Open MPI State of the Union (SotU)
November 19, 2013
SC'13 BOF Report

Similar to previous years, the Open MPI developer community presented a "State of the Union" to our user community. It is our intent to present the status of where we are, some interesting ongoing projects from our member organizations, and a best guess at a roadmap for future work.

This year, we asked for questions via a web form before the actual SC BOF itself with the idea that we could address these questions directly in the presentation. This worked out better than expected; we got a goodly number questions on the web form. We incorporated all but one into the presentation (the one we didn't was a highly specific question about a usage scenario that we ended up discussing in person with the user who submitted it after the BOF).

The slides from the BOF are available on the Open MPI web site; please feel free to check them out:

http://www.open-mpi.org/papers/sc-2013/

Slides marked with (*) in the upper right corner were influenced by questions submitted by the web form.

We got several pieces of feedback from the BOF that we're working to address:

- Make roadmaps more visible on the web site -- basically the BOF slides (in slightly better format) on the web site.
- More verbosity on COLL tuned selection.
- MPI_T performance variables for how many times you cross a threshold (e.g., coll selection, BTL underlying selection, etc.)
- Make OMPI more Valgrind-clean. The new MCA parameter system, for example, is fairly Valgrind-noisy.
- Increase TCP BTL buffer sizes, especially for 10G TCP-based networks.