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

```c
#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 *
   
   **Input**
   
   *On entry:* the name of the function to be initialized.
   
   *Constraint:* `rname` must be called with `rname = 'e04ufc'.`

2: `cwsav[lcwsav × 80]` – char
   
   **Communication Array**

3: `lcwsav` – Integer
   
   **Input**
   
   *On entry:* the dimension of the array `cwsav`.
   
   *Constraint:* `lcwsav ≥ 5`.

4: `lwsav[llwsav]` – Nag_Boolean
   
   **Communication Array**

5: `llwsav` – Integer
   
   **Input**
   
   *On entry:* the dimension of the array `lwsav`.
   
   *Constraint:* `llwsav ≥ 120`.

6: `iwsav[liwsav]` – Integer
   
   **Communication Array**

7: `liwsav` – Integer
   
   **Input**
   
   *On entry:* the dimension of the array `iwsav`.
   
   *Constraint:* `liwsav ≥ 610`.
8:  rwsav[lrwsav] — double

Communication Array

9:  lrwsav — Integer

On entry: the dimension of the array rwsav.

Constraint: lrwsav ≥ 475.

10: fail — NagError *

The NAG error argument (see Section 3.6 in the Essential Introduction).

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 = ⟨value⟩.
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: lew sav = ⟨value⟩,
llwsav = ⟨value⟩, liwsav = ⟨value⟩ and lrwsav = ⟨value⟩.

7 Accuracy

Not applicable.

8 Parallelism and Performance

Not applicable.

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).