

FUSION XL

Data Author User Guide

FusionXL: 2.4
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FUSION XL

FusionXL is a plugin for Microsoft Excel® which provides the ability to browse for, and author registry content in the Fusion Registry.

User Guide

This guide provides information on how to use the plugin in order to author, validate, convert, and publish datasets.

IMPORTANT

This User Guide is no longer maintained. To view the latest version, please refer to the [Metadata Technology Wiki](#).

[Click here for the latest version.](#)

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1 Overview

This document describes how to create datasets and load datasets for the purpose of data authoring, validation, conversion, and publishing.

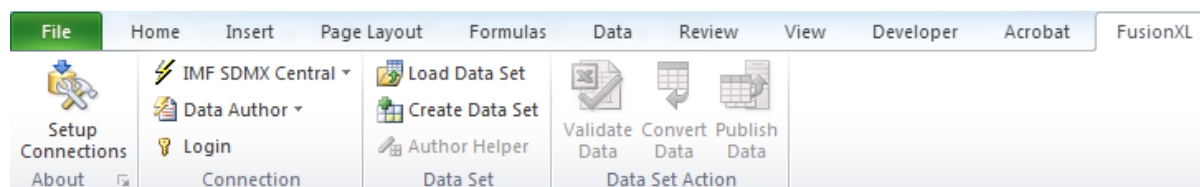


Figure 1 showing the FusionXL Ribbon in Data Author mode

To use FusionXL for authoring data, ensure a connection has been set up to the required Fusion Registry server, in the above image the server used is IMF SDMX Central. The Connection mode must be set to 'Data Author' as shown in the Connection section in the above image.

For more details on setting up connections, please read the setup guide.

2 Loading Data

To load an existing dataset, first login to the service by clicking on the login button on the ribbon. Once authenticated, click on 'Load Data Set', this will open a file browser window. Select the file, and click open.

Note: Supported file types include SDMX data files, CSV and XLSX files.

The loaded data file will be sent to the server for processing; if the file is SDMX or CSV it can be loaded in zip format (xlsx files are already zipped). If the server requires information about the dataflow, then FusionXL will display a pop up window requesting information on the Data Provider and Dataflow pair that the data are for.

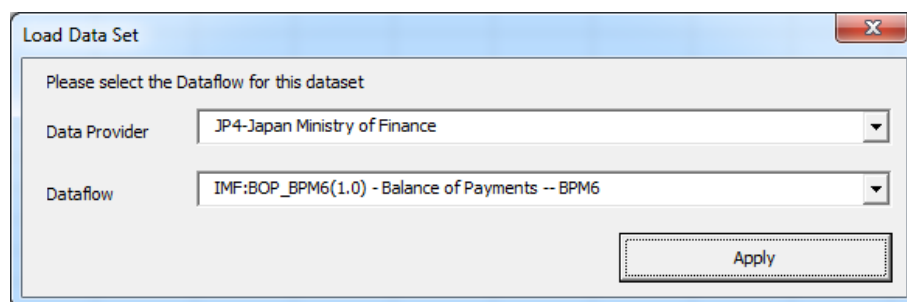


Figure 2 showing the Load Data Set pop up requesting more information on the file

