## GROMACS - Bug #1355

### ThreadMPI.cmake TestAtomic.c check is not reliable

10/11/2013 12:39 AM - Roland Schulz

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>Low</td>
</tr>
<tr>
<td>Assignee:</td>
<td>Mark Abraham</td>
</tr>
<tr>
<td>Category:</td>
<td>build system</td>
</tr>
<tr>
<td>Target version:</td>
<td></td>
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<tr>
<td>Affected version:</td>
<td>4.6</td>
</tr>
<tr>
<td>Difficulty:</td>
<td>uncategorized</td>
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**Description**

TestAtomic.c doesn't call any of the atomics. Thus the atomics are only syntax checked. Any compiler error which only occurs when macros are evaluated or compiler errors in later optimization/linker stages can't get noticed. An example is that the usage of sfence on MIC doesn't make the test fail. See [https://gerrit.gromacs.org/2690](https://gerrit.gromacs.org/2690)

**Associated revisions**

**Revision 2bd564f - 10/18/2013 09:38 AM - Mark Abraham**

Call atomics from TestAtomic.c

This exposes more compile-time errors than simply parsing the definitions. This makes CMake's diagnostics more useful with respect to atomic operations.

Fixes #1355

Change-Id: le1d6f14565700b98988cadc17cb7ac2b78d76ce3

**History**

**#1 - 10/11/2013 01:52 PM - Mark Abraham**

- Assignee deleted (Sander Pronk)

For the record, Sander left academe in about July, so please don't assign things to him unless/until we hear from him again! :-)

**#2 - 10/11/2013 02:23 PM - Mark Abraham**

- Status changed from New to In Progress
- Assignee set to Mark Abraham

Suggested fix in [https://gerrit.gromacs.org/#q,Ie1d6f14565700b98988cadc17cb7ac2b78d76ce3,n,z](https://gerrit.gromacs.org/#q,Ie1d6f14565700b98988cadc17cb7ac2b78d76ce3,n,z). Please try it out on MIC - I can't.

**#3 - 10/18/2013 09:40 AM - Mark Abraham**

- Status changed from In Progress to Resolved
- % Done changed from 0 to 100

Applied in changeset 2bd564f2a9021c872fc06f1689492fe128d76ce3.

**#4 - 12/03/2013 04:22 PM - Rossen Apostolov**

- Status changed from Resolved to Closed