

OTC Markets (OTCM)

Product Overview

OTC Markets Group operates the US over-the-counter equity market providing price and liquidity information for more than 12,000 securities. The OTC Markets data feed offers quote, trade and reference data for all OTC equity securities.

Publisher

OTC Markets Group (OTCQX: OTCM) provides mission-critical Market Data to broker-dealers, compliance, and risk management teams. As the primary market operator, we deliver the most comprehensive, contextual, real-time, and analytical data for over 12,000 domestic and international securities. For more information visit [OTC Markets Group](#).

Delivery

Nasdaq Data Link provides a modern and efficient method of delivery for real-time 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 Nasdaq Data Link API. While the SDK is open source, connecting to the API does require credentials, which are provided by Nasdaq during an on-boarding process.

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

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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.

Details

Field	Name	Type	Description														
Message Type	msg_type	string	S = System Message														
Event Code	event	string	Events for which the message is being generated. Possible values: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>*SOD</td> <td>Start of Day</td> </tr> <tr> <td>*MKO</td> <td>Market Open</td> </tr> <tr> <td>*MKC</td> <td>Market Close</td> </tr> <tr> <td>*EOD</td> <td>End of Day</td> </tr> </tbody> </table>	Code	Value	*SOD	Start of Day	*MKO	Market Open	*MKC	Market Close	*EOD	End of Day				
Code	Value																
*SOD	Start of Day																
*MKO	Market Open																
*MKC	Market Close																
*EOD	End of Day																
Impacted Market Center	market_center	string	Indicates OTC market tiers. Possible Values: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Unknown or Not Available</td> </tr> <tr> <td>e</td> <td>Expert Market</td> </tr> <tr> <td>t</td> <td>OTCQX</td> </tr> <tr> <td>b</td> <td>OTCQB</td> </tr> <tr> <td>i</td> <td>Pink Market</td> </tr> <tr> <td>G</td> <td>Grey Market</td> </tr> </tbody> </table>	Code	Value	Space	Unknown or Not Available	e	Expert Market	t	OTCQX	b	OTCQB	i	Pink Market	G	Grey Market
Code	Value																
Space	Unknown or Not Available																
e	Expert Market																
t	OTCQX																
b	OTCQB																
i	Pink Market																
G	Grey Market																
Upstream Sequence ID	upstream_seq	long	Upstream sequence number.														

Schema

```

{
  "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": "upstream_seq",
      "type": "long"
    }
  ],
  "version": "1"
}

```

Sample

```

{
  "msg_type": "S",
  "event_code": "*SOD",
  "market_center": "",
  "upstream_seq": 1
}

```

Inside Quote

Inside Quote is from OTCM Inside Quote channel, which is top of book and has the best bid offer from the OTC Link ATS. The price of an inside bid (offer) for a security is the highest bid price (lowest offer price) of all open bids (offers) for that security. The size of an inside bid (offer) is the aggregated size of all bids (offers) at the inside bid (offer) price.

Details

Field	Name	Type	Description
-------	------	------	-------------

Message Type	msg_type	string	N = Inside Quote														
Symbol	symbol	string	Issue symbol of the security.														
SIP Feed	sipfeed	string	This field isn't supported by OTCM. No value will be passed through.														
Upstream Sequence ID	upstream_seq	long	Upstream sequence number.														
Start Time	start_time	string	Start time format: yyyy-MM-dd'T'HH:mm:ss.SSS														
Bid Market Center	bid_market_center	string	Indicates OTC market tiers. Possible Values: <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Unknown or Not Available</td> </tr> <tr> <td>e</td> <td>Expert Market</td> </tr> <tr> <td>t</td> <td>OTCQX</td> </tr> <tr> <td>b</td> <td>OTCQB</td> </tr> <tr> <td>i</td> <td>Pink Market</td> </tr> <tr> <td>G</td> <td>Grey Market</td> </tr> </tbody> </table>	Code	Value	Space	Unknown or Not Available	e	Expert Market	t	OTCQX	b	OTCQB	i	Pink Market	G	Grey Market
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i	Pink Market																
G	Grey Market																
Bid Price	bid_price	double	The price of an inside bid for a security is the highest bid price of all open bids for that security.														
Bid Quantity	bid_quantity	int	The size of an inside bid is the aggregated size of all bids at the inside bid price.														
Ask Market Center	ask_market_center	string	Indicates OTC market tiers. Possible Values: <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Unknown or Not Available</td> </tr> <tr> <td>e</td> <td>Expert Market</td> </tr> <tr> <td>t</td> <td>OTCQX</td> </tr> <tr> <td>b</td> <td>OTCQB</td> </tr> <tr> <td>i</td> <td>Pink Market</td> </tr> <tr> <td>G</td> <td>Grey Market</td> </tr> </tbody> </table>	Code	Value	Space	Unknown or Not Available	e	Expert Market	t	OTCQX	b	OTCQB	i	Pink Market	G	Grey Market
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G	Grey Market																
Ask Price	ask_price	double	The price of an inside offer for a security is the lowest offer price of all open offers for that security.														
Ask Quantity	ask_quantity	Int	The size of an inside offer is the aggregated size of all offers at the inside offer price.														
Quote Conditions	quote_conditions	string	Indicates the quote conditions. Allowable values are:														

