

GROMACS - Bug #1327

CMake bugs with set(var value PARENT_SCOPE)

08/30/2013 03:35 PM - Mark Abraham

Status:	Closed	
Priority:	Normal	
Assignee:	Mark Abraham	
Category:	build system	
Target version:	4.6.4	
Affected version - extra info:	also master	Difficulty: uncategorized
Affected version:	4.6.3	

Description

<http://public.kitware.com/Bug/view.php?id=13786> notes that set(var value PARENT_SCOPE) does not work in 2.8.10.1 or 2.8.11. I've been using lots of 2.8.11 in recent months and not had problems, but we should be alert for this, because any other code we have that tries to be modular with CMake scope may also be broken. Ugh.

In particular, cmake .. -DGMX_BUILD_OWN_FFTW=on breaks because such a set(... PARENT_SCOPE) fails in src/contrib/fftw/CMakeLists.txt, giving messages like

```
-- The GROMACS-managed build of FFTW 3 will configure with the following optimizations: --enable-sse2
```

```
CMake Error at CMakeLists.txt:915 (MESSAGE):
```

```
Cannot find FFTW 3 (with correct precision - libfftw3f for single-precision GROMACS or libfftw3 for double-precision GROMACS). Either choose the right precision, choose another FFT(W) library (-DGMX_FFT_LIBRARY), enable the advanced option to let GROMACS build FFTW 3 for you (-DGMX_BUILD_OWN_FFTW=ON), or use the really slow GROMACS built-in fftpack library (-DGMX_FFT_LIBRARY=fftpack).
```

because FFTW_FOUND is not set TRUE. So I think we will need to version this error message by the CMake version, or face a future deluge of posts on gmx-users.

Associated revisions

Revision d703d38c - 09/02/2013 08:41 AM - Magnus Lundborg

Set upper case of FFTW variable at the right place.

Fixes #1327

Change-Id: Ie9ef1ffceef7d46f1e7a5a8ca3ceb22a81854

History

#1 - 09/01/2013 02:11 PM - Mark Abraham

Seems I was too hasty here - set(var value PARENT_SCOPE) sets **only** in the parent scope, and not the local scope (where I was testing for it).

#2 - 09/08/2013 05:20 PM - Magnus Lundborg

- Status changed from New to Resolved

- % Done changed from 0 to 100

Applied in changeset [d703d38cf75a0e77e4188c19eacc658a7207bd51](#).

#3 - 10/16/2013 03:28 PM - Mark Abraham

- Status changed from Resolved to Closed