

NAG Library Function Document

nag_opt_nlp_revcomm_init (e04wbc)

1 Purpose

nag_opt_nlp_revcomm_init (e04wbc) is used to initialize the function nag_opt_nlp_revcomm (e04ufc).

2 Specification

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

void nag_opt_nlp_revcomm_init (const char *rname, char cwsav[],
    Integer lcwsav, Nag_Boolean lwsav[], Integer llwsav, Integer iwsav[],
    Integer liwsav, double rwsav[], Integer lrwsav, NagError *fail)
```

3 Description

nag_opt_nlp_revcomm_init (e04wbc) initializes some or all of the arrays **cwsav**, **lwsav**, **iwsav** and **rwsav** for the function nag_opt_nlp_revcomm (e04ufc), and any associated option setting functions.

4 References

None.

5 Arguments

- | | | |
|----|---|---------------------|
| 1: | rname – const char *
<i>On entry:</i> the name of the function to be initialized.
<i>Constraint:</i> rname must be called with rname = 'e04ufc'. | Input |
| 2: | cwsav [lcwsav × 80] – char | Communication Array |
| 3: | lcwsav – Integer
<i>On entry:</i> the dimension of the array cwsav .
<i>Constraint:</i> lcwsav ≥ 5. | Input |
| 4: | lwsav [llwsav] – Nag_Boolean | Communication Array |
| 5: | llwsav – Integer
<i>On entry:</i> the dimension of the array lwsav .
<i>Constraint:</i> llwsav ≥ 120. | Input |
| 6: | iwsav [liwsav] – Integer | Communication Array |
| 7: | liwsav – Integer
<i>On entry:</i> the dimension of the array iwsav .
<i>Constraint:</i> liwsav ≥ 610. | Input |

- 8: **rwsav**[**lrwsav**] – double *Communication Array*
- 9: **lrwsav** – Integer *Input*
On entry: the dimension of the array **rwsav**.
Constraint: **lrwsav** \geq 475.
- 10: **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.

NE_BAD_PARAM

On entry, argument value had an illegal value.

NE_CHARACTER

On entry, **rname** = $\langle value \rangle$.

Constraint: **rname** must be called with **rname** = 'e04ufc'.

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_TOO_SMALL

One or more of the save array lengths is too small. Supplied values are: **lcwsav** = $\langle value \rangle$, **llwsav** = $\langle value \rangle$, **liwsav** = $\langle value \rangle$ and **lrwsav** = $\langle value \rangle$.

7 Accuracy

Not applicable.

8 Parallelism and Performance

nag_opt_nlp_revcomm_init (e04wbc) is not threaded in any implementation.

9 Further Comments

The time taken by nag_opt_nlp_revcomm_init (e04wbc) is negligible.

10 Example

The use of nag_opt_nlp_revcomm_init (e04wbc) is illustrated by the example in Section 10 in nag_opt_nlp_revcomm (e04ufc).
