

Standard DataFeed Download API

Programmer's Manual and Reference

Version 1.2.0

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Revision History

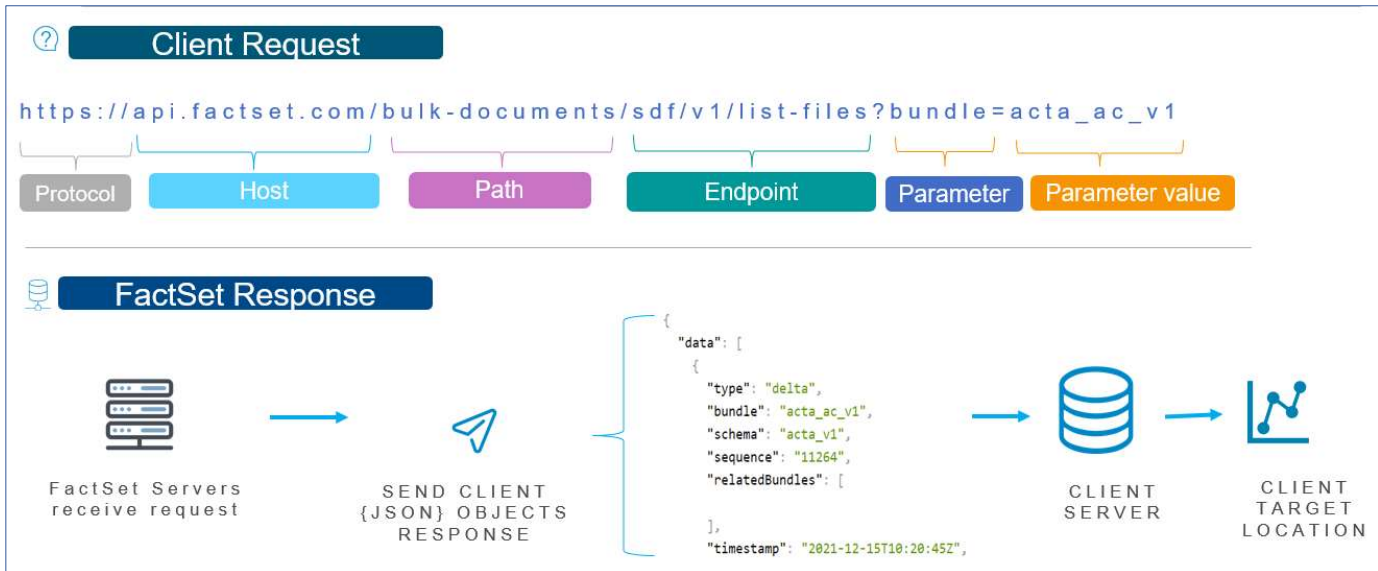
Effective Date	Version Number	Description	Changes made
02/15/2022	1.0A	Initial release	
06/10/2022	1.1.0		Now QFL data is also delivered through the SDF Download API
02/22/2024	1.2.0	Change to the existing /list-files endpoint	Restricted /list-files endpoint to get 1 month of data

1 Introduction

The FactSet SDF Download API is a synchronous delivery service that allows you to get the latest version of tables or schemas through an HTTP connection.

1.1 FactSet SDF Download (RESTful) API

The FactSet SDF Download RESTful API provides efficient programmatic access to all the SDF delta and full files for the schemas and bundles subscribed to by the user via the standard HTTPS protocol. Data is delivered URL to the downloadable files produced based on user's request.



