Datatypes Chapter Changes In MPI 4.1

MPI Forum Meeting, September 2023, Bristol, UK On behalf of the Datatypes Chapter Committee

Change Overview: Minor Edits

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#871: Update to Credits
#864: Pre RC4.1 fixes for the Datatypes chapter
#850: Review use of %ALLOWLATEX% and address issues; fix LaTeX warnings in
document.
#823: 'Pending communication' not defined in definition of
MPI Comm disconnect
#798: Add MPI Type get value index as a function
#832: Second attempt to apply PR 829 changes
#831.. Revert "Merge pull request #829 from
Wee Free Scot/Issue518 Deprecate X procedures"
#829.. Deprecate X procedures
#782: Reference the correct function.
#789: Remove MPI COMBINER STRUCT INTEGER.
#731: fix stray verbatim in datatypes
#706: Miscellaneous minor edits
#702: Improve primary index entries
#698: Editor fixes
#697: Improve example index
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#689: Fix table formatting and squash overfull boxes
#686: Consistent formatting for lists of MPI constants and objects.
There may be more to do; this captured the lists identified in issue
242
#685: Replaces use of \const with more specific macros
#683: Which hunt - replace with that where appropriate
#680: Correct use of paragraph command
#679: Consistent formatting for itemize lists
#677: Change non-xxx to nonxxx in most cases.
#631: Implementation of enhanced example index. Generated document does
not take advantage of these new features in the index, though the LaTeX
source is clearer.
#656: This has been waiting for reviews for months. I am assuming that
no issues noted means this is ok. As this is solely formatting changes,
these should not cause problems. Any issues can be addressed with a
subsequent PR.
#654: Correct spelling of executed in datatypes chapter
#642: After review by all chapters, merging the new format changes.
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#639: Fix type in MPI TYPE DUP.

% git log --first-parent --pretty=format:"%Cred%h%Creset %cs %Cgreen%<(25,trunc)%s%Creset %b" mpi-4.0..HEAD - datatypes.tex

Environmental Management Chapter Changes In MPI 4.1

MPI Forum Meeting, September 2023, Bristol, UK On behalf of the Inquiry Chapter Committee

Change Overview

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#166: Add functions to remove error objects
#834: Use MPI standard, not Standard
#833: Update for getlatex and fixes for explicit font commands
#826: Move the new figures to the correct location
#814: Use proper term for error codes, return codes, raise errors (Issue
671)
#790: Issue57 deprecate mpi host
#644: Wgft/errh session initial clarification
#762: New functions to query hardware resource names (issue #154)
#771: Remove (P)MPI Wtime and (P)MPI Wtick from list of allowed macros
#722: Deprecate mpif.h
#795: Fixes to distinguish MPI error codes and MPI T return codes
#755: Environment - Fix code examples
#784: Add a way to suppress implicit none in Fortran example code
fragments that include "USE" statements
#778: Enhance the compile check feature
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#657: MPI_LASTUSEDCODE - qualify when available
#693: Review use of emph where mpindex should be used
#688: Fix table formatting and squash overfull boxes
#686: Consistent formatting for lists of MPI constants and objects.
There may be more to do; this captured the lists identified in issue
242.
#685: Replaces use of \const with more specific macros
#683: Which hunt - replace with that where appropriate
#631: [...enhanced example index...]
#656: [...Code (re) formatting...]
#633: Add error class MPI_ERR_ERRHANDLER
#642: After review by all chapters, merging the new format changes.
#630: v4.x: remove dead code and comments
```

% git log --first-parent --pretty=format:"%Cred%h%Creset %cs %Cgreen%<(25,trunc)%s%Creset %b" mpi-4.0..HEAD - inquiry.tex

Visual diff: https://draftable.com/compare/ItcNopEGcyFg

#790: Issue57 deprecate mpi host

Nothing much to see except the deprecation of MPI_HOST and the removal of the text about host process

#166: Add functions to remove error objects

Add procedures MPI_REMOVE_ERROR_CLASS,
MPI_REMOVE_ERROR_CODE, MPI_REMOVE_ERROR_STRING to
complement the procedures adding error classes/codes/strings

#762: New functions to query hardware resource names

Added MPI_GET_HW_RESOURCE_INFO allowing to query the various hardware resource available on a system in order to perform a hardware-based splitting in MPI_Comm_split_type

#883: Typos

This is definitively last minute, but it fixes a typo, merges a few one-line paragraphs and allows the Example 9.4 to be on a single page.