QGIS Application - Bug report #17298
Processing: gdal merge python error on QGIS 3

2017-10-17 04:58 PM - Giovanni Manghi

Status:	Closed		
Priority:	High		
Assignee:	Victor Olaya		
Category:	Processing/GDAL		
Affected QGIS version:	master	**Regression?:**	Yes
Operating System:	Windows, MacOS	**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	fixed/implemented
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	25196

Description

Algorithm 'Merge' starting...
Input parameters:
{ 'INPUT' : ['C:/Users/qgis/Desktop/merge_null/OUTPUT1.tif','C:/Users/qgis/Desktop/merge_null/OUTPUT2.tif'], 'PCT' : False, 'SEPARATE' : False, 'OPTIONS' : '', 'DATA_TYPE' : 5, 'OUTPUT' : 'C:/Users/qgis/AppData/Local/Temp/processing_311e3738739c4ad08b8f21b50bdff7b5/2d82bd2adfdc43c4989ea7cff35be575/OUTPUT.tif'
UTPUT.tif' }

GDAL command:
cmd.exe /C gdal_merge.bat -ot Float32 -of GTiff -o C:/Users/qgis/AppData/Local/Temp/processing_311e3738739c4ad08b8f21b50bdff7b5/2d82bd2adfdc43c4989ea7cff35be575/OUTPUT.tif C
UTPUT.tif C:/Users/qgis/Desktop/merge_null/OUTPUT1.tif C:/Users/qgis/Desktop/merge_null/OUTPUT2.tif
GDAL command output:
File "C:\OSGEO4~1\apps\Python36\lib\site.py", line 177
file=sys.stderr)
^
SyntaxError: invalid syntax
Execution completed in 0.13 seconds
Results:
{'OUTPUT': <QgsProcessingOutputLayerDefinition {'sink':C:/Users/qgis/AppData/Local/Temp/processing_311e3738739c4ad08b8f21b50bdff7b5/2d82bd2adfdc43c4989ea7cff35be575/OUTPU
575/OUTPUT.tif, 'createOptions': {'fileEncoding': 'System'}}>}

Loading resulting layers
Algorithm 'Merge' finished

Other GDAL tools seems not affected.

Related issues:

Related to QGIS Application - Bug report # 15749: Processing: gdal merge conv...	**Closed**	**2016-10-24**
Related to QGIS Application - Bug report # 17846: Polygonize (raster to vecto...	**Closed**	**2018-01-12**
Duplicated by QGIS Application - Bug report # 18413: Incorrect Python ver. wi...	**Closed**	**2018-03-12**

History

#1 - 2017-10-23 10:28 AM - Jürgen Fischer

- Related to Bug report #15749: Processing: gdal merge converts no data in 0 added

#2 - 2017-10-30 05:41 AM - Nyall Dawson

- Operating System set to Windows

Seems a windows-specific issue

#3 - 2017-10-31 04:54 AM - Nyall Dawson

- Resolution set to up/downstream

I've looked into this - I don't believe this is a QGIS issue, but rather an osgeo4w packaging issue. The issue is that the gdal_merge.bat script runs gdal_merge.py under python2, not python3, which leads to the resulting error. (Indeed this issue applies to all the gdal_*.bat scripts). We'd require equivalent batch files which explicitly run these python utilities under python3.

