

NAG Toolbox for MATLAB

e04vs

1 Purpose

e04vs is used to get the value of a double optional parameter. e04vs can be used before or after calling e04vh.

2 Syntax

```
[rvalue, cw, iw, rw, ifail] = e04vs(string, cw, iw, rw)
```

3 Description

e04vs obtains the current value of a double option. For example

```
[featol, cw, iw, rw, ifail] = e04vr('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 e04vh.

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 e04vh).

2: **cw(*)** – **string array**

Note: the dimension of the array **cw** must be at least **lencw** (see e04vg).

3: **iw(*)** – **int32 array**

Note: the dimension of the array **iw** must be at least **leniw** (see e04vg).

4: **rw(*)** – **double array**

Note: the dimension of the array **rw** must be at least **lenrw** (see e04vg).

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 e04vg).

3: **iw**(*) – int32 array

Note: the dimension of the array **iw** must be at least **leniw** (see e04vg).

4: **rw**(*) – double array

Note: the dimension of the array **rw** must be at least **lenrw** (see e04vg).

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 e04vg 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

```
[cw, iw, rw, ifail] = e04vg();
[rvalue, cw, iw, rw, ifail] = e04vs('Feasibility Tolerance', cw, iw, rw)

rvalue =
    -11111
cw =
    array elided
iw =
    array elided
rw =
    array elided
ifail =
     0
```