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Subject: Re: Unsigned Integers - How?

Posted by [David Foster](#) on Fri, 07 Feb 1997 08:00:00 GMT

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David Fanning wrote:

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>
> Peter Berdeklis <peter@atmosp.physics.utoronto.ca> writes:
>
>> I'm trying to read a binary data file into IDL. Included in the data
>> headers are several unsigned integers for dates and times. Some of the
>> unsigned integers are overflowing, giving me negative integers. How do I
>> specify a variable as an unsigned integer in IDL?
>
> It's deja vu all over again, as one of our famous baseball players once
> said. :-)
>
> Read the unsigned integers into *signed* 16-bit integers in IDL.
> (You are already doing this, apparently).
>
> date = 0L
> time = 0L
> READU, lun, datafile, date, time
>
> Convert them to the correct *unsigned* values, like this:
>
> date = LONG(date) AND 'FFFF'x
> time = LONG(time) AND 'FFFF'x
>
```

Oops! If you specify LONG then you get 32-bit integers. So:

```
date = fix(0)
time = fix(0)
readu, lun, datafile, date, time
```

```
date = date AND 'FFFF'x
time = time AND 'FFFF'x
```

Of course, if you want 32-bit integers, use LONG like Dave suggested.

Dave

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