

## QGIS Application - Bug report #18199

### QGIS dev version: error when using geopandas and osmnx

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

<b>Status:</b>	Open	
<b>Priority:</b>	Normal	
<b>Assignee:</b>		
<b>Category:</b>	Python bindings / sipify	
<b>Affected QGIS version:</b>	3.0.0	<b>Regression?:</b> No
<b>Operating System:</b>		<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>		<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b>		<b>Copied to github as #:</b> 26090
<b>Description</b>		
<p>I've installed several external Python modules in the QGIS Python environnement (I use the last nightly build of QGIS dev) including geopandas and osmnx.</p> <p>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:</p> <p>Console Python</p> <p>Utilisez iface pour accéder à l'interface de l'API QGIS ou tapez help(iface) pour plus d'informations</p> <pre>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,...</pre> <pre>import osmnx as ox graph = ox.graph_from_polygon(polygonShape['geometry'][0], network_type='all')</pre> <p>Traceback (most recent call last):</p> <p>File "D:\\software\\OSGeo4W64\\apps\\Python36\\lib\\code.py", line 91, in runcode exec(code, self.locals)</p> <p>File "&lt;input&gt;", line 1, in &lt;module&gt;</p> <p>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)</p> <p>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)</p> <p>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)</p> <p>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]</p> <p>File "D:\\software\\OSGeo4W64\\apps\\Python36\\lib\\site-packages\\osmnx\\core.py", line 1007, in &lt;listcomp&gt; lines_buffered = [line.buffer(buffer_size) for line in lines]</p>		

```
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
cycler==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

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### #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
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