

Subject: Default initial values for optional dummy arguments
From: Van Snyder
Reference: 03-258r1, section 2.4.3.2

1 **Number**

2 TBD

3 **Title**

4 Default initial values for optional dummy arguments.

5 **Submitted By**

6 J3

7 **Status**

8 For consideration.

9 **Basic Functionality**

10 Default initial values for optional dummy arguments.

11 **Rationale**

12 A frequently requested feature is to be able to specify a default initial value for absent optional dummy
13 arguments.

14 **Estimated Impact**

15 Minor, mostly in Section 12.

16 **Detailed Specification**

17 It would seem to be easy to provide a specification for a default initial value for absent optional nonpointer
18 nonallocatable scalars and explicit-shape arrays, especially if the proposal to provide for reinitialization
19 on every invocation is adopted. If the proposal for non-null initial targets for pointers is adopted, it would
20 be easy to provide a default target for absent optional pointer dummy arguments. For assumed-shape
21 or -size arrays, or arguments with assumed length parameters, the assumed quantities can be taken
22 from the initialization. If an absent optional allocatable dummy argument has a default initial value
23 specified, it is initially allocated and has that value (and shape and length parameters if appropriate).
24 The distfix if-then-else operator proposal would go some distance toward solving the same problems as
25 this proposal, but it would still require an auxiliary named local variable.

26 **History**