

## QGIS Application - Bug report #16546

### exporting a raster layer with multiply blend mode with a dpi settings > 96 fails

2017-05-13 06:44 AM - Mathieu Pellerin - nIRV

<b>Status:</b>	Closed	
<b>Priority:</b>	High	
<b>Assignee:</b>	Mathieu Pellerin - nIRV	
<b>Category:</b>	Rasters	
<b>Affected QGIS version:</b>	master	<b>Regression?:</b> Yes
<b>Operating System:</b>	Ubuntu 16.04 LTS	<b>Easy fix?:</b> No
<b>Pull Request or Patch applied:</b>	Yes	<b>Resolution:</b> fixed/implemented
<b>Crashes QGIS or corrupts data:</b>	No	<b>Copied to github as #:</b> 24452
<b>Description</b>		
<p>Exporting a raster layer with a blend mode set to multiply fails to render properly for an output dpi that is greater than 96 dpi. The exported image results in a raster layer that blends only part of its full area (the part being equivalent to what the size would be in 96 dpi). It's a bit hard to explain, but the attached screenshot (300.jpg) should do a good job at showing the issue.</p>		
<b>Steps to reproduce</b>		
<ol style="list-style-type: none"><li>1. Open the raster-blending-bug test project (get it here: <a href="http://www.licadho-cambodia.org/raster-blending-bug.zip">http://www.licadho-cambodia.org/raster-blending-bug.zip</a>)</li><li>2. Save the canvas as an image, set the output dpi to 300</li><li>3. Open the exported image, take note of the issue :)</li></ol>		

#### Associated revisions

Revision 93c59f4e - 2017-05-13 05:19 PM - Mathieu Pellerin - nIRV

[raster] fix raster blending (fixes #16546)

#### History

#1 - 2017-05-13 09:50 AM - Mathieu Pellerin - nIRV

- File 96dpi-ok.jpg added

- File 300dpi-bad.jpg added

Here's a pair of exported images that shows the problem a bit better. It's clear that the 300dpi export has part of the image below the raster layer chopped off.

#2 - 2017-05-13 10:02 AM - Mathieu Pellerin - nIRV

- File 300dpi-semi.jpg added

Hmm, if I add some transparency to the multiply blend raster layer, it shows part of the underlying background.

So what seems to happen here is that the blend mode doesn't respect / account for the output dpi. That looks more and more like a Qt issue :/

#3 - 2017-05-13 02:51 PM - Mathieu Pellerin - nIRV

- Resolution set to up/downstream

- Status changed from Open to Closed

The area that's properly blended is a fixed 2000 px x 2000px, I'm closing this now concluding it's an issue with regards to the underlying Qt library.

**#4 - 2017-05-13 03:27 PM - Mathieu Pellerin - nIRV**

- Resolution deleted (up/downstream)
- Status changed from Closed to Reopened

Change of mind. 2000 x 2000 pixels happens to be this raster related with n height constant:

```
static const int DEFAULT_MAXIMUM_TILE_WIDTH = 2000;
static const int DEFAULT_MAXIMUM_TILE_HEIGHT = 2000;
```

That, and the fact that I can't see any problem with vector layers (eg a polygon covering the whole output area) points out at a problem in QGIS instead.

**#5 - 2017-05-13 04:30 PM - Mathieu Pellerin - nIRV**

- Pull Request or Patch supplied changed from No to Yes
- Priority changed from Normal to High
- Regression? changed from No to Yes
- Assignee set to Mathieu Pellerin - nIRV

Issue located, patch coming to github in the coming hour.

**#6 - 2017-05-13 05:19 PM - Mathieu Pellerin - nIRV**

- % Done changed from 0 to 100
- Status changed from Reopened to Closed

Applied in changeset commit:qgis|93c59f4e25cdfea7e703845891a907d6c1363ea8.

**#7 - 2017-05-15 04:43 PM - Giovanni Manghi**

- Resolution set to fixed/implemented

Files			
300.jpg	212 KB	2017-05-13	Mathieu Pellerin - nIRV
96dpi-ok.jpg	58.8 KB	2017-05-13	Mathieu Pellerin - nIRV
300dpi-bad.jpg	236 KB	2017-05-13	Mathieu Pellerin - nIRV
300dpi-semi.jpg	265 KB	2017-05-13	Mathieu Pellerin - nIRV