

Name of Solution:

Workflow: Loop Through Filelist One At a Time

Business Requirement:

A workflow implementation to loop through a set of files in a list. Each time the workflow runs, the sessions in the workflow processes data from a single file from the file list.

Solution URL:

<https://community.informatica.com/solutions/3151>

Supported Versions:

PowerCenter 9.1 and above

Description:

Sometime instead of processing all the files in a file list in a single session, we may process them one at a time in a workflow. The data from a single file is processed through multiple sessions through a single run of the workflow. The workflow is run again for the next file to be processed. So it is necessary to loop through a set of files in a list for each workflow run.

Implementation:

Workflow 1

Create a mapping to generate a file with a list of files (with full path) and sequence number.

Workflow 2

In the first session, read a filename from the file list created in the workflow 1 and create an indirect file with that filename. A workflow variable is to track the file number. It is incremented every time workflow is run so that the next file is processed in the subsequent run. The workflow variable is used in the first session through mapping variable to lookup the file list and create the file list with the single file name.

So, each time the workflow 2 runs, one file will be processed from the file list and File_No count will be incremented by 1. In the subsequent run the next file from the file list will be processed.

The scheduler of the workflow 2 has to be configured to repeat as many times as the number of files in the list. (Screen shot in the demo tab)

To rerun the Workflow2, the persistent workflow and mapping variables (of session 1) should be reset.

Download file contents:

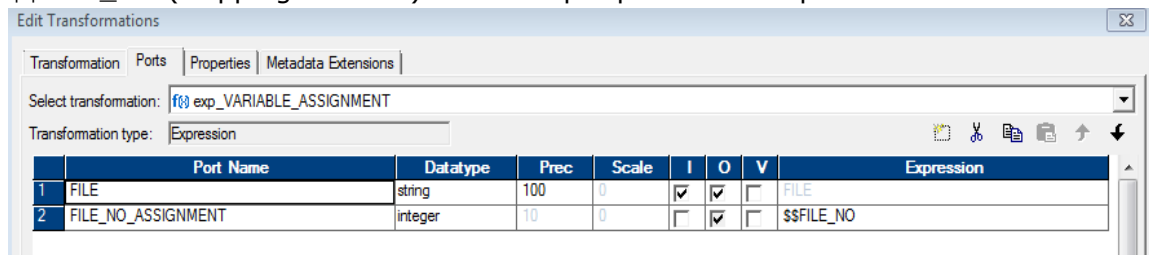
1. Workflow
2. Source File
3. Lookup file
4. Script

Steps to implement the solution:

1. Place source file in \$PMSourceFileDir folder.
2. Import workflow using the Repository Manager. Select the appropriate folder from the repository and resolve the conflicts by choosing suitable option.
3. In the PowerCenter Designer, Observe the mapping (Step1) "m_GENERATE_FILE_NUMBERS".

File_No is generated by the Sequence Generator Transformation.

4. Observe the mapping "m_LOOP_THROUGH_FILES_IN_A_LIST"(Step2), assign the \$\$FILE_NO (Mapping Variable) to the output port in the Expression Transformation.



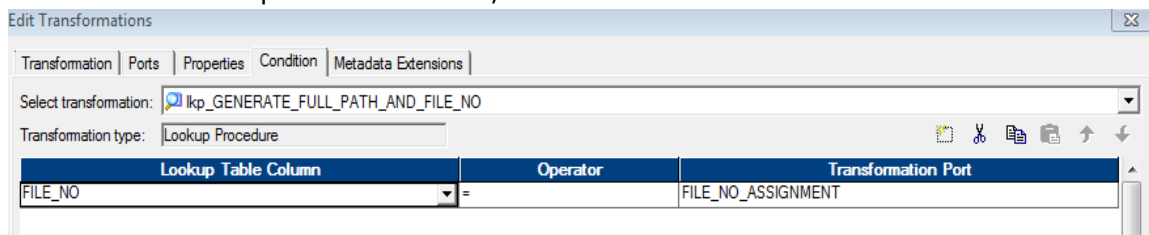
Transformations

Select transformation: **exp_VARIABLE_ASSIGNMENT**

Transformation type: **Expression**

	Port Name	Datatype	Prec	Scale	I	O	V	Expression
1	FILE	string	100	0	☒	☒	☐	FILE
2	FILE_NO_ASSIGNMENT	integer	10	0	☐	☒	☐	\$\$FILE_NO

