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PC-LAN Baseband Network Description

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Security: Everyone

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TOPIC -----

This article contains a description of IBM's PC-LAN Baseband.

DISCUSSION -----

IBM has two different networking schemes that are referred to as PC-LAN: Baseband and Broadband. Baseband is their system recommendation for K-12 labs.

Using the PC Network Adapter-II in the XT bus machines, such as the original PC and PS/2-25/30, and the PC Network Adapter II/A for the MicroChannel machines, it is a 2Mbps CSMA/CD protocol run over unshielded, twisted-pair telephone wiring. The network uses the IEEE 802.2 LLC standard like AT&T StarLAN. A typical configuration is cabled in daisy-chain fashion using RJ-11 telephone jacks and telephone cabling with up to eight stations within a maximum 200-foot chain compared to a 4000-foot network limit with PhoneNET.

NetBIOS support is not provided directly on the card; it is via two software products, the PC Network Protocol Driver and the LAN Support Program. This network does not support 8022 LLC protocol or APPC/PC, which limits available application memory.

The PC-LAN Baseband network can be enlarged using the IBM 5173 PC Network Baseband Extender, which has 10 ports. The network can be extended to 10 arms of eight workstations each, and the length of the daisy-chain arm is extended to 400 feet using the Extender. This means that the radius of a PC-LAN Baseband network cannot exceed 400 feet, significantly less than LocalTalk and PhoneNET networks. The maximum network is 80 stations unless a router is used to bridge multiple networks together or to jump to another topology, such as Ethernet or Token Ring.

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