



FUSION REGISTRY

Command Line

FUSION REGISTRY VERSION 9

Command Line

This guide documents the Fusion Registry Command Line Client which is used to load data, structures, and reference metadata into the Fusion Registry

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2 Overview

The Fusion Registry command line client (FusionRegistryCL) runs on a Windows or Unix command line, to support loading content to the Fusion Registry via the Fusion Registry secure web services.

FusionRegistryCL is distributed with a single properties file **fusionregistrycl.properties** which should be modified to point to the server URL of the Fusion Registry to communicate with.

Batch files (Windows) and sh files (UNIX) are provided to support loading (and deleting) structures, data, and reference metadata.

3 Publishing Structures

To Publish structures call the publishStructures.bat (or sh) with the following commands:

Argument	Required	Purpose	Example Values
uri	true	<p>The location of the Structures to load. This can resolve to a web URL or local file system.</p> <p>The format of the structure file can be any supported Fusion Registry format.</p> <p>The file may also be in zip format</p>	<p>File -uri "file:///C:/Sample/Structures.xml" -uri "file:///C:/Sample/Structures.zip"</p> <p>URL -uri "http://myserver/rest/conceptscheme" -uri "http://myserver/file/structures.xml"</p>
ds	false	<p>The Data Source argument will create a link between all submitted Provision Agreements and a Data Source in the Fusion Registry. (see Data Source Manager of Fusion Registry)</p> <p>If not provided the Provision Agreements will default to using the REST or File Data Registration mechanism for data</p>	<p>Fusion Store -ds FUSION</p> <p>Custom Data Store -ds MY_SQL_STORE</p>
a	false	<p>Action – allowable actions are Append Replace FullReplace Delete</p> <p>The publish action, defaults to Replaces</p>	<p>Delete -a DELETE</p> <p>REPLACE -a REPLACE</p> <p>FullReplace -a FullReplace</p>
u	false	<p>Username of a Fusion Registry user with permissions to load the structure file</p> <p>Not required IF using Certificates for Authentication</p>	-u myuser
p	false	<p>Password of a Fusion Registry user with permissions to load the structure file</p> <p>Not required IF using Certificates for Authentication</p>	-p mypass
cert	false	<p>File of Certificate to be used to authenticate with server (if username and password not used)</p> <p>Not required IF using Username/Password for Authentication</p>	-cert "C:/Cert/mycert.p12"
certPwd	false	The Certificate Password	-certPwd "password"
certType	false	The Certificate Type defaults to PKCS12 if not specified	-certType "PKCS12"

4 Data

4.1 Publishing Data

To Publish data call the publishData.bat (or sh) with the following commands:

Argument	Required	Purpose	Example Values
uri	true	<p>The location of the Data to load. This can resolve to a web URL or local file system.</p> <p>The format of the data file can be any supported Fusion Registry format.</p> <p>The file may also be in zip format</p> <p>If this URI resolves to a folder on the file system, all the files in the folder will be submitted for import via a single zip file</p>	<p>File -uri "file:///C:/Sample/Data.xml" -uri "file:///C:/Sample/Data.zip"</p> <p>Folder -uri "file:///C:/SampleDir"</p> <p>URL -uri "http://myserver/rest/data" -uri "http://myserver/file/data.xml"</p>
ref	false	<p>Optionally a Provision Agreement reference can be supplied, so the server can identify the Dataflow and Data Provider.</p> <p>This is not required if the data file contains this information.</p> <p>The format is Agency Id, Provision Id, Provision Version</p>	<p>-ref "ACY,PROV_ID,1.0"</p>
u	false	<p>Username of a Fusion Registry user with permissions to load the data file</p> <p>Not required IF using Certificates for Authentication</p>	<p>-u myuser</p>
p	false	<p>Password of a Fusion Registry user with permissions to load the data file</p> <p>Not required IF using Certificates for Authentication</p>	<p>-p mypass</p>
cert	false	<p>File of Certificate to be used to authenticate with server (if username and password not used)</p> <p>Not required IF using Username/Password for Authentication</p>	<p>-cert "C:/Cert/mycert.p12"</p>
certPwd	false	<p>The Certificate Password</p>	<p>-certPwd "password"</p>
certType	false	<p>The Certificate Type defaults to PKCS12 if not specified</p>	<p>-certType "PKCS12"</p>

4.2 Exporting Data

A full data export can be run against a Dataflow, in a specified format. The export is written to a file, whose name is specified as an argument to the export function.