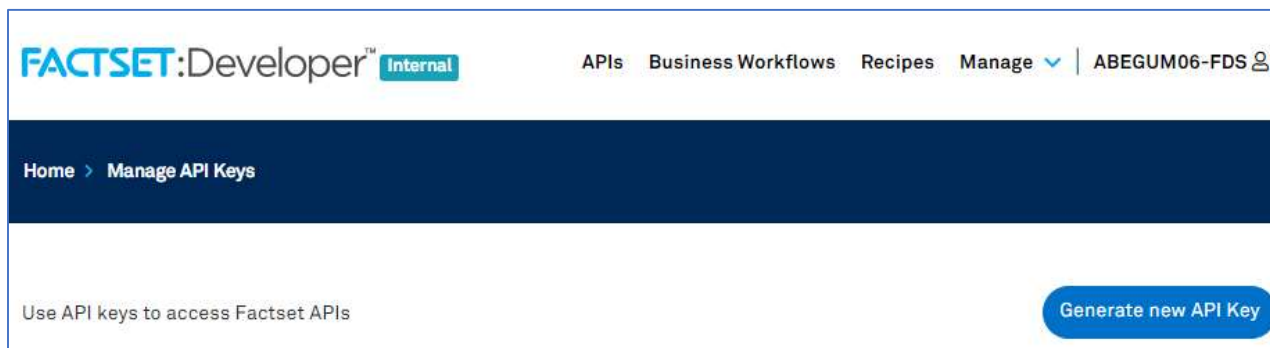
1.2 Authentication

The SDF Download API provides easy access to SDF data via the standard HTTPS protocol. All services are authenticated by a central source, so the same username and password work for all services. In addition, naming conventions have been standardized to simplify the consumption of multiple services.

To authenticate to the SDF 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:

1. Go to <https://developer.factset.com>
2. Login with your FactSet .NET ID
3. Go to <https://developer.factset.com/manage-api-keys>
4. Select your **machine** account to grant you access
5. Select Generate new API key



6. Provide a description of your API Key (Tip: Describe IP range)
7. Specify your required IP range and select Add. (The From IP value will auto populate, while the To IP can be left blank.)
You can edit this API key IP range in the future
8. Select Create
9. Copy your new API Key, this will not be retrievable again. Copy into a safe location for future reference, if needed

Note:

Use USERNAME-MACHINE SERIAL along with the API key generated in the previous step for authentication.

1.2.1 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.

Example:

GET request to the FactSet RESTful API using “username:serial:XXXXXXXXXXXXXXXXXXXXXXXXXXXX” as the credentials

```
$ printf "username-serial:XXXXXXXXXXXXXXXXXXXXXXXXXXXX" | base64
dXNlcm5hbWUtc2VyaWFsOiYWFhYWZhYWZhYWZhYWZhYWZhYWZhYWZhYWZhYWA==
$ curl -X GET "https://api.factset.com/bulk-documents/sdf"
-H "Accept: application/json"
-H "Authorization: Basic dXNlcm5hbWUtc2VyaWFsOiYWFhYWZhYWZhYWZhYWZhYWZhYWZhYWZhYWA=="
```

Note:

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

1.3 FactSet SDF RESTful API Service

The SDF Download API generates output files with data based on user specified input parameters. The input parameters include schema, sequence number, bundle specification and date ranges for which the data will be generated. When the API request with specified input parameters has completed the output files will be made available back to the users through a secure URL to the location where the files are stored. The files returned are chunked based on type schema bundle and sequence. Each secure link will be valid for up to 1 hour.

2 FactSet SDF Download API Functionality and Benefits

The FactSet SDF Download API 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 multiple 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 center 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.

3 Access and Security

Host Name	Service	Example URL
api.factset.com	bulk-documents/sdf	http://api.factset.com/bulk-documents/sdf/

3.1 Easy Access Through FactSet SDF Download API

This 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 users should not hardcode a reliance on any certificate or advertised certificate chain into their applications and expects users 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 increase continually increase over time (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 connections must be incorporated by the user as a necessary practice
- FactSet's Certificate chains, including intermediate Certificate Authorities, may change over time, and it is important that users dynamically validate FactSet's certificates against a modern CA trusted root certificate store. FactSet's current root certificate is [Thawte Primary Root CA](#)

3.3 Security Protocols

Users 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. Users should make sure that their software can handle ever changing Security Protocols.

3.4 Firewall

Users should have access to api.factset.com through their firewall.

4 Requests

4.1 Description

The FactSet RESTful API supports HTTP GET requests.

