

QGIS Application - Bug report #12634

Proj4 Exception in Measure tool leaves qgis in wait state (OTF On)

2015-04-23 04:54 AM - Sandro Santilli

Status:	Closed		
Priority:	Normal		
Assignee:	Sandro Santilli		
Category:			
Affected QGIS version:	2.8.1	Regression?:	No
Operating System:		Easy fix?:	No
Pull Request or Patch supplied:		Resolution:	fixed/implemented
Crashes QGIS or corrupts data:		Copied to github as #:	20749
Description			
<p>I've OnTheFly reprojection active. Map projection is EPSG:3003.</p> <p>Two layers visible, one also EPSG:3003, one EPSG:4326.</p> <p>If I open the "Measure tool" while the EPSG:4326 layer is selected, the first click on the map results in an error:</p> <pre>forward transform of (1.745309, -1.396266) PROJ.4: +proj=longlat +datum=WGS84 +no_defs +ellps=WGS84 +towgs84=0,0,0 +to +proj=tmerc +lat_0=0 +lon_0=9 +k=0.9996 +x_0=1500000 +y_0=0 +ellps=intl +towgs84=-104.1,-49.1,-9.9,0.971,-2.917,0.714,-11.68 +units=m +no_defs Error: latitude or longitude exceeded limits</pre> <p>Then, qgis remains with the "waiting circle" spinning.</p> <p>Note that selecting the <i>same</i> point with no layers selected works fine (but I need to restart to verify, as the previous error makes qgis stuck).</p> <p>This is with current 2.8 branch (2.8.1+).</p> <p>I hadn't checked with master or 2.6.</p>			
Related issues:			
Related to QGIS Application - Bug report # 11784: Measure Line behaviour whe...		Closed	2014-12-03

Associated revisions

Revision 0480cabf - 2015-04-24 10:25 AM - Sandro Santilli

Make QgsPointLocator discard geometries that cannot be projected

Fix #12634 (crash snapping in measure tool)

To be backported to 2.8 branch

Revision c9ec219f - 2015-04-24 10:27 AM - Sandro Santilli

Make QgsPointLocator discard geometries that cannot be projected

Fix #12634 (crash snapping in measure tool)

(cherry picked from commit 0480cabfc91353156c58285b5748ef1c83bbe5d7)

History

#1 - 2015-04-23 04:55 AM - Sandro Santilli

See also #11784

#2 - 2015-04-23 04:56 AM - Sandro Santilli

- Tag set to *measure*

#3 - 2015-04-23 07:21 AM - Sandro Santilli

2.6.1 is not affected

#4 - 2015-04-23 07:26 AM - Sandro Santilli

- Target version set to *Version 2.8.2*

master, as of commit:95a7fbc IS affected

#5 - 2015-04-23 07:50 AM - Sandro Santilli

It doesn't take 2 layers to reproduce. Single layer: world countries borders in EPSG:4326. Map projection in EPSG:3003, OTF projection, Measure tool and BOOM. Note: it still takes selecting the layer to trigger.

#6 - 2015-04-23 02:30 PM - Sandro Santilli

It is an unhandled exception taking down one thread:

```
src/app/qgsmeasuretool.cpp: 155: (canvasReleaseEvent) [4639ms] XXX release event got point 822, 188
src/providers/postgres/qgspostgresconn.cpp: 923: (openCursor) [2ms] Starting read-only transaction: 90306
src/core/qgscoordinatetransform.cpp: 716: (transformCoords) [18ms] Projection failed emitting invalid transform signal: forward transform of
(3.141572, -1.396270)
PROJ.4: +proj=longlat +datum=WGS84 +no_defs +ellps=WGS84 +towgs84=0,0,0 +to +proj=tmerc +lat_0=0 +lon_0=9 +k=0.9996
+x_0=1500000 +y_0=0 +ellps=intl +towgs84=-104.1,-49.1,-9.9,0.971,-2.917,0.714,-11.68 +units=m +no_defs
Error: latitude or longitude exceeded limits
src/core/qgscoordinatetransform.cpp: 720: (transformCoords) [0ms] throwing exception
src/core/qgscoordinatetransform.cpp: 367: (transformInPlace) [1ms] rethrowing exception
src/providers/postgres/qgspostgresconn.cpp: 941: (closeCursor) [6ms] Committing read-only transaction
src/core/qgsapplication.cpp: 257: (notify) [2ms] Caught unhandled QgsException: forward transform of
(3.141572, -1.396270)
PROJ.4: +proj=longlat +datum=WGS84 +no_defs +ellps=WGS84 +towgs84=0,0,0 +to +proj=tmerc +lat_0=0 +lon_0=9 +k=0.9996
+x_0=1500000 +y_0=0 +ellps=intl +towgs84=-104.1,-49.1,-9.9,0.971,-2.917,0.714,-11.68 +units=m +no_defs
Error: latitude or longitude exceeded limits
```

#7 - 2015-04-23 02:54 PM - Sandro Santilli

May be related to the refactoring conducted by Martin Dobias in commit:334d885b6d4757398d63771e1019fc4ed68c1a35

#8 - 2015-04-23 03:10 PM - Sandro Santilli

Catching the exception in QgsMeasureTool::snapPoint makes the measure tool functional, but still leaves a spinning waiting circle behind. It sounds like SnappingUtils::snapToMap is not exception safe.

#9 - 2015-04-24 01:15 AM - Sandro Santilli

I found the exception being thrown during creation of the snapping index. I don't think it is correct to index *all* geometries rather than only those that fall in the viewport, but that's another issue. For now I think it'll be ok just NOT TO SNAP against geometries that cannot be projected to map coordinate space (although I dunno if it makes sense at all to snap on map units rather than on pixel units...)

#10 - 2015-04-24 01:26 AM - Sandro Santilli

- *Status changed from Open to Closed*

Fixed in changeset commit:"0480cabfc91353156c58285b5748ef1c83bbe5d7".

#11 - 2015-04-24 01:29 AM - Sandro Santilli

- *Assignee set to Sandro Santilli*

- *Resolution set to fixed/implemented*

#12 - 2015-04-24 01:45 AM - Sandro Santilli

It would be useful to add tests in tests/src/core/testqgspointlocator.cpp, but I hadn't seen examples of changing settings in there. The case is presence of layers in which some geometries can not be projected to map projection, and snapping option requesting snap to "current layer" (being the offending one).