Subject: Re: Endian-ness
Posted by David Fanning on Fri, 08 Feb 2002 21:14:25 GMT
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Jonathan Joseph (jj21@cornell.edu) writes:

> Is there a system variable that gives the endian-ness of the current
> hardware? I am reading a file which tells me the endian-ness of the
> data, and I'd like to swap_endian if it is different from the current
> hardware. In lieu of finding a system variable to compare to, I have
> done this:
>
> test_int = 1
> byteorder,test_int,/ntohs
> big_endian = test_int eq 1
>
> "network" byte order is big-endian, so I convert a 1 to the host
> byte-order and see if it's still a 1.
>
> This way works fine, but it seems as thought I'm missing something.
> Is there a better way? Using the byteorder routine to convert the data
> is not an option (unless it's been improved for 5.5).

I don't know of a system variable. I've always used this
little function:

```
FUNCTION IS_LITTLE_ENDIAN
little_endian = (BYTE(1, 0, 1))[0]
IF (little_endian) THEN RETURN, 1 ELSE RETURN, 0
END

IDL> IF Is_Little_Endian() THEN Print, 'This is little endian, bro.'
```

I've always had success with the SWAP_IF_BIG_ENDIAN and
SWAP_IF_LITTLE_ENDIAN keywords on OPEN statements, however.
I presume these use the BYTEORDER routine, which I have
also never had a moments trouble with. (I live a clean
and wholesome life, though, which may explain it.)

Cheers,

David
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