

NAG Library Function Document

nag_opt_sparse_nlp_init (e04vgc)

1 Purpose

nag_opt_sparse_nlp_init (e04vgc) is used to initialize the function nag_opt_sparse_nlp_solve (e04vhc).

2 Specification

```
#include <nag.h>
#include <nage04.h>
void nag_opt_sparse_nlp_init (Nag_E04State *state, NagError *fail)
```

3 Description

nag_opt_sparse_nlp_init (e04vgc) initializes the structure **state** for the function nag_opt_sparse_nlp_solve (e04vhc).

4 References

None.

5 Arguments

- 1: **state** – Nag_E04State * *Communication Structure*
state contains internal information required for functions in this suite. It must not be modified in any way.
- 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_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_sparse_nlp_init (e04vgc) is not threaded in any implementation.

9 Further Comments

The time taken by nag_opt_sparse_nlp_init (e04vgc) is negligible.

10 Example

See Section 10 in nag_opt_sparse_nlp_solve (e04vhc) and nag_opt_sparse_nlp_option_set_file (e04vkc).
