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## Macintosh Quadra: NSI 1.2 Resolves LocalTalk Conflict (1/95)

Revised: 1/31/95  
Security: Everyone

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Article Created: 27 May 1992  
Article Reviewed/Updated: 31 January 1995

TOPIC -----

Did AppleTalk 57 shorten the data packet, thus correcting some problems between the Macintosh Quadra and Farallon's Star Controller?

DISCUSSION -----

### General Information

Some customers have experienced problems when using Macintosh Quadra computers on LocalTalk networks, including the inability to access LocalTalk services, and poor LocalTalk network performance. These problems are caused by the Quadra transmitting a number of abort bits (used to demarcate the end of a frame) outside the recommended range. The workaround is to update your LocalTalk resources with the NSI (Network Software Installer) 1.2 or later.

Those encountering the problem might report that:

- LaserWriters or servers disappear from the Chooser.
- Documents print fine once, then subsequent print commands yield PostScript errors or "printer not found" messages.
- Network performs slowly (for example, slow printing and file transfer, and device times out).

The problem most often occurs on a Quadra 700, since a Quadra 900 or 950 is out of compliance only when the PICs are turned off. Turning the PICs off is possible with the Serial Switch, which isn't commonly available or used.

Note that some third parties previously advised all Quadra owners encountering this problem to update to AppleTalk v57.0.1, which helped in many cases, but doesn't resolve this problem entirely. Therefore, customers encountering this

problem should use the NSI 1.2 or later.

#### Abort Bit Problem Only with LocalTalk

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AppleTalk v56 is located in the Quadra's ROMs. The NSI 1.2 or later patches out AppleTalk in ROM and also installs two updated 'ltlk' resources.

Note that Apple never shipped AppleTalk v57. Before releasing AppleTalk v57, we found a bug in ADSP at the last minute, fixed that problem, then changed the name of the code to AppleTalk v57.0.1.

This abort bit problem, if it occurs, will only occur with LocalTalk. That is, if the Quadra is connected directly to a LocalTalk network, particularly one having third-party repeater-type devices, then it may have problems. If the Quadra is using the on-board Ethernet, it won't have this problem, even if its packets are routed to devices using LocalTalk connected elsewhere on the network.

These articles can help you locate the NSI software mentioned here:

- "Where To Find Apple Software Updates"  
Lists online services for "free" Apple software updates.
- "Obtaining Apple Product Support in the USA"  
Lists 800 numbers and online services for software updates, Apple support information, and a subset of the Apple Tech. Info. Library.

#### Article Change History:

31 Jan 1995 - Removed references to AppleLink and added online services.

15 Sep 1992 - Revised to include path for the NSI disk on AppleLink.

Support Information Services

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Tech Info Library Article Number:10263