

QGIS Application - Bug report #6795

Possible Memory Leak in Map Rendering

2012-11-30 09:11 AM - Brent Kowal

Status: Closed	
Priority: Severe/Regression	
Assignee:	
Category: Map Canvas	
Affected QGIS version: master	Regression?: No
Operating System: All	Easy fix?: No
Pull Request or Patch supplied: No	Resolution:
Crashes QGIS or corrupts data: No	Copied to github as #: 15943

Description

There is a potential memory leak with the map canvas when rendering raster images. With a single raster loaded (TIF) each change to/update of the map canvas causes an increase in memory usage without it being cleared out. For this particular raster, about 1MB per refresh. QGIS Version: 1.9.0+git20121127+b9b943d~precise1

Potential valgrind output of the problem:

```
16099 6,010,724 (480 direct, 6,010,244 indirect) bytes in 10 blocks are definitely lost in loss record 17,982 of 17,984
16099 at 0x4C2B1C7: operator new(unsigned long) (in /usr/lib/valgrind/vgpreload_memcheck-amd64-linux.so)
16099 by 0x7E17EAA: QgsRasterDataProvider::block(int, QgsRectangle const&, int, int) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7E49F9E: QgsMultiBandColorRenderer::block(int, QgsRectangle const&, int, int) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7E413BB: QgsRasterResampleFilter::block(int, QgsRectangle const&, int, int) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7E21868: QgsRasterProjector::block(int, QgsRectangle const&, int, int) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7E26620: QgsRasterIterator::readNextRasterPart(int, int&, int&, QgsRasterBlock**, int&, int&) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7E3949C: QgsRasterDrawer::draw(QPainter*, QgsRasterViewPort*, QgsMapToPixel const*) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7E27794: QgsRasterLayer::draw(QPainter*, QgsRasterViewPort*, QgsMapToPixel const*) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7E30C3B: QgsRasterLayer::draw(QgsRenderContext&) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x7D11ECE: QgsMapRenderer::render(QPainter*, double*) (in /usr/lib/libqgis_core.so.1.9.0)
16099 by 0x82D8242: QgsMapCanvasMap::render() (in /usr/lib/libqgis_gui.so.1.9.0)
16099 by 0x82D30A3: QgsMapCanvas::refresh() (in /usr/lib/libqgis_gui.so.1.9.0)
```

Associated revisions

Revision 13d35ac3 - 2013-04-23 12:56 AM - Nathan Woodrow

Merge pull request #548 from minorua/raster_memory_leaks

Fix some memory leaks Fix #6795

History

#1 - 2013-03-14 01:07 AM - Nathan Woodrow

- Priority changed from Normal to High
- Operating System changed from Ubuntu 64-Bit to All
- OS version deleted (12.04 LTS)

I can replicate this on Windows XP, 7, 8. It can be a real issue if you are using a large raster layer. The memory usage can grow very quickly and never

comes down until QGIS crashes out.

#2 - 2013-03-14 01:18 AM - Giovanni Manghi

- *Crashes QGIS or corrupts data changed from No to Yes*

Would not be better to tag this "causes crash or corruption" tickets to be tagged as blockers and try to solve them before 2.0?

#3 - 2013-03-20 06:15 AM - Vincent Schut

I just want to confirm this bug. I'm digitizing from a large set of tiff's, and have to restart qgis from time to time to avoid a crash. Needless to say that this is highly annoying... I'm not good enough at C++ to create a patch, but if there's anything I can do to help investigate/solve this, please let me know.

Btw I'm on linux, and use qgis from master (frequently updated, building locally).

#4 - 2013-03-20 06:47 AM - Mathieu Pellerin - nIRV

Also seeing memory growth and ultimately crash on both win7 and linux running master builds.

#5 - 2013-04-10 04:10 PM - Nathan Woodrow

- *Priority changed from High to Severe/Regression*

#6 - 2013-04-22 03:00 AM - Minoru Akagi

- *File fix-some-memory-leaks.patch added*

Attached is a patch. It might not be perfect but large memory leaks should be fixed.

#7 - 2013-04-22 03:11 AM - Matthias Kuhn

I had a quick look at it. Looks proper at the first glance.

Can you make a pull request out of this?

It will be easier to review / merge for the people responsible for the raster functionality.

#8 - 2013-04-22 03:22 AM - Minoru Akagi

Matthias Kuhn wrote:

| *Can you make a pull request out of this?*

I've done it: <https://github.com/qgis/Quantum-GIS/pull/548>

#9 - 2013-04-22 03:56 PM - Nathan Woodrow

- *Status changed from Open to Closed*

Fixed in changeset commit:"13d35ac3f08453c47966141bf55144e1e52cab59".

Files

fix-some-memory-leaks.patch	2.62 KB	2013-04-22	Minoru Akagi
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