

The MPI Forum

**LEADERSHIP
COMPUTING FACILITY**
NATIONAL CENTER FOR COMPUTATIONAL SCIENCES



presented by

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Outline

- Forum Structure
- Schedules
- Introductions
- Scope
- Voting Rules
- Committee Rules

Face-To-Face Meetings

- March 10-12, 2008
- April 28-30, 2008 - Microsoft, Downtown Chicago
- June 30 - July 2, 2008 - Sun, Menlo Park
- Sept 3-5, 2008 Dublin, Ireland (Euro PVM/MPI is Sept 7-10, 2008 in Dublin)
- October 20-22, 2008 - Microsoft, Chicago (?)
- December 15-17, 2008 - Sun, Menlo Park (?)

Telcons

- Week of April 7th, 2008
- Week of May 26th, 2008
- Week of August 4th, 2008
- Week of Sept 29th, 2008
- Week of Nov 24th, 2008

Report due back to Forum Chairman/Secretary (part of the permanent record)

Logistics

- \$200 / meeting / person - this meeting
- ~\$50/ meeting next time (site specific)
- Online registration
 - Registration
 - Meeting fee
 - Hotel reservation

NSF funding for participants from US Academic Institutions

- Administered by UTK (Jack Dongarra's group)
- One person per institution
- \$750/meeting for travel/housing/registration/per-diem
- Pre-approval required
- Contact me, if interested

MPI 2.1

Scope : Clarification to the MPI standards document, resulting in a single document describing the full MPI 2.1 standard. This includes merging of documents, text corrections, and added clarifying text.

MPI 2.1 Primary Author: Rolf Rabenseifner

MPI 2.2

Scope: Small changes to the standard. A small change is defined as one that does not break existing user code - either by interface changes or semantic changes - and does not require large implementation changes.

MPI 2.2 Primary Author: Bill Gropp

MPI 3.0

Scope: Additions to the standard that are needed for better platform and application support. These are to be consistent with MPI being a library providing of parallel process management and data exchange. This includes, but is not limited to, issues associated with scalability (performance and robustness), multi-core support, cluster support, and application support.

MPI 3.0 - Initial Chapter Authors

- Fault Tolerance/Dynamic Process Control: Rich Graham
- Generalized Requests (progress): George Bosilca
- Improved One-sided Communications: Bill Gropp/Rajeev Thakur
- Non-Blocking Collectives: Andrew Lumsdaine

Voting Rules

- **There is one vote per organization, which must be present at the meeting when the vote is taken.**
- **To vote, an organization must have been present at two of the last three meetings.**
- **Votes are taken twice, at separate meetings. Votes are preceded by a “reading” at an earlier meeting, at which straw votes may be taken.**
- **Measures pass on simple majority.**
- **Only items consistent with the charter can be considered.**

Jan Meeting Attendees (Orgs may vote this meeting)

- Argonne NL
- Bull
- Cisco
- Cray
- HDF Group
- HLRS
- HP
- IBM
- Indiana University
- Inria
- Intel Corp.
- Lawrence Livermore NL
- Los Alamos NL
- Mathworks
- Myricom
- Microsoft
- NEC
- Oak Ridge NL
- Ohio State University
- Pacific Northwest NL
- QLogic
- Sandia NL
- SGI
- SiCortex
- Sun Microsystems
- University of Alabama Birmingham
- University of Houston
- University of Illinois Urbana Champagne
- University of Wisconsin

Working Groups

- 2.1
 - many active
- 2.2
 - a few items proposed
- 3.0
 - 8 working groups
 - Items will be brought to the full floor for consideration
 - Will slow down items to make sure dependencies between working groups are taken into account
 - Need to look at overall proposals and look for redundancies

Working Groups - Cont'd

- Working groups are functioning on behalf of the full forum
 - WG leads will ensure all proposals are considered
- Working groups should consider competing proposals
- Feel free to bring competing proposals to the full forum for discussion

Food

- Tonight - Pizza at
- Tomorrow night -
- Lunch tomorrow - on your own
- Make sure to sign up if you want to participate