MPICH BoF at SC13

Rajeev Thakur, Pavan Balaji

This is a brief report for the BoF at SC13 on "MPICH: A High-Performance Open-Source MPI Implementation." The BoF was held on Tuesday, Nov. 19, 5.30-7.00pm.

MPICH is a widely used, open-source implementation of the MPI message passing interface standard. It has been ported to many platforms and used by several vendors and research groups as the basis for their own MPI implementations. We have held a BoF at SC for the past 4–5 years in order to provide a forum for users of MPICH as well as developers of MPI implementations derived from MPICH to discuss experiences and issues in using and porting MPICH.

We had a successful BoF at SC13 this year. Pavan Balaji gave an update on the status and future plans of MPICH. He announced the MPICH ABI Compatibility Initiative, an effort involving the MPICH group and several vendors who produce MPI implementations derived from MPICH. The goal of this initiative is to maintain ABI (abstract binary interface) compatibility between these implementations, thereby enabling MPI application codes to run on different platforms with different MPI implementations without the need for recompilation.

Representatives from Cray, IBM, Intel, Microsoft, and University of Tokyo provided brief updates on the status of their MPI implementation efforts (based on MPICH). Slides from some of the presentations can be found here.

There was plenty of time at the end for audience participation. There were many questions and comments from the audience, which were addressed by the speakers.