EtherTalk 2.0 and 802.3 Framing

This article last reviewed: 9 January 1990

TOPIC ----------

Using a Macintosh II with the Apple EtherTalk Card, I hooked up and ran concurrently:

1) VersaTerm-Pro and Exodus X windows using a TSSnet transport providing login and X server capability to a DEC VAX running VMS and DECwindows.

2) NCSA Telnet and Exodus X windows using a Macintosh TCP/IP transport providing login and X server capability to a DEC VAX running Ultrix with X11 clients.

3) AppleShare Workstation using an AppleTalk transport to a DEC VAX running AlisaShare file server.

These three protocol stacks ran with Apple EtherTalk Phase 1 drivers, which use Ethernet framing, and ran concurrently without interference.

Would the above scenario work with Apple's EtherTalk Phase 2 drivers, which use 802.3 framing?

DISCUSSION ----------

The IEEE divides the OSI Data Link Layer into the Logical Link Control (LLC) layer and the Medium Access Control (MAC) layer. It also developed the SubNetwork Address Protocol (SNAP) standard to accommodate the large number of protocols.

With EtherTalk Phase 1, AppleTalk data was transmitted in the data field of an Ethernet packet. With EtherTalk Phase 2, AppleTalk data is encapsulated in a SNAP packet, which is encapsulated in an LLC packet and transmitted in a CSMA/CD 802.3 packet.

Though EtherTalk Phase 2 uses the SNAP interface, higher-level protocols can go directly to the LLC layer without using SNAP. SNAP allows for connectionless communication services only.

1 and 2)
These higher protocols go directly to the LLC layer and use the

Ethernet driver for the EtherTalk Card instead of using our higher-level EtherTalk 2.0 software. They should work fine.

3) This should work fine when Phase 2 support for AppleTalk for VMS is released.

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Keywords: <None>

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19960215 11:05:19.00

Tech Info Library Article Number: 5032