

NAG Toolbox for MATLAB

e04ny

1 Purpose

e04ny is used to get the value of a double optional parameter. e04ny can be used before or after calling e04nq.

2 Syntax

```
[rvalue, cw, iw, rw, ifail] = e04ny(string, cw, iw, rw)
```

3 Description

e04ny obtains the current value of a double option. For example

```
[featol, cw, iw, rw, ifail] = e04ny('Feasibility Tolerance', cw, iw, rw);
```

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 e04nq.

4 References

None.

5 Parameters

5.1 Compulsory Input Parameters

1: **string** – **string**

A single valid keyword of a double optional parameter (as described in Section 11 of the document for e04nq).

2: **cw(*)** – **string array**

Note: the dimension of the array **cw** must be at least **lencw** (see e04np).

3: **iw(*)** – **int32 array**

Note: the dimension of the array **iw** must be at least **leniw** (see e04np).

4: **rw(*)** – **double array**

Note: the dimension of the array **rw** must be at least **lenrw** (see e04np).

5.2 Optional Input Parameters

None.

5.3 Input Parameters Omitted from the MATLAB Interface

None.

5.4 Output Parameters

1: **rvalue** – **double scalar**

The double value associated with the keyword in **string**.

2: **cw(*)** – **string array**

Note: the dimension of the array **cw** must be at least **lencw** (see e04np).

3: **iw(*)** – **int32 array**

Note: the dimension of the array **iw** must be at least **leniw** (see e04np).

4: **rw(*)** – **double array**

Note: the dimension of the array **rw** must be at least **lenrw** (see e04np).

5: **ifail** – **int32 scalar**

0 unless the function detects an error (see Section 6).

6 Error Indicators and Warnings

Errors or warnings detected by the function:

ifail = 1

The initialization function e04np 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

```
string = 'Feasibility tolerance';
rvalue = 0.0001;
[cw, iw, rw, ifail] = e04np();
[cw, iw, rw, ifail] = e04nu(string, rvalue, cw, iw, rw);
[rvalueOut, cw, iw, rw, ifail] = e04ny(string, cw, iw, rw)

rvalueOut =
    1.0000e-04
cw =
    array elided
iw =
    array elided
rw =
    array elided
ifail =
     0
```

