

18. Section ?? on page ??.
New functions for a scalable distributed graph topology interface has been added. In this section, the functions `MPI_DIST_GRAPH_CREATE_ADJACENT` and `MPI_DIST_GRAPH_CREATE`, the constants `MPI_UNWEIGHTED`, and the derived C++ class `Distgraphcomm` were added.
19. Section 7.5.4 on page 248.
For the scalable distributed graph topology interface, the functions `MPI_DIST_NEIGHBORS_COUNT` and `MPI_DIST_NEIGHBORS` and the constant `MPI_DIST_GRAPH` were added.
20. Section 7.5.4 on page 248.
Remove ambiguity regarding duplicated neighbors with `MPI_GRAPH_NEIGHBORS` and `MPI_GRAPH_NEIGHBORS_COUNT`.
21. Section 8.1.1 on page 259.
The subversion number changed from 1 to 2.
22. Section 8.3 on page 264, Section ?? on page ??, and Annex A.1.3 on page 499.
Changed function pointer typedef names `MPI_{Comm,File,Win}_errhandler_fn` to `MPI_{Comm,File,Win}_errhandler_function`. Deprecated old “_fn” names.
23. Section ?? on page ??, and Section ?? on page ??.
Added const versions of `MPI::File::Set_errhandler` and `MPI::Win::Set_errhandler`. This allows `MPI::FILE_NULL` and `MPI::WIN_NULL` – regardless of whether they are const or not – to invoke these functions.
24. Section ?? on page ??.
Attribute deletion callbacks on `MPI_COMM_SELF` are now called in LIFO order. Implementors must now also register all implementation-internal attribute deletion callbacks on `MPI_COMM_SELF` before returning from `MPI_INIT/MPI_INIT_THREAD`.
25. Section 11.3.4 on page 331.
The restriction added in MPI 2.1 that the operation `MPI_REPLACE` in `MPI_ACCUMULATE` can be used only with predefined datatypes has been removed. `MPI_REPLACE` can now be used even with derived datatypes, as it was in MPI 2.0. Also, a clarification has been made that `MPI_REPLACE` can be used only in `MPI_ACCUMULATE`, not in collective operations that do reductions, such as `MPI_REDUCE` and others.
26. Section 12.2 on page 357.
Add “*” to the `query_fn`, `free_fn`, and `cancel_fn` arguments to the C++ binding for `MPI::Grequest::Start()` for consistency with the rest of MPI functions that take function pointer arguments.
27. Section 13.5.2 on page 414, and Table ?? on page ??.
`MPI_(U)INT{8,16,32,64}_T`, `MPI_AINT`, `MPI_OFFSET`, `MPI_C_COMPLEX`, `MPI_C_FLOAT_COMPLEX`, `MPI_C_DOUBLE_COMPLEX`, `MPI_C_LONG_DOUBLE_COMPLEX`, and `MPI_C_BOOL` are added as predefined datatypes in the external32 representation.