Subject: Re: IDL 5.3 Performance ?
Posted by Richard Tyc on Thu, 10 Feb 2000 08:00:00 GMT
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I did install IDL 5.2.1 and it did show a major improvement in some areas:

Platform: Dell 420 Dual Pentium III 733 MHz, 512 Mb RDRAM, Matrox G400 Max

	IDL5.3	IDL5.2.1	
TIME_TEST3	6.405	4.235	
GRAPHICS_TIMES3	4.593	2.625	? not sure why-same card ??
IO test	0.578	0.594	

Some significant differences

Invert 192^2 random matrix	0.266	0.07799
Generate 1000000 random nos	0.141	0.063
Smooth 512x512 float array	0.109	0.047

My own application ran 20% faster

Rich

David McClain <dmcclain@azstarnet.com> wrote in message
news:sa1qmsfchse80@corp.supernews.com...
> The only fair way to make this comparison is to install the old IDL 5.2x
on
> your new machine and run the same code. There are so many hardware
> variations with respect to bus width to memory, how many processors, how
> large and what mapping the secondary and primary caches offer, etc, etc. I
> would be interested to hear your results...
>
> David McClain, Sr. Scientist
> Raytheon Systems Co.
> Tucson, AZ
>
> Richard Tyc <richt@sbrc.umanitoba.ca> wrote in message
> news:87q5b0$g0k$1@canopus.cc.umanitoba.ca...
>> IDL speed gurus:.
>>
>> I just received my new Dell machine last week. It's a top of the line
dual
>> processor Pentium which should be blistering fast. I promptly began to
do
>> some speed tests using the idlspec2 from JD Smith at Cornell (results
have
>> been sent...) and also some app specific tests using my medical image

>> application for which we bought the machine. Needless to say, I am not
>> impressed with the performance so far but am confused at what the
problem
>> is. I am leaning toward saying its IDL 5.3 if this is possible.
>>
>> The current machine in question is a Dell Precision Workstation 420,
dual
>> Pentium III 733 MHz, 512 Mb Rambus RDRAM Memory on NT4 SP5. It uses a
>> relatively low-end graphics card, a Matrox G400 Max. I tend to think
this
>> may be where the problem lies. It had IDL 5.3 installed
>>
>> I compared the performance with a previous machine I got which is now in
> the
>> hands of our mechanical engineers running Autodesks Mechanical Desktop.
>> It was a Dell Precision Workstation 410, dual 700 MHz Pentium III, 1024
Mb
>> SDRAM, with a screaming fast Wildcat 4000 graphics card. It had IDL
5.2.1
>> installed.
>>
>> Anyway, the tests in question should really be exploiting the CPU
>> performance so I thought it was irrelevant the older Dell had the high
end
>> graphics card. I noticed the TIME_TEST3 performance was alot worse.
For
>> example running an empty for loop 2000000 times took 0.07799 units on
the
>> 700 MHz vs 0.172 on the new 733 MHz Dell.
>>
>> My app also takes almost twice as long on the current Dell and most of
the
>> work is number crunching and displaying rendered volumes (IDLgrvolume)
> which
>> should not take advantage of high end graphics cards like the wildcat
but
>> rather CPU performance because it uses a software ray tracing technique.
>>
>> So, the main difference seems to be the old machine had IDL5.2.1 and the
> new
>> IDL5.3 and I know from SPEC benchmarks the new Dell using the 733 Mhz
>> Pentium, the Rambus memory etc IS faster. So, is it possible IDL 5.3
may
>> run applications/benchmarks slower ? It's hard to believe and I think
> other
>> factors are at play but its odd even the CPU speed tested in idlspec2 is
>> slower.
>>

>> Q. for JD Smith: is the is2_53.sav test program alot different than the
>> version for IDL 5.2 ?
>>
>>
>>
>> Any comments/ideas ?
>>
>> Rich
>>
>>
>
>
