

NAG Library Function Document

nag_glopt_bnd_mcs_optget_real (e05jlc)

1 Purpose

nag_glopt_bnd_mcs_optget_real (e05jlc) is used to get the value of a real nag_glopt_bnd_mcs_solve (e05jbc) optional argument. nag_glopt_bnd_mcs_optget_real (e05jlc) can be used before or after calling nag_glopt_bnd_mcs_solve (e05jbc), but the initialization function nag_glopt_bnd_mcs_init (e05jac) **must** have been called before calling nag_glopt_bnd_mcs_optget_real (e05jlc).

2 Specification

```
#include <nag.h>
#include <nage05.h>
```

```
void nag_glopt_bnd_mcs_optget_real (const char *optstr, double *rvalue,
    Nag_E05State *state, NagError *fail)
```

3 Description

nag_glopt_bnd_mcs_optget_real (e05jlc) obtains the current value of a real-valued optional argument. For example

```
e05jlc ('Local Searches Tolerance', &loctol, &state, &fail);
```

will result in the value of the optional argument **Local Searches Tolerance** being output in loctol.

A complete list of optional arguments, their symbolic names and default values is given in Section 11 in nag_glopt_bnd_mcs_solve (e05jbc).

4 References

None.

5 Arguments

- 1: **optstr** – const char * *Input*
On entry: a string identifying a real-valued optional argument (as described in Section 11 in nag_glopt_bnd_mcs_solve (e05jbc)).
- 2: **rvalue** – double * *Output*
On exit: if **fail.code** = NE_NOERROR on exit, **rvalue** contains the real value associated with the optional argument in **optstr**.
- 3: **state** – Nag_E05State * *Communication Structure*
state contains information required by other functions in this suite. You must not modify it directly 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 $\langle value \rangle$ had an illegal value.

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.

NE_NOT_INIT

Initialization function nag_glopt_bnd_mcs_init (e05jac) has not been called.

NE_NOT_REAL_OPTION

The optional argument defined by **optstr** is not associated with a real value.

NE_OPT_NOT_READ

The supplied optional argument is invalid. Check that the keywords are neither ambiguous nor misspelt.

NE_WRONG_NUM_TOKENS

The optional argument name contained the wrong number of word 'tokens', so could not be recognized by the function.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

See Section 9 in nag_glopt_bnd_mcs_optset_file (e05jcc).