4.2 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 (.gzip files). Values need to be deflated

4.3 Request Parameters

4.3.1 List Schemas End Point

Parameters	Datatype	Description
Schema	string	Schema for which the schema file is required Note: Does not support multiple schemas QFL: To query QFL data, please use value: qfl_v1
Sequence	integer	Note: Please pass the sequence parameter only while passing the schema parameter in the request QFL: For QFL it's the sequence number associated with the "qfl" schema

4.3.2 List Files End Point

Parameters	Datatype	Description
Schema	string	Schema name. To get the files for a particular schema, default is all schemas & bundles subscribed by the user. For QFL its always "qfl_v1".
bundle	string	Bundle name. To get the files for a particular bundle, default is all schemas & bundles subscribed by the user. Note: - Supports multiple bundles QFL: In case of QFL it's a Factor Group name - Default is all the factor families & groups subscribed to by the user Note: Supports multiple factor groups
type	string	Specifies the Full / Delta file for YTD files. Full files are weekly files generated every weekend (Saturday). The date range should include weekend dates if requesting "Full" files.
startDate	string	The earliest date of the feed file the API should fetch for based on the fileTimestamp - If a schema parameter is not specified in the request, then data should be requested in batches of 10 days or less (Date range should be less than or equal to 10) - If the schema parameter is specified in the request, the date range can be greater than 10 days - If startDate and endDate parameters are not specified in the request, this endpoint returns the past 10 days of data by default - startDate can be absolute, YYYY-MM-DD or relative: -1 for yesterday
endDate	string	The latest date (YYYY-MM-DD) of the feed file the API should fetch for based on fileTimestamp. If startDate and endDate parameters are not specified in the request, this endpoint returns the past 10 days data by default. endDate can be in absolute, YYYY-MM-DD or relative date: 0 for today.
_sort	string	Sorts the data as per specified argument (default is descending or reverse chronological order). "_sort=startDate" gives all the results in chronological order.
_paginationLimit	integer	The number of results to display per page. "_paginationLimit" overrides the default (20) results per page. Max limit = 500.
_paginationOffset	integer	For requests that generates more than 20 results. This parameter is used to identify the beginning of the next set of results.

4.4 Request Return Codes

HTTP status code	Description
400	Incorrect sequence, incorrect schema name
403	No Subscription
500	There was an error while retrieving the data

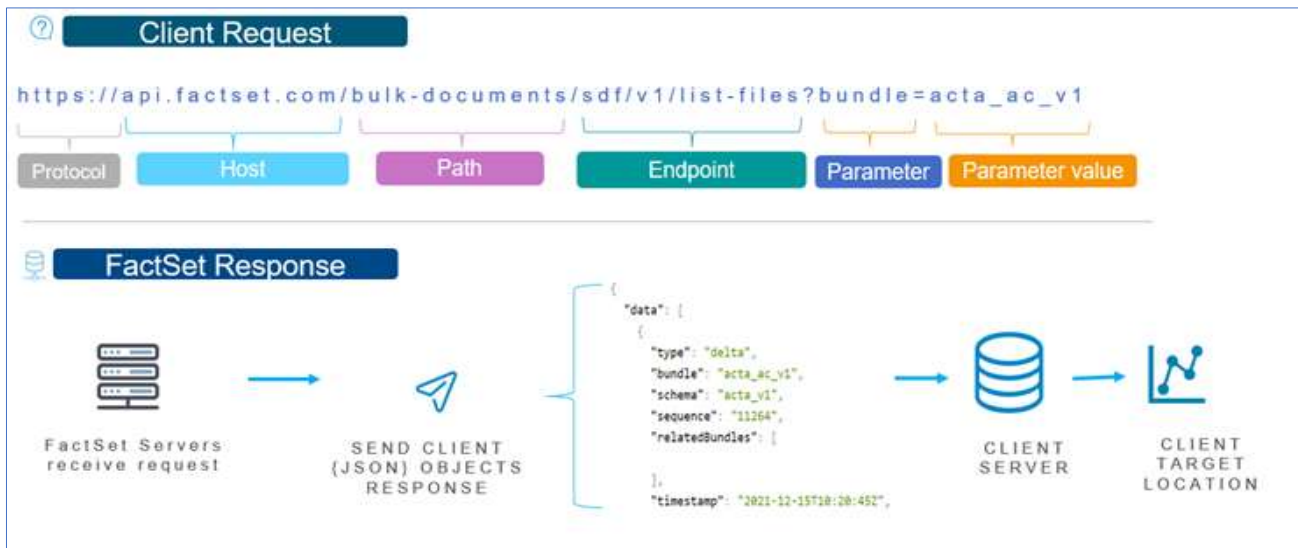
5 Sample Requests

5.1 URL Syntax

A URL is defined as following:

