

## Name of Solution:

Workflow: Running in loops

## Business Requirement:

This mapping template provides a simple solution to perform looping of a workflow.

## Solution URL:

<https://community.informatica.com/solutions/1508>

## Supported Versions:

PowerCenter 9.1 and 9.5

## Description:

The block solution to loop a workflow/mapping consists of the following components:

**A. Control table:** This table has at a minimum two columns, one column stores the value based on which looping has to be performed which in our case is Dept\_ID. The second column specifies if the row has been processed.

DEPT_ID	PROCESSED
101	X
102	

**B. Parent workflow:** This workflow consists of a mapping which determines if there are any rows left in the control table that has to be processed. If yes then it calls the child workflow else it creates an indicator file which signals the end of the loop.

**C. Child workflow:** This workflow contains the mapping which needs to be looped as per the requirement. The mapping also updates the control table to flag the row which it is currently processing.

Both the workflow contains command task which call each other using *pmcmd* with *NOWAIT* parameter. The values in the control table have to be reset prior to process.

## Download file contents:

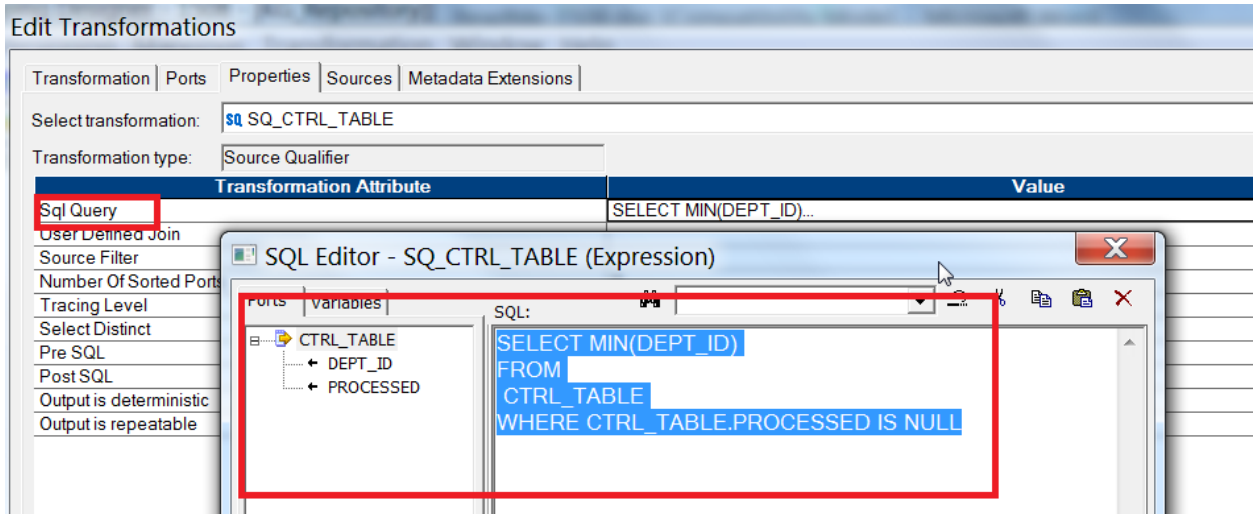
1. Workflow
2. Source File
3. Script

## Steps to implement the solution:

1. Place source file in \$PMSourceFileDir folder. Execute the script to create table and test data.
2. Import workflow using Repository Manager. Select the appropriate folder from repository and resolve the conflicts by choosing suitable option.

