

NAG C Library Function Document

nag_opt_nlp_option_get_double (e04wlc)

1 Purpose

nag_opt_nlp_option_get_double (e04wlc) is used to get the value of a double optional argument. nag_opt_nlp_option_get_double (e04wlc) can be used before or after calling nag_opt_nlp_solve (e04wdc).

2 Specification

```
#include <nag.h>
#include <nage04.h>
```

```
void nag_opt_nlp_option_get_double (const char *string, double *rvalue,
    Nag_E04State *state, NagError *fail)
```

3 Description

nag_opt_nlp_option_get_double (e04wlc) obtains the current value of a double option. For example

```
e04wlc ("LU Factor Tolerance", &factol, &state, &fail);
```

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

A complete list of optional arguments, their abbreviations, synonyms and default values is given in Section 11 of the document for nag_opt_nlp_solve (e04wdc).

4 References

None.

5 Arguments

- | | | |
|----|--|--------------------------------|
| 1: | string – const char * | <i>Input</i> |
| | <i>On entry:</i> a single valid keyword of a double optional argument (as described in Section 11 of the document for nag_opt_nlp_solve (e04wdc)). | |
| 2: | rvalue – double * | <i>Output</i> |
| | <i>On exit:</i> the double value associated with the keyword in string . | |
| 3: | state – Nag_E04State * | <i>Communication Structure</i> |
| | Note: state is a NAG defined type (see Section 2.2.1.1 of the Essential Introduction).
state contains internal information required for functions in this suite. It must not be modified in any way. | |
| 4: | fail – NagError * | <i>Input/Output</i> |
| | The NAG error argument (see Section 2.6 of the Essential Introduction). | |

6 Error Indicators and Warnings

NE_BAD_PARAM

On entry, argument $\langle value \rangle$ 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_E04WCC_NOT_INIT

Initialization function `nag_opt_nlp_init` (e04wcc) 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 consult NAG for assistance.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

See Section 9 of the document for `nag_opt_nlp_option_set_file` (e04wec).
