NYSE BEST QUOTE AND TRADES CLIENT SPECIFICATION

NYSE
NYSE AMERICAN
NYSE ARCA
NYSE CHICAGO
NYSE NATIONAL

Version	Date
2.2c	October 4, 2019

PREFACE

DOCUMENT HISTORY

VERSION	DATE	CHANGE DESCRIPTION
1.7	May 12, 2016	Consolidated Security Status message expanded to support changes in input markets. New fields are added to the end of the previous message structure for backward compatibility. Removed Trade Conditions 4,B,P,V,X (obsolete in all input markets)
1.7a	June 1, 2016	Corrected list of Security Status field values to include O, P, and X, exclude ~ and E
2.1	July 24, 2017	Replaced NYSE MKT with NYSE American Added explanatory text about the Trading Session Change message, type 33 Added E and L to Security Status and Market Status fields in Security Status msg Removed Trade Thru, Liquidity, Ask Price & Volume, Bid Price & Volume from Trade Removed Trade Through Exempt from Trade Correction msg
2.1a	April 4, 2018	NYSE National: Added product ID 10 to Market ID fields, 'C' to SSR Exchange fld
2.1b	May 2, 2018	Corrected length of Total Volume field to 8 bytes in Consolidated Volume msg (240).
2.2	Dec 5, 2018	Added support for TRF trades Removed Session Change message, which is no longer published upstream
2.2a	March 8, 2019	Additional clarifications on msg Type 34 for Security Status, Halt condition, Price 1 and Price 2 fields - Pillar Migration
2.2b	March 29, 2019	Additional clarifications on the Source Time for TRF Prior Day Trade (Msg 218) and TRF Prior Day Trade Cancel (Msg 219) messages.
2.2c	Oct 4, 2019	Enhanced the content of the NYSE BQT market data feed to include NYSE Chicago BBO and NYSE Chicago Trades market data feeds.

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:

- XDP Common Client Specification
- NYSE Symbology
- IP Addresses

CONTACT INFORMATION

Service Desk

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FURTHER INFORMATION

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

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1. NYSE BQT Introduction

1.1 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 three independent data feeds:

- **Trades**, derived from the Trades feeds of the NYSE exchanges
- **Best Bid/Offer (BBO)**, derived from the BBO feeds of the NYSE exchanges
- **Consolidated Volume**, derived from the SIP Trades feeds

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.

To receive the NYSE BQT feeds, clients subscribe to redundant pairs of multicast groups called channels to receive real-time market data messages. In order to recover from errors (sequence number gaps, late starts, client feed handler failures, etc.) clients can connect to a TCP/IP server and request retransmissions and refresh data, which is delivered over additional dedicated multicast channels.

For full details, see the XDP Common Client Specification on the NYSE BQT product page. For specific IP addresses, please refer to NYSE Proprietary IP_Addresses.

1.1.1 BQT Trades Feed

Trades data, which includes NYSE TRF trades, is delivered in its own dedicated feed with Product ID 25. It consists of 2 subsets of channelized data:

- Trades Data (1 channel) includes Tick-by-tick price and size, Trading Conditions, and Market ID
- Stock Summary Data (1 channel) includes Open, High, Low, Last and Aggregated Volume

1.1.2 BQT Best Bid/Offer (BBO) Feed

BBO data is delivered in its own dedicated feed with Product ID 26. It consists of 2 subsets of channelized data:

a) BBO Data (channels 1-4) includes Bid/Ask Price, Bid/Ask Size, Quote Condition, Market ID.
b) Consolidated Volume Data (channels 5-12)

1.1.3 BQT Consolidated Volume Feed

Consolidated Volume data is derived from SIP data (CTA and UTP). It contains input from all SIP participant exchanges, not just the NYSE Group exchanges. For this reason, Consolidated Volumes will not match the Aggregated Volumes published in the BQT Stock Summary channel.

There are 8 Consolidated Volume channels, with channel IDs 5 to 12.

  - Channels 5 to 8 publish NYSE-, Arca- and American-listed stocks and 9 to 12 publish NASDAQ-listed stocks. Within each 4-channel market group, messages are channelized in alphabetic symbol ranges.

- The Consolidated Volume feed publishes message types 240 (Consolidated Volume Message) and 34 (Consolidated Security Status Message). Message type 3 (Symbol Index Message) is not published.

- The Consolidated Volume feed provides Retrans and Refresh services in dedicated multicast channels.

