

TrueData[™] Market Data API (HTTP) version 6.3

Updated

20 Apr 2020

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1. Change History

Version	Date	Notes
1.1	20-Nov-2014	First version of revised API's
1.2	22-Nov-2014	Some corrections
1.3	26-Nov-2014	Folder names corrected
2.1	28-Nov-2014	Added Authentication
2.1	3-Dec-2014	Folder name typo
2.3	5-Dec-2014	Added Logout, Heartbeat & CA
3.1	15-Dec-2014	All API requests based on token number
3.3	31-Dec-2014	Standardized formats of response
4.1	22-Jan-2015	Added minute history for Contract F&O
4.2	3-Feb-2015	Snap Quote API introduced (Last cached values)
5.1	19-Feb-2015	Added From & To date for minute and Tick History
5.2	24-Oct-2015	SNAP will subscribe to the Scrip UNSUB will unsubscribe
5.3	19-Feb-2016	UNSUBM - Unsubscribe multiple tokens
5.4	24-Aug-2016	UNSUBALL - Unsubscribe all tokens
6.0	30-May-2018	Internal IP changes
6.1	10-June-2018	API refinements for Historical data
6.2	28-July-2019	Historical API updates + IP changes Idmdata.aspx replaced in all urls with
6.3	20-Apr-2020	idmadata.aspx



2. Overview

a) This document provides the TrueData Published Real Time & Historical Market data API's (Http) to get live market data and history data for the NSE Equity & FnO Markets.

Command Structure & Protocol

- b) All requests for data are made using the http protocol.
- c) The responses are comma or new line separated.
- d) A Sequence number is maintained for some real time API's to facilitate Incremental data reception. This also ensures that there is no gap in the data in case of a break in the internet connection at the client end.
- e) Structure:

http://PUB IP/Folder/truedata.aspx?cmd = name of the command

f) Note: -

- i) Multiple Commands can be clubbed into a single URL using ";"
- ii) Each Exchange and Segment is mapped to a number for Internal reference
- iii) Date time is sent as number of seconds elapsed since 01 January 1980
- iv) Change is to be computed at the client using LTP and Previous close
- v) PUB IP = Publisher IP This would be given to you by TrueData Support team
- vi) PUB_IP is the Real Time Data Server and provides Real Time Data for all scrips
- + the current days' Tick & intraday history (1 min) for all scrips



4. Master file index (Daily Download)

- a) Unlike the master file sent by the exchanges, this is a file processed daily, specifically to meet the requirements of this API. It is necessary to download this file every day (first thing) using the master file link (zipped file) to get amongst other things, the updated list of symbols and their respective tokens.
- b) Please download the master file from the below link. This file contains Cash, FnO and Currency masters in one file. This file format is mentioned in this attached document. This file is updated every day. If you required new file download it from the same link.
 - i) Master 1 is for Equity, Indices, Options & Contract Futureshttp://PUB_IP/IM/1.Nmaster1.zip
 - ii) Master 2 is for Continuous Futures (Download only in case required) http://PUB_IP/IM/1.Nmaster2.zip

c) Note: -

- ii) The Master files are uploaded every day at 08:40 0850 am.
- iii) These files need to be download every day to ensure that the correct token number matches the symbol selected. There are small changes on a daily basis and major changes on derivatives rollover dates.
- iv) Master 1 is for Equity, Indices, Options & Contract Futures
- v) Master 2 is for Continuous Futures
- vi) The breakdown of the columns in the master files is also enclosed, along with this document.



