

QGIS Application - Bug report #8102

Qgis Crash on exit

2013-06-18 09:45 AM - vinayan Parameswaran

Status:	Closed	
Priority:	Severe/Regression	
Assignee:		
Category:		
Affected QGIS version:	master	Regression?: No
Operating System:		Easy fix?: No
Pull Request or Patch supplied:		Resolution:
Crashes QGIS or corrupts data:		Copied to github as #: 16937
Description		
<p>The current master crashes when closing a project. here is the output..</p> <p>QGIS Version: commit:da0e4f3</p> <pre>Debug: src/gui/qgsmappcanvas.cpp: 1589: (mapToolDestroyed) maptool destroyed Debug: src/app/legend/qgslegend.cpp: 282: (removeAll) Entering. Debug: src/app/legend/qgslegend.cpp: 2387: (updateMapCanvasLayerSet) Entering. Debug: src/app/legend/qgslegend.cpp: 350: (removeLayers) Entering. Debug: src/app/legend/qgslegend.cpp: 2387: (updateMapCanvasLayerSet) Entering. Fatal: QGIS died on signal 11 Stacktrace (piped through c++filt): /home/vinayan/gitQgisBuild/output/bin/qgis(myMessageOutput(QtMsgType, char const*)+0x2dc)[0x549171] /usr/lib/x86_64-linux-gnu/libQtCore.so.4(qt_message_output(QtMsgType, char const*)+0x2e)[0x7fe1d51f741e] /usr/lib/x86_64-linux-gnu/libQtCore.so.4(+0x718bf)[0x7fe1d51f78bf] /usr/lib/x86_64-linux-gnu/libQtCore.so.4(qFatal(char const*, ...)+0x94)[0x7fe1d51f7a64] /home/vinayan/gitQgisBuild/output/bin/qgis(qgisCrash(int)+0x1f)[0x548e93] /lib/x86_64-linux-gnu/libc.so.6(+0x364a0)[0x7fe1d26e64a0] /usr/lib/libpython2.7.so.1.0(+0x151c4a)[0x7fe19e060c4a] /usr/lib/libpython2.7.so.1.0(PyGILState_Ensure+0x3c)[0x7fe19e060cec] /usr/lib/python2.7/dist-packages/PyQt4/QtCore.so(+0x181539)[0x7fe19da2e539] /usr/lib/python2.7/dist-packages/PyQt4/QtGui.so(+0x3692ac)[0x7fe19d32b2ac] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QApplication::palette(QWidget const*)+0x126)[0x7fe1d4682dc6] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidgetPrivate::naturalWidgetPalette(unsigned int) const+0x2d)[0x7fe1d46c6b0d] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidget::setPalette(QPalette const&)+0x35)[0x7fe1d46d1055] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(+0x501a46)[0x7fe1d49b9a46] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(+0x501cef)[0x7fe1d49b9cef] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidgetPrivate::setStyle_helper(QStyle*, bool, bool)+0xf6)[0x7fe1d46c5ea6] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidgetPrivate::inheritStyle()+0x142)[0x7fe1d46c5cb2] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidget::setParent(QWidget*, QFlags<Qt::WindowType>)+0x446)[0x7fe1d46d7306] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidget::setParent(QWidget*)+0x22)[0x7fe1d46d7892] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidgetAction::releaseWidget(QWidget*)+0xa0)[0x7fe1d46da410] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(+0x653af3)[0x7fe1d4b0baf3] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(+0x653ba9)[0x7fe1d4b0bba9] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidget::~~QWidget()+0x14f)[0x7fe1d46ce60f] /usr/lib/python2.7/dist-packages/PyQt4/QtGui.so(+0x2204a9)[0x7fe19d1e24a9] /usr/lib/x86_64-linux-gnu/libQtCore.so.4(QObjectPrivate::deleteChildren()+0x85)[0x7fe1d5313935] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidget::~~QWidget()+0x280)[0x7fe1d46ce740] /usr/lib/python2.7/dist-packages/PyQt4/QtGui.so(+0x360eed)[0x7fe19d322eed] /usr/lib/x86_64-linux-gnu/libQtCore.so.4(QObjectPrivate::deleteChildren()+0x85)[0x7fe1d5313935] /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QWidget::~~QWidget()+0x280)[0x7fe1d46ce740]</pre>		

```
/home/vinayan/gitQgisBuild/output/bin/qgis(QgisApp::~QgisApp()+0xa07)[0x55285f]
/home/vinayan/gitQgisBuild/output/bin/qgis(QgisApp::~QgisApp()+0x18)[0x552972]
/home/vinayan/gitQgisBuild/output/bin/qgis(main+0x2c17)[0x54be0a]
/lib/x86_64-linux-gnu/libc.so.6(__libc_start_main+0xed)[0x7fe1d26d176d]
/home/vinayan/gitQgisBuild/output/bin/qgis[0x548ba9]
The program has unexpectedly finished.
/home/vinayan/gitQgisBuild/output/bin/qgis exited with code 0
```

