

NAG Library Function Document

nag_opt_nlp_revcomm_option_set_string (e04uec)

1 Purpose

To supply individual optional arguments to nag_opt_nlp_revcomm (e04ufc).

2 Specification

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

void nag_opt_nlp_revcomm_option_set_string (const char *str,
      Nag_Boolean lwsav[], Integer iwsav[], double rwsav[], NagError *fail)
```

3 Description

nag_opt_nlp_revcomm_option_set_string (e04uec) may be used to supply values for optional arguments to nag_opt_nlp_revcomm (e04ufc). It is only necessary to call nag_opt_nlp_revcomm_option_set_string (e04uec) for those arguments whose values are to be different from their default values. One call to nag_opt_nlp_revcomm_option_set_string (e04uec) sets one argument value.

Each optional argument is defined by a single character string, consisting of one or more items. The items associated with a given option must be separated by spaces, or equals signs [=]. Alphabetic characters may be upper or lower case. The string

```
Print Level = 1
```

is an example of a string used to set an optional argument. For each option the string contains one or more of the following items:

- a mandatory keyword;
- a phrase that qualifies the keyword;
- a number that specifies an Integer or double value. Such numbers may be up to 16 contiguous characters which can be read using C's d or g formats, terminated by a space if this is not the last item on the line.

Blank strings and comments are ignored. A comment begins with an asterisk (*) and all subsequent characters in the string are regarded as part of the comment.

Optional argument settings are preserved following a call to nag_opt_nlp_revcomm (e04ufc) and so the keyword **Defaults** is provided to allow you to reset all the optional arguments to their default values before a subsequent call to nag_opt_nlp_revcomm (e04ufc).

A complete list of optional arguments, their abbreviations, synonyms and default values is given in Section 12 in nag_opt_nlp_revcomm (e04ufc).

4 References

None.

5 Arguments

- 1: **str** – const char * *Input*
- On entry:* a single valid option string (as described in Section 3 and in Section 12 in nag_opt_nlp_revcomm (e04ufc)).

- | | | |
|----|----------------------------------|----------------------------|
| 2: | lwsav [120] – Nag_Boolean | <i>Communication Array</i> |
| 3: | iwsav [610] – Integer | <i>Communication Array</i> |
| 4: | rwsav [475] – double | <i>Communication Array</i> |

The arrays **lwsav**, **iwsav** and **rwsav** MUST NOT be altered between calls to any of the functions `nag_opt_nlp_revcomm_option_set_file` (e04udc), `nag_opt_nlp_revcomm_option_set_string` (e04uec), `nag_opt_nlp_revcomm` (e04ufc) or `nag_opt_nlp_revcomm_init` (e04wbc).

- | | | |
|----|--------------------------|---------------------|
| 5: | fail – NagError * | <i>Input/Output</i> |
|----|--------------------------|---------------------|
- 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 $\langle value \rangle$ 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.

NE_INVALID_OPTION

The supplied option string is invalid. Supplied value was: $\langle value \rangle$.

7 Accuracy

Not applicable.

8 Parallelism and Performance

Not applicable.

9 Further Comments

`nag_opt_nlp_revcomm_option_set_file` (e04udc) may also be used to supply optional arguments to `nag_opt_nlp_revcomm` (e04ufc).

10 Example

See Section 10 in `nag_opt_nlp_revcomm_option_set_file` (e04udc).
