Subject: long to float
Posted by Dominik[1] on Thu, 05 Apr 2001 16:54:09 GMT
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By furtune I came a liitle bit closer to the solution of my Problem, but
still coulndt solve it. But perhaps can somebody explain me this:

I tried it two ways:

first in a file:
```
pro test
   out = -1.07615e+8
   byteorder, out, /VAXTOF
end
```
which delivers me out = 14.2375

second way using the command line:
out = -1.07615e+8
byteorder, out, /VAXTOF
and in the variable watch now is out = 10.8 which is correct!
Also with -3.69732e+019, which should be 6588.0, but will be calculated in
the pro file to 6556, which is wrong

Funny?!?!?

Does somebody know a solution?

Thanks

Dominik

Subject: Re: long to float
Posted by Martin Schultz on Thu, 05 Apr 2001 17:49:49 GMT
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Dominik wrote:
> Hello,
>
> I have a small problem (i hope)
>
> I read a number (is = -536852787) out of a file. But this number is not a
> long, it shoul be a float. It should be sb =6588.00. I am not sure if the
> first Number is a big endian, but the second is in little endian.
> so, after I multiply the start number with -1 and make byteorder, the same
> hexadecimal number is in the memory. It is FF1F33B9, but he shows
> e -14732359

> Is there a good way to see the stuff in memory as a float and not as a
> long??
>
> thanks for helping
> Dominik
>
> Example code
```
> pro test
>
>  f = -536852787
>  help, f
>  print, Format='(Z)', f
>  f = -1 * f
>  help, f
>  print, Format='(Z)', f
>  byteorder, f
>  help, f
>  print, Format='(Z)', f
> end
```

I would tackle the problem on the step before: you mention you read the number from a file. So (if it is a binary file) you should make use of the swap_endian keyword if you read files produced on other platforms. Then you can directly read in your float numbers with no need of conversion.

BTW: You should always "declare" the variable type when you read stuff from file, e.g.

```
time=0.D
value=0.
index=0L

readu,lun,time,value,index
```

Martin

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[[[[[[[[[
[[Dr. Martin Schultz   Max-Planck-Institut fuer Meteorologie   [[
[[Bundesstr. 55, 20146 Hamburg   [[
[[phone: +49 40 41173-308   [[
[[fax: +49 40 41173-298   [[
[[martin.schultz@dkrz.de   [[
[[[[[[[[[