

## QGIS Application - Bug report #5577

### "Densify geometries" crashes QGIS

2012-05-11 11:01 AM - Giovanni Manghi

|  |   |
|--|---|
| <b>Status:</b> Closed<br><b>Priority:</b> Severe/Regression<br><b>Assignee:</b> Alexander Bruy<br><b>Category:</b> Processing/QGIS<br><b>Affected QGIS version:</b> master<br><b>Operating System:</b> <del>Ubuntu</del><br><b>Pull Request or Patch applied:</b> <del>yes</del><br><b>Crashes QGIS or corrupts data:</b> <del>yes</del>   | <b>Regression?:</b><br><b>Easy fix?:</b><br><b>Resolution:</b> fixed<br><b>Copied to github as #:</b> 15157 |
| <b>Description</b><br><br>On Ubuntu 64bit<br><br>gio@sibirica:~\$ qgis<br>Warning: loading of qgis translation failed [/usr/share/qgis/i18n//qgis_en_US]<br>Warning: loading of qt translation failed [/usr/share/qt4/translations/qt_en_US]<br>Debug: OpenlayersLayer draw<br>Debug: page file: file:///home/gio/.qgis/python/plugins/openlayers/html/google_satellite.html<br>Debug: undefined0: TypeError: 'null' is not an object<br>Debug: extent: -798709.4330660001141950,4709909.2752386806532741 :<br>-797664.5537049998529255,4710634.0523063195869327<br>Debug: center: -798186.993386, 4710271.663773<br>Debug: size: 1149, 797<br>Debug: logicalDpiX: 96<br>Debug: outputDpi: 96.000000<br>Debug: mapUnitsPerPixel: 0<br>Debug: olSize: 1149, 797<br>Debug: adjust viewport: 0.909382 -> 0.597164: 1749.735190 x 1213.697952<br>Debug: updating OpenLayers extent<br>Debug: undefined0: TypeError: 'null' is not an object<br>Debug: scale image: 1749 x 1213 -> 1149 x 797<br>Debug: OpenlayersLayer draw<br>Debug: extent: -798709.4330656065139920,4709909.2752385335043073 :<br>-797664.5537053393200040,4710634.0523056639358401<br>Debug: center: -798186.993385, 4710271.663772<br>Debug: size: 1149, 797<br>Debug: logicalDpiX: 96<br>Debug: outputDpi: 96.000000<br>Debug: mapUnitsPerPixel: 0<br>Debug: olSize: 1149, 797<br>Debug: adjust viewport: 0.909382 -> 0.597164: 1749.735189 x 1213.697951<br>Debug: updating OpenLayers extent<br>Debug: scale image: 1749 x 1213 -> 1149 x 797<br>Warning: QObject::setParent: Cannot set parent, new parent is in a different thread<br>Warning: QPixmap: It is not safe to use pixmaps outside the GUI thread<br>Warning: QPixmap: It is not safe to use pixmaps outside the GUI thread<br>Warning: X Error: BadIDChoice (invalid resource ID chosen for this connection) 14<br>Major opcode: 1 (X_CreateWindow)<br>Resource id: 0x260028d<br>Warning: X Error: BadIDChoice (invalid resource ID chosen for this connection) 14 |   |

Extension: 150 (RENDER)  
Minor opcode: 4 (RenderCreatePicture)  
Resource id: 0x260028e  
qgis.bin: Fatal IO error 11 (Resource temporarily unavailable) on X server :0.0.

on windows it just gives a python error (see attached image and sample)

## History

### #1 - 2012-05-12 12:31 AM - Alexander Bruy

This is because attached layer contains MultiLineString geometry. It is odd that `wkbType()` for this layer returns 2 (WKBLineString) instead of 5 (WKBMultiLineString). So IMHO here we have two problems:

1. `wkbType()` reports wrong layer geometry type
2. densify geometries don't work with multi-geometries

I'll try to fix second ASAP

### #2 - 2012-05-12 01:32 AM - Salvatore Larosa

I don't think that the problem is the MultiGeometries:

```
$ ogrinfo /home/sam/Scaricati/caminhos_shp/caminhos.shp
INFO: Open of `'/home/sam/Scaricati/caminhos_shp/caminhos.shp'
      using driver `ESRI Shapefile' successful.
1: caminhos (Line String)
```

indeed it is not a MultiLinestring!

