



# FactSet Tick History API

- Programmer's Manual and Reference Version- 21st March 2024

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## Revision History

Effective Date	Version Number	Description	Changes made
08/21/2023	2.0 A	Major version release that includes Coverage and Level 1	
01/31/2024	2.1 A	Updated Minute Bars details	
03/21/2024	2.1 B	Removed Level 2 endpoints	

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## **Document Organization and Audience**

This user guide provides information regarding the Tick History RESTful API. The API delivers Tick History files to the user as per the user requirement(s) and set parameters.

Tick History RESTful API leverages AWS to deliver tick history files. This ensures scalability and stability to deliver large volume of data. The user can request data from 2012-01-01 to current date.

FactSet Tick History API V2 has Level 1 and Minutes bar

- Chapter 1 – Introduction
  - Chapter 2 – FactSet Tick History RESTful API Functionality and Benefits
  - Chapter 3 – Access and Security
  - Chapter 4 – Coverage Endpoint
  - Chapter 5 – Level 1
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## Chapter 1 Introduction

- FactSet Tick History is an archive of historical tick data drawn from our real time content. Data coverage goes back as far as 2012, including OTC and exchange-traded instruments, from more than 200 Exchanges. Clients get access to Global historical Tick data across all asset classes.
- Tick History coverage endpoint returns the coverage for all the requested tickers along with other response fields for 'Level 1' data.
- Tick History 'Level 1' provides access to retrieve 'Level 1' historical tick data.

### 1.1 Authentication

Tick History RESTful API provides easy access to historical tick data via the standard HTTPS protocol. All services are authenticated by a central source, so the same username and password works for all services. In addition, naming conventions have been standardized to simplify the consumption of multiple services.

To authenticate to the Tick History API FactSet leverages API Keys using Basic HTTP Authentication Scheme described in RFC 7617. Click [here](#) for more details on Authentication.

To generate an API key, go to <https://developer.factset.com>

1. Logon with your FactSet .NET ID
2. Go to <https://developer.factset.com/manage-api-keys>
3. Select your machine account - this must be done to grant you access.
4. Select "Generate new API key."
5. Provide a description of your API Key (Tip: Describe IP (Internet Protocol) range).
6. Specify your required IP range and select 'Add.' (The 'From IP' value will auto populate, while 'To IP' can be left blank.) You can edit this API key IP range in the future.
7. Select 'Create'
8. Copy your new 'API Key,' this will not be retrievable again. Copy into a safe location for future reference, if needed.
9. Please use USERNAME-MACHINE SERIAL along with the API key generated in the previous step for authentication.

#### 1.1.1 Issuing a request with an API key.

- The specifics of an API request differ by the FactSet RESTful API being used, but the authentication remains the same. A valid Authorization header must be provided using Basic HTTP Authentication Scheme. This scheme requires a username and password. The FactSet credentials (username and serial separated by a single hyphen "-" character) forms the username and the API key is the password. This username and password concatenated by a single colon ":" character must be Base64 encoded and included with the Authorization header for all API requests.
- Below is an example of GET request to the FactSet RESTful API using

```
$ printf "username-serial: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX" | base64
dXNlcm5hbWUtc2VyaWFsOihYWfYWFhYWfYWFhYWfYWFhYWfYWFhYWfYWFhYWA==
$ curl -X GET "https://api.factset.com/bulk-documents/tickhistory"
-H "Accept: application/json".
-H "Authorization: Basic
dXNlcm5hbWUtc2VyaWFsOihYWfYWFhYWfYWFhYWfYWFhYWfYWFhYWfYWFhYWA=="
```

- If the credentials are not valid, the server will respond with a 401 HTTP status code (Unauthorized).

## **Chapter 2 FactSet Tick History API Functionality and Benefits**

The FactSet Tick History RESTful provides the following features to applications:

- Synchronous access using a standard HTTP RESTful service.
- Stateless requests (No sticky cookies).
- Platform independence.
- Zero-based installation.
- Seamless failover.

### **2.1 Synchronous Access**

Synchronous data access simplifies application programming and makes it straightforward to exploit the HTTP protocol.

### **2.2 Stateless Request/Response**

The RESTful API is a stateless request/response service. The service does not make any use of HTTP cookies, and thus allows requests to be load-balanced over many servers. This in turn, improves both throughput and response time.

