# **XL TO XML PLUS**



### Description

New from version 2 is the ability to output data as JSON.

Also new for version 2 when outputting to rows successfully a count is kept of the number of rows/worksheets output to XML or JSON with a private data key named [private data name].totalNumberOfRows/numberOfWorksheets.

#### Data handling of different types of data

The handling of data in the cells has been made more robust. Previously there was no support for getting values from cells with formulas, or formatted as hypertext, which meant an error was being thrown. A fix has been instituted for this.

If, however, no usable data is found the following value will be used as the cell value: **No usable data defined** 

If your data set output contains this value please re-evaluate your Excel document.

#### Output data types

The app is designed to output XML or JSON from a Microsoft Excel document submitted to the flow.

#### Output schemes for data

There are various schemes for outputting the XML or JSON data, by setting the appropriate configuration for the app. The output schemes are either By Row, By Worksheet, or By Workbook.

#### Features of the app

There are a few features to note about the app:

- For version 2 private data is added to the outgoing job. Comprehensive information is given in the table on page 2 on this. One feature to note is the ability to track the number of rows or worksheets output as data from one Excel workbook. This allows the triggering of assembly structures downstream of the Excel parser.
- There is an option to allow or disallow empty cells in the dataset output. If the option
   Allow Empty Cells is set to No, the entire row that the empty cell is found in will be
   excluded from the dataset of XML or JSON output
   If Allow Empty Cells is set to Yes, a empty node will be generated in the XML or
   JSON dataset output.
- There is the ability to choose which line a header row is found in with the **Header Row Is Elsewhere** option set. This then allows the ability to designate where the data to be parsed starts at.

In this scenario if the data to be parsed ends at a certain row then this can be designated with the option **Specify if data ends at a specific row** set to Yes, with the number of the row the data ends at specified at the option Row data to be parsed ends at.

**Compatibility** Switch 2020 Spring and up.

## Overview of configurator options

Element	Options	Element Type	Description
Name		String	Name of script element in Switch.
Description		String	Description of element in Switch.
Dataset Name		String	Data set name attached to XML or JSON output.
Is the first row the header		Drop Down List	
	First Row Is Header		Set if the first row is the header for the data.
	No Header Row		Set if no header row.
	Header Row Is Elsewhere		Set if there is a header but not in the first row.
Choose 1 XML or JSON per Row, Worksheet or Workbook		Drop Down List	Set how the data is to be output, by row, by each worksheet, or entire workbook. This option not available for Header Row Is Elsewhere, as the only method allowed is By Row.
	By Row		
	By Worksheet		
	By Workbook		
Allow Empty Cells		Yes/No Drop Down List	Indicate if empty cells are to be allowed in the output XML or JSON. If set to know the entire row of data will be removed from the data set.
Default Row Name		String	Set default name to name the row node.
Default Worksheet Name		String	Set default name to name the worksheet node.
Default Workbook Name		String	Set default name to name the workbook node.
Private Data Prefix	exPDData(default)	String	This is private data set on the output result of the job. The text that is set at this input is used to prefix the private data attached to the output. In the case of a XML successfully output the private data will be structures as follows: [private data name].pass In the case of the an error the structure of the private data name].fail [private data name].fail [private data name].message The message key will give an indication of why there was an error When rows are output as XML data an extra key is added to the private data called totalNumberOfRows which is the total number of rows output for the entire workbook. A record of the number of the rows on the worksheet is added onto a key called worksheetRowsTotal. With worksheets being output the number of worksheets output is placed on a key called numberOfWorksheets This allows the tracking of the number of rows or worksheets output from an Excel document which could be used at a later point in a flow as a method of triggering an assembly structure, as all files would have arrived when the count is equal to the number of rows or worksheets

## Configuration for First Row Is Header, By Row

	Properties		×
Property	Value		
Element type	Excel to XML Plus		
Name	By Row		
Description			
Set the output format of the data	xml		
Is the first row the header	First Row Is Header		
Choose 1 XML or JSON per Row, Worksheet or Workbook	By Row		
Designate 1st part of name	1 I		
Designate 2nd part of name	0		
Character to join name			
Allow empty cells	Yes		
Default column name	column		
Default row name	row		
Default worksheet name	worksheet		
Default workbook name	workbook		
Dataset name	excelDataset		
Private data prefix	exPDData		

