## Consolidated Quotes and Trades (CQT)

#### **Product Overview**

The **Consolidates Quotes and Trades** feed provides easy and flexible access to high quality and reliable real time streaming data for Nasdaq-, NYSE-, NYSE American and other regional-listed securities—all through the cloud.

In order to match the entitlement structure, this feed will support three outbound channels. The data set will be channelized based on the listing market of a security.

Chanel	Securities Coverage
1 (CTA-A)	NYSE-listed issues
2 (CTA-B)	NYSE MKT-, NYSE Arca-, BATS-, and U.S. regional stock exchange- listed issues
3 (UTPBIN)	Nasdaq-listed issues

#### Publisher

Nasdaq Investment Intelligence is a leading source of market data, global indexes, and investment data and analytics. Powering price discovery and decisions around the globe, our data is distributed to millions of people daily, providing them with innovative real-time and historical information, as well as analytic solutions designed for investors of all sizes and at every stage of the investment lifecycle. To learn more about the company, technology solutions and career opportunities, visit us on <a href="LinkedIn"><u>LinkedIn</u></a>, on Twitter <a href="@Nasdaq">@Nasdaq</a>, or at <a href="www.nasdaq.com">www.nasdaq.com</a>.

### Delivery

Nasdaq Cloud Data Service (NCDS) provides a modern and efficient method of delivery for realtime exchange data and other financial information. Data is made available through a suite of APIs, allowing for effortless integration of data from disparate sources, and a dramatic reduction in time to market for customer-designed applications. The API is highly scalable, and robust enough to support the delivery of real-time exchange data.

This repository provides an SDK for developing applications to access the NCDS API. While the SDK is open source, connecting to the API does require credentials, which are provided by Nasdaq during an onboarding process.

For more information please use the link- https://github.com/Nasdaq/CloudDataService

## **Message Formats**

# System Event Message

System Event Messages is used to signal key market or data feed control events.

The Stream Event message is used to convey market events published on a specific upstream channel and (optionally) for a specific Market Center.

Field	Name	Туре	Description	on
Message Type	msg_type	string	S = System	n Message
Event Code	event	string	Events for values:	which the message is being generated. Possible
			Code	Value
			*SOD	Start of Day
			*MKO	Market Open
			*MKC	Market Close
			*EOD	End of Day
Impacted Market Center	market_center	string	Populated	d if it affects a market center
			Code	Value
			Q	The NASDAQ Stock Market, LLC
			N	New York Stock Exchange, LLC
			В	NASDAQ BX, Inc.
			E	Market Independent
			D	FINRA Alternative Display Facility
			Z	Cboe BZX Exchange, Inc
			Т	The NASDAQ Stock

	Market, LLC
I	International Securities Exchange
U	OTC Bulletin Board
W	Cboe Stock Exchange
u	OTC Markets Group
J	Cboe EDGA Exchange, Inc.
М	Chicago Stock Exchange
Υ	Cboe BYX Exchange, Inc.
С	NYSE National, Inc.
x	NASDAQ PSX, Inc.
А	NYSE American, LLC
К	Cboe EDGX Exchange, Inc.
Р	NYSE Arca, Inc
S	Consolidated Quotation System

```
{
  "type": "record",
  "name": "SystemEvent",
  "namespace": "com.nasdaq.cqt",
  "fields": [
    {
        "name": "msg_type",
        "type": "string"
    },
    {
        "name": "event_code",
        "type": "string"
    },
    {
        "name": "market_center",
        "type": "string"
    },
    {
        "name": "string"
    }
],
    "version": "1"
}
```

# Sample

```
{
    "msg_type": "S",
    "event_code": "*SOD",
    "market_center": ""
}
```

# Quotes

Field	Name	Туре	Description	
Message Type	msg_type	string	Q = Market Center Quote	
Symbol	symbol	string		sue symbol of the security for which the s being generated.
SIP Feed	sipfeed	string	SIP tape name	
SIP Sequence ID	sipfeed_seq	int	Quote sequen	ce number.
Market Center	market_center	string	Indicates the n message.	narket center code that originated the
			Code	Value
			Q	The NASDAQ Stock Market, LLC
			N	New York Stock Exchange, LLC
			В	NASDAQ BX, Inc.
			Е	Market Independent
			D	FINRA Alternative Display Facility
			Z	Cboe BZX Exchange, Inc
			Т	The NASDAQ Stock Market, LLC
			I	International Securities Exchange
			U	OTC Bulletin Board