Associated revisions

Revision f3e08b52 - 2013-07-03 01:23 PM - Matthias Kuhn

Only cleanup python with newer sip versions (Fix #8102)

History

#1 - 2013-06-18 10:42 AM - Giovanni Manghi

- Target version set to Version 2.0.0
- Priority changed from High to Severe/Regression

I will test for this issue asap on both Linux and Windows. Did you added a layer using the browser? There was an issue when adding layers with the browser, but it should be fixed.

#2 - 2013-06-18 06:14 PM - vinayan Parameswaran

I did not add any layer. simply opening and closing QGIS would produce this. Tested on Ubuntu 12.04

#3 - 2013-06-19 02:58 AM - Matthias Kuhn

Do you have any plugins enabled? Especially an open plugin dock or window would explain something.

#4 - 2013-06-20 04:25 AM - Salvatore Larosa

Confirmed here also with the qgis --noplugins command

#5 - 2013-06-20 03:55 PM - Salvatore Larosa

here the stacktrace with gdb:

```
Program received signal SIGSEGV, Segmentation fault.
new_threadstate (init=1, interp=0x0) at ../Python/pystate.c:199
199 ../Python/pystate.c: File o directory non esistente.
(gdb) bt full
#0 new_threadstate (init=1, interp=0x0) at ../Python/pystate.c:199
    tstate = 0x2bb3fe0
#1 PyThreadState_New (interp=0x0) at ../Python/pystate.c:210
No locals.
```

```
#2 0x00007fffd1d8955c in PyGILState_Ensure () at ../Python/pystate.c:597
    current = <optimized out>
    tcur = 0x0
#3 0x00007fffd173ed56 in ?? () from /usr/lib/python2.7/dist-packages/PyQt4/QtCore.so
No symbol table info available.
#4 0x00007fffd0fa457e in ?? () from /usr/lib/python2.7/dist-packages/PyQt4/QtGui.so
No symbol table info available.
#5 0x00007ffff288ec27 in QApplication::palette(QWidget const*) ()
    from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
No symbol table info available.
#6 0x00007ffff28cfe0d in QWidgetPrivate::naturalWidgetPalette(unsigned int) const ()
    from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
No symbol table info available.
#7 0x00007ffff28dbb95 in QWidget::setPalette(QPalette const&) ()
    from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
No symbol table info available.
#8 0x00007ffff2bb237d in ?? () from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
```

#6 - 2013-06-20 04:02 PM - Salvatore Larosa

Commenting out the lines 799 and 800 in qgisapp.cpp does not produce the crash.

#7 - 2013-06-20 11:32 PM - Matthias Kuhn

We can comment them again, that's not a big deal, the OS will clean up (at least the memory) on app exit anyway.

But I wonder, what is really causing that problem, because here python / pyqt cleanup and exit nice and clean.

What's left of python when running with --noplugins?

Only the python console and part of the plugin manager?

#8 - 2013-06-24 04:37 AM - Giovanni Manghi

Matthias Kuhn wrote:

We can comment them again, that's not a big deal, the OS will clean up (at least the memory) on app exit anyway.

But I wonder, what is really causing that problem, because here python / pyqt cleanup and exit nice and clean.

What's left of python when running with --noplugins?

Only the python console and part of the plugin manager?

Today I'm getting a lot of

gio@sibirica ~ \$ qgis

Warning: loading of qt translation failed [/usr/share/qt4/translations/qt_en_US]

Fatal: QGIS died on signal 11

Stacktrace (piped through c++filt):

Segmentation fault

when clicking on "new project"

#9 - 2013-06-24 04:46 AM - Matthias Kuhn

This bug only concerns a crash when exiting qgis.

#10 - 2013-06-24 04:48 AM - Giovanni Manghi

Matthias Kuhn wrote:

This bug only concerns a crash when exiting qgis.

Hi Matthias, right. I got it also on exit. Cheers!

