**Description**

I was testing a project I have and qgis (master) froze.

strace shows it hanging in: futex(0x45b791c, FUTEX_WAIT_PRIVATE, 1, NULL

```
gdb shows this backtrace:
```

```
(gdb) bt
  #0  pthread_cond_wait@GLIBC_2.3.2 () at ../nptl/sysdeps/unix/sysv/linux/x86_64/pthread_cond_wait.S:185
  #1  0x000007cf6914ae816 in QWaitCondition::wait(QMutex*, unsigned long) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #2  0x000007cf6914b8e4 in QFutureInterfaceBase::waitForFinished() () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #3  0x000007cf692b60daf in QgsMapRendererParallelJob::cancel (this=0x522b360) at /usr/src/qgis/qgis/src/core/qgsmaprendererparalleljob.cpp:92
 /usr/src/qgis/qgis/src/core/qgsmaprendererparalleljob.cpp:92
  #4  0x000007cf692224e9 in QgsMapCanvas::stopRendering (this=0x1f3c3c0) at /usr/src/qgis/qgis/src/gui/qgsmapcanvas.cpp:770
 /usr/src/qgis/qgis/src/gui/qgsmapcanvas.cpp:770
  #5  0x000007cf692223c2 in QgsMapCanvas::refreshMap (this=0x1f3c3c0) at /usr/src/qgis/qgis/src/gui/qgsmapcanvas.cpp:649
 /usr/src/qgis/qgis/src/gui/qgsmapcanvas.cpp:649
  #6  0x000007cf6922b4b14 in QgsMapCanvas::qt_static_metacall (_o=0x1f3c3c0, _c=QMetaObject::InvokeMetaMethod, _id=40, _a=0x7fff919dca60) at /usr/src/qgis/build/src/gui/moc_qgsmapcanvas.cxx:166
/usr/src/qgis/build/src/gui/moc_qgsmapcanvas.cxx:166
  #7  0x000007cf6915487a in QMetaObject::activate(QObject*, QMetaObject const*, int, void**) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #8  0x000007cf6915cd7a0 in ?? () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #9  0x000007cf69158a31 in QObjectId::event(QEvent*) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #10 0x000007cf690949e2c in QApplicationPrivate::notify_helper(QObject*, QEvent*) () from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
 /usr/lib/x86_64-linux-gnu/libQtGui.so.4
  #11 0x000007cf6909504a0 in QApplication::notify (this=0x7fff919dd910, receiver=0x45c7b80, event=0x7fff919dced0) at /usr/src/qgis/qgis/src/core/qgsapplication.cpp:252
/usr/src/qgis/qgis/src/core/qgsapplication.cpp:252
  #12 0x000007cf692a5b5cb in QgsApplication::notify (this=0x7fff919dd910, receiver=0x45c7b80, event=0x7fff919dced0) at /usr/src/qgis/qgis/src/core/qgsapplication.cpp:252
 /usr/src/qgis/qgis/src/core/qgsapplication.cpp:252
  #13 0x000007cf691b04dd in QCOREApplication::notifyInternal(QObject*, QEvent*) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #14 0x000007cf6915e0323 in ?? () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #15 0x000007cf6915d5f1 in ?? () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #16 0x000007cf68c2b3a6e04 in g_main_context_dispatch () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
 /lib/x86_64-linux-gnu/libglib-2.0.so.0
  #17 0x000007cf68c26b048 in ?? () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
 /lib/x86_64-linux-gnu/libglib-2.0.so.0
  #18 0x000007cf68c26b00ec in g_main_context_iteration () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
 /lib/x86_64-linux-gnu/libglib-2.0.so.0
  #19 0x000007cf69157d7a1 in QEVENTDispatcherGl::processEvents(QFlags<QEventLoop::ProcessEventsFlag>) () from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
 /usr/lib/x86_64-linux-gnu/libQtGui.so.4
  #20 0x000007cf6909ebbb6 in ?? () from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
 /usr/lib/x86_64-linux-gnu/libQtGui.so.4
  #21 0x000007cf6915af0af in QEVENTLoop::processEvents(QFlags<QEVENTLoop::ProcessEventsFlag>) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
  #22 0x000007cf6915af3a5 in QEVENTLoop::exec(QFlags<QEVENTLoop::ProcessEventsFlag>) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
 /usr/lib/x86_64-linux-gnu/libQtCore.so.4
```

2021-06-12

```
All I did to trigger it was changing visibility of a couple of layers and navigate. I'm tagging it as "Causes crash or corruption" as you can't exit from a deadlock w/out killing the process.

