# QGIS Application - Bug report #7845

# Topology checker crashes ggis when using the "must not have gaps" rule

2013-05-16 10:00 AM - Giovanni Manghi

Status: Closed

**Priority:** Severe/Regression **Assignee:** vinayan Parameswaran

Category: C++ Plugins

Affected QGIS version:master Regression?: No Operating System: Easy fix?: No

Pull Request or Patch supplied: Resolution:

Crashes QGIS or corruptesdata: Copied to github as #: 16726

#### Description

Attached sample vector and project.

The symptoms are different, sometime when I run a "validate all" ggis hard crash

...

...

Debug: reading features- 5631
Debug: reading features- 5632
Debug: reading features- 5633
Debug: reading features- 5634
Debug: reading features- 5635

Debug: creating geometry collection-

Debug: performing cascaded union..might take time..-

ERROR 1: TopologyException: found non-noded intersection between

LINESTRING (-53667 -208081, -53667 -208081) and LINESTRING (-53667 -208081, -53667 -208081) at -53666.955337816667 -208081.28168678112

Fatal: QGIS died on signal 11 Stacktrace (piped through c++filt):

/usr/bin/qgis.bin(myMessageOutput(QtMsgType, char const\*)+0xac)[0x4e706c]

/usr/lib/x86\_64-linux-gnu/libQtCore.so.4(qt\_message\_output(QtMsgType, char const\*)+0x2e)[0x7f18e684241e]

/usr/lib/x86 64-linux-gnu/libQtCore.so.4(+0x718bf)[0x7f18e68428bf]

/usr/lib/x86\_64-linux-gnu/libQtCore.so.4(qFatal(char const\*, ...)+0x94)[0x7f18e6842a64]

/lib/x86 64-linux-gnu/libc.so.6(+0x364a0)[0x7f18e3d334a0]

/usr/lib/libqgis\_core.so.1.9.0(QgsGeometry::asGeometryCollection()+0x12)[0x7f18e78959d2]

 $/usr/lib/qgis/plugins/libtopolplugin.so(topolTest::checkGaps(double, QgsVectorLayer^*, QgsVectorLaye$ 

bool)+0x8cc)[0x7f18bf5ecc6c]

/usr/lib/qgis/plugins/libtopolplugin.so(topolTest::runTest(QString, QgsVectorLayer\*, QgsVectorLayer\*, ValidateType,

double)+0x355)[0x7f18bf5ef2e5]

/usr/lib/qgis/plugins/libtopolplugin.so(checkDock::runTests(ValidateType)+0x4df)[0x7f18bf5dca5f]

/usr/lib/qgis/plugins/libtopolplugin.so(checkDock::validate(ValidateType)+0xb2)[0x7f18bf5dd302]

/usr/lib/qgis/plugins/libtopolplugin.so(+0x33e05)[0x7f18bf5f3e05]

/usr/lib/x86\_64-linux-gnu/libQtCore.so.4(QMetaObject::activate(QObject\*, QMetaObject const\*, int,

void\*\*)+0x2b1)[0x7f18e6960281]

 $/usr/lib/x86\_64-linux-gnu/libQtGui.so.4(QAbstractButton::clicked(bool)+0x32)[0x7f18e635ec72]$ 

/usr/lib/x86 64-linux-gnu/libQtGui.so.4(+0x599a4e)[0x7f18e609ca4e]

/usr/lib/x86 64-linux-gnu/libQtGui.so.4(+0x59ad8b)[0x7f18e609dd8b]

 $/usr/lib/x86\_64-linux-gnu/libQtGui.so.4 (QAbstractButton::mouseReleaseEvent (QMouseEvent^*) + 0x8c) [0x7f18e609dffc] \\$ 

/usr/lib/x86\_64-linux-gnu/libQtGui.so.4(QWidget::event(QEvent\*)+0x684)[0x7f18e5d1f144]