StartTime	start_time	string	Actual star	rt time of the Quote.
			0x01	Quote Sizes are Provided in Shares, not Lots
			4	Two-Sided Open
			3	One-Sided Open
			2	Closed
			1	Open
			0	None Provided
			Code	Value
Quote Condition	quote_conditions	string	Indicates t	he quote conditions. Allowable values are:
Ask Quantity	ask_quantity	int	The lowest price at the market center that someone i willing to sell a security at a given time.	
Ask Price	ask_price	float		t price at the market center that someone is sell a security at a given time.
Bid Quantity	bid_quantity	int		f shares available at the Market Center's bid given security.
Bid Price	bid_price float			st price at the market center that someone is buy a security at the given time.
			S	Consolidated Quotation System
			Р	NYSE Arca, Inc
			К	Cboe EDGX Exchange, Inc.
			А	NYSE American, LLC
			X	NASDAQ PSX, Inc.
			С	NYSE National, Inc.
			Υ	Cboe BYX Exchange, Inc.
			M	Chicago Stock Exchange
			J	Cboe EDGA Exchange, Inc.
			u	OTC Markets Group
			W	Cboe Stock Exchange

```
"type": "record",
"name": "QuoteMessage",
"namespace": "com.nasdaq.cqt",
"fields": [
  "name": "msg_type",
  "type": "string"
  "name": "symbol",
  "type": "string"
 },
  "name": "sipfeed",
  "type": "string"
  "name": "sipfeed_seq",
  "type": "int"
  "name": "market_center",
  "type": "string"
 },
  "name": "bid_price",
  "type": "float"
  "name": "bid_quantity",
  "type": "int"
  "name": "ask_price",
  "type": "float"
  "name": "ask_quantity",
  "type": "int"
  "name": "quote_conditions",
  "type": "string"
 },
  "name": "start_time",
  "type": "string"
"version": "1"
```

## Sample

```
{
   "msg_type": "Q",
   "symbol": "NDAQ",
   "sipfeed": "UQDF112",
   "sipfeed_seq": 1,
   "market_center": "N",
   "bid_price": 23.45,
   "bid_quantity": 100,
   "ask_price": 23.45,
   "ask_quantity": 1100,
   "quote_conditions": "",
   "start_time": "2021-06-02T00:00:00.000"
}
```

### Trades

Field	Name	Туре	Description
Message Type	msg_type	string	T = Trade Report
Symbol	symbol	string	Denotes the issue symbol of the security for which the quote report is being generated.
Price	price	float	Trade execution price.
Quantity	quantity	long	Trade execution quantity.
Canceled Indicator	canceled_indicator	boolean	Indicates that the record was cancelled (null if not cancelled).
Correction Indicator	correction_indicator	boolean	Indicates that the record was corrected.
DOTT	dott	string	Indicates whether trade occurred during pre-market, regular market or post market hours. Allowable values are:  • F = Regular Hours  • T = Pre/Post Market Hours

Listing Venue listing_venue		string	Indicates th Allowable v	e primary listing market for the issue alues are:			
			Code	Value			
			Q	Nasdaq			
			N	NYSE			
			Α	NYSE Market			
			Z	NYSE Arca			
			V	BATS			
Market Center market_center	market_center	string	Indicates th Allowable v	e market where the execution occurr alues are:			
			Code	Value			
			Q	The NASDAQ Stock Market, LLC			
			N	New York Stock Exchange, LLC			
			В	NASDAQ BX, Inc.			
			E	Market Independent			
						D	FINRA Alternative Display Facility
			Т	The NASDAQ Stock Market, LLC			
				I	International Securities Exchange		
			U	OTC Bulletin Board			
			W	Cboe Stock Exchange			
			u	OTC Markets Group			
			J	Cboe EDGA Exchange, Inc.			
			М	Chicago Stock Exchange			
			Υ	Cboe BYX Exchange, Inc.			
			С	NYSE National, Inc.			
			×	NASDAQ PSX, Inc.			
			А	NYSE American, LLC			
			К	Cboe EDGX Exchange, Inc.			
			Р	NYSE Arca, Inc			

