
Subject: Re: OPENR F77 SWAP_IF_LITTLE_ENDIAN
Posted by [Paul Van Delst\[1\]](#) on Mon, 06 Apr 2015 19:45:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello,

On 04/06/15 14:04, Edward Hyer wrote:

```
> ; open and write a file using F77_UNFORMATTED
> IDL> openw,lun,/get_lun,/f77,'/tmp/test_f77'
> IDL> writeu,lun,long(2015032518),float(6),long(0)
> IDL> free_lun,lun
> ; read the file back in
> IDL> openr,lun,/get_lun,/f77,'/tmp/test_conc'
> IDL> qq1=long(0) & qq2=float(0) & qq3=long(0)
> IDL> readu,lun,qq1,qq2,qq3
> IDL> print,qq1,qq2,qq3
> 2013052306 6.00000 0
> IDL> free_lun,lun
> ; now try reading it with /SWAP_IF_LITTLE_ENDIAN
> IDL> openr,lun,/get_lun,/f77,'/tmp/test_conc',/swap_if_little_end ian
> IDL> readu,lun,qq1,qq2,qq3
> % READU: Corrupted f77 unformatted file detected. Unit: 100
> File: /tmp/test_conc
> % Execution halted at: $MAIN$
>
>
> Has anyone encountered this behavior?
```

Yes. At least, when I read in the same file I write! (you have
'/tmp/test_f77' and '/tmp/test_conc')

On my (little-endian) machine:

```
IDL> print, !version
{ x86_64 linux unix linux 8.3 Nov 15 2013 64 64}
IDL> openw,lun,/get_lun,/f77,'tmp.test_f77'
IDL> writeu,lun,long(2015032518),float(6),long(0)
IDL> free_lun,lun
IDL> openr,lun,/get_lun,/f77,'tmp.test_f77'
IDL> qq1=long(0) & qq2=float(0) & qq3=long(0)
IDL> readu,lun,qq1,qq2,qq3
IDL> print,qq1,qq2,qq3
2015032518 6.00000 0
IDL> free_lun,lun
IDL> openr,lun,/get_lun,/f77,'tmp.test_f77',/swap_if_little_endia n
IDL> readu,lun,qq1,qq2,qq3
% READU: Corrupted f77 unformatted file detected. Unit: 100, File:
tmp.test_f77
```

% Execution halted at: \$MAIN\$

This is what should happen on a little endian machine.

Now, if you're on a big-endian machine (e.g. Power chips?) then this would be strange behaviour. But, last time I checked/cared, IDL wasn't being developed anymore for those platforms (e.g. IBM AIX RISC type of thing).

cheers,

paulv