### **2.3 Platform Independence**

The RESTful API can be used without any FactSet-supplied software. Applications can access data from any system that supports HTTPs requests.

### **2.4 Zero-Based Installation**

Proprietary software is not needed to access this service. Any standard library or application that can issue HTTP queries can request data via the RESTful API.

### **2.5 Seamless Failover**

If a FactSet Data Server or an entire data centre goes down, requests will be routed to an available Data Server using state-of-the-art load balancers. You do not have to change your software, as this failover will be automatic.



## Chapter 3 Access and Security

Host Name	Service	Example URL
api.factset.com	tick-history	<a href="https://api.factset.com/tick-history">https://api.factset.com/tick-history</a>

### 3.1 Easy Access Through FactSet Tick History API

The RESTful API uses HTTP Basic Authentication which requires the following HTTP header be added to the request:

Authorization: Basic {Base-64 Encoding of "user: password"}

See the Authentication Section for details on how to generate the password.

### 3.2 Certificates and Certificate Chains

FactSet recommends clients should not hardcode reliance on any certificate or advertised certificate chain into their applications and expects clients to rely on Public Key Infrastructure verification and validity of the certificates.

- FactSet's Certificates will change over time as they are renewed, and the complexity of the algorithms employed increases (i.e., SHA-2 rather than SHA-1 signatures). This is the constant evolution of security as old security algorithms are retired and new security algorithms are included. Often these certificates get updated on a rolling multi-year basis. Validating a certificate dynamically during TLS connect must be incorporated by the client as a necessary practice.
- FactSet's Certificate chains, including intermediate Certificate Authorities, may change over time, and it is important that clients dynamically validate FactSet's certs against a modern CA trusted root certificate store. FactSet's current root certificate is [Thawte Primary Root CA](#).

### 3.3 Security Protocols

Clients should not hardcode dependencies on any specific security protocol as FactSet is continuously reviewing security policies and reserves the right to disable support for older security protocols with short notice. The current supported protocols are TLSv1.1 and TLSv1.2 but at a future date, these may be replaced with future versions. Clients should make sure that their software can handle ever changing Security Protocols.

### 3.4 Firewall

Clients should have access to [api.factset.com](https://api.factset.com) through their firewall.

## Chapter 4 Coverage Endpoint

- Coverage endpoint returns coverage for specified tickers/ISIN along with other response fields for 'Level 1' Data.

**Note:** option identifiers do not cover in coverage endpoint.

### 4.1 Coverage Requests

#### 4.1.1 Description

The FactSet RESTful API supports HTTP GET requests.

#### 4.1.2 Request Headers

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded value>' format.
Accept-Encoding	FactSet will send compressed responses. Value needs to be deflated, gzip .

#### 4.1.3 Request Parameters

##### Coverage endpoint:

Parameters	Values	Description
tickers	string	Supports one or multiple tickers separated by comma. <b>Note: Maximum 10 tickers per request.</b>
or	or	or
ISINs	string	Supports one or multiple ISINs separated by comma. <b>Note: Maximum 10 ISINs per request.</b>
		The tickers and ISINs parameters provide two different ways to specify the identifiers for data retrieved. <b>Note: Please use either the tickers or ISINs parameter.</b>
factsetExchangeCode	string	This parameter is used to filter the results based on the FactSet specific regional or composite exchange code.  <b>Note: This parameter does not support multiple factsetExchangeCodes (Refer to FactSetHistory_DataModel_V1.0E.pdf for list of factsetExchangeCodes).</b>

### 4.2 Sample Requests

#### 4.2.1 URL Syntax:

A URL is defined as following:

```
<protocol>://<base URL>/<service>? <optional query string parameters>
```

## 4.2.2 Example:

Coverage: <https://api.factset.com/tick-history/v2/level1/coverage?tickers=XXX&factsetExchangeCode=XXX>

<https://api.factset.com/tick-history/v2/level1/coverage?isins=XXX&factsetExchangeCode=XXX>

