

QGIS Application - Bug report #18199

QGIS dev version: error when using geopandas and osmnx

2018-02-23 06:27 PM - Maxime Dufour

Status: Open	
Priority: Normal	
Assignee:	
Category: Python bindings / sipify	
Affected QGIS version: 3.0.0	Regression?: No
Operating System:	Easy fix?: No
Pull Request or Patch supplied:	Resolution:
Crashes QGIS or corrupts data:	Copied to github as #: 26090

Description

I've installed several external Python modules in the QGIS Python environment (I use the last nightly build of QGIS dev) including geopandas and osmnx.

My code is working properly from the windows command line (using QGIS version of python 3.6) but when using the QGIS python command line I keep having an error that I can't understand. Here is a simplified version of it using geopandas and osmnx:

Console Python

Utilisez iface pour accéder à l'interface de l'API QGIS ou tapez help(iface) pour plus d'informations

```
import matplotlib
matplotlib.use('agg') # just to avoid osmnx to change matplotlib backend to tkinter which seems touchy in QGIS Python
import matplotlib.pyplot as plt
import geopandas as gpd
polygonShape = gpd.read_file("D:\\software\\OSGeo4W64\\apps\\qgis-dev\\python\\plugins\\dhcoptimzier\\data\\antwerp.shp") #
I joined the file which is very simple

print(polygonShape)
district          geometry
0 antwerp POLYGON ((4.394025849609361 51.21877037018072,...
```

```
import osmnx as ox
graph = ox.graph_from_polygon(polygonShape['geometry'][0], network_type='all')
```

Traceback (most recent call last):

```
File "D:\software\OSGeo4W64\apps\Python36\lib\code.py", line 91, in runcode
    exec(code, self.locals)
File "<input>", line 1, in <module>
File "D:\software\OSGeo4W64\apps\Python36\lib\site-packages\osmnx\core.py", line 1680, in graph_from_polygon
    G_buffered = truncate_graph_polygon(G_buffered, polygon_buffered, retain_all=True, truncate_by_edge=truncate_by_edge)
File "D:\software\OSGeo4W64\apps\Python36\lib\site-packages\osmnx\core.py", line 1125, in truncate_graph_polygon
    points_within_geometry = intersect_index_quadrats(gdf_nodes, polygon, quadrat_width=quadrat_width, min_num=min_num,
buffer_amount=buffer_amount)
File "D:\software\OSGeo4W64\apps\Python36\lib\site-packages\osmnx\core.py", line 1043, in intersect_index_quadrats
    multipoly = quadrat_cut_geometry(geometry, quadrat_width=quadrat_width, buffer_amount=buffer_amount, min_num=min_num)
File "D:\software\OSGeo4W64\apps\Python36\lib\site-packages\osmnx\core.py", line 1007, in quadrat_cut_geometry
    lines_buffered = [line.buffer(buffer_size) for line in lines]
File "D:\software\OSGeo4W64\apps\Python36\lib\site-packages\osmnx\core.py", line 1007, in <listcomp>
    lines_buffered = [line.buffer(buffer_size) for line in lines]
```

File "D:\software\OSGeo4W64\apps\Python36\lib\site-packages\shapely\geometry\base.py", line 584, in buffer
return geom_factory(self.impl['buffer'](self, distance, res))

File "D:\software\OSGeo4W64\apps\Python36\lib\site-packages\shapely\topology.py", line 78, in call
return self.fn(this._geom, *args)

OSError: exception: access violation writing 0x00007FF9A3E58A30

I don't get where the memory access violation comes from (I've tried to run as administrator as well).

Here is my pip freeze for my QGIS Python:

```
alabaster==0.7.10
Babel==2.5.3
certifi==2018.1.18
chardet==3.0.4
click==6.7
click-plugins==1.0.3
cligj==0.4.0
colorama==0.3.9
cyclor==0.10.0
decorator==4.2.1
descartes==1.1.0
docutils==0.14
Fiona==1.7.11
future==0.16.0
GDAL==2.2.2
geopandas==0.3.0
geopy==1.11.0
httplib2==0.10.2
idna==2.6
imagesize==1.0.0
ipython-genutils==0.2.0
Jinja2==2.9.4
joblib==0.11
jsonschema==2.6.0
jupyter-core==4.4.0
MarkupSafe==0.23
matplotlib==2.1.1
mock==2.0.0
munch==2.2.0
nbformat==4.4.0
networkx==2.1
nose2==0.6.5
numpy==1.14.1
osmnx==0.6
OWSLib==0.14.0
packaging==16.8
pandas==0.22.0
pb-tool==3.0.6
pbr==1.10.0
pipdeptree==0.10.1
plotly==2.4.1
psycpg2==2.7.3.2
PuLP==1.6.8
Pygments==2.2.0
pyparsing==2.2.0
```

```
pyproj==1.9.5.1
python-dateutil==2.6.1
pytz==2018.3
PyYAML==3.12
requests==2.18.4
Rtree==0.8.3
Shapely==1.6.4.post1
six==1.11.0
snowballstemmer==1.2.1
Sphinx==1.7.0
sphinxcontrib-websupport==1.0.1
traitlets==4.3.2
urllib3==1.22
```

Thanks in advance !

Maxime

History

#1 - 2018-02-24 12:50 AM - Nyal Dawson

This was likely fixed with a recent change in osgeo4w python package. Please retest.

#2 - 2018-02-25 09:28 PM - Giovanni Manghi

- *Regression? set to No*
- *Crashes QGIS or corrupts data set to No*
- *Affected QGIS version set to 3.0.0*
- *Status changed from Open to Feedback*
- *Category changed from Any to Python bindings / sipify*
- *Project changed from QGIS Redmine (QGIS bug tracker) to QGIS Application*
- *Easy fix? set to No*

#3 - 2018-02-26 12:26 PM - Maxime Dufour

Thank you a lot for your answers!

I was using the last OSgeo4w nightly build on Friday, what more up to date version should I use ?

Kind regards,

Maxime

#4 - 2018-02-26 01:01 PM - Nyal Dawson

Try the final 3.0 release

#5 - 2018-03-14 05:18 PM - Maxime Dufour

I just tried with QGIS 3.0 and I still have the issue. I read the shapefile using geopandas and then try to use it to import openstreetmap information using osmnx as stated above.

When calling osmnx directly to retrieve data from a city name and not from a shapefile, the data retrieval works. I think that the issue is with geopandas

(which works outside of QGIS).

#6 - 2018-03-22 05:15 PM - Maxime Dufour

Hi,

Do you have any insight on the cause or a possible workaround for me ?

Even a system call would be good enough for me while waiting for a fix it but it doesn't seem to be working either.

Thanks in advance,

Maxime

#7 - 2018-03-22 05:15 PM - Maxime Dufour

- *Status changed from Feedback to Open*

Files

data.7z	623 Bytes	2018-02-23	Maxime Dufour
---------	-----------	------------	---------------