Subject: Re: - unsigned variables
Posted by JD Smith on Fri, 24 Sep 2004 00:53:18 GMT
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On Thu, 23 Sep 2004 15:56:16 -0700, Holger Fleckenstein wrote:

> A strange behavior in IDL occured to me.
>
> In C++ if I do:
> unsigned short x=1;
> printf("%d",-x);
> I get
> -1
> like I would expect.
>
> In IDL however:
> x=1U
> print, -x
> gives
> 65535
> So it basically treats it like I had done:
> print, uint(-1)
>
> Does anybody have an explanation for this? Is this, because of a typecast
> before executing the print? (Can creat bugs, which are hard to localize.)

Nope, it's because your print format is treating it as a signed long
integer. Try:

unsigned short x=1;
printf("%hu",-x);

which gives:

65535

The difference is, IDL *knows* your integer is an unsigned short. C
doesn't know or care, and so is happy to print it however you like.
You can always change IDL's mind by explicitly casting it:

IDL> print,fix(-1U)
-1

Note that short -1 and 65535 are actually represented by the exact
same bit pattern, namely:

1111111111111111

JD