QGIS Application - Bug report #1480
Strange behavior of set default qml style for indexed rasters

2009-01-07 01:56 PM - Maxim Dubinin

Status:	Closed		
Priority:	Low		
Assignee:	ersts -		
Category:	Rasters		
Affected QGIS version:		**Regression?:**	No
Operating System:	All	**Easy fix?:**	No
Pull Request or Patch supplied:		**Resolution:**	fixed
Crashes QGIS or corrupts data:		**Copied to github as #:**	11540

Description

- Load indexed raster

- Open properties

- Color table

- Change a couple of colors

- Save as default

- Ok

- Try to load the same raster or remove it and try to load it

Is it either not loaded (win) or crashes QGIS (linux)

tested on this raster: http://gis-lab.info/other/indexed-raster-topo1km.7z

History

#1 - 2009-01-08 07:37 AM - ersts -

- Status changed from Open to In Progress

I actually see several problems and I am surprised they have not come up before...

Part of the back trace:

    #0   0xb6d0a845 in GDALClose () from /usr/lib/libgdal1.5.0.so.1
    #3905 0xb7f48de7 in ~QgsRasterLayer (this=0x9a6e1d0) at
    /home/pete/devel/qgis/trunk-debug/src/core/raster/qgsrasterlayer.cpp:202
    #3906 0x080e988e in [[QgisApp]]::addRasterLayer (this=0x96b8f80, theRasterLayer=0x9a6e1d0) at
     /home/pete/devel/qgis/trunk-debug/src/app/qgisapp.cpp:5107
    #3907 0x080e9aca in [[QgisApp]]::addRasterLayers (this=0x96b8f80, theFileNameQStringList=@0xbfcb86b8,
     guiWarning=true) at /home/pete/devel/qgis/trunk-debug/src/app/qgisapp.cpp:5306
    #3908 0x080f2d19 in [[QgisApp]]::addRasterLayer (this=0x96b8f80) at
    /home/pete/devel/qgis/trunk-debug/src/app/qgisapp.cpp:5079

First issue is that the load default styles call is being made before a raster layer is actually loaded and set_blah_BandName( ) makes a call to validateBandName() which check to see if the band name actually exists, but since a raster layer has not yet be loaded all validation requests will fail and any/all bands will be set to "Not Set", but that is not what causes the crash.

Second problem and a more important one is that the load default styles is returning false, which makes the constructor abort mid way, again before a valid layer is loaded. The loading of the raster layer is where the "isValid" variable gets set, which is not initialized before hand. So when default styles kicks back

to the qgisapp.cpp around line 5107 is check to see if the raster layer is valid, if not the raster layer is delete. Because the variable is not initialized,sometime it is true and sometimes it is false which could explain why it sometimes crashes and sometimes does not. But the actual crash is the third problem.

The Third problem is that the in the deconstructor GDALClose is being called on the wrong pointer, which is not checked to see if it is null. This is what actually causes the crash, because if the raster layer has not been loaded, it going to be null.

Sorry for the long post, it is partially to help remember at a later date. I am sure there is going to be a quick release of small bug fixes shortly after v1.0.0 is released.

#2 - 2009-02-06 10:23 AM - John Tull

This seems to also occur if setting raster transparency only and saving as a default.

#3 - 2009-02-15 07:16 AM - ersts -

- Resolution set to fixed

- Status changed from In Progress to Closed

I will let this sit in trunk for a couple of days before shifting over to the Vesion-1_0 branch so a little more testing can be done

#4 - 2009-08-22 01:01 AM - Anonymous

Milestone Version 1.0.1 deleted