Subject: Allow *expr* to be unallocated if *variable* is allocatable in intrinsic assignment
From: Van Snyder

Number

TBD

Title

Allow *expr* to be unallocated if *variable* is allocatable in intrinsic assignment.

Submitted By

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Status

For consideration.

Basic Functionality

Allow *expr* to be unallocated if *variable* is allocatable in intrinsic assignment, with the result that *variable* becomes unallocated.

Rationale

There's no reason to prohibit it. It would make ordinary intrinsic assignment more like the allocatable components case. It could be useful: `a = b` would have the same effect as the following, but would be more terse.

```
  if ( allocated(b) ) then
    a = b
  else if ( allocated(a) ) then
    deallocate ( a )
  end if
```

Estimated Impact

Trivial for the standard, and probably in the trivial-to-small range for processors. Between 3 and 4 on the N1594 scale.

Minor edits are needed in the first and third paragraphs of 7.4.1.3 to say what happens in case *expr* is unallocated.

Detailed Specification

Allow *expr* to be unallocated if *variable* is allocatable in intrinsic assignment. If *expr* is unallocated, *variable* ends up unallocated.

One could argue that the next logical step would be to allow the result of a function with an allocatable result to be unallocated, but that would put this proposal definitely at the 4 level on the N1594 scale.

History