### 4.2.2.1 Request by Tickers

<https://api.factset.com/tick-history/v2/level1/coverage?tickers=IBM>

```
{
  "data": [
    {
      "ticker": "IBM",
      "factsetExchangeCode": "BUE",
      "startDate": "2012-01-04",
      "latestTradeDate": "2023-03-21",
      "companyName": "International Business Machines Corp Shs Cert Deposito Arg Repr 1/5 Sh",
      "isin": "ARDEUT110202",
      "currency": "ARS",
      "lastExchangeCode": "82",
      "lastExchangeName": "Buenos Aires Stock Exchange",
      "primaryTickerExchange": null
    },
    {
      "ticker": "IBM",
      "factsetExchangeCode": "CAN",
      "startDate": "2021-12-01",
      "latestTradeDate": "2023-03-21",
      "companyName": "International Business Machines Corporation Shs -CAD hedged- Canadian Depository Receipt Repr Shs Reg S",
      "isin": "CA4592111093",
      "currency": "CAD",
      "lastExchangeCode": "12146",
      "lastExchangeName": "Canadian Consolidated Pricing",
      "primaryTickerExchange": null
    }
  ]
}
```

### 4.2.2.2 Request by ISINs

<https://api.factset.com/tick-history/v2/level1/coverage?isins=ARDEUT110202>

```
{
  "data": [
    {
      "ticker": "IBM",
      "factsetExchangeCode": "BUE",
      "startDate": "2012-01-04",
      "latestTradeDate": "2023-03-21",
      "companyName": "International Business Machines Corp Shs Cert Deposito Arg Repr 1/5 Sh",
      "isin": "ARDEUT110202",
      "currency": "ARS",
      "lastExchangeCode": "82",
      "lastExchangeName": "Buenos Aires Stock Exchange",
      "primaryTickerExchange": null
    },
    {
      "ticker": "IBMC",
      "factsetExchangeCode": "BUE",
      "startDate": "2018-02-08",
      "latestTradeDate": "2023-03-21",
      "companyName": "International Business Machines Corp Shs Cert Deposito Arg Repr 1/5 Sh",
      "isin": "ARDEUT110202",
      "currency": "USD",
      "lastExchangeCode": "82",
      "lastExchangeName": "Buenos Aires Stock Exchange",
      "primaryTickerExchange": null
    }
  ]
}
```

## 4.3 Response Data Fields

### 4.3.1 Response Fields:

#### Coverage endpoint:

Parameters	Values	Description
ticker	string	Returns the unique ticker given to a company.
factsetExchangeCode	string	Factset specific regional or composite exchange code.
startDate	string	The date for (or from which) the coverage is required.
latestTradeDate	string	This specifies the date of the latest trade from tick history.
companyName	string	Returns the unique name of the firm.
ISIN	string	Returns the ISIN of the requested company.
currency	string	Represents 3 -digit ISO code for the requested company.
lastExchangeCode	string	This specifies the last traded exchange code from tick history.
lastExchangeName	string	This specifies the last traded exchange name from tick history.
primaryTickerExchange	string	The primary ticker ISO.

## Chapter 5 Level 1

- 'Level 1' API provides access to check coverage and retrieve 'Level 1' historical tick data.

### 5.1 Requests

#### 5.1.1 Description

The FactSet RESTful API supports HTTP GET requests.

#### 5.1.2 Request Headers

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded value>' format.
Accept-Encoding	FactSet will send compressed responses. Value needs to be deflated, gzip .

#### 5.1.3 Request Parameters

##### Create endpoint (POST Method):

For the create endpoint no parameters are required but request body is required.

Parameters	Values	Description
tickers	string	<p>This parameter refers to the requested list of one or more tickers. Please note it is best practice to include multiple IDs per each create files request body for clients interested in larger universes</p> <p><b>Note: Maximum 500 tickers per request.</b></p>
factsetExchangeCode	string	<p>This parameter is used to filter the results based on the FactSet specific regional or composite exchange code and last exchange code.</p> <p><b>Note: This parameter does not support multiple factsetExchangeCodes (Refer to FactSetTickHistory_DataModel_V1.0E.pdf for list of codes).</b></p>
dateTimeRange	string	<p>This parameter refers to start time and end time.</p> <p><b>Start</b>-The date for (or from which) the data is required. Supports in <b>YYYY-MM-DDTHH:MM:SSZ</b> format.</p> <p><b>End</b>-The date to which the data is required. Supports <b>YYYY-MM-DDTHH:MM:SSZ</b> format.</p> <p><b>Note: Using start and end parameters within dateTimeRange will fetch the data on particular days in between the timestamps given.</b></p>
single	boolean	<p>(single=true) Returns data in a single file. If parameter is not used it take default value as false and returns data in multiple files</p> <p><b>Note: This parameter works for requests with shorter data ranges having filesize &lt;= 128MB.</b></p>

fields	string	Refers to the fields for which the data is required. Refer <a href="#">FactSetTickHistory_DataModel_V1.0E.pdf</a> for list of fields.
--------	--------	---------------------------------------------------------------------------------------------------------------------------------------

### Status endpoint (GET Method):

Parameters	Values	Description
id	string	This parameter refers to the id returned by files to create an endpoint to poll and collect results of the query.

