

QGIS Application - Bug report #18406

QGIS 3 is about 3 times slower when calculating attributes.

2018-03-10 04:53 PM - Borys Jurgiel

Status: Closed	
Priority: High	
Assignee:	
Category: Attribute table	
Affected QGIS version: 3.1(master)	Regression?: Yes
Operating System:	Easy fix?: No
Pull Request or Patch supplied: No	Resolution: not reproducible
Crashes QGIS or corrupts data: No	Copied to github as #: 26296
Description	
<p>When calculating attributes, QGIS 3.0 and 3.1 are about 3 times slower than 2.18</p> <p>Tested on a simple GeoPackage and non-geometry Shapefile by updating 1k, 5k and 10k features with a constant number (just updating, without saving changes).</p> <p>In all tests 2.18 needed about 1 sec for 1000 rows, while QGIS 3.0 & 3.1 about 3 sec. GDAL 2.2.3 in both cases.</p> <p>I was also told by a Windows user that he aborted updating 120k features (Shapefile) after 5 hours.</p>	

History

#1 - 2018-03-10 04:53 PM - Borys Jurgiel

- File deleted (qgis)

#2 - 2018-03-10 04:54 PM - Giovanni Manghi

- Priority changed from Normal to High

#3 - 2018-03-11 12:16 PM - Alessandro Pasotti

Hi Borys, would you be able to add a simple python test to help reproducing this?

#4 - 2018-03-11 12:49 PM - Borys Jurgiel

Sure, but later this week or even the next weekend :/ Completely out of resources at the moment.

#5 - 2018-03-16 09:41 PM - Borys Jurgiel

Alessandro, when started writing a simple script, I realized adding simple (geometryless and attributeless) features is yet slower... Or something is wrong with my build.

On my laptop:

QGIS 2.18 (from Buster) ~0.6s

QGIS 3.1 (compiled) ~2.1s usually; occasionally ~1.3s

```
import timeit
```

```
l = QgsVectorLayer("Point?crs=epsg:4326&field=x:integer", 'test', 'memory')
```

```
pr = l.dataProvider()
```

2025-07-13

```
def addFeature():  
    pr.addFeatures([QgsFeature()])  
  
timeit.timeit(addFeature, number=100000)
```

Could anyone confirm please (in the Python console)?

#6 - 2018-03-16 09:55 PM - Nyal Dawson

Borys - can you confirm that your build is a release build, not debug?

#7 - 2018-03-17 06:54 PM - Borys Jurgiel

- *Resolution set to not reproducible*
- *Status changed from Open to Closed*

Nyal - thanks, the build type was set to None and after setting to Release, it's a bit faster. QGIS 3 is still significantly slower than 2.18 when adding features from Python (over 2x for empty features and ~1,5x for features with a geometry and one attribute), however, it was a side problem and adding 100k features in 2-3 seconds isn't any tragedy I guess.

I can't reproduce the original problem (slow updating attributes by the Field Calculator). What was taking 10s in QGIS 2.18 and 30s in QGIS 3 now works immediately. I'm closing it until I have any new observations.