QGIS Application - Bug report #15337
Scale dependent layer visibility and print composer

2016-07-25 06:51 AM - Benjamin Fuenfer-Koenigstein

Status:	Closed		
Priority:	Normal		
Assignee:			
Category:	Map Composer/Printing		
Affected QGIS version:	2.16.0	**Regression?:**	No
Operating System:	Windows 7 Professional	**Easy fix?:**	No
Pull Request or Patch supplied:		**Resolution:**	worksforme
Crashes QGIS or corrupts data:		**Copied to github as #:**	23269

Description

Scale dependent layer visibility set in layer properties -> general or in style -> rule-based is not working properly in print composer. Layers that are visible in the map canvas are not visible in the print composer layout although same scale is used in canvas and composer. In pdf or image export, there is a similar issue as layers appear or do not appear in exported files differing from composer view. The problem seems to be related to bug report #9648 (closed), where problems like this where predicted by Mathieu Pellerin. As I think that scale dependent styling rules and visibility are very important in any complex map styling, it would be great if there is a solution found for the issue.

In the attached files, I described the behaviour concerning scale dependent visibility between canvas and composer in detail. Therefore I created a simple test project with print composer. From that project I created screenshots and pdf exports and documented the used scale thresholds in a word document. Further details are also given in the word document.

In case the test project seems to show some edgy scenarios, I describe a daily-work issue I experience with the bug: Lets say I want to style a topographic base map with buildings displayed depending on scale. From 1:1 to 1:1,000 I want buildings to show in light grey and 50% transparency. From 1:1,001 to 1:10,000 I want to show buildings in solid dark grey. From 1:10,001 buildings shouldn't show at all. Off course, the user expects to get the same view in map composer and in export files. But with the bug, you will have some strange effects when printing maps from composer with close to threshold scale.

It might also help to take a view to the earlier communication on QGIS-user-mailinglist here:
http://osgeo-org.1560.x6.nabble.com/Bug-in-Map-Composer-td5277723.html#a5277953.

Associated revisions

Revision 08a9bcba - 2017-06-09 01:11 AM - Nyall Dawson

Unify scale widgets API

Flip all scale based widgets to use scale denominators instead

of actual scales (ie 100.0 instead of 0.01 for 1:100).

This is done for consistency with the rest of the API, which

predominantly uses scale denominators. It also helps

precision loss as a result of multiple 1.0 / scale conversions

throughout the code.

Refs #15337

History

#1 - 2016-12-05 07:08 AM - Steve Lowman

A brief example involving two raster background layers. Layer A is set to be visible at scales from 1:10000 to 1:24999. Layer B should be visible from 1:24999 to 1:50000. The transition at 1:24999 works correctly in QGIS map canvas, but is quite different in Print Composer and different again in the exported file. The transition scale in Print Composer and the exported file varies depending on the size of the map on the page, for example whether the map fills the page or whether there is a margin at the page edge.

Context	Scale at which visible layer changes from Layer A to Layer B
Map canvas	24999
Exported A3 – map fills the page	25049
Exported A3 – map smaller than page	25061
Print composer on screen – A3 – map fills the page	25070
Print composer on screen – A3 – map smaller than page	25090

The dynamic zooming capability in map canvas that should be facilitated by scale dependent visibility is made unfeasible in practice by this problem.

The 'affected version' for this bug is set to be 2.16, but clearly it also affects the 2.14 LTR. I have not tested it in 2.18.

#2 - 2017-03-06 02:46 PM - Giovanni Manghi

- Priority changed from High to Normal

#3 - 2017-05-01 01:02 AM - Giovanni Manghi

- Easy fix? set to No

- Regression? set to No

#4 - 2017-12-19 01:15 AM - Nyall Dawson

- Status changed from Open to Feedback

- Description updated

Please retest using the new layouts engine in qgis 3.0 master.

#5 - 2018-02-22 02:44 PM - Giovanni Manghi

- Resolution set to worksforme

- Status changed from Feedback to Closed

Closing for lack of feedback, please reopen if necessary.

Files

qgis_scale_issue.zip	3.62 MB	2016-07-25	Benjamin Fuenfer-Koenigstein