

Chapter 2

Change-Log

This annex summarizes changes from the previous version of the MPI standard to the version presented by this document. Only significant changes (i.e., clarifications and new features) that might either require implementation effort in the MPI libraries or change the understanding of MPI from a user’s perspective are presented. Editorial modifications, formatting, typo corrections and minor clarifications are not shown.

2.1 Changes from Version 2.2 to Version 3.0

2.1.1 Errata to Previous Versions of MPI

1. Sections 2.6.2 and 2.6.3 on pages 18 and 19, and MPI-2.2 Section 2.6.2 on page 17, lines 41-42, Section 2.6.3 on page 18, lines 15-16, and Section 2.6.4 on page 18, lines 40-41.
This is an MPI-2 erratum: The scope for the reserved prefix `MPI_` and the C++ namespace `MPI` is now any name as originally intended in MPI-1.
2. Sections 4.2.2, 5.9.2, 13.5.2 Table 13.2, and Annex 19.1.1 on pages 3, 176, 538, and 1, and MPI-2.2 Sections 3.2.2, 5.9.2, 13.5.2 Table 13.2, 16.1.16 Table 16.1, and Annex A.1.1 on pages 27, 164, 433, 472 and 513
This is an MPI-2.2 erratum: New named predefined datatypes `MPI_CXX_BOOL`, `MPI_CXX_FLOAT_COMPLEX`, `MPI_CXX_DOUBLE_COMPLEX`, and `MPI_CXX_LONG_DOUBLE_COMPLEX` were added in C and Fortran corresponding to the C++ types `bool`, `std::complex<float>`, `std::complex<double>`, and `std::complex<long double>`. These datatypes also correspond to the deprecated C++ predefined datatypes `MPI::BOOL`, `MPI::COMPLEX`, `MPI::DOUBLE_COMPLEX`, and `MPI::LONG_DOUBLE_COMPLEX`, which were removed in MPI-3.0. The non-standard C++ types `Complex<...>` were substituted by the standard types `std::complex<...>`.
3. Sections 5.9.2 on pages 176 and MPI-2.2 Section 5.9.2, page 165, line 47.
This is an MPI-2.2 erratum: `MPI_C_COMPLEX` was added to the “Complex” reduction group.
4. Section 7.5.5 on page 302, and MPI-2.2, Section 7.5.5 on page 257, C++ interface on page 264, line 3.