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/usr/lib/x86_64-linux-gnu/libQtGui.so.4(QApplicationPrivate::notify_helper(QObject*, QEvent*)+0xb4)[0x7f18e5cce894]
      /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QApplication::notify(QObject*, QEvent*)+0xabf)[0x7f18e5cd40bf]
      /usr/lib/libqgis core.so.1.9.0(QgsApplication::notify(QObject*, QEvent*)+0x96)[0x7f18e78416f6]
      /usr/lib/x86 64-linux-gnu/libQtCore.so.4(QCoreApplication::notifyInternal(QObject*, QEvent*)+0x8c)[0x7f18e694be9c]
      /usr/lib/x86 64-linux-gnu/libQtGui.so.4(QApplicationPrivate::sendMouseEvent(QWidget*, QMouseEvent*, QWidget*, QWidge
      QWidget**, QPointer<QWidget>&, bool)+0x172)[0x7f18e5ccf862]
      /usr/lib/x86 64-linux-gnu/libQtGui.so.4(+0x24bbf5)[0x7f18e5d4ebf5]
      /usr/lib/x86_64-linux-gnu/libQtGui.so.4(QApplication::x11ProcessEvent(_XEvent*)+0xdce)[0x7f18e5d4dbae]
      /usr/lib/x86_64-linux-gnu/libQtGui.so.4(+0x2740d2)[0x7f18e5d770d2]
      /lib/x86 64-linux-gnu/libglib-2.0.so.0(g main context dispatch+0x133)[0x7f18e285fd53]
      /lib/x86 64-linux-gnu/libglib-2.0.so.0(+0x480a0)[0x7f18e28600a0]
      /lib/x86_64-linux-gnu/libglib-2.0.so.0(g_main_context_iteration+0x34)[0x7f18e2860164]
      /usr/lib/x86 64-linux-gnu/libQtCore.so.4(QEventDispatcherGlib::processEvents(QFlags<QEventLoop::ProcessEventsFlag>)+0x6f)[0x7f18e69]
      f)[0x7f18e697b3bf]
      /usr/lib/x86 64-linux-gnu/libQtGui.so.4(+0x273d5e)[0x7f18e5d76d5e]
      /usr/lib/x86 64-linux-gnu/libQtCore.so.4(QEventLoop::processEvents(QFlags<QEventLoop::ProcessEventsFlag>)+0x32)[0x7f18e694ac82]?
      /usr/lib/x86 64-linux-gnu/libQtCore.so.4(QEventLoop::exec(QFlags<QEventLoop::ProcessEventsFlag>)+0xf7)[0x7f18e694aed7]
     /usr/lib/x86_64-linux-gnu/libQtCore.so.4(QCoreApplication::exec()+0x87)[0x7f18e694ff67]
      /usr/bin/ggis.bin(main+0x228e)[0x4e302e]
      /lib/x86_64-linux-gnu/libc.so.6(__libc_start_main+0xed)[0x7f18e3d1e76d]
      /usr/bin/qgis.bin[0x4e6e11]
      Aborted (core dumped)
other times it just return: "unknown exception"
and sometime it runs correctly after a "validate extent" but when I
click on an error in the list ggis crashes
      Debug: checking overlap for 3621
      Debug: checking overlap for 3625
      Fatal: QGIS died on signal 11
      Stacktrace (run through c++filt):
      Segmentation fault (core dumped)
cheers!
```

#### **Associated revisions**

Revision 454778c7 - 2013-07-21 10:15 AM - Jürgen Fischer

topology checker: catch difference error (fixes #7845)

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## #1 - 2013-05-17 02:46 AM - Werner Macho

Confirmed here

Identified the "must not have gaps" as the cause of this behaviour..

If I delete the "must not have gaps" check - everything works fine everytime for me ..

BT, I know this is not the correct place but do you think its possible to add something like a progressbar somewhere? checking this test project from giovanni takes some time and it looks like the computer is dead but indeed it is not..

Thanks a lot for this plugin (it should also go into core) .. and i still don't get how the "Tolerance" Field is getting used..

## #2 - 2013-05-17 03:06 AM - Giovanni Manghi

- File 49.png added

BT, I know this is not the correct place but do you think its possible to add something like a progressbar somewhere?

But there is a progress bar, can't you see it?:) See attached screenshot.

Does it work for you the "toggle error markers" button?

#### #3 - 2013-05-17 03:41 AM - Giovanni Manghi

BT, I know this is not the correct place but do you think its possible to add something like a progressbar somewhere? checking this test project from giovanni takes some time and it looks like the computer is dead but indeed it is not..

it seems that the progress bar shows only if there is >1 rule(?).

## #4 - 2013-05-17 03:46 AM - Werner Macho

Confirmed .. there is no progress bar if there is only one rule .. .. even if this one rule takes ages ..

regarding toggle errors ..

