

From: Masayuki Takata takata@g.edogawa-u.ac.jp

Subject: Re: 24772-8 Fortran vulnerabilities

Date: September 28, 2025 at 5:11 PM

To: John Reid john.reid9@talktalk.net

Cc: Steve Lionel steve@stevlionel.com, ploedere@informatik.uni-stuttgart.de, Stephen Michell stephen.michell@maurya.on.ca, Clune, Thomas L. (GSFC-6101) thomas.l.clune@nasa.gov, Daniel C Chen cdchen@ca.ibm.com

MT

Dear all,

Now, I could not find any more changes other than John has pointed out. So, as an individual expert in this small group, I agree to proceed to DIS.

Regards,
Makki

2025年9月9日(火) 22:42 John Reid <john.reid9@talktalk.net>:

Steve Lionel wrote:

> We had discussed the 2018 vs. 2023 issue during development. I don't
> object to changing the reference to F2023 if the BOZ issue is the only
> technical change needed, but I'm uncertain.

I don't think we have any choice about referencing the 2023 Fortran standard and similarly for the Floating Point standard. Yes, we need to look for other changes needed - I have tried and not found any.

Cheers,

John.

>
> Steve

>
> On 9/9/2025 9:00 AM, Erhard Ploedereder wrote:
>> If this is the sum total of required changes, there probably is no
>> need for a meeting in the first place or, if so, a very brief one to
>> record the decision to make the changes and send the changed document
>> along the necessary channels. To me, the changes all look good and
>> necessary.

>>
>> Cheers,
>> Erhard

>>
>> Am 09.09.2025 um 14:11 schrieb John Reid:
>>> Message sent on 17 July:

>>>
>>> Stephen,
>>>
>>> I have received this comment from Japan.

>>>
>>> "The current draft references Fortran 2018, and the date should be,
>>> at least, updated
>>> for Fortran 2023. This would be a technical change that is not
>>> allowed at DIS stage."

>>>
>>> I have also noticed that we reference
>>>
>>> ISO/IEC/IEEE 60559-2011, Information technology – Microprocessor
>>> Systems – Floating-Point arithmetic
>>>
>>> This too is an out-of-date reference. I suggest the following changes:

>>>
>>> 2., 3.1, 4.3 twice, 6.57.1, 6.58.1. Replace "1539-1:2018" by
>>> "1539-1:2023".

>>>
>>> 6.35.1. Replace "Fortran 2018" by "Fortran".

>>>
>>> 2., 4.6, 6.4.1. Replace "60559-2011" by "60559-2020".

>>>
>>> The only technical changes that I think are needed are:

>>>
>>> 6.3.1, para 3. Change to

>>>
>>> "Fortran allows constants to be defined by binary, octal, or
>>> hexadecimal digits, collectively called BOZ constants, but their
>>> use is limited."

>>>
>>> [More uses of BOZ constants are allowed in Fortran 2023, but I
>>> don't think there is a need to specify them here.]

>>>
>>> 6.58.1, para 2. In line 2 change "Annex B1" to "Annexes B1 and B2".
>>> In line 5 change "Annex B1" to "Annex B3".

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>>>
>>> [This was wrong for Fortran 2018, too].
>>>
>>>
>>> While looking through the document, I found these typos
>>>
>>> 4.10.4, bullet 2. Add space after "4.10.6".
>>>
>>> 6.2.1, para 5. Change "binary)" to "binary".
>>>
>>> 6.43.2. Remove comment in the margin.
>>>
>>> 6.44.1, para 3. Remove hyphen before "Among".
>>>
>>> 6.47.2, bullet 3. In "bind(C)" set ")" in courier.
>>>
>>> Cheers,
>>>
>>> John.
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