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

```c
#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 3.6 in the Essential Introduction).

6 Error Indicators and Warnings

**NE_ALLOC_FAIL**
Dynamic memory allocation failed.  
See Section 3.2.1.2 in the Essential Introduction 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 the Essential Introduction 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 the Essential Introduction for further information.
7 **Accuracy**
Not applicable.

8 **Parallelism and Performance**
Not applicable.

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).