
Subject: IDL 5.3 Performance ?

Posted by [Richard Tyc](#) on Tue, 08 Feb 2000 08:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

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
