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Subject: IDL with multiple processors

Posted by [David Schmidt](#) on Thu, 03 Dec 1998 08:00:00 GMT

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We recently tested the speed of a non-graphical, numerical IDL code run on two different Linux systems. The system with 2 350 MHz processors and SDRAM was about the same speed or a bit slower than the system with 1 233 MHz processor and EDORAM.

Anyone else have performance problems/suggestions for multiprocessor machines?

David

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Subject: Re: IDL with multiple processors

Posted by [Martin Schultz](#) on Mon, 14 Dec 1998 08:00:00 GMT

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Stein Vidar Hagfors Haugan wrote:

> In article <749m0g\$875\$1@agate.berkeley.edu>  
> korpela@islay.ssl.berkeley.edu (Eric J. Korpela) writes:  
>  
>> I'm pretty sure that when using floating licences, every IDL process I  
>> start checks out 10 licences regardless of which display they are running  
>> on. It's only the static licenses that allow any number of processes to  
>> be started as long as they are running on the same machine (regardless  
>> of the display location).  
>  
> A little experimenting shows that starting an extra idl process  
> on the same machine, with the same display, does not allocate  
> extra licenses. With three idl processes on the machine,  
> lmsat -A reports only 10 licenses in use. Starting a  
> process on another machine (regardless of display destination)  
> requires another 10, but additional processes on that  
> machine (with the same display) requires no more licenses).  
>  
> Stein Vidar

that's what I find (thanks for the lmsat tip). But is this true for multiprocessor machines as well? If you (happen to) log in on a different processor for your second session: does this count as different machine?

Just curious,  
Martin.

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Subject: Re: IDL with multiple processors  
Posted by [mgs](#) on Tue, 15 Dec 1998 08:00:00 GMT  
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In article <755cjq\$1@readme.uio.no>, steinh@ulrik.uio.no (Stein Vidar Hagfors Haugan) wrote:

> In article <36754DD9.66084666@io.harvard.edu>  
> Martin Schultz <mgs@io.harvard.edu> writes:  
>  
>> Stein Vidar Hagfors Haugan wrote:  
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>> processor for your second session: does this count as different machine?  
>  
> It appears that multiprocessor machines behave as a single machine.  
> At least on an AlphaServer with 4 processors we have here. It seems  
> like it's the "hostname" or something similar that's used for ID.

That's different than it was under IDL version 3.x from several years ago.  
I was working on a Sun MP/670 with 4 processors at the time. Multiple runs  
of IDL each took up to 25% of the total CPU load.

--  
Mike Schienle  
mgs@ivsoftware.com  
Interactive Visuals, LLC  
<http://www.ivsoftware.com/>

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Subject: Re: IDL with multiple processors

Posted by [pit](#) on Tue, 15 Dec 1998 08:00:00 GMT

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In article <36754DD9.66084666@io.harvard.edu>,  
Martin Schultz <mgs@io.harvard.edu> writes:

> that's what I find (thanks for the lostat tip). But is this true for  
> multiprocessor machines as well? If you (happen to) log in on a different  
> processor for your second session: does this count as different machine?

No, on most (all?) MP-Machines, a process is not bound to a special  
processor. The system kernel does the work to distribute the process on  
the available processors, and that can change. So it wouldn't make  
sense to lock the session to a specific CPU-ID (AFAIK, now the  
hardware-Address of ethernet-cards is used as ID)

Peter

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Tel.: +49 551 39-5048 [pit@uni-sw.gwdg.de](mailto:pit@uni-sw.gwdg.de)

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Come and see the stars! <http://www.kis.uni-freiburg.de/~ps/SFB>  
Sternfreunde Breisgau e.V. Tel.: +49 7641 3492

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Subject: Re: IDL with multiple processors

Posted by [steinhh](#) on Tue, 15 Dec 1998 08:00:00 GMT

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In article <36754DD9.66084666@io.harvard.edu>  
Martin Schultz <mgs@io.harvard.edu> writes:

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Regards,

Stein Vidar

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