

This file contains information on installing the software (driver) that allows a RoamAbout 802.11 PC Card to be used with an Apple PowerBook using the Macintosh operating system.

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1. NEW FEATURES

Version 4.02 of the RoamAbout driver for the Macintosh operating system supports Wired Equivalent Privacy (WEP), which allows the PC Card to transmit and receive encrypted data.

Version 3.0 of the driver added support for the Macintosh operating system 8.5 Energy Saver options, which are available with newer G3 PowerBooks.

2. REQUIREMENTS

RoamAbout PC Card Firmware Version 4.08 or later.

The PC Card should be installed after installing the driver; otherwise, you could see a message asking to eject the PC card because the software is not installed. When installing the card in PowerBook 3400 and G3 computers, use the lower PC Card slot. The upper PC Card slot sometimes fails to properly recognize RoamAbout PC Card when it is inserted, which may cause unreliable operation.

If using a RoamAbout Access Point, the Access Point firmware must be at Version 3.2 or later. If using WEP encryption, you need Version 4.02 or later of the Access Point. The latest version is available on our web site at:
<http://www.Cabletron.com/wireless>

One of the following systems:

- o PowerBook 2400, 3400, or G3 running System 7.6.1 or later with Open Transport V1.1.2 or later. On these systems, the driver is not compatible with earlier Macintosh system software.
- o PowerBook 1400 or 5300 running System 7.5.3 or later with Open Transport V1.1.2 or later. On these systems, the driver is not compatible with Apple Classic networking software.
- o PowerBook 190 running System 7.5.2 or later with Open Transport (V1.1.2 or later) or Apple Classic networking software.

Before installing the driver, install and enable the networking protocols (Apple's Open Transport or Apple Classic).

Remove any previously installed wireless networking software.

3. INSTALLATION

If you download the RoamAbout driver from the web site, the RoamAbout Driver software kit is contained in an HQX file.

To open the file, you need StuffIt Expander from Aladdin Systems, Inc. You can obtain a free copy from their web site at: <http://www.aladdinsys.com/expander/>

1. Whether you downloaded the driver to your Apple PowerBook system, or you have the RoamAbout driver on a diskette, open the ARA40200.HQX file with StuffIt Expander. The ARA40200.HQX file is decoded into a file called "RoamAbout Install Disk.sea". Typically, StuffIt automatically extracts the .SEA file and creates a folder called RoamAbout Install Disk.
2. Double-click the RoamAbout Install Disk folder to display the contents.
3. Double-click RoamAbout Installer to start the installation program.
4. In the Welcome window, click Continue to proceed.
5. In the list of options, select the correct option for your computer as follows. Typically, you should select Easy Install.
 - o For PowerBook 2400, 3400, or G3 running System 7.6.1 or later, the Easy Install option chooses "RoamAbout PC Card Networking Software (PCI)".
 - o For PowerBook 1400 or 5300 running System 7.5.3 or later, the Easy Install option chooses "RoamAbout PC Card Networking Software (PPC)". You can use the Custom Install option to choose the "RoamAbout PC Card Networking Software (68K)" software if you need Apple Classic networking compatibility.
 - o For PowerBook 190 running System 7.5.2 or later, the Easy Install option chooses "RoamAbout PC Card Networking Software (68K)".
6. When prompted, restart your computer.
7. After the restart, close any unnecessary windows then insert the RoamAbout PC Card (logo side up). The RoamAbout 802.11 DS icon appears on the desktop.
8. Open the Apple Menu, select Control Panels then AppleTalk.
9. In the AppleTalk window, open the Connect Via pull-down list and select RoamAbout 802.11 DS (if it is not present select Ethernet).
10. Close the AppleTalk window then click Save to confirm your changes.

4. CONFIGURATION

To view or modify the PC Card parameters, open the Apple menu, select Control Panels then select RoamAbout Setup.

After initially installing the PC Card, perform the following in this window:

1. If joining a wireless infrastructure network (uses Access Points to connect to a wired LAN), make sure that Ad-Hoc Demo Mode is NOT checked. You should only enable Ad-Hoc Demo Mode if joining or creating an ad-hoc network.
2. In the RoamAbout Name field, enter the wireless network name used by the Access Point. (Not used in an ad-hoc network.) The name is case sensitive.
3. Set the values for advanced settings as necessary by clicking the Advanced button. The following provides a brief description of the advanced parameters.

