

User's Manual

**Wireless 802.11b/g
PCI Adapter**

Q802PWG

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Revision History

Revision	Updated	Notes
1.00	03/08/2006	Initial Release

Introduction

Thank you for purchasing the Wireless Adapter. This Wireless Adapter is easy to use and easy to setup. If you are tired of all those messy wires needed to connect a lap-top to your Home network, and then take your networking to the next level with the Wireless Adapter. You will be able to share files, printers and even your High-Speed Internet access wirelessly.

Package Contents

Make sure the following items came in this package:

- Wireless Adapter
- Wireless Adapter Installation and User's Manual CD

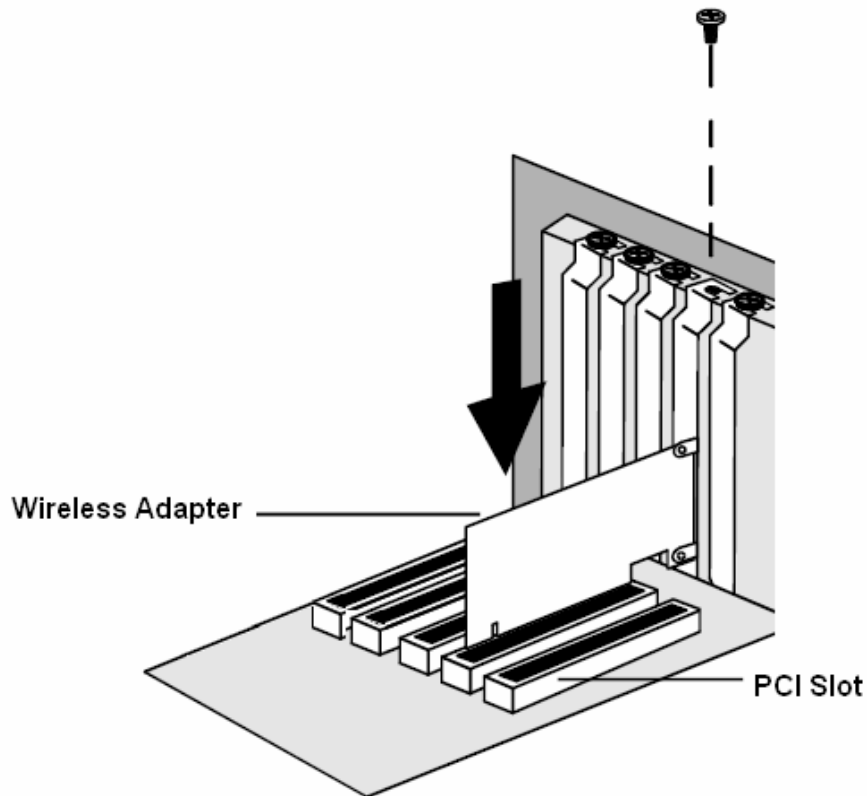
Minimum System Requirements

- Microsoft Windows XP, or Windows 2000 installed
- Microsoft Windows CE ver:4.2 and ver: 5.0

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Connecting the Wireless Adapter

1. Power down the computer.
2. Locate the PCI slot on the motherboard, and carefully insert the PCI Wireless Adapter.
3. Power on the computer.



Installing the PCI Wireless Adapter

Status LEDs

LED Status	MEANING (WLAN card activity)
LED speed blink	Data Transferred / Data Received
LED blink	Scanning for the Access Point
LED off	All other status

Installing the Wireless Adapter

◆ Windows XP SP2:



NOTE:

If you have installed the Wireless Adapter driver before, please uninstall the old version first.

