

Exiv2 - Bug #714

problem compiling with Sun Studio - visibility

23 Jul 2010 14:29 - Pavel Heimlich

Status:	Closed	Start date:	23 Jul 2010
Priority:	Normal	Due date:	
Assignee:	Robin Mills	% Done:	100%
Category:	not-a-bug	Estimated time:	0.00 hour
Target version:	0.26		
Description			
On OpenSolaris b134 with the Sun Studio 12u1 compiler, the build of exiv2 0.20 fails with ... "error.hpp", line 97: Error: Identifier expected instead of "__attribute__". This is because the use of <i>attribute</i> ((visibility(x)) is not part of the C++ standard, it's gcc specific and not supported by sun studio. The attached patch worked for me. reference: http://gcc.gnu.org/wiki/Visibility http://wikis.sun.com/display/SunStudio/Using+Sun+Studio+for+open+source+apps			
Related issues:			
Related to Exiv2 - Feature #536: Switch to a unified build system based on cmake		Closed	
Related to Exiv2 - Bug #710: Problems Compiling Exiv2 Under SGI IRIX		Closed	29 Jun 2010
Related to Exiv2 - Bug #715: -funsigned-char breaks build with Sun Studio		Closed	23 Jul 2010

Associated revisions

Revision 2300 - 25 Jul 2010 08:47 - Andreas Huggel

#714: Extended C++ symbol visibility support for Sun Studio C++ compiler.

History

#1 - 25 Jul 2010 04:05 - Andreas Huggel

Hi Pavel,

Thanks for reporting this issue. Assuming you configure your system with the ./configure script, for the patch to have any effect, the EXV_HAVE_GXXCLASSVISIBILITY compiler define must be set. That's the case if the visibility support is not explicitly disabled with the --disable-visibility configure option and if the compiler has a -fvisibility-inlines-hidden option (see below).

Does the Sun compiler indeed have this option?

```
AC_MSG_CHECKING([whether to enable g++ visibility support])
AC_ARG_ENABLE(visibility,
  [ --disable-visibility  do not use g++ visibility support ],
  GXX_VISIBILITY=$enableval, GXX_VISIBILITY=yes)
AC_MSG_RESULT($GXX_VISIBILITY)
if test "$GXX_VISIBILITY" = "yes"; then
  AX_CXX_CHECK_FLAG(-fvisibility-inlines-hidden, [], [], [GXX_VISIBILITY=yes], [GXX_VISIBILITY=no])
  if test "$GXX_VISIBILITY" = "yes"; then
    CXXFLAGS="${CXXFLAGS} -fvisibility=hidden -fvisibility-inlines-hidden"
    AC_DEFINE(HAVE_GXXCLASSVISIBILITY,1)
  fi
  if test "$enable_shared" = "yes"; then
    AC_DEFINE(HAVE_DLL)
  fi
fi
```

#2 - 25 Jul 2010 06:20 - Pavel Heimlich

Hi,
studio does not have the -fvisibility* options, however it may ignore them, so I guess that's how the HAVE_GXXCLASSVISIBILITY parameter got enabled.
The equivalent flag to fvisibility-hidden is -xldscope=hidden

see

<http://forums.sun.com/thread.jspa?threadID=5404019>

<http://docs.sun.com/app/docs/doc/820-7599/bklda?a=view>

from what I gathered, -fvisibility-inlines-hidden does not have an equivalent in Studio

#3 - 25 Jul 2010 09:25 - Andreas Huggel

- *Category set to build*

- *Target version set to 0.21*

- *% Done changed from 0 to 50*

Checked-in generalized visibility support which should now also work with the Sun Studio compiler. It sets the compiler defines according to the patch and sets the -xldscope=hidden flag if supported.

Appreciate if you can test this and let me know if it works.

Thanks,
Andreas

PS: This also needs to be implemented in the cmake build scripts.

#4 - 22 Nov 2010 18:32 - Andreas Huggel

- *Target version deleted (0.21)*

#5 - 22 Nov 2010 18:32 - Andreas Huggel

- *Target version set to 1.0*

#6 - 31 Jan 2012 13:39 - Pavel Heimlich

- *File exiv2-visibility.diff added*

I tried v0.22 with Solaris11 and Solaris Studio 12.3 and the Studio detection code is incomplete.

First, it only works for the C compiler (cc defines __SUNPRO_C, CC defines __SUNPRO_CC).

Second, the version condition is not really necessary as all currently supported (and available for download) Studio versions do support __global.

I had to use the attached patch to build exiv2 0.22

#7 - 22 Aug 2015 15:44 - Robin Mills

- *Category changed from build to not-a-bug*

- *Status changed from New to Closed*

- *Assignee set to Robin Mills*

- *Target version changed from 1.0 to 0.26*

This is an unsupported compiler. Please see the comments in [#710](#) concerning compiler and platform support.

#8 - 22 Aug 2015 16:10 - Robin Mills

- *% Done changed from 50 to 100*

Files

exiv2-visibility.diff	976 Bytes	23 Jul 2010	Pavel Heimlich
exiv2-visibility.diff	519 Bytes	31 Jan 2012	Pavel Heimlich