Subject: point_lun
Posted by R.Bauer on Wed, 23 Feb 2000 08:00:00 GMT
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Hi,

I have recognized today point_lun makes differences between files
written on UNIX or DOS
for following idl version.

```
** Structure !VERSION, 5 tags, length=40:
   ARCH            STRING    'x86'
   OS              STRING    'Win32'
   OS_FAMILY       STRING    'Windows'
   RELEASE         STRING    '5.3'
   BUILD_DATE      STRING    'Nov 11 1999'
```

My very old aix machine did not make a difference if the file is
written for DOS or for UNIX.

I have attached 2 example files and the testroutine.

The result of the test for windows is:

```
IDL> error_pointlun,'test.dos'
88 7777 AA          xa       xa
pointer is:         36
value:      11111.1
new position:         66
last position:        36
value:      11111.1

IDL> error_pointlun,'test.unix'
88 7777 AA          xa       xa
pointer is:         31
value:      11111.1
new position:         61
% READF: Input conversion error. Unit: 102, File: test.unix
% Execution halted at:  ERROR_POINTLUN      24 error_pointlun.pro
%                       $MAIN$
```

On some data files I recognized a byte shift to right.

R.Bauer

```
88 7777
AA          xa        xa
11111.11     11.99    444.11
22222.22     21.99    555.11
33333.33    331.99    666.12

88 7777
AA          xa        xa
11111.11     11.99    444.11
22222.22     21.99    555.11
33333.33    331.99    666.12

PRO error_pointlun,file


  OPENR, IUN, file, /GET_LUN

  POINT_LUN, IUN, 0

  s=STRARR(2)
  READF,iun,s
  PRINT,s

  POINT_LUN,-iun,bpos
  PRINT,'pointer is:',bpos

  s=FLTARR(1)
  READF,iun,s
  PRINT,'value:',s

  POINT_LUN,-iun,npos
  PRINT,'new position:',npos

  s=FLTARR(1)
  POINT_LUN,iun,bpos
  READF,iun,s
  PRINT,'last position:',bpos
```

```
  PRINT,'value:',s

  FREE_LUN,iun

END
```

File Attachments

1) test.unix, downloaded 95 times
2) test.dos, downloaded 91 times
3) error_pointlun.pro, downloaded 100 times

Subject: Re: point_lun
Posted by John-David T. Smith on Wed, 23 Feb 2000 08:00:00 GMT
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Craig Markwardt wrote:
>
> "R.Bauer" <R.Bauer@fz-juelich.de> writes:
>>
>> I have recognized today point_lun makes differences between files
>> written on UNIX or DOS
>> for following idl version.
>
> This almost certainly has something to do with the difference between
> end-of-line conventions in Unix and Windows worlds. I believe that
> windows/DOS uses a CR/LF while Unix simply uses an LF.
>
> I don't understand *exactly* what is going wrong though, but it seems
> that Windows may be assuming that a CR/LF pair are present in your
> Unix file when only one of them is there. What's wierd is that it's
> using that information in the POINT_LUN call. This may not be a bug
> in IDL but rather in the Windows library that IDL uses. The Microsoft
> people probably don't even consider it a bug but a feature...
>
> There are converters that can do the Unix<->DOS conversion for you,
> but unfortunately it's an extra ugly step.
>

It depends on how it was written. Even DOS C programs will happily convert each newline in your output to a carraige return/newline pair, unless told not to with some kind of BINARY mode. All formatted windows/dos output will reflect this conversion, unless it is somehow disabled. Many FTP programs will do this to, for example (unless in binary mode).

JD

--
J.D. Smith |*| WORK: (607) 255-5842
Cornell University Dept. of Astronomy |*| (607) 255-6263
304 Space Sciences Bldg. |*| FAX: (607) 255-5875
Ithaca, NY 14853 |*|

Subject: Re: point_lun
Posted by Craig Markwardt on Wed, 23 Feb 2000 08:00:00 GMT
View Forum Message <> Reply to Message

"R.Bauer" <R.Bauer@fz-juelich.de> writes:
>
> I have recognized today point_lun makes differences between files
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There are converters that can do the Unix<->DOS conversion for you, but unfortunately it's an extra ugly step.

