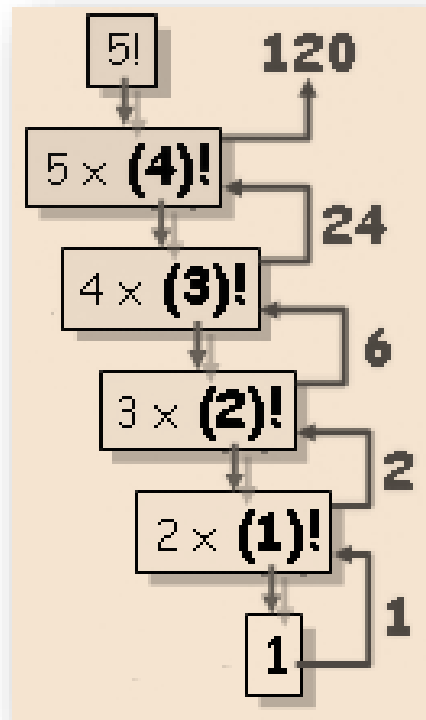
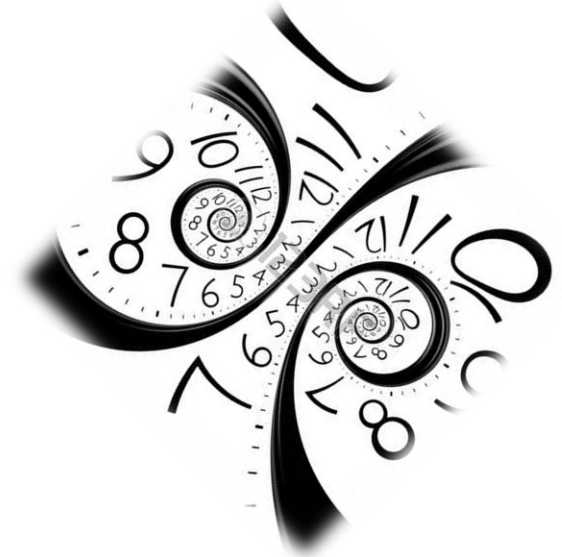


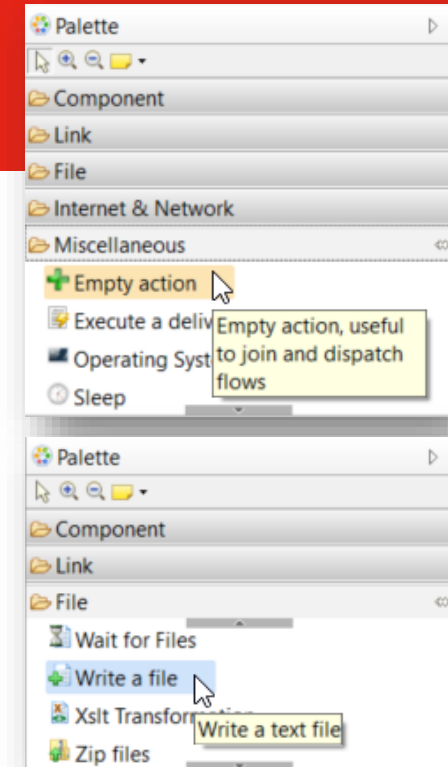
**Appendices -
Advanced exercises**

Recursive process

- ❖ Context : simply demonstrate
 - The recursion of the processes
 - The case study will be
 - To compute a factorial number



- ❖ 1 - Create the process “MyRecursiveProcess” and add 3 parameters in the process
 - Add a empty action
 - Add a WriteTxtFile action
 - Add an execution condition on the link



1

***MyRecursiveProcess**

Start

(i) current_iteration [1]
(i) factorialResult [1]
(i) factorialNumber [8]

WriteTxtFile

TXT_WRITE_FILENAME [%x(\$recursiveFactorial_folder/tech.path())x%/factorial_%x(md.formatDate("yyyyMMdd"))x%.txt]
(s) TXT_WRITE_APPEND [%e(rhino){if (\$../current_iteration)\$ == 1}
recursiveFactorial_folder

Sessions Session Detail Expression Editor

```
1 %e(rhino){ ($../current_iteration)$ <= $../factorialNumber$ } %e(rhino)%
```

Parameter MyRecursiveProcess/WriteTxtFile/TXT_WRITE_FILENAME

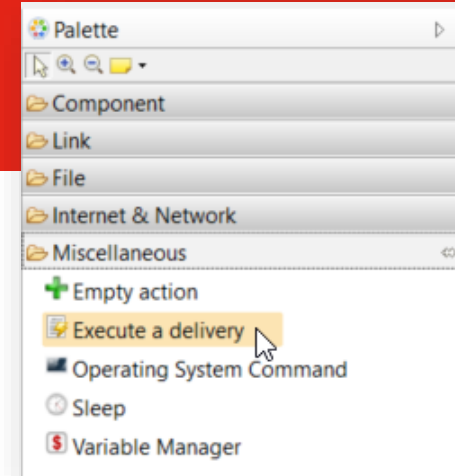
Standard	Name	TXT_WRITE_FILENAME
Meta-Inf	Type	String
Description	Value	%x(\$recursiveFactorial_folder/tech.path())x%/factorial_%x(md.formatDate("yyyyMMdd"))x%.txt
Advanced		