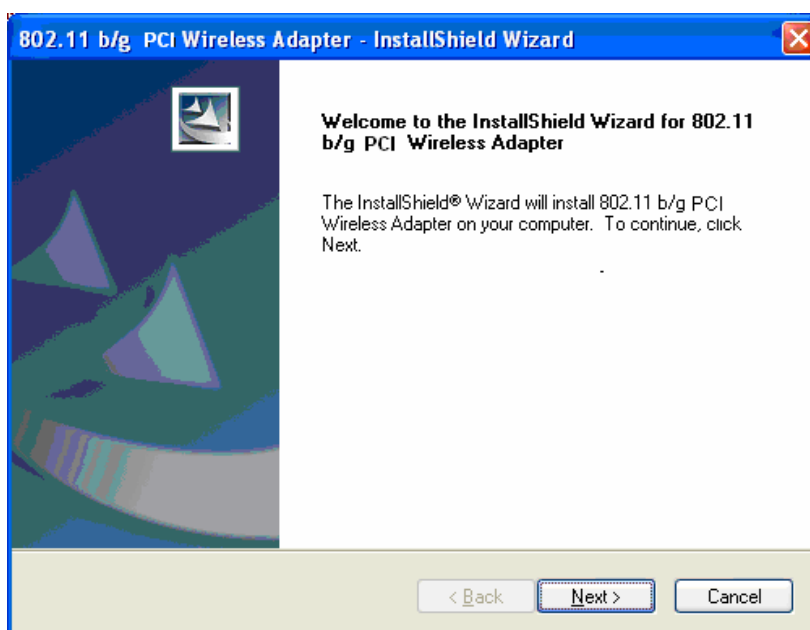
1. After you have installed the Wireless Adapter on your computer will display a **Found New Hardware Wizard** screen, click **Cancel** to continue.



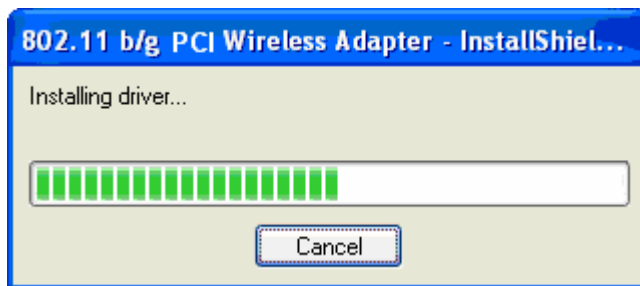
2. Insert the *Wireless Adapter Installation and User's Manual* CD into your CD-ROM, then the installation will be activated automatically. Click the **Driver Install** icon to begin the installation.



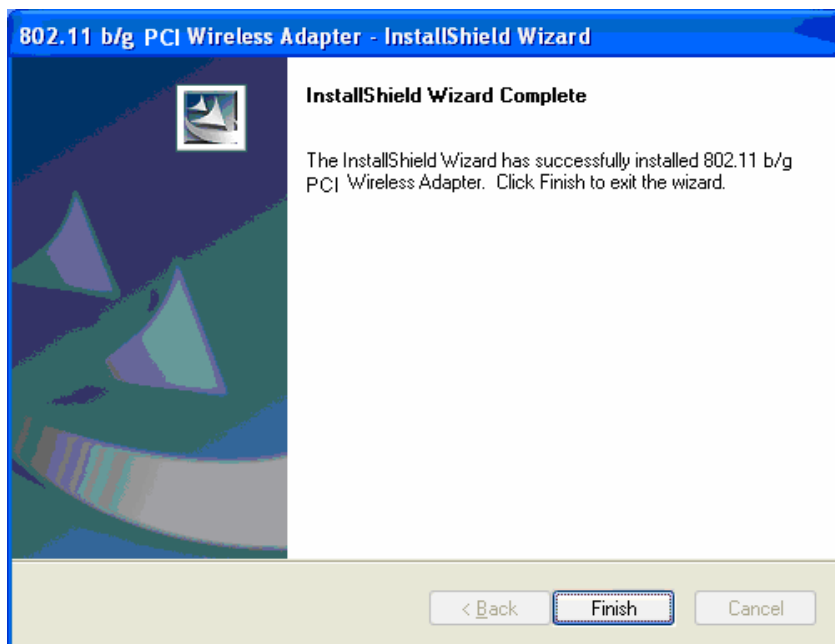
3. **InstallShield Wizard** will install the driver and utility on your system, click **Next** to continue.



