Subject: Re: Hyperthreading and IDL?
Posted by Marc R. Reinig on Wed, 29 Sep 2004 19:51:18 GMT
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"Edd Edmondson" <eddedmondson@hotmail.com> wrote in message
news:cje5vn$m5o$2@news.ox.ac.uk...
> Jonathan Greenberg <greenberg@ucdavis.edu> wrote:
>> Has anyone done any performance tests looking at IDL 6.0 (or 6.1) under
>> hyperthreaded architectures? I see that certain processes max the
>> processor
>> out at exactly 50%, which makes me think that I'm getting a 50%
>> performance
>> hit just using the hyperthreading enabled. Thoughts? Experience?
>
> It's probably a figment of the way the hyperthreaded CPU appears to the
> kernel - as one CPU or as two or whatever. It'd be best to do some sort of
> quick benchmark. Use 'timer=SYSTIME(/SECONDS)' before some long routine
> and then do a 'print, SYSTIME(/SECONDS)-timer' to see how much time has
> elapsed. You should pretty quickly be able to tell if you're actually
> getting a performance hit (which I'd be surprised if you did).

If you have Windows XP and above it will see a hyperthreaded processor as
two processors.

If you have an app that is running a single thread, it's activities will be
roughly divided between the two processors.

If you have an app that has multiple threads that can run concurrently, then
those threads will be divided amongst the processors available.

We run IDL on Windows Server 2003 on a 4-processor system. This shows as 8
processors on the Windows task manager performance tab (the four processors
are hyperthreaded). If we run IDL doing general activity, one processor
generally gets most of the work and the rest do some. If we use IDL doing
things it can multi thread, then all 8 processors bang up to ~90% until it
is done.

Marco

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Marc Reinig
UCO/Lick
Laboratory for Adaptive Optics