Subject: PRINTF printing to wrong LUN
Posted by polystethylene on Wed, 14 Jul 2010 14:48:59 GMT

Has anyone had any experience of IDL seemingly printing to the wrong
logical unit number?

I have this IF clause in my code:

```
 IF nwestframes GE 1 THEN BEGIN
    OPENW,lun2,'rotate.list'
    PRINTF,lun2,FORMAT='("'+string(calibprefix)+'",A0)',lightlist[b]
    CLOSE,lun2
    PRINTF,lun,'rotate @rotate.list @rotate.list 180'
    PRINT,'Pier flip occurs at frame
'+string(FORMAT='(I0)',nwestframes+1)+'. 180deg rotation to be applied
to all eastern sky images'
    PRINTF,redinfo,'Pier Flip @ frame =
'+string(FORMAT='(A0)',nwestframes+1)
 ENDIF
```

So as you can see I have a new file introduced within the IF clause,
and two previously open units, lun & redinfo.

Up until this point in the code, IDL was correctly printing to each
lun, as I instructed it to. In this case however, it has printed 'Pier
Flip @ frame   100' in the file associated with 'lun' instead of
'redinfo'. redinfo has other info successfully printed to it, so I
have no idea why IDL suddenly messes up here.

Any one seen anything like this before?

Cheers,

Stef

Subject: Re: PRINTF printing to wrong LUN
Posted by ben.bighair on Wed, 14 Jul 2010 15:34:14 GMT

On 7/14/10 10:48 AM, polystethylene wrote:
> Has anyone had any experience of IDL seemingly printing to the wrong
> logical unit number?
>
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>
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>    ENDIF
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> and two previously open units, lun&  redinfo.
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> Up until this point in the code, IDL was correctly printing to each
> lun, as I instructed it to. In this case however, it has printed 'Pier
> Flip @ frame    100' in the file associated with 'lun' instead of
> 'redinfo'. redinfo has other info successfully printed to it, so I
> have no idea why IDL suddenly messes up here.
>
```

Hi,

I adapted your snippet a bit (see below) and it seems to work fine on my
system { x86_64 darwin unix Mac OS X 7.1 Apr 21 2009   64   64}

My guess is that upstream of that code block the LUNs are getting swapped.

Cheers,
Ben

```
PRO testme

  OPENW, lun, "lun.txt", /GET
  OPENW, redinfo, "redinfo.txt", /GET
  GET_LUN, lun2


  nwestframes = 2

  IF nwestframes GE 1 THEN BEGIN
     PRINT, "lun2= " + STRTRIM(lun2,2)
     PRINT, "lun= " + STRTRIM(lun,2)
     PRINT, "redinfo= " + STRTRIM(redinfo,2)
     OPENW,lun2,'lun2.txt'
     PRINTF,lun2,"print to lun2"
     CLOSE,lun2
```

```
        PRINTF,lun,'print to lun'
        PRINT,'print to command line'
        PRINTF,redinfo,"print to redinfo"
    ENDIF


FREE_LUN, lun
FREE_LUN, redinfo
FREE_LUN, lun2


END
```

Subject: Re: PRINTF printing to wrong LUN
Posted by David Fanning on Wed, 14 Jul 2010 15:34:34 GMT

polystethylene writes:

> Has anyone had any experience of IDL seemingly printing to the wrong
> logical unit number?
>
> I have this IF clause in my code:
>
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>   CLOSE,lun2
>   PRINTF,lun,'rotate @rotate.list @rotate.list 180'
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> to all eastern sky images'
>   PRINTF,redinfo,'Pier Flip @ frame =
> '+string(FORMAT='(A0)',nwestframes+1)
> ENDIF
>
> So as you can see I have a new file introduced within the IF clause,
> and two previously open units, lun & redinfo.
>
> Up until this point in the code, IDL was correctly printing to each
> lun, as I instructed it to. In this case however, it has printed 'Pier
> Flip @ frame   100' in the file associated with 'lun' instead of
> 'redinfo'. redinfo has other info successfully printed to it, so I
> have no idea why IDL suddenly messes up here.
>
> Any one seen anything like this before?

No. :-)

I strongly suspect pilot error.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Subject: Re: PRINTF printing to wrong LUN
Posted by polystethylene on Wed, 14 Jul 2010 16:20:16 GMT
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>
>> Any one seen anything like this before?
>
> No. :-)
>
> I strongly suspect pilot error.
>
>

It usually is :)

I've just deleted the long winded response where I printed out every
line in my code that involves either a OPENW,lun,/GET_LUN or a CLOSE
statement...

Because I realised that before the above snippet of code I have:

 OPENW,lun1,'flatB.list',/GET_LUN
 OPENW,lun2,'flatV.list',/GET_LUN
 OPENW,lun3,'flatR.list',/GET_LUN
 OPENW,lun4,'flatI.list',/GET_LUN
 OPENW,lun5,'bias.list',/GET_LUN
 OPENW,lun6,'dark.list',/GET_LUN
 OPENW,lun7,'light.list',/GET_LUN
 OPENW,lun8,'fblight.list',/GET_LUN
 OPENW,lun9,'blight.list',/GET_LUN

 PRINTF,lun1,FORMAT='(A0)',Bflatfilelist

