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Ethernet NB Card: Cables, Connections, Termination (11/94)

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Security: Everyone

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TOPIC -----

We have the following questions about the Ethernet NB Card, regarding termination and compatibility:

- 1) Regarding the Ethernet NB Card and thin coax cable, is the termination supplied by the Apple Ethernet Thin Coax Transceiver, or the Apple Ethernet 5/13-meter cable, or both?
- 2) Would the new self-terminating thin coax cable work if connected to the older EtherTalk NB card (various revs) with a T connector? If so, would a terminator on the T be necessary?
- 3) Regarding question 2, what if we wish to connect the old card to a new card/CPU with built-in AAUI port? How can the two different cards/ports be connected using the new thin or thick coax cabling/transceivers? Would they need to use standard coax cable or can they use the Apple cable?

Example: We want to connect a Macintosh IIcx with a Rev. M EtherTalk NB card to a Quadra 900, with built-in Ethernet. We now must connect the Rev. M card with a T connector to the AAUI thin coax transceiver on the Quadra 900. Are the cards compatible or is it the cabling?

- 4) Will the Synoptics concentrators support Apple Ethernet NB cards?
- 5) Will the current network configuration allow us to use the Apple LaserWriter IIg directly from the RJ-45 ports?

DISCUSSION -----

- 1) Both the Apple Ethernet Thin Coax Transceiver and the Apple Ethernet 5/13-meter cables have the ability to supply termination. In regard to

the Apple Ethernet Thin Coax Transceiver, there are two BNC connectors on the transceiver. If a cable isn't attached to one or both of these BNC connectors, termination is applied. When cables (any cables, Apple or non-Apple) are attached to both connectors, termination is not applied.

The Apple Ethernet 5-meter Thin Coax Cable and Apple Ethernet 13-meter Plenum Cable have terminators at each end of the cables. When nothing is attached at either end of the cable, termination is applied at the end of the cable where nothing is attached.

- 2) Yes, but the Apple Ethernet 5-meter Thin Coax Cable and Apple Ethernet 13-meter Plenum Cable are only self-terminating when an end is not connected to anything. If you are using an EtherTalk NB Card at the end of a network, the T connector will either need a terminator on the open end, or one of the self-terminating Apple cables attached with nothing connected at the other end of the cable.
- 3) There is no problem using non-Apple thin coax cable with the Apple Ethernet Thin Coax Transceiver, nor is there a problem using Apple Thin Coax Cable with the EtherTalk NB Card. The Apple Ethernet NB Card and AppleTalk NB Cards can be intermixed on a network with no problems.
- 4) Yes. The only caveat here is that the Synoptics concentrators must have a 10BaseT compatible card installed (Synoptics LatticeNet 3308 10Base-T Host Card, for example).
- 5) Yes, if the RJ-45 port is wired into a 10BaseT compatible host card (Synoptics LatticeNet 3308 10Base-T Host Card, for example).

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