Subject: Re: Byte Swapping

Posted by David Fanning on Thu, 20 Nov 2003 20:27:15 GMT

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Mike W writes:

- > I am having trouble converting binary data from little endian to big
- > endian. Here are my commands:

>

- > brr=fltarr(1090,820)
- > byteorder,brr,/swap_if_big_endian
- > openr,1,'ndvi0006.d'
- > readu,1,brr
- > close,1

>

> and I get this error message as well:

>

- > % READU: End of file encountered. Unit: 1, File: ndvi0006.d
- > % Execution halted at: \$MAIN\$

Not sure I can help with the READU error, but I'm pretty sure you want this instead of what you have:

brr = fltarr(1090,820)
openr, 1, ,'ndvi0006.d',/swap_if_big_endian
readu,1,brr
close,1

Cheers,

David

--

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

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Subject: Re: Byte Swapping

Posted by bc25 on Thu, 20 Nov 2003 22:35:47 GMT

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mwatson@met.fsu.edu (Mike W) wrote in message news:<eb94e153.0311201151.428e6819@posting.google.com>...

- > I have a large set of data that apparently was created on a little
- > endian platform. I am working on a big endian platform and cannot get

```
> the data to read in correctly. These are my commands:
>
> brr=fltarr(1090,820)
> byteorder,brr,/swap_if_big_endian
> openr,1,'ndvi0006.d'
> readu,1,brr
> close.1
> and i get this error message:
>
 % READU: End of file encountered. Unit: 1, File: ndvi0006.d
> % Execution halted at: $MAIN$
>
> The data is not read correctly and is also very important when I do
> convert the data. I should get values in the array from -1 to 1. The
> negative values seem to be OK but the positive values are much too
> large. The data works fine when it was read on a little endian machine
> so that is why I assumed that this is the byte order of the data. Any
> help would be greatly appreciated.
> -Mike Watson
> -Florida State University
You may want to try:
brr=fltarr(1090,820)
openr,inunit,fname,/GET_LUN,/SWAP_IF_BIG_ENDIAN
readu,inunit,brr
FREE LUN, inunit
This works for me on Mac, Unix and PC reading data written by a PC.
Subject: Re: Byte Swapping
Posted by Richard French on Fri, 21 Nov 2003 00:20:28 GMT
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On 11/20/03 3:27 PM, in article MPG.1a26d18d7232577998974f@news.frii.com,
"David Fanning" <david@dfanning.com> wrote:
> Mike W writes:
>
>> I am having trouble converting binary data from little endian to big
>> endian. Here are my commands:
>>
>> brr=fltarr(1090,820)
```

>> openr,1,'ndvi0006.d'

>> byteorder,brr,/swap_if_big_endian

```
>> readu,1,brr
>> close,1
>>
>> and I get this error message as well:
>>
>> % READU: End of file encountered. Unit: 1, File: ndvi0006.d
>> % Execution halted at: $MAIN$
>
```

In your example, you are swapping a zero-filled array BEFORE you actually read the data. If you want to use byteorder, you have to do it AFTER you read the data. Or, you can use the /swap_if_big_endian on the openr command, as others have pointed out.

Dick French