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

<https://api.factset.com/bulk-documents/sdf/v1/list-files?bundle=XXXX>



Examples:

5.1.1 List Schemas

<http://api.factset.com/bulk-documents/sdf/v1/list-schemas> provides the list of schemas subscribed by you and your corresponding sequences if no query parameters are passed in the request.

```
{
  "qf1_v1": [
    "2"
  ]
}
```

5.1.2 List Schema and Sequence

https://api.factset.com/bulk-documents/sdf/v1/list-schemas?schema=qfl_v1&sequence=2 If schema & sequence number (version number of schema) are passed in the request, this endpoint provides a downloadable presigned url containing the schema information.

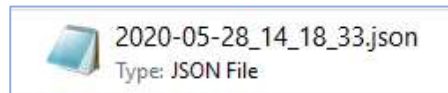
Note:

The request does not support multiple schemas as an input.

```
{
  schema: "qfl_v1",
  sequence: 2,
  url: "https://fdss3-bulk-data-delivery-sdf-prod.s3.amazonaws.com/schema/qfl_v1/2/2022-05-26_16_06_07.",
  timestamp: "2022-05-26 16:06:07"
}
```

List-schemas Output:

Output is delivered in the form of JSON files. File names are composed of schema update date and time.



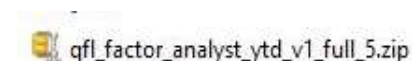
5.1.3 List Files

<http://api.factset.com/bulk-documents/sdf/v1/list-files> provides the downloadable links for all schemas & bundles subscribed by user. If startDate and endDate parameters are not specified in the request, this endpoint returns the past 10 days data by default.

```
{
  "data": [
    {
      "type": "delta",
      "bundle": "qfl_factor_corpgov_ytd_v1",
      "schema": "qfl_v1",
      "sequence": "2",
      "relatedBundles": [],
      "timestamp": "2022-06-01T02:01:56Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/05/31/36FD5A76-E14E-11EC-82EC-A9224B5D3790?res=SHA256&X-Amz-Credential=ASIA6B6XG7VE27CRVA4B%2F20220601%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20220601Token=IQoJb3JpZ2luX2VjEEYacXVzLWVhc3QtMSJGMEQCIAYSiGqAPSZcQ909jRqRDHtYoWH6eb2sTaFz15%2BtcXkAiATlpJS1g01Lw5LHcYbXm8ZSRm%2F1M9JiB0FsIgZsp5ijOczuM%2F%2BclLaTWqC3JrZVnUB07%2FxE1BKM0A4P803hQ8XU6jnaETTStGAzBB3srCPryfKR4XkB203P3FlCS7Voxr8vDbdhpITNY9qiYUA%2B3jIEJdLx1lTOkYg1NsGFzN0sJyw4amWmgY2vyRRs5UujSMN7n25QG0psBhq3KJHvMPnRVYfwYnh2nxDXHVtu3dUkrn0%2F2N%2FRJ8GKAP3NqVFDq3aHzyoOVKJ00NX102R60MS%2Fz2t7Lw%2BJrF6vY4c8%3D&X-Amz-Signature=...",
      "fileSize": "5.03MB"
    }
  ]
}
```

List-files output for YTD(Full) for QFL:

Output is delivered in the form of .zip files with the following naming convention - bundle name_filetype_sequence number.zip for full files.