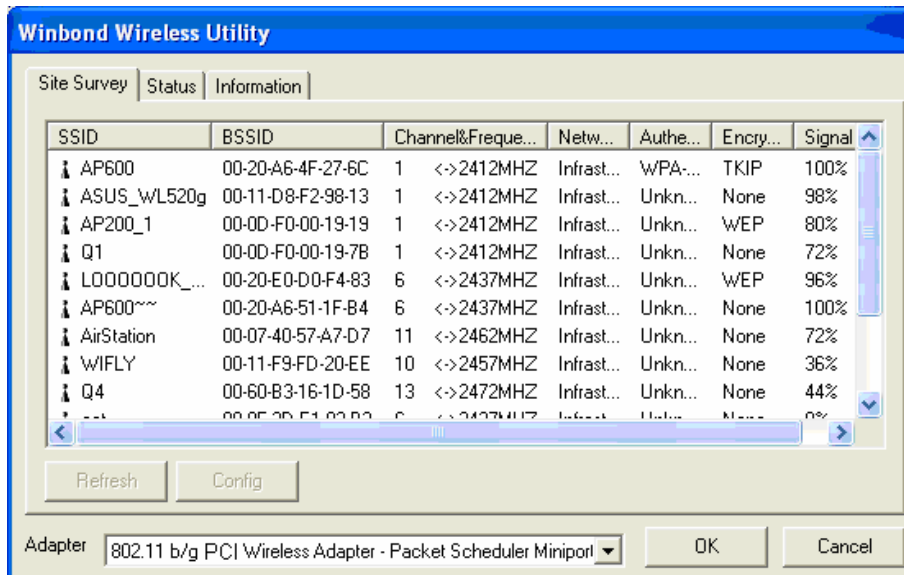
4. Wireless Adapter Driver and Utility are installing.



5. The installation is now complete, please click **Finish**.



6. After you have finished the Wireless Adapter driver and utility installation, your computer will display the **Winbond Wireless Utility** screen, click **Cancel** to continue.



NOTE:

When you complete the installation, the utility icon  will appear on the system tray. **If not**, it means that the installation failed. Please uninstall the driver and repeat the process.

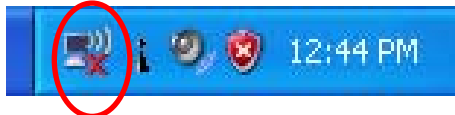
Configuring the Winbond Wireless Utility



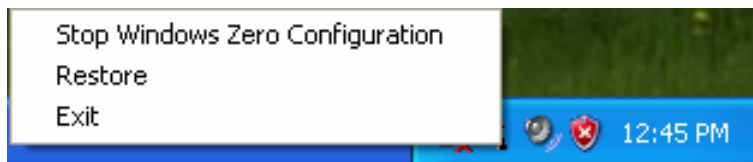
NOTE:

If you have installed the **Windows XP Service Pack 2**. You can use the **Windows Zero Configuration** for Wireless Configuring. Please see the **Windows XP User's Guide**

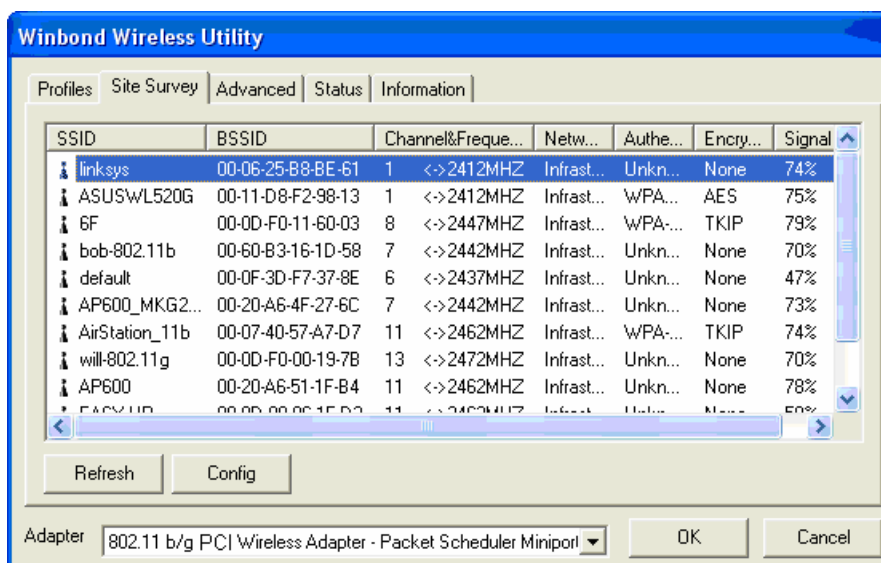
1. On the **Notification Area**, right-click the **Winbond Utility** icon.



