Utilities Module Contents

Module 1.1: nag_lib_support Library Support Facilities

nag_lib_support provides support facilities for the Library.

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Module Contents

Utilities

Utilities nag_lib_ident

Procedure: nag_lib_ident

1 Description

nag_lib_ident prints details of the implementation of the Library.

2 Usage

```
USE nag_lib_support
CALL nag_lib_ident
```

3 Arguments

None.

4 Error Codes

None.

5 Examples of Usage

The program

```
PROGRAM nag_lib_support_ex01

! Example Program Text for nag_lib_support
! NAG f190, Release 4. NAG Copyright 2000.

! .. Use Statements ..
USE nag_lib_support, ONLY : nag_lib_ident
! .. Implicit None Statement ..
IMPLICIT NONE
! .. Executable Statements ..
CALL nag_lib_ident

END PROGRAM nag_lib_support_ex01
```

produces details of the Library implementation. A typical example of the output from this program might be:

Module 1.1: nag_lib_support

```
*** Start of NAG Fortran 90 Library implementation details ***

Implementation title: Generalised Base Version
Product Code: FNBAS04D9
Release: 4
Precision: double (KIND= 2)

*** End of NAG Fortran 90 Library implementation details ***
```

nag_lib_ident Utilities

Utilities nag_deallocate

Procedure: nag_deallocate

1 Description

nag_deallocate deallocates storage from the pointer components of structures with types defined by the Library.

2 Usage

```
USE nag_lib_support
CALL nag_deallocate(comm)
```

2.1 Interfaces

Distinct interfaces exist, allowing the procedure to be used for an argument comm of any of the following derived data types:

```
defined by module nag_sparse_mat (4.3)
nag_sparse_mat_real_wp:
                               defined by module nag_sparse_mat (4.3)
nag_sparse_mat_cmplx_wp:
                               defined by module nag_pch_interp (8.1)
nag_pch_comm_wp:
                               defined by module nag_spline_1d (8.2)
nag\_spline\_1d\_comm\_wp:
                               defined by module nag_spline_2d (8.3)
nag_spline_2d_comm_wp:
                               defined by module nag_scat_interp (8.4)
nag_scat_comm_wp:
                               defined by module nag_ivp_ode_rk (12.1)
nag_rk_comm_wp:
                               defined by module nag_rand_discrete (21.3)
nag_ref_vec_wp:
```

3 Arguments

3.1 Mandatory Argument

```
comm — type(any of the derived types listed in Section 2.1), intent(in)

Input: the structure whose pointer components are to be deallocated.
```

4 Error Codes

None.

5 Examples of Usage

The module documents in which the relevant derived types are defined contain illustrations of the use of this procedure.

6 Further Comments

6.1 Access to the Procedure

This procedure is also available through the USE statement for the module which defines the type of the structure to be deallocated.