

NAG Library Function Document

nag_opt_handle_free (e04rzc)

1 Purpose

nag_opt_handle_free (e04rzc) is a part of the NAG optimization modelling suite. It is used to deallocate the memory used within the problem handle and to destroy the handle itself.

2 Specification

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

void nag_opt_handle_free (void **handle, NagError *fail)
```

3 Description

Each problem handle initialized by nag_opt_handle_init (e04rac) should be deallocated to avoid memory leaks. Therefore nag_opt_handle_free (e04rzc) should be called on all the handles which are no longer needed, typically after obtaining results from the solver. Please note that passing a handle which has not been initialized by nag_opt_handle_init (e04rac) might cause unpredictable behaviour, including a crash of your program. See nag_opt_handle_init (e04rac) for a generic description of the suite.

4 References

None.

5 Arguments

- 1: **handle** – void ** *Input/Output*
On entry: the handle to the problem. It needs to be initialized by nag_opt_handle_init (e04rac) and **must not** be changed before the call to nag_opt_handle_free (e04rzc).
On exit: the handle is destroyed and set to 0.
- 2: **fail** – NagError * *Input/Output*
The NAG error argument (see Section 2.7 in How to Use the NAG Library and its Documentation).

6 Error Indicators and Warnings

NE_ALLOC_FAIL

Dynamic memory allocation failed.

See Section 3.2.1.2 in How to Use the NAG Library and its Documentation for further information.

NE_BAD_PARAM

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

NE_HANDLE

The supplied **handle** does not define a valid handle to the data structure for the NAG optimization modelling suite. It has not been initialized by `nag_opt_handle_init` (e04rac) or it has been corrupted.

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.

An unexpected error has been triggered by this function. Please contact NAG.
See Section 3.6.6 in How to Use the NAG Library and its Documentation for further information.

NE_NO_LICENCE

Your licence key may have expired or may not have been installed correctly.
See Section 3.6.5 in How to Use the NAG Library and its Documentation for further information.

7 Accuracy

Not applicable.

8 Parallelism and Performance

`nag_opt_handle_free` (e04rzc) is not threaded in any implementation.

9 Further Comments

None.

10 Example

See Section 10 in `nag_opt_handle_init` (e04rac) for links to all examples in the suite.
