

NAG Toolbox for MATLAB

e04wl

1 Purpose

e04wl is used to get the value of a double optional parameter. e04wl can be used before or after calling e04wd.

2 Syntax

```
[rvalue, iw, rw, ifail] = e04wl(string, iw, rw)
```

3 Description

e04wl obtains the current value of a double option. For example

```
[factol, iw, rw, ifail] = e04wl('LU Factor Tolerance', iw, rw);
```

will result in the value of the optional parameter **LU Factor Tolerance** being output in `factol`.

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 a double 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: **rvalue** – **double scalar**

The double 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 = 'LU Factor Tolerance';  
value = 1e-3;  
[iw, rw, ifail] = e04wc();  
[iw, rw, ifail] = e04wh(str, value, iw, rw);  
[valueOut, iw, rw, ifail] = e04wl(str, iw, rw)
```

```
valueOut =  
    1.0000e-03  
iw =  
    array elided  
rw =  
    array elided  
ifail =  
        0
```