			S	Consolidated Quotation System
Sub Market Center	sub_market_center	string	ne sub-market where the execution occurred. values are:	
			Code	Value
			D	FINRA Alternative Display Facility
			N	FINRA NYSE Trade Reporting Facility
			Q	FINRA Nasdaq Trade Reporting Facility for Nasdaq listed securities
			Т	FINRA Nasdaq Trade Reporting Facility non- Nasdaq listed securities
			В	FINRA Nasdaq Trade Reporting Facility 2
MSN	msn	int		equence Number from the UTDF level 1 seed as a trade identifier.
OMSN	omsn	int	identifies th	to correction and cancel records and ne original trade to which the rection applies.
Sales Condition	sales_conditions	string	<ul> <li>Section</li> <li>Specific</li> <li>Section</li> <li>System</li> </ul>	nformation on Sales Condition codes, see:  n 7.5.1 of the <u>UTP Trade Data Feed</u> cation for <i>NASDAQ-listed securities</i> n 7.0 of the <u>Consolidated Tape</u> n <u>Specification</u> for <i>NYSE and AMEX-ecurities</i>
Trade Date	trade_date	string	Timestamp	of the trade.

```
{
  "type": "record",
  "name": "TradeMessage",
  "namespace": "com.nasdaq.cqt",
  "fields": [
    {
        "name": "msg_type",
        "type": "string"
    },
    {
        "name": "symbol",
    }
}
```

```
"type": "string"
  "name": "price",
  "type": "float"
  "name": "quantity",
  "type": "long"
  "name": "canceled_indicator",
  "type": "boolean"
  "name": "correction_indicator",
  "type": "boolean"
  "name": "dott",
  "type": "string"
  "name": "listing_venue",
  "type": "string"
 },
  "name": "market_center",
  "type": "string"
  "name": "sub_market_center",
  "type": "string"
  "name": "msn",
  "type": "int"
 },
  "name": "omsn",
  "type": "int"
  "name": "sales_conditions",
"type": "string"
  "name": "trade_date",
  "type": "string"
],
"version": "1"
```

## Sample

```
{
  "msg_type": "T",
  "symbol": "AAPL",
  "price": 23.45,
  "quantity": 100,
  "canceled_indicator": false,
  "correction_indicator": false,
  "dott": "F",
  "listing_venue": "",
  "market_center": "N",
  "sub_market_center": "",
  "msn": 1,
  "omsn": 0,
  "sales_conditions": "@ ",
  "trade_date": "2021-06-02T00:00:00.000"
}
```

## Issue Symbol

Name	Туре	Description	
msg_type	string	B (constant va	lue)
symbol	string	issue symbol of the security.	
security_name	string	Indicates secu	rity name.
market_tier	string	Indicates the market tiers. Allowable values are	
		Code	Value
		0	Unknown or Not Available
		1	NASDAQ Global Select
		2	NASDAQ Global
		3	NASDAQ Capital
	msg_type symbol security_name	msg_type string symbol string security_name string	msg_type string B (constant values) symbol string issue symbol constant values security_name string Indicates secu market_tier string Indicates the record code 0 1 2

Test symbol	test_symbol	boolean	True/False.	
Round Lot Size	round_lot_size	int	Value of ro	und lot size.
Financial Status Indicator	financial_status_indicat or	string	ne financial status, which is only available for cks. Allowable values are:	
			Code	Value
			0	Normal
			1	Bankrupt
			2	Delinquent (Late Filing)
			3	Delinquent and Bankrupt
			4	Deficient (Below Listing Standards)
			5	Deficient and Bankrupt
			6	Deficient and Delinquent
			7	Deficient, Delinquent, and Bankrupt
			8	Suspended
			9	Creations Suspended (ETPs)
			10	Redemptions Suspended (ETPs)
			11	Liquidation (for ETPs)

```
"name": "security_name",
  "type": "string"
  "name": "market_tier",
  "type": "string"
 },
  "name": "test_symbol",
  "type": "boolean"
  "name": "round_lot_size",
  "type": "int"
  "name": "financial_status_indicator",
  "type": "string"
 }
],
"version": "1"
Sample
  "msg_type": "B",
  "symbol": "AAPL",
  "security_name": "Apple Inc. - Common Stock",
  "market_tier": "1",
  "test_symbol": false,
  "round_lot_size": 100,
  "financial_status_indicator": "1"
}
```

## **Trading Action**

Field	Name	Туре	Description
Message Type	msg_type	string	H (constant value)

