10 August 2005 J3/05-198r1

Subject: Edits to allow a polymorphic allocatable variable in intrinsic assignment

From: Van Snyder

Reference: 04-354r1, 04-392, WG5/N1626-J3-022

1 1 Detailed Specification

- 2 Allow a polymorphic allocatable variable in intrinsic assignment. Require expr to have the same rank as
- 3 a polymorphic variable. If variable is allocated and polymorphic, and has a different dynamic type from
- 4 the expr, deallocate it (as we do now if any bounds or length type parameters differ). Then allocate it
- with the same dynamic type, type parameters and bounds as expr.

6 2 Syntax

7 No new syntax is required.

8 3 Edits

- 9 Edits refer to 04-007. Page and line numbers are displayed in the margin. Absent other instructions, a
- 10 page and line number or line number range implies all of the indicated text is to be replaced by associated
- 11 text, while a page and line number followed by +(-) indicates that associated text is to be inserted after
- 12 (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.
- 13 [Editor: At the end of the first paragraph of **7.4.1.2 Intrinsic assignment statement**, replace "variable 138:18
- shall not be polymorphic" by "if variable is polymorphic it shall be allocatable".]
- 15 [Editor: At the beginning of item (3) of the numbered list in **7.4.1.2 Intrinsic assignment statement**, 139:1
- 16 replace "The" by "If variable is polymorphic it shall be type compatible with expr and have the same
- 17 rank. Otherwise the".]

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- 18 [Editor: In the first line of the "derived type" row of Table 7.8, delete "and kind type parameters" and 139:2+8-11
- 19 the semicolon. Then delete the last three lines of Table 7.8 (which reappear in the next edit).]
- 20 [Editor: Insert a fourth item in the the numbered list in **7.4.1.2 Intrinsic assignment statement**:] 139:3-
 - (4) If variable is of derived type each length type parameter of variable shall have the same value as the corresponding type parameter of expr unless variable is allocatable and its corresponding type parameter is deferred, and each kind type parameter of variable shall have the same value as the corresponding type parameter of expr.
- 25 [Editor: In the third paragraph of **7.4.1.3 Interpretation of intrinsic assignments** the one beginning 139:23
- "If variable is an allocated . . . " replace "or" by a comma; insert ", or if the dynamic type of variable
- 27 and expr differ" after "differ".]
- 28 [Editor: Later in the same paragraph, delete the instance of "and" before "with each lower bound ...".] 139:25
- 29 [Editor: At the end of the same paragraph, insert ", and with the same dynamic type as expr" after 139:26
- 30 "LBOUND(expr)".]

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