**History**

#1 - 2015-02-19 04:32 AM - Martin Dobias

What about the worker threads - what were they waiting for?

#2 - 2015-02-19 04:51 AM - Jürgen Fischer

Martin Dobias wrote:

> What about the worker threads - what were they waiting for?

Good question :)  

<strk> master branch  
<strk> Process 10380 attached  
<strk> futex(0x45b791c, FUTEX_WAIT_PRIVATE, 1, NULL  
<strk> ^^^ that's coming from strace, it's stuck there, deadlock !  
<strk> strk: where?  
<strk> jef: #12228  
<sigq> Title: QGIS Application - Bug report #12228: deadlock from parallel rendering - QGIS Issue Tracking (at hub.qgis.org)  
<strk> jef: strk: and the other threads?  
<strk> jef: I killed the process now  
<strk> jef: but nothing was coming out from strace, so I guess all were quiet  
<strk> helgrind tool of valgrind might help

#3 - 2015-02-19 04:57 AM - Jürgen Fischer

BTW thread apply all bt in gdb produces backtraces for all threads.

#4 - 2015-02-19 04:59 AM - Jürgen Fischer

- Tag set to mtr

#5 - 2015-05-10 01:03 AM - Giovanni Manghi

- Target version changed from Version 2.8 to Version 2.8.2

#6 - 2015-05-14 03:02 AM - Giovanni Manghi

- Target version changed from Version 2.8.2 to Version 2.10

#7 - 2015-05-27 11:33 PM - Andreas Neumann
Strk - what are the data sources? Postgis, perhaps?

I have similar issues with Postgis connections and MTR if my number of cores for rendering goes beyond 2-3. If I limit the nr of cores to 2, the problem disappears.

I would really like to see a fix for this. I have not created a bug report, because it was very hard to reproduce and apparently shows up on my Windows version more often than on Linux. But that is perhaps because on Linux my Postgis connections are local, whereas on Windows the connections are remote.

#8 - 2015-05-28 12:59 AM - Giovanni Manghi
- Target version changed from Version 2.10 to Future Release - High Priority

Hi Andreas,

I would really like to see a fix for this. I have not created a bug report, because it was very hard to reproduce and apparently shows up on my Windows version more often than on Linux. But that is perhaps because on Linux my Postgis connections are local, whereas on Windows the connections are remote.

It seems there are different tickets with issues apparently caused by mtr, them main seems to be this #11141

#9 - 2015-05-28 02:27 AM - Sandro Santilli
I don't remember what the datasource was. Yes, debugging threading issues is an hell (thus the name of the valgrind tool, I guess)

#10 - 2015-05-28 03:14 AM - Jürgen Fischer
- Status changed from Open to Feedback

not reproducible

#11 - 2015-06-14 01:46 AM - Giovanni Manghi
- Status changed from Feedback to Closed
- Resolution set to not reproducible

closing for lack of feedback.

#12 - 2015-07-31 03:19 AM - Sandro Santilli
- Status changed from Closed to Reopened
- Resolution deleted (not reproducible)

I've just reproduced this, in 2.8.3 (lacking an entry in the "Affected version" pull-down menu).

