

Exiv2 - Feature #1236

Build Exiv2 on MinGW using CMake

30 Sep 2016 16:45 - Robin Mills

Status:	Closed	Start date:	30 Sep 2016
Priority:	Normal	Due date:	
Assignee:	Robin Mills	% Done:	100%
Category:	build	Estimated time:	35.00 hours
Target version:	0.26		
Description			
I've got this working and documented. For sure we should consider it 'experimental' for v0.26.			
Related issues:			
Related to Exiv2 - Support #1237: Report CMake/MinGW issues to Kitware		Closed	02 Oct 2016

Associated revisions

Revision 4590 - 30 Sep 2016 16:45 - Robin Mills

#1236 CMake build on MinGW.

Revision 4591 - 30 Sep 2016 16:46 - Robin Mills

#1236 Documentation

Revision 4592 - 30 Sep 2016 18:21 - Robin Mills

Adding #1236 to the Feature report.

Revision 4593 - 30 Sep 2016 19:33 - Robin Mills

#1236. Updated CMake/MinGW build instructions. That's all I intend to do on CMake/MinGW for v0.26

Revision 4596 - 02 Oct 2016 09:40 - Robin Mills

#1236 Updated CMake Documentation.

Revision 4599 - 03 Oct 2016 09:19 - Robin Mills

#1230 and #1236 Buildserver maintenance. Work-in-progress fixes for CMake/MinGW32

Revision 4601 - 04 Oct 2016 08:32 - Robin Mills

#1236 and #1237 Improvements/fixes to TODO-CMAKE for CMake/MinGW/32.

History

#1 - 30 Sep 2016 17:40 - Robin Mills

- Status changed from Closed to Resolved

- % Done changed from 100 to 80

#2 - 30 Sep 2016 17:44 - Robin Mills

This is a very exciting and bold new feature. I've got this mostly completed in [#1230](#) (bug hunt). However it's crashing the test suite here and there (metadata, geotag and exiv2json).

#3 - 30 Sep 2016 19:08 - Robin Mills

- % Done changed from 80 to 100

- Estimated time changed from 50.00 h to 25.00 h

The crashing in the test programs (geotag, exiv2json for sure) is coming from expat:

```
#0 0x6085daa6 in strsep () from c:\MinGW\msys\1.0\bin\msys-1.0.dll
#1 0x6082d627 in msys-1.0!calloc () from c:\MinGW\msys\1.0\bin\msys-1.0.dll
#2 0x6088d3a1 in strftime () from c:\MinGW\msys\1.0\bin\msys-1.0.dll
#3 0x6082d320 in msys-1.0!malloc () from c:\MinGW\msys\1.0\bin\msys-1.0.dll
```

```
#4 0x6994127c in msys-expat-1!XML_ParseCreate_MM () from c:\MinGW\msys\1.0\bin\msys-expat-1.dll <-- using msys-expat
#5 0x69941076 in msys-expat-1!XML_ParseCreate_MM () from c:\MinGW\msys\1.0\bin\msys-expat-1.dll
#6 0x69941044 in msys-expat-1!XML_ParseCreateNS () from c:\MinGW\msys\1.0\bin\msys-expat-1.dll
#7 0x6c71e18b in ExpatAdapter::ExpatAdapter() () from c:\MinGW\msys\1.0\home\rmills\gnu\exiv2\trunk\build\bin\libexiv2.dll
```

I want it to use /usr/local/bin/libexpat-1.dll

I'm not going to spend more time on this for v0.26. This has to be "experimental - use at your own risk". I'll get this all fixed in v0.27 and deploy it on the nightly build.

#4 - 30 Sep 2016 22:04 - Robin Mills

- Status changed from Resolved to Closed

#5 - 02 Oct 2016 07:11 - Robin Mills

- Status changed from Closed to Resolved

- % Done changed from 100 to 90

I've realised (while eating breakfast) why CMake has linked the wrong versions of expat and zlib. It's for the same issue in CMake concerning the include files. We'll have to rewrite the linker response files to link the libraries in /usr/local/lib.

The problem with CMake on MinGW is that CMake does not use the CMAKE_CXX_COMPILER directive in it's initial search for support for common matters such as linking ZLIB, HAVE_STDINT_H and so on.

CMake is unfit for purpose on Windows. It works well on Cygwin which is posix compliant layer over windows. However MinGW is a thin veneer over Windows. For sure CMake/Visual Studio is hideous.

I will report the bugs I have discovered in CMake/MinGW to Kitware. I'll review CMake/MinGW before we ship v0.27. In the meanwhile, I will update our CMAKE documentation to reflect the current status.

#6 - 02 Oct 2016 09:46 - Robin Mills

- % Done changed from 90 to 100

I've opened a new issue to pursue this matter during v0.27 [#1237](#)

[r4596](#) CMAKE documentation updated.

#7 - 02 Oct 2016 09:47 - Robin Mills

- Status changed from Resolved to Closed

#8 - 06 Oct 2016 08:07 - Robin Mills

- Estimated time changed from 25.00 h to 35.00 h

#9 - 10 Oct 2016 18:58 - Robin Mills

- Subject changed from Enable CMake to build on MinGW to Enable Exiv2 to build on MinGW using CMake

#10 - 10 Oct 2016 19:01 - Robin Mills

- Subject changed from Enable Exiv2 to build on MinGW using CMake to Build Exiv2 on MinGW using CMake