#4 - 2017-11-01 11:07 AM - Jürgen Fischer

- Description updated

#5 - 2017-11-01 11:15 AM - Jürgen Fischer

- Status changed from Open to Feedback

python should point to python3 when run from QGIS3:

```
Algorithm 'Verschmelzen' starting...
Input parameters:
{ 'INPUT' : ['D:/TEMP/test/10438_230601_d_gr_01.tiff'], 'PCT' : False, 'SEPARATE' : False, 'OPTIONS' : '', 'DATA_TYPE' : 5, 'OUTPUT' :
'C:/Users/jef.NORBIT/AppData/Local/Temp/processing_21c16c31984843028ddf4bacebba901a/c3b0c4c14a65448da9569b9fab6b30b5/OUTPUT.tif' }[??GDA
T.tif' }

GDAL command:
cmd.exe /C gdal_merge.bat -ot Float32 -of GTiff -o
C:/Users/jef.NORBIT/AppData/Local/Temp/processing_21c16c31984843028ddf4bacebba901a/c3b0c4c14a65448da9569b9fab6b30b5/OUTPUT.tif D:\TEMP
T.tif D:\TEMP\test\XXX.tiff
GDAL command output:

C:\WINDOWS\system32>python --version
Python 3.6.0

C:\WINDOWS\system32>path
PATH=C:\OSGEO4~1\apps\Python36\lib\site-packages\numpy\core;C:\OSGEO4~1\apps\qgis-dev\bin;C:\OSGEO4~1\apps\grass\grass-7.2.2\lib;C:\OSGEO4~
;C:\OSGEO4~1\apps\grass\grass-7.2.2\bin;C:\OSGEO4~1\apps\Python36;C:\OSGEO4~1\apps\Python36\Scripts;C:\OSGEO4~1\apps\qt5\bin;C:\OSGEO4~1\a
\OSGEO4~1\apps\Python27\Scripts;C:\OSGEO4~1\bin;C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\system32\WBem;C:\OSGEO4~1\apps\Python3
apps\Python36\lib\site-packages\pypiwin32_system32;
Warning 1: TIFFFetchNormalTag:ASCII value for tag "Software" contains null byte in value; value incorrectly truncated during reading due to
implementation limitations
0Warning 1: TIFFFetchNormalTag:ASCII value for tag "Software" contains null byte in value; value incorrectly truncated during reading due to
implementation limitations
...10...20...30...40...50...60...70...80...90...100 - done.
Execution completed in 0.64 seconds
Results:
{'OUTPUT': <QgsProcessingOutputLayerDefinition
{'sink':C:/Users/jef.NORBIT/AppData/Local/Temp/processing_21c16c31984843028ddf4bacebba901a/c3b0c4c14a65448da9569b9fab6b30b5/OUTPUT.tif, 'c
UTPUT.tif, 'createOptions': {'fileEncoding': 'System'}}>}
```

Lade Ergebnis Layer
Algorithm 'Verschmelzen' finished

with python --version and path added to gdal_merge.bat

#6 - 2017-11-02 12:32 PM - Giovanni Manghi
- Resolution deleted (up/downstream)
- Status changed from Feedback to Open

#7 - 2018-01-15 08:14 AM - Alexander Bruy
- Related to Bug report #17846: Polygonize (raster to vector) fails added

#8 - 2018-02-08 10:47 PM - Salvatore Larosa
- Operating System changed from Windows to Windows, MacOS

I can confirm it even on macos.

#9 - 2018-02-22 10:58 AM - Giovanni Manghi

Still true on the latest master.

#10 - 2018-02-22 11:14 AM - Luigi Pirelli

not confirmed with qgis master installed yesterday on win10 on my laptop... twin check with Giovanni on his laptop confirm the issue. Checking what local condition generate the error

#11 - 2018-02-22 11:25 AM - Luigi Pirelli

confirmed in this conditions:
Run qgis from start bar => e.g. run C:\<osgeo install>\bin\qgis-dev-bin-g7.4.0.exe

In my first test, that successfully end, I run qgis from cmd or osgeo shell running C:\<osgeo install>\bin\qgis-dev-g7.4.0.bat

e.g. the correct OSGeo4W env is loaded.

the problem seems a OSGe4W packaging problem

#12 - 2018-02-22 12:26 PM - Luigi Pirelli

as suggested by @jürgen adding load of osge4w env just in any command wrapper fix the issue

#13 - 2018-02-22 12:32 PM - Luigi Pirelli

what I'm not sure with the above fiex is that setting the osgeo4w env in each command wrapper does not allow to run all comands in a general custom osgeo4w env that can be useful to set for example to set a custom PATH or something else.

#14 - 2018-02-22 01:05 PM - Jürgen Fischer

- Resolution set to fixed/implemented

- Status changed from Open to Closed

Fixed in OSGeo4W's python-core.

#15 - 2018-03-30 11:12 AM - Jürgen Fischer

- Duplicated by Bug report #18413: Incorrect Python ver. with GDAL Merge tool in QGIS 3 added