

QGIS Application - Bug report #19372

Named algorithm outputs in modeler fail when used as inputs

2018-07-09 10:52 PM - Rudi von Staden

Status:	Closed	
Priority:	High	
Assignee:		
Category:	Processing/Modeller	
Affected QGIS version:	3.2	Regression?: Yes
Operating System:	Windows 10	Easy fix?: No
Pull Request or Patch supplied:	No	Resolution:
Crashes QGIS or corrupts data:	No	Copied to github as #: 27200
Description		
Using the modeler in QGIS 3.2, if you give a name to the output of an algorithm, you can't use that output as input for a subsequent algorithm. Trying to do so results in a processing error ('Could not load source layer for INPUT: invalid value'). I have attached a test project with some data and a model to demonstrate the issue. Included is a folder with an equivalent project in QGIS 2.18 showing that the same model worked in previous versions. The model runs two parallel processes which are identical (polygonize raster then extract by attribute) except the second names the output of the polygonize step before using it in the extract step. I am fairly sure that this is not an issue with the test algorithms used here, but more broadly with the mapping of input and output parameters in models. You can see in the model log below that the first 'extract by attribute' algorithm was able to find the input file (standard named 'OUTPUT.shp') but the second time the algorithm is executed it has an empty INPUT parameter. This is probably because the output of the previous step results in a file named 'gdal_polygonize_2_DEM_vector.shp', not 'OUTPUT.shp' as usual. I am not sure where the mapping of output and input names happens in the processing code (and whether it's executed in c++ or Python). If it's in Python I'd be happy to look into it if someone can tell me which class or file to start the investigation. <pre>Processing algorithm... Algorithm 'named_output_used_as_input' starting... Input parameters: { 'dem' : 'C:/Users/rudi_000/Dropbox/GIS/shared/named_output_used_as_input_test/dem.tif', 'gdal:polygonize_2:DEM_vector' : 'C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/bfa5cb1aca8a4c8b8a9b7da1b85da366/gdal_ a366/gdal_polygonize_2_DEM_vector.shp', 'native:extractbyattribute_1:Output 1' : 'memory:', 'native:extractbyattribute_2:Output 2 (named output)' : 'memory:' } Prepare algorithm: gdal:polygonize_1 Running Polygonize 1 [1/4] Input Parameters: { BAND: 1, EIGHT_CONNECTEDNESS: False, FIELD: 'DN', INPUT: 'C:/Users/rudi_000/Dropbox/GIS/shared/named_output_used_as_input_test/dem.tif', OUTPUT: 'C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/e715a21a7ae64c79a5b864dc72c5a6b1/OUT 5a6b1/OUTPUT.shp' } GDAL command: cmd.exe /C gdal_polygonize.bat C:/Users/rudi_000/Dropbox/GIS/shared/named_output_used_as_input_test/dem.tif C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/e715a21a7ae64c79a5b864dc72c5a6b1/OUT a6b1/OUTPUT.shp -b 1 -f "ESRI Shapefile" None DN GDAL command output: 0...10...20...30...40...50...60...70...80...90...Creating output C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/e715a21a7ae64c79a5b864dc72c5a6b1/OUT a6b1/OUTPUT.shp of format ESRI Shapefile. 100 - done. OK. Execution took 29.186 s (1 outputs). Prepare algorithm: native:extractbyattribute_1</pre>		

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Running Extract by attribute [2/4]
Input Parameters:
{ FIELD: 'DN', INPUT:
'C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/e715a21a7ae64c79a5b864dc72c5a6b1/OUT
5a6b1/OUTPUT.shp', OPERATOR: 0, OUTPUT: 'memory:', VALUE: '1' }
OK. Execution took 0.116 s (1 outputs).
Prepare algorithm: gdal:polygonize_2
Running Polygonize 2 (named output) [3/4]
Input Parameters:
{ BAND: 1, EIGHT_CONNECTEDNESS: False, FIELD: 'DN', INPUT:
'C:/Users/rudi_000/Dropbox/GIS/shared/named_output_used_as_input_test/dem.tif', OUTPUT:
'C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/bfa5cb1aca8a4c8b8a9b7da1b85da366/gdal_
a366/gdal_polygonize_2_DEM_vector.shp' }
GDAL command:
cmd.exe /C gdal_polygonize.bat C:/Users/rudi_000/Dropbox/GIS/shared/named_output_used_as_input_test/dem.tif
C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/bfa5cb1aca8a4c8b8a9b7da1b85da366/gdal_
a366/gdal_polygonize_2_DEM_vector.shp -b 1 -f "ESRI Shapefile" None DN
GDAL command output:
0...10...20...30...40...50...60...70...80...90...Creating output
C:/Users/rudi_000/AppData/Local/Temp/processing_37290c9f65694832953690d6bd83266d/bfa5cb1aca8a4c8b8a9b7da1b85da366/gdal_
a366/gdal_polygonize_2_DEM_vector.shp of format ESRI Shapefile.
100 - done.
OK. Execution took 29.425 s (1 outputs).
Prepare algorithm: native:extractbyattribute_2
Running Extract by attribute [4/4]
Input Parameters:
{ FIELD: 'DN', INPUT: "", OPERATOR: 0, OUTPUT: 'memory:', VALUE: '1' }
Could not load source layer for INPUT: invalid value
Error encountered while running Extract by attribute
Error encountered while running Extract by attribute
Execution failed after 59.70 seconds
Loading resulting layers
Algorithm 'named_output_used_as_input' finished
```

Associated revisions

Revision 41825cab - 2018-07-12 02:14 AM - Nyall Dawson

[processing] Also accept QgsProcessingOutputLayerDefinition for layer input values

Since these may result from the output of an earlier child algorithm running in a processing model.

Fixes #19372

Revision 257d64d1 - 2018-07-12 04:27 AM - Nyall Dawson

[processing] Also accept QgsProcessingOutputLayerDefinition for layer input values

Since these may result from the output of an earlier child algorithm running

in a processing model.

Fixes #19372

(cherry-picked from 41825cab)

History

#1 - 2018-07-10 03:32 AM - Nyal Dawson

- Status changed from Open to In Progress

#2 - 2018-07-12 02:13 AM - Nyal Dawson

- % Done changed from 0 to 100

- Status changed from In Progress to Closed

Applied in changeset commit:qgis|41825cab1b2df2c4c856a08b2047117a9fc35646.

Files

named_output_used_as_input_test.zip	165 KB	2018-07-09	Rudi von Staden
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