Subject: Re: Poor comparable performance for IDL on Solaris vs Vista or Snow Leopard
Posted by liamgumley on Mon, 22 Feb 2010 17:36:43 GMT
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On Feb 22, 11:15 am, demian <demian.ha...@gmail.com> wrote:
> Both servers are largely quiet and have most cycles available for user
> processing. One server has 4 ~1GHz processors, 32GB of RAM and runs
> Solaris 8. The other server has 4, 8core ~1GHz processors, 64GB of RAM
> and runs Solaris 10. We've tested to see if there is a performance
> difference between local vs SAN storage on these servers and cannot
> explain the difference.

If the Sun servers have T1 processors, then slow IDL performance should be expected, since a single floating point unit (FPU) is shared by all processor cores:

http://en.wikipedia.org/wiki/UltraSPARC_T1#Target_market

I would not expect a Sun server based on 1GHz CPUs to be as fast as a 3GHz Mac. Is multi-threading enabled on the Sun servers? Even if it is, the FPU issue will severely hamper performance if they are indeed T1 servers.

Cheers,
Liam.
Practical IDL Programming
http://www.gumley.com/

Subject: Re: Poor comparable performance for IDL on Solaris vs Vista or Snow Leopard
Posted by demian on Tue, 23 Feb 2010 21:37:15 GMT
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Liam,

Thanks for the response. The CPUs in the Solaris 8 system (v480) are: UltraSPARC III (http://en.wikipedia.org/wiki/UltraSPARC_III_Cu) , these have two ALUs and two FPUs, with different tasks.

The CPUs in the Solaris 10 system (T5240) are UltraSPARC T2 Plus (http://en.wikipedia.org/wiki/UltraSPARC_T2). The 5240 is a two-way SMP server, with one FPU per core and 8 threads per core handled concurrently. This system can handle 128 threads concurrently.

I can see how the UltraSPARC III, my not compete, but the UltraSPARC_T2 certainly should....

Does IDL take advantage of Sun's multi-threading?

Thanks,

Demian

On Feb 22, 10:36 am, Liam Gumley <liamgum...@gmail.com> wrote:
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