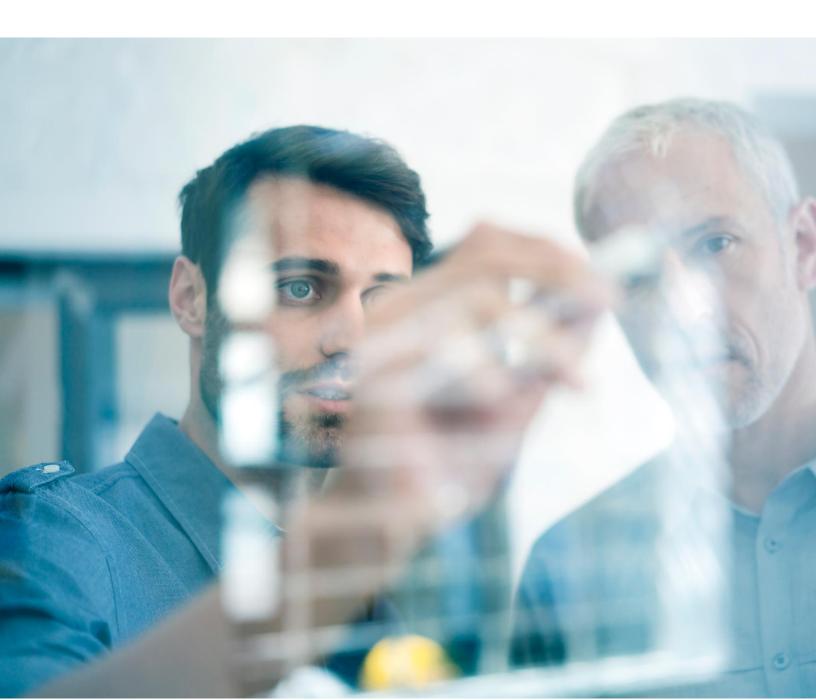
# PORTFOLIO API - VERSION 3.0 Developer's Manual and Reference April 2023

Document Version 1.0



# Portfolio API – Version 3.0

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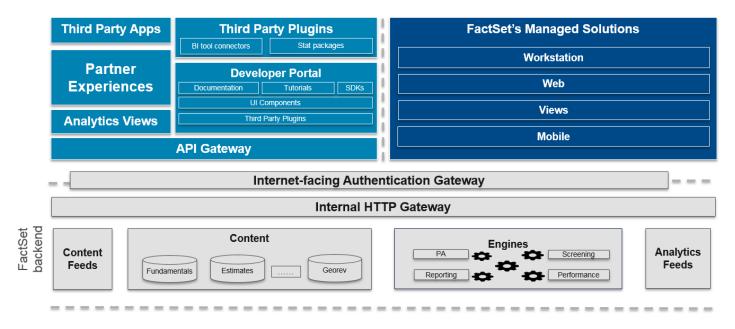
# 1. Motivation

In 1997, FactSet launched Portfolio Analysis 1.0, which set the foundation for Analytics. Soon after, Portfolio Analysis 2.0 integrated risk analytics from third-party vendors, and then expanded to include Fixed Income in 2004. FactSet now offers a robust suite of multi-asset portfolio analytics products that leads the market in flexibility, analytics, and breadth. Today, clients rely on FactSet for interactive analytics through various products, such as Portfolio Analysis (PA), SPAR, Alpha Testing, Optimizers, and Portfolio Dashboard, as well as the distribution of analytics through Portfolio Batcher, Publisher Flat Files, and Publisher documents.

# 2. API Program

### 2.1 Overview

Clients have been moving towards building a custom solution, driven by the need to increase productivity by consolidating information into a single user experience. By exposing analytics, performance, and risk through APIs, it provides you with a sophisticated channel to interact with FactSet's leading multi-asset analytics. As the market continues to demand more transparency and data, FactSet will provide flexible options to meet those demands. APIs complement the current analytics suite offerings and facilitate partnerships by allowing you to build private experiences, integrate with third-party BI tools like Power BI and Tableau, and increase control over internal consumption of analytics from FactSet.