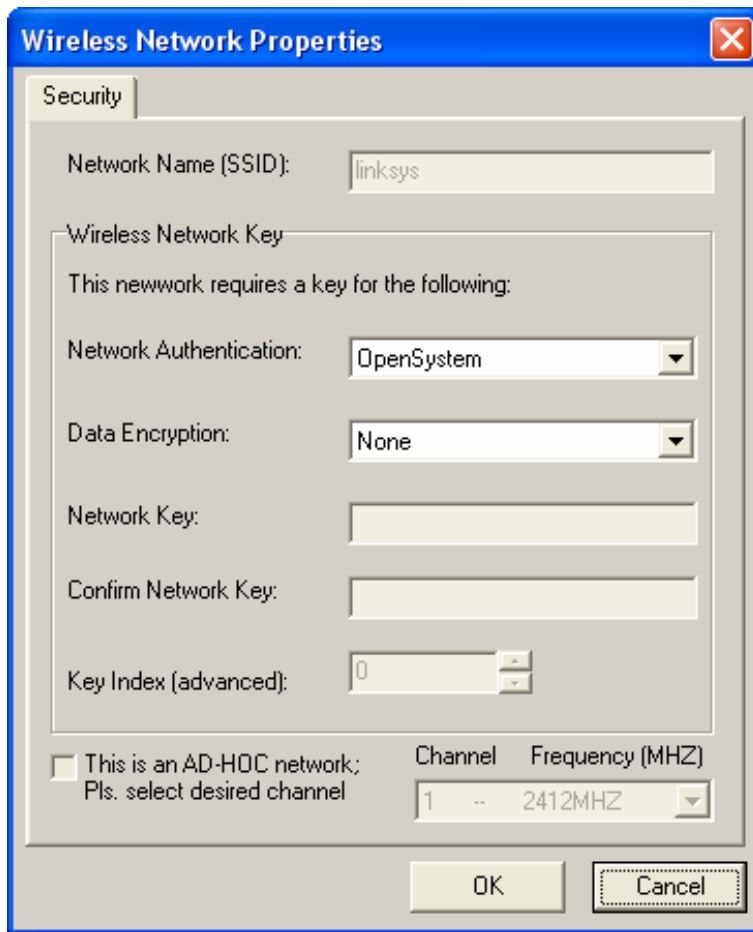
2. **Winbond Utility Selection** screen will be displayed, click **Stop Windows Zero Configuration**.



3. Double-click the utility icon  in your system tray to begin the utility configuration. Select **Site Survey Tab**, all available Access Points would be listed. Click on the desired Access Point, and click the **Config** button for Wireless configuring.

