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Open Transport 1.0.8: AppleTalk Features Q & A (3/96)

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TOPIC ---

This article is a series of questions and answers on the AppleTalk features in Apple Open Transport 1.0.8.

Open Transport 1.1 is now available, and Apple recommends upgrading to it. Also refer to Open Transport 1.1 Reference Questions and Answers Tech Info Library articles for the most recent information.

DISCUSSION --

Question: What are some of the upgraded protocol features of Open Transport/AppleTalk?

Answer: Open Transport/AppleTalk now includes new support for assigned (manually administered) protocol addresses. This allows AppleTalk nodes to be managed using protocol address as a unique and stable identifier. It also reduces some of the network traffic associated with AppleTalk's dynamic address assignment features (AARP).

Dynamic addressing continues to be available for those customers who prefer the automated address allocation.

Question: Does the use of AppleTalk manual addressing increase the requirement for network administration?

Answer: Open Transport/AppleTalk offers network administrators a choice. Sites that prefer to have the network infrastructure automatically assign unique protocol addresses can continue to rely on AppleTalk Address Resolution Protocol (AARP). Sites that find advantage in having fixed and well-known protocol addresses for each end-node can implement manual addressing.

When manual addressing is selected there will be a requirement to allocate and assign the initial protocol addresses, which will subsequently be "locked". Some administrators may prefer to do this allocation based on a central numbering plan, creating individual configuration templates (recommended or required settings) for each user. Others may prefer to allow the network to determine the initial address configuration (that is, use dynamic addressing once), and then lock the uniquely assigned addresses after initialization.

It is important that all nodes on each individual AppleTalk subnet (a given cable segment assigned a unique network number or network number range) be administered consistently - either all with dynamic addressing or all with pre-assigned static addresses. This avoids a potential conflict between a new dynamic node acquiring an address assigned to an off-line, manually-addressed node. Administrators can enforce the addressing policy for a subnet by locking the addressing mode in the "dynamic" or in the "manual" state. As an administrative precaution, however, Open Transport/AppleTalk does continue to check for the presence of duplicate protocol addresses on the LAN when static addressing is configured.

Question: Are there other benefits that arise from the new support for AppleTalk manual addressing?

Answer: Yes. Manual configuration of static AppleTalk addresses supports Mac OS products that utilize WAN datalinks where non-full-mesh topologies are important. This includes datalinks such as Frame Relay, SMDS, and ATM.

Question: Is Open Transport/AppleTalk "AppleTalk Phase 3"?

Answer: No. Open Transport/AppleTalk is a new, modern implementation of the AppleTalk Phase 2 protocol architecture for the Mac OS -- from the people who invented AppleTalk.

Question: What happened to the "Network" control panel?

Answer: The Network Control Panel has been replaced by the Open Transport AppleTalk configuration utility. This change was made to reflect the true function of the utility.

Question: Are there other changes to the human interface for AppleTalk?

Answer: Yes. The AppleTalk configuration utility now provides basic troubleshooting information as a part of the human interface. For example, the Advanced and Administrator views provide access to the current AppleTalk router address and the current AppleTalk network number range for the cable. Previously this information was only available through the use of router administration software, or protocol analysis software.

Article Change History:

26 Mar 1996 - Added statement on Open Transport 1.1 release.

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