

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 | <i>Communication Array</i> |
| 2: | LENIW – INTEGER | <i>Input</i> |

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 | <i>Communication Array</i> |
| 4: | LENRW – INTEGER | <i>Input</i> |

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.

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|----|-----------------|---------------------|
| 5: | IFAIL – INTEGER | <i>Input/Output</i> |
|----|-----------------|---------------------|

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`.
