Subject: Remove prohibition against forward reference to the type of an object
From: Van Snyder

1 Number

2 TBD

3 Title

4 Remove prohibition against forward reference to the type of an object.

5 Submitted By

6 J3

7 Status

8 For consideration.

9 Basic Functionality

10 Remove prohibition against forward reference to the type of an object.

11 Rationale

12 Processors are required to support forward reference from the FUNCTION statement to its result type
13 if the result type is derived, or from an IMPLICIT statement to a derived type, so there's really no point
14 to requiring other objects not to have their types declared by a forward reference.

15 The standard is inconsistent as it stands — compare the first and last sentences of the middle paragraph
16 of 5.1.1.1 — so some revision is necessary.

17 Estimated Impact

18 Trivial for the standard — about 3 on the N1594 scale. Probably in the trivial-to-small range for
19 processors.

20 Detailed Specification

21 Where a data entity is declared explicitly using a TYPE *declaration-type-spec*, the *type-name* in the
22 *derived-type-spec* shall specify a type that is defined within the same scoping unit or is accessible there
23 by use or host association. (This would replace 75:8-14 in the FDIS).

24 Where a data entity is declared explicitly using a CLASS *declaration-type-spec* that is not CLASS(*),
25 the *type-name* in the *derived-type-spec* shall specify a type that is defined within the same scoping unit
26 or is accessible there by use or host association. (This would be a new paragraph after 75:22 in the
27 FDIS.)

28 In an initialization expression one can only inquire the properties of an entity for which the type definition
29 appears prior to the expression. (This needs some polishing to become correct standardese.)

30 History