

## QGIS Application - Bug report #1533

### WMS raster transparency problem

2009-02-08 09:30 AM - John Tull

<b>Status:</b>	Closed	
<b>Priority:</b>	Low	
<b>Assignee:</b>	ersts -	
<b>Category:</b>	Map Canvas	
<b>Affected QGIS version:</b>		<b>Regression?:</b> No
<b>Operating System:</b>	OS X	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>		<b>Resolution:</b> fixed
<b>Crashes QGIS or corrupts data:</b>		<b>Copied to github as #:</b> 11593
<b>Description</b>		
<p>It appears that a WMS raster layer with transparency set in the layer properties will increase transparency with every screen refresh until it becomes invisible. To replicate, try the NED shaded relief layer from:</p> <p><a href="http://toposervices.cr.usgs.gov/wmsconnector/com.esri.wms.Esrimap/USGS_EDNA_geo?WMTVER=1.1.1&amp;#38;LAYERS=NED_2003_HADEDRELIEF&amp;#38;SRS=EPSG:4326&amp;#38;FORMAT=PNG&amp;#38;BGCOLOR=0xFF0000&amp;#38;TRANSPARENT=true&amp;#38;SERVICE=WMS&amp;#38;STYLES=&amp;#38;REQUEST=capabilities">http://toposervices.cr.usgs.gov/wmsconnector/com.esri.wms.Esrimap/USGS_EDNA_geo?WMTVER=1.1.1&amp;#38;LAYERS=NED_2003_HADEDRELIEF&amp;#38;SRS=EPSG:4326&amp;#38;FORMAT=PNG&amp;#38;BGCOLOR=0xFF0000&amp;#38;TRANSPARENT=true&amp;#38;SERVICE=WMS&amp;#38;STYLES=&amp;#38;REQUEST=capabilities</a></p>		

#### History

##### #1 - 2009-02-08 09:34 AM - John Tull

I realize now that the link can be shortened to:

[http://toposervices.cr.usgs.gov/wmsconnector/com.esri.wms.Esrimap/USGS\\_EDNA\\_geo?](http://toposervices.cr.usgs.gov/wmsconnector/com.esri.wms.Esrimap/USGS_EDNA_geo?)

##### #2 - 2009-02-09 10:04 AM - ersts -

- Status changed from Open to In Progress

This is a known issue. If you keep repeatedly hitting apply, the transparency it is additive. Likewise, if you decrease the transparency, it is still additive. However, if you pan the map canvas a little and cause a new fetch request, your layer will be at the correct/expected transparency level.

It seems to be a bug in Qt with setting the alpha value for an image more than once. Each apply causes a refresh and thus a reapplication of the alpha value. Too speed things up, the WMS provider does not request a new version of the image if the extent has not changed, it uses a cached version.

I am going to downgrade this a little, while it needs to get fixed but it does not cause a crash or a damage of data

##### #3 - 2009-02-09 05:25 PM - John Tull

Peter: Thanks for the detailed explanation. I did not see a bug filed, so added it this weekend. It sounds like I need to be filing bugs against Qt instead...

Also, it's good to know that forcing a wms refresh works around the problem.

##### #4 - 2009-02-09 07:54 PM - ersts -

I think it is more just that setAlphaChannel() does not work quite a expected. When you use that method it changes the image format to QImage::Format\_ARGB32\_Premultiplied

The image is stored using a premultiplied 32-bit ARGB format (0xAARRGGBB), i.e. the red, green, and blue channels are multiplied by the alpha component divided by 255. (If RR, GG, or BB has a higher value than the alpha channel, the results are undefined.) Certain operations (such as image composition using alpha blending) are faster using premultiplied ARGB32 than with plain ARGB32.

So I changed it around a little have had the WMS Provider store a QImage::Format\_ARGB32 then just adjusted the pixel values on each refresh. WMS images should be small enough to not see any performance hit.

The mods were made to the trunk r:10146. If you can take it for a spin and make sure it works more as expected. If it does I will close the ticket and add it to the Version-1\_0 branch for inclusion in the next release.

**#5 - 2009-02-10 09:59 AM - John Tull**

- *Status changed from In Progress to Closed*
- *Resolution set to fixed*

It does appear to be working now. Great! I closed the ticket.

**#6 - 2009-08-22 01:01 AM - Anonymous**

Milestone Version 1.0.1 deleted