

QGIS Application - Bug report #20133

map composer scale error

2018-10-17 03:18 PM - Loïc Bouffard

Status: Closed	
Priority: Normal	
Assignee:	
Category: Map Composer/Printing	
Affected QGIS version: 2.18.24	Regression?: No
Operating System: win 10	Easy fix?: No
Pull Request or Patch supplied: No	Resolution:
Crashes QGIS or corrupts data: No	Copied to github as #: 27954

Description

hi,
I met a problem of precision of my map composer's scale on different version. Always not solve on v3.2.
After making many tests, I found this.

There is always an error on the composer scale, not big but several tenth of percent. The more my map is large, the less the error is. With round numbers, error is very small and sometimes null but when I increase manually map width (size and position pannel) and tend to the upper round number, error is reaching until I exceed it. At this time the scale map factor automatically change (in main property pannel) and error is again at its minimum. If I continue to increase width map, error is growing until I reach following round number, etc... And error is proportionnaly bigger for little map width.

For my tests:

map width	->	error
1 mm		0%
1,99 mm		99%
2 mm		0%
2,99 mm		50%
3,99 mm		33%
9,99 mm		10%
298,99 mm		0,337%
1000 mm		0,1%

My conclusion is that the error is due to the difference of format number between map size (float) and scale factor (integer).
Maybe it's wrong but the facts are here and it's a bit annoying when we need precision.

Associated revisions

Revision 0a662576 - 2018-10-19 10:18 PM - Nyal Dawson

[layouts] Show more precision in map scale for map item properties

Previously we would often round the scale displayed to the nearest integer. Now ensure that the map scale widget shows more decimals to allow verification that the actual map scale exactly matches the desired scale.

Fixes #20133

History

#1 - 2018-10-17 09:41 PM - Nyal Dawson

- Assignee deleted (Nyal Dawson)

#2 - 2018-10-17 09:42 PM - Nyal Dawson

- Status changed from Open to Feedback

Please test with 3.3

#3 - 2018-10-18 09:26 AM - Loïc Bouffard

- File scale2.jpg added

- File scale1.jpg added

I'm sorry it's the same.

Look at pictures linked (done with v3.3): scale bar locked at its left on 0 (line color blanked, just real scale bar visible), right side is adjusting when map width is changing; scale bar is showing 200 m with scale factor=1000 so my scale bar must be 200mm long.

On "scale 1" almost ok when map width = 220,00 mm(guide to 199,984mm), on "scale 2" right guide = 200,892 mm for a map width = 220,999 mm

#4 - 2018-10-18 01:55 PM - Giovanni Manghi

- Status changed from Feedback to Open

#5 - 2018-10-19 02:12 AM - Nyal Dawson

<https://github.com/qgis/QGIS/pull/8233> fixes this for me -- it's an issue with precision in the widget showing the current map scale, not in the scalebar/map extent calculation.

Note that for testing you need to ensure that you have NO ellipsoid set in your project properties, or the scale bar will utilise a more accurate ellipsoid based distance calculation but this won't exactly match the results you'd expect on purely cartesian scale calculation.

#6 - 2018-10-19 10:18 PM - Nyal Dawson

- % Done changed from 0 to 100

- Status changed from Open to Closed

Applied in changeset commit:qgis|0a662576a74a742e1a8936a6f8dcfcc5a33607ae.

Files

scale1.jpg	474 KB	2018-10-18	Loïc Bouffard
scale2.jpg	498 KB	2018-10-18	Loïc Bouffard