List-files output for YTD(Delta) for QFL:

Output is delivered in the form of .zip files with the following naming convention - bundle name_ sequence number.zip for delta files.

 qfl_factor_profit_ytd_v1_6.zip
List-files output for Historical for QFL:

Output is delivered in the form of .zip files with the following naming convention - bundle name_filetype_sequence number.zip for full files.

 qfl_factor_crowding_2021_v1_full_1.zip

 qfl_factor_inside_2020_v1_full_1.zip

 qfl_factor_analyst_2019_v1_full_1.zip

 qfl_factor_corpgov_1995_v1_full_1.zip

 qfl_factor_inside_1995_v1_full_1.zip

 qfl_factor_crowding_1995_v1_full_1.zip
List-files output for Historical (excluding QFL):

Output is delivered in the form of .zip files with naming convention as bundle name_filetype_sequence number.zip for full files.

 bit_entity_v1_full_530.zip

 acta_ae_v1_embargoed_full_953.zip
List-files output for Delta(excluding QFL):

Output is delivered in the form of .zip files with naming convention as bundle name_ sequence number.zip for delta files.

 acta_v1_24277.zip

5.1.4 List Files for a Schema

https://api.factset.com/bulk-documents/sdf/v1/list-files?schema=qfl_v1

Provides all the “factor groups” within the subscribed factor families for the past 10 days.

```
{
  - data: [
    - {
      type: "delta",
      bundle: "qfl_factor_corpgov_ytd_v1",
      schema: "qfl_v1",
      sequence: "2",
      relatedBundles: [ ],
      timestamp: "2022-06-01T02:01:56Z",
      url: "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/05/31/36FD5A76-E14E-11EC-82EC-A9224",
      fileSize: "5.03MB"
    },
    - {
      type: "delta",
      bundle: "qfl_factor_crowding_ytd_v1",
      schema: "qfl_v1",
      sequence: "2",
      relatedBundles: [ ],
      timestamp: "2022-06-01T01:36:55Z",
      url: "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/05/31/1702F4EA-E14B-11EC-99F3-9EE2B",
      fileSize: "0.0MB"
    },
    - {
      type: "delta",
      bundle: "qfl_factor_analyst_ytd_v1",
      schema: "qfl_v1",
      sequence: "2",
      relatedBundles: [ ],
      timestamp: "2022-06-01T01:36:46Z",
      url: "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/05/31/18069DDA-E14B-11EC-AE28-C2968",
      fileSize: "0.0MB"
    }
  ]
}
```

5.1.5 List Files for a bundle

Provides all of the info for the bundle specified. Also gives the available related bundles.

https://api.factset.com/bulk-documents/sdf/v1/list-files?bundle=acta_ac_v1,fgp_global_prices_am_v1

Note: Supports multiple bundles inputs.

```
{
  "data": [
    {
      "type": "delta",
      "bundle": "fgp_global_prices_am_v1",
      "schema": "fgp_v1",
      "sequence": "2832",
      "relatedBundles": [
        {
          "bundle": "fgp_global_prices_eu_v1",
          "sequence": "4141"
        }
      ],
      "timestamp": "2022-01-29T03:55:58Z",
      "url": ""https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/01/28/50B8C5EC-80B7-11EC-8704-807C27  

disposition=attachment%3B%20filename%3Dfgp_global_prices_am_v1_2832.zip&X-Amz-Algorithm=AWS4-HMAC-SHA256  

Date=20220208T002434Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Security-  

Token=IQoJb3JpZ2luX2VjEKn%2F%2F%2F%2F%2F%2F%2F%2F%2F%2FwEaCXVzLWVhc3QtMSJGMEQCIFxBaJJzbOettTEfmhqRRijAeL  

F%2F8BEAEaDDk2NjI4MjExNjQyNSIME71YuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nQQbJMw%2BoLEgTuGIpnKUOXNE1JJ06Dni8Eu  

FrGPHHvxL9Tu7oD6%2BRZWcJqZHGSKq05npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoZtjB896ZK13ucZAyZK  

cIGHam3jz4k2VL16FQJDNN%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPn7Px08utuORXY6Ipzt  

w2hzfyZZb5rVLapIw%3D&X-Amz-Signature=996133149549565b91718f1dab71192a9fe5cc7ad6d9a2dc9bb6e8b063e7459b",
      "fileSize": "0.0MB"
    }
  ]
}
```

