

1 NUMBER: 000068  
2 TITLE: Asterisks as I/O units  
3 KEYWORDS: Asterisk, I/O, unit  
4 DEFECT TYPE: Erratum  
5 STATUS: Submitted

6 Question:

- 7 1. Does the Fortran 95 standard require the external unit corresponding to the I/O unit identified by an asterisk  
8 for input or output to be the same as the external unit identified by some fixed nonnegative integer value?
- 9 2. Can the I/O unit identified by an asterisk for input or output correspond to more than one external unit?
- 10 3. If the external unit identified by an integer value that corresponds to the I/O unit identified by an asterisk  
11 for input or output is closed, does that cause the I/O unit identified by an asterisk to become disconnected?

12 Answer:

- 13 1. No.
- 14 2. No.
- 15 3. Yes.

16 Discussion:

17 The submitter states: At least one Fortran 95 implementation uses -1 as the value of the I/O unit identified  
18 by an asterisk. A carefully constructed INQUIRE statement can expose this value to the user. Many users expect  
19 I/O to the units identified by asterisks to continue to work even after the corresponding units identified by integer  
20 values have been closed.

- 21 1. There is no requirement in the standard that the asterisk correspond to an *external-file-unit*.
- 22 2. For the units identified by the asterisk , the text of section 9.3.2 does not allow two or more units to be  
23 connected simultaneously to the same external device or file [139:8-9]. An edit is supplied to clarify this  
24 situation.
- 25 3. There may not be an *external-file-unit* that corresponds to the *io-unit* specified by an asterisk, as clarified by  
26 the edit below. If there is, it is permissible to execute a CLOSE statement on them as on any other unit.

27 REFERENCES: ISO/IEC 1539-1:1997(E), Sections 9.3 and 9.4.4.2

28 EDITS:

29 For Fortran 95:

30 Add the following text to the end of the last paragraph before section 9.3.1 [138:34+]:  
31 "An asterisk used in an input statement may identify the same *io-unit* as some particular  
32 *external-file-unit*. An asterisk used in an output statement may identify the same *io-unit* as some  
33 other particular *external-file-unit*. "

34 There are no edits required for Fortran 2000.

35 SUBMITTED BY: Robert Corbett

36 HISTORY:

37 99-192 m150 Submitted  
38 99-215 m150 Proposed response.  
39 [End of J3 / 99-215]