
Subject: Re: Reading non-standard variable sizes
Posted by [Michael Galloy](#) on Fri, 07 Sep 2012 21:23:15 GMT
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On 9/7/12 2:44 PM, Brian J. Daniel wrote:

> I'm attempting to read values from a binary file with some strange variable formats.
Specifically, I have a field of data that uses 9 bytes. No IDL data format has 9 bytes. I can do the following:

```
>  
> data = bytarr(9)  
> ReadU, lun, data  
>  
> And lun will be ready to read the next variable, but how do I convert the 9 byte variable into a  
single 8-byte double number?  
>  
> Unfortunately, I can't change the format of this data because its a standard. Thanks for your  
interest.  
>  
> -Brian  
>
```

Check out the DOUBLE function. I think you want something like:

```
d = double(data, 0)
```

or

```
d = double(data, 1)
```

depending on which 8 bytes of the 9 bytes are used.

Mike

--

Michael Galloy
www.michaelgalloy.com
Modern IDL: A Guide to IDL Programming (<http://modernidl.idldev.com>)
Research Mathematician
Tech-X Corporation

Subject: Re: Reading non-standard variable sizes
Posted by [Craig Markwardt](#) on Sat, 08 Sep 2012 03:49:44 GMT
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On Friday, September 7, 2012 5:23:15 PM UTC-4, Mike Galloy wrote:

> On 9/7/12 2:44 PM, Brian J. Daniel wrote:

```
>  
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> d = double(data, 0)
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> or
>
>
>
> d = double(data, 1)
>
>
>
> depending on which 8 bytes of the 9 bytes are used.
...

```

And then pray to gods of endianness. A sacrifice at the altar of SWAP_ENDIAN may allow you to receive your wish.

Craig

Subject: Re: Reading non-standard variable sizes
Posted by [Brian Daniel](#) on Mon, 10 Sep 2012 18:56:53 GMT
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Thanks for your advice Mike and Craig. After trying and failing with `double()` and swapping endians (which only reverses the answers you get with `double(var,0)` and `double(var,1)`), I realized the data is ASCII and the ICD is really describing the number of characters in the string, not the number of bytes in the binary data. But again, thanks for your help.

-B

On Friday, September 7, 2012 4:44:21 PM UTC-4, Brian J. Daniel wrote:

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Specifically, I have a field of data that uses 9 bytes. No IDL data format has 9 bytes. I can do the following:

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>  
>  
> data = bytarr(9)  
>  
> ReadU, lun, data
```

```
>  
>  
>  
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single 8-byte double number?
```

```
>  
>  
>  
> Unfortunately, I can't change the format of this data because its a standard. Thanks for your  
interest.
```

```
>  
>  
>  
> -Brian
```
