

NAG Library Routine Document

E04VRF

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

E04VRF is used to get the value of an INTEGER optional parameter. E04VRF can be used before or after calling E04VHF.

2 Specification

```
SUBROUTINE E04VRF (STRING, IVALUE, CW, IW, RW, IFAIL)
INTEGER           IVALUE, IW(*), IFAIL
double precision RW(*)
CHARACTER*(*)     STRING
CHARACTER*8       CW(*)
```

3 Description

E04VRF obtains the current value of an integer option. For example

```
CALL E04VRF ('Major Iterations', ITNLIM, CW, IW, RW, IFAIL)
```

will result in the value of the optional parameter Major Iterations Limit being output in ITNLIM.

A complete list of optional parameters, their abbreviations, synonyms and default values is given in Section 11 in E04VHF.

4 References

None.

5 Parameters

- | | | |
|----|--|----------------------------|
| 1: | STRING – CHARACTER*(*) | <i>Input</i> |
| | <i>On entry:</i> a single valid keyword of an INTEGER optional parameter (as described in Section 11 in E04VHF). | |
| 2: | IVALUE – INTEGER | <i>Output</i> |
| | <i>On exit:</i> the INTEGER value associated with the keyword in STRING. | |
| 3: | CW(*) – CHARACTER*8 array | <i>Communication Array</i> |
| | Note: the dimension of the array CW must be at least LENCW (see E04VGF). | |
| 4: | IW(*) – INTEGER array | <i>Communication Array</i> |
| | Note: the dimension of the array IW must be at least LENIW (see E04VGF). | |
| 5: | RW(*) – double precision array | <i>Communication Array</i> |
| | Note: the dimension of the array RW must be at least LENRW (see E04VGF). | |

6: IFAIL – INTEGER

Input/Output

On entry: IFAIL must be set to 0, -1 or 1. If you are unfamiliar with this parameter you should refer to Section 3.3 in the Essential Introduction 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, if you are 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

The initialization routine E04VGF has not been called.

IFAIL = 2

The supplied option is invalid. Check that the keywords are neither ambiguous nor misspelt.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

See Section 9 in E04VKF.