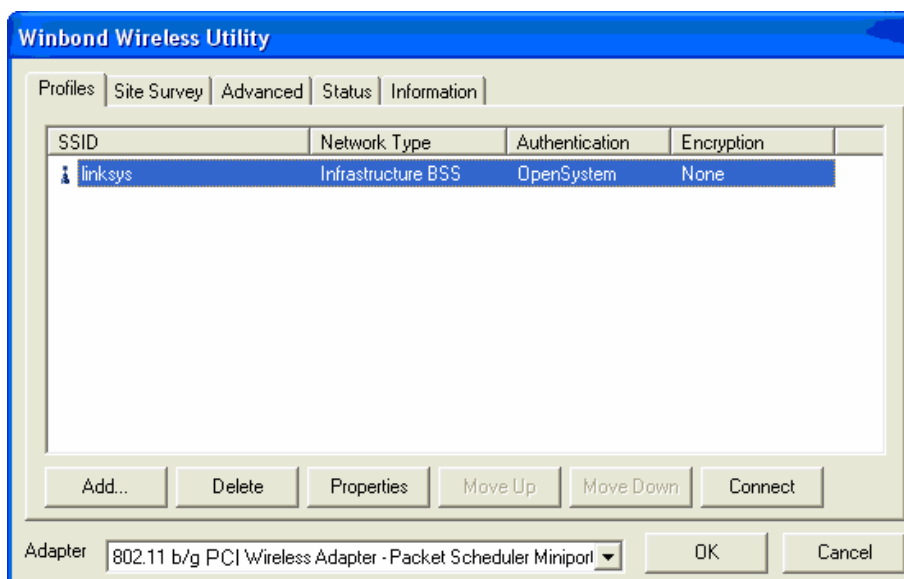


4. On the **Wireless Network Properties** screen, you may set Network Name (SSID), Wireless Network Security Key or AD-HOC network.



The **Wireless Network Properties** dialog box is shown with the **Security** tab selected. The **Network Name (SSID)** is set to **linksys**. The **Wireless Network Key** section indicates that the network requires a key. The **Network Authentication** is set to **OpenSystem** and **Data Encryption** is set to **None**. The **Network Key** and **Confirm Network Key** fields are empty. The **Key Index (advanced)** is set to **0**. At the bottom, there is a checkbox for **This is an AD-HOC network; Pls. select desired channel**, which is currently unchecked. Below this checkbox, the **Channel** is set to **1** and the **Frequency (MHZ)** is set to **2412MHZ**. **OK** and **Cancel** buttons are at the bottom right.

5. Click on the desired profile, and click the **Connect** button to take effect.



The **Winbond Wireless Utility** window is shown with the **Profiles** tab selected. It displays a table of wireless profiles:

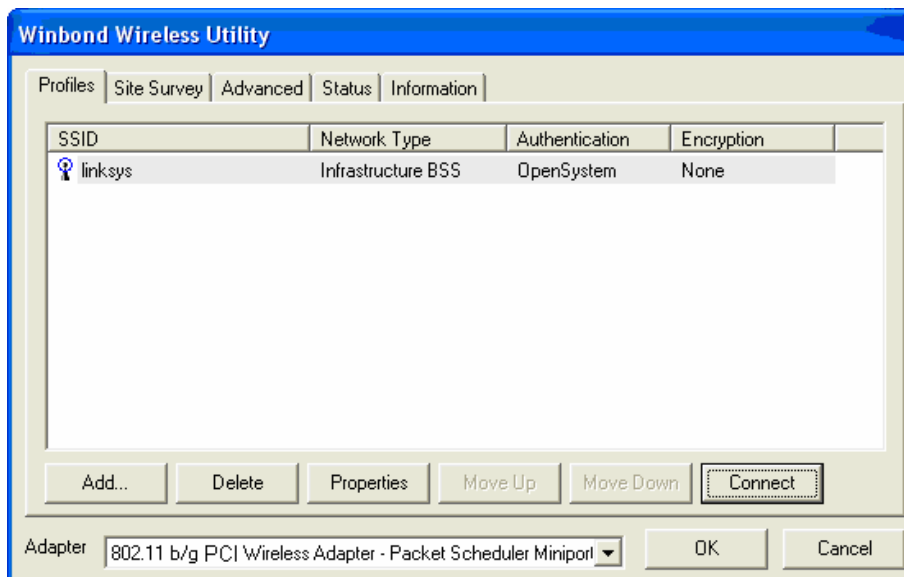
SSID	Network Type	Authentication	Encryption
linksys	Infrastructure BSS	OpenSystem	None

Below the table are buttons for **Add...**, **Delete**, **Properties**, **Move Up**, **Move Down**, and **Connect**. At the bottom, the **Adapter** is set to **802.11 b/g PCI Wireless Adapter - Packet Scheduler Miniport**, with **OK** and **Cancel** buttons.