Once the server has all the necessary information to process the dataset, the Excel worksheet will be updated to display the dataset.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	DATA_DOMAIN	BOP6														
2	REF_AREA	JP														
3	COUNTERPART	W1														
4	COMMENT															
5	OBS_STATUS															
6																
7	Series Key	INDICATOR	FREQ	BASE_PER	UNIT_MULT	TIME_FORMAT	2014-Q1	2014-Q2	2014-Q3	2014-Q4	2015-Q1	2015-Q2	2015-Q3	2015-Q4	2016-Q1	2016-Q2
8	EXD:JP:DG_GR_DG_GR_BP6_Q				9		92,098	94,893	98,900	105,206	109,909	108,292	114,082	121,245	121,497	122,201
9	EXD:JP:DG_GR_DG_GR5_BP6_Q				9		50,625	52,330	49,869	51,323	54,813	54,091	56,072	61,015	59,092	56,171
10	EXD:JP:DG_GR_DG_GRSD_BP6_Q				9		50,323	52,036	49,549	50,901	54,547	53,844	55,810	60,616	58,785	55,879
11	EXD:JP:DG_GR_DG_GRSL_BP6_Q				9		0	0	0	0	0	0	0	0	0	0
12	EXD:JP:DG_GR_DG_GR5O_BP6_Q				9		303	295	320	421	266	247	262	399	306	292
13	EXD:JP:DG_GR_DG_GRL_BP6_Q												58,010	60,230	62,405	66,030
14	EXD:JP:DG_GR_DG_GRLS_BP6_Q												2,070	2,050	1,946	1,765
15	EXD:JP:DG_GR_DG_GRLD_BP6_Q												55,939	58,179	60,458	64,264
16	EXD:JP:DG_GR_DG_GRL BP6_Q												0	0	0	0
17	EXD:JP:DG_GR_DG_GRL BP6_Q												1	1	1	1
18	EXD:JP:DCB_GF_DCB_GR_BP6_Q												6,950	6,385	7,482	9,519
19	EXD:JP:DCB_GF_DCB_GR5_BP6_Q												6,950	6,385	7,482	9,519
20	EXD:JP:DCB_GF_DCB_GRSL_BP6_Q												0	0	0	0
21	EXD:JP:DCB_GF_DCB_GRSD_BP6_Q												6,950	6,385	7,482	9,519
22	EXD:JP:DODC_DODC GR BP6_Q												140,748	143,189	146,943	138,688
23	EXD:JP:DODC_DODC GR5 BP6_Q												126,177	128,158	131,248	122,850
24	EXD:JP:DODC_DODC GRSD BP6_Q												307	143	157	219
25	EXD:JP:DODC_DODC GRSL BP6_Q												89,731	93,336	92,010	85,944
26	EXD:JP:DODC_DODC GRSD BP6_Q												16,662	15,212	16,887	16,611

Figure 3 showing the loaded dataset

Once the dataset is loaded, it can be manually edited with the assistance of the Data Set Author Helper if required. The Data Set Author Helper is discussed in **TODO**.

3 Create Data Set

To create a new dataset, first login to the service, and then click 'Create Data Set'. This will open up a new window requesting information on the dataset, as shown in the image below.

Figure 4 showing the create data set form

The form requires information on the Data Provider, this will be determined based on your login credentials, if your account links to more than one Data Provider then this drop down list will contain multiple entries. The available Dataflows are those for which the selected Data Provider has been configured to provide data for. Data Start and end dates are also required, along with the observation Frequency, these are required to build date columns for each observation time.



The output of filling in the above form is shown in the image below:

