

# f90\_stat: STAT Error Code Module

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## 1 Name

f90\_stat — Module providing STAT error codes

## 2 Usage

**USE F90\_STAT**

## 3 Synopsis

### Parameters

STAT\_ALREADY\_ALLOCATED, STAT\_MEMORY\_LIMIT\_EXCEEDED,  
STAT\_NO\_MEMORY, STAT\_NOT\_ALLOCATED, STAT\_NOT\_ASSOCIATED,  
STAT\_PART\_OF\_LARGER\_OBJECT, STAT\_POINTER\_UNDEFINED,  
STAT\_WRONG\_COLOUR.

## 4 Parameter Description

INTEGER,PARAMETER :: STAT\_ALREADY\_ALLOCATED

An allocatable variable in an ALLOCATE statement is already currently allocated.

INTEGER,PARAMETER :: STAT\_MEMORY\_LIMIT\_EXCEEDED

An allocation in an ALLOCATE statement requested more memory than the limit in this version of the NAG Fortran compiler.

INTEGER,PARAMETER :: STAT\_NO\_MEMORY

Insufficient free memory available to satisfy the requested allocation.

INTEGER,PARAMETER :: STAT\_NOT\_ALLOCATED

An allocatable variable in a DEALLOCATE statement is not currently allocated.

INTEGER,PARAMETER :: STAT\_NOT\_ASSOCIATED

A pointer in a DEALLOCATE statement is disassociated.

INTEGER,PARAMETER :: STAT\_PART\_OF\_A\_LARGER\_OBJECT

A pointer in a DEALLOCATE statement refers to part of a larger object.

```
INTEGER,PARAMETER :: STAT_POINTER_UNDEFINED
```

A pointer in a DEALLOCATE statement is undefined. (This value is never returned to the user program, which is always immediately terminated if the use of an undefined pointer is detected.)

```
INTEGER,PARAMETER :: STAT_WRONG_COLOUR
```

A pointer in a DEALLOCATE statement is associated with a target that was not created by pointer allocation.

## 5 Example

```
USE f90_stat
REAL,ALLOCATABLE :: big(:,:,:)
INTEGER :: status
ALLOCATE(big(100,1024,1024),STAT=status)
IF (status==STAT_NO_MEMORY) PRINT *,'Out of memory'
```

## 6 Notes

The source code for this module may be found in the NAG Fortran runtime library directory (usually /usr/local/lib/NAG.Fortran).

## 7 See Also

nagfor(1), nag\_modules(3).

## 8 Bugs

Please report any bugs found to ‘support@nag.co.uk’ or ‘support@nag.com’, along with any suggestions for improvements.