

NAG Library Function Document

nag_opt_sparse_nlp_option_get_double (e04vsc)

1 Purpose

nag_opt_sparse_nlp_option_get_double (e04vsc) is used to get the value of a double optional argument. nag_opt_sparse_nlp_option_get_double (e04vsc) can be used before or after calling nag_opt_sparse_nlp_solve (e04vhc).

2 Specification

```
#include <nag.h>
#include <nage04.h>
void nag_opt_sparse_nlp_option_get_double (const char *string,
    double *rvalue, Nag_E04State *state, NagError *fail)
```

3 Description

nag_opt_sparse_nlp_option_get_double (e04vsc) obtains the current value of a double option. For example

```
e04vsc ("Feasibility Tolerance", &featol, &state, &fail);
```

will result in the value of the optional argument **Feasibility Tolerance** being output in featol.

A complete list of optional arguments, their abbreviations, synonyms and default values is given in Section 12 in nag_opt_sparse_nlp_solve (e04vhc).

4 References

None.

5 Arguments

- 1: **string** – const char * *Input*
On entry: a single valid keyword of a double optional argument (as described in Section 12 in nag_opt_sparse_nlp_solve (e04vhc)).
- 2: **rvalue** – double * *Output*
On exit: the double value associated with the keyword in **string**.
- 3: **state** – Nag_E04State * *Communication Structure*
state contains internal information required for functions in this suite. It must not be modified in any way.
- 4: **fail** – NagError * *Input/Output*
The NAG error argument (see Section 3.6 in the Essential Introduction).

6 Error Indicators and Warnings

NE_BAD_PARAM

On entry, argument *<value>* had an illegal value.

NE_E04_OPTION_INVALID

The supplied option string is invalid. Check that the keywords are neither ambiguous nor misspelt. The option string is '*value*'.

NE_E04VGC_NOT_INIT

Initialization function nag_opt_sparse_nlp_init (e04vgc) has not been called.

NE_INTERNAL_ERROR

An internal error has occurred in this function. Check the function call and any array sizes. If the call is correct then please contact NAG for assistance.

7 Accuracy

Not applicable.

8 Parallelism and Performance

Not applicable.

9 Further Comments

None.

10 Example

See Section 10 in nag_opt_sparse_nlp_option_set_file (e04vkc).
