

Subject: Initial values on every invocation
From: Van Snyder
Reference: 03-258r1, section 2.11

1 **Number**

2 TBD

3 **Title**

4 Initial values on every invocation.

5 **Submitted By**

6 J3

7 **Status**

8 For consideration.

9 **Basic Functionality**

10 Provide a specification that initialization for a variable declared in a subprogram applies on every
11 invocation of the procedure.

12 **Rationale**

13 Users who don't read the standard (or their textbooks) carefully are sometimes confused by initialization
14 for variables. They don't realize that it happens exactly once, and not on every invocation. Leaving
15 aside the confusion, it is sometimes desirable for initialization to happen on every invocation, and not
16 automatically to imply the SAVE attribute.

17 **Estimated Impact**

18 Minor.

19 **Detailed Specification**

20 Provide an attribute for a variable declared in a subprogram, which can only be specified if it has
21 initialization, that specifies that the initialization is performed every time the procedure is invoked.
22 It should also be applicable to automatic variables and to pointers. If the variable doesn't have the
23 POINTER attribute, allow the initial value to be a specification expression.

24 This attribute, and initialization in the presence of this attribute, ought not to imply the SAVE attribute.

25 **History**