Subject: Re: for loops and calls to functions/objects
Posted by Conor on Tue, 15 Apr 2008 18:59:44 GMT
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On Apr 15, 11:11 am, Charles at AER <cpax...@aer.com> wrote:
> Dear Newsgroup,
>
> A program I am optimizing loads a series of images from netcdf files,
> the user may select an arbitrary number of images to display.  Within
> a for loop, the program calls a netcdf reader that initializes a
> netcdf object, gets lat and lon info and then grabs an image. If the
> user wants to look at 10 images, the read net cdf is called 10 times,
> and the time to initialize the netcdf object takes 0.1 seconds, and to
> get the image takes 0.2 seconds.   Here's the rub, if the user wants
> to investigate 70 images, the netcdf initialization is 10 times longer
> - about 1 second, similarly, the get method loads the image in 2
> seconds.  So to read 10 images takes 3 seconds, and to read 70 images
> takes 210 seconds.  The exponential increase is untenable. Does any
> one understand what is happening, and are there work-arounds?  Thanks.
>
> Sincerely,
>
> Charles

I'm not sure if there's really enough info here to go on, but I'll
hazard a guess.  I don't actually know anything about netcdf files,
but I suspect that isn't the problem.  After all there is no reason
why the time it takes to load an image should change from call to
call, assuming all the images are the same size.  My guess then is
that you are simply running out of memory.  If the first 50 images
fill up your memory then for the next 20 images your computer is going
to be reading and writing to a swap directory, which is a VERY slow
process.  Might that be the problem?