### Get endpoint (GET Method):

Parameters	Values	Description
id	string	This parameter refers to the id returned by files create endpoint to poll and collect results of the query
_paginationLimit	integer	The number of results displayed per page. "paginationLimit" overrides the default (20) results per page.
_paginationOffset	integer	For requests that generate more than 20 results. This parameter is used to identify the beginning of the next set of results.

### 5.1.4 Request Return codes

HTTP status code	Description
200	No Error.
201	The request has been created.
202	The request has not been finished, and the result has not been created.
400	Invalid request or "Improper formatting of request body or parameters".
401	Missing or invalid authentication.
403	Users are forbidden access with current credentials. Missing parameters or Invalid input value in the request.
404	Id not found.
408	The request was timed out.
429	Too many requests.
500	There was an error while retrieving the data.

## 5.2 Sample Requests

### 5.2.1 URL Syntax:

A URL is defined as following:

```
<protocol>://<base URL>/<service>? <optional query string parameters>
```

### 5.2.2 Example:

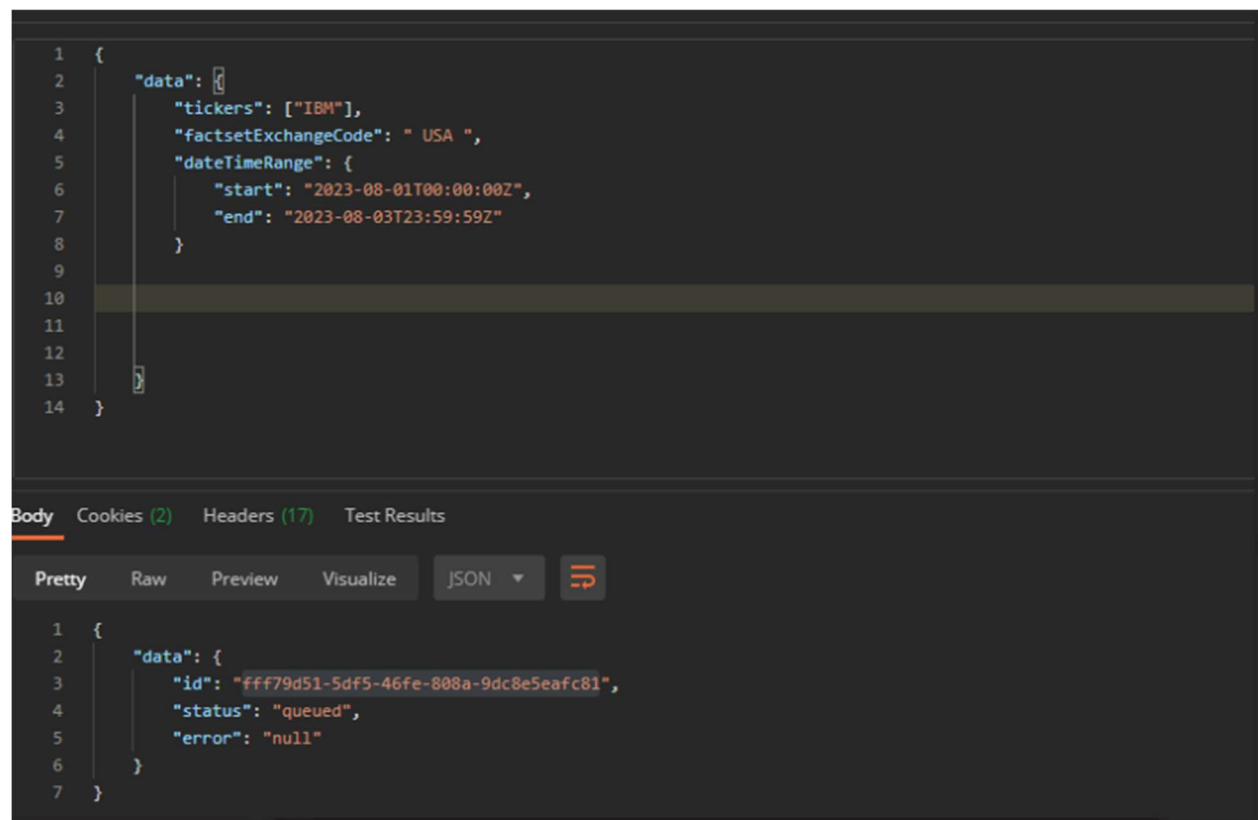
**Create:** <https://api.factset.com/tick-history/v2/level1/files/create>

