

```

1  MPI_WIN_SET_ATTR(WIN, WIN_KEYVAL, ATTRIBUTE_VAL, IERROR)
2      INTEGER WIN, WIN_KEYVAL, IERROR
3      INTEGER(KIND=MPI_ADDRESS_KIND) ATTRIBUTE_VAL

```

```

4  MPI_WIN_SET_NAME(WIN, WIN_NAME, IERROR)
5      INTEGER WIN, IERROR
6      CHARACTER*(*) WIN_NAME

```

A.3.5 Process Topologies Fortran Bindings

```

11 MPI_CARTDIM_GET(COMM, NDIMS, IERROR)
12     INTEGER COMM, NDIMS, IERROR

```

```

13 MPI_CART_COORDS(COMM, RANK, MAXDIMS, COORDS, IERROR)
14     INTEGER COMM, RANK, MAXDIMS, COORDS(*), IERROR

```

```

16 MPI_CART_CREATE(COMM_OLD, NDIMS, DIMS, PERIODS, REORDER, COMM_CART, IERROR)
17     INTEGER COMM_OLD, NDIMS, DIMS(*), COMM_CART, IERROR
18     LOGICAL PERIODS(*), REORDER

```

```

19 MPI_CART_GET(COMM, MAXDIMS, DIMS, PERIODS, COORDS, IERROR)
20     INTEGER COMM, MAXDIMS, DIMS(*), COORDS(*), IERROR
21     LOGICAL PERIODS(*)

```

```

23 MPI_CART_MAP(COMM, NDIMS, DIMS, PERIODS, NEWRANK, IERROR)
24     INTEGER COMM, NDIMS, DIMS(*), NEWRANK, IERROR
25     LOGICAL PERIODS(*)

```

```

26 MPI_CART_RANK(COMM, COORDS, RANK, IERROR)
27     INTEGER COMM, COORDS(*), RANK, IERROR

```

```

29 MPI_CART_SHIFT(COMM, DIRECTION, DISP, RANK_SOURCE, RANK_DEST, IERROR)
30     INTEGER COMM, DIRECTION, DISP, RANK_SOURCE, RANK_DEST, IERROR

```

```

31 MPI_CART_SUB(COMM, REMAIN_DIMS, NEWCOMM, IERROR)
32     INTEGER COMM, NEWCOMM, IERROR
33     LOGICAL REMAIN_DIMS(*)

```

```

35 MPI_DIMS_CREATE(NNODES, NDIMS, DIMS, IERROR)
36     INTEGER NNODES, NDIMS, DIMS(*), IERROR

```

```

37 MPI_DIST_GRAPH_CREATE(COMM_OLD, N, SOURCES, DEGREES, DESTINATIONS, WEIGHTS,
38     INFO, REORDER, COMM_DIST_GRAPH, IERROR)
39     INTEGER COMM_OLD, N, SOURCES(*), DEGREES(*), DESTINATIONS(*),
40     WEIGHTS(*), INFO, COMM_DIST_GRAPH, IERROR
41     LOGICAL REORDER

```

```

43 MPI_DIST_GRAPH_CREATE_ADJACENT(COMM_OLD, INDEGREE, SOURCES, SOURCEWEIGHTS,
44     OUTDEGREE, DESTINATIONS, DESTWEIGHTS, INFO, REORDER,
45     COMM_DIST_GRAPH, IERROR)
46     INTEGER COMM_OLD, INDEGREE, SOURCES(*), SOURCEWEIGHTS(*), OUTDEGREE,
47     DESTINATIONS(*), DESTWEIGHTS(*), INFO, COMM_DIST_GRAPH, IERROR
48     LOGICAL REORDER

```

```

MPI_DIST_GRAPH_NEIGHBORS(COMM, MAXINDEGREE, SOURCES, SOURCEWEIGHTS,
    MAXOUTDEGREE, DESTINATIONS, DESTWEIGHTS, IERROR)
    INTEGER COMM, MAXINDEGREE, SOURCES(*), SOURCEWEIGHTS(*), MAXOUTDEGREE,
    OUTDEGREE, DESTINATIONS(*), DESTWEIGHTS(*), IERROR
MPI_DIST_GRAPH_NEIGHBORS_COUNT(COMM, INDEGREE, OUTDEGREE, WEIGHTED, IERROR)
    INTEGER COMM, INDEGREE, OUTDEGREE, IERROR
    LOGICAL WEIGHTED
MPI_GRAPHDIMS_GET(COMM, NNODES, NEDGES, IERROR)
    INTEGER COMM, NNODES, NEDGES, IERROR
MPI_GRAPH_CREATE(COMM_OLD, NNODES, INDEX, EDGES, REORDER, COMM_GRAPH,
    IERROR)
    INTEGER COMM_OLD, NNODES, INDEX(*), EDGES(*), COMM_GRAPH, IERROR
    LOGICAL REORDER
MPI_GRAPH_GET(COMM, MAXINDEX, MAXEDGES, INDEX, EDGES, IERROR)
    INTEGER COMM, MAXINDEX, MAXEDGES, INDEX(*), EDGES(*), IERROR
MPI_GRAPH_MAP(COMM, NNODES, INDEX, EDGES, NEWRANK, IERROR)
    INTEGER COMM, NNODES, INDEX(*), EDGES(*), NEWRANK, IERROR
MPI_GRAPH_NEIGHBORS(COMM, RANK, MAXNEIGHBORS, NEIGHBORS, IERROR)
    INTEGER COMM, RANK, MAXNEIGHBORS, NEIGHBORS(*), IERROR
MPI_GRAPH_NEIGHBORS_COUNT(COMM, RANK, NNEIGHBORS, IERROR)
    INTEGER COMM, RANK, NNEIGHBORS, IERROR
MPI_TOPO_TEST(COMM, STATUS, IERROR)
    INTEGER COMM, STATUS, IERROR

```

A.3.6 MPI Environmenta Management Fortran Bindings

```

DOUBLE PRECISION MPI_WTICK()
DOUBLE PRECISION MPI_WTIME()
MPI_ABORT(COMM, ERRORCODE, IERROR)
    INTEGER COMM, ERRORCODE, IERROR
MPI_ADD_ERROR_CLASS(ERRORCLASS, IERROR)
    INTEGER ERRORCLASS, IERROR
MPI_ADD_ERROR_CODE(ERRORCLASS, ERRORCODE, IERROR)
    INTEGER ERRORCLASS, ERRORCODE, IERROR
MPI_ADD_ERROR_STRING(ERRORCODE, STRING, IERROR)
    INTEGER ERRORCODE, IERROR
    CHARACTER*(*) STRING
MPI_ALLOC_MEM(SIZE, INFO, BASEPTR, IERROR)
    INTEGER INFO, IERROR
    INTEGER(KIND=MPI_ADDRESS_KIND) SIZE, BASEPTR

```