

NAG Toolbox for MATLAB

x04ac

1 Purpose

x04ac opens a Fortran unit number for reading, writing or appending, and associates the unit with a named file.

2 Syntax

```
[ifail] = x04ac(iounit, file, mode)
```

3 Description

x04ac is especially useful if the calling language is not Fortran. It opens a Fortran unit number for reading, writing or appending, and associates the unit with a filename specified by the parameter **file**.

4 References

None.

5 Parameters

5.1 Compulsory Input Parameters

1: **iounit – int32 scalar**

The Fortran unit number which identifies the file to be read from, written to or appended to. Note that this may be system dependent. Values in the range 7 to 1000 should however be safe on most systems.

2: **file – string**

The name of the file to be opened.

Constraint: must contain a valid filename for the computer system being used.

3: **mode – int32 scalar**

Specifies whether the file is to be opened for reading, writing or appending.

mode = 0

The file is to be opened for reading.

mode = 1

The file is to be opened for writing.

mode = 2

The file is to be opened for appending.

Constraint: $0 \leq \mathbf{mode} \leq 2$.

5.2 Optional Input Parameters

None.

5.3 Input Parameters Omitted from the MATLAB Interface

None.

5.4 Output Parameters

1: **ifail** – int32 scalar

0 unless the function detects an error (see Section 6).

6 Error Indicators and Warnings

Errors or warnings detected by the function:

ifail = 1

On entry, **mode** is invalid.

ifail = 2

Failure to open the file for reading.

ifail = 3

Failure to open the file for writing.

ifail = 4

Failure to open the file for appending.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

```
iounit = int32(4);  
file = 'success.res';  
mode = int32(1);  
[ifail] = x04ac(iounit, file, mode)
```

```
ifail =  
      0
```