#11 - 2013-06-27 12:49 AM - Borys Jurgiel

Matthias Kuhn wrote:

*What's left of python when running with --noplugins?
Only the python console and part of the plugin manager?*

The Plugin Manager is fully loaded, so you can disable/uninstall/update crashing plugins.

#12 - 2013-06-27 01:23 PM - Borys Jurgiel

In my case the crash only happens if Value Tool is loaded (or was loaded in the session, even if I unload it prior to closing). Can anybody confirm? See #8184

#13 - 2013-06-27 03:17 PM - Salvatore Larosa

Borys Jurgiel wrote:

*In my case the crash only happens if Value Tool is loaded (or was loaded in the session, even if I unload it prior to closing). Can anybody confirm?
See #8184*

Hi Borys,

here the crash is not dependent from plugins (I guess) as I run with --noplugins command.

I did try by installing Value Tool plugin (it was not installed yet on my machine) and I got the same stacktrace.

out of curiosity, which Qt version?

#14 - 2013-06-27 03:50 PM - Borys Jurgiel

Salvatore Larosa wrote:

| *here the crash is not dependent from plugins (I guess) as I run with --noplugins command.*

Ok, so it's something another.

| *ouf of curiosity, which Qt version?*

Qt 4.8.4 + PyQt 4.10.1 @ Debian Jessie.

#15 - 2013-06-30 09:40 AM - Pedro Venâncio

Hi,

Here the problem is also not dependent of plugins.

QGIS compiled against Qt 4.8.1 and Python-Qt 4.9.1.

#16 - 2013-07-01 02:39 AM - Matthias Kuhn

- Status changed from Open to Feedback

Would you be able to debug the crash in gdb and then enter "py-bt" in the gdb console?

I hope this gives valuable additional information about this problem.

#17 - 2013-07-01 02:58 AM - Salvatore Larosa

Matthias Kuhn wrote:

| *Would you be able to debug the crash in gdb and then enter "py-bt" in the gdb console?*
| *I hope this gives valuable additional information about this problem.*

I already had tried that but unfortunately it doesn't give any additional info.

#18 - 2013-07-02 07:31 AM - Matthias Kuhn

I tracked down the issue in the ZoomToCoordinates plugin:

The issue is related to creating a QMainWindow in *init* (Line 57) and then reparenting this window to *iface.mainWindow()* (Line 59), if instead ownership remains with the plugin (pass *None* instead of *iface.mainWindow()* to *setParent()*) there is no crash.

That it is in *init* is important, because this gets also executed with --noparent and if the plugin is disabled.

Therefore a question to the plugin department (borys?):

Why does this code need to be executed (I see it's executed once and destroyed almost immediately again when loading the plugins)?
If this code would not need to be executed, it would be much easier to find buggy plugins instead of suspecting QGIS of being responsible for the crash.
I would vote for closing this bug as soon as the QGIS application does not crash any more because of a buggy but disabled plugin.

Concerning this particular issue. There seems to be an ownership issue with PyQt, such that certain widgets get deleted but references to these remain present in other widgets. I guess, that this issue has been resolved in a recent version of PyQt or depend on a certain configuration because it does not happen on every system. So I don't see, what we could do from the QGIS side. (This paragraph is based on assumptions, I would be happy to be corrected by somebody with a better understanding of this problem)

#19 - 2013-07-03 01:47 AM - Matthias Kuhn

Also interesting:

When the Python interpreter exits it garbage collects those objects that it can.
This means that any corresponding C++ instances and C structures owned by Python are destroyed.
Unfortunately this happens in an unpredictable order and so can cause memory faults within the wrapped library.
Calling this function with a value of False disables the automatic destruction of C++ instances and C structures.

Source: http://pyqt.sourceforge.net/Docs/sip4/python_api.html?highlight=destroyonexit#sip.setdestroyonexit
sip.setdestroyonexit is unfortunately only available starting from SIP 4.14.2
Current OSGeo4W version is 4.12.1

#20 - 2013-07-03 04:04 AM - Matthias Kuhn

One of the following package updates solves the problem, if I downgrade I get the crash also:

PyQt4-4.9.5 => PyQt4-4.10.1
sip-4.14.1 => sip-4.14.6

#21 - 2013-07-03 04:24 AM - Matthias Kuhn

- Status changed from Feedback to Closed

Fixed in changeset commit:"f3e08b521f8053056bb7ac6bdc46582e0a2c05a".

#22 - 2013-07-03 02:39 PM - Pedro Venâncio

Hi Matthias,

I no longer have the crash. I think I can confirm the fix!

Thank you very much!