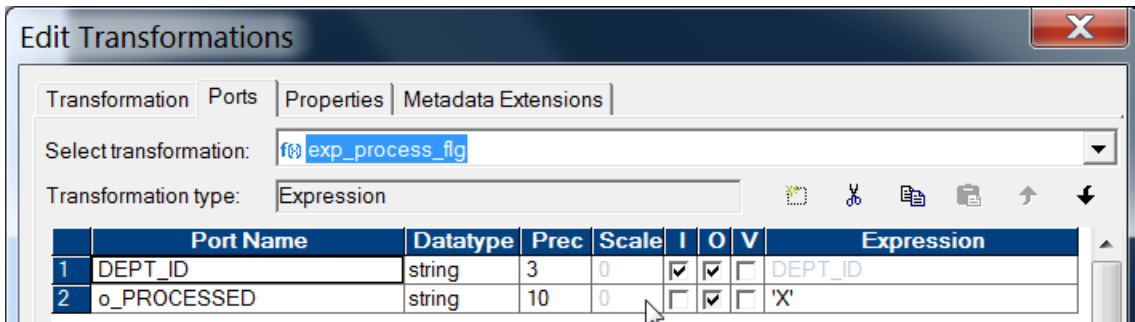
Please rate this solution and share your feedback on [Marketplace](#) Website.

- Open mapping in PowerCenter Designer, note SQL query of the source qualifier "SQ\_CTRL\_TABLE" in mapping "m\_load\_emp\_file" as shown below.

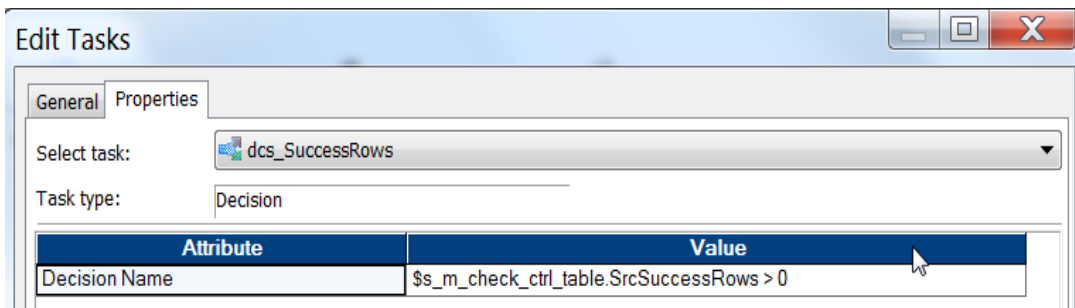


Source qualifier provides only one record in each run.

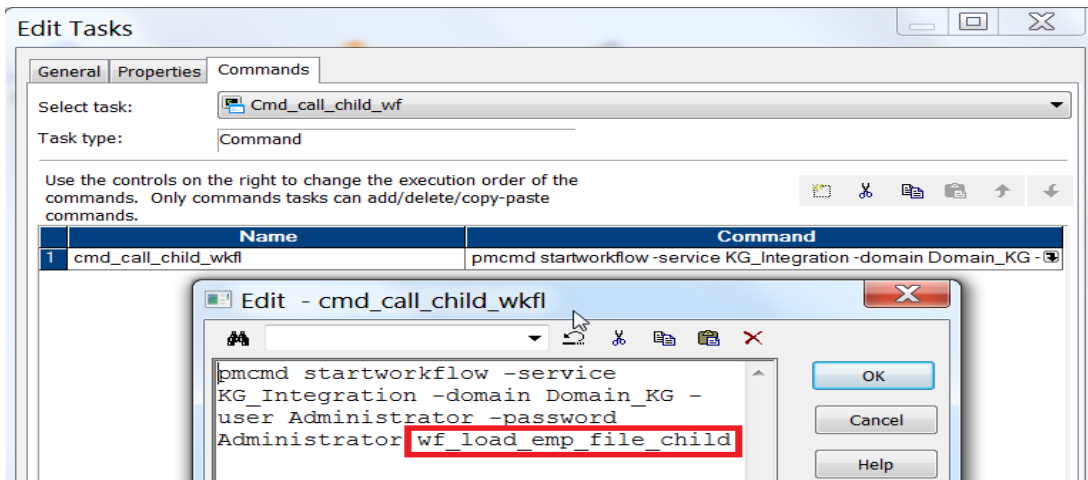
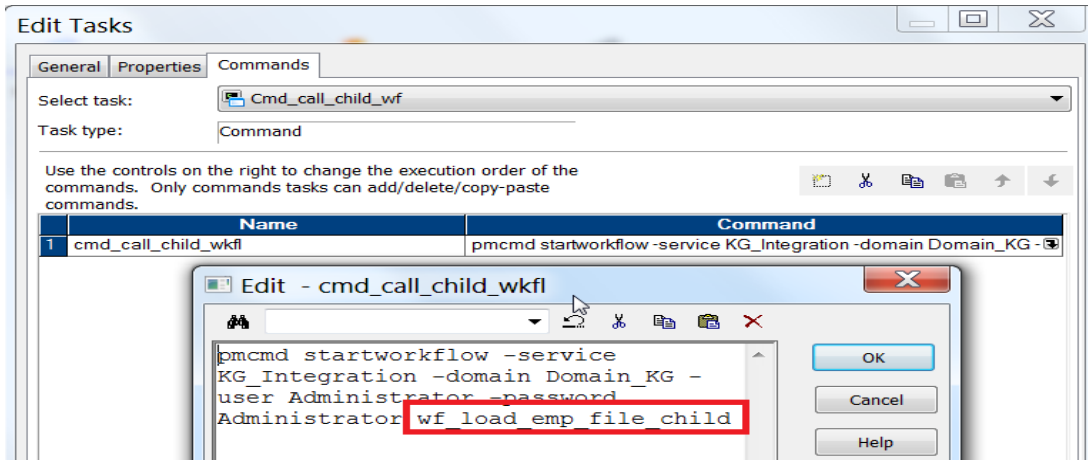
- Notice the o\_Processed port of expression transformation "exp\_process\_flg" as shown below. Processed dept\_id will be marked with 'X' in control table.