5.1.6 List-files with type = full / delta

https://api.factset.com/bulk-documents/sdf/v1/list-files?schema=ks_v1&type=full

```
{
  "data": [
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-864A-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA6B6XG7VERTPWNUSP%2F20220208%2Fus-east-1%2F2F8BEAEaDDk2Nji4MjExNjQyNSIME71YzuzL8N78rMLGKvMB144xxsyX4Y9fr3P5nOQbJMW%2BoLEgTuGIpFrGPHvXl9Tu7oD6%2BRZWCjQzHGSKqO5npQlDwVUvDULc2gAEsNYfJ9ABfiXrh7W9Qkxgj0ZnpCoZ8cRIRmoCIGham3jz4k2VL16FQJDNn%2Fft3XFx89LB63PS65dsK5vv6%2Fyx%2FqWtZ0igLdLaub47ZgpeLVsR9g2zJPt2hZfyZZb5rVLapIw%3D&X-Amz-Signature=2b49fe574d1749ce9ae457e2ebfd81cea047383d87fe60a1"
    },
    {
      "type": "full",
      "bundle": "ks_hub_v1",
      "schema": "ks_v1",
      "sequence": "1074",
      "relatedBundles": [
        ],
      "timestamp": "2022-02-05T06:08:01Z",
      "url": "https://fdss3-sdf-publish-prod.s3.amazonaws.com/prod/02/05/EA54E18A-8
```

https://api.factset.com/bulk-documents/sdf/v1/list-files?schema=ks_v1&type=delta

[illegible]

5.1.7 List-files for a date range

startDate=YYYY-MM-DD&endDate= YYYY-MM-DD

Provides data for a specified date range.

```
{
  "type": "delta",
  "bundle": "ks_us_v1",
  "schema": "ks_v1",
  "sequence": "260",
  "relatedBundles": [

  ],
  "timestamp": "2021-08-28T12:11:55Z",
  "url": "https://fdss3-sdf-publish-dev.s3.amazonaws.com/dev/08/28/F646B08E-07F8-11EC-A3E4-D826610AAFED?responseAlgorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA4NAFRGHDPQULC5PK%2F20220208%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20210828T121155Z&X-Amz-SignedHeaders=x-amz-content-sha256;x-amz-date;x-amz-security-token;&X-Amz-Signature=d7e4acdecc951e32b95610c3088c94b3690ea42727b58273cac0fc82837905cb",
  "fileSize": "-"}},
{
  "type": "full",
  "bundle": "ks_us_v1",
  "schema": "ks_v1",
  "sequence": "260",
  "relatedBundles": [

  ],
  "timestamp": "2021-08-28T12:11:53Z",
  "url": "https://fdss3-sdf-publish-dev.s3.amazonaws.com/dev/08/28/F5A8B92F-07F8-11EC-BE64-99A4925EDE03?responseAlgorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIA4NAFRGHDPQULC5PK%2F20220208%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20210828T121153Z&X-Amz-SignedHeaders=x-amz-content-sha256;x-amz-date;x-amz-security-token;&X-Amz-Signature=a9daf06472f215627cd53c804c877cf54169c074a4b36be13551661e902f3f4",
  "fileSize": ""}
```

Note:

In the absence of a date parameter input, the API returns (by default) 10 days of data.

5.1.8 “_sort” list-files

By default, API shows results in the reverse chronological order based on “time stamp”. This order can be changed using “_sort” option in query input

https://api.factset.com/bulk-documents/sdf/v1/list-files?type=full&_sort=startDate

_sort=startDate - sorts the data as per oldest date in response output.

6 Response Data Fields

6.1 Response fields

List-schemas endpoint

Response fields	Datatype	Description
timestamp	string	Time stamp of when the schema-sequence was last updated
bundle	string	Pre-signed downloadable url containing the information of the schema
schema	string	Name of the schema
sequence	integer	Version number of schema

List-files endpoint

Response fields	Datatype	Description
type	string	Type of file (daily updates / weekly full) values: full / delta
bundle	string	Name of the bundle QFL: For QFL its Factor Group name
schema	string	Name of the schema QFL: In case of QFL its always qfl_v1
sequence	string	Bundle sequence number
relatedBundles	array	Bundle name and sequence number of related bundles
timestamp	string	Time stamp of when the bundle was generated
url	string	Pre-signed downloadable url, containing the bundle information
filesize	string	File size of the particular bundle

6.2 Meta fields

```
"meta": {
  "pagination": {
    "total": 256,
    "isEstimatedTotal": false,
    "limit": 20,
    "offset": 20
  },
  "partial": {
    "isPartial": true
  }
}
```

6.2.1 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.