5. Login / Authentication Token (Key)

- a) The login API needs to be fired to be get the Authentication token (or Key) from the server, for a particular login.
- b) The Authentication token returned by the login response should be captured and sent with each request made to data server as a special header as described below:

X-Authz: <Authentication Token>

- c) Note: -
 - Response Status Code to the data request will be 401(Un-Authorized) when:
 - i) There is no X-Authz header present on the request.
 - ii) X-Authz header contains invalid or expired authentication token.
 - Authentication token is valid for a day only.
- d) Request:

Using HTTP POST method http://PUB_IP/IDAUTH/Login.aspx

Passing Content: -

userid = your User ID
 password = your password
 PROVIDER = TRUEDATA

e) Response:

Authentication Token

OK

7

1|2|3

20141130

200

0

PUB_IP Main / PUB_IP Standby History IP Main / History IP Standby



- f) This response from the login server contains the following elements:
 - i) Each user gets his own token number to keep a track of the subscriber and the symbols linked to him. This is required as Header in all subsequent requests
 - ii) OK/DU/IV/EX
 - OK Authentication is ok
 - DU Duplicate Login
 - IV Invalid
 - EX Subscription Expired
 - iii) Entitlement level (Used for controlling data set features and content)
 - iv) 1|2|3 Market Segment List subscribed
 - v) Expiry date
 - vi) Maximum allowed Scrips per segment
 - vii) Real Time Server IPs list Pub1, Pub2
 - viii) Historical Server IPs list TDH1, TDH2



6. Real Time Market data API's

a) Index list

i) This API is used to get the list of the Indices for a particular market. Each index symbol has an internal id which needs to be used subsequently for that symbol. The response from this API contains the internal id for each index which must be used for further processing. The Cmd to get the master list of Indices is I.

ii) Request:

http://PUB_ IP/dataservice/idmdata.aspx?cmd=I

Cmd = I

iii) Response
fields: Index id,
Index Ticker I2,CNX
Nifty
I3,CNX IT
I4,BANK Nifty
......

b) Subscription of Tokens

- i) This API is to be used for subscribing to tokens for which live data is required. Every user is allowed to subscribe for a maximum of 200 tokens per market segment.
- ii) This should be used at the beginning; each time application logs in or every time or there is a change to the list of subscribed tokens of the client.
- iii) Request: (Use HTTP POST method)

http://PUB

IP/mxds/idmdata.aspx?cmd=SUB,userid

Cmd = SUB

Userid = your user id



iv) Response fields:

Snap shot data for all the subscribed tokens same as live data

v) Note: -

- In this process, the User id gets registered for subscribed number of tokens.
- If the User Logs in at 0930 (after the markets have already opened) Cached Last trade data for all the subscribed scrips would be downloaded first followed by the update of the real time rates in the database.
- In case of any changes in the subscribed scrips (tokens), the client would need to re-register using this method.
- Token list separated by comma needs to be sent in the request body.
- Maximum number of tokens that can be registered is 200 for each segment
- If there is an addition or deletion to the list, the entire list be resubscribed.



c) Real Time / Live Data for Subscribed Tokens

- a) This API returns the real time / live data for the subscribed tokens that includes trades, best Bid / Ask and other values as given in the table below. In case no symbol is subscribed, no data would be returned.
- b) This request should be made repeatedly to get incremental data from the last request. (each request after a min gap of 0.8 secs)
- c) The first request after login should have all three-sequence number as 0. All the responses are terminated by three sequence numbers, which must be used in the next request.

d) Request:

http://PUB IP /mxds/idmdata.aspx?cmd=d;MDATA,userid,#seq1, #seq2, #seq3

Cmd = d (Returns the latest date time. Only place where Julian date time format is used)

Cmd = MDATA (For Live market Data)

Userid = your user id

e) Response fields:

The response contains first line as date time in seconds from 01 Jan, 1980

f) Note: -

- i) Subsequent lines will have first character "Code" as the key followed by the token or Index id, followed by corresponding data as shown in the table below.
- ii) All data is incremental and will be terminated in the 3 sequence numbers.



