

NAG Fortran Library Routine Document

E04NYF

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

To get the value of a *double precision* optional parameter. This routine can be used before or after calling E04NQF.

2 Specification

```
SUBROUTINE E04NYF (STRING, RVALUE, CW, IW, RW, IFAIL)
INTEGER           IW(*), IFAIL
double precision RVALUE, RW(*)
CHARACTER*(*)    STRING
CHARACTER*8      CW(*)
```

3 Description

E04NYF obtains the current value of a *double precision* option. For example

```
CALL E04NYF ('Feasibility Tolerance', FEATOL, CW, IW, RW, IFAIL)
```

will result in the value of the optional parameter **Feasibility Tolerance** being output in FEATOL.

A complete list of optional parameters, their abbreviations, synonyms and default values is given in Section 11 of the document for E04NQF.

4 References

None.

5 Parameters

1: STRING – CHARACTER*(*) *Input*
On entry: a single valid keyword of an *double precision* optional parameter (as described in Section 11 of the document for E04NQF).

2: RVALUE – *double precision* *Output*
On exit: the *double precision* value associated with the keyword in STRING.

3: CW(*) – CHARACTER*8 array *Communication Array*
 4: IW(*) – INTEGER array *Communication Array*
 5: RW(*) – *double precision* array *Communication Array*

The arrays CW, IW and RW are defined in the document for E04NPF and **must not** be altered between calls to any of the routines E04NPF, E04NQF, E04NRF, E04NSF, E04NTF, E04NUF, E04NXF and E04NYF.

6: 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:

$IFAIL = 1$

The initialization routine E04NPF 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 of the document for E04NRF.
