
Subject: Re: -32768

Posted by [Yngvar Larsen](#) on Fri, 21 Mar 2014 18:39:45 GMT

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On Friday, 21 March 2014 19:16:40 UTC+1, fawltyl...@gmail.com wrote:

> On Friday, March 21, 2014 7:02:08 PM UTC+1, Yngvar Larsen wrote:

>

>

>

>> For literals, I agree that this might be regarded as dubious. But in general, the fact that N-bit integer arithmetic is silently wrapped modulo 2^N should be regarded as semantically well defined. If not, I believe a serious performance hit would result.

>

> The C standard guarantees modulo 2^N arithmetic for unsigned integers only. For signed integers, the behavior is undefined.

Thanks for the info! I didn't know that. Fortunately, I haven't had to do much numerical work in C lately.

Do you by any chance know the rationale behind that?

> -32768 is a funny number. Did you know that its absolute value is negative?

>

> IDL> help, abs(-32767-1)

> <Expression> INT = -32768

Yes! In fact, we've been internally misusing that fact in an IDL routine at work :) I guess we probably shouldn't, but it worked so well in the context to leave it alone!

--

Yngvar