Switch configuration for First Row Is Header, By Row

Element	Option	Element Type	Description
Is the first row the header	First Row Is Header	Drop Down List	Set when header row is not in the first row of the Excel document.
Choose 1 XML or JSON per Row, Worksheet or Workbook	By Row	Drop Down List	Set how the data is to be output - each XML or JSON is a row of Excel data.
	Designate 1st part of name	String	Set the column number to be used for the first part of the name (starting from left in the Excel document at 1).
	Designate 2nd part of name	String	Set the column number to be used for the second part of the name (set to zero if second part of name to not be used).
	Set character for joining name	String	Set the character for joining the name string if second part of name needed. This will be ignored if second name field set to zero.

## Configuration for First Row Is Header, By Worksheet

	Properties	6	×
Property	Value		
Element type	Excel to XML Plus		
Name	By Worksheet		
Description			
Set the output format of the data	xml		
Is the first row the header	First Row Is Header		
Choose 1 XML or JSON per Row, Worksheet or Workbook	By Worksheet		
Use worksheet name as XML or JSON name	Yes		
Allow empty cells	No		
Default column name	column		
Default row name	row		
Default worksheet name	worksheet		
Default workbook name	workbook		
Dataset name	excelDataset		
Private data prefix	exPDData		

Switch configuration for First Row Is Header, By Worksheet

Element	Option	Element Type	Description
Is the first row the header	First Row Is Header	Drop Down List	Set when header row is not in the first row of the Excel document.
Choose 1 XML or JSON per Row, Worksheet 0r Workbook	By Worksheet	Drop Down List	Set how the data is to be output - each XML or JSON is a worksheet of Excel data.
	Set Worksheet Name as XML or JSON name	Yes/No Drop down List	Set to Yes if name of worksheet to be used for name of XML or JSON output. If set to No a default value will be used to set the name internally in the app

## Configuration for First Row Is Header, By Workbook

	Properties	8
Property	Value	
Element type	Excel to XML Plus	
Name	By Workbook	
Description		
Set the output format of the data	xml	
Is the first row the header	First Row Is Header	
Choose 1 XML or JSON per Row, Worksheet or Workb	ok By Workbook	
Set the name of XML or JSON file for output by w	or xmlWorkbook	
Allow empty cells	No	
Default column name	column	
Default row name	row	
Default worksheet name	worksheet	
Default workbook name	workbook	
Dataset name	excelDataset	
Private data prefix	exPDData	

Switch configuration for First Row Is Header, By Workbook

Element	Option	Element Type	Description
Is the first row the header	First Row Is Header	Drop Down List	Set when header row is not in the first row of the Excel document.
Choose 1 XML or JSON per Row, Worksheet 0r Workbook	By Worksheet	Drop Down List	Set how the data is to be output - each XML or JSON is a workbook of Excel data.
	Set the name of XML or JSON file for output By Workbook	String	Designate the name to be used for the output XML or JSON.

## Configuration for No Header, By Row

1	Properties	6	×
Property	Value		
Element type	Excel to XML Plus		
Name	By Row - No Header		
Description			
Set the output format of the data	ison		
Is the first row the header	No Header Row		
Choose 1 XML or JSON per Row, Worksheet or Workbook	By Row		
Designate 1st part of name	1		
Designate 2nd part of name	0		
Character to join name			
Specify number of columns of data	3		-
Allow empty cells	No		
Default column name	column		
Default row name	row		
Default worksheet name	worksheet		
Default workbook name	workbook		
Dataset name	excelDataset		
Private data prefix	exPDData		

Additional row that appears when there is no header for data. This will be added for the options By Row, By Worksheet and By Workbook