my pull request got accepted today by vinayan and there should be not toggle button any more but rather a Show errors CheckBox (which seemed more reasonable to me)

And yes .. this CheckBox is working fine here ..

The only questions I still have are:

Why is there a Tolerance SpinBox (Which disappears as soon as I select a Layer)?

Is there a possibility to fix some of the errors automatically (like I have seen some FIX-errors boxes in the UI file)?

#### #5 - 2013-05-17 07:22 AM - vinayan Parameswaran

Werner,

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Currently there are no rules that support a tolerance value. That is why it gets disabled. As of now we can simply keep it hidden to avoid confusion..right? those fix buttons too are from the initial work..they are supposed to fix errors automatically..not implemented yet..

#### #6 - 2013-05-17 07:59 AM - Werner Macho

Thanks for the Clearification .. so the Tolerance should be kept hidden from beginning on.. Because when I open Topology checker it is been shown as long as i click nothing..

And for the rest there seem to be only the "must not have a gap" bug that Giovanni discovered to make it at least ready for 2.0 release..

I guess you wanted to add the rest of checking and tolerance and fixing geometry errors later..

If I can help you in any way just tell me..

## #7 - 2013-06-16 06:00 AM - Giovanni Manghi

Werner Macho wrote:

Thanks for the Clearification .. so the Tolerance should be kept hidden from beginning on.. Because when I open Topology checker it is been shown as long as i click nothing..

And for the rest there seem to be only the "must not have a gap" bug that Giovanni discovered to make it at least ready for 2.0 release..

I guess you wanted to add the rest of checking and tolerance and fixing geometry errors later..

If I can help you in any way just tell me..

Hi all!

is there a patch available for the last issue has been found?

Thanks in advance!

## #8 - 2013-06-17 12:13 AM - Werner Macho

No patch so far .. I've been only working on the UI ..

Don't have the skills to debug that error though I think it should be obvious  $\ensuremath{\boldsymbol{.}}$ 

Sorry for that ..

Hope that somebody picks this up for the release ..

#### #9 - 2013-06-17 12:40 AM - vinayan Parameswaran

I will fix the crash today or tomorrow.. it is due to an error in the geometry (multiple nodes at the same coordinate..)..somehow this error is not caught by our geometry checking methods..unless we fix this geometry, it is not possible to run 'must not have gaps' rule..

# #10 - 2013-06-17 02:18 AM - Giovanni Manghi

vinayan Parameswaran wrote:

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I will fix the crash today or tomorrow.. it is due to an error in the geometry (multiple nodes at the same coordinate..)..somehow this error is not caught by our geometry checking methods..unless we fix this geometry, it is not possible to run 'must not have gaps' rule..

Hi Vinayan, are going to remove the "must not have gaps" rule? I hope not :)

## #11 - 2013-06-17 02:26 AM - vinayan Parameswaran

Giovanni..not at all..simply that rule will not run if the geometry contains such an error..i am still working out why geos/qgis does not tag that geom as error..

## #12 - 2013-06-17 02:56 AM - Giovanni Manghi

vinayan Parameswaran wrote:

Giovanni..not at all..simply that rule will not run if the geometry contains such an error..

ok! thanks a lot for your work!

## #13 - 2013-07-02 04:20 AM - Giovanni Manghi

- Subject changed from Topology checker crashes qgis to Topology checker crashes qgis when using the "must not have gaps" rule

# #14 - 2013-07-13 08:40 AM - Salvatore Larosa

- Crashes QGIS or corrupts data changed from No to Yes

More info about the crash: http://codepad.org/0Ak5u0ry

## #15 - 2013-07-21 01:22 AM - Jürgen Fischer

- Status changed from Open to Closed

Fixed in changeset commit:"454778c7a5e0e3865fe21a80690ad8daec49ff8c".

#### Files

uso_solo_maio2013.zip	2.8 MB	2013-05-16	Giovanni Manghi
49.png	323 KB	2013-05-17	Giovanni Manghi

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