d) Live Data Response Codes

Code	Purpose	Description	Response (Examples)
!	No Response	Returned when there is an issue on the	! <description[optional]></description[optional]>
		request parameters or there is no data	
d	Date and	Number of seconds elapsed since 1st Jan	d1094315301
	time	1980	
Т	Trade data	It contains 'T' followed by Token,	T2047753,152557,4.90,500,
		Time (HHmmss), LTP, LTQ, Total Volume	13500
В	Best Bid and	It contains 'B' followed by Token, Bid Price,	B1001363,155.85,4806,156.
	Ask data	Bid Qty, Ask Price, Ask Qty	00,6073
0	Symbol Open	Contains 'O' followed by Token, Symbol	O1003478,63.00
		Open price	
Н	Symbol High	Contains 'H' followed by Token, Symbol	H1003478,69.90
		High price	
L	Symbol Low	Contains 'L' followed by Token, Symbol	L1003478,61.00
		Low price	
С	Symbol Close	Contains 'C' followed by Token, Symbol	C1003478,65.25
		Close price	
W	Symbol	Contains 'W' followed by Token, Symbol	W1003478,64.25
	Average	Average price	
N	Symbol Open	Contains 'N' followed by Token, Symbol	N2013478,12342
	Interest	Open Interest	
0	Index Open	Contains 'o' followed by Index Id, Index	o2,7831.00
		Open value	
h	Index High	Contains 'h' followed by Index Id, Index	h2,7889.95
		High value	
I	Index Low	Contains 'I' followed by Index Id, Index Low	12,7875.95
		value	
С	Index Close	Contains 'c' followed by Index Id, Index	c2,7859.95
		Close value	
i	Index Current	Current value of Index	i2,7850.00
	value		,
l	Index Name	Contains 'I' followed by Index Id, Index	I2,CNX Nifty
	and Id	Name	I3,CNX IT
S	Data	Contains 'S' followed by Seg#1, Seg#2,	S4086,10901,1987635
-	Sequence	Seq#3. These three Seq# should be sent in	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		subsequent requests.	



7. Snap Quote (Cached Last Traded data for Tokens)

- a) Option 1 : SNAP (Single Token):
 - i) This API returns the last traded data for the requested tokens that includes trades, best Bid / Ask and other values as given in the table above.
 - ii) Request: (SNAP (Single token))

http://PUB IP/mxds/idmdata.aspx?cmd=SNAP,userid,token

Cmd = SNAP for Snap Quote for that token

iii) Response fields:

The response would be exactly similar to MDATA. There will be no termination line with sequence number etc.

- iv) Note:
 - The token for which Snap Quote is requested will be subscribed automatically. There is no need to subscribe for a token whose SNAP Quote has been requested.
 - If the addition of this token exceeds the max limit of token for the user, the token would be dropped and an error will be returned.

b) Option 2 : SNAP Multiple Tokens:

- i) This API returns the last traded data for multiple tokens that includes trades, best Bid / Ask and other values as given in the table above. The requested tokens will be added to the subscribed list.
- ii) Request: (SNAP multiple tokens Use HTTP POST method)

http://PUB IP/mxds/idmdata.aspx?cmd=SNAPM,userid

Cmd = SNAPM Uid = User Id

Token list separated by comma to be sent in the request body.

iii) Response fields:

Snap shot data for all the subscribed tokens similar to MDATA will be returned.



iv) Note:

- Maximum number of tokens that can be Snapped in one request is 200.
- If the addition of tokens exceeds the max limit of tokens for the user, they would be dropped.



8. Unsubscribe (Unsubscribe Tokens)

- a) Option 1 : Unsubscribe Single Token:
 - i) This API will unsubscribe an already subscribed token.
 - ii) Request:

http://PUB IP/mxds/idmdata.aspx?cmd=UNSUB,userid,token

Cmd = UNSUB for unsubscribing the token

iii) Response fields:

!Removed

- *b) Option 2 : Unsubscribe Multiple Tokens:*
 - i) This API will unsubscribe multiple tokens in a single request.
 - ii) Request: (UNSUBM multiple tokens Use HTTP POST method)

http://PUB IP/mxds/idmdata.aspx?cmd=UNSUBM,userid

Cmd = UNSUBM

Token list separated by comma to be sent in the request body

iii) Response fields:

!Removed

- c) Option 3 : Unsubscribe all Tokens:
 - i) This API will unsubscribe all tokens in a single request.
 - ii) Request: (UNSUBM multiple tokens)

http://PUB IP/mxds/idmdata.aspx?cmd=UNSUBALL,userid

Cmd = UNSUBALL

iii) Response fields:

