

NAG Fortran Library Routine Document

E05JKF

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

E05JKF is used to get the value of an INTEGER E05JBF optional parameter. E05JKF can be used before or after calling E05JBF, but the initialization routine E05JAF **must** have been called before calling E05JKF.

2 Specification

```
SUBROUTINE E05JKF (STRING, IVALUE, RW, LENRW, IFAIL)
INTEGER              IVALUE, LENRW, IFAIL
double precision    RW(LENRW)
CHARACTER*(*)        STRING
```

3 Description

E05JKF obtains the current value of an integer option. For example

```
CALL E05JKF ('Function Evaluations Limit', NF, RW, LENRW, IFAIL)
```

will result in the value of the optional parameter **Function Evaluations Limit** being output in NF.

A complete list of optional parameters, their abbreviations, synonyms and default values is given in Section 11 of the document for E05JBF.

4 References

None.

5 Parameters

- | | | |
|----|---|----------------------------|
| 1: | STRING – CHARACTER*(*) | <i>Input</i> |
| | <i>On entry:</i> a valid INTEGER optional parameter (as described in Section 11 of the document for E05JBF). | |
| 2: | IVALUE – INTEGER | <i>Output</i> |
| | <i>On exit:</i> the INTEGER value associated with the keyword in STRING. | |
| 3: | RW(LENRW) – double precision array | <i>Communication Array</i> |
| | The array RW must not be altered between calls to any of the routines E05JBF, E05JCF, E05JDF, E05JEF, E05JFF, E05JGF, E05JHF, E05JKF and E05JLF. | |
| 4: | LENRW – INTEGER | <i>Input</i> |
| | <i>On entry:</i> the dimension of the array RW as declared in the (sub)program from which E05JKF is called. | |
| 5: | IFAIL – INTEGER | <i>Input/Output</i> |
| | <i>On entry:</i> IFAIL must be set to 0, -1 or 1. If you are unfamiliar with this parameter you 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, 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 E05JAF has not been called.

IFAIL = 2

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

IFAIL = 3

The optional parameter in STRING is not associated with an INTEGER value. See Section 11 of the document for E05JBF for a full list of the optional parameters.

IFAIL = 4

The option-name contained the wrong number of word ‘tokens’, so could not be recognised by the routine.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

See Section 9 of the document for E05JCF.