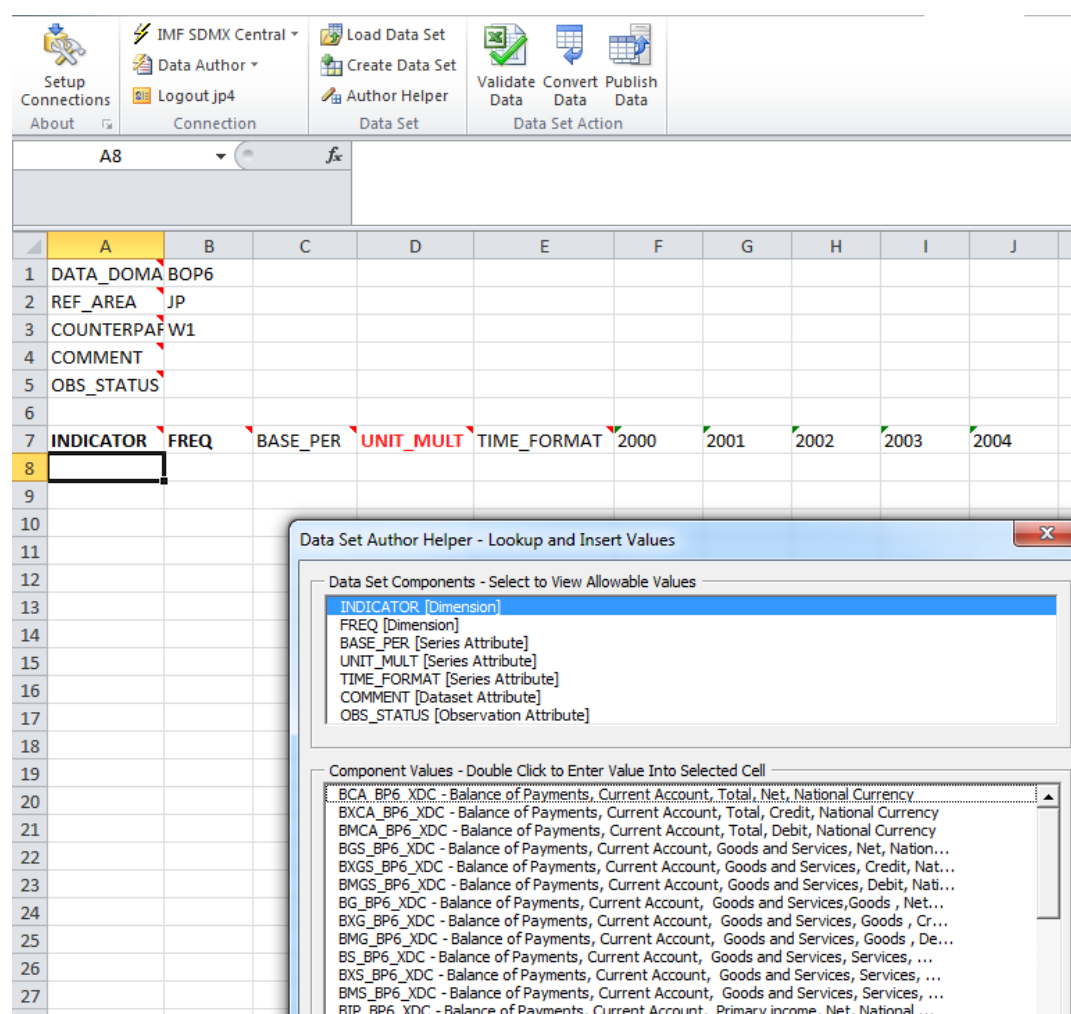


Figure 5 showing the dataset template built from the server

The above template comprises of a header section (rows 1-5), and data section (row 7 onwards).

The generated header section includes Dimensions and Attributes which only have one possible value (rows 1-3) this may be due to restrictions placed on the Data Provider for the selected Dataflow. The header section also includes Observation attributes (rows 4-5), these are provided in the header as a means to supply a default value for all observations. Observation attributes can be left blank in the header if no default is required.

The data section contains columns for the remaining Dimensions, and Attributes. Attributes which are mandatory (they require a value for each series) are highlighted in **red**. Columns are also created for each time period (columns F-J) based on the details supplied on dataset creation.

The Data Set Author Helper is also opened, which can be used to assist the user in authoring the dataset.

4 Dataset Author Helper

The Data Set Author Helper provides allowable values for each of the Dimensions/Attributes for a Dataset. The allowable values are based on the Data Structure Definition (DSD) in the context of the Dataflow and Data Provider combination. If codelists have been restricted based on the Dataflow or

Data Provider, then the Dataset Author Helper will not include disallowed codes. When selecting a Component in the Dataset Author Helper, the selected cell in the Excel worksheet will be automatically selected in the current row. Double clicking on a value in the Component Values section will automatically populate the current cell with the Code Id.

For observation attributes, the dataset author helper will also include the options to choose an observation time, or set the default value. If setting a value on the observation, then it will be inserted as a Cell comment, this is shown in the image below.

