
Subject: swap_endian breaks on double

Posted by [Philippe Peeters](#) on Tue, 23 Apr 1996 07:00:00 GMT

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I need to read the content of a binary file generated on a Sun (I think). The content is quite complex and is a mixture of different structures containing int, float, long, double and string. I used the swap_endian function to convert from the original data to my representation (linux on x86). Everything is fine unless the structure I want to convert contains double data. The error message is

```
% Expression must be a scalar in this context: <DOUBLE   Array(1)>.
% Execution halted at: SWAP_ENDIAN      55
  /usr/local/rsi/idl_4/lib/swap_endian.pro
%          READ_LVL1      58
/home/philp/idl/read_lvl1.pro
%          $MAIN$
```

Just try this:

```
IDL> a={x:0.0,y:0,z:0.d0}
IDL> help,/str,a
** Structure <30b908>, 3 tags, length=16, refs=1:
  X      FLOAT      0.00000
  Y      INT        0
  Z      DOUBLE     0.0000000
```

```
IDL> b=swap_endian(a)
% Expression must be a scalar in this context: <DOUBLE   Array(1)>.
% Execution halted at: SWAP_ENDIAN      55
  /usr/local/rsi/idl_4/lib/swap_endian.pro
%          $MAIN$
```

BUT:

```
IDL> a=dblarr(10)
IDL> help,a
A      DOUBLE   = Array(10)
IDL> b=swap_endian(a)
IDL>
```

swap_endian fails on structures containing scalar double. Why?

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Subject: Re: swap_endian breaks on double
Posted by [Rolando Raqueno](#) on Wed, 15 May 1996 07:00:00 GMT
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I mailed a fix to RSI which takes care of this problem and works
for the case that you posted.

`a={x:0.0,y:0,z:0.d0}`

You can either get it from them or I will post the correction once I
here that its OK to do so. (Copyright stuff issues).

Rolando
