
Subject: Re: readf and structures

Posted by [David Fanning](#) on Tue, 10 Apr 2007 15:34:04 GMT

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Wox writes:

```
> Is there an easy way of printing arrays of structures to a file and
> read them in again, without reading the fields separate?
>
> This doesn't work (also tried with specifying formats):
>
> tout={a:0.,b:'name'}
> tin={a:0.,b:''}
>
> openw,lun,'c:\test.txt',/get_lun
> printf,lun,tout
> close,lun
> free_lun,lun
>
> openr,lun,'c:\test.txt',/get_lun
> readf,lun,tin
> close,lun
> free_lun,lun
```

This basically doesn't work because you have a string field. All variables in IDL have a defined length, EXCEPT strings. Thus, unless you can tell IDL how long your strings are, it just keeps reading until it gets to the end of an input line.

One way to tell IDL how long your strings are is to use the XDR format for input/output. Thus, these commands would work for you:

```
tout={a:0.,b:'name'}
tin={a:0.,b:''}

openw,lun,'test.txt',/get_lun, /xdr
writeu,lun,tout
free_lun,lun

openr,lun,'test.txt',/get_lun, /xdr
readu,lun,tin
free_lun,lun
```

Note that there is no need to have a CLOSE statement in your code. FREE_LUN both closes the logical unit and frees it up for future use.

Cheers,

David

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

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