### #3 - 2012-05-12 01:34 AM - Giovanni Manghi

Alexander Bruy wrote:

*This is because attached layer contains MultiLineString geometry. It is odd that `wkbType()` for this layer returns 2 (WKBLineString) instead of 5 (WKBMultiLineString). So IMHO here we have two problems: 1. `wkbType()` reports wrong layer geometry type*

*2. densify geometries don't work with multi-geometries*

*I'll try to fix second ASAP*

Hi Alex,

this line shape was obtain in QGIS by digitizing a few features and doing a couple of "merge selected features" operations, so really nothing uncommon.

### #4 - 2012-05-12 01:45 AM - Alexander Bruy

Salvatore Larosa wrote:

*I don't think that the problem is the MultiGeometries:*

*[...]*

*indeed it is not a MultiLineString!*

Well, take a look at geometry with FID = 1. This one is MultiGeometry and you can easily check this in Python console

```
>>> layer = qgis.utils.iface.mapCanvas().currentLayer()
>>> ft = QgsFeature()
>>> layer.featureAtId(1, ft)
True
>>> ft.geometry().wkbType()
5
```

Giovanni Manghi wrote:

*this line shape was obtained in QGIS by digitizing a few features and doing a couple of "merge selected features" operations, so really nothing uncommon.*

Ah, so the root of the problem is that "merge selected features" sometimes creates MultiGeometries (e.g. when there is a small distance between two features). Maybe when snapping is not used during digitizing, or something like this)

#### #5 - 2012-05-12 01:49 AM - Alexander Bruy

Anyway I add MultiLineString support in commit:033d58d454, and now attached file processed correctly. Now working on MultiPolygon support

#### #6 - 2012-05-12 03:32 AM - Salvatore Larosa

- File *LineStringQGIS.png* added

Alexander Bruy wrote:

*Well, take a look at geometry with FID = 1. This one is MultiGeometry and you can easily check this in Python console*  
*[...]*

Right, thanks!

Anyway I noticed that imports shp in PostGIS, densify tool works successfully this because the geometries are MultiLineString!

I don't know why in QGIS (see image) and ogrinfo, it is considered like a LineString geometry type!!!

#### #7 - 2012-05-12 04:07 AM - Salvatore Larosa

Well,

FID 0,2,3 wkbType() returns 2 and isMultipart() returns False;

FID 1 wkbType() returns 5 and isMultipart() returns True.

Is it conceptually correct?

Now I begin to understand the issues #5547, #5328!  
Could help Jürgen's fix(#5109)?

**#8 - 2012-05-12 04:19 AM - Alexander Bruy**  
- Status changed from Open to Closed  
- Resolution set to fixed

As I understand, shapefile can contain in LineString layer also MultiLineString geometries, and in MultiLineString layer simple LineString geometries (same for points and polygons). "Merge selected features" tool sometimes (when input features have some distance between them) produces multi-geometry. Modifying shapefile didn't change it type, so it continues to report old LineString type.

Multipolygon support added in commit:2607535b3f, so I close this ticket. Please reopen if necessary

**#9 - 2012-05-13 01:54 AM - Giovanni Manghi**

Alexander Bruy wrote:

*As I understand, shapefile can contain in LineString layer also MultiLineString geometries, and in MultiLineString layer simple LineString geometries (same for points and polygons). "Merge selected features" tool sometimes (when input features have some distance between them) produces multi-geometry. Modifying shapefile didn't change it type, so it continues to report old LineString type.*

*Multipolygon support added in commit:2607535b3f, so I close this ticket. Please reopen if necessary*

Hi Alex, thanks for this! I will give it a try asap!

**#10 - 2017-05-01 01:22 AM - Giovanni Manghi**

The "ftools" category is being removed from the tracker, changing the category of this ticket to "Processing/QGIS" to not leave the category orphaned.

| Files              |         |            |                  |
|--------------------|---------|------------|------------------|
| 55.png             | 21.9 KB | 2012-05-11 | Giovanni Manghi  |
| caminhos_shp.zip   | 3.07 KB | 2012-05-11 | Giovanni Manghi  |
| LinestringQGIS.png | 131 KB  | 2012-05-12 | Salvatore Larosa |