1.2 FIELD-LEVEL NOTES

1.2.1 Fields in Symbol Index Mapping Message (type 3)

The Symbol Index Mapping message (see the XDP Common Client Specification for details), when published by NYSE BQT, has the following field values defaulted to 0:

- Market ID
- System ID
- Prev Close Price
- Prev Close Volume

1.2.2 Market IDs

The Market ID 0 (NYSE Group, or BQT) can appear in certain BQT messages when no valid information is available from any upstream market. For example, an empty quote can occur when there is no valid quote available for a certain instrument because all existing quotes have been cancelled or are not eligible for BBO calculations. In this case the Market ID field will contain 0.

1.3 TRADING SESSION TIMES

NYSE BQT and its NYSE Group source feeds start up at approximately 12:15am Eastern Time every morning. Shortly after system startup, initial Symbol Index Mapping and Security Status messages are published.

Full schedules of trading session hours on normal and early-close days for all NYSE markets are available here.

1.4 CONTROL MESSAGE TYPES USED IN NYSE BQT

The set of control messages used in NYSE BQT follows. For further details, refer to the XDP Common Client Specification.

MSGTYPE	DESCRIPTION
1	Sequence Number Reset Message
3	Symbol Index Mapping Message
10	Retransmission Request Message
11	Request Response Message
12	Heartbeat Response Message
13	Symbol Index Mapping Request Message
15	Refresh Request Message
31	Message Unavailable Message
32	Consolidated Symbol Clear Message
34	Consolidated Security Status Message
35	Refresh Header Message

2. Quote Messages

BBO Rules

The “best” quote-side (bid or offer) is determined by Price/Volume/Time rules:

1. The best quote-side is the bid with the highest price or the offer with the lowest price
2. If the prices are equal, the best quote-side is the one with the highest volume
3. If prices and volumes are equal, the best quote-side is the one that was received by the NYSE BQT publisher first

2.1 CONSOLIDATED SYMBOL CLEAR MESSAGE – MSG TYPE ‘32’

In case of a failure and recovery of an upstream Matching Engine or 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	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 22 bytes
Msg Type	2	2	Binary	The type of message • 32 – Consolidated Symbol Clear
Source Time	4	4	Binary	The time when this msg was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
Source Time NS	8	4	Binary	The nanosecond offset from the SourceTime
Symbol Index	12	4	Binary	The unique ID of the symbol in the Symbol Index msg
Next Source Seq Number	16	4	Binary	The source sequence number value that the recipient should expect in the immediately succeeding data packet for the specified symbol.
Market ID	20	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago

2.2 CONSOLIDATED SECURITY STATUS MESSAGE – MSG TYPE 34

This message is sent on both the BBO feed and the Trades feed.

This message will be sent to inform the subscribers of Trading Halts on the securities traded. The Market ID allows clients to know which exchange is involved.

FIELD NAME	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 46 bytes
Msg Type	2	2	Binary	The type of this message 34 – Consolidated Security Status message
Source Time	4	4	Binary	The time when this msg was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
Source Time NS	8	4	Binary	The nanosecond offset from the SourceTime
Symbol Index	12	4	Binary	The unique ID of the symbol in the Symbol Index msg
Symbol Seq Number	16	4	Binary	The unique ID of this message in the sequence of messages published for this specific symbol.
Security Status	20	1	ASCII	The new status that this security is transitioning to. The following are Halt Status Codes: ▪ ‘4’ - Trading Halt ▪ ‘5’ - Resume The following are Short Sale Restriction Codes: ▪ ‘A’ – Short Sale Restriction Activated (Day 1) ▪ ‘C’ – Short Sale Restriction Continued (Day 2) ▪ ‘D’ - Short Sale Restriction Deactivated NYSE Market State values: ▪ ‘P’ – Pre-opening ▪ ‘E’ – Early ▪ ‘O’ – Opened ▪ ‘L’ – Late ▪ ‘X’ – Closed The following values are the Price Indication values: ▪ ‘I’ – Price Indication ▪ ‘G’ – Pre-Opening Price Indication
Halt Condition	21	1	ASCII	▪ 0x20 – Not applicable ▪ '~' – Security not delayed/halted ▪ 'D' – News dissemination ▪ 'I' – Order imbalance ▪ 'P' – News pending ▪ 'M' – Volatility Trading Pause ▪ 'X' – Equipment changeover 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. Market Wide Circuit Breakers: • '1' - Market Wide Circuit Breaker Halt Level 1 • '2' - Market Wide Circuit Breaker Halt Level 2 • '3' - Market Wide Circuit Breaker Halt Level 3