```
PRINTF,lun2,FORMAT='(A0)',Vflatfilelist
PRINTF,lun3,FORMAT='(A0)',Rflatfilelist
PRINTF,lun4,FORMAT='(A0)',Iflatfilelist
PRINTF,lun5,FORMAT='(A0)',biasfilelist
PRINTF,lun6,FORMAT='(A0)',darkfilelist
PRINTF,lun7,FORMAT='(A0)',lightlist
PRINTF,lun8,FORMAT='("fb",A0)',lightlist
PRINTF,lun9,FORMAT='("b",A0)',lightlist

CLOSE,/ALL
```

Redinfo is opened before the close,/all statement...

So I deduce from this that in the absence of a 'redinfo' to printf to,
IDL has printed to another open lun...

This is interesting behaviour, I would have expected a message telling
me that the file unit 'redinfo' doesn't exist?

Anyway, thanks everyone. Once again I air my ignorance and shoddy
bookkeeping skills public on the idl usenet group. I learnt something
though, which is always good :)

Subject: Re: PRINTF printing to wrong LUN
Posted by jeanh on Wed, 14 Jul 2010 17:53:18 GMT
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On 14/07/2010 12:20 PM, polystethylene wrote:
>
>>
>>> Any one seen anything like this before?
>>
>> No. :-)
>>
>> I strongly suspect pilot error.
>>
>>
>
> It usually is :)
>
>
> I've just deleted the long winded response where I printed out every
> line in my code that involves either a OPENW,lun,/GET_LUN or a CLOSE
> statement...

```
>
> Because I realised that before the above snippet of code I have:
>
>   OPENW,lun1,'flatB.list',/GET_LUN
>   OPENW,lun2,'flatV.list',/GET_LUN
>   OPENW,lun3,'flatR.list',/GET_LUN
>   OPENW,lun4,'flatI.list',/GET_LUN
>   OPENW,lun5,'bias.list',/GET_LUN
>   OPENW,lun6,'dark.list',/GET_LUN
>   OPENW,lun7,'light.list',/GET_LUN
>   OPENW,lun8,'fblight.list',/GET_LUN
>   OPENW,lun9,'blight.list',/GET_LUN
>
>   PRINTF,lun1,FORMAT='(A0)',Bflatfilelist
>   PRINTF,lun2,FORMAT='(A0)',Vflatfilelist
>   PRINTF,lun3,FORMAT='(A0)',Rflatfilelist
>   PRINTF,lun4,FORMAT='(A0)',Iflatfilelist
>   PRINTF,lun5,FORMAT='(A0)',biasfilelist
>   PRINTF,lun6,FORMAT='(A0)',darkfilelist
>   PRINTF,lun7,FORMAT='(A0)',lightlist
>   PRINTF,lun8,FORMAT='("fb",A0)',lightlist
>   PRINTF,lun9,FORMAT='("b",A0)',lightlist
>
>   CLOSE,/ALL
>
>
> Redinfo is opened before the close,/all statement...
>
>
> So I deduce from this that in the absence of a 'redinfo' to printf to,
> IDL has printed to another open lun...
>
> This is interesting behaviour, I would have expected a message telling
> me that the file unit 'redinfo' doesn't exist?
>
>
> Anyway, thanks everyone. Once again I air my ignorance and shoddy
> bookkeeping skills public on the idl usenet group. I learnt something
> though, which is always good :)

Hi,

well, the file unit is closed, but the variable is not erased.
So if by chance/bad luck, another lun has the same value as in redinfo,
your printf,redinfo statement will print to that file...

ex:
openU, redinfo, /get_lun
```

print, redinfo --> 5
free_lun, redinfo
print, redinfo --> 5

openU, aaa, /get_lun
print, aaa --> 5

then
printf, redinfo
and
printf, aaa

are the same, and will print in the same file

Jean