Re: Winsock calls overhead

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- *Date*: Mon, 24 Sep 2007 08:49:55 −0700

Please don't separately post the same question to multiple groups! If you feel like two groups should get the question, list both groups in the To field of a single message. I've replied elsewhere...

Paul T.

"ravishk" <ravishk@xxxxxxxxx> wrote in message
news:1190543635.749934.307780@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

> I am using a simple application that creates a scoket and sends UDP data on a
> WinCE 6.0 BSP on 250 MHz ARM. What was observed that for different data
> rates, the measured CPU load turned out to be pretty much high as mentioned
> in the table below:
>
> Desired | CPU load | CPU load
> Throughput | (Stack Loopback) | (Send to a particular IP Address)
> (Kbps) | (127.0.0.1) |
> −−
> 10 | 10 % | 7 %
> 100 | 11 % | 7 %
> 400 | 18 % | 14 %
> 800 | 27 % | 23 %
> 1000 | 31 % | 27 %
>
> I doubted the NDIS miniport implementation for taking so much of a CPU load
> in a send call but the Stack level loopback using IP address 127.0.0.1 (when
> my NDIS Miniport send functions are not called) take much more CPU load. In
> there something wrong in the way I am sending and receiving packets in my
> application or the miniport NDIS. We are targetting an applciaiton that sends
> A/V streams at constant bitrate (varying from 100Kbps − 1Mbps) UDP

packets.
We are using blocking socket calls and our concern is the CPU loading. The
Winsock stress tests also showed a 100 % CPU load all the time.

Will Overlapped IO, non blocking sockets will aid in lowering the CPU utilization?
Why should a sendto() call for 127.0.0.1 should take so much of a CPU load.

Thanks.

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