Subject: Unsigned Integers - How?
Posted by Peter Berdeklis on Wed, 05 Feb 1997 08:00:00 GMT
View Forum Message <> Reply to Message

Hi.

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 unsinged integers are overflowing, giving me negative integers. How do I specify a variable as an unsinged integer in IDL?

Peter Berdeklis
Dept. of Physics, Univ. of Toronto

Subject: Re: Unsigned Integers - How?
Posted by sterner on Tue, 11 Feb 1997 08:00:00 GMT
View Forum Message <> Reply to Message

davidf@dfanning.com (David Fanning) writes:

> Convert them to the correct *unsigned* values, like this:

> date = LONG(date) AND 'FFFF'x

A minor variation:

date = date AND 'FFFF'xL

Ray Sterner sterner@tesla.jhuapl.edu
The Johns Hopkins University North latitude 39.16 degrees.
Applied Physics Laboratory West longitude 76.90 degrees.
Laurel, MD 20723-6099
WWW Home page: http://fermi.jhuapl.edu/s1r/people/res/res.html

Subject: Re: unsigned integers
Posted by davidf on Fri, 17 Jul 1998 07:00:00 GMT
View Forum Message <> Reply to Message

Richard G. French (rfrench@wellesley.edu) writes:

> Does anyone out there know why the unsigned integer type has
> never been implemented in IDL? Has anyone written a small
> package of routines to deal with them painlessly? I've always
> handled on a case-by-case basis by reading the signed shorts into IDL

> and then converting them to LONG, using the MSB of the short to
> turn the sign bit into the appropriate power of two. Don't all C
> compilers have unsigned shorts as a standard type? Is there anyone
> else out there who would like to see unsigned integers elevated to
> a legal type?

According to my usually reliable sources, an unsigned
integer data type is under very strong consideration at
RSI. It is especially needed to work with much of the data
coming from EOS missions. I wouldn't be surprised to see it
in a future upgrade. Customer requests, of course, always
make a difference.

Cheers,

David

David Fanning, Ph.D.
Fanning Software Consulting
E-Mail: davidf@dfanning.com
Phone: 970-221-0438
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: unsigned integers
Posted by David Foster on Mon, 20 Jul 1998 07:00:00 GMT
View Forum Message <> Reply to Message

David Fanning wrote:
>
> Richard G. French (rfrench@wellesley.edu) writes:
>
>> Does anyone out there know why the unsigned integer type has
>> never been implemented in IDL? Has anyone written a small
>> package of routines to deal with them painlessly? I've always
>> handled on a case-by-case basis by reading the signed shorts into IDL
>> and then converting them to LONG, using the MSB of the short to
>> turn the sign bit into the appropriate power of two. Don't all C
>> compilers have unsigned shorts as a standard type? Is there anyone
>> else out there who would like to see unsigned integers elevated to
>> a legal type?
>
> According to my usually reliable sources, an unsigned
> integer data type is under very strong consideration at
> RSI. It is especially needed to work with much of the data
> coming from EOS missions. I wouldn't be surprised to see it
> in a future upgrade. Customer requests, of course, always

> make a difference.
>

In the meantme, check out an article "Working with unsigned integers"
on David Fanning's web site: www.dfanning.com .

Dave
--

~~~~~~ ~~~~~~~
David S. Foster Univ. of California, San Diego
Programmer/Analyst Brain Image Analysis Laboratory
foster@bial1.ucsd.edu Department of Psychiatry
(619) 622-5892 8950 Via La Jolla Drive, Suite 2240
La Jolla, CA 92037
~~~~~~ ~~~~~~~