

Subject: Disassociated or deallocated actual argument associated with nonpointer nonallocatable optional dummy argument is considered not to be present
From: Van Snyder
Reference: 03-258r1, section 2.4.3.1

1 **Number**

2 TBD

3 **Title**

4 Disassociated or deallocated actual argument associated with nonpointer nonallocatable optional dummy
5 argument is considered not to be present.

6 **Submitted By**

7 J3

8 **Status**

9 For consideration.

10 **Basic Functionality**

11 A disassociated or deallocated actual argument associated with optional dummy argument is considered
12 not to be present.

13 **Rationale**

14 I have a procedure that has numerous pointers that are associated, or not, depending on input parame-
15 ters. These are in turn passed to some subroutines that do (or do not do) some computations depending
16 on whether the dummy arguments are associated. This, of course, requires the dummy arguments to
17 be pointers, which degrades the generality of the procedure, and may have undesirable implications for
18 optimization.

19 It would be better if I could use optional nonpointer dummy arguments to decide whether to do these
20 computations. In order to achieve this effect by using optional n dummy arguments I need an IF ELSE
21 IF ... ENDIF construct with 2^n branches.

22 **Estimated Impact**

23 Nearly trivial — a minor change in definition of “present”.

24 **Detailed Specification**

25 Allow to associate a deallocated allocatable actual argument, or a disassociated pointer actual argument,
26 with an optional nonpointer nonallocatable dummy argument, in which case the dummy argument is
27 considered to be absent instead of an error.

28 **History**