

FactSet Custom Templates OnDemand

Programmer's Manual and Reference

Version 1.3

## Revision History

Effective Date	Version Number	Sections	Changes Made
05/17/2021	1.3		Updated the document as per the latest template.

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## Global Client Support

If you have any questions, submit a request through <https://issuetracker.factset.com> under the "OnDemand" category and for more queries you can chat with a representative through [FactSet Support \(@HELP\)](#). For unlimited access to FactSet Consulting Services you can reach out to [FactSet global support numbers](#). If you do not have login credentials for Issue Tracker, Email to [datadirect\\_support@factset.com](mailto:datadirect_support@factset.com) For general assistance, contact your local FactSet Consultant or Salesperson or Email [support@factset.com](mailto:support@factset.com).

## Document Organization and Audience

This document describes how to use the FactSet Custom Templates OnDemand Service. You should be familiar with the HTTP protocol and Web Services. This document will describe the syntax needed for proper request formatting as well as the rules for processing responses.

- Chapter 1 Introduces the DataFetch service with general concepts and terminology
- Chapter 2 describes the template set up
- Chapter 3 describes the URL and provides examples and error examples

## Introduction and General Concepts

### Introduction

Custom Templates OnDemand provides synchronous access to data via the standard HTTPS protocol. Data can be returned in a number of formats. You can make custom requests by changing the request URL to contain the parameters you need.

### DataFetch Service

The Custom Templates OnDemand service from FactSet Research Systems provides data and calculations for your applications via a URL call to a web server at FactSet. You will receive data via pre-configured templates that use FactSet FQL and Screening codes. Data is returned in various standard and customized formats, such as XML or delimited text.

The DataFetch interface is a HTTPS-based web service and is accessible on the internet. GET or POST methods are allowed for DataFetch requests.

Templates are built by your CTS Implementation Specialist using FQL and Screening codes to retrieve data from any number of FactSet databases. Once the template is set up, you can access the information on an ad hoc basis, request data for single or multiple identifiers, and for a single point in time or over a time period.

### Ad Hoc Requests vs. Batch Processing

The Custom Templates OnDemand service is best used for ad hoc requests. While it is possible to batch some data, it is highly recommended to use other applications that FactSet offers (i.e., Cornerstone) to do that type of data processing. The DataFetch service has a built-in ten-minute timeout in which a request will be terminated if it takes more than this amount of time.

## Template Setup

Every DataFetch URL call requires a template which drives the data requests. This template can be very simple, such as requesting the most recent closing price and date, or very complex with a wide variety of fields entered. Your CTS Implementation Specialist will set up this template based on the data items and parameters you need.

## HTTP Request and Responses

### HTTP Request and Responses

Data is requested via simple URL requests that retrieve results in varied flexible formats. The data is retrieved based on the report name and arguments that are passed in through a URL.

### Custom Templates OnDemand URL Syntax

The URL used to generate data can be divided into the following arguments:

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

Example :

[https://datadirect.factset.com/services/DataFetch?report=Sample\\_report&format=xml&id=FDS](https://datadirect.factset.com/services/DataFetch?report=Sample_report&format=xml&id=FDS)

#### Protocol

Custom Templates OnDemand information is transmitted via the HTTPS protocol for secure data delivery. In the previous example, the protocol argument is https.

#### Base URL

The base URL argument identifies the host web address and base path of a Custom Templates OnDemand service. In the previous example, the base URL is datadirect.factset.com/services.

#### Service

The service argument identifies the Data Direct service being called. In the previous example, the service argument is DataFetch, which is a request to the Custom Templates OnDemand service. Other OnDemand services include but are not limited to FastFetch and NewsFetch. Each Data Direct service requires a separate subscription.

#### Report Name

The report name argument identifies the name of the template which exists on FactSet's servers. The name of the report needs to match the template name. In the previous example, the report name is `report=Sample_report`

#### Optional Query String Parameters

The optional query string specifies a list of service-specific parameters. The query string begins after the report name and contains a list of name=value pairs separated by ampersands (&). In the previous example, the optional query string parameter is `&ids=fds`

#### Standard Template Parameters

The DataFetch service supports many custom arguments. Many of the arguments which are needed are standard across templates. If custom parameters are needed, contact your CTS Specialist.