MAC Address - Only enter a value if your network requires a local MAC address value. Most networks do not use a local MAC addressing scheme.

AP Density - AP Density changes the sensitivity of the roaming clients. Set the AP Density setting to match the Access Point AP Density setting. Using non-matching values may seriously affect the wireless performance of the client.

Transmit Rate - The transmit rate identifies the preferred data transmission speed of the client. The actual data transmission speed is subject to the PC Cards at both ends of the wireless link and the communications quality of the link. The default setting is the PC Card's highest transmit rate.

Fixed Rate - Enabling Fixed Rate prevents the PC Card from retransmitting at a lower transmit rate after a transmission fails more than once.

Medium Reservation - Only use Medium Reservation to resolve a hidden station problem. A wireless device is considered to be a hidden station when its transmissions cannot be sensed by another wireless device that uses the same Access Point. Hidden stations can result in data collisions and reduced network performance.

4. Set the power management values as necessary by clicking the Power Management button. The following provides a brief description of the power management parameters.

Enable Power Management - With Power Management enabled, the client goes into sleep mode to minimize power consumption. The wireless traffic is buffered in the Access Point that the client uses to connect to the network. At regular intervals (defined by the Maximum Sleep Duration field), the client checks for network traffic addressed to the client. However, Power Management imposes a more active use of the wireless medium, which might lead to more frequent transmission delays experienced as slower network response times during file transfers.

Receive All Required Multicasts - Keep this enabled to receive

multicast messages from the wireless network. Missing these messages might result in losing the network connection or other network problems. You can disable this option to achieve the best possible power savings. However, make sure that the wireless LAN, the higher layer protocols of the network system, and the application running on your device do NOT need multicast messages for proper communication. An example of when you can disable this option is if your wireless device is a hand-held scanning device communicating to a network via a single protocol system.

Maximum Sleep Duration - This is the listen interval in milliseconds that the client applies to verify if there is traffic on the network addressed to the client. You should not change the default value of 100 milliseconds, since this may interfere with the operation of the network operating system. You can consider using 100-500 milliseconds when operating a wireless powered hand-held terminal connected to a network infrastructure that can handle a less critical latency.

5. Set the data encryption values as necessary by clicking the Encryption button. The following provides a brief description of the encryption parameters.

Enable Encryption - When enabled, the client can encrypt all data for transmission and decipher received encrypted data. However, the sending and receiving devices must be configured with the same encryption key.

Encryption Keys 1, 2, 3, and 4 - RoamAbout devices can be configured with up to four encryption keys. Each key is placed in a specific position (Key 1, Key 2, Key 3, or Key 4). To decipher the data, the receiving wireless device must have the key used to encrypt the data in the same position as the sending device.

Encrypt Data Transmissions Using - Select one of the keys (Key 1, Key 2, Key 3, or Key 4) to encrypt transmitted data. The receiving client must be configured with the same key in the same position to decipher the data.

Refer to the RoamAbout documentation for additional information on each of these parameters. The RoamAbout documentation can be viewed or downloaded from our web site at:
<http://www.Cabletron.com/wireless>

5. RESTRICTIONS

Only install one version of this driver (PPC, PCI, or 68K) on a PowerBook. Installing multiple versions could cause the computer to crash.

The client utilities provided with the RoamAbout PC Card are not compatible with the Macintosh operating system.

You cannot directly monitor wireless network performance from an Apple computer. Instead, you can monitor performance from a Windows system in the wireless network and identify the Apple system as the remote client.

To avoid any interruption, you should not roam between Access Points while a file copy is in progress.

6. REMOVING THE DRIVER

Removing a previously installed driver is mandatory to:

- o Upgrade a driver
- o Change the type of driver, such as when migrating from Apple Classic to Apple Open Transport.

To remove the driver, proceed as follows:

1. Open the RoamAbout Install Disk folder.
2. Double-click RoamAbout Installer to start the installation program.
3. In the Welcome window, click Continue.
4. From the list of options, select Custom Remove. Click all boxes to completely remove the driver. If you have any open applications, you are prompted to close them.
5. Follow the instructions as they appear on your screen and restart your computer.

END OF FILE