Subject: Re: 32-bit Unsigned Integers, Was: Unsigned Integers - How?
Posted by Peter Berdeklis on Mon, 10 Feb 1997 08:00:00 GMT
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On Sat, 8 Feb 1997, David Fanning wrote:
> Somehow, Peter, I just *knew* you didn't have 16-bit integers! :-)

Hard to believe that's cutting edge on a PC, isn't it? :-}

Thank you for your suggestion. It works perfectly. In return, here's
how to do it for an array.

```
th = '8f7b91dd'x  ; Unsigned this is 2407240157.
   ; Signed this is -1887727139.

th_arr = replicate(th, 10) ; make an array of 10 of them to test

tb_arr = byte(th_arr, 0, 4, 10) ; map the array to a 4x10 array of bytes
   ;  if the initial array is not 1D just add
   ;  dimensions (up to 6 more)

; make your array of 10 doubles

td_arr = double(tb_arr(0,*)) + double(tb_arr(1,*)*2.^8) $
         + double(tb_arr(2,*)*2.^16) + double(tb_arr(3,*)*2.^24)
```

Of course, as you said, the byte order is dependent on the endian of the
machine. However, there is no need to check if the unsigned has
overflowed since this will correctly map values that haven't. Of course
if you do want to check, just check if the number is <0. It shouldn't be
if it is unsigned. :)

Thanks again for the help.

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