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 12 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 12 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_OPT_NOT_READ

The supplied optional argument is invalid. A keyword or keyword combination was not recognized.

7   Accuracy

Not applicable.

8   Parallelism and Performance

Not applicable.

9   Further Comments

None.

10   Example

See Section 10 in nag_glopt_bnd_mcs_optset_file (e05jcc).