**Status:** <https://api.factset.com/tick-history/v2/level1/files?/status?id=XXXXX>

**Get:** <https://api.factset.com/tick-history/v2/level1/files/get?id=XXX-XXX-XXX-XXXX& paginationLimit=XX& paginationOffset=X>

#### 5.2.2.1 Level 1 Create

<https://api.factset.com/tick-history/v2/level1/files/create>



```
1 {
2   "data": {
3     "tickers": ["IBM"],
4     "factsetExchangeCode": " USA ",
5     "dateTimeRange": {
6       "start": "2023-08-01T00:00:00Z",
7       "end": "2023-08-03T23:59:59Z"
8     }
9   }
10 }
11
12
13
14 }
```

Body Cookies (2) Headers (17) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "data": {
3     "id": "fff79d51-5df5-46fe-808a-9dc8e5eafc81",
4     "status": "queued",
5     "error": "null"
6   }
7 }
```

## 5.2.2.2 Level 1 Status

<https://api.factset.com/tick-history/v2/level1/files/status?id=50cda506-9ac6-4078-bdfa-562ccfc9821d>

The screenshot shows a REST client interface with the following details:

- Request Method: **GET**
- Request Headers: **9**
- Request Body: **none**
- Status: **201 Created**, Time: **528 ms**, Size: **876 B**
- Response Body (JSON):

```
1  
2  
3  "data": {  
4    "status": "created",  
5    "id": "50cda506-9ac6-4078-bdfa-562ccfc9821d",  
6    "error": "null"  
7  }
```

## 5.2.2.3 Level 1 Get

<https://api.factset.com/tick-history/v2/level1/files/get?id=fff79d51-5df5-46fe-808a-9dc8e5eafc81>

The screenshot shows a REST client interface with the following details:

- Request Method: **GET**
- Request Headers: **16**
- Status: **200 OK**, Time: **805 ms**, Size: **9.56 kB**
- Response Body (JSON):

