

NAG Toolbox for MATLAB

e04nx

1 Purpose

e04nx is used to get the value of an integer optional parameter. e04nx can be used before or after calling e04nq.

2 Syntax

```
[ivalue, cw, iw, rw, ifail] = e04nx(string, cw, iw, rw)
```

3 Description

e04nx obtains the current value of an integer option. For example:

```
[itnlim, cw, iw, rw, ifail] = e04nx('Iterations', cw, iw, rw);
```

will result in the value of the optional parameter **Iterations Limit** being output in itnlim.

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 an integer 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: **ivalue** – **int32 scalar**

The integer 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 = 'Elastic mode';
ivalue= int32(1);
[cw, iw, rw, ifail] = e04np();
[cw, iw, rw, ifail] = e04nt(string, ivalue, cw, iw, rw);
[ivalueOut, cw, iw, rw, ifail] = e04nx(string, cw, iw, rw)

ivalueOut =
         1
cw =
    array elided
iw =
    array elided
rw =
    array elided
ifail =
         0
```

