

NAG Library Function Document

nag_ip_init (h02xxc)

1 Purpose

nag_ip_init (h02xxc) is the options structure initialization function for the h Chapter Introduction. This function or nag_ip_read (h02xyc) must be called before making any use of the options structure.

2 Specification

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

void nag_ip_init (Nag_H02_Opt *options)
```

3 Description

The integer programming (IP) functions of the h Chapter Introduction have a number of optional parameters, which are set by means of a structure of type Nag_H02_Opt. Optional parameter values may be assigned to members of an options structure directly in the program text and/or by supplying the optional values in a file which can be read by the function nag_ip_read (h02xyc).

If optional parameter values are assigned directly in the program text and no use is made of nag_ip_read (h02xyc), then nag_ip_init (h02xxc) **must** be called before any assignments are made to the options structure. Initialization is still required even if no assignments are made to the structure before it is passed to the IP function.

If the file reading function nag_ip_read (h02xyc) is used then this will automatically initialize the options structure if this has not already been done. Any direct assignment to the options structure made **after** a call to nag_ip_read (h02xyc) must **not** be preceded by a call to nag_ip_init (h02xxc) otherwise the values set by nag_ip_read (h02xyc) will be lost. Direct assignments to the options structure made **before** calling nag_ip_read (h02xyc) must, of course, still be preceded by a call to nag_ip_init (h02xxc).

The purpose of nag_ip_init (h02xxc) is to initialize the options structure members with null values which indicate to the IP function that the optional parameter a structure member represents is not to be changed from its default value.

4 References

None.

5 Arguments

- 1: **options** – Nag_H02_Opt * *Output*
On exit: the initialized options structure.

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Parallelism and Performance

nag_ip_init (h02xxc) is not threaded in any implementation.

9 Further Comments

None.

10 Example

See Section 10 in nag_ip_bb (h02bbc).