Craig

--
---------- ----------
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
---------- ----------

Subject: Re: point_lun
Posted by Martin Schultz on Fri, 25 Feb 2000 08:00:00 GMT
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Hallo Reimar!

since I was looking at a similar issue yesterday night, I came across

some
statements about this in the online help. Look for "reading
files:Windows platform"
in the help index. It basically confirms what Craig said.

If nothing else helps and you *really* need to read these ASCII files
platform-
independently, you'll probably have to resort to reading it as binary
unformatted
into your own buffer, filter all CR's (13B) in case there are any, and
break the
lines at the line feeds (10B). This still leaves out the Mac World,
where they use only CR as far as I know...

Viele Gruesse,
Martin

"R.Bauer" wrote:
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>
> I have recognized today point_lun makes differences between files
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> for following idl version.
>
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> RELEASE STRING '5.3'
> BUILD_DATE STRING 'Nov 11 1999'
>
> My very old aix machine did not make a difference if the file is
> written for DOS or for UNIX.
>
> I have attached 2 example files and the testroutine.
>
> The result of the test for windows is:
>
> IDL> error_pointlun,'test.dos'
> 88 7777 AA xa xa
> pointer is: 36
> value: 11111.1
> new position: 66
> last position: 36
> value: 11111.1
>

```
>  IDL> error_pointlun,'test.unix'
>  88 7777 AA          xa       xa
>  pointer is:         31
>  value:      11111.1
>  new position:         61
>  % READF: Input conversion error. Unit: 102, File: test.unix
>  % Execution halted at:  ERROR_POINTLUN     24 error_pointlun.pro
>  %                    $MAIN$
>
>  On some data files I recognized a byte shift to right.
>
>  R.Bauer
>
>    ------------------------------------------------------------ ------------
>  88 7777
>  AA          xa       xa
>  11111.11     11.99    444.11
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>
>    ------------------------------------------------------------ ------------
>  88 7777
>  AA          xa       xa
>  11111.11     11.99    444.11
>  22222.22     21.99    555.11
>  33333.33    331.99    666.12
>
>    ------------------------------------------------------------ ------------
>  PRO error_pointlun,file
>
>    OPENR, IUN, file, /GET_LUN
>
>    POINT_LUN, IUN, 0
>
>    s=STRARR(2)
>    READF,iun,s
>    PRINT,s
>
>    POINT_LUN,-iun,bpos
>    PRINT,'pointer is:',bpos
>
>    s=FLTARR(1)
>    READF,iun,s
>    PRINT,'value:',s
>
>    POINT_LUN,-iun,npos
>    PRINT,'new position:',npos
>
```

>   s=FLTARR(1)
>   POINT_LUN,iun,bpos
>   READF,iun,s
>   PRINT,'last position:',bpos
>   PRINT,'value:',s
>
>   FREE_LUN,iun
>
> END

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

Subject: Re: point_lun
Posted by John-David T. Smith on Tue, 29 Feb 2000 08:00:00 GMT
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Martin Schultz wrote:
>
> Hallo Reimar!
>
>   since I was looking at a similar issue yesterday night, I came across
> some
> statements about this in the online help. Look for "reading
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> in the help index. It basically confirms what Craig said.
>
>   If nothing else helps and you *really* need to read these ASCII files
> platform-
> independently, you'll probably have to resort to reading it as binary
> unformatted
> into your own buffer, filter all CR's (13B) in case there are any, and
> break the
> lines at the line feeds (10B). This still leaves out the Mac World,
> where they use only CR as far as I know...

Or, just read a line at a time, which is platform independent, and how ascii
files are normally read. To skip to the nth line:

lin=''

for i=0,n-1 do readf,un,lin

JD

--
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