!Removed



9. Tick History (Including current day Tick History)

a) Option 1 : Number of days of Tick History

- i) This API provides tick data history (Intra-day & more) for a particular scrip.
- ii) Date & time format is yyyymmdd hhmm (not Julian format here).
- iii) This history comes from the PUB Server (Real Time Server).
- iv) Your application must be able to keep a record off the data already downloaded and load only incremental data. This is important as it would otherwise unnecessarily load the server whenever a user logs in, which is not required.

v) Request: (Intra-Day Ticks)

http://PUB IP/mxds/idticks.aspx?t=100001&nd=0

t = token (ticker in the case of Index)

nd = number of days for which tick history is requested. It will be zero if it is intra-day

(It is also possible to get incremental tick history from the last tick downloaded. Use the Sequence number generated with the first request & send with the next request for incremental Tick data since previous download. Use parameter p =<tick Seq number> It is recommended to send this request with a minimum internal of 5 minutes)

vi) Response fields:

Date Time(yyyymmdd hhmmss), Price, Volume, OI

20140929 10:01:01,1399.45,39531,10083445 20140929 10:01:02,1399.55,40530,10083445

The response rows will be terminated by Sequence number which must be sent in subsequent requests for intra-day ticks.

vii) Note:

- All Tick history is extracted from the Real Time (Pub Server) only.
- If the token sent is a Equity token, then OI will be zero.
- Requests can be made every few seconds.
- Number of days requested should be a maximum of 20.
- A maximum of 20 trading days (approx. 28 calendar days) of Tick history can be obtained for any symbol.
- Your application should remember the last downloaded date and request only incremental data.
- It should not request for entire data every time it logs into the application.



The download may take time depending on the number of days of

history requested. There are close to 400,000 rows of data for a 20 days history.

• nd = 0 for current intraday ticks; nd = 2 means current day + 2 more previous days of data

b) Option 2: Tick History (With Start & End Date Range)

- ii) This API provide ticks for the number of days within a start and end date.
- iii) This history comes from the PUB Server (Real Time Server).

iv) Request:

http://PUB IP/mxds/idticks.aspx?t=100001&sd=yyyymmdd&ed=yyyymmdd

t = token (ticker in the case of Index)

sd = Start date from which tick history is requested ed = End date from which tick history is requested

iv) Response fields for both Options:

Date Time (yyyymmdd hhmmss), Price, Volume, Ol

20140921 10:01:01,1399.45,39531,10083445 20140921 10:01:02,1399.55,40530,10083445 20140922 10:01:01,1399.45,39531,10083445 20140922 10:01:02,1399.55,40530,10083445

v) Note:

While requesting ticks using sd and ed, the earliest starting date would be computed based on the entitlement.



10. Current Day History (1min Intraday)

- a) This API provides snapshot live 1min intra-day
- b) This history comes from the PUB Server (Real Time Server).

c) Request:

http://PUBIP/mxds/id1min.aspx?t=1000022&p=0

t = token (ticker in the case of Index)
p = This is the sequence number to be sent with every request for 1-minute bar. It should be set to zero in the first request. It is recommended to send request every 30 secs.

d) Response Fields:

Date Time(hh:mm), Open, High, Low, Close, Volume, Open Interest

20140921 10:01,1399.45,1399.45,1398.80,1398.80,39531,10083445 20140921 10:03,1397.10,1398.00,1397.05,1397.95,40677,10089570 #minute seq, #tick seq

e) <u>Note:</u>

The #minute seq should be used to get minute bars every few secs (ideally 15 secs). However if ticks are required, the # tick seq should be used along with intraday ticks (idticks) API in a similar manner



11. Current Day Candle (Daily Intraday)

- a) This API provides snapshot live Daily Intra-day
- b) This history comes from the PUB Server (Real Time Server).
- c) Request:

http://PUB IP/mxds/id1day.aspx?t=1000022

t = token (ticker in the case of Index)

d) Response Fields:

Date, Open, High, Low, Close, Volume, Open Interest

20141229,2464.9,2528,2464.9,2513.75,2310250,3618125

e) Note:

