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Subject: IDL and Macs. Speed is not only about squared roots

Posted by [jgc](#) on Fri, 14 Jul 2006 07:17:13 GMT

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Dear all,

I tried the tests decribed in topic

[http://groups.google.com/group/comp.lang.idl-pvwave/browse\\_thread/thread/da3a8dd9a11276d3/87f9e46339684e43#87f9e46339684e43](http://groups.google.com/group/comp.lang.idl-pvwave/browse_thread/thread/da3a8dd9a11276d3/87f9e46339684e43#87f9e46339684e43) in a rather unfair fashion (IDL 6.0 on windows PC 1.4 GHZ against IDL 6.3 Mac OS X 2.16 GHZ Intel duo) and results were, as expected: 0.02 against 0.88 to the advantage of the Mac (for `a=randomu(sd,100L*10000l)` as the pc didn't have enough memory.

However there is more in life than squared roots, so I was dissapointed to see that a complex program, involving large array manipulation, input and output, and loops reduced to a minimum, took almost double the time in the Mac than in the windows PC. This is a energy balance model for snow ablation over a glacier in the Alps (<http://www.arolla.ethz.ch/snowdem.html>).

One summer simulation took 22 minutes on IDL 6.0 in the windows PC 1.4 GHz and 42 minutes on the Mac Intel 2.16 GHz with IDL 6.2. Almost double in a much more powerful computer! IDL 6.3 seems slightly better but still slower (I'm waiting for the full license to test it).

I did additional texts such as repeatig more complex processes (my shading algorithm, <http://www.itvis.com/codebank/search.asp?FID=141>). Here the mac outperforms the pc. Thus, obviously there must be just a few inefficient processess for the Mac, which slow down the wole thing.

I wonder if anybody has identified which are these processes, so that we can optimize the code by avoiding them as much as possible.

Thanks,

Javier

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Subject: Re: IDL and Macs. Speed is not only about squared roots

Posted by [JD Smith](#) on Fri, 14 Jul 2006 17:51:26 GMT

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On Fri, 14 Jul 2006 00:17:13 -0700, jgc wrote:

> Dear all,

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> I tried the tests decribed in topic

> [http://groups.google.com/group/comp.lang.idl-pvwave/browse\\_thread/thread/da3a8dd9a11276d3/87f9e46339684e43#87f9e46339684e43](http://groups.google.com/group/comp.lang.idl-pvwave/browse_thread/thread/da3a8dd9a11276d3/87f9e46339684e43#87f9e46339684e43)  
> in a rather unfair fashion (IDL 6.0 on windows PC 1.4 GHZ against IDL  
> 6.3 Mac OS X 2.16 GHz Intel duo) and results were, as expected:  
> 0.02 against 0.88 to the advantage of the Mac (for  
> a=randomu(sd,100L\*10000I) as the pc didn't have enough memory.

You need to try the (very recently released) version of IDL 6.3 re-compiled for Intel. It should mention darwin x86 at the top when you start up. BTW, there are \*two\* version of IDL 6.3 for Macs: the one available before yesterday, and the one available after yesterday. You need the latter. You can also:

```
IDL> print,!VERSION.OS,',',!VERSION.ARCH
```

to see which you've got.

JD

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