

Comments on document N1211 Fortran vulnerabilities by J. Reid.

6.6.1 Applicability to language

Last line. Delete comment [Covered by the text preceding the example.]

6.8.1 Applicability to language

Para 5. Remove highlighting and delete the comment [Covered by para 6.]

6.9.2 Guidance to language users

Extra white space after bullet 1.

6.11.1 Applicability to language

Final para. Add space before sentence 2 and set the whole of `c_funloc` in courier.

6.11.2 Guidance to language users

Replace bullet 3 by

“Avoid sequence types; all use of sequence types is error prone because no checks are made by the compiler for components of the wrong type or shape.”
and delete first comment.

6.54.1 Applicability to language

In para 4, delete the final sentence and associated comment [Default initialization of a component of a derived type does not imply that objects of the type have the save attribute, see Fortran standard, 7.5.4.6, para 6.]

6.55.1 Applicability to language

Delete empty first bullet.

In final bullet, change “left-to-right” to “specified” [It is mostly left-to-right but `a**b**c` is `a**(b**c)`]

In final para hyphenate “Implementation defined”, twice.

6.57.1 Applicability to language

In para 2 hyphenate “Implementation defined”.

6.59.1 Applicability to language

Replace all but the final para by

“The vulnerability described in ISO/IEC 24772-1 clause 6.59 is not applicable to Fortran.

Images in Fortran all start asynchronously without activation by a single thread. Failure detection during this phase is no different from failure detection during any other stage of the program execution. “

6.59.2 Guidance to language users

Delete subclause

6.60 Concurrency – Directed termination [CGT]

Delete the final sentence. [It is wrong – error stop causes all images to terminate.]

6.61.1 Applicability to language

In para 1, change “Only coarray data” to “Data” so that the sentence reads

“Data are accessible across image boundaries and only by using image selectors in square brackets.”

[Consider a[image]%pointer]

In para 2, delete “coarray”. [Consider a[image]%pointer]

6.61.2 Guidance to language users

Bullet 1. Delete comment [On reflection, I accept this guidance.]

Bullet 3, sub-bullet 3. Change “collective subroutines” to “a collective subroutine”.