

Subject: On Walt’s observations about eof, err, eor arguments of DTIO procedures
From: Van Snyder

1 **1 Introduction**

2 Walt observed that the IOSTAT keyword is considered to be a more modern way to report excep-
3 tional events during input/output. It would also be simpler to describe the DTIO procedures,
4 and probably simpler to write them, if they had a single iostat argument instead of the three
5 eof, err and eor arguments.

6 **2 Edits**

7 Edits refer to 02-007. Page and line numbers are displayed in the margin. Absent other
8 instructions, a page and line number or line number range implies all of the indicated text is to
9 be replaced by associated text, while a page and line number followed by + (-) indicates that
10 associated text is to be inserted after (before) the indicated line. Remarks are noted in the
11 margin, or appear between [and] in the text.

12 [Editor: “eof, err, eor” ⇒ “iostat” 191:25

13 INTEGER, INTENT(OUT) :: iostat 192:5

14 [Editor: “eof, err, eor” ⇒ “iostat” 192:13

15 INTEGER, INTENT(OUT) :: iostat 192:17

16 [Editor: “err” ⇒ “iostat” 192:26

17 INTEGER, INTENT(OUT) :: iostat 192:33

18 [Editor: “err” ⇒ “iostat” 192:41

19 INTEGER, INTENT(OUT) :: iostat 192:45

20 The iostat argument is used to report whether an error, end-of-record, or end-of-file con- 194:3-10
21 dition (9.9) occurs. If an error condition occurs, the user-defined derived-type input/output
22 procedure shall assign a positive value to the iostat argument. Otherwise, if an end-of-file con-
23 dition occurs, the user-defined derived-type input procedure shall assign the value of the named
24 constant IOSTAT_END (13.8.3.2.1) to the iostat argument. Otherwise, if an end-of-record
25 condition occurs, the user-defined derived-type input procedure shall assign the value of the
26 named constant IOSTAT_EOR (13.8.3.2.2) to iostat. Otherwise, the user-defined derived-type
27 input/output procedure shall assign the value zero to the iostat argument.

28 If the user-defined derived-type input/output procedure returns a nonzero value for the iostat
29 argument, the

30 [Editor: “err... true” ⇒ “iostat argument of the user-defined derived-type input/output 194:13-14
31 procedure has a nonzero value”.]