

AppleTalk and EtherTalk Packets: How They Work Together

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The AppleTalk packet is encapsulated within an Ethernet packet. The Ethernet packet contains the Ethernet address of the receiving device, so only that device will accept and inspect the packet. Any AppleTalk device connected directly to an Ethernet uses Address Resolution Protocol (ARP) to determine the Ethernet address of the AppleTalk device it wants to send a packet to.

This means that all address resolution and Ethernet packet addressing occur within the sending AppleTalk node. For example, a Macintosh II, using an EtherTalk card and the EtherTalk drivers and sending to another Macintosh II on the same Ethernet, inspects its ARP address tables and sends an AppleTalk packet encapsulated within an Ethernet packet addressed specifically for the receiving Macintosh II. The receiving Macintosh II strips the Ethernet information from the packet and processes the AppleTalk packet. No other Ethernet device does anything with that packet, unless it is a device like a protocol analyzer peeking at packets.

In the case of an AppleTalk device on a LocalTalk on the other side of a bridge (like a Kinetics FastPath), the Ethernet packet is addressed to the FastPath. The FastPath takes the packet, strips off the Ethernet information, and sends the packet out onto the LocalTalk network.

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