Subject: Re: readcol procedure
Posted by R.Bauer on Thu, 12 Sep 2002 21:05:07 GMT
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Liam E. Gumley wrote:

> Reimar Bauer wrote:
> [stuff deleted]
>> if you use the eof method you have to read line by line. As you know idl
>> is an array orientated language so reading in an array is much faster.
>> It's really fast. If you have only 10 lines it doesn't matter but
>> sometimes we got datafiles of nearly 100.000 lines. In this case it is
>> very important.
>
> How much time do you spend in determining the number of lines in the
> file?

Dear Liam,

you are right there was a quite improvement which I missed in the past.
I did the following test to get no problems by internal caches.

I created on my USB Disk V1.1 which allows a max speed of 1MB/s
a file with transpose(sindgen(100000L)) characters.

Then I did a reboot so cache is empty
fileline needs 1.7 seconds to find 100000 lines

After this I rebooted the machine again
(or did someone know how to say linux to clear the filecache)

The following script needs only 1.63 seconds. So it's faster!!
(May be the difference comes from compiling two routines, fileline,filesize)

```
pro tr
openr,lun,'t1.txt',/get_lun
Z=''
count=0L
while not eof(lun) do begin
readf,lun,z
count=count+1
endwhile
print,count
end
```

I don't experimented if READS in addition to convert string to values
will need more time as reading again into rows and columns.
I believe reads takes more time.

and you are right too I am using the byte array in my read_data_file
routine not only the number of lines which was calculated from fileline.
The optional output is the bytarr.

There is another important routine bytes2strarr which converts the bytarr
back into string. I have choosen this way to read the data only once. To
get the routine faster is to read again the file because then the file is
in cache and conversion could not be faster.

regards

Reimar

>
> Cheers,
> Liam.
> Practical IDL Programming
> http://www.gumley.com/

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