Configuration

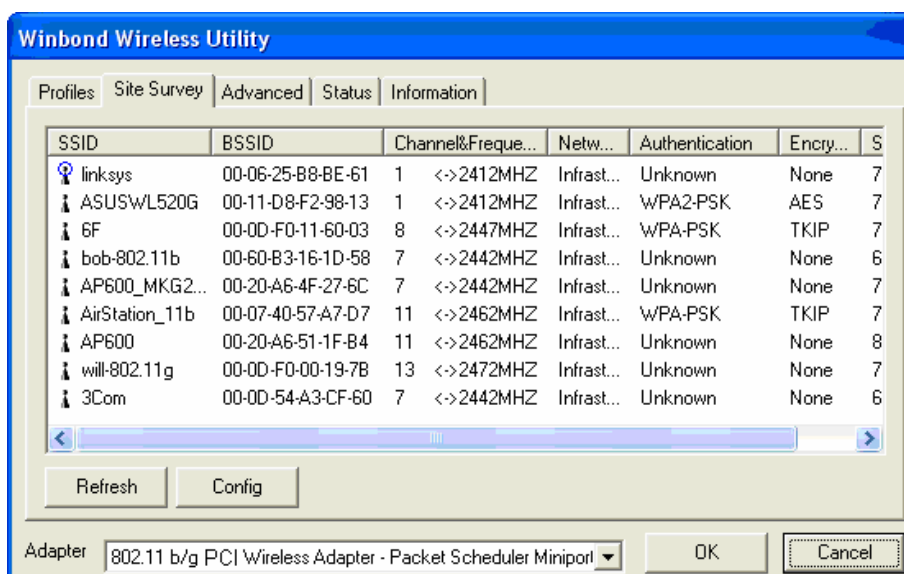
● Profile

The **Profile Tab** allows you to set values for all parameters by selecting a previously defined profile. To create a profile, click **Add**, type a profile name and set the corresponding parameters. If one of the profiles is no longer used, you may remove it by clicking the **Delete** button. After changing parameters, click the **Connect** button to take effect. You can have multiple profiles and modify the profile at any time.



● Site Survey

Site Survey Tab lists the features of the available Access Points within range of the Wireless Adapter's signal. Click on the desired Access Point, and click **Config** for Wireless Configuration. You may click **Refresh** to refresh the list.



- **Advance**

The Configuration Utility also offers the advanced configuration for user to set the Wireless Adapter under certain network environment. These advanced options include RTS Threshold, Fragmentation Threshold, Preamble Type, Tx Rate and Power Save.

- **Status**

- **Network Name**

The field shows the association status to available Access Point with SSID of the Access Point.

- **Link Status**

Shows the whether the link is Connect or Disconnected.

- **Current Channel**

Shows the channel on which the connection is made.

- **Current Speed**

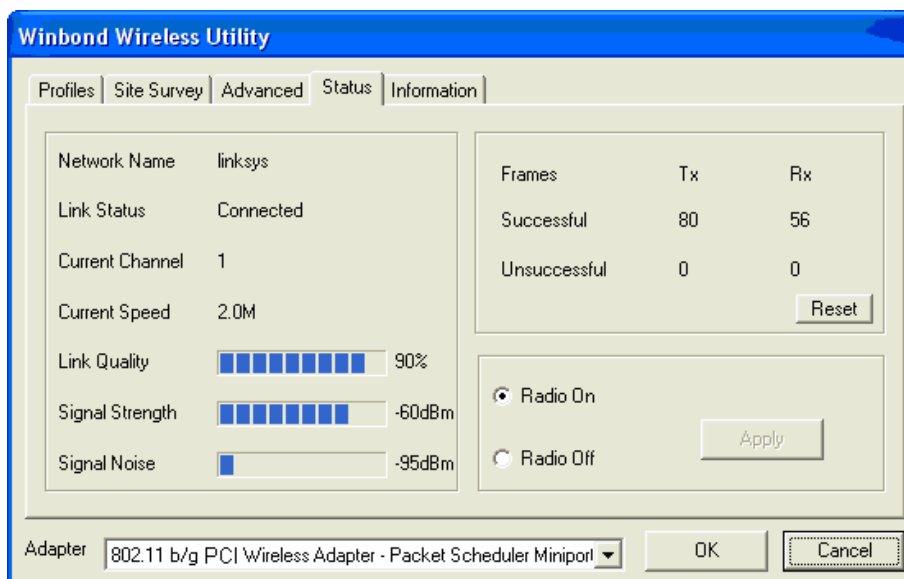
Shows the highest transmit rate of the current association.

