

Re: [PATCH] "volatile considered harmful", take 3

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 - *Date:* Sat, 12 May 2007 12:58:19 +0530
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On 5/12/07, H. Peter Anvin <hpa@xxxxxxxxxx> wrote:

Satyam Sharma wrote:

>>

>> Sorry, that's just utter crap. Linux isn't written in some mythical C
>> which only exists in standard document, it is written in a particular
>> subset of GNU C. "volatile" is well enough defined in that context, it
>> is just frequently misused.

>

> Of course, volatile `_is_` defined (well, `_anything_` that is implemented
> `_is_` defined, after all) in the context of GNU C, and if you're saying
> that the kernel (and all its subsystems) is and should `_continue_` to
> be (the purpose of this document) written within that context, then
> that's your opinion and I would not disagree with you. If you do
> prefer to continue using that dialect, then I wouldn't stop you either.
>

This isn't just an opinion, this is the language the Linux kernel is written in today, and has been for the duration of its 16-year

I said "and should `_continue_` to be (the purpose of this document) written within that context, then that's your opinion". That "is" before the "and should ..." was not meant to be combined with "your opinion".

existence. It contains *many* constructs that are not defined in, for example, C99, and it would in fact be impossible to write the Linux kernel using only C99-compliant constructs.

And that is not what I attempt to do (or even suggest) either. Which is why I do *not* disagree with the jiffies clause — it exists in that document merely to `_inform_` readers about `_current_` behaviour / dialect of the kernel and not to influence code written in the future. The problem with the last clause is that it explicitly influences *future* code (by coming in as a "rare situation where volatile makes sense in the kernel").

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- > Personally, I'd prefer writing in a slightly more portable / larger
- > context (using well-defined and understood APIs), thank you, and
- > hope you'd allow me to do so myself.

There is no such "slightly more portable/larger context/well-defined and understood" context in existence. If you think so, you're deluding yourself.

If you remember my original mail was in the "_why_ use volatile" tone, which means to _dissuade_ future spurious additions of volatile to the kernel. Now this _is_ a matter of opinion: I personally prefer as much (if not all) future code to be dialect-independent, you might not.

Satyam

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