- Open the workflow in Workflow Manager. Assign the integration service in Workflow - > Edit -> Integration Service
- Edit session and assign valid connection object for the source and target.
- For more details for importing object please visit our [YouTube](#) link.
- In workflow "wf\_check\_ctrl\_table\_parent", as screen shot suggests decision task moves control forward only if success row(s) are more than 0.



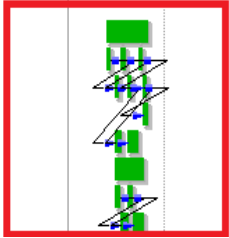
9. Note the use of "pmcmd" command in commands task which is used to call child workflow as shown below. Same behavior can be found in "wf\_load\_emp\_file\_child", it will call parent workflow.



10. Execute the parent workflow and observe the target files. While processing observe the execution in workflow monitor and study the session log. Following are the steps of execution flow:

- a. Parent workflow gets executed manually.
- b. If parent workflow identifies dept id to processed. Then indicator file created and child workflow gets executed through command task. Parent's execution finishes at this point.
- c. Child workflows get executed and it processed the single dept id (min among all records) and writes the data in target file.
- d. After the successful execution of child session, parent workflow gets executed through command task of child workflow.

At the end workflow monitor will look like as shown in following screenshot.

1508	wf_check_ctrl_table_parent	00:00:05	Succeeded	
	s_m_check_ctrl_table	00:00:02	Succeeded	
	dcs_SuccessRows	00:00:00	Succeeded	
	Cmd_touchfile	00:00:02	Succeeded	
	Cmd_call_child_wf			
	wf_load_emp_file_child	00:00:10	Succeeded	
	s_m_load_emp_file	00:00:03	Succeeded	
	Cmd_call_parent_wf	00:00:06	Succeeded	

YouTube Video on Importing and Configuring Workflows:

<http://www.youtube.com/playlist?list=PLLReK2jjgWBQ4NPfp0QWTxYDvlnEqSJ>

Other Useful links:

[Bundle : Useful PowerCenter Script files](#)

[Bundle : Advanced Workflow Techniques](#)

[Bundle : PowerCenter Mapping Templates](#)

[Bundle : Informatica Debugging Tools](#)

[Bundle : Informatica Productivity Tools](#)