

Re: ask for sample ping source code without IP protocol stack

Source: <http://coding.derkeiler.com/Archive/General/comp.arch.embedded/2004-03/0341.html>

From: Robert Wessel (robertwessel2_at_yahoo.com)

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John Black <black@eed.com> wrote in message news:<40490C9E.74D5732A@eed.com>...

> Hi,
> I am testing an ethernet device on a development board, I programmed
> a ping echo program based on the ethernet driver, not using any IP
> protocol stack, but I have a hard time using the program to echo the
> ping from my Windows 2000 PC. From some network traffic tool I can see
> the ethernet frame coming to the PC and I believe the ethernet header
> and ICMP header are correct, but Windows ping can not receive my echo.
> I suspect I miss some tricks, so I am wondering if there are ping
> source code for Windows to reference. From web searching, I see someone
> mentioned Windows SDK has a sample ICMP application, but I do not have
> access of that and I think that application should be based on socket
> programming, while I am looking for no protocol stack source file.
> Could you help here?

There's not really much to question here: ICMP echo-request/reply are pretty solidly spec'd in the RFCs. Can you post the network monitor trace of the echo request from the Windows box and the reply from your device? Be sure to include everything out to the MAC frame. Also, let us know what the MAC and IP addresses are for the two boxes, and be sure to include any ARP traffic.

My suspicion is that you are either not putting the correct MAC or IP address into the reply, or you're not copying over the identifier and sequence number fields from the request.