5. Observe the Lookup Transformation,



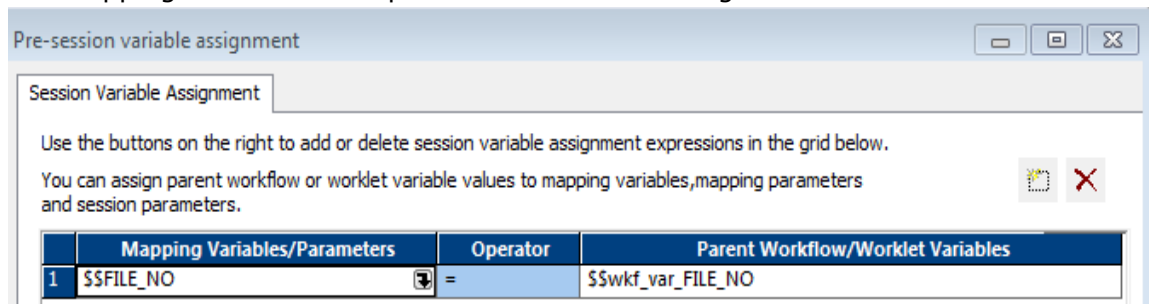
Transformations

Select transformation: **lkp_GENERATE_FULL_PATH_AND_FILE_NO**

Transformation type: **Lookup Procedure**

	Lookup Table Column	Operator	Transformation Port
1	FILE_NO	=	FILE_NO_ASSIGNMENT

6. Observe the session "s_m_Get_Next__File_In_List", assign the workflow variable to the mapping variable in the pre-session variable assignment section.



Pre-session variable assignment

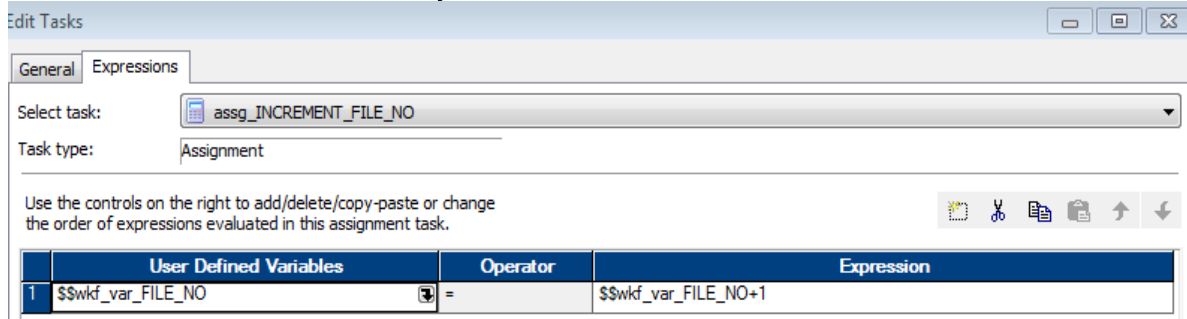
Session Variable Assignment

Use the buttons on the right to add or delete session variable assignment expressions in the grid below.

You can assign parent workflow or worklet variable values to mapping variables, mapping parameters and session parameters.

	Mapping Variables/Parameters	Operator	Parent Workflow/Worklet Variables
1	\$\$FILE_NO	=	\$\$wvlf_var_FILE_NO

7. Observe the Assignment Task, workflow variable is incremented by 1.



Edit Tasks

General Expressions

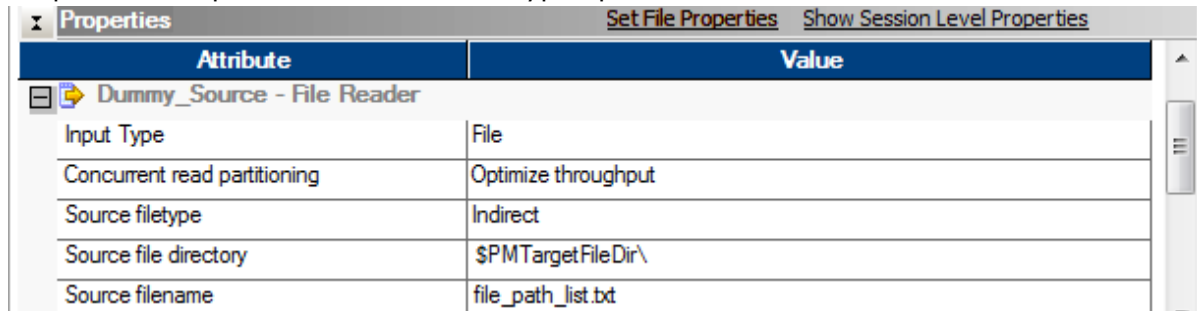
Select task: assg_INCREMENT_FILE_NO

Task type: Assignment

Use the controls on the right to add/delete/copy-paste or change the order of expressions evaluated in this assignment task.

	User Defined Variables	Operator	Expression
1	\$\$wkf_var_FILE_NO	=	\$\$wkf_var_FILE_NO+1

- Observe the session "s_m_Process_Current_File", it uses target file created in the Step2 as the input source. Source filetype option should be selected as "Indirect".



Properties Set File Properties Show Session Level Properties

Attribute	Value
Dummy_Source - File Reader	
Input Type	File
Concurrent read partitioning	Optimize throughput
Source filetype	Indirect
Source file directory	\$PMTargetFileDir\
Source filename	file_path_list.txt

- 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 of importing object, please visit our [YouTube](#) link.
- Execute the workflow. Each time the workflow runs, one file will be processed from the file list and File_No count will be incremented by 1 and data will be loaded into the target table.

YouTube Video on Importing and Configuring Workflows:

<http://www.youtube.com/playlist?list=PLLRreK2jjgWBO4NPfp0QWTxYDvInEqSJ>

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