
Subject: Re: converting 8 bytes to a double
Posted by [sterner](#) on Thu, 28 Jul 1994 16:36:17 GMT
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stl@sma.ch (Stephen Strebel) writes:

> Hi again,

> sorry about that. CONverting 4 bytes to a long (as in the lasting
> posting) isn't really what I wanted to find out about. I really need to
> convert 8 bytes into a double.

> Any ideas? Or any libraries that already do this?

What you want to do is called field extraction and is discussed
in Chapter 4 of the IDL User's Guide in the section on
Type Conversion Functions.

If you have a byte array b you can extract doubles from it as follows:

```
d = double(b,s,n)
```

where s is the starting element in array b, and n is the number
of doubles to extract. n is actually the size of the first dimension
of the extracted array and could be followed by other dimensions to
extract multidimensional arrays.

An example:

```
a=dblarr(5)+!dpi ; Create a 5 element double array.  
b=byte(a,0,8,5) ; Convert it to an 8 x 5 byte array.  
print,b ; Look at it.  
64 9 33 251 84 68 45 24  
64 9 33 251 84 68 45 24  
64 9 33 251 84 68 45 24  
64 9 33 251 84 68 45 24  
64 9 33 251 84 68 45 24  
print,double(b,0,5) ; Extract & print the original values.
```

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Subject: Re: converting 8 bytes to a double
Posted by [Geoff.Sobering](#) on Thu, 04 Aug 1994 01:25:50 GMT
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In article <318lqdlNN5n5@i32.sma.ch>, stl@sma.ch (Stephen Strebel) wrote:

> sorry about that. COnverting 4 bytes to a long (as in the lasting
> posting) isn't really what I wanted to find out about. I really need to
> convert 8 bytes into a double.

Should work the same as with byte->long.

```
new_double = double( existing_byte_array, 0, 1 )
```

and the reverse operation:

```
new_byte_array = byte( existing_double, 0, 8 )
```

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