The first stage of exposing Analytics APIs will focus on the portfolio analytics engine. Later, the program will expand to include other analytics engines, products, and APIs from other business units.

The program will provide the following:

• Developer toolkit to build proof of concept

- Uniform feel across all FactSet's Enterprise scale APIs
- Adherence to industry standards
- Versioned APIs
- Extensive documentation and tutorials on the developer portal

### 3. Portfolio APIs

All APIs are hosted under <u>https://api.factset.com</u>. Authentication is handled using API Keys and authorization is handled using FactSet's in-house subscriptions product. You can find more information about using API Keys at <u>https://developer.factset.com/authentication</u>.

The Portfolio API is a modern, flexible, REST API that allows you to upload and edit holdings data to FactSet, enabling you to access the power of our world-class Portfolio Analytics suite and instantly start evaluating your portfolio's performance via the Portfolio Analytics API. All portfolios leverage FactSet's pricing sources and analytics sources when computing analytics data.

HTTP request and response header names should be considered case insensitive as per <u>HTTP Standard</u>. Please do not rely on case sensitive matching of headers in your code.

### 3.1 Create/Update Account

**PUT** /analytics/accounts/v3/models/{name}

### Description

This endpoint creates and/or updates the model account specified in the URL using the holdings provided in the PUT body. It must be used first, before fetching or cancelling endpoints. A successful response will contain the URL of the resource in the Location header.

#### **Request Headers**

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>
Content-Type	Standard HTTP header. Value needs to specify application/JSON (i.e., caller needs to specify that the body is in JSON format).

### **Request Body**

The request body accepts a collection of calculation parameters. The parent parameters are outlined below:

Parameter name	Data type	Required	Description	Format
data	Object	Yes	Parent object for the request body.	List of fields to be entered for securities.

meta	Object	No	Allows users to specify the account For example, "Test Desc" description.	

### Below are the field parameters supported by data section:

Parameter name	Data type	Required	Description
iterative	Object	Yes	Object must contain a mapping of date(s) to symbols(s).
nonlterative	Object	No	Object must contain a mapping of 2D fields.
additionalFields	Object	No	Object must contain additional parameters for custom fields

Below are the field parameters supported within Iterative Object:

Parameter name	Data type	Required	Description	Format
iterative.{date}	Array	Yes	The date on which holdings were held.	YYYYMMDD
iterative.{date}.symbol	String	Yes	The symbol of the holding, like CUSIP, SEDOL, ISIN, TICKER, Security Name and FactSet Permanent Identifiers	For example, "FDS".
iterative.{date}.quantity	String	No	The symbol's quantities. Only one of weight or quantity must be set.	For example, 5 or 5.0
iterative.{date}.weight	String	No	The symbol's weight. Only one of weight or quantity must be set.	For example, 20 or 20.0
iterative.{date}.price	String	No	The symbol's price.	For example, 242.05
iterative.{date}.currencyisocode	String	No	The currency code in which price is specified. Required when price parameter is used.	For example, "JPY"

Below are the field parameters supported within nonlterative Object:

Parameter name	Data type	Required	Description	Format
nonlterative.{symbol}	Array	Yes	The symbol of the holding, like CUSIP, SEDOL, ISIN, TICKER, Security Name and FactSet Permanent Identifiers	For example, "FDS".
nonIterative.{symbol}.{custom_fields}	String	Yes	Custom_fields associated to the symbol like Taxable, Asset Type etc.	For example, "TAXABLE"

Below are the field parameters supported within additionalFields\* Object:

Parameter name	Data type	Required	Description
iteration	Boolean	Yes	2D = false and 3D = true
name	String	Yes	Name of the custom field. For example, "ASSET_TYPE"
type	string	Yes	Data type of custom field added. For example - Use type as "CHAR" or "LONG_CHAR" for including Asset Type and Asset Class as additional fields.
description	String	Yes	Description for the name of the custom field.
size	Integer	Yes	Size of the custom column field. This field is only valid if type field is char/ext. char. Default =Null,

\*To include any additional fields in your portfolio, please raise an issue tracker to **Analytics APIs – Support** category to work with API product managers to set-up a precise schema for the additional field.

### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.
Location	Standard HTTP header. Contains location of the newly created model account.
X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.
X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

#### Returns

HTTP status code	Description
200	Expected response, updated model account
201	Expected response, created model account
204	Model account doesn't exist
400	Invalid POST body.
401	Missing or invalid authentication.
403	User is forbidden with current credentials
415	Missing/Invalid Content-Type header. Header needs to be set to application/JSON.

500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime

#### Remarks

- Maximum 50 PUT requests allowed in a 5 second window for each API. The same can be verified using the various Rate-Limit headers available in the API response.
  - X-FactSet-Api-RateLimit-Limit
- Number of allowed requests for the time window.
- X-FactSet-Api-RateLimit-Remaining
- Number of requests left for the time window.
- X-FactSet-Api-RateLimit-Reset
- Number of seconds remaining till rate limit resets.

#### Examples

```
Request:
PUT https://api.factset.com/analytics/accounts/v3/models/client%3Amp test account.acct
Headers:
content-type: application/json
Accept-Encoding: gzip
content-length: 201
Body:
{
 "data": {
   "iterative": {
     "20191010": {
       "FDS": {
        "weight": "20",
        "price": "50",
        "priceiso": "USD"
       },
       "GOOGL": {
        "weight": "20",
        "price": "50",
         "priceiso": "USD"
       }
     }
   },
   "nonIterative": {
     "GOOGL": {
       "taxable": "false"
```

```
},
      "FDS": {
        "taxable": "false"
      }
    },
    "additionalFields": [
      {
        "iteration": false,
        "name": "TAXABLE",
        "type": "STRING",
        "description": "Taxable",
        "splitDirection": "NONE",
        "size": 0
      }
    ]
  },
  "meta": {
    "description": "Test desc"
  }
}
Response:
HTTP 201 Created
Headers:
location: https://api.factset.com/analytics/accounts/v3/models/client:mp test account.acct
x-datadirect-request-key: 6165223F17C4C483
x-factset-api-request-key: 6165223FC0590212
```

### 3.2 Get Account by Name, Symbol and Date

GET /analytics/accounts/v3/models/{name}/dates/{date}/symbols/{symbol}

### Description

This endpoint takes an account name, symbol and date and returns underlying data.

### **Request Headers**

Header name	Description		
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>		
Accept-Encoding	Standard HTTP header. Value can be gzip, identity, and/or *.		

Accept

(Optional) Standard HTTP header. Value needs to be application/json.

### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.
Content-Encoding	Standard HTTP header. Header value is based on the Accept-Encoding Request header value.
Content-Type	Standard HTTP header.
Transfer-Encoding	Standard HTTP header. Header value will be set to Chunked if Accept-Encoding header is specified.
X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.
X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

### Returns

HTTP status code	Description
200	Expected response, returns JSON representation of the account's dates, symbols and other fields
400	Invalid account name or type parameter provided.
401	Missing or invalid authentication.
403	User is forbidden with current credentials.
404	The provided account name does not exist at the location provided.
406	Unsupported Accept header. Header needs to be set to application/json.
500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime.

