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

Number

TBD

Title

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

Submitted By

J3

Status

For consideration.

Basic Functionality

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

Rationale

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

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

Estimated Impact

Nearly trivial — a minor change in defintion of "present".

Detailed Specification

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

History