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AppleTalk Address Resolution Protocol (AARP): Description

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TOPIC ---

Does AppleTalk Address Resolution Protocol (AARP) play a role in address
resolution for MacTCP, or is there a corresponding TCP/IP protocol that
manages this mapping? What can you tell me about products such as TSSnet?

I am trying to understand where AARP sits in a Macintosh running more than
one protocol on a single datalink adaptor (for the sake of argument,
consider it Ethernet). Are packets handed from the hardware adapter to ELAP
to AARP to the appropriate protocol stack, or do they go from ELAP to the
appropriate protocol stack, and then to AARP, only if the packet type is
AppleTalk?

DISCUSSION --

AppleTalk Address Resolution Protocol (AARP) is used to map between the
AppleTalk node ID and the physical address of a datalink, such as Ethernet
and Token Ring. For example, node A is a Macintosh on EtherTalk. This
Macintosh has an AppleTalk node ID 30 and an Ethernet physical address
$02608C02AAA3. When an AppleTalk packet is sent to AppleTalk node 30, AARP
is used to determine that the AppleTalk node 30 is at Ethernet physical
address $02608C02AAA3.

TCP/IP has a similar protocol call Address Resolution Protocol (ARP) that
does basically the same thing, but in TCP/IP. For example, you have a
machine with an IP address 130.43.4.13 and an Ethernet physical address
$02608C02AAA3. When a TCP/IP packet is sent to the IP address 130.43.4.13,
ARP is used to determine that the IP address 130.43.4.13 is at Ethernet
physical address $02608C02AAA3.

Note: MacTCP, in native TCP mode (using Ethernet and no DDP/IP gateway),
would not be generating AppleTalk packets; AARP would not be used, but ARP
would be.

More information on AARP is in chapter 2 of "Inside AppleTalk."

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