Switch configuration for No Header Row, By Workbook

Element	Option	Element Type	Description
Is the first row the header	First Row Is Header	Drop Down List	Set when header row is not in the first row of the Excel document.
Choose 1 XML or JSON per Row, Worksheet 0r Workbook	By Worksheet	Drop Down List	Set how the data is to be output - each XML or JSON is a workbook of Excel data.
	Set the name of XML or JSON file for output By Workbook	String	Designate the name to be used for the output XML or JSON.
	Specify number of columns of data	String	Specify the number of columns of data to be read for the dataset. Used for various checking methods as header row not present. This is the additional row that appears when there is no header for data that is added to the configuration By Row, By Worksheet and By Workbook. NOTE: If there are multiple worksheets in the workbook, the length of columns need to be equal.

## Configuration Header Row Is Elsewhere till end of data

	Properties	Ð	>
Property	Value		
Element type	Excel to XML Plus		
Name	By Row - Header is elsewhere		
Description	·		
Set the output format of the data	ison		
Is the first row the header	Header Row Is Elsewhere		
Row number of header	7		
Start row for data parse	8		
Specify if data ends at a specific row	No		
Designate 1st part of name	1		
Designate 2nd part of name	2		
Character to join name			
Allow empty cells	No		
Default column name	column		
Default row name	rew		
Default worksheet name	worksheet		
Default workbook name	workbook		
Dataset name	excelDataset		
Private data prefix	exPDData		

Switch configuration for Header Row Is Elsewhere, data ends at a specific row

Element	Option	Element Type	Description
Is the first row the header	Header Row Is Elsewhere	Drop Down List	Set when header row is not in the first row of the Excel document.
	Specify the row number the header row is in	String	Set the row the header is to be found in.
	Set row number that data parsing is to start at	String	Set the row that the data starts at. This must be larger than header row number.
	Specify if data parse ends at a specific row	Yes/No Drop down List	Set to No if data to be parsed does not end at a specific row.
	Set column name for first part of name	String	Set the column number to be used for the first part of the name (starting from left in the Excel document at 1).
	Set column name for second part of name	String	Set the column number to be used for the second part of the name (set to zero if second part of name to not be used).
	Set character for joining name	String	Set the character for joining the name string if second part of name needed. This will be ignored if second name field set to zero.

**NOTE:** When header is elsewhere there is no support for:

not having a header outputting by worksheet or workbook(only option is output by row) •

## Configuration for Header Row Is Elsewhere if data parse ends at a specific row

	Properties	8
Property	Value	
Element type	Excel to XML Plus	
Name	By Row - Header is elsewhere - Data ends	
Description		
Set the output format of the data	ison	
Is the first row the header	Header Row Is Elsewhere	
Row number of header	7	
Start row for data parse	8	
Specify if data ends at a specific row	Yes	
Row that data to be parsed ends at	10	
Designate 1st part of name	1	
Designate 2nd part of name	2	
Character to join name		
Allow empty cells	No	
Default column name	column	
Default row name	row	
Default worksheet name	worksheet	
Default workbook name	workbook	
Dataset name	excelDataset	
Private data prefix	exPDData	

Switch configuration for Header Row Is Elsewhere, data ends at a specific row.

Element	Option	Element Type	Description
Is the first row the header	Header Row Is Elsewhere	Drop Down List	Set when header row is not in the first row of the Excel document.
	Specify the row number the header row is in	String	Set the row the header is to be found in.
	Set row number that data parsing is to start at	String	Set the row that the data starts at. This must be larger than header row number.
	Specify if data parse ends at a specific row	Yes/No Drop down List	Set to Yes if the data to be parsed ends at a specific row.
	Specify the row that data to be parsed ends at	String	Set the row number that the data to be parsed ends at.
	Set column name for first part of name	String	Set the column number to be used for the first part of the name (starting from left in the Excel document at 1).
	Set column name for second part of name	String	Set the column number to be used for the second part of the name (set to zero if second part of name to not be used).
	Set character for joining name	String	Set the character for joining the name string if second part of name needed. This will be ignored if second name field set to zero.

**NOTE:** When header is elsewhere there is no support for:

not having a header

• outputting by worksheet or workbook(only option is output by row)