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  0x00007cf6914ae816 in QWaitCondition::wait(QMutex*, unsigned long) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#2  0x00007cf6914b8e4 in QFutureInterfaceBase::waitForFinished() () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#3  0x00007cf6926b60af in QgsMapRendererParallelJob::cancel (this=0x522b360) at
    /usr/src/qgis/qgis/src/core/qgsmaprendererparalleljob.cpp:92
#4  0x00007cf692224e9 in QgsMapCanvas::stopRendering (this=0xlsf3c3c0) at
    /usr/src/qgis/qgis/src/gui/qgsmapcanvas.cpp:770
#5  0x00007cf692223c2 in QgsMapCanvas::refreshMap (this=0xlsf3c3c0) at /usr/src/qgis/qgis/src/gui/qgsmapcanvas.cpp:649
#6  0x00007cf69221b414 in QgsMapCanvas::qt_static_metacall (_o=0xlsf3c3c0, _c=QMetaObject::InvokeMetaMethod, _id=40,
    _a=0x7ffff919dca60)
    at /usr/src/qgis/build/src/gui/moc_qgsmapcanvas.cxx:166
#7  0x00007cf6915c487a in QMetaObject::activate(QObject*, QMetaObject const*, int, void**) () from
    /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#8  0x00007cf69156d70a in ?? () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#9  0x00007cf6915638a31 in QObject::event(QEvent*) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#10 0x00007cf690949e2c in QApplicationPrivate::notify_helper(QObject*, QEvent*) () from
    /usr/lib/x86_64-linux-gnu/libQtGui.so.4
#11 0x00007cf690945c0d in QCoreApplication::notifyInternal(QObject*, QEvent*) () from
    /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#12 0x00007cf690945c07d in QCoreApplication::notify(QObject*, QEvent*) () from
    /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#13 0x00007cf690945c04d in QCoreApplication::notify(QObject*, QEvent*) () from
    /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#14 0x00007cf6915e0323 in ?? () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#15 0x00007cf6915df5f1 in ?? () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#16 0x00007cf6915cf1ae04 in _main_context_dispatch () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
#17 0x00007cf6915cf1b484 in ?? () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
#18 0x00007cf6915cf1b48c in _main_context_iteration () from /lib/x86_64-linux-gnu/libglib-2.0.so.0
#19 0x00007cf6915da7a1 in QEventDispatcherGlib::processEvents(QFlags<QEventLoop::ProcessEventsFlag>) ()
    from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#20 0x00007cf69095f9b85 in ?? () from /usr/lib/x86_64-linux-gnu/libQtGui.so.4
#21 0x00007cf6915a0af0 in QEventLoop::processEvents(QFlags<QEventLoop::ProcessEventsFlag>) () from
    /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#22 0x00007cf6915a3a5 in QEventLoop::exec(QFlags<QEventLoop::ProcessEventsFlag>) () from
    /usr/lib/x86_64-linux-gnu/libQtCore.so.4
```

2022-02-27
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.

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**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 !
<jef> strk: where?
<strk> jef: #12228
<sigq> Title: QGIS Application - Bug report #12228: deadlock from parallel rendering - QGIS Issue Tracking (at hub.qgis.org)
<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 reproduceable

#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  0x00007f8953cc816 in QWaitCondition::wait(QMutex*, unsigned long) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#2  0x00007f8953b8e94 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  0x00007f8954d4d619 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#5  0x00007f8954d4df012 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

woth thread apply all bt
, as suggested by Jurgen:

(gdb) thread apply all bt

Thread 13 (Thread 0x7f89394ee700 (LWP 24245)): 0x00007f8950fdf12d in poll () at /sysdeps/unix/syscall-template.S:81
#1  0x00007f895833181d in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#2  0x00007f8958360fd6 in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#3  0x00007f8954d4df012 in QgsMapCanvas::refreshMap (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:657

