Change-log

Changes and corrections for MPI 4.1
On behalf of the Topologies Chapter Committee

September 2023

Diffs between MPI-4.0 and MPI-4.1

Text with highlighted changes: https://fs.hlrs.de/~hpctohaa/mpi-41-rc1-commented.pdf
Colours:

- green: New text.
- red: New text in wrong section.
- orange: Changes in LaTeX that do not change the text, e.g. \emph changed to \textbf.

github diff: https://github.com/mpi-forum/mpi-standard/compare/mpi-4.0...mpi-41-rc#
diff-5c3de92b858a21937eb7b60df1f9023e6d14f7afeb9993c52da8d8cc5c7bd11a

Findings during MPI4.0RC1 review

- Appendix B.1.2 lists the clarification of progress rules of `MPI_REQUEST_GET_STATUS` twice (items 9 and 12), see Issue#741, PR884
- One paragraph (errata) is the wrong section (B.2.1 instead of B.1.1), see Issue#754, PR874,
- Typos etc., see Issue#747, PR881.

Maybe missing PRs

Should the following PRs have an entry in the change-log (YES NO)?

- Correct Rationale About Info Objects #843? NO
- Error handler are copied too with MPI_COMM_DUP (issue #690) #830 ?YES
- Fix for issue #687 (MPI_Comm_disconnect is not stated to delete attributes) #827 ?YES
- Definition 'noncollective procedure' added, 'nonpersistent' substituted #820 ?NO
- Remove MPI_COMBINER_STRUCT_INTEGER. #789 ?NO
- Add condition stating when MPI_WAIT is nonlocal #750 ?NO
- Add advice to everyone about ambiguity of logically concurrent #748 ?NO
- Fixing examples in tools chapter #734 ?NO
- Example 12.4: RMA communication calls may not block in PSCW #671 ?YES
- RMA: both MPI_WIN_ALLOCATE and MPI_WIN_ALLOCATE_SHARED allocate memory #664 ?NO
- RMA: Add missing win-sync calls to Example 12.21 #663 ?YES
- sessions: changes to language bindings #658 ?YES
- MPI_COMM_CREATE_FROM_GROUP errhandler text update #629 ?YES Combine with current item 8 in change-log
- Added MPI_Status_set_elements_c through a POLYKIND #620 -? YES
- Fix for Issue 509 : Wrong examples in Partitioned Comms Chapter #607 ?YES, combine with errata item 5.

Chapter commitee

Current chapter commitee members

- Marc-André Hermanns
- Rolf Rabenseifner (now retired)
- Tobias Haas