Source Market Center	source_market_center	string	Originating	market center.
Timestamp	action_time	string	SIP timestamp - Date in format: yyyy-MM-dd'T'HH:mm:ss.SSS	
Symbol	symbol	string	issue symbo	ol of the security.
SIP Feed	sipfeed	string	SIP feed ide	entifier.
SIP Sequence ID	sipfeed_seq	int	SIP feed ID.	
Action Code	action	int	Indicates the trading actions. Allowable values a	
			Code	Value
			1	Trading
			2	Quoting (Orders are accepted, but not Executing – books may be crossed)
			3	Halted (Orders are not accepted or executing)
			4	Paused (Used for Volatility Trading Pauses in US Equities – denotes a symbol going into the Halted State followed Immediately by the Quoting State)
Reason Code	reason	int	Indicates th	ne trading actions. Allowable values are:
			Code	Value
			0	None Provided
			1	News Dissemination
			2	News Pending
			3	Order Influx
			4	Order Imbalance
			5	Volatility
			6	Equipment Changeover
			7	Sub-Penny Trading
			8	Regulatory – Extraordinary Market Activity

1-1	
9	ETF
10	Information Requested
11	Non-Compliance
12	Filings Not Current
13	SEC Trading Suspension
14	Regulatory Concern
15	Operations
16	Corporate Action
17	Quote Not Available
18	Volatility – Straddle State
19	News and Resumption Times
20	Single Stock Pause
21	Single Stock Pause – Quoting
22	Qualifications Resolved
23	Filings Resolved
24	Issuer News Not Forthcoming
25	Requirements Met
26	Filings Met
27	Concluded by Other Authority
28	New Issue Available
29	Issue Available
30	IPO – Not Yet Trading
31	IPO – Release for Quotation
32	IPO – Window Extension
33	Market Wide Circuit Breaker Level 1
34	Market Wide Circuit Breaker Level 2
35	Market Wide Circuit Breaker Level 3
36	Market Wide Circuit Breaker – Carryover from Prior Day
37	Market Wide Circuit

38	Post-Close
39	Pre-Cross
40	Cross
41	SEC Revocation
42	Foreign Market Regulatory
43	Component Derivative Of Exchange Listed
44	Extraordinary Events
45	Security Deletion
46	Internal Halt
47	Was Frozen
48	Was Delayed
49	As-Of Update
50	Related Security – News Dissemination
51	Related Security – News Pending
52	Related Security
53	In View Of Common
54	Exchange Specific
55	Security Not Delayed Or Halted
56	LULD Trading Pause
57	No Open No Resume
58	Not Available For Trading
59	Unknown or Invalid
60	Merger Effective (CTS)
61	ETF Component Price Not Available (CTS)
62	Intraday Indicative Price Not Available (CTS)

```
{
  "type": "record",
  "name": "TradingAction",
  "namespace": "com.nasdaq.cqt",
  "fields": [
```

```
"name": "msg_type",
  "type": "string"
},
  "name": "source_market_center",
  "type": "string"
  "name": "action_time",
  "type": "string"
},
  "name": "symbol",
  "type": "string"
  "name": "sipfeed",
  "type": "string"
  "name": "sipfeed_seq",
  "type": "int"
  "name": "action",
  "type": "int"
  "name": "reason",
  "type": "int"
"version": "1"
```

## Sample

```
{
    "msg_type": "H",
    "source_market_center": "",
    "action_time": "2021-06-02T00:00:00.000",
    "symbol": "AAPL",
    "sipfeed": "UQDF112",
    "sipfeed_seq": 1,
    "action": 1,
    "reason": 0
}
```

# Market Center Trading Action

Field	Name	Туре	Description		
Message Type	msg_type	string	K (constant value)		
Source Market Center	source_market_center	string	Originating ma	arket center	
Impacted Market Center	market_center	string	Impacted mark	ket center	
Timestamp	action_time	string	SIP timestamp dd'T'HH:mm:ss	- Date in format: yyyy-MM- s.SSS	
Symbol	symbol	string	issue symbol o	f the security.	
SIP Feed	sipfeed	string	SIP feed identifier.		
SIP Sequence ID	sipfeed_seq	int	SIP feed ID		
Action Code	action	int	Indicates the t	rading actions. Allowable values are:	
			Code	Value	
			1	Trading	
			2	Quoting (Orders are accepted, but not Executing – books may be crossed)	
			3	Halted (Orders are not accepted or executing)	
		4	Paused (Used for Volatility Trading Pauses in US Equities – denotes a symbol going into the Halted State followed Immediately by the Quoting State)		