### **Examples**

Request:
GET
https://api.factset.com/analytics/accounts/v3/models/client%3Amp test account.acct/dates/201910
10/symbols/FDS?
<u>Headers</u> :

### 

```
Response:
HTTP 200 OK
Headers:
x-datadirect-request-key: 6165302D29C33104
x-factset-api-request-key: 6165302D27739A81
Body:
{
  "data": {
    "definition": {
      "columns": [
        {
          "id": "date",
          "name": "Date",
          "type": "string"
        },
        {
          "id": "PRICE",
          "name": "PRICE",
          "type": "number"
        },
        {
          "id": "PRICEISO",
          "name": "PRICEISO",
          "type": "string"
        },
        {
          "id": "WEIGHT",
          "name": "WEIGHT",
          "type": "number"
        },
        {
          "id": "symbol",
          "name": "Symbol",
          "type": "string"
        }
      ]
    },
    "data": {
      "rows": [
        {
```

```
"values": {
    "symbol": "FDS",
    "date": "20191010",
    "PRICE": 50,
    "PRICEISO": "USD",
    "WEIGHT": 20
    }
    }
    }
    }
},
"meta": {
    "description": "Test desc"
    }
}
```

### 3.3 Get Account by Name and Date

GET /analytics/accounts/v3/models/{name}/dates/{date}

### Description

This endpoint takes an account name, date and returns underlying data for that date.

### **Request Headers**

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>
Accept-Encoding	Standard HTTP header. Value can be gzip, identity, and/or *.
Accept	(Optional) Standard HTTP header. Value needs to be application/json.

### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.
Content-Encoding	Standard HTTP header. Header value is based on the Accept-Encoding Request header value.
Content-Type	Standard HTTP header.
Transfer-Encoding	Standard HTTP header. Header value will be set to Chunked if Accept-Encoding header is specified.
X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.

X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

### Returns

HTTP status code	Description
200	Expected response, returns JSON representation of the account's dates, symbols and other fields
400	Invalid account name or type parameter provided.
401	Missing or invalid authentication.
403	User is forbidden with current credentials.
404	The provided account name does not exist at the location provided.
406	Unsupported Accept header. Header needs to be set to application/json.
500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime.

### Examples

# **Request:** GET https://api.factset.com/analytics/accounts/v3/models/client%3Amp test account.acct/dates/201910 <u>10?</u> Headers: Response: HTTP 200 OK Headers: x-datadirect-request-key: 6165370E0A245E2B x-factset-api-request-key: 6165370ECDE0EFCE Body: { "data": { "definition": { "columns": [

"id": "date",

{

```
"name": "Date",
      "type": "string"
    },
    {
      "id": "PRICE",
      "name": "PRICE",
      "type": "number"
    },
    {
      "id": "PRICEISO",
      "name": "PRICEISO",
      "type": "string"
   },
   {
      "id": "WEIGHT",
      "name": "WEIGHT",
      "type": "number"
    },
    {
      "id": "symbol",
      "name": "Symbol",
      "type": "string"
                       }
  ]
},
"data": {
  "rows": [
    {
      "values": {
        "symbol": "FDS",
        "date": "20191010",
        "PRICE": 50,
        "PRICEISO": "USD",
        "WEIGHT": 20
      }
    },
    {
      "values": {
        "symbol": "GOOGL",
        "date": "20191010",
        "PRICE": 50,
        "PRICEISO": "USD",
        "WEIGHT": 20
      }
```

```
}
]
}
meta": {
   "description": "Test desc"
}
```

### 3.4 Get Account by Name and Symbol

GET /analytics/accounts/v3/models/{name}/symbols/{symbol}

### Description

This endpoint takes an account name, symbol and returns underlying data for that symbol.

### **Request Headers**

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>
Accept-Encoding	Standard HTTP header. Value can be gzip, identity, and/or *.
Accept	(Optional) Standard HTTP header. Value needs to be application/json.

### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.
Content-Encoding	Standard HTTP header. Header value is based on the Accept-Encoding Request header value.
Content-Type	Standard HTTP header.
Transfer-Encoding	Standard HTTP header. Header value will be set to Chunked if Accept-Encoding header is specified.
X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.
X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

### Returns

HTTP status code	Description
200	Expected response, returns JSON representation of the account's dates, symbols and other fields
400	Invalid account name or type parameter provided.
401	Missing or invalid authentication.
403	User is forbidden with current credentials.
404	The provided account name does not exist at the location provided.
406	Unsupported Accept header. Header needs to be set to application/json.
500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime.

