Subject: Re: time cost for file reading increasing!!! same file!
Posted by Chris[6] on Tue, 09 Feb 2010 00:58:39 GMT
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On Feb 8, 1:20 pm, minchen <mchen...@gmail.com> wrote:
> Hi everyone,
> I meet a mysterious problem on IDL file reading.
> The problem is as following:
> I just read the same hdf5 file seveal times and see the time costing.
> I find the first 270 file reading is very quickly but after that, the
> reading speed drops down although the file is the same one.
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> The simple code is here:
> pro try
> filename='./particles.h5'
> file_id=h5f_open(filename)
> for i=1,2 do begin
> i=1 ; here just for test, so it will
> always read
> print,'Systime=',Systime(0) ; here output the systime
> dataset_name='Electrons_at_PE_302'
> dataset_id=h5d_open(file_id,dataset_name)
> ptcl0=h5d_read(dataset_id)
> h5d_close,dataset_id
> endfor
> h5f_close,file_id
> end
>
> I have check the memory, it does not increase. So the memory should no
> problem.
> Why the reading time increase? I am also sure there is no problem with
> the hard disk heating.
> So, what's the problem?

What does your system memory look like? I don't know anything about
h5d_read, but if there is a memory leak, you could be running low on
RAM. Try adding in a line like
help,/memory
to the interior of the loop. None of the numbers should increase over
time unless you are leaking memory.

chris

Subject: Re: time cost for file reading increasing!!! same file!
Posted by minchen on Tue, 09 Feb 2010 01:05:19 GMT
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I use:
mem=memory(/current)
print,mem

inside the loop, and the 'print,mem' always the same value
and I also use the top command in the system to check the occupied
memory, it does not change.

On Feb 8, 4:58 pm, Chris <beaum...@ifa.hawaii.edu> wrote:
> On Feb 8, 1:20 pm, minchen <mchen...@gmail.com> wrote:
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> chris- Hide quoted text -
>
> - Show quoted text -

Subject: Re: time cost for file reading increasing!!! same file!
Posted by minchen on Tue, 09 Feb 2010 01:14:04 GMT
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The help,/memory output is like this:
j= 87Systime=Mon Feb 8 17:11:28 2010Memory= 2762878
heap memory used: 2762878, max: 4706734, gets: 9133,
frees: 8314
j= 88Systime=Mon Feb 8 17:11:29 2010Memory= 2762878
heap memory used: 2762878, max: 4706734, gets: 9153,
frees: 8334
j= 89Systime=Mon Feb 8 17:11:29 2010Memory= 2762878

So the heap memory used does not change.

Subject: Re: time cost for file reading increasing!!! same file!
Posted by Robert Moss, PhD on Tue, 09 Feb 2010 01:16:04 GMT
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On Feb 8, 8:05 pm, minchen <mchen...@gmail.com> wrote:
> I use:
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Is this a local disk, or a network drive? Is it local but shared by
other users? Your problem could potentially be caused by network
traffic or other folks hitting the same drive.

r

Subject: Re: time cost for file reading increasing!!! same file!

Posted by minchen on Tue, 09 Feb 2010 01:20:19 GMT
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It is a network drive. But it is unlikely the problem of confliction
with others. Because I run it several times,every time the reading
speed drops down after reading about 280 times of the file.

Subject: Re: time cost for file reading increasing!!! same file!
Posted by wlandsman on Tue, 09 Feb 2010 02:00:14 GMT
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On Feb 8, 6:20 pm, minchen <mchen...@gmail.com> wrote:
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in an earlier thread (http://tinyurl.com/yzrvd96) where the correct
question should be "Why is the file reading so fast to start
with?" Those fast times are deceptive because the IDL thinks the I/
O operation is complete after it has passed the data to the memory
cache, but the OS has not yet written the data to disk. Once the
memory cache fills, then IDL has to wait until the data is written to
the mechanical disk, but those longer times are a better measure of
the time to write the data to disk.

--Wayne

Subject: Re: time cost for file reading increasing!!! same file!
Posted by wlandsman on Tue, 09 Feb 2010 02:04:08 GMT
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On second thought, the OP is only reading, not writing, to disk, so
the memory cache may not be relevant.

On Feb 8, 9:00 pm, wlandsman <wlands...@gmail.com> wrote:
> On Feb 8, 6:20 pm, minchen <mchen...@gmail.com> wrote:
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Subject: Re: time cost for file reading increasing!!! same file!
Posted by minchen on Tue, 09 Feb 2010 18:22:49 GMT
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I think this is not the reason. Since the speed is slow down with
time. At later time, it may cost 10 minutes to read a file. At fist is
less than 0.1s.

On Feb 8, 6:04 pm, wlandsman <wlands...@gmail.com> wrote:
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>> --Wayne- Hide quoted text -
>
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Subject: Re: time cost for file reading increasing!!! same file!
Posted by Juggernaut on Wed, 10 Feb 2010 14:00:12 GMT
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On Feb 9, 1:22 pm, minchen <mchen...@gmail.com> wrote:
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Which version of IDL are you using?

Subject: Re: time cost for file reading increasing!!! same file!
Posted by minchen on Thu, 11 Feb 2010 16:56:29 GMT
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Both 7.0 and 7.1 are tried.

On Feb 10, 6:00 am, Bennett <juggernau...@gmail.com> wrote:
> On Feb 9, 1:22 pm, minchen <mchen...@gmail.com> wrote:
>
>
>
>
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