QGIS Application - Bug report #2714
Crash when resizing map window with Qt 4.6

2010-05-14 01:49 AM - Marco Hugentobler

Status:	Closed		
Priority:	Normal		
Assignee:			
Category:	Map Canvas		
Affected QGIS version:	master	**Regression?:**	No
Operating System:	All	**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	up-/downstream
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	12774

Description

Load a large vector file. Resize the main windows several time (or add the attribute table docked). Qgis crashes with Qt 4.6. With 4.5, there was no crash. Maybe this is because of concurrent vector access?

Related issues:

Related to QGIS Application - Bug report # 3771: White stripes when panning map	**Closed**	**2011-07-25**

History

#1 - 2010-05-14 02:42 AM - Martin Dobias

It seems it's caused by the processEvents() calls in [[QgsVectorLayer]] - the crash happens in Qt libraries. If I comment out the processEvents() calls, the segfault is gone.

My GSoC project should handle this once the rendering will be completely done in worker thread(s), but that will be too late for 1.5. So probably we should just disable these calls (they are already disabled on OS X).

#2 - 2010-05-14 03:04 AM - Marco Hugentobler

Looking forward for a clean solution with the worker thread.
For the short term (1.5), maybe it is possible to improve the protection for the render method?

Because disable the calls of processEvents would mean no incremental screen updates and no interruption of the rendering for 1.5? This would make handling of large datasets with QGIS very difficult.

#3 - 2010-05-15 10:48 AM - Jürgen Fischer

Replying to [comment:2 mhugent]:

> *Because disable the calls of processEvents would mean no incremental screen updates and no interruption of the rendering for 1.5? This would make handling of large datasets with QGIS very difficult.*

The WMS provider now has the same problem. It seems to be a bug in the new Qt Animation Framework as the Qt Bug report #6797 looks related.

Following change works around the problem:

```
Index: src/gui/qgsmapcanvas.cpp
===================================================================
```

```
--- src/gui/qgsmapcanvas.cpp    (revision 13491)
+++ src/gui/qgsmapcanvas.cpp    (working copy)
@@ -960,7 +960,11 @@
     updateCanvasItemPositions();

     updateScale();
+#if QT_VERSION >= 0x40600
+    QTimer::singleShot( 1, this, SLOT( refresh() ) );    // take rendering outside of resizeEvent()
+#else
     refresh();
+#endif
     emit extentsChanged();
   }
   isAlreadyIn = false;
```

#4 - 2010-05-16 07:45 AM - Jürgen Fischer

I applied the workaround in commit:f8b728bd (SVN r13501).

#5 - 2010-06-07 10:05 PM - Jürgen Fischer

workaround fixes the crash.

#6 - 2010-06-21 04:57 AM - marisn -

Replying to [comment:6 jef]:

> *workaround fixes the crash.*

No. It doesn't. Can't get backtrace, as running under GDB frezes whole KDE and core is truncated.

Resizing window with present vector layer still results in segfault. Can be trigerred also by moving around toolbars (cause canvas resize). And this isn't "minor: annoyance"

QGIS trunk 13763

Qt 4.6.3

Gentoo ~AMD64

#7 - 2010-12-14 05:33 AM - marisn -

Issue dissapears when I disable "Use render caching" in Options. Also - to make QGIS crash, one needs to issue multiple redraws - resize layer TOC or window and not simply minimize/maximize it. Seems to be some race condition as next redraw has to start before previous is complete.

QGIS trunk 14908

Gentoo ~AMD64

x11-libs/qt-core-4.7.1-r1:4
x11-libs/qt-dbus-4.7.1:4
x11-libs/qt-gui-4.7.1-r1:4
x11-libs/qt-multimedia-4.7.1:4
x11-libs/qt-opengl-4.7.1:4
x11-libs/qt-qt3support-4.7.1:4
x11-libs/qt-script-4.7.1-r1:4
x11-libs/qt-sql-4.7.1:4
x11-libs/qt-svg-4.7.1:4
x11-libs/qt-test-4.7.1:4
x11-libs/qt-webkit-4.7.1-r1:4
x11-libs/qt-xmlpatterns-4.7.1:4
x11-libs/qtscriptgenerator-0.1.0:0

#8 - 2011-01-14 03:26 PM - Jürgen Fischer

see also #2884.
commit:a3cfe6fb (SVN r15506) might fix this.

#9 - 2011-01-14 03:27 PM - Jürgen Fischer

Replying to [comment:11 jef]:

> *see also #2884.*
> *commit:a3cfe6fb (SVN r15506) might fix this.*

commit:185ec5db (SVN r15051) that is.

#10 - 2011-01-14 03:34 PM - Jürgen Fischer

see also #2339

#11 - 2011-01-14 03:48 PM - adbosco -

This looks a lot like the (possible) race condition that causes the crashes on changing symbology, reported on #3380, #3381 and #3391.

