NAME

MPI_Status_f2c − Convert a status from its Fortran representation to its C representation

SYNOPSIS

```
#include <mpi.h>
int
MPI_Status_f2c(MPI_Fint *f_status, MPI_Status *c_status)
```

INPUT PARAMETER

f_status

- Fortran status

OUTPUT PARAMETER

c_status

- C status

NOTES FOR FORTRAN

All MPI routines in Fortran (except for *MPI_WTIME* and *MPI_WTICK*) have an additional argument *ierr* at the end of the argument list. *ierr* is an integer and has the same meaning as the return value of the routine in C. In Fortran, MPI routines are subroutines, and are invoked with the *call* statement.

All MPI objects (e.g., *MPI_Datatype* , *MPI_Comm*) are of type *INTEGER* in Fortran.

ERRORS

If an error occurs in an MPI function, the current MPI error handler is called to handle it. By default, this error handler aborts the MPI job. The error handler may be changed with *MPI_Errhandler_set* ; the predefined error handler *MPI_ERRORS_RETURN* may be used to cause error values to be returned (in C and Fortran; this error handler is less useful in with the C++ MPI bindings. The predefined error handler *MPI::ERRORS_THROW_EXCEPTIONS* should be used in C++ if the error value needs to be recovered). Note that MPI does *not* guarantee that an MPI program can continue past an error.

All MPI routines (except *MPI_Wtime* and *MPI_Wtick*) return an error value; C routines as the value of the function and Fortran routines in the last argument. The C++ bindings for MPI do not return error values; instead, error values are communicated by throwing exceptions of type *MPI::Exception* (but not by default). Exceptions are only thrown if the error value is not *MPI::SUCCESS* .

Note that if the *MPI::ERRORS_RETURN* handler is set in C++, while MPI functions will return upon an error, there will be no way to recover what the actual error value was.

MPI_SUCCESS

- No error; MPI routine completed successfully.

SEE ALSO

MPI_Status_c2f(3)

MORE INFORMATION

For more information, please see the official MPI Forum web site, which contains the text of both the MPI-1 and MPI-2 standards. These documents contain detailed information about each MPI function (most of which is not duplicated in these man pages).

http://www.mpi-forum.org/

LOCATION

handles.c