Subject: Re: Writing a very large file
Posted by Jim Pendleton, ITT Vi on Fri, 07 Dec 2007 21:47:14 GMT
View Forum Message <> Reply to Message

"wlandsman" <wlandsman@gmail.com> wrote in message
 news:f3c3ac4e-a5c2-4d57-a1f2-d0356d7a0d00@i12g2000prf.google groups.com...
> I am writing a sequence of images to a single very large file on my
> Linux system.   I find that the processing dramatically slows down
> after the first few images.   The simplified code looks like the
> following:
>
> pro test
> ; Display the time required to write a series of image to a single
> large file
> im = intarr(4096,4096)
> t = systime(1)
>
> close,1 & openw,1,'test.dat'
> for i=0,20 do begin
> writeu,1,im
> print,i,systime(1)-t & t = systime(1)
> endfor
>
> close,1
> return
>
>
> IDL> test
>   0   0.22054195
>   1   0.26708603
>   2   0.35127902
>   3   0.37285185
>   4   3.3877730
>   5   6.1666460
>   6   6.1697872
>   7   6.2481630
>
>
> So the first four images take ~0.3s each to write, while subsequent
> images require more than 6 seconds each.   I suspect that the slowing
> down is due to IDL (or the OS) needing to extend the file size.   (I
> checked that it is not a memory usage problem.)   So I think
> things would speed up if I could specify the final file size at the
> beginning -- perhaps there is a way to do this in Unix?   I have
> experimented with the BUFSIZE and RAWIO keywords to OPENW but so far
> without any improvement.
>
> Thanks for any suggestions, --Wayne

Wayne,
    The POINT_LUN procedure can be used to define a file's
size at the outset. That is, you can OPENW a file then POINT_LUN
to define the maximum file size without having to write any data to
the file first. POINT_LUN to an offset of 0 to begin writing.
See also TRUNCATE_LUN, and the "Reading and Writing Very
Large Files" section of the on-line help.

Jim P.

Jim P.