Re: Udp sending performance in Gbit Ethernet

Source:
http://www.tech−archive.net/Archive/Development/microsoft.public.development.device.drivers/2006−01/msg00492.h

- *From*: "Stephan Wolf [MVP]" <stewo68@xxxxxxxxxxx>
- *Date*: 13 Jan 2006 04:45:58 −0800

Not sure whether your test program or setup is correct. You should
better use some well−known test program like TTCP. Various
implementations of TTCP are available for Windows, see e.g.

"Test TCP (TTCP) Benchmarking Tool for Measuring TCP and UDP
Performance"
http://www.pcausa.com/Utilities/pcattcp.htm

We've been using the UDP tests with WSTTCP for years and IIRC, we got
it to 100% load our Gigabit network (using cards with the Marvell
"Yukon" GigE chipset).

The performance drop you describe can actually be caused by an
increased number of interrupts. However, modern NICs usually implement
"interrupt moderation" so that should not actually be a problem.

Stephan
−−−
JTL wrote:
> Hello,
>
> This topic has been previously discussed in win32.programmer.networks, but
> no clear solution has been found.
>
> It seems that when sending UDP packets at maximum speed, the throughput of
> the sending drops significantly when the payload size is increased from 1024
> to 1025 bytes. This seems to be connected to the NIC interrupts in some way,
> it seems like that 1024−byte packets can be sent at full rate, but 1025 byte
> packets only once per interrupt (and per sending application).
>
> I made a web page of the situation so far, and it is located at:
>
> http://www.kolumbus.fi/juha.lemmetti/Udp.html
>
> If you have explanation or work−around, please reply to this post or to me
> (e−mail is on the web page).
>
> Greetings,

>
> Juha

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    - ◊ *From:* JTL

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