Tech Info Library

PCI Network Installer: Read Me (7/96)

Revised: 7/1/96
Security: Everyone

PCI Network Installer: Read Me (7/96)

==========

Article Created: 17 April 1996
Article Reviewed/Updated: 1 July 1996

TOPIC --

This article contains the ReadMe file for the PCI Network Installer Version 1.0 which is used with the Apple PCI Token Ring card.

DISCUSSION --

Contents
========

What the PCI Network Installer disk includes

==========

Version 1.0 of the PCI Network Installer disk includes:

• Apple PCI Token Ring 1.0

The Apple PCI Token Ring card is the first, and at the time of this release, the only, PCI-based networking card for MacOS supported by Apple, and therefore the only card supported by this PCI Network Installer disk. Future releases of the PCI Network Installer may include support for additional PCI-based networking cards, as well as possible enhancements to the Apple PCI Token Ring driver.

System requirements

The PCI Network Installer 1.0 disk requires:

• Power Macintosh 7200/120 computer
• Power Macintosh 5400 Performa computers
• Power Macintosh 7500, 7600, 8500, and 9500 series computers
• Workgroup Server 7250, and 8550 computers
  NOTE: At this time, the PCI Token Ring card is not compatible with the PCI DOS Compatibility card. Apple Engineering is investigating this issue.
• Mac OS version 7.5.3 or higher
• Open Transport 1.1 or higher (included in MacOS version 7.5.3)
• An Apple PCI Token Ring card

Important information about your PCI Token Ring Card and software

These notes pertain to the Apple PCI Token Ring driver, version 1.0, contained on this disk, and to the Apple PCI Token Ring card.

Setting the ring speed

The Apple PCI Token Ring card automatically detects the speed of the ring (4 Mbps or 16 Mbps) and adapts to it, eliminating the need for any manual speed-setting mechanism.

Except for the initial insertion (using a factory-preset speed of 16 Mbps), the card will "remember" the speed it used most recently and will make subsequent insertions using that speed. Should an insertion failure occur, however, the card will report this error to the user, and toggle the speed of the card for the next insertion attempt. In essence, after an insertion error occurs, the card will alternate between 4 Mbps and 16 Mbps with each insertion attempt until it finally succeeds.

The only caveat to this is the initial insertion using a factory-preset speed of 16 Mbps. The card's design requires that the first insertion cannot be onto an empty ring (one with no stations on it already), or the insertion will fail.

Using the PCI Token Ring Card with MacIPX

This release of the Apple Token Ring PCI card and software does not support MacIPX. This results from incompatibility issues between the MacIPX software and PCI-based networking cards in general, which Apple and Novell are working to resolve.

Using the Apple PCI Token Ring Card with Novell Netware for Macintosh 3.011, 3.12 or 4.02

Versions of the APPLETLK.NLM prior to version 4.50c have known problems with source routing, which may affect the proper operation of this card with your server. To avoid these problems, upgrade your APPLETLK.NLM to version 4.50c (or later), following the installation instructions provided by Novell.

This upgrade is available on Novell's NetWire Web site (http://www.novell.com/) as a self-extracting archive titled ATK45C.EXE.

Using the Apple PCI Token Ring Card with SoftWindows

The Apple PCI Token Ring software supplied on this disk does not support Insignia Solutions' SoftWindows product.

Using the Apple PCI Token Ring Card on Power Macintosh 7200/75 and 7200/90 systems

---

The Apple PCI Token Ring Card is not supported on Power Macintosh 7200/75 and 7200/90 systems at this time. If you try to use this card in a Power Macintosh 7200/75 or 7200/90, the system may freeze.

Using the Apple PCI Token Ring Card with the Apple Internet Router

---

The Apple Internet Router is not compatible with Open Transport, and is therefore not compatible with the Apple PCI Token Ring card or driver.

Using the Apple PCI Token Ring Card with Apple LocalTalk/LaserWriter Bridge software

---

The Apple LocalTalk Bridge 2.0.1 and Apple LaserWriter Bridge 2.0.1 products are not Open Transport compatible, and are therefore not compatible with the Apple PCI Token Ring Card or driver. Enhancements or updates to these products may be made at a later date, along with other MacOS system enhancements.

Using the Apple PCI Token Ring Card with SNA•ps

The Apple PCI Token Ring Card is compatible with SNA•ps client software, although the current version of Open Transport does not support the use of SNA•ps gateway software using the Apple PCI Token Ring Card and driver.

Locally Administered Addresses

There is presently no Apple-provided mechanism for setting a Locally Administered Address of the Apple PCI Token Ring Card. The hardware address of the card can be displayed by selecting it in the AppleTalk Control Panel, and setting the User Mode to Advanced.

Using the Apple PCI Token Ring Card with long station cables

The Apple PCI Token Ring Card's ability to automatically sense the speed of the ring may be defeated on station cables that exceed the maximum lobe length allowed for your network. The maximum lobe length allowed for your token ring network depends on your network topology, but never exceeds 330 feet for 16Mbps networks, or 500 feet for 4Mbps networks.

If your station cable (lobe cable) is excessively long, and the card's "last known" speed (factory default of 16Mbps for new cards) does not match the speed of your token ring backbone, then the card may fail to detect the speed mismatch, resulting in a partially-inserted condition. The symptom of this situation includes no network activity to or from this station, and a solid green light on the back of the card.

The work-around to this problem is to use a short station cable to temporarily connect the Apple PCI Token Ring Card to a token ring network running at the desired ring speed. This will allow the card to set its default speed to the desired ring speed, causing subsequent insertion attempts to be made at the proper speed.

Once the default speed of the card has been changed to the proper speed, insertion attempts using longer station cables are more likely to succeed, though we cannot guarantee proper operation of the card on networks that violate token ring topology specifications.

Article Change History:
01 Jul 1996 - Updated article for clarity.
14 May 1996 - Added information about hardware compat.

Tech Info Library Article Number:19629