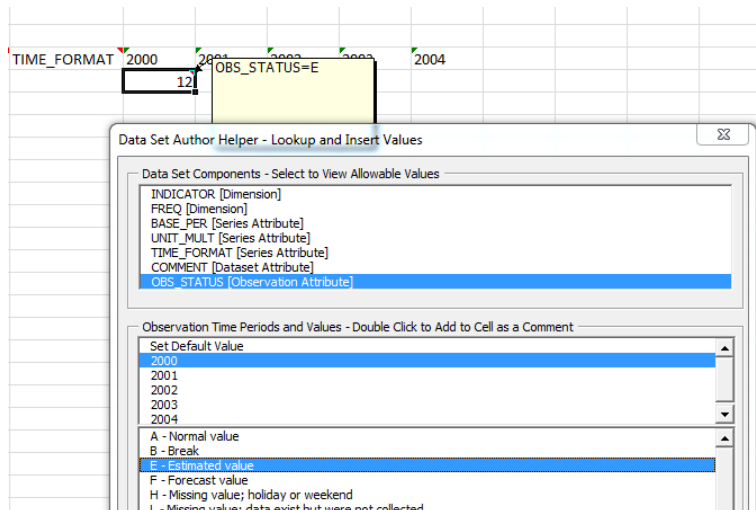


Figure 6 showing the cell comment OBS_STATUS=E for the year 2000

5 Data Validation

Once a dataset has been loaded, or authored, in FusionXL, it can be validated. To validate a dataset, click on the Validate button in the Excel Ribbon. If the dataset is valid, a small window will open to indicate there were no errors. If the dataset fails validation, a validation report will be opened, as shown in the image below.



Data Validation Errors	
Definition	
Data Flow	IMF:BOP_BPM6[1.0] - Balance of Payments -- BPM6
Data Provider	JP4 - Japan Ministry of Finance
Provision Agreement	IMF:JP_BOP[1.0] - Japan Balance of Payments
Number of Series	1
Number of Observations	4
Number of Groups	0
Validation Results	
Semantically Compliant	
Structurally Compliant	
Valid Representation	1 Error(s)
Valid Constraint	
Duplicate Observations	
Mandatory Attributes Present	

Figure 7 showing a validation report with a single error

To view the error details, click on the red error cell in the table (as shown above), this will open a window showing the error details, as shown below.

Representation Errors

1. Error in series: BOP6:JP:BXCA_BP6_XDC:W1:F

- Dimension 'FREQ' is reporting value 'F' which is not a valid representation in referenced Codelist 'SDMX:CL_FREQ(1.0)'

Close

Figure 8 showing the error details for a dataset

6 Data Conversion

To convert the dataset from XLSX to SDMX or RDF format, click on the Convert Data button in the Excel Ribbon.

A form will open requesting the Export format, for SDMX formats the Sender Id can be provided. If provided, the Sender Id will be included in the Header of the SDMX Document.

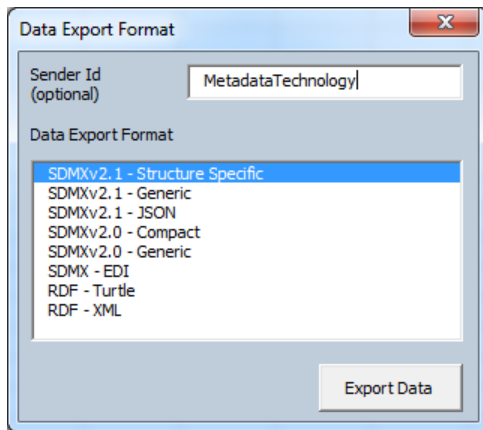


Figure 9 showing the data export form

7 Data Publish

For data providers who have been configured to publish data to the linked Fusion Registry, the Publish Data button facility can be used. This will publish the data in the current worksheet to the linked Registry, for processing, validation, and import.

Publishing data requires further authentication before being actioned. Published data are made publically available with immediate effect in the Fusion Registry.