```
18  "url": "https://fds3-structured-data-delivery-tickhistory.s3.amazonaws.com/abb2de9d687a91a637be4034180b481/595715217/data_14_1_0.csv.gz?X-Amz-Algorithm=AWS4-HMAC-SHA256  
X-Amz-Credential=ASIA4NAFR8G3J0WfPK2F28238814N2Fus-east-1k2f53k2faws4_request&X-Amz-Date=20230814T122427Z&X-Amz-Expires=86400&X-Amz-SignedHeaders=host&  
X-Amz-Security-Token=IQpJb3j721uX2VJEHQaCKVzLWvh3QfMS3HfEUCIQCN2Bk28BmK85PA0yCjIE3kb1NNT9K2FfaFmRkdj1K2BnExx78AIg0JVPjN1436wa7LESYhf7svlKX28FB416J3U5xwRHEjgBqQM1LRADGpwNIT1  
Nj1ZnJANzA1DMYCKVR10x91ZLF06yrr2AsLxk2BR5VHQ0qs58D2PD7neBwv4uXx8g1Y3VJ2A7p62WuACFK2FIga28K2gCk2F11Z5F1k2BjkuUUN28QIIM1X8JMFZ5AK2F1S1T11obc2FMc1w81h7k8Ck2BwJ61mFVVLtuJ0deep  
zB7hcjclmk3QofkHkUeA90ek1Xw1RU48BHSwExS3Iak28J5KuME626K2FwQQ0VY3G1f3E0rWf9ke541twszqomFbWuzQe1ncTRQ8b19uOH19bkBbEV1Xyy7v9cD9j3b4Nk2F858xVly133DN28MwS2guk2FEXEnBeNc18k2F5FC  
bdfFmJEzn45JdmBq2F2ZpFwFVdVbHL5Nuk8LxXfrp8XuCm8LU1uJUPUQVQcMeet4nY88zq3K2F5edZt6YzjuAFk54gk8u1B1k28F781k2F1HfF0k2Fzbi78E211g3WfBhKX2F6V28Vnd3QynK2F3P25NGJc34GAY8V  
F153JSHCdqM5TH8FY00I=91n0831G7gWfrBAAMQCu6KYOp8B4f8mVNDU1D1nPlzEnR1fh4o76C1Nbnk2FBPXQ0HY296LQpK9QTK3mqQoou02s7qqCy91c8k2FHX3wJ110mSHAPTXS1S8rg5D1N8QC80JRMuyataKZLewRe1vyNinE  
z3cKzT1bun0Hl9Ro0nT1zSUCcym0K0K2FK5X4ngxh1EN8xMy8Voa155113BVlyC0YRrXsFK2BcQeKk28pgeK28qAfgK3DK308  
X-Amz-Signature=16ea9614f5fc281024ed4f7b898f44b76d919cb8776b822ff15c9c1f732f97d"
```



## 5.3 Response Data Fields

### 5.3.1 Response Fields:

#### Create endpoint:

Parameters	Values	Description
id	string	This parameter returns the unique identification for the query requested.
status	string	The status of the query.  If the request is accepted the status will be displayed as “queued.”  queued: the creation of the resources did not start yet.

#### Status endpoint:

Parameters	Values	Description
id	string	a unique identification for the query requested.
status	string	The status of the query. If the request is accepted and response is created, then the status will be displayed as:  “ <b>created</b> ”: the resource has been successfully created. If the request has not finished and results are not created, then the status will be displayed as one of the below.  1.“ <b>queued</b> ”: the creation of the resource did not start yet.  2.“ <b>Executing</b> ”: the resource is being created.  3.“ <b>Failed</b> ”: the creation of the resource failed. And it displays the error as ‘not a valid request.’  4.“ <b>Cancelled</b> ”: the creation of this resource was cancelled before it could finish. And it displays the error as ‘request taking long time.’

## Get endpoint:

Parameters	Values	Description
requestTimestamp	string	Timestamp of when request was made.
updateTimestamp	string	Timestamp when the file was last updates.
notAuthorizedTickers	string	Returns the tickers that are not authorized.
invalidTickers	string	This will return the tickers that are invalid.
listOfFiles	string	This will contain the list of files with file name and URL.
fileName	string	Name of the files generated for the requested query.
url	string	Download link for the tick history file with requested parameters.

## 5.4 Meta Fields:

Meta Member Name	Values	Description
pagination	object	Object defining the pagination attributes for an endpoint response.
pagination.total	Int32	Total number of entries in the result set.
pagination.isEstimatedTotal	boolean	Flag indicating that the value of total is estimated.

### 5.4.1 Pagination

An endpoint where the primary data in the response is an array or an object containing an array MAY support pagination of the respective array to limit the number of resources returned in a response, using a pagination meta-attribute.

#### EXAMPLE:

```
{  
  "meta": {  
    "pagination": {  
      "total": 3,  
      "isEstimatedTotal": false  
    }  
  },  
}
```

## Total

Specifies the number of records returned in the response. In this example the total number of records are 3.