Thread 12 (Thread 0x7f8938ced700 (LWP 24246)): 0x00007f8950fdf12d in poll () at /sysdeps/unix/syscall-template.S:81
#1  0x00007f895833181d in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#2  0x00007f8958360fd6 in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#3  0x00007f8954d4df012 in QgsMapCanvas::refreshMap (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:657

Thread 11 (Thread 0x7f8931333700 (LWP 24253)): 0x00007f8950fdf12d in poll () at /sysdeps/unix/syscall-template.S:81
#1  0x00007f895833181d in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#2  0x00007f8958360fd6 in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#3  0x00007f8954d4df012 in QgsMapCanvas::refreshMap (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:657

Thread 10 (Thread 0x7f8925296700 (LWP 24254)): 0x00007f8950fdf12d in poll () at /sysdeps/unix/syscall-template.S:81
#1  0x00007f895833181d in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#2  0x00007f8958360fd6 in ?? () from /usr/lib/x86_64-linux-gnu/libQtWebKit.so.4
#3  0x00007f8954d4df012 in QgsMapCanvas::refreshMap (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:657

Thread 9 (Thread 0x7f8933ff700 (LWP 24256)): 0x00007f8950fd0f12d in poll () at /sysdeps/unix/syscall-template.S:81
Thread 5 (Thread 0x7f89337fe700 (LWP 24293)):
#0 0x00007895f0b2af5 in __libc_wait (stat_loc=0x7f89337fc460) at ../sysdeps/unix/sysv/linux/x86_64/wait.c:35
#1 0x0000000000580193 in dumpBacktrace (depth=20) at /usr/src/qgis/qgis-2.8/src/app/main.cpp:236
#2 0x00000000005802c8 in myMessageOutput (type=QtWarningMsg, msg=0x7f8920015108 "\"GEOS exception: \"\"") at /usr/src/qgis/qgis-2.8/src/app/main.cpp:236
#3 0x00007895f53c1bb1 in qt_message_output(QMsgType, char const*) () from /usr/lib/x86_64-linux-gnu/libQCore.so.4
#4 0x000000000098e61 in QDebug::QDebug() ()
#5 0x00007895f560866 in throwGEOSException (fmt=0x7f89523af8cb "\%s") at /usr/src/qgis/qgis-2.8/src/core/qgsgeometry.cpp:101
#6 0x00007895f52aee0d in GEOSContextHandle_HS::ERROR_MESSAGE (this=0x2256890, cs=<optimized out>) at geos_ts_c.cpp:243
#7 0x00007895f52a5e7e in GEOSGeom_createLineString_r (extHandle=0x2256890, cs=<optimized out>) at geos_ts_c.cpp:4100
#8 0x00007895f561033e in createGeoLineString (polyline=...) at /usr/src/qgis/qgis-2.8/src/core/qgsgeometry.cpp:262
#9 0x00007895f561d347 in QgsGeometry::exportWkbToGeos (this=0x7f8920015320) at /usr/src/qgis/qgis-2.8/src/core/qgsgeometry.cpp:4118
#10 0x00007895f561e50 in QgsGeometry::asGeos (this=0x7f8920015320) at /usr/src/qgis/qgis-2.8/src/core/qgsgeometry.cpp:625
#11 0x00007895f565d84c in QgsPalLayerSettings::registerFeature (this=0x5925208, f=..., context=..., dxfLayer=...) at /usr/src/qgis/qgis-2.8/src/core/qgsPalLayerSettings.cpp:1782
#12 0x00007895f5656e3c6f in QgsPalLabeling::registerFeature (this=0x514b990, layerID=..., f=..., context=..., dxfLayer=...) at /usr/src/qgis/qgis-2.8/src/core/qgsPalLabeling.cpp:3405
#13 0x00007895f575921b in QgsVectorLayerRenderer::drawRendererV2 (this=0x5401470, f=...) at /usr/src/qgis/qgis-2.8/src/core/qgsvectorlayerrenderer.cpp:238
#14 0x00007895f575921c in QgsVectorLayerRenderer::drawLayer (this=0x5401470) at /usr/src/qgis/qgis-2.8/src/core/qgsvectorlayerrenderer.cpp:236
#15 0x00007895f5656ba60 in QgsMapRendererParallelJob::renderLayerStatic (job=...) at /usr/src/qgis/qgis-2.8/src/core/qgsmaprendererparalleljob.cpp:215
#16 0x00007895f5656b98a2 in QtConcurrent::FunctionWrapper1<void, LayerRenderJob&>::operator() (this=0x5808108, u=...) at /usr/include/qt4/QtCore/qtconcurrentfunctionwrappers.h:86
#17 0x00007895f56568bc0a in QtConcurrent::MapKernel<QList<LayerRenderJob>::iterator, QtConcurrent::FunctionWrapper1<void, LayerRenderJob&>>::run (this=0x5408000, it=...) at /usr/include/qt4/QtCore/qtconcurrentmapkernel.h:73
#18 0x00007895f56568bcf8 in QtConcurrent::MapKernel<QList<LayerRenderJob>::iterator, QtConcurrent::FunctionWrapper1<void, LayerRenderJob&>>::run (this=0x5408000, sequenceBeginIterator=..., beginIndex=3, endIndex=4) at /usr/include/qt4/QtCore/qtconcurrentmapkernel.h:82
#19 0x00007895f568b0c in QtConcurrent::IterateKernel<QList<LayerRenderJob>::iterator, void>::forThreadFunction (this=0x58080d0) at /usr/include/qt4/QtCore/qtconcurrentiteratekernel.h:263
