

# QGIS Application - Bug report #3439

## QGIS crashes when reshaping invalid polygon geometry

2011-01-25 06:16 AM - marish -

<b>Status:</b> Closed	
<b>Priority:</b> Low	
<b>Assignee:</b> Jürgen Fischer	
<b>Category:</b> Vectors	
<b>Affected QGIS version:</b>	<b>Regression?:</b> No
<b>Operating System:</b> Gentoo	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	<b>Resolution:</b> fixed
<b>Crashes QGIS or corrupts data:</b>	<b>Copied to github as #:</b> 13499

### Description

GEOS 3.2.2 QGIS r15075

Steps to reproduce:

- draw self intersecting polygon;
- use reshape too to reshape it:

```
Debug: /home/marish/soft/qgis_trunk/src/providers/ogr/qgsogrprovider.cpp: 591: (select) Setting spatial filter using POLYGON((556162.68083173 6356447.94617169, 556162.68083173 6357221.35032134, 557111.30935904 6357221.35032134, 557111.30935904 6356447.94617169, 556162.68083173 6356447.94617169))
```

```
ERROR 1: [[TopologyException]]: found non-noded intersection between LINESTRING (556163 6.35744e+06, 555613 6.35629e+06) and LINESTRING (556271 6.35654e+06, 555299 6.35676e+06) at 555784 6.35665e+06
```

Program received signal SIGSEGV, Segmentation fault.

GEOSGeomTypeId\_r (extHandle=0xb21c30, g1=0x0) at geos\_ts\_c.cpp:1296

1296 geos\_ts\_c.cpp: No such file or directory.

in geos\_ts\_c.cpp

(gdb) bt

#0 GEOSGeomTypeId\_r (extHandle=0xb21c30, g1=0x0) at geos\_ts\_c.cpp:1296

#3905 0x00007ffff716fff5 in [[QgsGeometry]]::reshapeLine (line=0x25af600, reshapeLineGeos=0x2505cb0) at /home/marish/soft/qgis\_trunk/src/core/qgsgeometry.cpp:5179

#3906 0x00007ffff717086e in [[QgsGeometry]]::reshapePolygon (polygon=0x25b6d10, reshapeLineGeos=0x2505cb0) at /home/marish/soft/qgis\_trunk/src/core/qgsgeometry.cpp:5087

#3907 0x00007ffff7170c2d in [[QgsGeometry]]::reshapeGeometry (this=0xcd31d0, reshapeWithLine=...) at /home/marish/soft/qgis\_trunk/src/core/qgsgeometry.cpp:3280

#3908 0x0000000005a514e in [[QgsMapToolReshape]]::canvasReleaseEvent (this=0xfbc990, e=<value optimized out>) at /home/marish/soft/qgis\_trunk/src/app/qgsmaptoolreshape.cpp:104

#3909 0x00007ffff6d28cc8 in [[QgsMapCanvas]]::mouseReleaseEvent (this=0xc4f300, e=<value optimized out>) at /home/marish/soft/qgis\_trunk/src/gui/qgsmapcanvas.cpp:921

#3910 0x00007ffff55f0cbd in QWidget::event (this=0xc4f300, event=0x7fffffc510) at kernel/qwidget.cpp:8200

#3911 0x00007ffff59c4db4 in QFrame::event (this=0xc4f300, e=0x7fffffc510) at widgets/qframe.cpp:557

#3912 0x00007ffff5c397d1 in QGraphicsView::viewportEvent (this=0xc4f300, event=0x7fffffc510) at graphicsview/qgraphicsview.cpp:2864

#3913 0x00007ffff624c2e9 in QCoreApplicationPrivate::sendThroughObjectEventFilters (this=<value optimized out>, receiver=0xc45930, event=0x7fffffc510) at kernel/qcoreapplication.cpp:847

#10 0x00007ffff5592b0c in QApplicationPrivate::notify\_helper (this=0xb58b10, receiver=0xc45930, e=0x7fffffc510) at kernel/qapplication.cpp:4441

#3914 0x00007ffff55987eb in QApplication::notify (this=0x7fffffd360, receiver=0xc45930, e=0x7fffffc510) at kernel/qapplication.cpp:4006

