

# Re: Intel Xeon dual-core HTT

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<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.general/2006-03/msg00869.html>

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- *From:* AnthonyThomas <[AnthonyThomas@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:AnthonyThomas@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Thu, 16 Mar 2006 07:38:34 -0800
- 

That makes sense in order to distinguish between HTT and processors, but are there CPU instructions that distinguish between core and socket?

It also makes sense as far as the logical cap as a limitation of memory map, but that would be true of Datacenter Edition too, except that edition would allow all of them to be physical processors.

Thanks.

Anthony Thomas

"Michael D. Ober" wrote:

There are new CPU level instructions to query the number of logical processors per CPU. Windows XP and 2003 are aware of these instructions and MS has coded these OSs to limit based on physical processors. This said, there is still a hard limit of 32 logical processors for 32-bit versions of Windows and 64 logical processors for 64-bit versions of windows. This is because the processor affinity instructions use a simple bitmap of a machine word to allocate processor usage to an application.

Mike Ober.

"AnthonyThomas" <[AnthonyThomas@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:AnthonyThomas@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)> wrote in message <news:0D44DB09-C990-4D4A-9033-8A46B6CE5C80@xxxxxxxxxxxxxxxxxxxx>

Thanks for the reply, but I understand the difference between logical and physical processors, but since Windows does not necessarily make this distinction, how is the 8 processor limit controlled when you have more

than

8 logical processors?

The new dual-core Xeon's with HTT turned on, are 4 logical processors per

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socket. So, what happens when I have a 4-way of these processors installed?

That would make 16 logical processors, but Win2K3 EE is only supposed to work on up to 8.

The question is will it recognize all 16 and use them all, or only up to 8?

I don't care what the OS sees, but the MAXIMUM it will see when you use these hybrid type processors.

Anthony Thomas

"Admiral Q" wrote:

Well I can say I'm running Win2k3 R2 x64 on a box with 2x2.8Ghz Dual

Core

Processors with HT – with HT off, Win2k3 sees 4 processors, with HT on,

it

sees 8 and uses them as such.

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Star Fleet Admiral Q @ your service!  
Google is your friend!  
<http://www.google.com>

"AnthonyThomas"  
<AnthonyThomas@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote  
in

message

<news:6F6B5E6F-5492-4D04-8617-E87A5891B6A4@xxxxxxxxxxxxxxxxxxxx>

Re: Intel Xeon dual-core HTT

Anyone know how Win2K3 EE supports the new Intel Xeon dual-core HTT processors?

If I install 8 of these bad boys, will the OS see a maximum of 8

logical

processors or the 32 that the subsystem is presenting?

What about the HP tests of the new Itanium 2 Montecito chips that are

also

supposed to be dual-core, HTT?

Anyone have any redirects to some documentation of the behavior?

Thanks.

Sincerely,

Anthony Thomas