The Same candle will be updated with every request to get the updated daily bar (Ideally every minute)



12. Heart Beat

a) Your application must send heartbeat request every 2 minutes. The idea it to intimate the server that the user is alive.

b) Request (HTTP POST):

http://PUB IP/IDAUTH/Heartbeat.aspx
Content-Type = application/x-www-form-urlencoded

c) Request Body:

UserId=<user id>&Password=<password>&Provider=TRUEDATA

d) Response:

CN or IV

CN = ContinueIV = Invalid



13. Logout

a) Your application must send a logout request on application closure. If this is not done, he same user will not be able to login immediately. The time stamp will expire after 2 minutes only.

b) Request (HTTP POST):

<u>http://PUB IP/IDAUTH/Logout.aspx</u> Content-Type = application/x-www-form-urlencoded

c) Request Body:

UserId=<user id>&Password=<password>&Provider=TRUEDATA

d) Response:

LX or IV

- LX =Logout Successful
- IV = Invalid



Historical Data APIs

From Historical Data Server (Other than Current Day & Tick Data)

14. Overview

- a) This TrueData Market Data API (Historical Data) has been developed to provide stock market historical data through HTTP (GET) request/response as CSV
- b) To start with, please login using the real time login API to get the authentication token for your id which is valid for a day.
- c) This authentication key is required & has to be sent as a header in all requests sent to the server for history.

X-Authz: <Authentication Token received after login>

15. More Details on the Historical Data APIs

16. Overview

- i) There are 4 main APIs for historical data (these APIs get data from previous trading day backwards & excluding current day)
- ii) History for intraday & EOD data can be called based on the number of days (nd) or the date range (with start & end dates).
- iii) History for Daily bars can be called based on the number of days (nd) back from today or for a date range, using a start date & an end date.
- iv) The mode for requesting the correct API would depend upon whether the symbol forms a part of Master 1 or Master 2. (Master 2 contains only continuous futures. Master 1 contains all Equities, Indices, Contract Futures & Options). This is done because though the future has the same token number, the historical data for both the continuous & contract futures is different.
- v) The token number of the required symbol, available in the masters for all symbols needs to be used with each request.
- vi) Intraday history is available in 1, 5, 15 & 60 min format. EOD has a dedicated API.
- vii) This history API can be used to request for history up to the previous trading day. The current trading day's history forms a part of the real time API.
- viii) The history API needs to be activated from our backend. The API is restricted to a single machine & the login id & password need to form a part of each request as shown in the commands below.



a) Intraday Bar History

- i) Option 1: Intraday Bar History with Start & End Date Ranges
 - Command is as follows: -

http://<TrueData_History_IP>/iddataservice/idIntra.aspx?cmd=<mode>&t=<token number>&min=<resolution>&sd=<yyyymmdd>&ed=<yyyymmdd>

eg..

http://43.241.61.45/iddataservice/idlntra.aspx?cmd=hmin&t=1001330&min=1&sd=201807 01&ed=20180711

mode=hmin

hmin for master1 symbols

hmcf for master2 symbols

token number=1001330

token number of the symbol as obtained from the master file

minutes=1

resolution of 1/5/15/60 min (candles can be received from the server in all these time frames

1 min candles = 30 trading days ~ 45 calendar days 5 min candles = 2 months 15 min candles = 3 months 60 min candles = 5 months

• sd=20180702

starting date in yyyymmdd format

• ed=20180710

ending data in yyyymmdd format

 Add the following header in the history API request to get compressed data

X-Authz: <Authentication Token received after login>



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 Add the following header in the history API request to get compressed data (can be ignored):

"X-Comp"=1

1 = get the compress data

0 = get the uncompressed data

Response fields (Uncompressed):

Date, Time, Open, High, Low, Close, Volume, Open Interest 20180702 09:15,1912.90,1915.35,1912.90,1914.00,82219,0 20180702 09:16,1914.20,1914.20,1908.85,1908.85,19786,0 20180702 09:17,1909.00,1909.00,1906.75,1908.20,10163,0 20180702 09:18,1908.95,1909.40,1907.50,1907.95,16301,0 20180702 09:19,1907.75,1907.95,1906.35,1907.05,8329,0 20180702 09:20,1907.30,1907.35,1904.20,1904.20,11512,0 20180702 09:21,1904.20,1904.25,1902.90,1902.90,7915,0

......

