

Subject: Edits to allow optional arguments for defined operations – to show how easy it would be
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 Reference: 04-169

1 Although the edits proposed here reference 03-007r2, they are intended for the next revision of the
 2 standard, not the FCD. They would allow procedures that define operations or assignment to have
 3 optional arguments in addition to the arguments necessary to satisfy the requirements for the operation
 4 or assignment. The primary purpose in offering these edits is to illustrate the simplicity of the necessary
 5 modifications to the standard. The effect on implementations may primarily be in removing exceptions
 6 to the general structure of generic resolution and procedure invocation.

7 1 Edits

8 Edits refer to 03-007r2. Page and line numbers are displayed in the margin. Absent other instructions, a
 9 page and line number or line number range implies all of the indicated text is to be replaced by associated
 10 text, while a page and line number followed by + (-) indicates that associated text is to be inserted after
 11 (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.

12 [Editor: Delete. This will change the item number at [122:8] to (1).] 122:6-7

13 (2) The function satisfies the requirements in 12.4.4.1 necessary for it to be referenced with one 122:13+
 14 actual argument x_2 associated with its first dummy argument. The first dummy argument
 15 shall have INTENT(IN).

16 [Editor: Delete. Covered by 12.4.1.2.] 122:14-19

17 [Editor: Delete. This will change the item number at [122:25] to (1).] 122:23-24

18 (2) The function satisfies the requirements in 12.4.4.1 necessary for it to be referenced with two 122:30+
 19 actual arguments x_1 and x_2 associated with its first two dummy arguments. The first two
 20 dummy arguments shall have INTENT(IN).

21 [Editor: Delete. Covered by 12.4.1.2.] 122:31-38

22 [Editor: Delete. This will change the item number at [142:11] to (1).] 142:9-10

23 (2) The subroutine satisfies the requirements in 12.4.4.1 necessary for it to be referenced with 142:16+
 24 two actual arguments x_1 and x_2 associated with its first two dummy arguments.

25 [Editor: Delete. Covered by 12.4.1.2.] 142:17-24

26 If OPERATOR is specified in a generic specification, all of the procedures specified in the generic interface 262:4-12
 27 shall be functions that may be referenced as defined operations (7.1.3, 7.1.8.7, 7.2, 12.4). The function
 28 result shall not have assumed character length. If the operator is an *intrinsic-operator* (R310), the number of
 29 nonoptional function arguments shall not exceed a number that is consistent with the intrinsic uses of
 30 that operator, and the types, kind type parameter values, or ranks of the dummy arguments shall differ
 31 from those required for the intrinsic operation (7.1.2).

32 Each of these subroutines shall have at least two dummy arguments. Dummy arguments after the second, 263:6
 33 if any, shall be optional.