What I did:
1) Load the POSTGIS_SRC/topology/test/invalid_topology.sql script into a topology-enabled PostgreSQL database
2) Load the "invalid_topology" schema in qgis via DBManager (select the schema, pick Topology Viewer from the "schema" menu)
What I got: a blocked GUI

The backtrace:

(gdb) bt
#0  pthread_cond_wait@@GLIBC_2.3.2 () at ../nptl/sysdeps/unix/sysv/linux/x86_64/pthread_cond_wait.S:185
#1  0x00007f8953c8186 in QWaitCondition::wait(QMutex*, unsigned long) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#2  0x00007f8953b38e4 in QFutureInterfaceBase::waitForFinished() () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#3  0x00007f895658a281 in QgsMapRendererParallelJob::cancel (this=0x57c2ba0) at /usr/src/qgis/qgis-2.8/src/core/qgsmaprendererparalleljob.cpp:92
#4  0x00007f8954d4d629 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#5  0x00007f8954d505d in QgsMapCanvas::refreshMap (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:657

#13 - 2015-07-31 03:23 AM - Sandro Santilli

wioth thread apply all bt
, as suggested by Jurgen:

(gdb) thread apply all bt

Thread 13 (Thread 0x7f89394ee700 (LWP 24245)):
#0  0x00007f895df12d in poll () at /sysdeps/unix/syscall-template.S:81
#1  0x00007f895486ed18f64 in ?? () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
#2  0x00007f895486ed230a in g_main_loop_run () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
#3  0x00007f895486ed336 in ?? () from /lib/x86_64-linux-gnu/libgio-2.0.so.0
#4  0x00007f895486e605 in ?? () from /lib/x86_64-linux-gnu/libgio-2.0.so.0
#5  0x00007f895486e38128 in start_thread (arg=0x7f89394ee700) at pthread_create.c:312
#6  0x00007f895486e47d in clone () at /sysdeps/unix/sysv/linux/x86_64/clone.S:111

Thread 12 (Thread 0x7f8938ced700 (LWP 24246)):
#0  0x00007f895486ef12d in poll () at /sysdeps/unix/syscall-template.S:81
#1  0x00007f895486ed18f64 in ?? () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
#2  0x00007f895486ed230a in g_main_loop_run () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
#3  0x00007f895486ed336 in ?? () from /lib/x86_64-linux-gnu/lib gio-2.0.so.0
#4  0x00007f895486e605 in ?? () from /lib/x86_64-linux-gnu/lib gio-2.0.so.0
#5  0x00007f895486e38128 in start_thread (arg=0x7f8938ced700) at pthread_create.c:312
#6  0x00007f895486e47d in clone () at /sysdeps/unix/sysv/linux/x86_64/clone.S:111

Thread 11 (Thread 0x7f8931333700 (LWP 24253)):
#0  pthread_cond_wait@@GLIBC_2.3.2 () at ../nptl/sysdeps/unix/sysv/linux/x86_64/pthread_cond_wait.S:185
#1  0x00007f8958533181d in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#2  0x00007f89585331859 in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#3  0x00007f895853318128 in start_thread (arg=0x7f8931333700) at pthread_create.c:312
#4  0x00007f895853347d in clone () at /sysdeps/unix/sysv/linux/x86_64/clone.S:111

Thread 10 (Thread 0x7f8925296700 (LWP 24254)):
#0  pthread_cond_wait@@GLIBC_2.3.2 () at ../nptl/sysdeps/unix/sysv/linux/x86_64/pthread_cond_wait.S:185
#1  0x00007f8958507220d in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#2  0x00007f8958506f66 in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#3  0x00007f895850723182 in start_thread (arg=0x7f8925296700) at pthread_create.c:312
#4  0x00007f8958506c7d in clone () at /sysdeps/unix/sysv/linux/x86_64/clone.S:111

Thread 9 (Thread 0x7f8933ff700 (LWP 24256)):
#0  0x00007f895486ef12d in poll () at /sysdeps/unix/syscall-template.S:81
Thread 1 (Thread 0x7f8595000800 (LWP 242444)):

