A Multiband image(e.g. landsat5,7,8) cannot be displayed in windows8.

Hi all.

I tried to use landsat5,7,8 and worldview2 satellite images as multiband images. But they couldn't be displayed well.

Sometimes, they can be displayed, sometimes, only white. If they are white, Pushing Refresh button many times, then they might be displayed.

(They were all .tif type and created pyramid layer of all levels.)

I tried them on windows7 pro too, they work every time.

This problem happened only on windows8.

I tested on Windows8.1 pro, 8GB and almost 100GB memory size, QGIS 2.10 and QGIS 2.8.2

Hi all.

I tried to use landsat5,7,8 and worldview2 satellite images as multiband images. But they couldn't be displayed well.

Sometimes, they can be displayed, sometimes, only white. If they are white, Pushing Refresh button many times, then they might be displayed.

(They were all .tif type and created pyramid layer of all levels.)

I tried them on windows7 pro too, they work every time.

This problem happened only on windows8.

I tested on Windows8.1 pro, 8GB and almost 100GB memory size, QGIS 2.10 and QGIS 2.8.2

## Related issues:
Related to QGIS Application - Bug report # 12522: Raster layers sometimes not... Closed 2015-04-06

## Associated revisions

**Revision cc505424 - 2016-01-20 07:05 AM - Nyall Dawson**

Hopefully fix raster layers not rendering on Windows

The copy constructor for QgsContrastEnhancement was using an uninitialized value for the mContrastEnhancementAlgorithm member, resulting in no contrast function being set in certain occasions.

Refs #13155

**Revision 44330203 - 2016-02-23 03:43 AM - Nyall Dawson**

Fix raster layers not rendering on Windows 8

The copy constructor for QgsContrastEnhancement was using an uninitialized value for the mContrastEnhancementAlgorithm member, resulting in no contrast function being set in certain occasions.
History

#1 - 2015-07-30 02:18 PM - Giovanni Manghi
- Category set to Rasters
- Status changed from Open to Feedback

Did you noticed the difference between Win 8 and Win 7 on the same machine (same hardware) or on different machines?

#2 - 2015-07-31 12:33 AM - Nobuhiko Yoshimura

Thank you for your response.

They were different machine.

I checked more than 5 machines for each(win8, win7).
All win7 was fine and All win8 has that problem.

#3 - 2015-08-05 01:29 AM - Nobuhiko Yoshimura

I changed to QGIS 32 bit in Windows8.
It works well.

This problem is only 64bit version.

#4 - 2015-08-05 11:43 AM - Adrian Klink

I had a similar problem and can add: the problem with Windows 8 and 64bit only applies to multiband raster layers when **contrast stretch** is active.
Without **contrast stretch**, Win 8 / 64bit works well. (But of course, contrast stretch is necessary in most cases). This might be important for locating the bug with Win 8 / 64bit. Please see here:

QGIS Application Bug report #13181: random (In-)visibility Issue when using several large multispectral raster layers

#5 - 2015-08-07 06:52 AM - Luca Ongaro

I have the same problem, the description of Adrian is correct.
I can add that it seems to be independent from image size and type.

#6 - 2015-10-08 03:53 AM - Adrian Klink

Nobuhiko Yoshimura wrote:

```
I changed to QGIS 32 bit in Windows8.
It works well.
```
Unluckily the issue can also happen with 32bit version in Windows 8, too. Changing from 64bit to 32bit QGIS only solves issue in part. It can still happen in seldom cases in 32bit, unlike the 64bit version where it happens very often. But it only happens when contrast stretch is enabled for the layer.

#7 - 2015-10-31 04:02 AM - Luca Ongaro

The issue persists in QGIS 2.12.

#8 - 2015-11-06 02:40 AM - Giovanni Manghi

- Affected QGIS version changed from 2.10.0 to 2.12.0

Can anyone attach/link sample data?

#9 - 2015-11-08 08:32 PM - Nobuhiko Yoshimura

Giovanni Manghi wrote:

Can anyone attach/link sample data?

I guess that you could check this issue by using full scene of landsat images.
(Landsat8 images are better to check)

Please download it from here.
https://libra.developmentseed.org/

Thanks!!

#10 - 2015-11-10 01:19 AM - Giovanni Manghi

I guess that you could check this issue by using full scene of landsat images.
(Landsat8 images are better to check)

Please download it from here.
https://libra.developmentseed.org/

nope, I cannot replicate the issue. Tested on both Windows and Linux.

#11 - 2015-11-11 11:53 AM - Adrian Klink

Giovanni Manghi wrote:

I guess that you could check this issue by using full scene of landsat images.
(Landsat8 images are better to check)
I have downloaded 3 Landsat sample sets from given link (LC81960242015185LGN00.tar.bz, LC81960242015217LGN00.tar.bz, LC81960242015233LGN00.tar.bz), created a .vrt layer stack from each set (raster -> misc -> create virtual raster (catalog) -> using option separate [gdalbuildvrt -separate]) then issue occurred after some retries enabling/disabling the .vrt layer stacks using color stretch to min max. Most likely issue will not occur if only one layer stack is loaded, but chances to see the issue increase when adding more layers (2-3 should be enough).

Used OS for testing: Windows 8.1 (64bit) with 8GB RAM - as far as I know, Linux and Windows 7 are not affected by issue, only Windows 8. (Never tried Windows 10)
Used QGIS for testing: 2.12.0 Lyon (64bit)

#12 - 2015-11-16 04:05 PM - Cédric Lardeux

Hello,

I can confirm that during remote sensing training in the computer room we use computer on windows 8 64bit (intel core i7 and 8Go of ram in case on this information is useful).
We use qgis 2.10 64bits and it's appear exactly as describe before when we have probably more than 5 or 6 bands.
Indeed based on the same dataset given below, when we split data to create vrt with only 3 bands it works well contrary to the full dataset.
With Spot 6 with 4 bands works well, with Radar data 3 bands in floats works well.

I remember that some people had the same problem with 2.8.
Just now the same for dev version 2.13.
I have tried to add option for compatibility mode as WINXPSP3 in bat file but not better

In comparison to my laptop on Ubuntu any problem. In my virtualbox with Win 7 64bits (for test) it work well. The same on standard laptop with win 7 64bits.
Edit: On Windows 10 also the bug

I hope you will find the problem because it's a limitation for windows user that want to use Qgis for remote sensing with OTB for example in the processing toolbox.

The dataset (clip of PanSharpen Landsat 8 in Brazil)
https://drive.google.com/file/d/0B3-2whKiftUjUWNoYmxtojUWc/view?usp=sharing

#13 - 2015-11-26 01:04 PM - Lammert Hilarides

I can confirm this behaviour on 64b versions of QGIS 2.8, 2.10 and 2.12 on Windows 8.1 and Windows 10, using multiband Landsat imagery.

#14 - 2015-12-20 03:43 AM - Giovanni Manghi
- Status changed from Feedback to Open

I think there is enough feedback to say that the issue is confirmed, at least on some Windows machines.
see also #12522

Please test with tomorrow's nightly builds and confirm whether the possible fix has worked

Nyall Dawson wrote:

Please test with tomorrow's nightly builds and confirm whether the possible fix has worked

Just downloaded today's nightly build of 2.13 (64bit, Win 8.1). It works for me. Still need some more testing, but on first try with same scene no issue occurred where it definitely would have happen with versions <= 2.12. Thanks! Good Job!

100% confident this is fixed now - I've thrown a lot of testing at it.

It works for me.
Thank you very much.