NAG Toolbox for MATLAB

e04vr

1 Purpose

e04vr is used to get the value of an integer optional parameter. e04vr can be used before or after calling e04vh.

2 Syntax

```
[ivalue, cw, iw, rw, ifail] = e04vr(string, cw, iw, rw)
```

3 Description

e04vr obtains the current value of an integer option. For example

```
[itnlim, cw, iw, rw, ifail] = e04vr('Major Iterations', cw, 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 e04vh.

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 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: **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 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

```
string = 'Elastic mode';
ivalue = int32(1);
[cw, iw, rw, ifail] = e04vg();
[cw, iw, rw, ifail] = e04vm(string, ivalue, cw, iw, rw);
[ivalueOut, cw, iw, rw, ifail] = e04vr(string, cw, iw, rw)
```

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