```
▼ "meta": {  
  │  
  ▼ "pagination": {  
    │  
    │ "total": 3,  
    │ "isEstimatedTotal": false  
    │ }  
  │ }  
  },
```

## Chapter 6 Level 1 Minute Bars

- 1-minute bars available from 20120101 to previous day. Per request able to fetch upto 6 months of data.

### 6.1 Requests

#### 6.1.1 Description

The FactSet RESTful API supports HTTP GET requests.

#### 6.1.2 Request Headers

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded value>' format.
Accept-Encoding	FactSet will send compressed responses. Value needs to be deflated, gzip .

#### 6.1.3 Request Parameters

##### Create endpoint (POST Method):

For the create endpoint no parameters are required but request body is required.

Parameters	Values	Description
tickers	string	This parameter refers to the requested list of one or more tickers. Please note it is best practice to include multiple IDs per each create files request body for clients interested in larger universes  <b>Note: Maximum 500 tickers per request.</b>
factsetExchangeCode	string	This parameter is used to filter the results based on the FactSet specific regional or composite exchange code.  <b>Note: This parameter does not support multiple factsetExchangeCodes (Refer to FactSetTickHistory_DataModel_V1.0E.pdf for list of codes).</b>
dateTimeRange	string	This parameter refers to start time and end time.  <b>Start</b> -The date for (or from which) the data is required. Supports in <b>YYYY-MM-DDTHH:MM:SSZ</b> format.  <b>End</b> -The date to which the data is required. Supports <b>YYYY-MM-DDTHH:MM:SSZ</b> format.
granularity	string	This parameter refers to the granularity in which minute bars data is shown. <b>Possible values are 1m</b>

type	string	This parameter 'type=trades refer to minute bars data calculated from trade data (price and volume)
------	--------	-----------------------------------------------------------------------------------------------------

### Status endpoint (GET Method):

Parameters	Values	Description
id	string	This parameter refers to the id returned by files to create an endpoint to poll and collect results of the query.

### Get endpoint (GET Method):

Parameters	Values	Description
id	string	This parameter refers to the id returned by files create endpoint to poll and collect results of the query
_paginationLimit	integer	The number of results displayed per page. "paginationLimit" overrides the default (20) results per page.
_paginationOffset	integer	For requests that generate more than 20 results. This parameter is used to identify the beginning of the next set of results.

### 6.1.4 Request Return codes

HTTP status code	Description
200	No Error.
201	The request has been created.
202	The request has not been finished, and the result has not been created.
400	Invalid request or "Improper formatting of request body or parameters".
401	Missing or invalid authentication.
403	Users are forbidden access with current credentials. Missing parameters or Invalid input value in the request.
404	Id not found.
408	The request was timed out.
429	Too many requests.
500	There was an error while retrieving the data.

## 6.2 Sample Requests

### 6.2.1 URL Syntax:

A URL is defined as following:

```
<protocol>://<base URL>/<service>? <optional query string parameters>
```

### 6.2.2 Example:

**Create:** <https://api.factset.com/tick-history/v2/level1/files/minute-bars/create>

**Status:** <https://api.factset.com/tick-history/v2/level1/files/minute-bars/status?id=XXXXX>

**Get:** [https://api.factset.com/tick-history/v2/level1/files/minute-bars/get?id=XXXXX&\\_paginationLimit=XX&\\_paginationOffset=X](https://api.factset.com/tick-history/v2/level1/files/minute-bars/get?id=XXXXX&_paginationLimit=XX&_paginationOffset=X)

#### 6.2.2.1 Create

<https://api.factset.com/tick-history/v2/level1/files/minute-bars/create>

The screenshot shows a REST client interface with the following details:

- Request Body (JSON):**

```
1 {
2   "data": {
3     "tickers": [
4       "IBM"
5     ],
6     "factsetExchangeCode": "USA",
7     "dateTimeRange": {
8       "start": "2020-01-01T00:00:00Z",
9       "end": "2020-01-01T23:59:59Z"
10    },
11    "granularity": "1m",
12    "type": "trades"
13  }
14 }
```
- Response Body (JSON):**

```
1 {
2   "data": {
3     "id": "b03bed69-c37c-4b97-9f1b-8c63199c6f4c",
4     "status": "created",
5     "error": null
6   }
7 }
```
- Status:** 202 Accepted, Time: 1666 ms, Size: 116 KB

#### 6.2.2.2 Status

<https://api.factset.com/tick-history/v2/level1/files/minute-bars/status?id=b03bed69-c37c-4b97-9f1b-8c63199c6f4c>

The screenshot shows a REST client interface with the following details:

- Request:** This request does not have a body.
- Response Body (JSON):**

```
1 {
2   "data": {
3     "id": "b03bed69-c37c-4b97-9f1b-8c63199c6f4c",
4     "status": "created",
5     "error": null
6   }
7 }
```
- Status:** 201 Created, Time: 406 ms, Size: 115 KB

#### 6.2.2.3 Get

<https://api.factset.com/tick-history/v2/level1/files/minute-bars/get?id=b03bed69-c37c-4b97-9f1b-8c63199c6f4c>

