

NAG Toolbox for MATLAB

e04wk

1 Purpose

e04wk is used to get the value of an integer optional parameter. e04wk can be used before or after calling e04wd.

2 Syntax

```
[ivalue, iw, rw, ifail] = e04wk(string, iw, rw)
```

3 Description

e04wk obtains the current value of an integer option. For example

```
[itnlim, iw, rw, ifail] = e04wk('Iterations', iw, rw);
```

will result in the value of the optional parameter **Major 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 e04wd.

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 e04wd).

2: **iw**(*) – **int32 array**

Note: the dimension of the array **iw** must be at least **leniw** (see e04wc).

3: **rw**(*) – **double array**

Note: the dimension of the array **rw** must be at least **lenrw** (see e04wc).

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: **iw(*)** – **int32** array

Note: the dimension of the array **iw** must be at least **leniw** (see e04wc).

3: **rw(*)** – **double** array

Note: the dimension of the array **rw** must be at least **lenrw** (see e04wc).

4: **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 e04wc 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

```
str = 'Iterations';  
ivalue = int32(100);  
[iw, rw, ifail] = e04wc();  
[iw, rw, ifail] = e04wg(str, ivalue, iw, rw);  
[ivalueOut, iw, rw, ifail] = e04wk(str, iw, rw)
```

```
ivalueOut =  
          100  
iw =  
    array elided  
rw =  
    array elided  
ifail =  
          0
```