

QGIS Application - Bug report #14713

Return duplicated elements in SnapWithResultsWithinTolerances mode

2016-04-20 11:55 PM - Yun Lin

Status: Closed	
Priority: Normal	
Assignee:	
Category: Digitising	
Affected QGIS version: 2.12.3	Regression?: No
Operating System:	Easy fix?: No
Pull Request or Patch supplied: No	Resolution: end of life
Crashes QGIS or corrupts data: No	Copied to github as #: 22674

Description

I used QGIS recently and found out there is a certain situation where I got two same snapping results from QgsSnapper. And I debugged a little, and found out a bug in the following place:

File : src/core/qgssnapper.cpp

Function : int QgsSnapper::snapMapPoint(const QgsPoint& mapCoordPoint, QList<QgsSnappingResult>& snappingResult, const QList<QgsPoint>& excludePoints)

The code :

```
QgsSnappingResult returnResult = evallt.value();
for ( evallt = snappingResultList.begin(); evallt != snappingResultList.end(); ++evallt )
{
    if ( evallt.value().snappedVertexNr != -1 )
    {
        returnResult = evallt.value();
        snappingResultList.erase( evallt );
        break;
    }
}
//We return the preferred result
snappingResult.push_back( returnResult );
if ( mSnapMode == QgsSnapper::SnapWithOneResult )
{
    //return only a single result, nothing more to do
}
else if ( mSnapMode == QgsSnapper::SnapWithResultsForSamePosition )
{
    //take all snapping results within a certain tolerance because rounding differences may occur
    double tolerance = 0.000001;
    for ( evallt = snappingResultList.begin(); evallt != snappingResultList.end(); ++evallt )
    {
        if ( returnResult.snappedVertex.sqrDist( evallt.value().snappedVertex ) < tolerance*tolerance )
        {
            snappingResult.push_back( evallt.value() );
        }
    }
}
else //take all results
{
```

```
for ( evallt = snappingResultList.begin(); evallt != snappingResultList.end(); ++evallt )
{
    snappingResult.push_back( evallt.value() );
}
}
```

The problem occurs when var 'snappingResultList' has no elements satisfied the condition :

```
if ( evallt.value().snappedVertexNr != -1 )
```

And since the following code :

```
snappingResult.push_back( returnResult );
```

will push the first result(by QgsSnappingResult returnResult = evallt.value();) anyway, and

when we under 'SnapWithResultsWithinTolerances' snap mode, we will get two duplicated elements!

And since the problem is obvious, so no test case provided.

History

#1 - 2016-04-21 12:02 AM - Yun Lin

OK. It's also affected the mode 'SnapWithResultsForSamePosition' too

#2 - 2017-05-01 01:05 AM - Giovanni Manghi

- Easy fix? set to No

- Regression? set to No

#3 - 2019-03-09 03:08 PM - Giovanni Manghi

- Resolution set to end of life

- Status changed from Open to Closed

End of life notice: QGIS 2.18 LTR

Source:

<http://blog.qgis.org/2019/03/09/end-of-life-notice-qgis-2-18-ltr/>

QGIS 3.4 has recently become our new Long Term Release (LTR) version. This is a major step in our history – a long term release version based on the massive updates, library upgrades and improvements that we carried out in the course of the 2.x to 3x upgrade cycle.

We strongly encourage all users who are currently using QGIS 2.18 LTR as their preferred QGIS release to migrate to QGIS 3.4. This new LTR version will receive regular bugfixes for at least one year. It also includes hundreds of new functions, usability improvements, bugfixes, and other goodies. See the relevant changelogs for a good sampling of all the new features that have gone into version 3.4

Most plugins have been either migrated or incorporated into the core QGIS code base.

We strongly discourage the continued use of QGIS 2.18 LTR as it is now officially unsupported, which means we'll not provide any bug fix releases for it.

You should also note that we intend to close all bug tickets referring to the now obsolete LTR version. Original reporters will receive a notification of the ticket closure and are encouraged to check whether the issue persists in the new LTR, **in which case they should reopen the ticket.**

If you would like to better understand the QGIS release roadmap, check out our roadmap page! It outlines the schedule for upcoming releases and will help you plan your deployment of QGIS into an operational environment.

The development of QGIS 3.4 LTR has been made possible by the work of hundreds of volunteers, by the investments of companies, professionals, and administrations, and by continuous donations and financial support from many of you. We sincerely thank you all and encourage you to collaborate and support the project even more, for the long term improvement and sustainability of the QGIS project.