#3915 0x00007ffff714bae6 in [[QgsApplication]]::notify (this=<value optimized out>, receiver=<value optimized out>, event=<value optimized out>) at /home/marish/soft/qgis\_trunk/src/core/qgsapplication.cpp:88

```
#3916 0x00007ffff624c94e in QCoreApplication::notifyInternal (this=0x7fffffd360, receiver=0xc45930,
event=0x7fffffc510) at kernel/qcoreapplication.cpp:732
#3917 0x00007ffff5596c9c in sendEvent (receiver=0xc45930, event=0x7fffffc510, alienWidget=0xc45930,
nativeWidget=0xd279f0, buttonDown=<value optimized out>, lastMouseReceiver=<value optimized out>,
spontaneous=true) at ../../include/QtCore/../../src/corelib/kernel/qcoreapplication.h:215
#3918 QApplicationPrivate::sendMouseEvent (receiver=0xc45930, event=0x7fffffc510, alienWidget=0xc45930,
```

Depending on self intersecting polygon shape, it might also show "unknown exception" error. After that, it's impossible to stop reshape tool - ESC doesn't work, right click just gives exception warning. Only way out is to BACKSPACE all nodes till reshaping line contains no more nodes.

```
Debug: /home/maris/soft/qgis_trunk/src/providers/ogr/qgsogrprovider.cpp: 591: (select) Setting spatial filter using
POLYGON((555697.42989796 6358290.82324704, 555697.42989796 6359396.54949225, 556446.66516793
6359396.54949225, 556446.66516793 6358290.82324704, 555697.42989796 6358290.82324704))
Debug: /home/maris/soft/qgis_trunk/src/core/qgsgeometry.cpp: 93: (throwGEOSEException) GEOS exception encountered:
[[TopologyException]]: found non-noded intersection between LINESTRING (556107 6.35923e+06, 555867 6.35867e+06) and
LINESTRING (556374 6.35902e+06, 556049 6.35918e+06) at 556078 6.35916e+06
Debug: /home/maris/soft/qgis_trunk/src/providers/ogr/qgsogrprovider.cpp: 591: (select) Setting spatial filter using
POLYGON((555697.42989796 6358290.82324704, 555697.42989796 6359783.25156708, 556446.66516793
6359783.25156708, 556446.66516793 6358290.82324704, 555697.42989796 6358290.82324704))
Debug: /home/maris/soft/qgis_trunk/src/core/qgsgeometry.cpp: 93: (throwGEOSEException) GEOS exception encountered:
[[TopologyException]]: found non-noded intersection between LINESTRING (556107 6.35923e+06, 555867 6.35867e+06) and
LINESTRING (556374 6.35902e+06, 556049 6.35918e+06) at 556078 6.35916e+06
Debug: /home/maris/soft/qgis_trunk/src/core/qgsgeometry.cpp: 6496: (validatePolyline) linijas 0 segmenti 0 un 4 krustojas
556274.812174, 6358657.66189
Debug: /home/maris/soft/qgis_trunk/src/core/qgsgeometry.cpp: 6496: (validatePolyline) linijas 0 segmenti 2 un 4 krustojas
556072.148796, 6359200.42703
Debug: /home/maris/soft/qgis_trunk/src/providers/ogr/qgsogrprovider.cpp: 591: (select) Setting spatial filter using
POLYGON((555697.42989796 6358290.82324704, 555697.42989796 6359783.25156708, 556446.66516793
6359783.25156708, 556446.66516793 6358290.82324704, 555697.42989796 6358290.82324704))
Debug: /home/maris/soft/qgis_trunk/src/core/qgsgeometry.cpp: 93: (throwGEOSEException) GEOS exception encountered:
[[TopologyException]]: found non-noded intersection between LINESTRING (556082 6.35917e+06, 555867 6.35867e+06) and
LINESTRING (556087 6.35916e+06, 556049 6.35918e+06) at 556078 6.35916e+06
```

When reshaping self intersecting line, QGIS just fails silently (with debug in console). Same should happen on incorrect polygons.

## Associated revisions

### Revision e7958d72 - 2011-04-16 04:24 PM - Jürgen Fischer

fix #3439

git-svn-id: <http://svn.osgeo.org/qgis/trunk/qgis@15728> c8812cc2-4d05-0410-92ff-de0c093fc19c

### Revision 8196c87d - 2011-04-16 04:24 PM - Jürgen Fischer

fix #3439

git-svn-id: <http://svn.osgeo.org/qgis/trunk@15728> c8812cc2-4d05-0410-92ff-de0c093fc19c

## History

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#1 - 2011-04-16 07:25 AM - Jürgen Fischer

- Resolution set to fixed

- Status changed from Open to Closed

fixed in commit:8196c87d (SVN r15729).