# QGIS Application - Bug report #1533
## WMS raster transparency problem

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

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|---|---|---|---|---|
| **Status:** | Closed | | | |
| **Priority:** | Low | | | |
| **Assignee:** | ersts - | | | |
| **Category:** | Map Canvas | | | |
| **Affected QGIS version:** | | **Regression?:** | No | |
| **Operating System:** | OS X | **Easy fix?:** | No | |
| **Pull Request or Patch supplied:** | | **Resolution:** | fixed | |
| **Crashes QGIS or corrupts data:** | | **Copied to github as #:** | 11593 | |

**Description**

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:

http://toposervices.cr.usgs.gov/wmsconnector/com.esri.wms.Esrimap/USGS_EDNA_geo?WMTVER=1.1.1&#38;LAYERS=NED_2003_
HADEDRELIEF&#38;SRS=EPSG:4326&#38;FORMAT=PNG&#38;BGCOLOR=0xFF0000&#38;TRANSPARENT=true&#38;SERVICE=WMS&#
WMS&#38;STYLES=&#38;REQUEST=capabilities

**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?

**#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