Sessions Session Detail Expression Editor

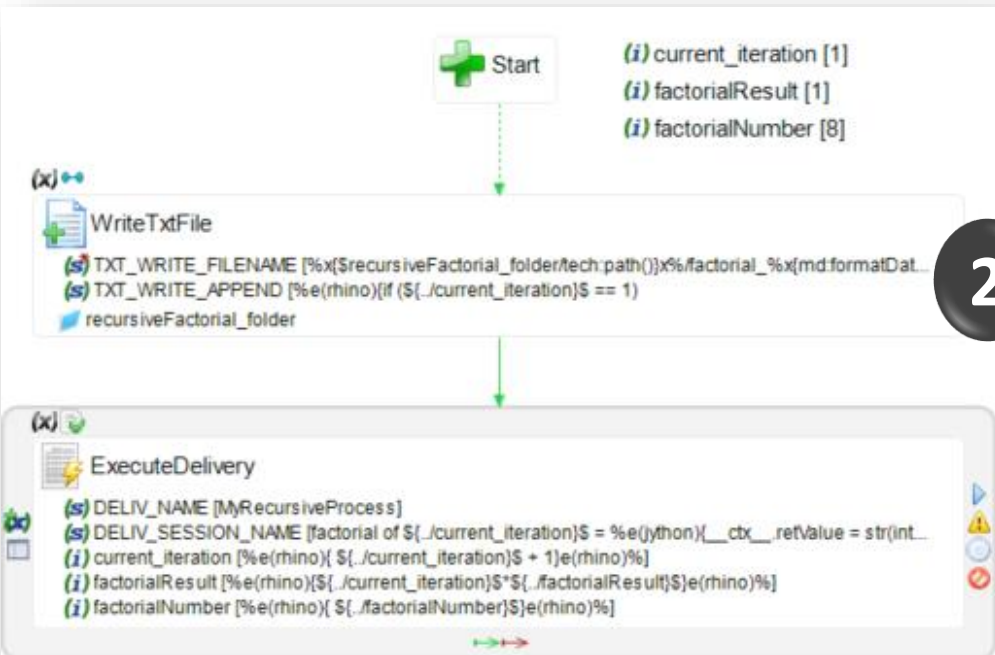
```
1 %e(rhino){if ($../current_iteration)$ == 1}
2 {__ctx__.retValue = "false"; }
3 else {__ctx__.retValue = "true";} } %e(rhino)%
```

Sessions Session Detail Expression Editor

```
1 factorial of $../current_iteration$ = %e(jython){__ctx__.retValue = str(int($
```



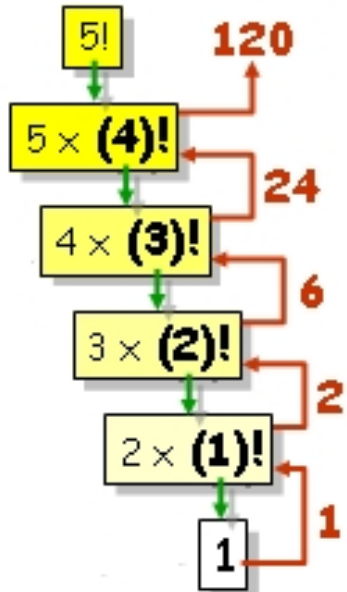
- ❖ 2 - Add an “ExecuteDelivery” action and add the 3 same parameters in the action



Action Code ExecuteDelivery

Standard	Name	ExecuteDelivery	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Errors Accepted
Generation				
Meta-Inf				
Description				
Advanced				
Core				
	<input type="checkbox"/> Deliv Asynchronous Execution	<input checked="" type="checkbox"/> Deliv Memory Mode		
	<input type="checkbox"/> Deliv Standard Output Redirection	<input checked="" type="checkbox"/> Deliv Wait All Sessions		
	<input type="checkbox"/> Deliv Remote Delivery Mode			
	Deliv Engine Host			
	Deliv Engine Port			
	Deliv Engine User Name			
	Deliv Engine Password			
	Deliv Engine Unencrypted Password			
	Deliv Engine Api			
	Deliv Name	MyRecursiveProcess		
	Deliv Session Name	factorial of \${./current_iteration}\$ = %e(jython){__ctx__.retValue = str(int(
	Deliv File Name			
	Deliv Configuration			

❖ 3 - Execute the process to study the results :



3

Start Time	Name
2020/07/07 20:13:30.359	MyRecursiveProcess
2020/07/07 20:13:30.438	factorial of 1 = 1
2020/07/07 20:13:30.482	factorial of 2 = 2
2020/07/07 20:13:30.524	factorial of 3 = 6
2020/07/07 20:13:30.568	factorial of 4 = 24
2020/07/07 20:13:30.617	factorial of 5 = 120
2020/07/07 20:13:30.659	factorial of 6 = 720
2020/07/07 20:13:30.704	factorial of 7 = 5040
2020/07/07 20:13:30.753	factorial of 8 = 40320

```
factorial_20200707.txt
factorial of 1 = 1
factorial of 2 = 2
factorial of 3 = 6
factorial of 4 = 24
factorial of 5 = 120
factorial of 6 = 720
factorial of 7 = 5040
factorial of 8 = 40320
```

