

QGIS Application - Bug report #6573

QgsVectorLayer.geometryChanged not connectable on Windows

2012-10-26 02:39 AM - Rafael Varela

Status:	Closed	
Priority:	Normal	
Assignee:		
Category:	Python plugins	
Affected QGIS version:	master	Regression?: No
Operating System:		Easy fix?: No
Pull Request or Patch supplied:		Resolution: worksforme
Crashes QGIS or corrupts data:		Copied to github as #: 15769
Description		
A connect() that works OK on 1.9-master for Linux fails in Windows with this message: <pre>vLayer.geometryChanged.connect(self.onNodeGeometryChange) TypeError: connect() failed between geometryChanged(QgsFeatureId,QgsGeometry) and unislot()</pre> The code looks like this: <pre>... vLayer.geometryChanged.connect(self.onNodeGeometryChange) ... @pyqtSlot(int, QgsGeometry) def onNodeGeometryChange(self, featureId, geom): ...</pre> I had a similar problem in Linux with QGIS 1.8 wich was solved upgrading to master after being aware of commit:32978fb4		

History

#1 - 2013-10-29 08:50 AM - Robin V.

The problem still exists in QGis 2.0.1-3 available through OSGeo4W distribution. New style connection always return the same error:

```
TypeError: connect() failed between geometryChanged(QgsFeatureId,QgsGeometry) and unislot()
```

A possible workaround is to use old signal/slot code:

```
QObject.connect(my_vectlayer,SIGNAL("geometryChanged(QgsFeatureId, QgsGeometry&)"),mynicehandler)
```

instead of expected:

```
my_vectlayer.geometryChanged.connect(mynicehandler)
```

Full testcase:

```
from PyQt4.QtCore import QVariant, pyqtSlot, QObject, SIGNAL
from PyQt4.QtGui import QMessageBox
from qgis.core import QgsFeature

vl = QgsVectorLayer("Point", "temporary_points", "memory")
pr = vl.dataProvider()
pr.addAttributes( [ QgsField("name", QVariant.String), QgsField("age", QVariant.Int),QgsField("size", QVariant.Double) ] )
fet = QgsFeature()
fet.setGeometry( QgsGeometry.fromPoint(QgsPoint(10,10)) )
fet.setAttributes(["Johnny", 2, 0.3])
pr.addFeatures([fet])
QgsMapLayerRegistry.instance().addMapLayer(vl)
vl.updateExtents()

def mynicehandler(feats, geo):
    print "mynicehandler"
    QMessageBox.information(iface.mainWindow(), "mynicehandler", "Here I am")

# working
QObject.connect(vl,SIGNAL("geometryChanged(QgsFeatureId, QgsGeometry&)"),mynicehandler)

# not working
vl.geometryChanged.connect(mynicehandler)
```

Toying with pyqtSlot annotation didn't help in any manner:

```
@pyqtSlot()
@pyqtSlot(qint64, QgsGeometry)
@pyqtSlot(int, QgsGeometry)

QgsFeatureId = int
@pyqtSlot(QgsFeatureId, QgsGeometry)
@pyqtSlot('QgsFeatureId,QgsGeometry&')
@pyqtSlot('QgsFeatureId,const QgsGeometry&')
@pyqtSlot('QgsFeatureId,QgsGeometry')
```

#2 - 2013-10-29 09:07 AM - Matthias Kuhn

This very minimalistic example makes no trouble here (Linux). Manually changing geometries prints the message to the python console.

```
def geom_changed(fid,geom):
    print('Geometry of feature {} changed'.format(fid))

iface.activeLayer().geometryChanged.connect(geom_changed)
```

#3 - 2013-10-29 11:31 AM - Robin V.

Even your minimalistic example fails on windows (latest qgis 2.0.1-3 shipped with OSGeo4W):

```
Python 2.7.4 (default, Apr 6 2013, 19:54:46) [MSC v.1500 32 bit (Intel)] on HOMESTATION
## Type help(iface) for more info and list of methods.
def geom_changed(fid,geom):
    print('Geometry of feature {} changed'.format(fid))
iface.activeLayer().geometryChanged.connect(geom_changed)
Traceback (most recent call last):
  File "<input>", line 1, in <module>
TypeError: connect() failed between geometryChanged(QgsFeatureId,QgsGeometry) and unislot()
```

I don't know if the about box content is useful, but here it is:

```
QGIS version 2.0.1-Dufour
QGIS code revision ebebd3
Compiled against Qt 4.7.1
Running against Qt 4.7.1
Compiled against GDAL/OGR 1.10.1
Running against GDAL/OGR 1.10.1
Compiled against GEOS 3.3.8-CAPI-1.7.8
Running against GEOS 3.4.2-CAPI-1.8.2 r3921
PostgreSQL Client Version 8.3.10
Spatialite Version 4.1.1
QWT Version 5.2.1
PROJ.4 Version 480
QScintilla2 Version 2.6.2
```

I've seen bugs and reports around `qgsvectorlayer.sip`, but those seems to be solved for a year or so. The fact that "old school signal" syntax works let me think that there's a weird problem in PyQt4 and SIP black magic, but I'm not skillful enough to diagnose it better.

#4 - 2014-06-21 05:24 AM - Jürgen Fischer

- Subject changed from *Python bindings fail on 1.9-master for Windows* to *QgsVectorLayer.geomChanged not connectable on Windows*
- Category set to *Python plugins*

#5 - 2016-06-20 03:41 PM - Jürgen Fischer

- Resolution set to *worksforme*
- Status changed from *Open* to *Closed*

apparently meanwhile fixed.