J3 Work Items

A place to discuss work items
https://j3-fortran.org/forum/

F202y features assigned to JoR at m227

https://j3-fortran.org/forum/viewtopic.php?f=9&t=106

Re: F202y features assigned to JoR at m227

by **rich.bleikamp**

Posted: **Thu Jul 21, 2022 12:54 pm**

Status of F202y features assigned to JoR (tentative, from m227)

Recommended for inclusion in F202y

Priority	Effort	Feature	Notes	References
High	Medium	cpp	likely approach: examine existing cpp like support, adopt a viable subset, make it Fortran friendly w.r.t. fixed/free source form, Fortran comments, continuation lines, ... support #include, #define, #ifdef, #if. It is a companion processor, off by default. Processor dependent: how to enable it. NOT Optional. Required to be available to be F202y compliant. Likely a new part 2 of 1539.	https://github.com/j3-fortran/fortran_p ... /issues/65
Low	Easy	change F.P. model to be IEEE 754	not a technical change. Will make examples match behavior of common HW.	https://github.com/j3-fortran/fortran_p ... issues/268
Low	Easy?	Remove some processor dependencies from Annex A	i.e. define min # of nested include stmts processor must support	
Med	Low	Immutable values		https://github.com/j3-fortran/fortran_p ... issues/221
Med	low-med	program specified default kinds for constants and intrinsic types.	ADOPTED by DATA, similar to -r8 processor flag	https://github.com/j3-fortran/fortran_p ... /issues/78

Undecided - subgroup hasn't decided whether or not to recommend this feature

Priority	Effort	Feature	Notes	References

?	?	scan/prefix sum	JoR needs help evaluating this feature, use cases, ...	https://github.com/j3-fortran/fortran_p ... issues/273
?	?	scan clause for do concurrent reduce	JoR needs help evaluating this feature, use cases, ...	https://github.com/j3-fortran/fortran_p ... issues/224
?	Low	Disallow use of specific new F202y features in a program unit that uses any deprecated/deleted features	This is a way to discourage users from using obsolescent features (such as fixed form source). You would get a "non-conforming" error message (maybe a warning, maybe fatal). Subgroup is uncertain about the desirability of this feature. Strong committee support might change our mind.	https://github.com/j3-fortran/fortran_p ... issues/280

Not recommended for inclusion in F202y

Priority	Effort	Feature	Notes	References
Low	Easy	Surprising results for UBOUND and LBOUND when argument has zero extent	JoR is leaning towords dropping this feature. A compelling use case would change our mind.	https://github.com/j3-fortran/fortran_p ... issues/254
Low	Easy	log2: just log2, or survey math.h and see what other base 2 intrinsics are missing from fortran.	We would like a compelling use case (HPC related) before we would tackle this feature.	https://github.com/j3-fortran/fortran_p ... issues/222
?	Easy	intrinsic to return the name of your caller, current procedure name, ...	JoR decided not to pursue this. Again, a compelling use case might change our mind. Overhead and possibly requiring debugging info is a concern. Seems like a companion processor (debugger) can do some of this.	https://github.com/j3-fortran/fortran_p ... issues/180
?	Easy	ASSERT	May be simple to do yourself if we have cpp. JoR sees little value in this if we have cpp.	https://github.com/j3-fortran/fortran_p ... /issues/70
Low	?	Deprecate D format edit descriptor	the D edit descriptor serves no useful purpose anymore. But removing it from the standard may not be trivial.	https://github.com/j3-fortran/fortran_p ... issues/226
?	?	constexpr	JoR needs to research this more, but it seems un-fortran like. JoR would like to see a compelling use case. Also seems expensive to implement?	https://github.com/j3-fortran/fortran_p ... issues/214https://fortran-lang.discourse.group/t/ ... fortranfan and from a DATA subgroup item

				https://github.com/j3-fortran/fortran_p ... issues/253

All times are UTC-04:00

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