NAG Fortran Library Routine Document

E05JLF

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

E05JLF is used to get the value of a ***double precision*** E05JBF optional parameter. E05JLF can be used before or after calling E05JBF, but the initialization routine E05JAF **must** have been called before calling E05JLF.

2 Specification

```
SUBROUTINE E05JLF (STRING, RVALUE, RW, LENRW, IFAIL)

INTEGER             LENRW, IFAIL
double precision    RVALUE, RW(LENRW)
CHARACTER*(*)       STRING
```

3 Description

E05JLF obtains the current value of a ***double precision*** option. For example

```
CALL E05JLF ('Local Searches Tolerance', LOCTOL, RW, LENRW, IFAIL)
```

will result in the value of the optional parameter **Local Searches Tolerance** being output in `LOCTOL`.

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*(*) *Input*

On entry: a valid ***double precision*** optional parameter (as described in Section 11 of the document for E05JBF).

2: RVALUE – ***double precision*** *Output*

On exit: the ***double precision*** value associated with the keyword in STRING.

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

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 *Input*

On entry: the dimension of the array RW as declared in the (sub)program from which E05JLF is called.

5: 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 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 ***double precision*** 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.