### Examples

•
<u>Request</u> :
GET
https://api.factset.com/analytics/accounts/v3/models/client%3Amp_test_account.acct/symbols/FDS
<u>Headers</u> :
Authorization: Basic RkRTX0RFTU9fVVMt*********************************
Response:
HTTP 200 OK
<u>Headers</u> :
x-datadirect-request-key: 6165380F2FF8F784
x-factset-api-request-key: 6165380F13F7A5FA
Body:
{
"data": {
"definition": {
"columns": [
{
"id": "date",
"name": "Date",
"type": "string"
},

"id": "PRICE",

{

```
"name": "PRICE",
        "type": "number"
      },
      {
        "id": "PRICEISO",
        "name": "PRICEISO",
        "type": "string"
      },
      {
        "id": "WEIGHT",
        "name": "WEIGHT",
        "type": "number"
      },
      {
        "id": "TAXABLE",
        "name": "TAXABLE",
        "type": "string"
      },
      {
        "id": "symbol",
        "name": "Symbol",
        "type": "string"
      }
    ]
  },
  "data": {
    "rows": [
      {
        "values": {
          "symbol": "FDS",
          "date": "20191010",
          "PRICE": 50,
          "PRICEISO": "USD",
          "WEIGHT": 20,
          "TAXABLE": "false"
        }
      }
    ]
  }
},
"meta": {
  "description": "Test desc"
}
```

}

### 3.5 GET Account Schema

GET /analytics/accounts/v3/models/{name}/schema

### Description

This endpoint returns the Schema for a previously created account.

### **Request Headers**

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>
Accept-Encoding	Standard HTTP header. Value can be gzip, identity, and/or *.
Accept	(Optional) Standard HTTP header. Value needs to be application/json.

### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.
Content-Encoding	Standard HTTP header. Header value is based on the Accept-Encoding Request header value.
Content-Type	Standard HTTP header.
Transfer-Encoding	Standard HTTP header. Header value will be set to Chunked if Accept-Encoding header is specified.
X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.
X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

### Returns

HTTP status code	Description
200	Expected response, returns JSON representation of the account's dates, symbols and other fields
400	Invalid account name or type parameter provided.
401	Missing or invalid authentication.
403	User is forbidden with current credentials.
404	The provided account name does not exist at the location provided.
406	Unsupported Accept header. Header needs to be set to application/json.

500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime.

### **Examples**

```
Request:
GET https://api.factset.com/analytics/accounts/v3/models/client%3Amp test account.acct/schema
Headers:
Response:
HTTP 200 OK
Headers:
x-datadirect-request-key: 616539023843375D
x-factset-api-request-key: 6165390213A6F470
Bodv:
{
 "data": [
   {
     "iteration": false,
     "name": "SYMBOL",
     "type": "CHAR",
     "description": "SYMBOL",
     "splitDirection": "NONE",
     "size": 32,
     "codePageFlag": "UNKNOWN"
   },
   {
     "iteration": true,
     "name": "WEIGHT",
     "type": "DOUBLE",
     "description": "Weight",
     "splitDirection": "NONE",
     "size": 0
   },
   {
     "iteration": true,
     "name": "PRICE",
     "type": "FLOAT",
```

```
"description": "Price",
      "splitDirection": "NORMAL",
      "size": 0
    },
    {
      "iteration": true,
      "name": "PRICEISO",
      "type": "CHAR",
      "description": "Price ISO",
      "splitDirection": "NONE",
      "size": 8,
      "codePageFlag": "ANSI"
    },
    {
      "iteration": false,
      "name": "TAXABLE",
      "type": "STRING",
      "description": "Taxable",
      "splitDirection": "NONE",
      "size": 0
    }
  ]
}
```

### **3.6 Delete Account**

**DELETE** /analytics/accounts/v3/models/{name}

### Description

This endpoint is used to delete a previously created account.

#### **Request Headers**

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>

#### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.

