## Subject: Re: IDL 6.3 for Mac OS X on Intel Now Available Posted by Paolo Grigis on Fri, 14 Jul 2006 08:00:15 GMT

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I think it would be very interesting to compare performance with a macbook with the same specification running windows via bootcamp... will this give a further increase in performance due to windows optimizations? Or at least somebody with a native windows core duo laptop could report.

Otherwise I cannot understand why a windows laptop with a pentium M clocked at 1.6 GHz performs 1.27 in TT3... or are core duo processors \*expected\* to be less efficient than similarly clocked pentium Ms for single processor task?

(For comparison, on that system JD\_TEST returns 0.73, a bit more than a factor 2 worse than dual core, as expected).

Ciao, Paolo

```
JD Smith wrote:
```

- > On Thu, 13 Jul 2006 09:24:56 -0700, bokubo wrote:
- >
- >> I am pleased to announce the release of IDL 6.3 for Mac OS X on Intel.
- >> This new IDL release runs as a native application on all Mac Intel
- >> supported machines and offers significant performance benefits. We have
- >> seen a growing popularity of Mac OS X for scientific and analysis
- >> applications, and this release represents our ongoing commitment to
- >> this growing base of IDL users.

>

>

>

>

> And....

- > it's \*FAST\*. Here's the breakdown for some portable OSX systems,
- following along the tests at:
- http://idl.tamu.edu/mac\_bench.php
- System TT3 (AVG) TT3 (GEOM) JD\_TEST

- > PB (G4 1.67GHz, 2GB, PPC IDL native) 3.20 .13 1.86
- > MBP(CoreDuo 2GHz, 1GB, PPC IDL via Rosetta) 3.45 .13 3.02

```
MBP(CoreDuo 2GHz, 1GB, i386 IDL native)
                                                1.69
                                                        .06
                                                                 0.32
>
  All times in seconds.
  PB == PowerBook
> MBP == MacBook Pro (thanks to Jason Harris for a temporary loan)
> TT3 == Time Test 3, run under IDL 6.3, demo mode.
> AVG == average
> GEOM == geometric mean
> JD TEST ==
   IDL> a=randomu(sd,100L*!CPU.TPOOL_MIN_ELTS)
   IDL> t=systime(1) & a=sqrt(a)/(a>0.5) & print,systime(1)-t
>
  So, for things which are limited by a single processor (TIME_TEST3),
 we're roughly ~2x faster than a G4 PB (which was a slow IDL system, to
  be fair), with only 20% more clock speed.
>
  But, the real fun comes when running big array manipulations, like
> JD_TEST, where the dual Core Duo processors can flex their muscles.
> Here the speedup is closer to 6x, which is almost too good to believe.
> This will of course depend on which operations you use, but testing a
> variety of arithmetic ones, I found speedups of anywhere from 2-7 on
  arrays large enough to make multi-threading effective.
>
  The MBP (a portable system) is now comparable in speed to a quad-processor
  G5, and (I suspect) similar dual-processor Linux/Windows desktops. Very
  respectable. Woeful OSX/IDL performance, R.I.P.
>
> JD
>
```