Reason Code reason	int	Indicates the trading actions. Allowab		
			Code	Value
			0	None Provided
			1	News Dissemination
			2	News Pending
			3	Order Influx
			4	Order Imbalance
			5	Volatility
			6	Equipment Changeover
			7	Sub-Penny Trading
			8	Regulatory – Extraordinary Market Activity
			9	ETF
			10	Information Requested
			11	Non-Compliance
			12	Filings Not Current
			13	SEC Trading Suspension
			14	Regulatory Concern
			15	Operations
			16	Corporate Action
			17	Quote Not Available
			18	Volatility – Straddle State
			19	News and Resumption Times
			20	Single Stock Pause
			21	Single Stock Pause – Quoting
			22	Qualifications Resolved
			23	Filings Resolved
			24	Issuer News Not Forthcoming
			25	Requirements Met
			26	Filings Met
			27	Concluded by Other Authority
			28	New Issue Available
			29	Issue Available

30 31 32 33	IPO – Not Yet Trading IPO – Release for Quotation IPO – Window Extension
32	Quotation
	IPO – Window Extension
33	
	Market Wide Circuit Breaker Level 1
34	Market Wide Circuit Breaker Level 2
35	Market Wide Circuit Breaker Level 3
36	Market Wide Circuit Breaker – Carryover from Prior Day
37	Market Wide Circuit Breaker – Resumption
38	Post-Close
39	Pre-Cross
40	Cross
41	SEC Revocation
42	Foreign Market Regulatory
43	Component Derivative Of Exchange Listed
44	Extraordinary Events
45	Security Deletion
46	Internal Halt
47	Was Frozen
48	Was Delayed
49	As-Of Update
50	Related Security – News Dissemination
51	Related Security – News Pending
52	Related Security
53	In View Of Common
54	Exchange Specific
55	Security Not Delayed Or Halted
56	LULD Trading Pause
57	No Open No Resume
58	Not Available For Trading

	59	Unknown or Invalid	
	60	Merger Effective (CTS)	
	61	ETF Component Price Not Available (CTS)	
	62	Intraday Indicative Price Not Available (CTS)	
			_

```
"type": "record",
"name": "MarketCenterTradingAction",
"namespace": "com.nasdaq.cqt",
"fields": [
 "name": "msg_type",
  "type": "string"
  "name": "source_market_center",
  "type": "string"
  "name": "market_center",
  "type": "string"
  "name": "action_time",
 "type": "string"
  "name": "symbol",
  "type": "string"
  "name": "sipfeed",
  "type": "string"
  "name": "sipfeed_seq",
  "type": "int"
  "name": "action",
  "type": "int"
  "name": "reason",
  "type": "int"
```

```
],
    "version": "1"
}

Sample

{
    "msg_type": "K",
    "source_market_center": "N",
    "market_center": "N",
    "action_time": "2021-06-02T00:00:00.000",
    "symbol": "AAPL",
    "sipfeed": "UQDF112",
    "sipfeed_seq": 1,
    "action": 3,
    "reason": 54
}
```

## NBBO Quote Message

Field	Name	Туре	Description	
Message Type	msg_type	string	N (constant val	ue)
Symbol	symbol	string	issue symbol of the security.	
SIP Feed	sipfeed	string	Feed on which Quote was reported.	
SIP Sequence ID	sipfeed_seq	int	SIP feed ID	
Bid Market Center	bid_market_center	string	Allowable value	es are:
			Code	Value
			Q	The NASDAQ Stock Market, LLC
			N	New York Stock Exchange, LLC

			В	NASDAQ BX, Inc.
			E	Market Independent
			D	FINRA Alternative Display
				Facility
			Z	Cboe BZX Exchange, Inc
			Т	The NASDAQ Stock Market, LLC
			I	International Securities Exchange
			U	OTC Bulletin Board
			W	Cboe Stock Exchange
			u	OTC Markets Group
			J	Cboe EDGA Exchange, Inc.
			М	Chicago Stock Exchange
			Υ	Cboe BYX Exchange, Inc.
			С	NYSE National, Inc.
			×	NASDAQ PSX, Inc.
			А	NYSE American, LLC
			К	Cboe EDGX Exchange, Inc.
			Р	NYSE Arca, Inc
			S	Consolidated Quotation System
Bid Price	bid_price	float		
Bid Quantity	bid_quantity	int		
Ask Market Center	ask_market_center	string	Allowable va	lues are:
			Code	Value
			Q	The NASDAQ Stock Market, LLC
			N	New York Stock Exchange, LLC
			В	NASDAQ BX, Inc.
			E	Market Independent
			D	FINRA Alternative Display Facility