X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.
X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

### Returns

HTTP status code	Description
204	Expected response, no content.
400	Invalid model account name or type parameter provided
401	Missing or invalid authentication.
403	User is forbidden with current credentials.
500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime.

### Examples

Request: DELETE https://api.factset.com/analytics/accounts/v3/models/client%3Amp test account.acctt

<u>Headers</u>:

### <u>Response</u>:

HTTP 204 No Content

### <u>Headers</u>:

x-datadirect-request-key: 616539DE336F2CDA x-factset-api-request-key: 616539DE94F668D9

### 3.7 Delete by Symbol

DELETE /analytics/accounts/v3/models/{name}/symbols/{symbol}

### Description

This endpoint is used to delete entire symbol or specific dates for a symbol from a previously created account.

### **Request Headers**

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>

#### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.
X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.
X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

### Returns

HTTP status code	Description
204	Expected response, no content.
400	Invalid model account name or type parameter provided
401	Missing or invalid authentication.
403	User is forbidden with current credentials.
500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime.

#### Examples

Request: Delete all entries for a symbol -DELETE https://api.factset.com/analytics/accounts/v3/models/client%3Amp test account.acct/symbols/FDS

Delete specific date entries for a symbol -DELETE <u>https://api.factset.com/analytics/accounts/v3/models/client%3Amp\_test\_account.acct/symbols/FDS?</u> <u>dates=20220706&dates=20220707</u>

#### <u>Headers</u>:

Response: HTTP 204 No Content

Headers: x-datadirect-request-key: 632C302B2092FE78 x-factset-api-request-key: 632C302B8830983E

#### 3.8 Delete by Date

DELETE /analytics/accounts/v3/models/{name}/dates/{date}

#### Description

This endpoint is used to delete data for entire date or specific symbols for a date from a previously created account.

#### **Request Headers**

Header name	Description
Authorization	Standard HTTP header. Value needs to use 'Basic <base64 encoded="" value="">' format.</base64>

#### **Response Headers**

Header name	Description
X-DataDirect-Request-Key	FactSet's request key header.
X-FactSet-Api-Request-Key	Key to uniquely identify an Analytics API request. Only available after successful authentication.
X-FactSet-Api-RateLimit-Limit	Number of allowed requests for the time window.

X-FactSet-Api-RateLimit-Remaining	Number of requests left for the time window.
X-FactSet-Api-RateLimit-Reset	Number of seconds remaining till rate limit resets.

### Returns

HTTP status code	Description
204	Expected response, no content.
400	Invalid model account name or type parameter provided
401	Missing or invalid authentication.
403	User is forbidden with current credentials.
500	Server error. Log the X-DataDirect-Request-Key header to assist in troubleshooting.
503	Request timed out. Retry the request in sometime.

### Examples

Request: Delete all entries for a date -DELETE https://api.factset.com/analytics/accounts/v3/models/client%3Amp test account.acct/dates/202207 06

**Delete specific symbol entries for a date -** DELETE

https://api.factset.com/analytics/accounts/v3/models/client%3Amp\_test\_account.acct/dates/202207 06?symbols=FDS&symbols=G00GL

#### <u>Headers</u>:

### <u>Response</u>:

HTTP 204 No Content

### <u>Headers</u>:

x-datadirect-request-key: 632C3BEA3B48442E x-factset-api-request-key: 632C3BEAB2226E41

# 4. Troubleshooting

Following steps are recommended to troubleshoot errors from any of the different APIs:

- Record the X-DataDirect-Request-Key response header so that FactSet's API engineering team can analyze your specific request/response.
- Record the response body when the response is an error response. All HTTP status codes equal to and greater than 400 are considered error responses.
- Reach out to your account team with the above information for assistance.

### 5. Version Upgrade

FactSet will support old API versions for a limited time. The actual support time will depend on the API and the release stage (i.e., beta or production). All breaking changes, functionality additions, and bug fixes across earlier versions will be documented in the changelog.

FactSet's API engineering team will work with the clients to ensure smooth transition to newer versions.