

GROMACS - Bug #682

Gromacs 4.5.3 fails to compile on ppc

01/24/2011 10:03 PM - Jussi Lehtola

Status: Closed	
Priority: Normal	
Assignee:	
Category:	
Target version: 4.5.6	
Affected version - extra info:	Difficulty: uncategorized
Affected version:	
Description	
Hi,	
Gromacs 4.5.3 fails to compile on RHEL 4 for ppc. The error comes in	
<pre>[77%] /usr/bin/gcc -O2 -g -pipe -m32 -fsigned-char -Wa,--noexecstack -fPIC -O3 -DNDEBUG -fPIC CMakeFiles/g_luck.dir/g_luck.c.o -o g_luck -rdynamic -ldl -lm libgmxpreprocess.so.6 ../mdlib/libmd.so.6 ../gmxlib/libgmx.so.6 -ldl -lm -lpthread -lfftw3f -lxml2 ../gmxlib/libgmx.so.6: undefined reference to `__sync_lock_test_and_set' ../gmxlib/libgmx.so.6: undefined reference to `__sync_fetch_and_add' ../gmxlib/libgmx.so.6: undefined reference to `__sync_bool_compare_and_swap' ../gmxlib/libgmx.so.6: undefined reference to `__sync_lock_release' ../gmxlib/libgmx.so.6: undefined reference to `__sync_synchronize' ../gmxlib/libgmx.so.6: undefined reference to `__sync_add_and_fetch' collect2: ld returned 1 exit status make²: *** [src/kernel/g_luck] Error 1</pre>	
The full logs are available at http://koji.fedoraproject.org/koji/taskinfo?taskID=2740287	
Related issues:	
Related to GROMACS - Bug #573: CMake doesn't detect Altivec support	Closed 09/28/2010
Related to GROMACS - Bug #574: Using autoconf produces zero forces with Altivec	Closed 09/28/2010

History

#1 - 06/08/2011 04:01 PM - Rossen Apostolov

Do you have the same problem with 4.5.4?

#2 - 06/08/2011 05:20 PM - Jussi Lehtola

Yes, see

<http://koji.fedoraproject.org/koji/getfile?taskID=3119344&name=build.log>

```
/usr/bin/gcc -O2 -g -pipe -m32 -fsigned-char -Wa,--noexecstack -fPIC -O3 -DNDEBUG -fPIC CMakeFiles/g_luck.dir/g_luck.c.o -o g_luck
-rdynamic -ldl -lm libgmxpreprocess.so.6 ../mdlib/libmd.so.6 ../gmxlib/libgmx.so.6 -ldl -lm -lpthread -lfftw3f -lxml2
../gmxlib/libgmx.so.6: undefined reference to `__sync_lock_test_and_set'
../gmxlib/libgmx.so.6: undefined reference to `__sync_fetch_and_add'
../gmxlib/libgmx.so.6: undefined reference to `__sync_bool_compare_and_swap'
../gmxlib/libgmx.so.6: undefined reference to `__sync_lock_release'
../gmxlib/libgmx.so.6: undefined reference to `__sync_synchronize'
../gmxlib/libgmx.so.6: undefined reference to `__sync_add_and_fetch'
```

#3 - 04/11/2012 11:40 AM - Rossen Apostolov

Related question - are the Altivec kernels important for you? Because we consider dropping the support for them, see [#574](#)

#4 - 04/11/2012 11:57 AM - Jussi Lehtola

No, they're not.

#5 - 04/12/2012 10:49 AM - Rossen Apostolov

What version of gcc are you using? Is it possible that it doesn't have support for these primitives on ppc?

Rossen

Jussi Lehtola wrote:

Yes, see

<http://koji.fedoraproject.org/koji/getfile?taskID=3119344&name=build.log>

```
/usr/bin/gcc -O2 -g -pipe -m32 -fsigned-char -Wa,--noexecstack -fPIC -O3 -DNDEBUG -fPIC CMakeFiles/g_luck.dir/g_luck.c.o -o g_luck
-rdynamic -ldl -lm libgmxpreprocess.so.6 ../mdlib/libmd.so.6 ../gmxlib/libgmx.so.6 -ldl -lm -lpthread -lfftw3f -lxml2
../gmxlib/libgmx.so.6: undefined reference to `__sync_lock_test_and_set'
../gmxlib/libgmx.so.6: undefined reference to `__sync_fetch_and_add'
../gmxlib/libgmx.so.6: undefined reference to `__sync_bool_compare_and_swap'
../gmxlib/libgmx.so.6: undefined reference to `__sync_lock_release'
../gmxlib/libgmx.so.6: undefined reference to `__sync_synchronize'
../gmxlib/libgmx.so.6: undefined reference to `__sync_add_and_fetch'
```

#6 - 04/12/2012 10:49 AM - Rossen Apostolov

- Target version set to 4.5.6

#7 - 04/12/2012 11:10 AM - Jussi Lehtola

Well, this was on RHEL 4, so it was on the 3.4.6 series.

But RHEL 4 is EOL, so this bug is kind of obsolete.

#8 - 04/12/2012 01:57 PM - Rossen Apostolov

- Status changed from New to Closed

OK, closing then.