FIELD NAME	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Market ID	22	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 - NYSE American • 10 - NYSE National • 11 - NYSE Chicago • 255 - NYSE Trade Reporting Facility
Reserved	24	2	Binary	Future use. Any field content should be ignored.
Price 1	26	4	Binary	Default value is 0. ▪ If securityStatus = A and this security is listed on this exchange, then this field is the SSR Triggering Trade Price If securityStatus = G or I, then this field is the Indication Low Price.
Price 2	30	4	Binary	Default value is 0 If securityStatus = G or I, then this field is the Indication High Price.
SSR Triggering Exchange ID	34	1	ASCII	This field is only populated when SecurityStatus = 'A', and otherwise is defaulted to '0x20'. Valid values are: • 'N' – NYSE • 'P' – NYSE Arca • 'Q' – NASDAQ • 'A' – NYSE American • 'B' – NASDAQ OMX BX • 'C' – NYSE National • 'D' – FINRA • 'I' – ISE • 'J' – EDGA • 'K' – EDGX • 'M' – NYSE Chicago • 'S' – CTS • 'T' – NASDAQ OMX • 'W' – CBSX • 'X' – NASDAQ OMX PSX • 'Y' – BATS Y • 'Z' – BATS
SSR Triggering Volume	35	4	Binary	Default value is 0. This field is only populated when SecurityStatus = 'A'

FIELD NAME	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Time	39	4	Binary	Format : HHMMSSmmm (mmm = milliseconds) ▪ If SecurityStatus = 'A' , then this is SSR Trigger Time Default value is 0.
SSRState	43	1	ASCII	The current SSR state, which this msg updates if the Security Status field contains an SSR Code. Valid values: ▪ '~' – No Short Sale Restriction in Effect ▪ 'E' – Short Sale Restriction in Effect Default value is 0.
MarketState	44	1	ASCII	The current Market State, which this msg updates if the Security Status field contains a Market State Code. Valid values: ▪ 'E' – Early ▪ 'L' - Late ▪ 'O' – Opened ▪ 'P' – Pre-Opening ▪ 'X' – Closed Default value is 0.
SessionState	45	1	ASCII	The current Session State. Valid values: ▪ 'X' – Early Session State ▪ 'Y' – Core Session State ▪ 'Z' – Late Session State Default value is 0.

2.3 BQT MESSAGE – MSG TYPE 142

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	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 35 bytes
Msg Type	2	2	Binary	The type of message ▪ 142 – BQT Message
Symbol Index	4	4	Binary	The unique ID of the symbol in the Symbol Index msg
Symbol Seq Number	16	4	Binary	The unique ID of this message in the sequence of messages published for this specific symbol.
Ask Price	12	4	Binary	The Ask price. Use the Price scale from the symbol mapping index.
Ask Volume	16	4	Binary	The Ask size.
Bid Price	20	4	Binary	The Bid price. Use the Price scale from the symbol mapping index.
Bid Volume	24	4	Binary	The Bid size.
Ask Quote Condition	28	1	ASCII	• 'C' - Closing • 'O' - Opening Quote • 'R' - Regular Quote • 'W' - Slow on the Bid and Ask due to Set Slow List
Bid Quote Condition	29	1	ASCII	• 'C' - Closing • 'O' - Opening Quote • 'R' - Regular Quote • 'W' - Slow on the Bid and Ask due to Set Slow List
Retail Pricing Indicator	30	1	Binary	Bit field: • 0x00 No Retail Interest • 0x01 Retail Interest on the Bid side • 0x02 Retail Interest on the Ask side • 0x03 Retail Interest on Bid & Ask side
Market ID of Best Ask	31	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago
Market ID of Best Bid	33	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago

