

Comments on Document N1219 Fortran Language vulnerabilities by J. Reid.

4.6 Numeric model

Move the first sentence of para 3 “Inquiry intrinsic ...” to end of para 1.
[Para split last time at the wrong place.]

Renumber subclause 4.8 and insert new subclause 4.8 :

4.8 Allocatable variables

An allocatable variable or component is declared with a rank (dimensionality) but without data. It is associated with data by an `allocate` statement and is then said to be **allocated**. If it is an array, the `allocate` statement provides it with bounds. Its data is released to the system by a `deallocate` statement and it is then said to be **unallocated**. Its initial status is unallocated. Its allocation status is either allocated or unallocated. While it has many of the properties of a pointer variable, it cannot give rise to memory leakage or a dangling pointer.

6.13.1 Applicability to language

At the end of para 1 add “It also occurs for a pointer whose pointer association status is undefined.”. In para 2, change “that is not undefined” to “whose pointer association status is defined” and remove comma before “or”.

6.13.2 Guidance to language users

Add bullet 1 “Follow the guidance of ISO/IEC 24772-1 clause 6.13.5.” and delete comment.

Delete “throughout” at end of bullet 3. [We already have “during”.]

In bullet 4 change “the pointer” to “a pointer” and “it” to “the pointer”. [For clarity]

6.14.2 Guidance to language users

Bullet 5. For the final “target” unbold and use courier.

6.22 Initialization of variables [LAV]

Add “**Missing**” at the start of the title.

6.22.2 Guidance to language users

Bullet 1. Delete “???”.

6.24.1 Applicability to language

At the start of sentence 2, add “Non-intrinsic” before “Fortran functions”. [All the intrinsic functions are pure.]

6.29 Loop Control Variables [TEX]

Change “**Variables**” to “**Variable abuse**” in the title.

6.30.1 Applicability to language

Para 3. Delete comment.

6.37.1 Applicability to language

Para 1. Change “common and equivalence” to “common, equivalence, and entry”.

Change “the means” to “other means”.

Para 2. Change “Transfer” to “The intrinsic transfer”.

Para 3. Change “common or equivalence” to “common, equivalence, or entry” and change “common and equivalence” to “common, equivalence, and entry”.

6.37.2 Guidance to language users

Add bullet:

“Do not use `entry`. Use a module containing any private data items, with a module procedure for each entry point and the shared code in a private module procedure.”

6.61.1 Applicability to language

In item 1, change “image selectors” to “an image selector”.

Change item 2 to “By invoking a collective procedure (clause 4.8.8)”. [They are not just scatter and gather. If more explanation is needed, let’s put it in 4.8.8.]