
Subject: Re: Help: Byte-swapping program
Posted by [thompson](#) on Tue, 13 Dec 1994 15:57:16 GMT
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plutchak@lager.geo.brown.edu (Joel Plutchak) writes:

> In article <3chsab\$d78@paperboy.gsfc.nasa.gov> thompson@orpheus.nascom.nasa.gov (William Thompson) writes:

>> I don't know about PV-Wave, but IDL does contain the options /XDRTOF and
>> /FTOXDR to convert between IEEE and the local host floating point
>> representation. Similarly, one can use /XDRTOD and /DTONDR for double
>> precision.

>>

>> The IDL astronomy user's library (anonymous ftp to idlastro.gsfc.nasa.gov)
>> routines IEEE_TO_HOST and HOST_TO_IEEE does the appropriate conversions for all
>> data types.

> Yes, but neither of those seem to be sufficient. In my case (and I
> believe in the case of the original poster), we've got VAX floating
> point numbers to be read into IEEE format on a machine who's local
> format *is* IEEE. Unless I'm missing something in my reading of the
> manual, that's not covered by IDL's conversion functions.
> I've got some code lying around somewhere that I wrote to go from
> VAX to IEEE floating point (single-precision), which I'll dig up if
> I don't see any other solution go by before I get back from my travels.

There are also some routines to handle this in the IDL astronomy user's library. In the "misc" subdirectory there are the routines CONV_VAX_UNIX and CONV_UNIX_VAX. They're not as fast as those mentioned above, but they'll do what you want. Depending on how the file was written (i.e. the VMS record attributes), you may also need the routine CONV_VAX_BLOCK.

Bill Thompson