Response fields (Compressed):

@W(�20180719,2003�

5.05,1977,1988.4,1385205,0-8(@,202*198.�9.45,2796940-H!91(P,1968W�9.3,217122W6w19.9U 7.739�1.2,3693133YO@78.3-

43��1972.5,24654_P2,193• @79.9,A62.7�7172\�4�061.3020.o�28.1,222480�

.....



- ii) Option 2: Intraday Bar History with Number of Days Backwards from Current Date
 - Command is as follows: -

http://<TrueData_History_IP>/iddataservice/idIntra.aspx?cmd=<mode>&t=<token_number>&min=<resolution>&nd=<number of days>

eg..

 $\underline{http://43.241.61.45/iddataservice/idIntra.aspx?cmd=hmin\&t=1001330\&min=1\&nd=2$

mode=hmin

hmin for master1 symbols

hmcf for master2 symbols

token number=1001330

token number of the symbol as obtained from the master file

minutes=1

resolution of 1/5/15/60 min (candles can be received from the server in all these time frames

1 min candles = 30 trading days ~ 45 calender days 5 min candles = 2 months 15 min candles = 3 months 60 min candles = 5 months

- nd = number of days = 2
 - number of days of data required from previous / last trading date
- Add the following header in the history API request to get compressed data

X-Authz: <Authentication Token received after login>

 Add the following header in the history API request to get compressed data:



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"X-Comp"=1

1 = get the compress data

0 = get the uncompressed data

Response fields (Uncompressed):

Date, Time, Open, High, Low, Close, Volume, Open Interest 20180702 09:15,1912.90,1915.35,1912.90,1914.00,82219,0 20180702 09:16,1914.20,1914.20,1908.85,1908.85,19786,0 20180702 09:17,1909.00,1909.00,1906.75,1908.20,10163,0 20180702 09:18,1908.95,1909.40,1907.50,1907.95,16301,0 20180702 09:19,1907.75,1907.95,1906.35,1907.05,8329,0 20180702 09:20,1907.30,1907.35,1904.20,1904.20,11512,0 20180702 09:21,1904.20,1904.25,1902.90,1902.90,7915,0

.....

Response fields (Compressed):

@W(�20180719,2003�

5.05,1977,1988.4,1385205,0-8(@,202*198.�9.45,2796940-H!91(P,1968W�9.3,217122W6w19.9U 7.739�1.2,3693133YO@78.3-

43��1972.5,24654_P2,193• @79.9,A62.7�7172\�4�061.3020.o�28.1,222480�

.....



- b) Daily Bar History (EOD Bars)
 - i) Option 1: Daily Bar History with Start & End Date Ranges
 - Command is as follows: -

http://<TrueData_History_IP>/iddataservice/idDataservice.aspx?cmd=<mode>&t=<token number>&sd=<yyyymmdd>&ed=<yyyymmdd>

eg.

 $\frac{\text{http://43.241.61.45/iddataservice/idDataservice.aspx?cmd=hdly\&t=1001330\&sd=201212}{19\&ed=20141219}$

mode=hdly

hdly for master1 symbols hdcf for master2 symbols (Continuous Futures)

token=1001330

token of the symbol

sd = start date | ed = end date

start date and end date of the data required in yyyymmdd format

Note:- Max # of years that can be requested = 15 years

 Add the following header in the history API request to get compressed data

X-Authz: <Authentication Token received after login>

• Add the following header in the history API request to get compressed data:

"X-Comp"=1

1 = get the compress data

0 = get the uncompressed data

Response fields (Uncompressed):

TrueData**

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Date, Open, High, Low, Close, Volume, Open Interest 20141219,2464.9,2528,2464.9,2513.75,2310250,3618125 20141218,2461.2,2475.95,2441.1,2464.95,1141250,4456000 20141217,2463.15,2480.65,2418.25,2453.7,1509000,4856125

