

QGIS Application - Bug report #1854
qgsinterpolator.cpp causing build error on OS X

2009-08-01 08:58 AM - John Tull

Status:	Closed	
Priority:	Low	
Assignee:	nobody -	
Category:	Build/Install	
Affected QGIS version:		Regression?: No
Operating System:	OS X	Easy fix?: No
Pull Request or Patch supplied:		Resolution: fixed
Crashes QGIS or corrupts data:		Copied to github as #: 11914
Description		
<p>From the most current svn, I cannot build successfully on OS X. The error message is:</p> <p>...</p> <p>[68%] Building CXX object src/plugins/interpolation/CMakeFiles/interpolationplugin.dir/qgstinterpolator.o /Users/jctull/sources/qgis/trunk/src/plugins/interpolation/qgstinterpolator.cpp: In member function 'int [[QgsTINInterpolator]]::insertData(QgsFeature*, bool, int, [[QgsInterpolator]]::InputType)': /Users/jctull/sources/qgis/trunk/src/plugins/interpolation/qgstinterpolator.cpp:159: error: 'isnan' was not declared in this scope make[2]: * [src/plugins/interpolation/CMakeFiles/interpolationplugin.dir/qgstinterpolator.o] Error 1 maker1: [src/plugins/interpolation/CMakeFiles/interpolationplugin.dir/all] Error 2 make: ** [all] Error 2</p>		

History

#1 - 2009-08-01 10:22 AM - William Kyngesburye

I just tried building after commit:7bc1a64e (SVN r11239), using the Xcode build -- same error.

#2 - 2009-08-01 12:45 PM - William Kyngesburye

P.S. it's also showing up in qgsinterpolator.cpp.

#3 - 2009-08-01 08:59 PM - Gary Sherman

Cmake build works fine on OS X for me at commit:06ce0aa4 (SVN r11243)

#4 - 2009-08-02 08:57 AM - William Kyngesburye

OK, I see that isnan has been in qgsinterpolator.cpp since February (fixed for OSX in March), and I haven't had a problem with it. Now isnan was added to qgstinterpolator.cpp, and now both of them complain about isnan...

John - I believe you are using Qt 4.5, right? I just updated to Qt 4.5 this weekend (right before commit:5d9b66fa (SVN r11212), which added isnan to the tin source). And it's interesting that at first I only got 1 isnan error, but after commit:7bc1a64e (SVN r11239) I got errors in both.

Gary - which Qt version are you using?

That's the only major change in my setup that I can think of.

#5 - 2009-08-02 09:28 AM - John Tull

William - I was coming to that same realization. I was about to post a similar comment about qt versions as well. I'm using 4.5.2, fwiw.

#6 - 2009-08-02 09:53 AM - William Kyngesburye

... but then, as I recall you've been using Qt 4.5 for a while, and this is the first time you've had this error? When did you update to 4.5.2 (from 4.5.0 or .1)? When was the last time you compiled Qgis?

#7 - 2009-08-02 10:01 AM - John Tull

I recall communicating with the dev of this plugin a while back. When it did not get fixed, I removed it from the plugins cmakefile, so I was not trying to build it for some time. I am guessing that the cmakefile changed when the osm plugin was added to the repo over the past week or so. It has been a problem since it was introduced into the codebase, which was after switching to qt-4.5.x, for me. Everything but this compiled fine using your xcode project yesterday. About a week or two ago, prior to that, for my last build.

#8 - 2009-08-04 08:53 AM - William Kyngesburye

[jef] wrote on the dev list:

<http://trac.osgeo.org/geos/ticket/270> might also relate to that.

Does replacing

```
#include <cmath>
```

with

```
#include <math.h>
```

in `src/core/qgis.h` help?

...now I'm back to the original error John had, just in tininterpolator. So interpolator is doing something right so that isnan works. Or tininterpolator is including another header that includes <cmath> (the trail was too tangled for me to follow).

As a test, I changed isnan() in tininterpolator to std::isnan() and it compiled. Doing the same for interpolator breaks with:

So there seems to be some sort of namespace issue in tininterpolator, or <cmath> is included somewhere.

#9 - 2009-08-04 01:09 PM - Marco Hugentobler

I think it is because qgstinterpolator.h includes `[[DualEdgeTriangulation]].h` and that includes `[[MathUtilis]].h` (which includes <cmath>). Could you try to add the ifdef clause



```
#ifndef Q_OS_MACX
#include <cmath>
#else
#include <math.h>
```



to `[[MathUtils]].h` and tell me if it works?



Marco

#10 - 2009-08-04 03:43 PM - William Kyngesburye

...and in `Point3D.h` and `Vector3D.h`. Then it compiles.



Summary: change `#include <cmath>` in `qgis.h`, `[[MathUtils]].h`, `Point3D.h` and `Vector3D.h` to:

```
#ifndef Q_OS_MACX
#include <cmath>
#else
#include <math.h>
#endif
```

#11 - 2009-08-04 03:50 PM - William Kyngesburye

... though the `qgis.h` change is global (the rest of Qgis compilation seems to be OK with it). Everything else in Qgis works with `<cmath>` for math functions. It would be nice to figure out why only `tininterpolation` has this problem.

#12 - 2009-08-05 06:26 AM - Marco Hugentobler

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

I think the `'#include <cmath>'` in `qgis.h` is not used anywhere. So I removed it and added the `ifdefs` in `commit:3ddd1795` (SVN r11275). Please reopen this bug if there are still compile problems with the modifications.

