

## Variable XPath Repeater

### Description

This app allows you to use Switch variables in XML location paths (XPath).

If necessary, you can duplicate your job a variable number of times and use the generated loop variable (and 5 extra variables) in your XPaths.

Best example: XML order with many products (suborders).

Consider following XML order file: (*available as sample file on app's page*)

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <order id="1234">
3   <customer>
4     <name>John Doe</name>
5     <address>123 Main St</address>
6     <city>Anytown, USA</city>
7   </customer>
8   <products>
9     <product id="1234.01">
10      <name>cards</name>
11      <copies>500</copies>
12      <url>http://www.vdp_printing.com/jobs/1234_01.pdf</url>
13    </product>
14    <product id="1234.02">
15      <name>envelopes</name>
16      <copies>250</copies>
17      <url>http://www.vdp_printing.com/jobs/1234_02.pdf</url>
18    </product>
19    <product id="1234.03">
20      <name>business cards</name>
21      <copies>1000</copies>
22      <url>http://www.vdp_printing.com/jobs/1234_03.pdf</url>
23    </product>
24  </products>
25 </order>

```

We have to repeat the incoming job/file (attached as metadata) 3 times (amount of products), get the details of each product, and attach them as private data for further use in the flow.

*Repeat job n times property:* let's count the products with this XPath:

```
[Metadata.Integer:Path="count(/order/products/product)",Dataset="Xml",Model="XML"]
```

Then simply use <VARloop> (generated loop variable) and <VAR1> to <VAR5> in the *Evaluate XPaths property*.

Using this syntax for each variable: PrivateDataKey::XPathWithVariables::GetVariableAs

GetVariableAs must be String, Number, Boolean or Date.

- Product.ID::[Metadata.Text:Path="/order/products/product[<VARloop>]/@id", Dataset="Xml",Model="XML"]::String
- Product.Name::[Metadata.Text:Path="/order/products/product[<VARloop>]/name", Dataset="Xml",Model="XML"]::String
- Product.Copies::[Metadata.Integer:Path="/order/products/product[<VARloop>]/copies", Dataset="Xml",Model="XML"]::Number
- Product.URL::[Metadata.Text:Path="/order/products/product[<VARloop>]/url", Dataset="Xml",Model="XML"]::String

The value of the variables will first be calculated, then replaced in the XML location path, then the XPath will be evaluated, and the result written in the private data.



Properties	
Property	Value
<b>Name</b>	Variable XPath Repeater
<b>Description</b>	
<b>Repeat job</b>	Yes
<i>Repeat job n times</i>	Single-line text with variables defined
<i>Loop private data key</i>	loop
<i>Loop start value</i>	1
<i>Loop increment</i>	1
<b>Evaluate XPathS</b>	// lines beginning with // are comment lines and will be ignored // ...
<b>Variable 1</b>	None
<b>Variable 2</b>	None
<b>Variable 3</b>	None
<b>Variable 4</b>	None
<b>Variable 5</b>	None
<b>Log info</b>	Yes

Edit multi-line text: Default

Enter a description...

```

// lines beginning with // are comment lines and will be ignored
// empty lines, lines without the :: separator and lines with less than 3 items will be ignored
// syntax: PrivateDataKey::XPathWithVariables::GetVariableAs
// GetVariableAs must be String, Number, Boolean or Date
Product.ID::[Metadata.Text:Path="/order/products/product[<VARloop>]/@id",Dataset="Xml",Model="XML"]::String
Product.Name::[Metadata.Text:Path="/order/products/product[<VARloop>]/name",Dataset="Xml",Model="XML"]::String
Product.Copies::[Metadata.Integer:Path="/order/products/product[<VARloop>]/copies",Dataset="Xml",Model="XML"]::Number
Product.URL::[Metadata.Text:Path="/order/products/product[<VARloop>]/url",Dataset="Xml",Model="XML"]::String
        
```

## Flow elements properties

- Repeat job
  - Repeat job and loop n times? Default Yes
- Repeat job n times
  - Amount of times to repeat the job
- Loop private data key
  - Name of the private data key that will be added to the outgoing jobs, with the value of the <VARloop> variable, default “loop”
- Loop start value
  - Loop start value of the <VARloop> variable, default 1
- Loop increment
  - Loop increment of the <VARloop> variable, default 1
- Evaluate XPathS
  - Define private data key to add + XML location path + GetVariableAs  
syntax: PrivateDataKey::XPathWithVariables::GetVariableAs  
Repeat lines as needed.  
Use <VARloop> variable (defined above, if job is repeated) and <VAR1>, <VAR2>, <VAR3>, <VAR4>, <VAR5> variables (defined below) in your Xpaths.  
GetVariableAs must be String, Number, Boolean or Date.  
There is a validation check. If needed, check the error messages in the Switch log.
- Variable 1, Variable 2, Variable 3, Variable 4, Variable 5
  - Define the content of the <VAR1> to <VAR5> variables, using Switch variables
- Log info
  - Log content of loop variable, private data key, resolved XPathS, ... in Switch message pane.

## Compatibility

Switch 13 update 1 and higher, Windows & Mac