2.4 CONSOLIDATED SINGLE-SIDED QUOTE MESSAGE – MSG TYPE 143

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

FIELD NAME	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 25 bytes
Msg Type	2	2	Binary	The type of message • 143 – Consolidated Single-Sided Quote
Symbol Index	4	4	Binary	The unique ID of the symbol in the Symbol Index msg
Symbol Seq Number	16	4	Binary	The unique ID of this message in the sequence of messages published for this specific symbol.
Side	12	1	ASCII	The side of the order - Buy/Sell. Valid values: • 'B' – Buy • 'S' – Sell (Offer)
Price	13	4	Binary	The price. Use the PriceScaleCode in the Symbol Mapping msg). See the **XDP Common Client Specification**.
Volume	17	4	Binary	The order quantity in shares.
Quote Condition	21	1	ASCII	• 'C' - Closing • 'O' - Opening Quote • 'R' - Regular Quote • 'W' - Slow on the Bid and Ask due to a "Set Slow List" • 0x00 - empty quote (there is no BBO available for the given instrument)
Retail Pricing Indicator	22	1	ASCII	Bit field: • 0x00 No Retail Interest • 0x01 – Retail Interest on the Bid side • 0x02 – Retail Interest on the Ask side • 0x03 – Combination of Retail Interest on Bid & Ask side
Market ID	23	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago

3. Trade Messages

Several message types that appear in the Trades feed are sent on both the Trades and the BBO feeds, and are documented under BBO Messages. These message types are:

- Consolidated Symbol Clear Message – Msg Type 32
- Consolidated Security Status Message – Msg Type 34

3.1 CONSOLIDATED TRADE MESSAGE – MSG TYPE 220

The Trade messages published on the Trades feed are the same Trade messages published to the CTA by the originating NYSE exchange and the NYSE Trade Reporting Facility. All Trades are passed through and marked with the originating Market ID.

FIELD NAME	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 38 bytes
Msg Type	2	2	Binary	The type of message • 220 – Consolidated Trade message
Source Time	4	4	Binary	The time when this msg was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
Source Time NS	8	4	Binary	The nanosecond offset from the SourceTime
Symbol Index	12	4	Binary	The unique ID of the symbol in the Symbol Index msg
Symbol Seq Number	16	4	Binary	The unique ID of this message in the sequence of messages published for this specific symbol.
Trade ID	20	4	Binary	The unique Trade ID assigned by the source system
Price	24	4	Binary	The price of the trade. Use the Price scale from the Symbol Mapping msg.
Volume	28	4	Binary	Volume of the trade.
Trade Condition 1	32	1	ASCII	Settlement related conditions. • '@' – Regular Sale • 'C' – Cash • 'N'– Next Day Trade • 'R' – Seller
Trade Condition 2	33	1	ASCII	The reason for Trade Through Exemptions. • '0x20' – N/A • 'F' – Intermarket Sweep Order • 'O' – Market Center Opening Trade • '5' – Market Center Reopening Trade • '6' – Market Center Closing Trade • '9' – Corrected Last Sale Price
Trade Condition 3	34	1	ASCII	Extended hours/sequencing related conditions • '0x20' – N/A • 'L' – Sold Last • 'T' – Extended Hours Trade • 'U' – Extended Hours Sold (Out of Sequence) • 'Z' – Sold
Trade Condition 4	35	1	ASCII	SRO Required Detail. • '@' – Regular Sale • '0x20' – N/A • 'E' – Automatic Execution • 'H' – Price Variation Trade • 'I' – Odd Lot Trade

FIELD NAME	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
				• ‘K’ – Rule 127 (NYSE only) or Rule 155 (NYSE American Only) • ‘M’ – Official Closing Price • ‘Q’ – Official Open Price
Market ID	36	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago

3.2 CONSOLIDATED TRADE CANCEL MESSAGE – MSG TYPE 221

This message is sent when a trade is cancelled.

FIELD NAME	OFFSETS	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 26 bytes
Msg Type	2	2	Binary	The type of message • 221 – Consolidated Trade Cancel/Bust
Source Time	4	4	Binary	The time when this msg was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
Source Time NS	8	4	Binary	The nanosecond offset from the SourceTime
Symbol Index	12	4	Binary	The unique ID of the symbol in the Symbol Index msg
Symbol Seq Number	16	4	Binary	The unique ID of this message in the sequence of messages published for this specific symbol.
Trade ID	20	4	Binary	The ID of trade being cancelled.
Market ID	24	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago

3.3 CONSOLIDATED TRADE CORRECTION MESSAGE – MSG TYPE 222

This message is sent when a trade is corrected.

