GROMACS - Bug #798

SigTerm during file I/O causes gmx_error

08/30/2011 10:45 AM - Roland Schulz

Status:	Closed		
Priority:	High		
Assignee:	Sander Pronk		
Category:			
Target version:	4.6		
Affected version - extra info:		**Difficulty:**	uncategorized
Affected version:			

Description

The error handler is setup in signal_handler_install using the "signal" function. If a system call is running (e.g. I/O) while the function is running the system call fails with EINTR. One can check everywhere for EINTR and rerun the system call. But much easier is to set the signal behavior to SA_RESTART.

This flag is only available with the function "sigaction" and not with "signal". "signal" doesn't specify whether a syscall is interrupted or not (it is for e.g. Linux). Thus I suggest that in signal_handler_install function "signal" is replaced by sigaction and SA_RESTART is set.

For systems without sigaction (e.g. Windows), we could continue to use "signal".

Associated revisions

Revision bf2fcd92 - 04/16/2012 03:22 PM - Roland Schulz

Restart IO operations when interrupter by signal

Fixes #798

Change-Id: I762412abf8138bbbe3d386d015e6af3522bd5235

Revision bf2fcd92 - 04/16/2012 03:22 PM - Roland Schulz

Restart IO operations when interrupter by signal

Fixes #798

Change-Id: I762412abf8138bbbe3d386d015e6af3522bd5235

Revision 6cb62f77 - 04/27/2012 06:09 AM - Roland Schulz

Fix for sigaction

Commit "Restart IO operations when interrupter by signal" didn't actually activate sigaction because config.h.cmakein change was missing.

Fixes #798

Change-Id: Id5c7e3344688c32ec4c51d84ccbc66658ed928f9

Revision 6cb62f77 - 04/27/2012 06:09 AM - Roland Schulz

Fix for sigaction

Commit "Restart IO operations when interrupter by signal" didn't actually activate sigaction because config.h.cmakein change was missing.

Fixes #798

Change-Id: Id5c7e3344688c32ec4c51d84ccbc66658ed928f9

History

#1 - 09/01/2011 10:25 PM - Rossen Apostolov

- Assignee set to Sander Pronk

#2 - 09/13/2011 11:19 PM - Roland Schulz

- Target version set to 4.5.5

#3 - 09/22/2011 03:50 PM - Rossen Apostolov

- Target version changed from 4.5.5 to 4.5.6

#4 - 03/05/2012 11:59 AM - Rossen Apostolov

Shall this get fixed for 4.5.6?

#5 - 03/05/2012 03:38 PM - Roland Schulz

I think so. I'm happy to make the proposed change myself - is very easy. I didn't do this initially because I wanted get feedback on whether the solution is correct. Should I go ahead and push a change to gerrit to get feedback there?

#6 - 03/06/2012 10:05 AM - Rossen Apostolov

Sure, please do that.

Sander, what do you think about this patch?

#7 - 03/15/2012 05:53 AM - Roland Schulz

Sander, can you let me know what you think about the idea as described? Or do you want me to upload first the patch and then comment there?

#8 - 04/11/2012 10:28 AM - Rossen Apostolov

- Priority changed from Normal to High

Could you patch it for 4.5.6?

#9 - 04/11/2012 06:21 PM - Roland Schulz

- Target version changed from 4.5.6 to 4.6

See https://gerrit.gromacs.org/#/c/719/ for reason to change target.

#10 - 04/11/2012 08:50 PM - Rossen Apostolov

OK, that's good

#11 - 04/16/2012 01:44 PM - Rossen Apostolov

- Status changed from New to Closed

Closing, the patch is approved and just needs to be merged.