			Code	Value
			None	None Provided
			13	Open
			14	Closed
Start time	start_time	string	Start time format: yyyy-MM-dd'T'HH:mm:ss.SSS	

Schema

```
{
  "type": "record",
  "name": "NBBOQuoteMessage",
  "namespace": "com.nasdaq.cqt",
  "fields": [
    {
      "name": "msg_type",
      "type": "string"
    },
    {
      "name": "symbol",
      "type": "string"
    },
    {
      "name": "sipfeed",
      "type": "string"
    },
    {
      "name": "upstream_seq",
      "type": "long"
    },
    {
      "name": "bid_market_center",
      "type": "string"
    },
    {
      "name": "bid_price",
      "type": "double"
    },
    {
      "name": "bid_quantity",
      "type": "int"
    },
    {
      "name": "ask_market_center",
      "type": "string"
    },
    {
      "name": "ask_price",
      "type": "double"
    }
  ],
}
```

```

{
  "name": "ask_quantity",
  "type": "int"
},
{
  "name": "quote_conditions",
  "type": "string"
},
{
  "name": "start_time",
  "type": "string"
}
],
"version": "1"
}

```

Sample

```

{
  "msg_type": "N",
  "symbol": "STMEF",
  "sipfeed": "",
  "upstream_seq": 28367707,
  "bid_market_center": "i",
  "bid_price": 48.95,
  "bid_quantity": 1417,
  "ask_market_center": "i",
  "ask_price": 50.92,
  "ask_quantity": 1000,
  "quote_conditions": "13",
  "start_time": "2023-08-07T11:27:13.685"
}

```

Trades

Includes trades from OTC Markets.

Details

Field	Name	Type	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	double	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	This value isn't supported by OTCM. Default value is "F".														
Listing Venue	listing_venue	string	Indicates OTC market tiers. Possible Values: <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Unknown or Not Available</td> </tr> <tr> <td>e</td> <td>Expert Market</td> </tr> <tr> <td>t</td> <td>OTCQX</td> </tr> <tr> <td>b</td> <td>OTCQB</td> </tr> <tr> <td>i</td> <td>Pink Market</td> </tr> <tr> <td>G</td> <td>Grey Market</td> </tr> </tbody> </table>	Code	Value	Space	Unknown or Not Available	e	Expert Market	t	OTCQX	b	OTCQB	i	Pink Market	G	Grey Market
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Space	Unknown or Not Available																
e	Expert Market																
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Market Center	market_center	string	Indicates OTC market tiers. Possible Values: <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Unknown or Not Available</td> </tr> <tr> <td>e</td> <td>Expert Market</td> </tr> <tr> <td>t</td> <td>OTCQX</td> </tr> <tr> <td>b</td> <td>OTCQB</td> </tr> <tr> <td>i</td> <td>Pink Market</td> </tr> <tr> <td>G</td> <td>Grey Market</td> </tr> </tbody> </table>	Code	Value	Space	Unknown or Not Available	e	Expert Market	t	OTCQX	b	OTCQB	i	Pink Market	G	Grey Market
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Sub Market Center	sub_market_center	string	This field isn't supported by OTCM. No value will be passed through.														
MSN	msn	long	Message Sequence Number from the UTDF level 1 data feed used as a trade identifier.														
OMSN	omsn	long	Applicable to correction and cancel records and identifies the original trade to which the cancel/correction applies.														
Sales Condition	sales_conditions	string	This field isn't supported by OTCM. Default value is "@".														
Trade Date	trade_date	string	Timestamp of the trade.														
Upstream Sequence ID	upstream_seq	long	Upstream sequence number.														

Schema

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

```

},
{
  "name": "sales_conditions",
  "type": "string"
},
{
  "name": "trade_date",
  "type": "string"
},
{
  "name": "upstream_seq",
  "type": "long"
}
],
"version": "1"
}

```

Sample

```

{
  "msg_type": "T",
  "symbol": "FOJYC",
  "price": 0.0258,
  "quantity": 204,
  "canceled_indicator": false,
  "correction_indicator": false,
  "dott": "F",
  "listing_venue": "i",
  "market_center": "i",
  "sub_market_center": "",
  "msn": 28367758,
  "omsn": 0,
  "sales_conditions": "",
  "trade_date": "2023-08-07T11:27:13.696",
  "upstream_seq": 28367758
}

```

Issue Symbol

Provides reference data from OTC Markets.

