
Subject: Re: integer?

Posted by [David Fanning](#) on Tue, 30 Jul 2002 15:34:38 GMT

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tom (tom2959@21cn.com) writes:

> This is a segment of HEX: 00 00 00 64
>
> there are two 2byte-integers in it.
> But when I set
> a=0
> readu,lun,a ; I hope a=hex(00 00)
> print,a
> the result is 100. That's a=hex(00 00 00 64)
> that's the same as "a=0l readu,lun,a"
>
> how to read 2byte integer then?

Like this:

```
IDL> a = '00000064'x
IDL> HELP, a
  A      INT    =    100
IDL> Print, 'High order byte: ', Byte(a, 1)
  High order byte:  0
IDL> Print, 'Low order byte: ', Byte(a, 0)
  Low order byte: 100
```

Cheers,

David

--

David W. Fanning, Ph.D.

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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Subject: Re: integer?

Posted by [Nigel Wade](#) on Wed, 31 Jul 2002 08:32:37 GMT

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tom wrote:

> Hi, all
>
> This is a segment of HEX: 00 00 00 64

>
> there are two 2byte-integers in it.
> But when I set
> a=0
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>
> how to read 2byte integer then?
>
> Tom

Could the number be one little endian 32 bit integer rather than two 16 bit ones? That would account for the discrepancy.

What platform are you doing this on, and what platform was the data file created on?

--

Nigel Wade, System Administrator, Space Plasma Physics Group,
University of Leicester, Leicester, LE1 7RH, UK
E-mail : nmw@ion.le.ac.uk
Phone : +44 (0)116 2523568, Fax : +44 (0)116 2523555

Subject: Re: integer?
Posted by [tom](#) on Wed, 31 Jul 2002 12:26:35 GMT
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I know that. That because I use /xdr in open.

Thanks.

On Wed, 31 Jul 2002 09:32:37 +0100, Nigel Wade <nmw@ion.le.ac.uk> wrote:

> tom wrote:
>
>> Hi, all
>>
>> This is a segment of HEX: 00 00 00 64
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>> there are two 2byte-integers in it.
>> But when I set
>> a=0

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>> readu,lun,a ; I hope a=hex(00 00)
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>> Tom
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> Could the number be one little endian 32 bit integer rather than two 16 bit
> ones? That would account for the discrepancy.
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> What platform are you doing this on, and what platform was the data file
> created on?
```

Subject: Re: integer?

Posted by [Nigel Wade](#) on Wed, 31 Jul 2002 13:25:42 GMT

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tom wrote:

```
> I know that. That because I use /xdr in open.
>
> Thanks.
>
>
```

You might have mentioned that in your original post.
AFAIK XDR doesn't have a 16 bit integer.

Anything else you'd care to tell us about?

--

Nigel Wade, System Administrator, Space Plasma Physics Group,
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Subject: Re: integer?

Posted by [David Fanning](#) on Wed, 31 Jul 2002 13:56:17 GMT

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Nigel Wade (nmw@ion.le.ac.uk) writes:

- > You might have mentioned that in your original post.
- > AFAIK XDR doesn't have a 16 bit integer.
- >
- > Anything else you'd care to tell us about?

Maybe I'll work on that "Art of Asking a Question" article some more today. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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Subject: Re: integer?

Posted by [tom](#) on Fri, 02 Aug 2002 01:07:28 GMT

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I am sorry for that.

But only after read the answers, I try to replace XDR by ENDIAN... Then I find the problem.

"Nigel Wade" <nmw@ion.le.ac.uk> ??????:ai8ogm\$1i4t\$1@rook.le.ac.uk...

> tom wrote:

>

>> I know that. That because I use /xdr in open.

>>

>> Thanks.

>>

>>

>

> You might have mentioned that in your original post.

> AFAIK XDR doesn't have a 16 bit integer.

>

> Anything else you'd care to tell us about?

>

> --

> -----

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Subject: Re: integer?

Posted by [Nigel Wade](#) on Fri, 02 Aug 2002 09:01:50 GMT

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tom wrote:

- > I am sorry for that.
- > But only after read the answers, I try to replace XDR by ENDIAN... Then I
- > find the problem.
- >

Does the file actually contain XDR data?

If you write a short integer (16 bits) with `xdr_short`, the routine actually writes 32 bits, big endian, to the data file (it only deals in multiples of 4 bytes in big endian, or network byte order).

--

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