Response fields (Compressed):

@W(\$20180719,2003\$
5.05,1977,1988.4,1385205,0
-8(@,202*198.\$9.45,2796940-H!91(P,1968W\$9.3,217122W6w19.9U
7.739\$1.2,3693133YO@78.343\$\$1972.5,24654_P2,193* @79.9,A62.7\$7172\\$4\$061.3020.0\$28.1,2224



- ii) Option 2: Daily Bar History with Number of Days Backwards from Current Date
 - Command is as follows: -

http://<TrueData_History_IP>/iddataservice/idDataservice.aspx?cmd=<mode>&t=<token_number>&nd=<number of days>

eg..

http://43.241.61.45/iddataservice/idDataservice.aspx?cmd=hdly&t=1001330&nd=350

mode=hdly

hdly for master1 symbols hdcf for master2 symbols (Continuous Futures)

token=1001330

token of the symbol

days=350

number of days of data required from previous / last trading date

Note:- Max # of years that can be requested = 15 years

 Add the following header in the history API request to get compressed data

X-Authz: <Authentication Token received after login>

 Add the following header in the history API request to get compressed data:

"X-Comp"=1

1 = get the compress data

0 = get the uncompressed data

Response fields (Uncompressed):

Date, Open, High, Low, Close, Volume, Open Interest 20141219,2464.9,2528,2464.9,2513.75,2310250,3618125 20141218,2461.2,2475.95,2441.1,2464.95,1141250,4456000 20141217,2463.15,2480.65,2418.25,2453.7,1509000,4856125

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Response fields (Compressed):

@W(•20180719,2003•5.05,1977,1988.4,1385205,0 -8(@,202*198.•9.45,2796940-H!91(P,1968W•9.3,217122W6w19.9U 7.739•1.2,3693133YO@78.3-43•1972.5,24654_P2,193• @79.9,A62.7•7172\•4•061.3020.0•28.1,222 480•

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c) Data Decompression Details & Processing Uncompressed Data

```
LZ4 compression has been used to compress the intra/daily data
i)
ii)
       LZ4 is an open source library and is available in all versions
       Download the suitable lib/source from the https://code.google.com/p/lz4/
iii)
iv)
       Implement the uncompressing logic for high compression and check from your
code.
v)
       Following is the sample code which can be used to decompress: -
        var _httprequest = new WebClient();
        _httprequest.Headers.Add("X-Authz", _authkey);
        _httprequest.Headers.Add("X-Comp", "1");
        var bdata = _httprequest.DownloadData(new Uri(url));
         if (bdata != null && bdata.Length > 0 && ((char)bdata[0]) != '!')
        var dcdata = DartZip.Compression.Decompress(bdata);
        var stringdata = Encoding.ASCII.GetString(dcdata);
```

- vi) Note:- When receiving uncompressed data:
 - Check for the 200 (OK) status on the response header
 - The API returns **204 (No content)** as the response code for an unsuccessful data retrieval/error on authorization.
 - Clients need to check the status code of the http response before processing.
 - The responses must be processed only when status code is **200 (OK)** and other responses can be safely ignored.



17. Corporate Action

• This API gives the last / latest corporate action of a type (Split / Bonus)

http://<TrueData History IP>/idDataService/idDataService.aspx?cmd=cahtk&t=<token number>

eg...

http://43.241.61.45/idDataService/idxDataService.aspx?cmd=cahtk&t=1004963

cmd = cahtk for CA history by ticker m =Market ID

t = Ticker

Response:

Ticker, CA Date(yyyyMMdd), CA Type(Split/Bonus), Ratio, Factor

Sample Response:

ICICIBANK,20140930,S,2:10,0.2 ICICIBANK,20140930,B,1:1,0.5

Note:

- All Daily & Intraday history is adjusted for Corporate Action
- Tick Data is not adjusted from corporate action and this API could be used to correct for the same
- Also, Corporate Action date and ratio could be used to highlight
- The date on your chart (with a bubble) to demarcate where the Corporate Action took Place)