask Volume	askvolume	uint32	The Ask size.
Bid Price	bidprice	double	The Bid price. Use the Price scale from the symbol mapping index.
Bid Volume	bidvolume	uint32	The Bid size.
Ask Quote Condition	askcondition	string	• closing - Closing • opening_quote - Opening Quote • regular_quote - Regular Quote • slow_bid_and_ask_set_slow - Slow on the Bid and Ask due to Set Slow List
Bid Quote Condition	bidcondition	string	• closing - Closing • opening_quote - Opening Quote • regular_quote - Regular Quote • slow_bid_and_ask_set_slow - Slow on the Bid and Ask due to Set Slow List
Retail Pricing Indicator	retailpriceindicator	string	• none - No Retail Interest • bid - Retail Interest on the Bid side • offer - Retail Interest on the Ask side • both - Retail Interest on Bid & Ask side
Market ID of Best Ask	askmarketid	string	The ID of the Originating Market: • nyse_group – NYSE Group (BQT)

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
			• nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago
Market ID of Best Bid	bidmarketid	string	The ID of the Originating Market: • nyse_group – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago

4.3 CONSOLIDATED SINGLE-SIDED QUOTE MESSAGE

This message is sent when an event causes a change in only one side of a BBO.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uin64	The unique ID of this message
Symbol	symbol	string	Symbol for this message
Side	side	string	The side of the order - Buy/Sell. Valid values: • 'B' – Buy • 'S' – Sell (Offer)
Price	price	double	The price. Use the PriceScaleCode in the Symbol Mapping message.
Volume	volume	uint32	The order quantity in shares.
Quote Condition	condition	string	• closing - Closing • opening_quote - Opening Quote • regular_quote - Regular Quote • slow_bid_and_ask_set_slow - Slow on the Bid and Ask due to Set Slow List • na - empty quote (there is no BBO available for the given instrument)
Retail Pricing Indicator	retailpriceindicator	string	• none - No Retail Interest • bid - Retail Interest on the Bid side • offer - Retail Interest on the Ask side • both - Retail Interest on Bid & Ask side
Market ID	marketid	string	The ID of the Originating Market: • nyse_group – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago

5. BQT Trade Messages

BQT Trades Data includes last sale information from the underlying NYSE Group Trades feeds:

- New York Stock Exchange LLC (NYSE) Trades datafeed
- NYSE Arca, Inc. (NYSEArca) Trades datafeed
- NYSE American LLC (NYSEAMER) Trades datafeed
- NYSE Chicago, Inc. (NYSECHX) Trades datafeed
- NYSE National, Inc. (NYSENAT) Trades datafeed

Furthermore, BQT includes trades reported by FINRA/NYSE Trade Reporting Facility (“TRF”).

The BQT Trade messages feed are the same Trade messages published to the Securities Information Processor (SIP) by the originating NYSE Group exchange and the NYSE Trade Reporting Facility.

All Trades are passed through and marked with the originating Market ID.

5.1 CONSOLIDATED TRADE MESSAGE

The following message structure applies to the Trade message.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
Source Time	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	Symbol for this message
Trade ID	tradeid	uint32	The unique Trade ID assigned by the source system
Price	price	double	The price of the trade. Use the Price scale from the Symbol Mapping msg.
Volume	volume	uint32	Volume of the trade.
Trade Condition 1	tradecondition1	string	Settlement related conditions. • regular_sale – Regular Sale • regular_sale_trf - Regular Sale (TRF only) • cash – Cash • next_day_trade– Next Day Trade • seller – Seller
Trade Condition 2	tradecondition2	string	The reason for Trade Through Exemptions. • na – N/A • intermarket_sweep_order – Intermarket Sweep Order • opening_trade – Market Center Opening Trade • derivatively_priced - Derivatively priced (TRF) • reopening_trade – Market Center Reopening Trade • closing_trade – Market Center Closing Trade • qct_order_execution - Qualified Contingent Trade (TRF)

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
			• corrected_cons_close_price – Corrected Last Sale Price
Trade Condition 3	tradecondition3	string	Extended hours/sequencing related conditions • na – N/A • sold_last - Sold Last • extended_hours_trade – Extended Hours Trade • extended_hours_sold – Extended Hours Sold (Out of Sequence) • sold – Sold
Trade Condition 4	tradecondition4	string	SRO Required Detail. • regular_sale – Regular Sale • na – N/A • odd_lot_trade – Odd Lot Trade • official_closing_price – Official Closing Price • official_open_price – Official Open Price • contingent_trade - Contingent Trade • prior_ref_price - Prior Reference Price (TRF) • weighted_average_price - Weighted Average Price (TRF)
Market ID	marketid	string	The ID of the Originating Market: • nyse_group – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF

5.2 CONSOLIDATED TRADE CANCEL MESSAGE

This message is published when a trade is cancelled.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
Source Time	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	Symbol for this message
Original Trade ID	origtradeid	uint32	The original Trade ID of trade being cancelled.
Market ID	marketid	string	The ID of the Originating Market: • nyse_group – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF

5.3 CONSOLIDATED TRADE CORRECTION MESSAGE

This message is published when a trade is corrected.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
Source Time	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	Symbol for this message
Original Trade ID	origtradeid	uint32	The ID of the Trade being corrected.
Trade ID	tradeid	uint32	The Trade ID identifies a unique Trade execution.
Price	price	double	The price of the trade. Use the Price scale from the symbol mapping index.
Volume	volume	uint32	Volume of the trade.
Trade Condition 1	tradecondition1	string	**Settlement related conditions.** • regular_sale – Regular Sale • regular_sale_trf - Regular Sale (TRF only) • cash – Cash • next_day_trade– Next Day Trade • seller – Seller
Trade Condition 2	tradecondition2	string	**The reason for Trade Through Exemptions.** • na – N/A • intermarket_sweep_order – Intermarket Sweep Order • opening_trade – Market Center Opening Trade • derivatively_priced - Derivatively priced (TRF) • reopening_trade – Market Center Reopening Trade • closing_trade – Market Center Closing Trade • qct_order_execution - Qualified Contingent Trade (TRF) • corrected_cons_close_price – Corrected Last Sale Price
Trade Condition 3	tradecondition3	string	**Extended hours/sequencing related conditions** • na – N/A • sold_last - Sold Last • extended_hours_trade – Extended Hours Trade • extended_hours_sold – Extended Hours Sold (Out of Sequence) • sold – Sold
Trade Condition 4	tradecondition4	String	**SRO Required Detail.** • regular_sale – Regular Sale • na – N/A • odd_lot_trade – Odd Lot Trade • official_closing_price – Official Closing Price • official_open_price – Official Open Price • contingent_trade - Contingent Trade • prior_ref_price - Prior Reference Price (TRF)

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
			• weighted_average_price - Weighted Average Price (TRF)
Market ID	marketid	string	**The ID of the Originating Market:** • nyse_group – NYSE Group (BQT) • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF

5.4 TRF PRIOR DAY TRADE MESSAGE

If a TRF participant firm fails to report a trade on the day in which it occurs, the firm may report the trade on a subsequent day by publishing a Prior Day Trade message. The message structure is as follows:

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
Source Time	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	Symbol for this message
Trade ID	tradeid	u32int	Unique identifier for this trade.
Price	price	double	The price of the Trade. Use the Price scale from the Symbol Index Mapping message.
Volume	volume	uint32	The volume of the trade in shares.
Trade Condition 1	tradecondition1	string	Settlement related conditions. • regular_sale – Regular Sale • regular_sale_trf - Regular Sale (TRF only) • cash – Cash • next_day_trade– Next Day Trade • seller – Seller
Trade Condition 2	tradecondition2	string	The reason for Trade Through Exemptions. • na – N/A • intermarket_sweep_order – Intermarket Sweep Order • opening_trade – Market Center Opening Trade • derivatively_priced - Derivatively priced (TRF) • reopening_trade – Market Center Reopening Trade • closing_trade – Market Center Closing Trade • qct_order_execution - Qualified Contingent Trade (TRF) corrected_cons_close_price – Corrected Last Sale Price
Trade Condition 3	tradecondition3	string	Extended hours/sequencing related conditions • na – N/A • sold_last - Sold Last • extended_hours_trade – Extended Hours Trade • extended_hours_sold – Extended Hours Sold (Out of Sequence) • sold – Sold
Trade Condition 4	tradecondition4	string	SRO Required Detail. • regular_sale – Regular Sale • na – N/A • odd_lot_trade – Odd Lot Trade • official_closing_price – Official Closing Price • official_open_price – Official Open Price • contingent_trade - Contingent Trade • prior_ref_price - Prior Reference Price (TRF)

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
			• weighted_average_price - Weighted Average Price (TRF)
PriorDayTime	priordaytime	uint64	The date and time when this Trade occurred at the participant firm, in nanoseconds since Jan 1, 1970 00:00:00 UTC.

5.5 TRF PRIOR DAY TRADE CANCEL MESSAGE

If a TRF participant firm discovers that it has reported a trade with an inaccurate price or volume on a previous day, the firm may correct the trade on a subsequent day by publishing a Prior Day Trade Cancel message, followed by a Prior Day Trade. The message structure is as follows:

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
Source Time	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	Symbol for this message
TradeID	tradeid	uint32	Unique identifier for this trade.
Price	price	double	The price of the Trade being cancelled. Use the Price Scale Code from the Symbol Index Mapping message.
Volume	volume	uint32	The volume of the Trade being cancelled.
PriorDayTime	priordaytime	uint64	The date and time when original Trade being cancelled occurred at the participant firm, in nanoseconds since Jan 1, 1970 00:00:00 UTC.

5.6 CONSOLIDATED STOCK SUMMARY MESSAGE

The stock summary message is sent every 1 minute, after a security is Open. Any data sourced from CTA/UTP SIP is delayed consistent with the requirements for redistributing such data as set forth in the securities information processor plans.

