
Subject: Re: Double-Precision Byte Swap
Posted by [rkj](#) on Wed, 29 Apr 1998 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

: Assuming that the data are IEEE double-precision (almost certainly), yes, you
: just need to reverse the order of each number's 8 bytes.
: (But note that if it's Digital Unix that you're using then you should NOT
: re-order.)

: I don't use PV-Wave, but here's a little IDL routine for the job:

```
: ;=====
: ; Reverse the byte order of a whatever
: pro bytere, v
:   j=size(v) &nj=n_elements(j) &t=j(nj-2) &n=j(nj-1)
:   if (t le 1) or (t ge 7) then return ;undefined, or inappropriate type
:   case t of
:     2:byteorder,v,/sswap ;short
:     3:byteorder,v,/lswap ;long
:     4:byteorder,v,/lswap ;float
:     5:begin &for i=0L,n-1L do v(i)=double(rotate(byte(v(i),0,8),2),0) &end ;double
:     6:byteorder,v,/lswap ;complex (it works, too!)
:   endcase
:   return
: end
: ;=====
```

: Peter Mason

Works like a charm! This ought to be in the user library.

Thanks.

Kyle
