Charm++ - Bug #1514
Throw a runtime error for registrations that occur after startup
04/19/2017 10:16 AM - Eric Mikida

<table>
<thead>
<tr>
<th>Status:</th>
<th>Implemented</th>
<th>Start date:</th>
<th>04/19/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>High</td>
<td>Due date:</td>
<td></td>
</tr>
<tr>
<td>Assignee:</td>
<td>Seonmyeong Bak</td>
<td>% Done:</td>
<td>0%</td>
</tr>
<tr>
<td>Category:</td>
<td></td>
<td>Estimated time:</td>
<td>0.00 hour</td>
</tr>
<tr>
<td>Target version:</td>
<td>6.8.0</td>
<td>Spent time:</td>
<td>0.00 hour</td>
</tr>
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Description
This specifically comes up for templated entry methods that aren't explicitly instantiated in the ci file. If you forgot to instantiate a version of the templated entry method, the code still compiles and links fine but at runtime, the behavior is undefined and no errors are ever thrown. One quick fix for this behavior would be to at least throw an error if a new registration occurs after startup.

History
#1 - 04/25/2017 04:28 PM - Phil Miller
- Target version set to 6.8.0

#2 - 04/25/2017 04:34 PM - Phil Miller
- Priority changed from Normal to High

#3 - 04/25/2017 04:51 PM - Phil Miller
- Assignee changed from Eric Mikida to Seonmyeong Bak

#4 - 05/01/2017 05:17 PM - Seonmyeong Bak
This issue doesn't happen on multicore version. Even without instantiation of template on ci files, the application is compelled, linked and executed on multicore version.

Investigating this issue.

#5 - 05/01/2017 05:57 PM - Eric Mikida
I think that's just a symptom of the example program I gave you. The call to the entry method that wasn't instantiated was done in the main chare constructor, so it was still during startup. If you move that call to somewhere after startup completes then I suspect multicore will have the same problem.

#6 - 05/02/2017 11:07 AM - Seonmyeong Bak
- Status changed from New to In Progress

#7 - 05/10/2017 02:40 AM - Seonmyeong Bak
https://charm.cs.illinois.edu/gerrit/#/c/2510/

#8 - 05/10/2017 03:55 PM - Seonmyeong Bak
After the initialization is done, the calling the templated entry method in an uninstantiated form leads to CkAbort. Probably this patch helps the issue resolved.

#9 - 05/10/2017 09:13 PM - Seonmyeong Bak
- Status changed from In Progress to Implemented