Charm++ - Bug #1634
HDF5 issues in AMPI
07/16/2017 02:52 PM - Matthias Diener

| Status: | New | Start date: | 07/16/2017 |
| Priority: | Normal | Due date: | |
| Assignee: | Matthias Diener | % Done: | 0% |
| Category: | AMPI | Estimated time: | 0.00 hour |
| Target version: | 6.8.1 | Spent time: | 0.00 hour |

Description
The HDF5 library is available for AMPI at
https://charm.cs.illinois.edu/gerrit/#/admin/projects/hdf5-ampi

This bug tracks several of the issues that are still needed for complete support.

History
#1 - 07/16/2017 02:55 PM - Matthias Diener
The issues to test and improve are:
- Test if applications work with the shared library (currently, only the static hdf5 library is built)
  - This is currently blocked by the lack of a shared-library ROMIO
- SMP mode (seems to work 07/16)
- Virtualization (seems to work 07/16)
- Migration
- Some spurious crashes/segfaults at hdf5 library termination
- Test other architectures than linux/netlhrs. Currently works with:
  - netlhrs-linux-58_64
  - netlhrs-linux-58_64 smp
  - multicore-linux-58_64

#2 - 07/18/2017 09:39 AM - Sam White
'rlsglobals' currently requires static linking: https://charm.cs.illinois.edu/redmine/issues/1220

For migration, the main concern is migrating with open files: so far we've told users to explicitly close and re-open files before and after migration (or if doing serial I/O, make that rank non-migratable), but we could potentially do that for them in our ROMIO and HDF5 distributions.