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 42 bytes
Msg Type	2	2	Binary	The type of message • 222 – Consolidated Trade Correction
Source Time	4	4	Binary	The time when this msg was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
Source Time NS	8	4	Binary	The nanosecond offset from the SourceTime
Symbol Index	12	4	Binary	The unique ID of the symbol in the Symbol Index msg
Symbol Seq Number	16	4	Binary	The unique ID of this message in the sequence of messages published for this specific symbol.
Original Trade ID	20	4	Binary	The ID of the Trade being corrected.
Trade ID	24	4	Binary	The Trade ID identifies a unique Trade execution.
Price	28	4	Binary	The price of the trade. Use the Price scale from the symbol mapping index.
Volume	32	4	Binary	Volume of the trade.
Trade Condition 1	36	1	ASCII	This field contains settlement related conditions. • '@' – Regular Sale • 'C' – Cash • 'N'– Next Day Trade • 'R' – Seller
Trade Condition 2	37	1	ASCII	This field contains a Reason for Trade Through Exemptions. • '0x20' – N/A • 'F' – Intermarket Sweep Order • 'O' – Market Center Opening Trade • '4' – Derivatively Priced • '5' – Market Center Reopening Trade • '6' – Market Center Closing Trade • '9' – Corrected Last Sale Price
Trade Condition 3	38	1	ASCII	This field contains extended hours/sequencing related conditions. • '0x20' – N/A • 'L' – Sold Last • 'T' – Extended Hours Trade • 'U' – Extended Hours Sold (Out of Sequence) • 'Z' – Sold
Trade Condition 4	39	1	ASCII	This field contains the SRO Required Detail. • '@' – Regular Sale • '0x20' – N/A • 'B' – Average Price Trade • 'E' – Automatic Execution • 'H' – Price Variation Trade • 'I' – Odd Lot Trade • 'K' – Rule 127 (NYSE only) or Rule 155 (NYSE American Only) • 'M' – Official Closing Price • 'P' – Prior Reference Price • 'Q' – Official Open Price • 'V' – Stock-Option Trade

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
				• ‘X’ – Cross Trade
Market ID	40	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago

3.4 TRF PRIOR DAY TRADE MESSAGE - MSG TYPE 218

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.

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 44 bytes
Msg Type	2	2	Binary	The type of message: 218 – TRF Prior Day Trade Message
SourceTime	4	4	Binary	The time when this msg was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
SourceTimeNS	8	4	Binary	The nanosecond offset from the Source Time
SymbolIndex	12	4	Binary	The ID of the symbol in the Symbol Index message
SymbolSeqNum	16	4	Binary	The symbol sequence number.
TradeID	20	4	Binary	Unique identifier for this trade.
Price	24	4	Binary	The price of the Trade. Use the Price scale from the Symbol Index Mapping message.
Volume	28	4	Binary	The volume of the trade in shares.
TradeCond1	32	1	ASCII	Settlement related conditions. Valid values: ▪ @ – Regular Sale (Arca, American, National) **NYSE only** ▪ ‘ ‘ – (space) Regular Sale ▪ C – Cash ▪ N– Next Day Trade ▪ R – Seller
TradeCond2	33	1	ASCII	The reason for Trade Through Exemptions. Valid values: **All markets** ▪ ‘ ’ – N/A (0x20) ▪ 5 – Market Center Reopening Trade ▪ 6 – Market Center Closing Trade ▪ 9 – Corrected Last Sale Price **NYSE only** ▪ F – Intermarket Sweep Order ▪ O – Market Center Opening Trade **NYSE TRF only** ▪ 4 – Derivatively priced ▪ 7 - Qualified Contingent Trade
TradeCond3	34	1	ASCII	Extended hours/sequencing related conditions. Valid values: **All markets** ▪ ‘ ’ – (space, or 0x20) N/A Z – Sold**NYSE only** ▪ L – Sold Last **Arca, American and National only** ▪ T – Extended Hours Trade

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
				▪ U – Extended Hours Sold (Out of Sequence)
TradeCond4	35	1	ASCII	SRO Required Detail. Valid values: **All markets** ▪ I – Odd Lot Trade **NYSE only** ▪ ‘ ‘ – (space, or 0x20) N/A ▪ H – Aberrant Trade K – Rule 127 **NYSE TRF only** ▪ P - Prior Reference Price ▪ V - Contingent Trade ▪ W - Weighted Average Price **Arca, American and National only** ▪ @ - Regular Sale ▪ M – Official Closing Price ▪ Q – Official Open Price
PriorDayTime	36	4	Binary	The date and time when this Trade occurred at the participant firm, in seconds since Jan 1, 1970 00:00:00 UTC.
PriorDayTimeNS	40	4	Binary	The nanosecond offset from the Prior Day Time

3.5 TRF PRIOR DAY TRADE CANCEL MESSAGE - MSG TYPE 219

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.

