

Exiv2 - Bug #840

example1.cpp clang Mac OS X warnings

23 Aug 2012 08:52 - Jerry Jacobs

Status:	Closed	Start date:	23 Aug 2012
Priority:	Normal	Due date:	
Assignee:	Robin Mills	% Done:	0%
Category:	build	Estimated time:	0.00 hour
Target version:			
Description			
Dear all,			
The example at http://www.exiv2.org/example1.html prints some warnings with my compiler on Mac OS X.			
Compiler:			
bash-3.2\$ c++ --version			
Apple clang version 4.0 (tags/Apples/clang-421.0.60) (based on LLVM 3.1svn)			
Target: x86_64-apple-darwin11.4.2			
Thread model: posix			
Warnings:			
bash-3.2\$ c++ -lexiv2 -I /Users/jerry/Macports/include -L /Users/jerry/Macports/lib -o exifprint exifprint.cpp			
In file included from exifprint.cpp:5:			
In file included from /Users/jerry/Macports/include/exiv2/exiv2.hpp:35:			
In file included from /Users/jerry/Macports/include/exiv2/bmpimage.hpp:34:			
In file included from /Users/jerry/Macports/include/exiv2/exif.hpp:34:			
In file included from /Users/jerry/Macports/include/exiv2/metadatum.hpp:39:			
/Users/jerry/Macports/include/exiv2/value.hpp:984:9: warning: attribute 'visibility' is ignored, place it after "struct" to apply attribute to type declaration			
[-Wignored-attributes]			
EXIV2API struct Date			
^			
/Users/jerry/Macports/include/exiv2/exv_conf.h:245:20: note: expanded from macro 'EXIV2API'			
1. define EXIV2API EXV_IMPORT			
^			
/Users/jerry/Macports/include/exiv2/exv_conf.h:217:39: note: expanded from macro 'EXV_IMPORT'			
2. define EXV_IMPORT attribute ((visibility("default")))			
^			
1 warning generated.			
Kind regards,			
Jerry Jacobs			
- http://xor-gate.org			

History

#1 - 27 Aug 2012 11:28 - Robin Mills

- Status changed from New to Assigned

- Assignee set to Robin Mills

Jerry

I recommend you build the sample applications and take a look at the arguments passed when he builds samples/exifprint

```
cd exiv2 ; make config ; ./configure ; make ; make samples
```

I suspect there are additional arguments you'll have to pass. You may have to export CC=c++ as I think ./configure uses g++ by default. I'm not too sure about the differences between the compilers gcc, g++ and c++. However the samples build and pass our test suite on MacOS-X/Lion (and other MacOS-X versions).

I'm away from my iMac today. I've assigned this issue to myself and I'll investigate later in the week when I have access to my iMac. Perhaps you could update this issue with any discoveries you make.

#2 - 28 Aug 2012 17:32 - Robin Mills

Here's the transcript:

```
513 rmills@rmills-imac:~/gnu/exiv2/exiv2.master/samples $ touch exifprint.cpp ; make CC=c++
g++ -O2 -fvisibility=hidden -fvisibility-inlines-hidden -Wall -Wcast-align -Wpointer-arith -Wformat-security -Wmissing-format-attribute
-Woverloaded-virtual -W -MMD `pkg-config exiv2 --cflags` -c -o exifprint.o exifprint.cpp

../libtool --mode=link g++ `pkg-config exiv2 --libs` -ldl -o exifprint exifprint.o
libtool: link: g++ -o exifprint exifprint.o -Wl,-bind_at_load -L/usr/local/lib -L/usr/local/lib/libexiv2.dylib -L/Users/rmills/gnu/exiv2/test.build/xmpsdk/src
/usr/local/lib/libiconv.dylib -lz /usr/local/lib/libexpat.dylib -ldl
```

c++, g++ and gcc are all linked to the same file:

```
$ ls -alt `which c++`
lrwxr-xr-x 1 root wheel 12 Jun 13 22:31 /usr/bin/c++ -> llvm-g++-4.2
$ ls -alt `which g++`
lrwxr-xr-x 1 root wheel 12 Jun 13 22:31 /usr/bin/g++ -> llvm-g++-4.2
$ ls -alt `which gcc`
lrwxr-xr-x 1 root wheel 12 Jun 13 22:31 /usr/bin/gcc -> llvm-gcc-4.2
```

```
$ c++ --version
i686-apple-darwin11-llvm-g++-4.2 (GCC) 4.2.1 (Based on Apple Inc. build 5658) (LLVM build 2336.1.00)
Copyright (C) 2007 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

```
$ sw_vers
ProductName: Mac OS X
ProductVersion: 10.7.4
BuildVersion: 11E53
```

If you're unhappy with this explanation, please voice your concern and I will investigate and respond. If you're happy with this explanation, may I ask you to change the status of the issue to closed.

#3 - 02 Sep 2012 17:02 - Robin Mills

I built exiv2 from the trunk and installed it:

```
cd exiv2 ; make configure ; ./configure; make ; sudo make install
```

Compile/link exifprint.cpp (from <http://www.exiv2.org/example1.html>) is:

```
$ g++ exifprint.cpp -lexiv2 -o exifprint
```

I've tried a loop with g++, c++ and gcc. Although those are the same executable, gcc doesn't appear to link the C++ std run-time library.

```
$ for c in g++ c++ gcc; do rm -f exifprint; echo - $c --- ; $c exifprint.cpp lexiv2 -o exifprint 2>&1 | head -2 ; ./exifprint ~/P.jpg | head -1 ; done
--- g++ ---
Exif.Image.ImageDescription          0x010e Ascii   32
--- c++ ---
Exif.Image.ImageDescription          0x010e Ascii   32
--- gcc ---
Undefined symbols for architecture x86_64:
"std::cout", referenced from:
-bash: ./exifprint: No such file or directory

$
```

#4 - 03 Sep 2012 09:07 - Robin Mills

- Status changed from Assigned to Feedback

#5 - 03 Sep 2012 09:09 - Robin Mills

- Status changed from Feedback to Resolved

#6 - 24 Jul 2013 15:25 - Robin Mills

- Status changed from Resolved to Closed

Fixed in 0.24.