

GROMACS - Feature #2592

Allow compile caching with ccache

07/30/2018 01:06 PM - Eric Irrgang

Status:	Closed
Priority:	Normal
Assignee:	
Category:	build system
Target version:	
Difficulty:	uncategorized
Description	
ccache is a compiler wrapper that can greatly speed up rebuilds in some cases. To be used with CMake in a general way, the LAUNCHER facility can be used. A proposed CMake update is in Change-Id: la04d7388a3e8367d31cc5728dfc4b245ea7ef774	

Associated revisions

Revision 04190c78 - 08/08/2018 04:00 PM - Eric Irrgang

Enable ccache compiler wrapper when available.

Let CMake use ccache compiler wrapper via `..._LAUNCHER`.

For gcc and compatible compilers, the cost of rebuilding can be greatly reduced when switching back and forth between branches. If ccache is not installed or is not given a known-compatible compiler to wrap, this change has no effect.

Potential side effects should already be familiar to ccache users:

- In some cases, a cache configured to grow too large may lose its benefit.
- If the cache is corrupted, it may need to be removed to restore utility.

We are not using any of the more aggressive caching options, so there should be no risk of false positives in compile cache hits.

Resolves #2592

Change-Id: la04d7388a3e8367d31cc5728dfc4b245ea7ef774

History

#1 - 07/30/2018 03:27 PM - Gerrit Code Review Bot

Gerrit received a related patchset '3' for Issue [#2592](#).

Uploader: M. Eric Irrgang (ericirrgang@gmail.com)

Change-Id: gromacs~master~la04d7388a3e8367d31cc5728dfc4b245ea7ef774

Gerrit URL: <https://gerrit.gromacs.org/8117>

#2 - 07/31/2018 07:45 PM - Eric Irrgang

- Description updated

I believe suggestions from code review have been addressed as of patch set 4 on Gerrit. The feature will be quietly on by default, but easily disabled. Output is minimal and idempotent. Conditional activation is conservative, but a note in the developer tools notes suggests adventurous users try out and submit updates when the caching should be applied more aggressively.

#3 - 08/09/2018 10:40 AM - Eric Irrgang

- Status changed from New to Resolved

#4 - 09/04/2018 12:54 PM - Paul Bauer

- Status changed from Resolved to Closed