Welcome to the 2nd annual event!
August 25-27, 2014

Attendees List

20 Organizations	
Cray	San Diego Supercomputer Center
Dell	Sandia National Laboratories
IBM	Swiss National Computing Center, Switzerland
Intel	The Ohio State University
Lawrence Livermore National Laboratory	The University of Utah
Mellanox Technologies	Texas Advanced Computing Center
Northeastern University	University of California, San Diego
NVIDIA	University of Cambridge, UK
Ohio Supercomputer Center	University of Michigan, Ann Arbor
Pacific Northwest National Laboratory	Wright-Patterson Airforce Base

Objectives of MUG

This meeting provides an open forum for all attendees (users, system administrators, researchers, engineers, and students) to:

- Discuss and share their knowledge on using MVAPICH2, MVAPICH2-X, MVAPICH2-GDR and OMB
- Experience with large-scale systems
- Usage with a diverse set of applications
- Getting exposed to tuning and optimization
- Sharing common knowledge and troubleshooting procedures

WIFI details

Please connect to:
WIFI@OH-TECH
Password: 1224kinnear

MVAPICH
User Group Meeting

Monday, August 25 – Afternoon Schedule

12:00 – 1:00	Lunch & Registration
1:00 – 5:00	**Tutorial: Optimization and Tuning of MPI and PGAS Applications using MVAPICH** Hosted by the MVAPICH team
6:30 – 8:00	**Reception at Buffalo Wild Wings** 2151 N High St Columbus, OH 43201 Easy 10 minute walk from the Blackwell Hotel

MVAPICH User Group Meeting

Tuesday, August 26 - Morning Schedule

07:45 –	Registration
7:45 – 8:20	Continental Breakfast
8:20 – 8:30	Opening Remarks
8:30 – 9:30 **Keynote Talk**	**MVAPICH at Petascale: Experiences in Production on the Stampede System** Dan Stanzione, Texas Advanced Computing Center
9:30 – 10:00	**Overview of the MVAPICH Project: Latest Status and Future Roadmap** Dhabaleswar K. (DK) Panda, The Ohio State University
10:00 – 10:30	**MVAPICH - Still saving the world! Now even faster.** Adam Moody, Lawrence Livermore National Laboratory
10:30 – 11:00	Break
11:00 – 11:30	**High Order Seismic Simulations at Sustained Petascale** Alexander Heinecke, Intel
11:30 – 12:00	**Operational Robustness of Accelerator Aware MPI** Sadaf Alam, Swiss National Supercomputing Center (CSSC), Switzerland
Before Lunch	Group Photo

MVAPICH User Group Meeting

Tuesday, August 26 - Afternoon Schedule

12:00 – 1:00	Lunch
1:00 – 1:30	**Interconnect Your Future** Gilad Shainer, Mellanox
1:30 – 2:00	**HPC, GPUs and Networking** Davide Rossetti, NVIDIA
2:00 – 2:30	**Expanding Stack Coverage in HPC Systems** David Race, Cray
2:30 – 3:00	**System Design Considerations for HPC Solutions** Onur Celebioglu, Dell
3:00 – 3:30	Break
3:30 – 4:00	**HOOMD-blue: Scalable Molecular Dynamics on Thousands of GPUs** Jens Glaser, University of Michigan
4:00 – 5:00 **Contributed Presentations (Session I)**	**Experiences with Sandia National Laboratories HPC Applications and MPI Performance** Mahesh Rajan - Sandia National Laboratories **Parallel Breadth First Search on GPU Clusters using MPI and GPU Direct** Harish Kumar Dasari - Scientific Computing and Imaging Institute, The University of Utah **DMTCP: System-Level Checkpoint-Restart in User-Space** Gene Cooperman - Northeastern University

Open mic Session

- Free discussion on your thoughts and comments on MVAPICH projects (MVAPICH2, MVAPICH2-X , MVAPICH2-GDR and OMB)

- Examples (not limited to):
  - Your experience on what works and what does not work
  - What can be improved
  - Suggestion for improvements
  - Feature requests
  - Challenges for the MVAPICH team
  - ….

Tuesday, August 26th 6:30pm

Reception and Dinner at:
Bravo! Cucina Italia

1803 Olentangy River Rd.
Columbus, OH 43212
(614) 291-8210

Directions to Bravo! from OSC:

- Head east on Kinnear Road

Directions to Bravo! from the Blackwell:

- Head north on Tuttle Park Pl toward Neil Ave
- Turn left onto W Lane Ave
- Turn left onto Olentangy River Rd
- Turn left to stay on Olentangy River Rd

Bravo! Will be on the right in the Lennox Movie theater parking lot behind Champps Restaurant

(Transportation will be provided by student volunteers)

Wednesday, August 27 – Morning Schedule

07:45 –	Registration
7:45 – 8:30	Continental Breakfast
8:30 – 9:30 **Keynote Talk**	**Preparing Applications for current and future Systems: Experiences at PNNL** Darren Kerbyson, Pacific Northwest National Laboratory
9:15 – 10:00	**NWChem and Global Arrays Applications using MPI-3 RMA** Jeff Hammond, Intel
10:00 – 10:30	**Application and Microbenchmark Performance using MVAPICH2-X on San-Diego Supercomputing Center Gordon Cluster** Mahidhar Tatineni, San-Diego Supercomputing Center
10:30 – 11:00	Break
11:00 – 11:30	**Scalable Fabric Interfaces Lessons Learned from MVAPICH/MVAPICH2** Sayantan Sur, Intel
11:30 – 12:00	**Advantages to Using MVAPICH2 on TACC HPC Clusters** Jerome Vienne, Texas Advanced Computing Center

Wednesday, August 27 - Afternoon Schedule

12:00 – 12:15 **Contributed Presentations (Session II)**	**GPUDirect Approach for Parallel 3D-FFT in Quantum ESPRESSO** Filippo Spiga, University of Cambridge, United Kingdom
12:15 – 12:30	Closing Remarks and Future MUG Planning
12:30 – 1:30	Lunch
1:30 – 3:30	**Interactive/Hands-on Session with MVAPICH2 and MVAPICH2-X Developers**

Presentation Slides

Please submit all presentations to:

Mark Arnold
arnoldm@cse.ohio-state.edu

PDF version of the slides will be linked to the website
Recordings of the presentations will also be available

Group Photo

Before lunch today we will be taking a group photo to commemorate the second MUG event!

Parking

Please see the registration desk for a daily event parking pass

Thanks to our Sponsors!

Thanks!!

- Keynote Speakers
- All other Speakers
- Authors of contributed presentations
- All attendees

- OSC Staff members

- Student Volunteers

- Carrie Stein, Mark Arnold and Hari Subramoni