Subject: Re: IDL 6.3 for Mac OS X on Intel Now Available
Posted by JD Smith on Thu, 13 Jul 2006 18:15:15 GMT
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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