0 pthread_cond_wait@GLIBC_2.3.2 () at /usr/lib/x86_64-linux-gnu/libpthread.so.0
1 0x0000000000000000 in start_thread (arg=0x7f88af7fe700) at pthread_create.c:312
2 0x0000000000000000 in clone () at ../sysdeps/unix/sysv/linux/x86_64/clone.S:111
3 0x0000007895568a281 in QgsMapRendererParallelJob::cancel (this=0x57c2ba0) at /usr/src/qgis/2.8/src/core/qgsmaprendererparalleljob.cpp:92
4 0x0000000000000000 in QWaitCondition::wait(QMutex*, unsigned long) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
5 0x0000000000000000 in QFutureInterfaceBase::waitForFinished() () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
6 0x0000000000000000 in QgsMapCanvas::qt_static_metacall (_o=0x26c7680, _c=QMetaObject::InvokeMetaMethod, _id=41, _a=0x7fff26747150)
7 at /usr/src/qgis/2.8/src/core/qgsmapcanvas.cpp:168
8 0x000000789540e7b7a in QMutex::tryLock() () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
9 0x000000789540e6a31 in QObject::event(QEvent*) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
10 0x0000007895346e2c in QApplicationPrivate::notify_helper(QObject*, QEvent*) () from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
11 0x0000007895346e4a0 in QApplication::notify(QObject*, QEvent*) () from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
12 0x0000007895558216d in QGisApplication::notify (this=0x7fff26748000, receiver=0x5842910, event=0x7fff267475c0)

- 2015-07-31 03:26 AM - Sandro Santilli
  - Target version deleted (Future Release - High Priority)
  - Affected QGIS version changed from 2.6.0 to 2.8.2

- 2015-07-31 03:26 AM - Sandro Santilli
  - File invalid_topo.sql.gz added

Could it be the lack of exception handling in Thread 2?

```
msg=0x7f88a402a718 "\"GEOS exception: IllegalArgumentException: point array must contain 0 or >1 elements\""
```

- 2015-07-31 05:48 AM - Sandro Santilli
  - File invalid_topo.sql.gz added

#14 - 2015-07-31 03:26 AM - Sandro Santilli
- Target version deleted (Future Release - High Priority)
- Affected QGIS version changed from 2.6.0 to 2.8.2

#15 - 2015-07-31 03:26 AM - Sandro Santilli

Could it be the lack of exception handling in Thread 2?

```
msg=0x7f88a402a718 "\"GEOS exception: IllegalArgumentException: point array must contain 0 or >1 elements\""
```

#16 - 2015-07-31 05:48 AM - Sandro Santilli
- File invalid_topo.sql.gz added
I'm attaching a dump to reproduce this. I could reproduce it just fine with 2.8. Master doesn't seem to have the problem.

#17 - 2015-07-31 06:23 AM - Giovanni Manghi
- Affected QGIS version changed from 2.8.2 to 2.8.3

#18 - 2015-10-05 03:26 AM - Jürgen Fischer
- Category set to Symbology

#19 - 2016-06-09 03:17 AM - Sandro Santilli
- Status changed from Reopened to In Progress

I cannot reproduce with current master either (2.15 -- d1cac84).
Given 2.14 is the new LTR I'll test that one and if fixed would close this bug.

#20 - 2016-06-09 03:47 AM - Sandro Santilli
- Target version set to Version 2.14
- Status changed from In Progress to Closed
- Resolution set to fixed/implemented

2.14.3 is not affected either, while I confirm 2.8.9 is.
Given 2.14 is the new LTR, I'm closing this as fixed.

Files

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<tr>
<th>File</th>
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<th>Date</th>
<th>Author</th>
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<td>invalid_topo.sql.gz</td>
<td>83.6 KB</td>
<td>2015-07-31</td>
<td>Sandro Santilli</td>
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</tbody>
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