
Subject: Re: Hyperthreading and IDL?

Posted by [Edd Edmondson](#) on Wed, 29 Sep 2004 11:23:35 GMT

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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).

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Edd

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:

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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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