

# QGIS Application - Bug report #15829

## georeferencer - logical error during loadGCPs

2016-11-10 01:37 AM - Mark Johnson

<b>Status:</b> Closed	
<b>Priority:</b> High	
<b>Assignee:</b>	
<b>Category:</b> C++ plugins/Georeferencer	
<b>Affected QGIS version:</b> 2.18.0	<b>Regression?:</b> No
<b>Operating System:</b>	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b>	<b>Copied to github as #:</b> 23749

### Description

While working on the georeferencer, I have noticed a logical error during the function 'loadGCPs'.

When the .points file is being read, after reading **each point**, the function 'addPoint' is called.

'addPoint'

- creates a new QgsGeorefDataPoint
- creates a SIGNAL for the QgsGeorefDataPoint
- appends it to 'mPoints'

and then calls mGCPListWidget->setGCPList( &mPoints );

which will (re-)build the QTableView with any needed calculations.

In a case where there are 892 points

- 'setGCPList' is called 892 times and takes a good minute to load

When this is corrected to call 'setGCPList' **after** the building of 'mPoints' has been completed

- the loading takes a few seconds, since the QTableView is only being build once

Since the QTableView is not needed during the reading of the .points file

- 'setGCPList' should only be called once

### Associated revisions

**Revision 59a0e2fb - 2016-12-05 02:09 AM - Mark Johnson**

Fix #15829 georeferencer - resolve logical error during loadGCPs

### History

**#1 - 2016-11-10 08:17 AM - Mark Johnson**

This could then be something in the form of:

```
bool QgsGeorefPluginGui::loadGCPs( /*bool verbose*/ )
{
    QFile pointFile( mGCPpointsFileName );
    if ( !pointFile.open( QIODevice::ReadOnly ) )
    {
```

```

return false;
}

clearGCPData();

QTextStream points( &pointFile );
QString line = points.readLine();
while ( !points.atEnd() )
{
...
QgsPoint mapCoords( ls.at( 0 ).toDouble(), ls.at( 1 ).toDouble() ); // map x,y
QgsPoint pixelCoords( ls.at( 2 ).toDouble(), ls.at( 3 ).toDouble() ); // pixel x,y
QgsGeorefDataPoint* pnt;
if ( ls.count() == 5 )
{
bool enable = ls.at( 4 ).toInt();
pnt = new QgsGeorefDataPoint( mCanvas, miface->mapCanvas(), pixelCoords, mapCoords, enable);
}
else
pnt = new QgsGeorefDataPoint( mCanvas, miface->mapCanvas(), pixelCoords, mapCoords,true);

mPoints.append( pnt );
connect( mCanvas, SIGNAL( extentsChanged() ), pnt, SLOT( updateCoords() ) );
++;
}
mInitialPoints = mPoints;
mGCPsDirty = true;
}
if ( mGCPsDirty )
{
mGCPListWidget->setGCPList( &mPoints );
updateGeorefTransform();
mCanvas->refresh();
miface->mapCanvas()->refresh();
}

return true;
}

```

## #2 - 2016-11-10 03:43 PM - Nyal Dawson

Mark - this looks good! Could you submit this as a pull request to the QGIS Github repo (<https://github.com/qgis/QGIS>)? That's the usual approach to get changes like this merged in.

## #3 - 2016-11-11 09:18 AM - Mark Johnson

Done, see:

<https://github.com/qgis/QGIS/pull/3754>

please see the notes of the pull, since other files diff have been included.

**#4 - 2016-12-04 05:21 PM - Mark Johnson**

- *Status changed from Open to Closed*

Fixed in changeset commit:"59a0e2fb886fc0bcf620c860bba85d3863c46b73".