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Subject: Re: Simple File I/O

Posted by [David Fanning](#) on Sat, 26 Jan 2008 05:11:23 GMT

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Gary writes:

> This questions stems, as much as anything, from my newness to  
> programming in general. I would like to take a pixmap my code  
> generates, save it as a file for later use, and then read it in later  
> after having restarted the code. Thus far, I've tried simply using  
> writeu and readu. The error comes when readu is reached producing the  
> error, readu: end of file encountered. I use TVRD() to generate a  
> float array from the pixmap then writeu this to a file.

TVRD() doesn't generate floats. It generates bytes, and probably not in the way you are expecting, to be honest. So, even if this works, I don't think you will be happy with the results. Do you mean you are \*casting\* the results of TVRD() into floats?

> This produces a file of byte format?

Huh!?

> On the other end, I generate a float array hard  
> coded to the same size as the original pixmap, and simply use readu  
> into the float array, whereupon I get the end of file encountered  
> error.

When you make a float array, you tell IDL to read 4 bytes for each floating value. Since I am certain you have a byte array, you are running past the end of the file, which is why you are getting this error. You are trying to read four times as many bytes as there are in the file.

> I think I'm missing something between the conversion between  
> the original float array to bytes and then back again.

The original array was in bytes to begin with. But if you hope to recover your window, you will probably (unless you have an ancient computer) want to read a 3 by x by y array out of that window. If you do it the way you appear to be doing it, your window when it is restored will look nothing like it did when you saved it.

I would use TVREAD and save the data in a TIFF file. Then just read the data from the TIFF file to recover it.

<http://www.dfanning.com/programs/tvread.pro>

> Also, fstat  
> tells me that there are four extra bytes to the number of cells in the  
> original array. 460x920 = 423200 cells, but fstat gives a file size of  
> 423204 bytes. I'm guessing its really simple and I'm just missing it.  
> Any and all help much appreciated.

I don't know. Let's solve the other problems first, then deal with this. :-)

Cheers,

David

>

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David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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Subject: Re: Simple File I/O

Posted by [Gary](#) on Tue, 29 Jan 2008 01:38:17 GMT

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Thank for your advice. As always, very educational for the newbie such as my self. As it turns out, I over complicated the problem for myself. As the program is a GUI, I added a pointer to the info structure which points to the original image. I simply dereferenced it to a variable which was the written to the file. B/C I'm the only person using this bit of code, and know precisely the file parameters, I simply read in the file as part of a separate event. I guess you could liken it to a simple jig or template in wood working. I'm sure if I'm asked to generalize the operation, I'll make use of your TVREAD and be back for more help. Thanks again.

-g

On Jan 25, 9:11 pm, David Fanning <n...@dfanning.com> wrote:

> Gary writes:

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> David

>  
>  
>  
> --  
> David Fanning, Ph.D.  
> Fanning Software Consulting, Inc.  
> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>  
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