			Z	Cboe BZX Exchange, Inc
			T	The NASDAQ Stock
				Market, LLC
			I	International Securities Exchange
			U	OTC Bulletin Board
			W	Cboe Stock Exchange
			u	OTC Markets Group
			J	Cboe EDGA Exchange, Inc.
			М	Chicago Stock Exchange
			Υ	Cboe BYX Exchange, Inc.
			С	NYSE National, Inc.
			X	NASDAQ PSX, Inc.
			А	NYSE American, LLC
			К	Cboe EDGX Exchange, Inc.
			Р	NYSE Arca, Inc
			S	Consolidated Quotation System
Ask Price	ask_price	Float		
Ask Quantity	ask_quantity	Int		
Quote Conditions	quote_conditions	string	Indicates th	ne quote conditions. Allowable values are:
			Code	Value
			0	None Provided
			1	Open
			2	Closed
			3	One-Sided Open
			4	Two-Sided Open
			0x01	Quote Sizes are Provided in Shares, not Lots

```
"type": "record",
"name": "NBBOQuoteMessage",
"namespace": "com.nasdaq.cqt",
"fields": [
  "name": "msg_type",
  "type": "string"
  "name": "symbol",
  "type": "string"
  "name": "sipfeed",
  "type": "string"
  "name": "sipfeed_seq",
  "type": "int"
 },
  "name": "bid_market_center",
  "type": "string"
 },
  "name": "bid_price",
  "type": "float"
  "name": "bid_quantity",
  "type": "int"
  "name": "ask_market_center",
  "type": "string"
 },
  "name": "ask_price",
  "type": "float"
  "name": "ask_quantity",
  "type": "int"
  "name": "quote_conditions",
  "type": "string"
 },
  "name": "start_time",
  "type": "string"
],
```

```
"version": "1"
 }
Sample
   "msg_type": "N",
   "symbol": "NDAQ",
   "sipfeed": "UQDF112",
   "sipfeed_seq": 1,
   "bid_market_center": "N",
   "bid_price": 23.45,
   "bid_quantity": 100,
   "ask_market_center": "N",
   "ask_price": 23.45,
   "ask_quantity": 1100,
   "quote_conditions": "",
   "start_time": "2021-06-02T00:00:00.000"
 }
```

## Limit Up Limit Down (LULD)

Field	Name	Туре	Description	
Message Type	msg_type	string	P (constant va	alue)
Market Center	market_center	string	Indicates the Allowable val	market where the execution occurred. ues are:
			Code	Value
			Q	The NASDAQ Stock Market, LLC
			N	New York Stock Exchange, LLC
			В	NASDAQ BX, Inc.
			Е	Market Independent
			D	FINRA Alternative Display Facility
			Z	Cboe BZX Exchange, Inc

Timestamp	timestamp	string	U W U J M Y C X A K P S Date in format	The NASDAQ Stock Market, LLC  International Securities Exchange  OTC Bulletin Board  Cboe Stock Exchange  OTC Markets Group  Cboe EDGA Exchange, Inc.  Chicago Stock Exchange  Cboe BYX Exchange, Inc.  NYSE National, Inc.  NASDAQ PSX, Inc.  NYSE American, LLC  Cboe EDGX Exchange, Inc.  NYSE Arca, Inc  Consolidated Quotation System  : yyyyy-MM-dd'T'HH:mm:ss.SSS
LULD Price Band	symbol luld_price_band_indicat or	string	Code 0 1 2 3 4 5 6	Value  None / Not Applicable  Opening Update  Intraday Update  Re-Stated Value  Suspended During Trading Halt or Trading Pause  Re-Opening Update  Outside Price Band Rule Hours
LULD TImestamp	luld_time	string	Date in format	: yyyy-MM-dd'T'HH:mm:ss.SSS

