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Subject: Re: writeu, printf, readu/f 2 file

Posted by [Craig Markwardt](#) on Tue, 13 Mar 2001 20:13:00 GMT

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Without delving into too much detail about your specific program, I can say that you should pay a lot more attention to your output formatting. Don't assume, simply because you print it out one way, it can be read the same way. For example:

```
IDL> openw, 50, 'test.dat'
IDL> printf, 50, 1, '2 3', 4
IDL> close, 50
IDL> openr, 50, 'test.dat'
IDL> a = 0 & b = " & c = 0
IDL> readf, 50, a, b, c
% READF: End of file encountered. Unit: 50
      File: test.dat
% Execution halted at: $MAIN$
```

Hmmm, why did this fail? Well, the string B is very greedy and it consumes everything to the end of the line, including the "4".

Mixing formatted and unformatted data in a file can be tricky. The problem is that when you read formatted data the file pointer can advance unpredictably. Better to read and write the data intermediately to a string buffer.

Craig

"Sean Heukels" <[sean77=cuthere=@dds.nl](mailto:sean77=cuthere=@dds.nl)> writes:

- > Can writeu, and printf be combined ?? in one write action.
- > Or is it the one or the other ?
- > I've been trying everything. The whole day and it still doesn't work.
- >
- > What I want to do is write some txt and variables, that define
- > the following data block and ofcourse the time and location, etc
- > In the header. But somehow, the first line reads fine, but after that
- > everything is garbled.
- > I think it has something to do with the different write/read statements
- >
- > See sample code that is not working
- ... deleted ...

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Craig B. Markwardt, Ph.D.      EMAIL: [craigmnet@cow.physics.wisc.edu](mailto:craigmnet@cow.physics.wisc.edu)

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Subject: Re: writeu, printf, readu/f 2 file

Posted by [Martin Schultz](#) on Mon, 19 Mar 2001 15:45:02 GMT

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Craig Markwardt wrote:

- >
- > Without delving into too much detail about your specific program, I
- > can say that you should pay a lot more attention to your output
- > formatting. Don't assume, simply because you print it out one way, it
- > can be read the same way. For example:
- >
- > IDL> openw, 50, 'test.dat'
- > IDL> printf, 50, 1, '2 3', 4
- > IDL> close, 50
- > IDL> openr, 50, 'test.dat'
- > IDL> a = 0 & b = " & c = 0
- > IDL> readf, 50, a, b, c
- > % READF: End of file encountered. Unit: 50
- >     File: test.dat
- > % Execution halted at: \$MAIN\$
- >
- > Hmmmm, why did this fail? Well, the string B is very greedy and it
- > consumes everything to the end of the line, including the "4".
- >
- > Mixing formatted and unformatted data in a file can be tricky. The
- > problem is that when you read formatted data the file pointer can
- > advance unpredictably. Better to read and write the data
- > intermediately to a string buffer.
- >
- > Craig
- >

... or use a byte array to represent strings in a binary file. I have a little utility program available that will convert strings (or string arrays) to byte arrays. To go back, you can simply use String(thearray). The program is here:

[http://www.mpimet.mpg.de/~schultz.martin/idl/html/src/martin\\_\\_schultz/str2byte.pro](http://www.mpimet.mpg.de/~schultz.martin/idl/html/src/martin__schultz/str2byte.pro)

Cheers,  
Martin

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