#12 - 2011-01-17 04:55 AM - Giovanni Manghi

Replying to [comment:11 jef]:

> *see also #2884.*
> *commit:a3cfe6fb (SVN r15506) might fix this.*

The crash when resizing the overview windows is indeed fixed. Unfortunately it seems that there is a secondary problem (let me know if you want me to

open a new ticket): resizing the overview windows is very slow, with both the "cache rendering" enabled or disabled. Just tested it with a couple of polygon/line layers (shapes, wfs).

#13 - 2011-01-17 04:59 AM - Giovanni Manghi

it doesn't seems to resize vertically at all.

> *The crash when resizing the overview windows is indeed fixed. Unfortunately it seems that there is a secondary problem (let me know if you want me to open a new ticket): resizing the overview windows is very slow, with both the "cache rendering" enabled or disabled. Just tested it with a couple of polygon/line layers (shapes, wfs).*

#14 - 2011-02-23 12:45 PM - Jürgen Fischer

- Status changed from Open to Closed
- Resolution set to fixed

should be fixed in commit:185ec5db (SVN r15051).

#15 - 2011-03-02 06:00 AM - Markus Neteler

- Status changed from Closed to Feedback
- Resolution deleted (fixed)

Having loaded two vector maps (LAEA, no reprojection on the fly), resizing the window leads to a crash. Logs of two events attached.

System: Linux north 2.6.33.7-desktop-2mnb #3905 SMP Mon Sep 20 18:19:20 UTC 2010 x86_64 x86_64 x86_64 GNU/Linux

Qt 4.6.2

If it was fixed on trunk, please backport to 1.6 since it is a major showstopper.

#16 - 2011-03-02 06:27 AM - Paolo Cavallini

I just got a crash resizing a window on commit:f5b1607e (SVN r15261), so I'm not so sure it is fully fixed in trunk.

#17 - 2011-03-02 06:45 AM - Paolo Cavallini

See also #2942, possibly duplicated

#18 - 2011-04-17 07:10 AM - Anne Ghisla

I can reproduce this bug with a huge shapefile - 37k points - and resize the main window from a corner twice. It happens anytime, disregarding render caching setting.

commit:f8e10a33 (SVN r15725), Qt 4.7.1

#19 - 2011-04-19 12:59 PM - Marco Hugentobler

- Status changed from Feedback to Closed

- Resolution set to fixed

Hopefully fixed with commit:f4d26d6 (tested with Qt 4.7 and 4.6.2 on Linux).

#20 - 2013-06-03 09:14 AM - Radim Blazek

- Assignee deleted (nobody -)

- Priority changed from Low to Severe/Regression

- Target version changed from Version 1.7.0 to Version 2.0.0

- Pull Request or Patch supplied set to No

- Crashes QGIS or corrupts data set to No

- Affected QGIS version set to master

- File resize-crash-backtrace.txt added

- Category changed from GUI to Map Canvas

- Status changed from Closed to Reopened

I have the same problem with current master with single WMS layer on Debian 5.0 and Qt 4.6.1, backtrace attached.

I am not sure if it is still the same problem, but Qt 4.6 suggests that it could be and other people just upgraded Qt to 4.7 and problem was "resolved".

#21 - 2013-06-21 12:42 AM - Matthias Kuhn

Could be related, based on the stack trace.

Can you try to enable backbuffering in Settings => Options => Rendering.

#22 - 2013-06-21 12:53 AM - Jürgen Fischer

Radim Blazek wrote:

> *I have the same problem with current master with single WMS layer on Debian 5.0 and Qt 4.6.1, backtrace attached.*
>
> *I am not sure if it is still the same problem, but Qt 4.6 suggests that it could be and other people just upgraded Qt to 4.7 and problem was "resolved".*

lenny is oldoldstable. And if upgrading to Qt 4.7 helps, this might be a Qt problem after all. Should that really be a blocker?

#23 - 2013-07-08 04:40 AM - Jürgen Fischer

- Priority changed from Severe/Regression to Normal

- Status changed from Reopened to Closed

- Resolution changed from fixed to up-/downstream

Jürgen Fischer wrote:

> *lenny is oldoldstable. And if upgrading to Qt 4.7 helps, this might be a Qt problem after all. Should that really be a blocker?*

Closing it again.

Files

qgis_canvas_resize_point_bt	40.3 KB	2010-12-14	marisn -
qgis_canvas_resize_line_bt	33.7 KB	2010-12-14	marisn -
qgis_1_6_branch_resize_crash1.txt	2.86 KB	2011-03-02	Markus Neteler
qgis_1_6_branch_resize_crash2.txt	2.86 KB	2011-03-02	Markus Neteler
resize-crash-backtrace.txt	5.1 KB	2013-06-03	Radim Blazek