1 Purpose
nag_opt_sparse_nlp_option_get_double (e04vsc) is used to get the value of a double optional argument. nag_opt_sparse_nlp_option_get_double (e04vsc) can be used before or after calling nag_opt_sparse_nlp_solve (e04vhc).

2 Specification
#include <nag.h>
#include <nage04.h>
void nag_opt_sparse_nlp_option_get_double (const char *string,
     double *rvalue, Nag_E04State *state, NagError *fail)

3 Description
nag_opt_sparse_nlp_option_get_double (e04vsc) obtains the current value of a double option. For example
   e04vsc ("Feasibility Tolerance", &featol, &state, &fail);
will result in the value of the optional argument Feasibility Tolerance being output in featol.
A complete list of optional arguments, their abbreviations, synonyms and default values is given in Section 12 in nag_opt_sparse_nlp_solve (e04vhc).

4 References
None.

5 Arguments
1: string – const char * 
   Input
   On entry: a single valid keyword of a double optional argument (as described in Section 12 in nag_opt_sparse_nlp_solve (e04vhc)).

2: rvalue – double * 
   Output
   On exit: the double 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 \(\langle value\rangle\) 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 \(\langle value\rangle\).

**NE_E04VGC_NOT_INIT**
The initialization function nag_opt_sparse_nlp_init (e04vgc) 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_nlp_option_set_file (e04vkc).