4.3

To Publish data call the exportData.bat (or sh) with the following commands:

Argument	Required	Purpose	Example Values
ex	true	The dataflow to export all the data for, the format is Agency Id, Dataflow Id, Dataflow Version	-df "ACY,DF_ID,1.0"
exfmt	true	The Export format. Allowed values are specified in the Fusion Registry Web Services document. See format parameter under the data web service documentation.	-exfmt "sdmx-generic-2.1"
exf	true	Export file, the file will be created if it does not exist, or deleted and recreated if it does exist. To export as a compressed zip file, ensure the file name ends in .zip If the file postfix is not provided, it will be determined by the server based on the export format The file name may include placeholders for Dataflow Agency Id (%agency%), Dataflow Id (%id%), and Dataflow version (%version%). The placeholders will be replaced with the values from the dataflow	XML -exf "genricdata.xml" ZIP -exf "genericdata.zip" Placeholders -exf "%agency%_%id%_%version%" No Postfix -exf "myexport"
s	false	Timeout time in seconds, default is 120	-s 600

4.4 Deleting Data

To Publish data call the deleteData.bat (or sh) with the following commands:

Argument	Required	Purpose	Example Values
df	Either the df or pa argument is required.	The dataflow to delete all the data for, the format is Agency Id, Dataflow Id, Dataflow Version	-df "ACY,DF_ID,1.0"
pa		The provision agreement to delete all the data for, the format is Agency Id, Dataflow Id, Dataflow Version	-pa "ACY,PA_ID,1.0"
ds	true	The Id of the Data Source to delete the data from. (see Data Source Manager of Fusion Registry)	Fusion Store -ds FUSION Custom Data Store -ds MY_SQL_STORE
u	false	Username of a Fusion Registry user with permissions to delete the data Not required IF using Certificates for Authentication	-u myuser
p	false	Password of a Fusion Registry user with permissions to delete the data Not required IF using Certificates for	-p mypass

		Authentication	
cert	false	File of Certificate to be used to authenticate with server (if username and password not used) Not required IF using Username/Password for Authentication	-cert "C:/Cert/mycert.pl2"
certPwd	false	The Certificate Password	-certPwd "password"
certType	false	The Certificate Type defaults to PKCS12 if not specified	-certType "PKCS12"

4.5 Validating Data

To Publish data call the validateData.bat (or sh) with the following commands:

Argument	Required	Purpose	Example Values
dsd	Mutually exclusive.	The Data Structure to validate the dataset against	-dsd "ACY,DSD_ID,1.0"
df	Not required if specified in the dataset	The Dataflow to validate the dataset against	-df "ACY,DF_ID,1.0"
pa		The Provision Agreement to validate the dataset against	-pa "ACY,PA_ID,1.0"
uri	true	The data file to validate	File -uri "file:///C:/Sample/Data.xml" -uri "file:///C:/Sample/Data.zip" URL -uri "http://myserver/rest/data" -uri "http://myserver/file/data.xml"
f	false	Only required if data format is CSV, denotes the format and delimiter. See data-format in Fusion Registry web services guide (validation section)	csv;delimiter=[delimiter] Where [delimiter] is either: <ul style="list-style-type: none"> • comma • tab • semicolon Comma Separated -f csv:delimiter=comma
o	false	The output file, if not present then the validation report will be written to the System.out	Windows -o c:/mydir/myFile.json Unix -o /mydir/myFile.json
id	false	The Sender Id field to be included in the validation report, if excluded the value Unknown will be used	-id MyId
u	false	Username of a Fusion Registry user, only required if Fusion Registry is enforcing user login and IF not using Certificate for Authentication	-u myuser
p	false	Password of a Fusion Registry user, only required if Fusion Registry is enforcing user login and IF not using	-p mypass

		Certificate for Authentication	
cert	false	File of Certificate to be used to authenticate with server (if username and password not used) Only required if Fusion Registry is enforcing user login and not required IF using Username/Password for Authentication	-cert "C:/Cert/mycert.p12"
certPwd	false	The Certificate Password	-certPwd "password"
certType	false	The Certificate Type defaults to PKCS12 if not specified	-certType "PKCS12"

