

## Re: numbers don't lie ...

---

*Source:* <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/hackers/2006-09/msg00115.html>

---

- *From:* Danny Braniss <danny@xxxxxxxxxxxxxx>
  - *Date:* Thu, 14 Sep 2006 13:13:38 +0300
- 

In <E1GNOLq-000DC2-1Q@xxxxxxxxxxxxxxxxxxxx>, Danny Braniss <danny@xxxxxxxxxxxxxx> typed:

Im testing these 2 boxes, Sun X4100 and Dell-2950, and:

SUN X4100: Dual Core AMD Opteron(tm) Processor 280 (2393.19-MHz K8-class CPU)  
one 70g sata disk  
DELL 2950: Intel(R) Xeon(TM) CPU 3.20GHz (3192.98-MHz K8-class CPU)  
4 sata disks + raid0

they both run identical 6.1-STABLE.

my 'cpu benchmark' shows the amd being much better than the intel.  
but, doing a make buildworld give interesting results:

```
dell-2950 : make -j16 TARGET_ARCH=amd64 buildworld : 24m17.41s  
real 1h3m3.26s  
user 17m15.07s sys  
dell-2950 : make -j8 TARGET_ARCH=amd64 buildworld : 24m8.28s real  
1h2m59.38s  
user 16m16.20s sys  
  
sunfire : make -j16 TARGET_ARCH=amd64 buildworld : 24m21.38s real  
49m6.68s  
user 14m22.64s sys  
sunfire : make -j8 TARGET_ARCH=amd64 buildworld : 23m47.69s real  
48m53.58s  
user 13m44.81s sys
```

which probably says something about my 'cpu benchmark' :-(

Yes – that it's not very good at predicting performance on a parallel make. That's not surprising, as it's true of most benchmarks. You might want to check out some of the benchmarks in the ports tree as well.

Re: numbers don't lie ...

i've been using it since the days of the p90, and this is the first time it has failed me! it only measures (or tries) the cpu performance on some standard functions.

but why is the user time so much different between the boxes?

What's the CPU configuration? The AMD is dual core – is that it? Could the Xeon be dual-core and hyperthreaded, so it's got that many more CPUs to contribute towards user time?

To illustrate, I have numbers for "make -j4" for a P4 with and without hyperthreading enabled:

```
machdep.hyperthreading_allowed: 1 -> 0
50m55.99s real 35m28s.19 user 8m20s.02 sys
machdep.hyperthreading_allowed: 0 -> 1
38m48s.85 real 55m2s.43 user 12m27s.90 sys
```

Note the effect of the second CPU on the user time.

i did the tests with hyperbluffing disabled in the bios.

now, since you asked i tried:

```
sysctl machdep.cpu_idle_hlt=0
```

```
machdep.cpu_idle_hlt: 1 -> 0
```

```
dell-2950 : make -j8 TARGET_ARCH=amd64 buildworld : 23m55.03s real 1h2m54.84s
user 16m48.79s sys
```

and no difference, by the way, i did this also changing the bios setting (called logical cpus :-), but again, no difference.

so, this reminds me of an old joke about a spider without legs does not hear conclusion: in this case hyper\* does no affect nothing.

but the original question stands: why is the user time between the boxes so different, whyle the real time remains the same?

cheers,  
danny

---

freebsd-hackers@xxxxxxxxxxx mailing list

<http://lists.freebsd.org/mailman/listinfo/freebsd-hackers>

To unsubscribe, send any mail to "freebsd-hackers-unsubscribe@xxxxxxxxxxx"

Re: numbers don't lie ...