

XPATH SEARCH



Description

This app is designed to search for a text string in a XML file flowing through Switch.

Currently only text searches are supported.

There are 4 methods for searching available, exact match, contains, does not contain and count:

- For exact match, only the nodes that contain the exact search string will return data.
- For the contains match, all nodes that contain the search string will return data.
- For the does not contain match, all nodes that do not contain the search string will return data.
- The count method is used for finding how many matches there are for a specific node in an XML dataset.
This is targeted for use in more advanced flows that would need to keep a record of how many datasets could be output by the Xpath Parser downstream of Xpath Search.
Capturing of sibling nodes is not available for this function.

There are various ways of handling the data returned from search hits(this is only available for the searches that return a text result):

- Get all siblings - returns all the sibling nodes of a search match, including the node matched
- Get all preceding siblings - returns all preceding siblings, not including the node matched
- Get all following siblings - returns all the following siblings, not including the node matched
- Get next sibling - returns the next sibling, not including the node matched
- Get preceding sibling - returns the previous sibling, not including the node matched

There is one caveat. To avoid unwanted results, the children nodes need to be the same length in the parent node searched for a match.

Compatibility

Switch 2020 Spring and up.

What follows is configuration information for the app. The tables will explain more in depth the configuration, and screenshots will illustrate actual configurations that have been used. These need to be adjusted to the individual use case.

Example flows are provided.

Overview of configurator options

Property	Value
Element type	Xpath Search
Name	Xpath Search
Description	
Base key for private data	xpathKey
Dataset name of outgoing file	searchDataset
XML encoding	utf8
Indicate which xpath function to use	does not contain
<i>Specify output format</i>	xml
<i>Set custom root name</i>	root
<i>Designate value to find</i>	Single-line text with variables defined
<i>Path to parent node</i>	/root/record
<i>Lookup node name</i>	name
<i>Indicate sibling node handling</i>	Get all siblings

Element	Options	Element Type	Description
Name		String	Name of script element in Switch.
Description		String	Description of element in Switch.
Enable debug mode		Yes/No Drop Down List	Set to No.
Script path		Choose File	Pick the app file.
Set custom root name		String	Set the name of the root node for the output XML
Base key for private data		String	<p>Set the parent key name of the private data that will be attached to the outgoing job.</p> <p>On successful output of the XML, the following keys will be added to prefix key: nodeCount baseXMLName statusOfJob -> statusOfJob will have 2 sub keys: status message</p> <p>If the job fails, the following keys will be added to the prefix key: statusOfJob -> statusOfJob will have 2 sub keys: status message</p> <p>See notes for more info</p>
Dataset name of outgoing file		String	Set the name of the dataset of the file that is output by the app
XML encoding		Drop Down List	
	utf8		Default encoding.
	latin 1		Set to this if character encoding of XML is not utf8.
Indicate which xpath function to use		Drop Down List	Set the method to be used for performing the xpath search.
	exact match	String	Exact match of search string looked for in the node set as the lookup node.
	contains	String	Search string searched for should be contained in the node set as the lookup node.
	does not contain		Search for everything that does not contain the search string
	count		Count the number of nodes matched by the node looked for. NOTE: Only matches for node names currently supported.

Table above gives an overview of the options available in the configurator. In depth configuration is discussed further on the next pages in the document.

Configuration for exact match, contains or does not contain

Indicate which xpath function to use	does not contain
<i>Specify output format</i>	xml
<i>Set custom root name</i>	root
<i>Designate value to find</i>	Single-line text with variables defined
<i>Path to parent node</i>	/root/record
<i>Lookup node name</i>	name
<i>Indicate sibling node handling</i>	Get all siblings

Element	Option	Element Type	Description
Specify output format		Dropdown list	Specify the output format of the XML parsed. Dataset will be set according to output format.
	xml		
	json		
Set custom root name		String	Set name of root object for XML & JSON.
Designate value to find		Single line text with variables	There is a choice of either entering a custom text or the ability to pick one of the many pieces of data associated with a job in Switch as the parameter to look for in the XML to be processed.
Path to parent node			Set the path to the parent node. This should be something like the following, with record being the parent of the node that should be searched: /root/record NOTE: This follows the xpath convention. There should not be a closing forward slash after the parent name, as the app takes care of this. If the convention is not followed the search will fail.
Lookup node name			The name of the node to be searched in for the search string. NOTE: all searches are global, this therefore means that all matches will be returned. Contains could return more matches than exact as the search string just needs to be contained for a successful hit.
Indicate sibling node handling		Drop down list	Indicate how to handle the siblings of the matched node. Generally for a xpath search one wants to access data that is associated with a matched node.
	Return path matched		Only returns the node path searched for.
	Get all siblings		Get all the sibling nodes of node matched(includes matched node).
	Get all preceding siblings		Get all siblings before the node matched(does not include the matched node).
	Get all following siblings		Get all siblings after the node matched (does not include the matched node).
	Get next sibling		Get next sibling after node matched (does not include the matched node).
	Get preceding sibling		Get sibling before the node matched (does not include the matched node).

XPath resource links

For more information on siblings in xpath follow below link on MDN:

<https://developer.mozilla.org/en-US/docs/Web/XPath/Axes>

Notes on private data

The private data placed on the job will look like this:

For successful processing:

[private data name].statusOfJob.status - value will be: success

[private data name].statusOfJob.message - value will be: There was a successful search of the value looked for: [search string value]

[private data name].baseXMLName

[private data name].nodeCount - the number of nodes matched

For errors:

[private data name].statusOfJob.status- value will be: fail

[private data name].statusOfJob.message - error message giving some indication of why the error occurred