

MPI 2.2

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Goals

- Modernize MPI Specification
 - ◆ Without impacting implementations
 - ◆ Examples: Add const to C binding; relax send and receive buffer restrictions
- Continue to clarify MPI standard document
 - ◆ Build on the MPI 2.1 work
 - ◆ See Rolf's excellent summary
- Fix some broken parts
 - ◆ E.g., MPI::SEEK_SET (remove, rename, something else?)
- Add urgently needed missing routines
 - ◆ E.g., MPI_Offset-related datatype routines?



Resources

- Wiki page
 - ◆ http://meetings.mpi-forum.org/MPI_2.2_main_page.php
- Pre-wiki discussion of issues
 - ◆ <http://www.cs.uiuc.edu/homes/wgropp/projects/parallel/MPI/mpi-errata/mpi2-2issues.htm> (linked from wiki page)



Current State

- 38 Items have proposals on Wiki
- New Routines
 - ♦ 3(MPI_Init_asserted), 5(comm_set_info), 14(local reduce), 15(progress), 16(request callback), 17(reduce-scatter-block), 22(probe/recv), 23(pack-block), 33(large counts),
- Text (only) Updates
 - ♦ 6,7,9,10,11,12,20,21,26,28,29,30,31,32,34,35,36,37,38,42,43, 44,45,47,
- Enhancements to standard
 - ♦ 1 (const), 2(buffer), 4(request_ignore), 18(binary scan ops), 24(inplace for alltoall), 27(new predefined datatypes), 39 (more const (C++)), 40 (Grequest function typedefs), 41 (function typedefs),
- Move to MPI 3
 - ♦ 13(graph, changes binding)
- Not Ready
 - ♦ 8 (graph_create), 19(MPI_Ops), 25(error reporting), 46 (RMA Sync semantics), 48 (passive target RMA in Fortran)



Plan

- Review New Routines and Enhancements
 - ◆ Straw vote: Yes, Needs Improvement, No
 - This is feedback for the proposer
 - Goal is to ensure the best proposal when we do a vote
- Review Text Updates
 - ◆ Ready for votes
- Miscellaneous
 - ◆ Discussion of incomplete proposals

