

NAG Fortran Library Routine Document

E04WCF

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of *bold italicised* terms and other implementation-dependent details.

1 Purpose

E04WCF is used to initialize the routine E04WDF.

2 Specification

```
SUBROUTINE E04WCF (IW, LENIW, RW, LENRW, IFAIL)
  INTEGER          IW(LENIW), LENIW, LENRW, IFAIL
  double precision RW(LENRW)
```

3 Description

E04WCF initializes the arrays IW and RW for the routine E04WDF.

4 References

None.

5 Parameters

1: IW(LENIW) – INTEGER array *Communication Array*
 2: LENIW – INTEGER *Input*

On entry: the dimension of the array IW as declared in the (sub)program from which E04WCF is called.

Constraint: $LENIW \geq 600$, see routine E04WDF.

3: RW(LENRW) – *double precision* array *Communication Array*
 4: LENRW – INTEGER *Input*

On entry: the dimension of the array RW as declared in the (sub)program from which E04WCF is called.

Constraint: $LENRW \geq 600$, see routine E04WDF.

5: IFAIL – INTEGER *Input/Output*

On entry: IFAIL must be set to 0, -1 or 1. Users who are unfamiliar with this parameter should refer to Chapter P01 for details.

On exit: IFAIL = 0 unless the routine detects an error (see Section 6).

For environments where it might be inappropriate to halt program execution when an error is detected, the value -1 or 1 is recommended. If the output of error messages is undesirable, then the value 1 is recommended. Otherwise, for users not familiar with this parameter the recommended value is 0. **When the value -1 or 1 is used it is essential to test the value of IFAIL on exit.**

6 Error Indicators and Warnings

If on entry $IFAIL = 0$ or -1 , explanatory error messages are output on the current error message unit (as defined by $X04AAF$).

Errors or warnings detected by the routine:

$IFAIL = 1$

One or more of the communication array lengths $LENIW$ or $LENRW$ is less than 600.

7 Accuracy

Not applicable.

8 Further Comments

The time taken by this routine is negligible.

9 Example

See Section 9 of the documents for E04WDF and E04WEF.
