

QGIS Application - Bug report #10999

Unknown exception while reshaping

2014-08-02 10:43 AM - Reinhard Schimek

Status:	Closed	
Priority:	Severe/Regression	
Assignee:	Luigi Pirelli	
Category:	Digitising	
Affected QGIS version:	master	Regression?: No
Operating System:	Ubuntu	Easy fix?: No
Pull Request or Patch applied:	No	Resolution:
Crashes QGIS or corrupts data:	No	Copied to github as #: 19341
Description		
To whom it concerns:		
Yesterday, when I tried to expand a polygon using the reshape feature in the advance digitized menu, and I received an error stating that an unknown exception has occurred. I went back to the same polygon using version 2.2 without an problems.		

Associated revisions

Revision 037138fa - 2014-10-22 06:34 AM - Martin Dobias

Fix #10999 (reshape tool throws GEOS exceptions)

Exceptions fixed earlier by @mkuhn in 37f1a1

Numerical problems found by @arnaud-morvan, corrected by @jef-n

History

#1 - 2014-08-05 03:53 AM - Giovanni Manghi

- *Category set to Digitising*

- *Status changed from Open to Feedback*

In general the reshape tool works fine in qgis 2.4 as it does in 2.2

If you a problematic vector/polygon that makes the tool fail in qgis 2.4 then this is needed to help the developers find the issue. Please attach a sample of the problematic data. Cheers!.

#2 - 2014-08-05 07:44 AM - Reinhard Schimek

- *File Erratzu_Grassland.zip added*

Hi,

I am confuse that you can no reproduce the error that is shown in attached photo. I created a new polygon layer in QGIS v 2.4 and then used the reshape tool which produced the error. I tried to reinstall QGIS v2.4 several times to see if the issue resolved itself, which it did not. I don't want to second guess you, but have you tried Window version.

If there an updated of v2.4, can you point me in the right direction... attached is the shape file that produce error that is shown in the pic above

thanks, Reinhard

#3 - 2014-08-21 03:58 AM - João Gaspar

Hi,

it's a bug that only occurs in scales below to 1:30 in QGIS Chugiak 64-bits

Tested in Windows 7 64-bits OsGeo Installer QGIS Chugiak 2.4 and MASTER (With shapefile and postgis layer)

Tested in Linux Mint 64-bits QGIS Chugiak 64-bits

Works fine at all scales in:

Tested in QGIS Valmiera 2.2 32-bits standalone

Tested in QGIS Valmiera 2.2 64-bits standalone

I only need to confirm if this bug occurs in QGIS Chugiak 32-bits, someone can try to zoom in an element in test scales 1:1, 1:15, 1:30 and 1:50, and try to do the reshape element? Please post the results, for developers understand if is a architecture problem or a version bug.

Regards

João

#4 - 2014-08-22 02:15 AM - Giovanni Manghi

- *Affected QGIS version changed from 2.4.0 to master*
- *OS version deleted (Vista x 64, 7)*
- *Status changed from Feedback to Open*
- *Priority changed from Normal to Severe/Regression*
- *Operating System deleted (Windows)*

The problem definitely occur when using the tool at very high scales. In my case it does not happen starting exactly from 1:30 but seems anyway near that point.

#5 - 2014-08-30 01:33 AM - Jürgen Fischer

- *OS version set to Vista x64 and 7*
- *Subject changed from Error in the Advance Digitized feature to Unknown exception while reshaping*
- *Operating System set to Windows*
- *Affected QGIS version changed from master to 2.4.0*

#6 - 2014-08-30 01:35 AM - Jürgen Fischer

- *OS version deleted (Vista x64 and 7)*
- *Affected QGIS version changed from 2.4.0 to master*
- *Operating System deleted (Windows)*

#7 - 2014-10-03 02:58 AM - Giovanni Manghi

- *Crashes QGIS or corrupts data changed from No to Yes*

discarding edits (after getting the exception) made my qgis crash.

#8 - 2014-10-04 04:25 AM - Luigi Pirelli

- Assignee set to Luigi Pirelli

#9 - 2014-10-04 05:39 AM - Arnaud Morvan

- Assignee deleted (Luigi Pirelli)

Should be due to excessive buffer : <https://github.com/qgis/QGIS/blob/master/src/core/qgsgeometry.cpp#L5245>

I think we should replace -11 by -1 or -2

#10 - 2014-10-04 05:40 AM - Arnaud Morvan

- Assignee set to Luigi Pirelli

#11 - 2014-10-04 06:53 AM - Luigi Pirelli

in my case exception append in this call:

<https://github.com/qgis/QGIS/blob/master/src/core/qgsgeometry.cpp#L4871>

```
newRing = GEOSGeom_createLinearRing_r( geosinit.ctx, newCoordSequence );
```

investigating the passed values

#12 - 2014-10-04 07:51 AM - Luigi Pirelli

geos message is:

src/core/qgsgeometry.cpp: 99: (throwGEOSException) GEOS exception: IllegalArgumentException: Points of LinearRing do not form a closed linestring

#13 - 2014-10-04 08:01 AM - Arnaud Morvan

I've resolve it, I will make a push request:

```
- double bufferDistance = pow( 1.0L, geomDigits( line2 ) - 11 );
```

```
+ double bufferDistance = pow( 0.1L, geomDigits( line2 ) - 2 );
```

#14 - 2014-10-04 08:12 AM - Arnaud Morvan

Pull request created : <https://github.com/qgis/QGIS/pull/1609>

#15 - 2014-10-04 08:20 AM - Luigi Pirelli

Arnaud Morvan wrote:

| Pull request created : <https://github.com/qgis/QGIS/pull/1609>

checking

#16 - 2014-10-04 08:36 AM - Luigi Pirelli

Arnaud Morvan wrote:

Pull request created : <https://github.com/qgis/QGIS/pull/1609>

the pull request doesn't fix the issue (checked with 1:24 scale) still generating the same GEOS exception

#17 - 2014-10-04 12:06 PM - Arnaud Morvan

We have reduced the problem by reducing the size of the buffer used in QgsGeometry::XXXContainedInLine functions.

The error may still occur depending on:

- the accuracy of the projection used,
- the distance between the object to modify and the nearest point.

So we caught the error, stop capturing and displaying a more specific message.

see the PR : <https://github.com/qgis/QGIS/pull/1609>

#18 - 2014-10-04 12:10 PM - Giovanni Manghi

Arnaud Morvan wrote:

We have reduced the problem by reducing the size of the buffer used in QgsGeometry::XXXContainedInLine functions.

The error may still occur depending on:

- the accuracy of the projection used,*
- the distance between the object to modify and the nearest point.*

So we caught the error, stop capturing and displaying a more specific message.

see the PR : <https://github.com/qgis/QGIS/pull/1609>

many thanks for the effort! cheers!

#19 - 2014-10-04 12:12 PM - Luigi Pirelli

- Pull Request or Patch supplied changed from No to Yes

Tested with Arnaud, and discussed with Giovanni Manghi, I think it is a good compromise to avoid heavy refactoring of the logic of the QgsGeometry::XXXContainedInLine functions.

#20 - 2014-10-21 09:43 PM - Martin Dobias

- Status changed from Open to Closed

Fixed in changeset commit:"037138fae5afb22ec11f5959052d20db978475da".

Files

qgis_error.jpg	1.03 MB	2014-08-02	Reinhard Schimek
Erratzu_Grassland.zip	136 KB	2014-08-05	Reinhard Schimek