Charm++ - Bug #1441
lies at startup about "The comm. thread both sends and receives messages"

02/21/2017 02:58 PM - Jim Phillips

Status: New  Start date: 02/21/2017
Priority: Normal  Due date:
Assignee: Jaemin Choi  % Done: 0%
Category: Machine Layers  Estimated time: 0.00 hour
Target version: 6.8.0  Spent time: 0.00 hour

Description
There is logic for setting and reporting Cmi_smp_mode_setting at startup, but this only reflects the behavior of the mpi-smp and gni-smp layers.

```
jim@sunnyvale$ grep -r Cmi_smp_mode_setting .
./arch/util/machine-common-core.c:static enum MACHINE_SMP_MODE Cmi_smp_mode_setting = COMM_THREAD_SEND_RECV;
./arch/util/machine-common-core.c: if (Cmi_smp_mode_setting == COMM_THREAD_SEND_RECV) {
./arch/util/machine-common-core.c: } else if (Cmi_smp_mode_setting == COMM_THREAD_ONLY_RECV) {
./arch/util/machine-common-core.c: } else if (Cmi_smp_mode_setting == COMM_WORK_THREADS_SEND_RECV) {
./arch/util/machine-common-core.c: } else if (Cmi_smp_mode_setting == COMM_THREAD_NOT_EXIST) {
./arch/util/machine-common-core.c: if(Cmi_smp_mode_setting == COMM_THREAD_ONLY_RECV || Cmi_smp_mode_setting == COMM_THREAD_NOT_EXIST)
./arch/mpi/machine.c: if (Cmi_smp_mode_setting == COMM_THREAD_SEND_RECV) {
./arch/mpi/machine.c: if (Cmi_smp_mode_setting == COMM_THREAD_ONLY_RECV) {
./arch/mpi/machine.c: } else if (Cmi_smp_mode_setting == COMM_THREAD_ONLY_RECV) {
./arch/mpi/machine.c: } else if (Cmi_smp_mode_setting == COMM_THREAD_SEND_RECV)
./arch/mpi/machine.c: if (Cmi_smp_mode_setting == COMM_THREAD_SEND_RECV && _thread_provided != MPI_THREAD_MULTIPLE) {
./arch/mpi/machine.c: Cmi_smp_mode_setting = COMM_THREAD_SEND_RECV;
./arch/gni/machine.c: Cmi_smp_mode_setting = COMM_WORK_THREADS_SEND_RECV;
```

History

#1 - 02/21/2017 04:03 PM - Jim Phillips
More specifically, verbs and net-ibverbs only use the comm thread for receives.

#2 - 03/03/2017 11:41 AM - Sam White
- Target version set to 6.8.0
- Assignee set to Nitin Bhat

#3 - 03/14/2017 01:54 PM - Phil Miller
- Assignee changed from Nitin Bhat to Jaemin Choi