## PowerBook 500 series: Switching Between Ethernet And LocalTalk

Article Created: 27 July 1994

TOPIC -----------------------------------------------------------

A PowerBook 500 series computer is connected to an Ethernet network, shutdown, taken home and hooked to a PhoneNet network and restarted. The PowerBook does not see the network even though it changes to LocalTalk (Built-In) in the Network Control Panel. Switching back and forth in the Network Control Panel makes no difference. The PowerBook must be restarted again to see the net.

If the PowerBook is switched to LocalTalk before being shut down and moved, it sees the PhoneNet network fine when started later. Yet, going the other way (from LocalTalk to Ethernet), you simply change the network CDEV and the network shows up right away. Why?

DISCUSSION ------------------------------------------------------

If you are going to be using Ethernet you should select the EtherTalk option in the Network Control Panel.  Now, the desired behavior for the PowerBook 5xx is to use Ethernet when available, otherwise use LocalTalk.  This should be accomplished without ever opening the Network Control Panel.

On two systems that I used for testing, I was able to use Ethernet but when I switched to a LocalTalk connection, I did not have access to network services. If I simply went back to an Ethernet connection I had access to the network again. If, while connected to LocalTalk, I opened the Network Control Panel, it indicated that LocalTalk was the selected option.  There are two ways I could get LocalTalk to actually work;

1. Select EtherTalk and have that attempt fail since there was no Ethernet connection
 or

2. Reboot the PowerBook.

The problem is that now, in order to use Ethernet, it is necessary to select the EtherTalk option in the Network Control Panel the next time you connect to an Ethernet network.

A third system used in testing behaved as expected, switching from Ethernet to LocalTalk depending on the physical connection.  Finally, after verifying that the software on all three systems was essentially the same, the PRAM on the two

offending machines was reset using the old Command-Option-P-R method.  Much to
our pleasure the two systems worked as advertised.

Note:  If you open the Network Control Panel while the PowerBook is using
LocalTalk it will change the default network connection to LocalTalk.  This
happens even if you don't select anything in the Network Control Panel and just
close it.  The mere act of opening and closing the Network Control Panel is
enough to change the default connection.

The bottom line is that if you are going to be switching frequently between
Ethernet and LocalTalk, set it up for Ethernet once and leave the Network
Control Panel alone.

In the course of testing we did observe that changing from LocalTalk to
EtherTalk in the Network Control Panel often took very long, in some cases the
PowerBook froze, requiring us to force it to reboot.  This may be what is
corrupting the PRAM.  We will report this and continue investigation.

Support Information Services
Copyright 1994, Apple Computer, Inc

====================================================================

This information is from the Apple Technical Information Library.

19960215 11:05:19.00
Tech Info Library Article Number:  15893