Standard parameters:

Parameter	Description	Default Value	Allowable Values
<b>id</b>	Identifier – A ticker, sedol, ticker, cusip or other identifier	Inform your CTS Specialist your desired default Identifier or choose  None	A single identifier or multiple identifiers may be added to a URL depending on the setup.
<b>sd</b>	Start Date – A date, relative to today, or absolute date	If Relative, -1Y  If specified, none	Any acceptable relative or absolute date
<b>ed</b>	End Date – A date, relative to today, or absolute date	If Relative, -1Y  If specified, none	Any acceptable relative or absolute date
<b>freq</b>	Frequency – The frequency of the time series which the data will be returned	D (Daily)	D, W, M, Q, Y
<b>format</b>	The format of the output file produced	XML	XML, HTML, CSV, PIPE, JSON

## Examples

The following examples explore how altering the URL will change the results returned for a given DataFetch request:

### Example URL

In this example, closing price for FactSet (FDS) is returned using the report called **Sample\_report**

[https://datadirect.factset.com/services/DataFetch?report=Sample\\_report&format=xml&id=FDS](https://datadirect.factset.com/services/DataFetch?report=Sample_report&format=xml&id=FDS)

The following optional arguments are passed into the example URL:

- Format – XML
- Id – FDS

After entering the authorization credentials (i.e., Basic Auth) in the browser or Postman tool, the following data is returned:

```

▼<Grid>
  ▼<DataRow>
    <DataItem name="Ticker">FDS-US</DataItem>
    <DataItem name="Date">02/18/2021</DataItem>
    <DataItem name="price">318.5</DataItem>
  </DataRow>
</Grid>

```

If the report is configured to handle multiple identifiers, additional securities can be added to the URL, separated by a comma to retrieve data for multiple companies at one time.

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For example:

[https://datadirect.factset.com/services/DataFetch?report=Sample\\_report&format=xml&id=FDS,IBM,AAPL](https://datadirect.factset.com/services/DataFetch?report=Sample_report&format=xml&id=FDS,IBM,AAPL)

```
▼<Grid>
  ▼<DataRow>
    <DataItem name="Ticker">FDS-US</DataItem>
    <DataItem name="Date">02/18/2021</DataItem>
    <DataItem name="price">318.5</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker">IBM-US</DataItem>
    <DataItem name="Date">02/18/2021</DataItem>
    <DataItem name="price">120.73</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker">AAPL-US</DataItem>
    <DataItem name="Date">02/18/2021</DataItem>
    <DataItem name="price">129.71</DataItem>
  </DataRow>
</Grid>
```

If the report is configured to provide the data for a range, we need to provide the start date and end date.

[https://datadirect.factset.com/services/DataFetch?report=Sample\\_report&format=xml&id=FDS&sd=0&ed=-1AY](https://datadirect.factset.com/services/DataFetch?report=Sample_report&format=xml&id=FDS&sd=0&ed=-1AY)

```
▼<Grid>
  ▼<DataRow>
    <DataItem name="Ticker">FDS-US</DataItem>
    <DataItem name="Date">02/18/2021</DataItem>
    <DataItem name="price">318.5</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker"/>
    <DataItem name="Date">02/17/2021</DataItem>
    <DataItem name="price">315.04</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker"/>
    <DataItem name="Date">02/16/2021</DataItem>
    <DataItem name="price">312.6</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker"/>
    <DataItem name="Date">02/12/2021</DataItem>
    <DataItem name="price">316</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker"/>
    <DataItem name="Date">02/11/2021</DataItem>
    <DataItem name="price">317.14</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker"/>
    <DataItem name="Date">02/10/2021</DataItem>
    <DataItem name="price">309.41</DataItem>
  </DataRow>
  ▼<DataRow>
    <DataItem name="Ticker"/>
    <DataItem name="Date">02/09/2021</DataItem>
    <DataItem name="price">313.6</DataItem>
  </DataRow>
```



These examples show a basic setup, templates can get more complex. For assistance setting up a template which returns data that suits your needs, contact your CTS Specialist.

## Errors in the Response

If you are unsure why your request is returning an error, you can contact your CTS Specialist and provide the RequestKey which will expedite the handling of your problem. The RequestKey can be found in the header of the response or in the output of a failed request.

For example, using the URL:

<http://datadirect.factset.com/services/DataFetch?&format=xml&id=FDS>

You may receive an error that looks like the following:

```
Error: No report selected  
RequestKey: 602F78B26CC5BCA5
```

In this case, a report name was not specified, which resulted in an error.

## Acknowledgements

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