New Technical Notes

Macintosh

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NW 575 - Routing Table Maintenance Protocol Q&As
Networking

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Written by: Developer Support Center	October 1990

This Technical Note contains a collection of Q&As relating to a specific topic—questions you've sent the Developer Support Center (DSC) along with answers from the DSC engineers. While DSC engineers have checked the Q&A content for accuracy, the Q&A Technical Notes don't have the editing and organization of other Technical Notes. The Q&A function is to get new technical information and updates to you quickly, saving the polish for when the information migrates into reference manuals.

Q&As are now included with Technical Notes to make access to technical updates easier for you. If you have comments or suggestions about Q&A content or distribution, please let us know by sending an AppleLink to DEVFEEDBACK. Apple Partners may send technical questions about Q&A content to DEVSUPPORT for resolution.

Receiving RTMP packets from a generic router
Date Written: 4/22/91
Last reviewed: 6/14/93

I'm trying to receive the periodic Routing Table Maintenance Protocol (RTMP) packets sent out from a generic router. The only solution so far is to close down the Link Access Protocol (LAP) handlers and install my own. However, when I'm finished, I must restart AppleTalk when my program exits. Is there an alternative solution?

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You've hit upon a side effect of the AppleTalk architecture. It's understandable that being only a listener, that you would simply want to attach yourself into the LAP chain without shutting down AppleTalk. Your findings are correct though—you would need to shut down the LAP handler and install one of your own. This would require restarting AppleTalk when your program exits.

You'd find that EtherPeek, a commercially available software sniffer works similarly. This has the ramifications of complicating the process by restarting AppleTalk with the desired connection method. It also limits compatibility with Apple cards and those from other vendors you select to support.

Multicast addresses for zone names hashed to same index value
Date Written: 3/3/92

M.NW.RTMP.Q&As

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What's the strategy for assigning a multicast address if two different zone names hash to the same index value? How do two different routers synchronize the multicast address assignment in the case of hash synonyms?

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It's quite possible that two zone names will hash to the same index. Networks which have zone names that hash to synonyms will have the packets resolved at the receiving nodes. Packets that get delivered to the wrong zone because of identical multicast addresses will be handled by NBP (Name Binding Protocol), which will see that the destination zone name is different if the target zone is the zone synonym.

Start & end for extended networks with single number for range
Date Written: 3/3/92
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If a network is assigned a single network number for a network number range—for example, 3—how is the network number range start and end represented? It is 3-3 or 3-0 or is it anything else?

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On an extended network type such at TokenTalk or EtherTalk, a network range of a single network number is entered as both the start and end of the range. For example, a network range of 3 is such that netLo is 3 and netHi is also 3.

Phase 2 routers must support Split Horizon technique
Date Written: 3/3/92
Last reviewed: 6/14/93

RTMP data packets sent by all routers on an internet use the Split Horizon technique or the No-Split Horizon. Does it matter if different routers use different techniques?

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The AppleTalk router, version 2.0, implements the Split Horizon technique. All Phase 2 routers MUST implement the Split Horizon technique for compatibility with AppleTalk. For a description of the Split Horizon technique, refer to *Inside AppleTalk,* 2nd ed., 5-11.

AppleTalk routers and Route Data Request (RDR) packets
Date Written: 3/3/92
Last reviewed: 6/14/93

Does an AppleTalk router initiate a Route Data Request (RDR) packet? If so, when?

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A router is free to send a Route Data Request packet at any time. A particularly good time to send an RDR packet is when a router has not heard from another router in some time.