

SP2 gigabit ethernet problems

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I'm using an eval edition of SP2 to build configurations for Compact PCI blades that have multiple gigabit ethernet ports. Current vintage boards support up to 2 GHz Pentium-M CPUs and almost all (Kontron, Momentum, Diversified Technology to name a few) use the Intel 82546EB dual ethernet chip for Gbe. Although there are some Pro 1000 class drivers in SP2 I have not found support for the 82546EB which I think is a huge omission. However I did find drivers at both XpeFiles and Intel web sites that upon examination appear to specifically support the 82546EB. When I build a configuration with either of these drivers the system fails to obtain IP addresses via DHCP even though an IP address is obtained by PXE during the remote boot process. For example, after remote boot an "ipconfig" command shows 0.0.0.0 as the IP address for active ethernet ports. An "ipconfig /renew" command on a system built with the Intel driver results in the following message:

An error occurred while renewing interface Local Area Connection 4 : The interface is unknown

and if the XpeFiles driver is used:

An error occurred while renewing interface Intel(R) Pro/1000 MT Dual port Network Connection #4 : The interface is unknown

In my examples only port 4 was connected to live ethernet. The messages indicated correctly that the other ports were not connected. I did extensive googling and could not find any discussion of the above messages.

An "ipconfig /all" command indicates that both DHCP and AutoConfiguration are enabled. An "sc query e1000" command indicates that the service is running.

Note that I previously configured the same hardware using SP1 and vendor supplied driver components and I was successful in having Gbe work however those drivers are no longer available to me. Network tracing on the SP1 configuration showed that after the remote boot protocol completed the target device sent DHCP requests but tracing showed no such requests from the SP2 configuration.

I'm hoping someone has an idea about what's causing the problem.

RHL

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Change "3e" in my address to "ee"