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uint64	The unique ID of this message
Source Time	sourcetime	uint64	The time when this msg was generated in the order book, in nanoseconds since Jan 1, 1970 00:00:00 UTC.
Symbol	symbol	string	Symbol for this message
NYSE Group High Price	hiprice	double	The High price of the stock for the day. Use the Price scale from the symbol mapping index.
NYSE Group Low Price	loprice	double	The Low price of the stock for the day. Use the Price scale from the symbol mapping index.
Primary Listing Market Official Open Price	listingmktopenprice	double	The Opening price of the stock for the day received from the listing market. If there is no official opening price received from the listing market, the Open Price will default to “none”. Note: Non-NYSE Group Primary Listing Market Prices are sourced from CTA/UTP SIP
NYSE Group Volume	grpvol	uint32	The cumulative volume for the stock during the day.
NYSE Group Market ID of High Price	mktofhiprice	string	The ID of the Originating Market: • none – Default • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF
NYSE Group Market ID of Low Price	mktofloprice	string	The ID of the Originating Market: • none – Default • nyse_cash – NYSE • nyse_arca_cash – NYSE Arca • nyse_mkt_cash – NYSE American • nyse_national_cash – NYSE National • nyse_chx - NYSE Chicago • nyse_trf - NYSE TRF
Market ID of Open Price	mktofopenprice	string	The ID of the Originating Market: • none – Default • primary_listing_mkt - Primary Listing Market
Num Close Prices	numclsprice	uint32	The number of Market ID/Closing Price pairs. Values can be 0 – 1.
NYSE Group Market ID of the Close	mktofcloseprice	string	The ID of the Originating Market: • none – Default • primary_listing_mkt - Primary Listing Market

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Primary Listing Market Official Close Price	listingmktcloseprice	double	The Official Close Price of the stock for the day for the originating market captured in the preceding Market ID field. Note: Non-NYSE Group Primary Listing Market Prices are sourced from CTA/UTP SIP
Consolidated High Price	conshiprice	double	The highest price of any high/low eligible transaction on Tapes A, B or C received on the trading day. This field will be blank on all message publications until end of day summary data is received from CTA/UTP SIP
Consolidated Low Price	consloprice	double	The lowest price of any high/low eligible transaction on Tapes A, B or C received on the trading day. This field will be blank on all message publications until end of day summary data is received from CTA/UTP SIP
Consolidated First Price	consfirstprice	double	The price of the first last sale eligible transaction on Tapes A, B, or C received on the trading day This field will be blank on all message publications until the end of day summary data is received from CTA/UTP SIP
Consolidated Last Price	conslastprice	double	The price of the final last sale eligibiel transaction on Tapes A, B, or C received on the trading day. This field will be blank on all message publications until the end of day summary data is received from CTA/UTP SIP
Complete	complete	string	• normal • unrecoverable_gap

6. BQT Consolidated Volume

The consolidated volume channel carries consolidated volume for all listed equities in a manner consistent with the requirements for redistributing such data as set forth in the securities information processor plans.

The Consolidated Volume feed publishes Consolidated Volume Message and Consolidated Security Status Message.

Symbol Index Messages are not published on these channels.

6.1 CONSOLIDATED VOLUME MESSAGE

FIELD NAME	PROTO KEY	FORMAT	DESCRIPTION
Feed Message Sequence	feedmsgseq	uin64	The unique ID of this message
Symbol	symbol	string	Symbol for this message
Consolidated Volume	consvol	uint64	The cumulative volume for the stock throughout the day.
Reason	reason	string	Reason for this update • new • trade_canc • trade_err • trade_corr • closing
Complete	complete	string	• normal • unrecoverable_gap

7. BQT Trading Status

NYSE BQT provides quotes and trades in alignment with the NYSE Group Trading hours.

	Exchange	Quotes and Trading (EST)	Included in BQT
1	NYSE Arca	Quotes and Trades starts with early session at 4am	Yes
2	NYSE Chicago	Quotes and Trades Starts with early session at 7am	Yes
3	NSE American	Quotes and Trades Starts with early session at 7am	Yes
4	NYSE National	Quotes and Trades Starts with early session at 7am	Yes
5	NYSE Tapes B/C	Quotes and Trades Starts with early session at 7am	Yes
6	NYSE Tape A	Quotes and Trades Starts with core session at 9:30am	Yes
7	NYSE TRF Trades	No Quoting. Trading session is 8am - 8pm	Yes

1. NYSE BQT provides security status in alignment with the NYSE Group Trading hours.

For example, on the NYSE Arca Pillar platform (Tape A + Tape B + Tape C)

- ‘P’ at ~12:15am (feed start time)
- ‘B’ at 2:30am (order entry gateways are open)
- ‘E’ at 4:00am (start of trading and quoting)
- ‘O’ at 9:30am (after 9:30am core transition)
- ‘L’ at 4:00pm (late session start)
- ‘X’ at 8:00pm (end of day)

2. Consolidated Volume messages sourced from the SIPs (CTA and UTP) start at 4:00am EST.

3. Please note that NYSE (Tape A) primary listed securities only publish quotes and trades during core hours.