
Subject: point_lun

Posted by [R.Bauer](#) on Wed, 23 Feb 2000 08:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

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 104 times
 - 2) [test.dos](#), downloaded 111 times
 - 3) [error_pointlun.pro](#), downloaded 129 times
-

Subject: Re: point_lun

Posted by [John-David T. Smith](#) on Wed, 23 Feb 2000 08:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

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 carriage 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
> 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.

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
[View Forum Message](#) <> [Reply to Message](#)

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:

```
>
> 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
>

```


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

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 |*|