Details

Field	Name	Type	Description
Message Type	msg_type	string	B = Issue Symbol

Symbol	symbol	string	Issue symbol of the security.														
Name	security_name	string	Indicates security name.														
Market Tier	market_tier	string	Indicates the market tiers. Allowable values are: <table border="1" data-bbox="938 464 1500 810"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Unknown or Not Available</td> </tr> <tr> <td>e</td> <td>Expert Market</td> </tr> <tr> <td>t</td> <td>OTCQX</td> </tr> <tr> <td>b</td> <td>OTCQB</td> </tr> <tr> <td>i</td> <td>Pink Market</td> </tr> <tr> <td>G</td> <td>Grey Market</td> </tr> </tbody> </table>	Code	Value	Space	Unknown or Not Available	e	Expert Market	t	OTCQX	b	OTCQB	i	Pink Market	G	Grey Market
Code	Value																
Space	Unknown or Not Available																
e	Expert Market																
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i	Pink Market																
G	Grey Market																
Test symbol	test_symbol	boolean	This field isn't supported by OTCM. Default value is "false".														
Round Lot Size	round_lot_size	int	This field isn't supported by OTCM. Default value is 1.														
Financial Status Indicator	financial_status_indicator	string	This field isn't supported by OTCM. No value will be passed through.														
Upstream Sequence ID	upstream_seq	long	Upstream sequence number.														

Schema

```

{
  "type": "record",
  "name": "IssueSymbol",
  "namespace": "com.nasdaq.cqt",
  "fields": [
    {
      "name": "msg_type",
      "type": "string"
    },
    {
      "name": "symbol",
      "type": "string"
    },
    {
      "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"
},
{
  "name": "upstream_seq",
  "type": "long"
}
],
"version": "1"
}

```

Sample

```

{
  "msg_type": "B",
  "symbol": "STMEF",
  "security_name": "STMicroelectronics NV",
  "market_tier": "i",
  "test_symbol": false,
  "round_lot_size": 1,
  "financial_status_indicator": "",
  "upstream_seq": 1
}

```

Trading Action

Provides trading status from OTC Markets.

Details

Field	Name	Type	Description
Message Type	msg_type	string	K = Trading Action
Source Market Center	source_market_center	string	This field isn't supported by OTCM. No value will be passed through.

Impacted Market Center	Market_center	string	Indicates OTC market tiers. Possible Values: <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Unknown or Not Available</td> </tr> <tr> <td>e</td> <td>Expert Market</td> </tr> <tr> <td>t</td> <td>OTCQX</td> </tr> <tr> <td>b</td> <td>OTCQB</td> </tr> <tr> <td>i</td> <td>Pink Market</td> </tr> <tr> <td>G</td> <td>Grey Market</td> </tr> </tbody> </table>	Code	Value	Space	Unknown or Not Available	e	Expert Market	t	OTCQX	b	OTCQB	i	Pink Market	G	Grey Market
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Space	Unknown or Not Available																
e	Expert Market																
t	OTCQX																
b	OTCQB																
i	Pink Market																
G	Grey Market																
Timestamp	action_time	string	Timestamp - Date in format: yyyy-MM-dd'T'HH:mm:ss.SSS														
Symbol	symbol	string	Issue symbol of the security.														
SIP Feed	sipfeed	string	This field isn't supported by OTCM. No value will be passed through.														
Upstream Sequence ID	upstream_seq	long	Upstream sequence number.														
Action Code	action	int	Indicates the trading actions. Allowable values are: <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Trading</td> </tr> <tr> <td>2</td> <td>Quoting (Orders are accepted, but not Executing – books may be crossed)</td> </tr> <tr> <td>3</td> <td>Halted (Orders are not accepted or executing)</td> </tr> <tr> <td>14</td> <td>Active</td> </tr> <tr> <td>17</td> <td>Deleted</td> </tr> </tbody> </table>	Code	Value	1	Trading	2	Quoting (Orders are accepted, but not Executing – books may be crossed)	3	Halted (Orders are not accepted or executing)	14	Active	17	Deleted		
Code	Value																
1	Trading																
2	Quoting (Orders are accepted, but not Executing – books may be crossed)																
3	Halted (Orders are not accepted or executing)																
14	Active																
17	Deleted																
Reason Code	reason	int	Indicates the trading actions. Allowable values are: <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>None Provided</td> </tr> <tr> <td>13</td> <td>SEC Trading Suspension</td> </tr> <tr> <td>41</td> <td>SEC Revocation</td> </tr> <tr> <td>45</td> <td>Security Deletion</td> </tr> <tr> <td>46</td> <td>Internal Halt</td> </tr> </tbody> </table>	Code	Value	0	None Provided	13	SEC Trading Suspension	41	SEC Revocation	45	Security Deletion	46	Internal Halt		
Code	Value																
0	None Provided																
13	SEC Trading Suspension																
41	SEC Revocation																
45	Security Deletion																
46	Internal Halt																

Schema

```
{
  "type": "record",
  "name": "MarketCenterTradingAction",
  "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": "upstream_seq",
      "type": "long"
    },
    {
      "name": "action",
      "type": "int"
    },
    {
      "name": "reason",
      "type": "int"
    }
  ],
  "version": "1"
}
```

Sample

```
{
  "msg_type": "K",
  "source_market_center": "",
  "market_center": "i",
  "action_time": "2021-06-02T00:00:00.000",
}
```

```
"symbol": " STMEF",  
"sipfeed": "",  
"upstream_seq": 1,  
"action": 1,  
"reason": 0  
}
```