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 40 bytes
Msg Type	2	2	Binary	The type of message: 219 – TRF Prior Day Trade Cancel Message
SourceTime	4	4	Binary	The time when this message was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
SourceTimeNS	8	4	Binary	The nanosecond offset from the Source Time
SymbolIndex	12	4	Binary	The ID of the symbol in the Symbol Index message
SymbolSeqNum	16	4	Binary	The symbol sequence number.
TradeID	20	4	Binary	Unique identifier for this trade.
Price	24	4	Binary	The price of the Trade being cancelled. Use the Price Scale Code from the Symbol Index Mapping message.
Volume	28	4	Binary	The volume of the Trade being cancelled.
PriorDayTime	32	4	Binary	The date and time when original Trade being cancelled occurred at the participant firm, in seconds since Jan 1, 1970 00:00:00 UTC.
PriorDayTimeNS	36	4	Binary	The nanosecond offset from the Prior Day Time

3.6 CONSOLIDATED STOCK SUMMARY MESSAGE – MSG TYPE 229

The stock summary message is sent every 1 minute regardless of whether there is a change to a particular value or not. In the event that there is no volume on the stock, the stock summary message will not be disseminated.

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 39-57 bytes. Note: The Msg Size varies with the 'Num Close Prices' field.
Msg Type	2	2	Binary	The type of message ▪ 229 – Consolidated Stock Summary
Source Time	4	4	Binary	The time when this msg was generated in the order book, in seconds since Jan 1, 1970 00:00:00 UTC.
Source Time NS	8	4	Binary	The nanosecond offset from the SourceTime
Symbol Index	12	4	Binary	The unique ID of the symbol in the Symbol Index msg
High Price	16	4	Binary	The High price of the stock for the day. Use the Price scale from the symbol mapping index.
Low Price	20	4	Binary	The Low price of the stock for the day. Use the Price scale from the symbol mapping index.
Open	24	4	Binary	The Opening price of the stock for the day. Use the Price scale from the symbol mapping index.
Total Volume	28	4	Binary	The cumulative volume for the stock during the day.
Market ID of High Price	32	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago • 255 - NYSE Trade Reporting Facility
Market ID of Low Price	34	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago • 255 - NYSE Trade Reporting Facility
Market ID of Open Price	36	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca • 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago • 255 - NYSE Trade Reporting Facility
Num Close Prices	38	1	Binary	The number of Market ID/Closing Price pairs. Values can be 0–4.
Market ID of the Close	39	2	Binary	The ID of the Originating Market: • 0 – NYSE Group (BQT) • 1 – NYSE • 3 – NYSE Arca

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
				• 9 – NYSE American • 10 – NYSE National • 11 - NYSE Chicago • 255 - NYSE Trade Reporting Facility
Close	41	4	Binary	The Closing price of the stock for the day. Use the Price scale from the symbol mapping index. Note: The 'Market ID of the Close' field and the 'Close' field repeat as a pair for 'Num Close Prices' times.

4. Consolidated Volume Message

Message types 240 (Consolidated Volume Message) and 34 (Consolidated Security Status Message) are published on the consolidated volume channels.

Consolidated Security Status Message – Msg Type 34 is documented under BBO Messages.

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 22 bytes.
Msg Type	2	2	Binary	The type of message • 240 – Consolidated Volume message
Symbol Index	4	4	Binary	The unique ID of the symbol in the Symbol Index msg
Symbol Seq Number	16	4	Binary	The unique ID of this message in the sequence of messages published for this specific symbol.
Total Volume	12	8	Binary	The cumulative volume for the stock throughout the day.
Reason	20	1	Binary	Reason for this update • 0 – New trade • 1 – Trade Cancellation • 2 – Trade Error • 3 – Trade Correction • 4 – Closing/End Trade Summary (Synchronization with CTS and UTDF for NYSE listed and NASDAQ symbols separately)
Complete	21	1	Binary	• 0 – Normal. Data is complete. • 1 – An unrecoverable gap was experienced in the input stream, so data may not be complete.

5. Product ID and Market ID

PRODUCT ID	CHANNELS	DESCRIPTION
25	1 N/A	NYSE BQT Trades NYSE BQT Stock Summaries (no retrans/refresh available)
26	1 - 4 5 - 8 9 - 12	NYSE BQT BBO NYSE BQT Consolidated Volume, CTA symbols NYSE BQT Consolidated Volume, UTP symbols

EXCHANGE	MARKET ID
NYSE Group	0