Limit Down Price	limit_down_price	float	Price for limit down.
Limit Up Price	limit_up_price	float	Price for limit up.

```
"type": "record",
"name": "LimitUpLimitDown",
"namespace": "com.nasdaq.cqt",
"fields": [
  "name": "msg_type",
  "type": "string"
  "name": "market_center",
  "type": "string"
  "name": "timestamp",
  "type": "string"
 },
  "name": "symbol",
  "type": "string"
  "name": "luld_price_band_indicator",
  "type": "int"
  "name": "luld_time",
  "type": "string"
  "name": "limit_down_price",
  "type": "float"
 },
  "name": "limit_up_price",
  "type": "float"
"version": "1"
```

## Sample

```
{
    "msg_type": "P",
    "market_center": "N",
    "timestamp": "2021-06-02T00:00:00.000",
    "symbol": "AAPL",
    "luld_price_band_indicator": 1,
    "luld_time": "2021-06-02T09:30:00.000",
    "limit_down_price": 10.3,
    "limit_up_price": 11.3
```

# Market Wide Circuit Breaker (MWCB)

Field	Name	Туре	Description	Description	
Message Type	msg_type	string	D (constant v	D (constant value)	
Market Center	market_center	string		Indicates the market where the execution occurred. Allowable values are:	
			Code	Value	
			Q	The NASDAQ Stock Market, LLC	
			N	New York Stock Exchange, LLC	
			В	NASDAQ BX, Inc.	
			E	Market Independent	
			D	FINRA Alternative Display Facility	
			Z	Cboe BZX Exchange, Inc	

			Т	The NASDAQ Stock	
				Market, LLC	
			1	International Securities Exchange	
			U	OTC Bulletin Board	
			W	Cboe Stock Exchange	
			u	OTC Markets Group	
			J	Cboe EDGA Exchange, Inc.	
			M	Chicago Stock Exchange	
			Υ	Cboe BYX Exchange, Inc.	
			С	NYSE National, Inc.	
			х	NASDAQ PSX, Inc.	
			A	NYSE American, LLC	
			К	Cboe EDGX Exchange, Inc.	
			Р	NYSE Arca, Inc	
			S	Consolidated Quotation System	
Timestamp	timestamp	string	Date in form	nat: yyyy-MM-dd'T'HH:mm:ss.SSS	
MWCB Status	mwcb_status	string	Indicates the market wide circuit breaker status. Allow values are:		ble
			Code	Value	
			*MW1	Market Wide Circuit Breaker Level 1 Breach (US Equities)	
			*MW2	Market Wide Circuit Breaker Level 2 Breach (US Equities)	
			*MW3	Market Wide Circuit Breaker Level 3 Breach (US Equities)	

```
{
  "type": "record",
  "name": "MarketWideCircuitBreakerDeclineLevel",
  "namespace": "com.nasdaq.cqt",
  "fields": [
  {
```

```
"name": "msg_type",
    "type": "string"
    "name": "market_center",
    "type": "string"
    "name": "timestamp",
    "type": "string"
    "name": "mwcb_level_1",
    "type": "float"
    "name": "mwcb_level_2",
    "type": "float"
   },
    "name": "mwcb_level_3",
    "type": "float"
  ],
  "version": "1"
 }
Sample
  "msg_type": "D",
  "market_center": "",
  "timestamp": "2021-06-02T00:00:00.000",
  "mwcb_status": "*MW1"
```

### MWCB Decline Level

Field	Name	Туре	Description
Message Type	msg_type	string	C (constant value)

Market Center	market_center	string	Allowable values are:		
			Code	Value	
			Q	The NASDAQ Stock Market, LLC	
			N	New York Stock Exchange, LLC	
			В	NASDAQ BX, Inc.	
			Е	Market Independent	
			D	FINRA Alternative Display Facility	
			Z	Cboe BZX Exchange, Inc	
			Т	The NASDAQ Stock Market, LLC	
			I	International Securities Exchange	
			U	OTC Bulletin Board	
			W	Cboe Stock Exchange	
			u	OTC Markets Group	
			J	Cboe EDGA Exchange, Inc.	
			М	Chicago Stock Exchange	
			Υ	Cboe BYX Exchange, Inc.	
			С	NYSE National, Inc.	
			X	NASDAQ PSX, Inc.	
			A	NYSE American, LLC	
			К	Cboe EDGX Exchange, Inc.	
			Р	NYSE Arca, Inc	
			S	Consolidated Quotation System	
Timestamp	timestamp	string	Date in form	nat: yyyy-MM-dd'T'HH:mm:ss.SSS	
MWCB Level 1	mwcb_level_1	float	Value of MWCB level 1		
MWCB Level 2	mwcb_level_2	float	Value of MWCB level 2		
MWCB Level 3	mwcb_level_3	float	Value of MWCB level 3		

```
"type": "record",
  "name": "MarketWideCircuitBreakerDeclineLevel",
  "namespace": "com.nasdaq.cqt",
  "fields": [
    "name": "msg_type",
    "type": "string"
    "name": "market_center",
    "type": "string"
   },
    "name": "timestamp",
    "type": "string"
    "name": "mwcb_level_1",
    "type": "float"
    "name": "mwcb_level_2",
    "type": "float"
   },
    "name": "mwcb_level_3",
    "type": "float"
  ],
  "version": "1"
Sample
  "msg_type": "C",
  "market_center": "",
  "timestamp": "2021-06-02T00:00:00.000",
  "mwcb_level_1": 2000.0,
```

