Subject: Re: AMD CPU - pentium way faster? (should be IDL on win2000 faster than IDL on linux)

Posted by Robert Stockwell on Thu, 31 Jan 2002 20:35:50 GMT

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Rick Towler wrote:

- > How much of this is from differences in processor architecture, platform
- > configuration, and OS? You are comparing apples and oranges. Install Win2k
- > on your AMD system (or linux on your laptop) and try again.

>

> -Rick

>

Of course you are right, so I went to a dual boot machine. Both running idl 5.5 (in demo mode, we don't have a license on it) I ran the time tests about 15 time each, and took an average (after it read from file and compiled the code) the computer: 1.4 Ghz AMD athlon, 512 Ram.

OS 1) Win2000 SP 2

Average time for time_test.pro = 0.596 seconds
OS 2) Slackware 8 2.4.17 kernel with X3864.1 running fvw2
Average time for time_test.pro = 0.725 seconds
Os 3) Slackware 8 2.4.17 kernel with no xwindows (i.e. command line only)
Average time for time_test.pro = 0.721 seconds

So, that is .725/.596 = 23.5% longer on linux. (and the command line version is slightly quicker, probably in printing out the 10 or twnety lines of text)

The difference that I attributed to the pentium over the athlon, is the same as the difference from win2000 to linux, so it seems that is is merely the OS, and not the processor that causes the difference.

I do satellite data crunching on this machine, so the code runs for about 120 days of CPU time to do the entire set (spread over many machines of course). The difference is 120 days on linux, or 100 days on win2000. I would prefer the 100 days.

I'd guess that there are compiler optimizations or different math
libraries available on win2000 that are not used in linux under
my current version and kernel options. I'll take this up with RSI.

Cheers, bob

PS anyone else see this difference in speed between operating systems?