#20 0x00007895f5656be0c in QtConcurrent::IterateKernel<QList<LayerRenderJob>::iterator, void>::forThreadFunction (this=0x58080d0) at /usr/include/qt4/QtCore/qtconcurrentiteratekernel.h:225
#21 0x00007895f5653bfe05 in QtConcurrent::ThreadEngineBase::run() () from /usr/lib/x86_64-linux-gnu/libQCore.so.4
#22 0x00007895f5653bbfe in ?? () from /usr/lib/x86_64-linux-gnu/libQCore.so.4
#23 0x00007895f563c52c in ?? () from /usr/lib/x86_64-linux-gnu/libQCore.so.4
#24 0x00007894e383182 in start_thread (arg=0x7f89337fe700) at pthread_create.c:312
#25 0x00007895f560f4c7d in clone () at /sysdeps/unix/sysv/linux/x86_64/clone.S:111

Thread 4 (Thread 0x7f88c4976700 (LWP 24294)):
#0 pthread_cond_wait@GLIBC2.3.2 () at /sysdeps/unix/sysv/linux/x86_64/pthread_cond_wait.S:185
#1 0x00007895f560866 in QWaitCondition::wait(QMutex*, unsigned long) () from /usr/lib/x86_64-linux-gnu/libQCore.so.4
#2 0x00007895f5653bfe05 in QgsSemaphore::acquire(int) () from /usr/lib/x86_64-linux-gnu/libQCore.so.4
#3 0x00007895f5653c1bc6 in QgsConnectionPoolGroup<QgsPostgresConn*>::acquire (this=0x7f88b8012fd0) at /usr/src/qgis/qgis-2.8/src/providers/.../core/qgsconnectionpoolpool.h:81
#4 0x00007895f5653bfe06 in QgsConnectionPool<QgsPostgresConn*, QgsPostgresConnPoolGroup>::acquireConnection (this=0x7f88d4ca460 <QgsPostgresConnPool::sInstance>, connInfo=...) at /usr/src/qgis/qgis-2.8/src/providers/.../core/qgsconnectionpoolpool.h:218
#5 0x00007895f5653bfe04 in QgsPostgresFeatureRenderer::QgsPostgresFeatureRenderer (this=0x7f88b8012fd0, source=0x5429a70, ownSource=false, request=...) at /usr/src/qgis/qgis-2.8/src/providers/postgres/qgspostgresqlrenderertool.cpp:38
Thread 1 (Thread 0x7f8595008000 (LWP 242444)):

#0  pthread_cond_wait@GLIBC_2.3.2 () at .../sysdeps/unix/sysv/linux/x86_64/pthread_cond_wait.S:185
#1  0x00007895f3c816 in QWaitCondition::wait(QMutex*, unsigned long) () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#2  0x00007895f3b98e4 in QFutureInterfaceBase::waitForFinished() () from /usr/lib/x86_64-linux-gnu/libQtCore.so.4
#3  0x00007895f55b8218 in QgsMapRendererParallelJob::cancel (this=0x57c2ba0) at
   /usr/src/qgis/qgis-2.8/src/core/qgsmaprendererparalleljob.cpp:92
   at /usr/src/qgis/build/2.8/src/gui/moc_qgsmapcanvas.cxx:168
#4  0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#5  0x00007895f45012 in QgsMapCanvas::refreshMap (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:657
#6  0x00007895f46d8df in QgsMapCanvas::qt_static_metacall (_o=0x26c7680, _c=QMetaObject::InvokeMetaMethod, _id=41, _a=0x7fffe26747150)
   at /usr/src/qgis/build/2.8/src/gui/moc_qgsmapcanvas.cxx:168
   at /usr/src/qgis/qgis-2.8/src/core/qgsapplication.cpp:252
#7  0x00007895f4e287a in QMutexGuard::QMutexGuard (this=0x57c2ba0) at
   /usr/src/qgis/qgis-2.8/src/core/qgsapplication.cpp:252
#8  0x00007895f4e287a in QMutexGuard::QMutexGuard (this=0x57c2ba0) at
   /usr/src/qgis/qgis-2.8/src/core/qgsapplication.cpp:252
#9  0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#10 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#11 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#12 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#13 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#14 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#15 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#16 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#17 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#18 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#19 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#20 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#21 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#22 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#23 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778
#24 0x00007895f46d219 in QgsMapCanvas::stopRendering (this=0x26c7680) at /usr/src/qgis/qgis-2.8/src/gui/qgsmapcanvas.cpp:778

#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
invalid_topo.sql.gz  83.6 KB  2015-07-31  Sandro Santilli