```

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies
none form-data x-www-form-urlencoded raw binary GraphQL

Body Cookies (2) Headers (24) Test Results This request does not have a body Status: 200 OK Time: 536 ms Size: 2.45 KB Save as example
Pretty Raw Preview Visualize JSON View

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
}
  "data": {
    "requestTimestamp": "2024-01-09T10:38:11.888Z",
    "updateTimestamp": "2024-01-09T10:38:16.724Z",
    "listOfFiles": [
      {
        "fileName": "data_81b18d65-0404-34a8-0761-8391b063e7_185_1_0.csv.gz",
        "url": "https://d3s3-structured-data-delivery-minutabar-81g-c3.amazonaws.com/minutabar/303bed69-c37c-4897-9f1b-8c63199c6f4c/data_81b18d65-0404-34a8-0761-8391b063e7_185_1_0.csv.gz"
      }
    ]
  },
  "meta": {
    "pagination": {
      "total": 1,
      "isEstimatedTotal": false
    }
  }
}

```

### 6.3 Response Data Fields

#### 6.3.1 Response Fields: Create endpoint:

Parameters	Values	Description
id	string	This parameter returns the unique identification for the query requested.  Note: id will be valid up to 30 days
status	string	The status of the query.  If the request is accepted the status will be displayed as “queued.”  queued: the creation of the resources did not start yet.

## Status endpoint:

Parameters	Values	Description
id	string	a unique identification for the query requested.  Note: id will be valid up to 30 days
status	string	The status of the query. If the request is accepted and response is created, then the status will be displayed as:  “ <b>created</b> ”: the resource has been successfully created. If the request has not finished and results are not created, then the status will be displayed as one of the below.  1.“ <b>queued</b> ”: the creation of the resource did not start yet.  2.“ <b>Executing</b> ”: the resource is being created.  3.“ <b>Failed</b> ”: the creation of the resource failed. And it displays the error as ‘not a valid request.’  4.“ <b>Cancelled</b> ”: the creation of this resource was cancelled before it could finish. And it displays the error as ‘request taking long time.’

## Get endpoint:

Parameters	Values	Description
requestTimestamp	string	Timestamp of when request was made.
updateTimestamp	string	Timestamp when the file was last updates.
listOfFiles	string	This will contain the list of files with file name and URL.
fileName	string	Name of the files generated for the requested query.
url	string	Download link for the tick history file with requested parameters.



## 6.4 Meta Fields:

Meta Member Name	Values	Description
pagination	object	Object defining the pagination attributes for an endpoint response.
pagination.total	Int32	Total number of entries in the result set.
pagination.isEstimatedTotal	boolean	Flag indicating that the value of total is estimated.

### 6.4.1 Pagination

An endpoint where the primary data in the response is an array or an object containing an array MAY support pagination of the respective array to limit the number of resources returned in a response, using a pagination meta-attribute.

#### EXAMPLE:

```
{
  "meta": {
    "pagination": {
      "total": 3,
      "isEstimatedTotal": false
    }
  },
}
```

#### Total

Specifies the number of records returned in the response. In this example the total number of records are 3.

```
{
  "meta": {
    "pagination": {
      "total": 3,
      "isEstimatedTotal": false
    }
  },
}
```



Globex option root from the exchange +1- letter month code. + - digit year code + # + 6- digit option Expiration date (YYMMDD) + Exchange ISO.

Example: NEK31#310425C00002700000-NYME, is the May 2031 Natural Gas future call Option expiring on 25th of April 2031 with a \$2.70 strike price.

Example: LOZ30#301115P00093000000-NYME which is the Dec 2030 Crude Oil Future Put Options expiring on 15th Nov 2030 with a \$93.00 strike price.

## **Appendix A: FactSet Symbology and Data Policy**

Refer to (FactSetTickHistory\_DataModel\_V1.0E.pdf for details) document for FactSet Symbology and Data Policy.

## **Global Client Support**

If you have any questions, submit a request through <https://issuetracker.factset.com> under the “Tick History Data Feed” category.

If you do not have login credentials for Issue Tracker, Email to [datafeed\\_support@factset.com](mailto:datafeed_support@factset.com). For general assistance, contact your local FactSet Consultant or Salesperson or Email [support@factset.com](mailto:support@factset.com).

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## **Acknowledgements**

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).