Subject: Re: Make THISFN simpler and more powerful Posted by Lance on Tue, 08 Oct 2024 18:01:45 GMT

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Didier wrote on Tue, 08 October 2024 13:25Hello Lance,

What compilers do with bit field is not covered by a standard and is implementation defined... so they do just about whatever they want.

BUT, something important is missing in you're code! If you really want everything to be side by side, bit wise, you have to specify PACKED option on you're structs

search the web: __attribute__((packed, aligned(X))) or __PACKED__

This will force the compiler to 'pack' all the bits together not waisting anything: so you will have a stable size.

Note: positionning of the inside the struct is implementation defined ... so some compilers put them in on order, and others the other way around;)
==> you're code won't be very portable

Thanks for your reply, Didier.

I am fine with padding. I am having issues with the way MSVC padding this one to unnecessary increase object size.

Also, for union, I expect objects taking same memory address. MSVC failed to deliver. I don't know what the standard says. But it's a tradition dated back to old C.

Are compiler free to reorder data members with the same access privileges? I will have to double check. Thanks again.