Subject: Re: Fortran unformatted data: Big or little endian
Posted by Mark Hadfield on Wed, 30 Apr 2003 20:13:12 GMT
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"Michael Schroeter" <schroeter@muk.uni-hannover.de> wrote in message
news:b8og1i$6bt$1@newsserver.rrzn.uni-hannover.de...

> I have a problem reading Fortran unformatted data in IDL. I have a
> file containing data of well known size (e.g., an array of 100 x 100
> single precision floating point values). Unfortunately, I don't know
> something about the machine (big or little endian machine) on which
> the file has been produced. Is there a way to get this information
> on the fly by IDL in order to open the file automatically in the
> correctly (using the /SWAP_ENDIAN option or not). The way I used so
> far was trial and error. But since I have many of those files I'm
> searching for a solution without recompiling my source code.

If you have a reasonably recent version of IDL (>= 5.4??) and you know
the byte-order of the machine on which you're *reading* the data then
you can use OPEN's SWAP_IF_BIG_ENDIAN or SWAP_IF_LITTLE_ENDIAN
keywords. Here's the documentation entry for the former:

SWAP_IF_BIG_ENDIAN

Setting this keyword is equivalent to setting SWAP_ENDIAN; it only
takes effect if the current system has big endian byte
ordering. This keyword does not refer to the byte ordering of the
input data, but to the computer hardware.

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