

## NAG Library Function Document

### nag\_opt\_sparse\_convex\_qp\_option\_get\_integer (e04nxc)

#### 1 Purpose

nag\_opt\_sparse\_convex\_qp\_option\_get\_integer (e04nxc) is used to get the value of an Integer optional argument. nag\_opt\_sparse\_convex\_qp\_option\_get\_integer (e04nxc) can be used before or after calling nag\_opt\_sparse\_convex\_qp\_solve (e04nqc).

#### 2 Specification

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

void nag_opt_sparse_convex_qp_option_get_integer (const char *string,
        Integer *ivalue, Nag_E04State *state, NagError *fail)
```

#### 3 Description

nag\_opt\_sparse\_convex\_qp\_option\_get\_integer (e04nxc) obtains the current value of an integer option. For example:

```
e04nxc ("Iterations", &itnlim, &state, &fail);
```

will result in the value of the optional argument **Iterations Limit** being output in itnlim.

A complete list of optional arguments, their abbreviations, synonyms and default values is given in Section 12 in nag\_opt\_sparse\_convex\_qp\_solve (e04nqc).

#### 4 References

None.

#### 5 Arguments

- 1: **string** – const char \* *Input*  
*On entry:* a single valid keyword of an Integer optional argument (as described in Section 12 in nag\_opt\_sparse\_convex\_qp\_solve (e04nqc)).
- 2: **ivalue** – Integer \* *Output*  
*On exit:* the Integer value associated with the keyword in **string**.
- 3: **state** – Nag\_E04State \* *Communication Structure*  
**state** contains internal information required for functions in this suite. It must not be modified in any way.
- 4: **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\_E04\_OPTION\_INVALID

The supplied option string is invalid. Check that the keywords are neither ambiguous nor misspelt.  
The option string is '*<value>*'.

### NE\_E04NPC\_NOT\_INIT

The initialization function `nag_opt_sparse_convex_qp_init` (e04npc) has not been called.

### 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

None.

## 10 Example

See Section 10 in `nag_opt_sparse_convex_qp_option_set_file` (e04nrc).

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