Replace IOSTAT_END and IOSTAT_EOR with Functions

To: J3
From: Craig Dedo
Subject: Replace IOSTAT_END and IOSTAT_EOR with Functions
Date: March 31, 2003

Edits refer to 02-007r3.

[3:20+] Add the list item:

(3) This standard allows more than one value to indicate an end-of-file or end-of-record condition.

[201:21-22] Change "the value ... argument" to "a negative integer value to the IOSTAT argument that would cause the result value of the IS_IOSTAT END intrinsic function (13.7.54a) to be true".

[201:23] Change "the value ... iostat" to "a negative integer value to the IOSTAT argument that would cause the result value of the IS_IOSTAT EOR intrinsic function (13.7.54b) to be true".

[216:12-15] Replace the existing text in list items (3) and (4) with the following:

(3) With a processor-dependent negative integer value that would cause the result value of the IS_IOSTAT END intrinsic function (13.7.54a) to be true if an end-of-file condition occurs and no error condition occurs, or

(4) With a processor-dependent negative integer value that would cause the result value of the IS_IOSTAT EOR intrinsic function (13.7.54b) to be true if an end-of-record condition occurs and no error condition or end-of-file condition occurs. This value shall be different from any value that causes the result value of the IOSTAT END intrinsic function (13.7.54b) to be true.

[294:7+] Add the following entries to the table in section 13.5.17:

IS_IOSTAT_END (I) Test for end-of-file status
IS_IOSTAT_EOR (I) Test for end-of-record status

[319:27+] Add the following:

13.7.54a IS_IOSTAT END (I)

Description. Determine whether the argument value indicates an end-of-file condition.

Class. Elemental function

Argument. I shall be of type integer.

Result Characteristics. Default logical.

Result Value. The result has the value true if and only if I is a value that could be assigned to the *scalar-int-variable* in an IOSTAT= specifier to indicate an end-of-file condition (9.10.2).

13.7.54b IS_IOSTAT EOR (I)

Description. Determine whether the argument value indicates an end-of-record condition.

Class. Elemental function

Argument. I shall be of type integer.

Result Characteristics. Default logical.

Result Value. The result has the value true if and only if I is a value that could be assigned to the *scalar−int−variable* in an IOSTAT= specifier to indicate an end−of−record condition (9.10.3).

[354:2-4] Replace the paragraph with, "The default integer scalar constant IOSTAT_END is a processor−dependent negative integer value that would cause the result value of the IS_IOSTAT_END intrinsic function (13.7.54a) to be true.".

[354:6-9] Replace the paragraph with, "The default integer scalar constant IOSTAT_EOR is a processor−dependent negative integer value that would cause the result value of the IS_IOSTAT_EOR intrinsic function (13.7.54b) to be true. This value shall be different from any value that causes the result value of the IS_IOSTAT_END intrinsic function (13.7.54a) to be true.".

[354:9+] Add the following note.

Note 13.18a

The processor may provide more than one value that causes IS_IOSTAT_END or IS_IOSTAT_EOR to be true.

[451:32] Change "the value . . . module" to "a value that would cause the result value of the IS_IOSTAT_EOR intrinsic function (13.7.54b) to be true".]

References

02-007r2, Fortran 2000 Draft

[End of J3 / 03-103r1]