

Re: speed up calculation suggestions

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- *From:* e p chandler <epc8@xxxxxxxx>
 - *Date:* Tue, 13 Nov 2007 21:10:47 -0800
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On Nov 13, 7:17 pm, rleav...@xxxxxxxxxxxxxxxxxxxx wrote:

I am an actuary and not a system professional and so please bear with me. We use Fortran for some of our calculations and are being hampered by long calculation times. There is nothing fancy in the code... I process many millions of records from text files through some fairly simple calculations, and write out the results. I want to speed up this process, but am really not sure where to devote my efforts. I have a new (dual core) windows XP machine with F95 compiled by absoft. (I think version 7.5). I do not have much system support and not too much time for experimentation, but am willing to tinker a little. I am interested in other's thoughts.

Options:

1. Optimize my code: I am not sure what this means... It is pretty stripped down now.
- 2 Get an updated compiler (any suggestions?)
- 3 Switch to Linux
4. Vectorize my code and use multiple processors (not sure how hard this is).
5. Upgrade my computer (are some CPU's better at computation than others?)
6. Other suggestions?

Of course, I do several of things, but really want help deciding what will give me the biggest improvement for the least effort.

Thanks, Rick

How long does your program take to run? How much time is spent in input, calculation and output? Are there multiple input files? Are you reading them sequentially? Is there a relationship between data items in different files?

Do you need to process all of the input data? Would it help to extract some of the input data to a temporary input file?

Re: speed up calculation suggestions

There are any number of ways to speed up programs – only some of them are specific to Fortran.

I doubt that going to unformatted files from formatted files will do you much good. The same for changing computers, compilers or operating systems. If you want a big "payoff", find a better way to solve your problem.

[The last time I ran into a program that was I/O bound was on a 386sx-25 computer where the rate limiting step was a dot matrix printer used for output! :-).]