Meta Member name	Format	Description
pagination	object	Object defining the pagination attributes for an endpoint response.
pagination.total	integer	Total number of entries in the result set.
pagination.isEstimatedTotal	boolean	Flag indicating that the value of total is estimated.
pagination.limit	integer	Number of results returned per page
pagination.offset	integer	The flag indicating the position in the results array if additional results are available beyond the default value or the value in _paginationLimit parameter (if used). This value is passed in the _paginationOffset parameter to retrieve subsequent results

Example:

```
"meta": {
  "pagination": {
    "total": 256,
    "isEstimatedTotal": false,
    "limit": 20,
    "offset": 20
  },
}
```

6.2.2 Total

Specifies the number of records returned in the response. In this example the total number of records are 256.

```
"meta": {
  "pagination": {
    "total": 256
    "isEstimatedTotal": false,
    "limit": 20,
    "offset": 20
  },
  "partial": {
    "isPartial": true
  }
}
```

6.2.3 _paginationLimit

The default results per page is 20 (offset). “_paginationLimit” parameter allows users to override the default.

http://api.factset.com/bulk-documents/sdf/v1/list-files?schema=ks_v1&_paginationLimit=100

shows 100 results per page instead of default 20

Default Limit value

```
"meta": {
  "pagination": {
    "total": 256,
    "isEstimatedTotal":
false,
    "limit": 20
    "offset": 20
  },
  "partial": {
    "isPartial": true
  }
}
```

with “_paginationLimit=100”

```
"meta": {
  "pagination": {
    "total": 256,
    "isEstimatedTotal":
false,
    "limit": 100
  },
  "offset": 100
},
  "partial": {
    "isPartial": true
  }
}
```

6.2.4 _paginationOffset

The “_paginationOffset” option allows users to navigate to the next set of records. By default, the Pagination Limit = Pagination Offset.

http://api.factset.com/bulk-documents/sdf/v1/list-files?schema=ks_v1&_paginationLimit=50

Default Offset value

```
"meta": {
  "pagination": {
    "total": 71,
    "isEstimatedTotal": false,
    "limit": 50,
    "offset": 50
  },
  "partial": {
    "isPartial": true
  }
}
```

“_paginationOffset=50” returns next set of 50 records. In this case last 21 (51-71) records since the total number of records are 71.

https://api.factset.com/bulk-documents/sdf/v1/list-files?schema=ks_v1&_paginationLimit=50&_paginationOffset=50

with “_paginationOffset=50”

```
"meta": {
  "pagination": {
    "total": 71,
    "isEstimatedTotal":
false,
    "limit": 50,
    "offset": 100
  },
  "partial": {
    "isPartial": false
  }
}
```

6.2.5 isPartial

6.2.5.1 isPartial: true

Denotes there are additional results/pages for the request.

```
"meta": {  
  "pagination": {  
    "total": 256,  
    "isEstimatedTotal": false,  
    "limit": 20,  
    "offset": 100  
  },  
  "partial": {  
    "isPartial": true  
  }  
}
```

6.2.5.2 isPartial: false

Denotes there are no further results/pages for the request.

```
"meta": {  
  "pagination": {  
    "total": 256,  
    "isEstimatedTotal":  
false,  
    "limit": 100,  
    "offset": 300  
  },  
  "partial": {  
    "isPartial": false  
  }  
}
```

7 Error Response

7.1 Permission Error

7.1.1 User does not have a subscription to the API

```
"id": "d53e590f-543c-4ab0-863d-5048a3b0728e",  
"error_message": "You are not subscribed to this product: sdf"
```

7.1.2 User does not have a subscription to the Schema in list-schema endpoint

```
"id": "5d378c0c-2d84-4574-acd5-588bba395c59",  
"error_message": "parameterError:fgp_v1 : Not a valid schema."
```

7.2 Param Error

Example not entitled error messages:

1. Does not support multiple inputs for “schema” parameter in list-schemas end point.

```
"id": "ac27e073-ed3e-4669-81de-361d75394504",  
"error_message": "parameterError:Bad Request: schema and sequence required"
```

2. No schema or bundle access - returns blank output in /list-files end point.

```
{  
  "data": [  
  
  ],  
  "meta": {  
    "pagination": {  
      "total": 0,  
      "isEstimatedTotal": false,  
      "limit": 20,  
      "offset": 20  
    },  
    "partial": {  
      "isPartial": false  
    }  
  }  
}
```

3. If the date range for data requested is greater than 10 days without using the schema parameter in the list-files end point.