"mwcb\_level\_2": 1900.0, "mwcb\_level\_3": 1800.0

# Regulation SHO Restriction Indicator

Field	Name	Туре	Description	
Message Type	msg_type	string	V (constant value)	
Source Market Center	source_market_center	string	Originating market center	
Timestamp	action_time	string	SIP timestamp - Date in format: yyyy-MM-dd'T'HH:mm:ss.SSS	
Symbol	symbol	string	issue symbol of the security.	
SIP Feed	sipfeed	string	SIP feed identifier.	
SIP Sequence ID	sipfeed_seq	int	SIP feed ID.	
Action Code	action	int	Indicates the regulation SHO actions. Allowable values are:	
			Code Value	
			0	Short Sale Restriction Not In Effect
			1	Short Sale Restriction In Effect
Reason Code	reason	int	Indicates the regulation SHO reasons. Allowable values are:	
			Code	Value
			0	None / Not In Effect
			1	Day 1 – Activated
			2	Day 2 – Continued

"type": "record",

"fields": [

"name": "RegSHORestrictionIndicator", "namespace": "com.nasdaq.cqt",

```
"name": "msg_type",
    "type": "string"
   },
    "name": "source_market_center",
    "type": "string"
    "name": "action_time",
    "type": "string"
   },
    "name": "symbol",
    "type": "string"
   },
    "name": "sipfeed",
    "type": "string"
    "name": "sipfeed_seq",
    "type": "int"
   },
    "name": "action",
    "type": "int"
    "name": "reason",
    "type": "int"
  ],
  "version": "1"
Sample
  "msg_type": "V",
  "source_market_center": "N",
  "action_time": "2021-06-02T00:00:00.000",
  "symbol": "AAPL",
  "sipfeed": "UQDF112",
```

```
"sipfeed_seq": 1,
"action": 0,
"reason": 0
```

### Change control log

The following fields have been added in System Event Message:

• Impacted Market Center

The following fields have been removed in **System Event Message**:

• Nanoseconds (Timestamp in nanoseconds from midnight)

The following fields have been removed from Quotes:

- end time
- Removed suffix "Z" from timestamps

The following fields have been renamed in **Quotes**:

- Renamed "marketCenter" to "market\_center"
- Renamed "AskPrice" to "ask\_price"
- Renamed "AskQuantity" to "ask\_quantity"
- Renamed "BidPrice" to "bid price"
- Renamed "BidQuantity" to "bid\_quantity"
- Renamed "QuoteConditions" to "quote\_conditions"
- Renamed "SipFeed" to "sipfeed"
- Renamed "UFQuoteMessage" to "QuoteMessage"

The following fields have been added from **Trades**:

• correction\_indicator

The following fields have been removed from **Trades**:

• Removed suffix "Z" from timestamps

The following fields have been renamed in **Trades**:

Renamed "UFTradeMessage" to "TradeMessage"

### Other changes:

 Renamed "namespace" in schema from "com.nasdaq.equities.island.applications.datafeed.uf.messaging.binary21" to "com.nasdaq.cqt"

The following **new messages** have been added:

- Issue Symbol
- Trading Action
- Market Center Trading Action
- NBBO Quote Message
- Limit Up Limit Down
- Market Wide Circuit Breaker
- Market Wide Circuit Breaker Decline Level
- Regulation SHO Restriction Indicator

The following **Codes** have been renamed:

- Using numbers to represent "Market Tier Value" Code instead of characters
- Using numbers to represent "Financial Status" Code instead of characters