Subject: More issues related to pointer assignment and procedure pointers
From: Van Snyder
References: wvs-151-1

1 Discussion

The syntactic term *target* is used as the description of what gets assigned to *pointer-object*. This is not correct in the case that *target* is a reference to a function that returns a pointer.

The constraints at 155:14-19 constrain the type of *target*, but this isn't quite right in the case that *target* is a function procedure pointer, and even less right in the case that *target* is a function that returns a pointer to a function procedure. It is the type of the target, not the syntactic term *target*, that needs to be constrained.

The paragraphs at 155:39-2 should be constraints. Also, they disagree with the constraints at 155:14-19 in the case of a polymorphic *pointer-object*.

2 Edits

Edits refer to 99-007r2. Page and line numbers are displayed in the margin. Absent other instructions, a page and line number or line number range implies all of the indicated text is to be replaced by immediately following text, while a page and line number followed by + indicates that immediately following text is to be inserted after the indicated line. Remarks for the editor are noted in the margin, or appear between [and] in the text.

The target of a pointer assignment operation is a data object or a procedure. It may be specified directly, by a pointer, or be the result of a function reference that returns a pointer.	155:1+
[Editor: Remove "or a function procedure pointer."]	155:14
[Editor: Replace "*target*" by "the target" four times.]	155:15, 16
[Editor: Remove "or a function procedure pointer."]	155:18
[Editor: Replace "*target*" by "the target" twice.]	155:19, 34
[Editor: Replace "*target*" by "target" twice.]	155:36, 37
[Editor: Replace "*target*" by "the target" at line 39, and make the paragraph a constraint.]	155:39-44
[Editor: Replace "*target*" by "the target" throughout (three times), remove "and" at 156:1, add ", and if the result value of *pointer-object* is polymorphic, the result type of the target shall be an extension of the result type of *pointer-object*" at the end of 156:2, and make the paragraph a constraint.]	155:45-2
Constraint: If *pointer-object* is a function procedure pointer that has implicit interface, the characteristics of the result type (12.2.2) of *pointer-object* shall be the same as the characteristics of the result type of the target, except that if the *pointer-object* is polymorphic, the result type of the target shall be an extension of the result type of *pointer-object*.	156:2+
The decision concerning agreement of kind type parameters (issue 20), as described in paper wvs-151-1, affects the above two constraints.	*Note to J3; not an edit*

[Editor: Replace "*target*" by "target" throughout (six times).]	156:3-7
[Editor: Replace "*target*" by "the target" throughout (five times).]	156:8-15
[Editor: Replace "*target*" by "the target" throughout (three times).]	157:2-6