4.5.1 Validation Output

An example output for a valid dataset.

```
{
  "Prepared": "2016-05-03T16:10:31",
  "SenderId": "FusionReg",
  "DataSetId": "012e47df-c582-400b-80fd-5e99b95f5eea",
  "FileFormat": "Structure Specific (Compact) v2.1",
  "DSD": "urn:sdmx:org.sdmx.infomodel.datastructure.DataStructure=WB:WDI(1.0)",
  "Dataflow": "urn:sdmx:org.sdmx.infomodel.datastructure.Dataflow=WB:EDUCAT(1.0)",
  "KeysCount": 382,
  "ObsCount": 7136,
  "GroupsCount": 0,
  "Errors": false
}
```

An example output for an invalid dataset.

```
{
  "Prepared": "2016-05-04T12:24:40",
  "SenderId": "MetadataTechnology",
  "DataSetId": "1aeb4cad-9262-4201-b71d-1060cd1d2aab",
  "FileFormat": "Structure Specific (Compact) v2.1",
  "DSD": "urn:sdmx:org.sdmx.infomodel.datastructure.DataStructure=WB:WDI(1.0)",
  "Dataflow": "urn:sdmx:org.sdmx.infomodel.datastructure.Dataflow=WB:WDI_EDUCATION(1.0)",
  "KeysCount": 1,
  "ObsCount": 9,
  "GroupsCount": 0,
  "Errors": true,
  "ValidationReport":
  [
    {
      "Type": "Semantic",
      "Errors": [
        ["Error reading dataset '1': Element 'StructureSpecificData/Header/Test' expected to come after the 'ID' element"],
        ["Error reading dataset '1': Missing Mandatory Header Elements : [ID, Sender]"],
        ["Error reading dataset '1': Element 'StructureSpecificData/Header/Receiver' expected to come after the 'Sender' element"]
      ]
    },
    {
      "Type": "Duplicate",
      "Errors": ["Contradictory observation value reported for series 'A:SE_PRM_GINT_FE_ZS:AFG'. Observation for time period '1985' reports both '19.09035' and '21' "]
    }
  ]
}
```

An example output for a server error (unable to process request):

```
{"Error": "Unrecognised file format, contents of file are: this is a bad format"}
```

5 Publishing Metadata

To Publish data call the publishMetadata.bat (or sh) with the following commands:

Argument	Required	Purpose	Example Values
uri	false	<p>The location of the Metadata to load. This can resolve to a web URL or local file system.</p> <p>The format of the file can be any supported Fusion Registry format.</p> <p>The file may also be in zip format</p>	<p>File</p> <pre>-uri "file:///C:/Sample/Data.xml" -uri "file:///C:/Sample/Data.zip"</pre> <p>URL</p> <pre>-uri "http://myserver/rest/data" -uri "http://myserver/file/data.xml"</pre>
a	false	<p>The action. If the action is DELETE and a metadata file is provided, then the submission will delete the metadata.</p> <p>If the action is DELETE and a metadata file is not provided, then an id argument is expected</p>	<pre>-a "DELETE"</pre>
id	false	<p>If the action is delete and a URI is not provided, then this argument can be used to identify the metadata set to delete by its id.</p>	<pre>-id "MY_METADATASET"</pre>
u	false	<p>Username of a Fusion Registry user with permissions to delete the metadata</p> <p>Not required IF using Certificates for Authentication</p>	<pre>-u myuser</pre>
p	false	<p>Password of a Fusion Registry user with permissions to delete the metadata</p> <p>Not required IF using Certificates for Authentication</p>	<pre>-p mypass</pre>
cert	false	<p>File of Certificate to be used to authenticate with server (if username and password not used)</p> <p>Not required IF using Username/Password for Authentication</p>	<pre>-cert "C:/Cert/mycert.p12"</pre>
certPwd	false	The Certificate Password	<pre>-certPwd "password"</pre>
certType	false	The Certificate Type defaults to PKCS12 if not specified	<pre>-certType "PKCS12"</pre>

6 Export Node

To export the entire contents of the Fusion Registry as a node.zip file, which can be used with the FusionNode dissemination service, use the exportNode.bat (or sh) command.

Argument	Required	Purpose	Example Values
s	false	Request timeout time in seconds, default is 120	-s 600
u	false	Username of a Fusion Registry user with permissions to load the structure file Not required IF using Certificates for Authentication	-u myuser
p	false	Password of a Fusion Registry user with permissions to load the structure file Not required IF using Certificates for Authentication	-p mypass
cert	false	File of Certificate to be used to authenticate with server (if username and password not used) Not required IF using Username/Password for Authentication	-cert "C:/Cert/mycert.p12"