<https://api.factset.com/bulk-documents/sdf/v1/list-files?startDate=2022-01-25&endDate=2022-02-10>

```
"id": "e95786a8-f5bb-43a5-9d3f-7e1af224a4e5",
```

```
"error_message": "Error:Gap between start_date and end_date should be greater than 1 and less than or equal 10"
```

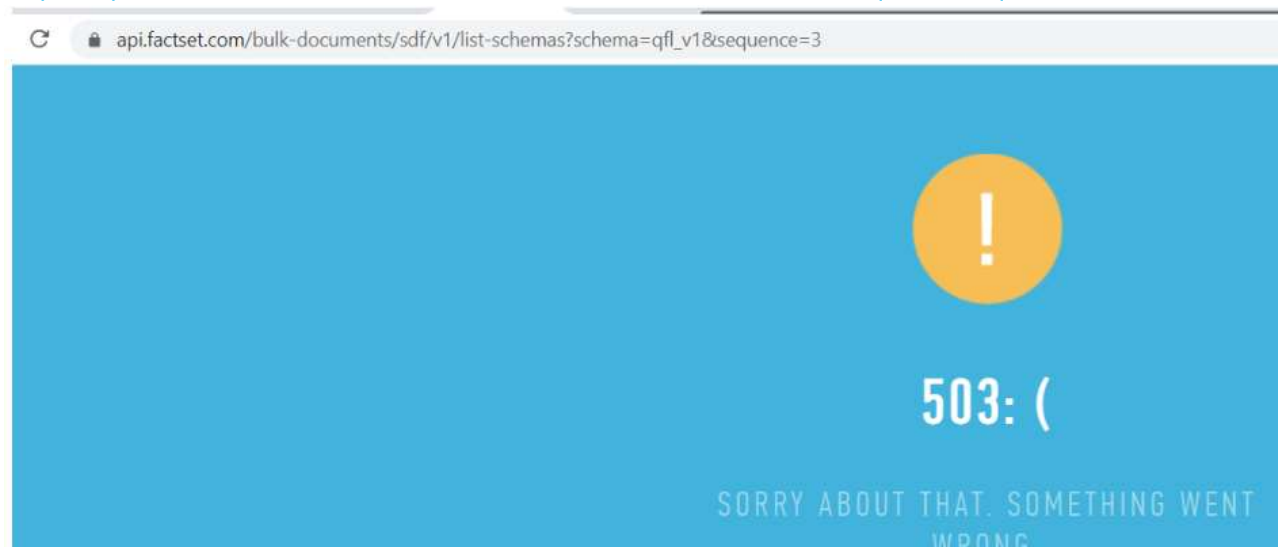
4. The 10-day date range limitation does not apply when requesting data for a schema.

https://api.factset.com/bulk-documents/sdf/v1/list-files?schema=sym_v1&startDate=2022-01-25&endDate=2022-02-10& paginationLimit=500

[illegible]

Passing the correct schema name value with the wrong sequence number returns a 503 error.

https://api.factset.com/bulk-documents/sdf/v1/list-schemas?schema=qfl_v1&sequence=3



Appendix D: Reference Docs

Refer to the documents below from [OA Page:15222](#)

- FactSet Standard DataFeed Symbology v1 UserGuide for FactSet symbology
- FactSet Standard DataFeed General v1 User Guide for standard datafeed questions

Global Client Support

If you have any questions, submit a request through <https://issuetracker.factset.com> under the “Documents API” RPD product category.

If you do not have login credentials for Issue Tracker, Email to datafeed_support@factset.com.

For general assistance, contact your local FactSet Consultant or Salesperson or Email support@factset.com.

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