- **Link Quality / Signal Strength**

The Link Quality and Signal Strength bar graph is only active when the node is in Infrastructure Mode. The bar graph displays the quality and strength of the link between the node and its Access Point.

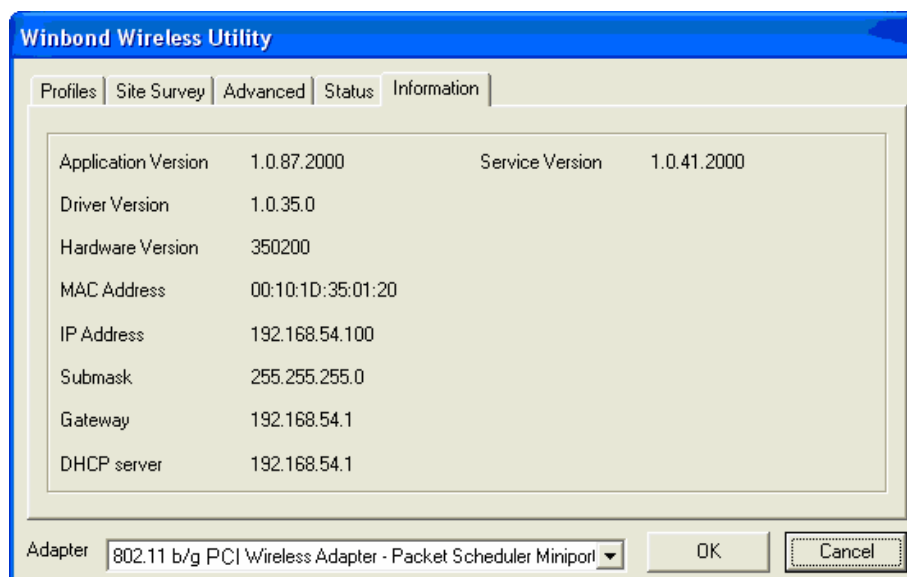
- **Signal Noise**

This displays the noise level of the link between the node and its Access Point.



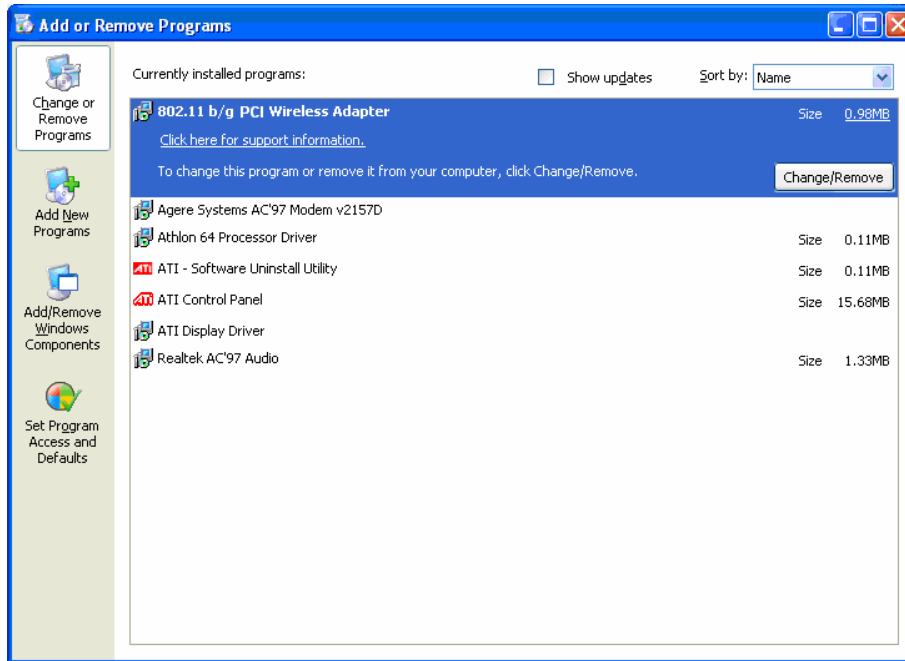
- **Information**

About Tab shows the product version including the detail of Configuration Utility, Driver, and NIC MAC Address.

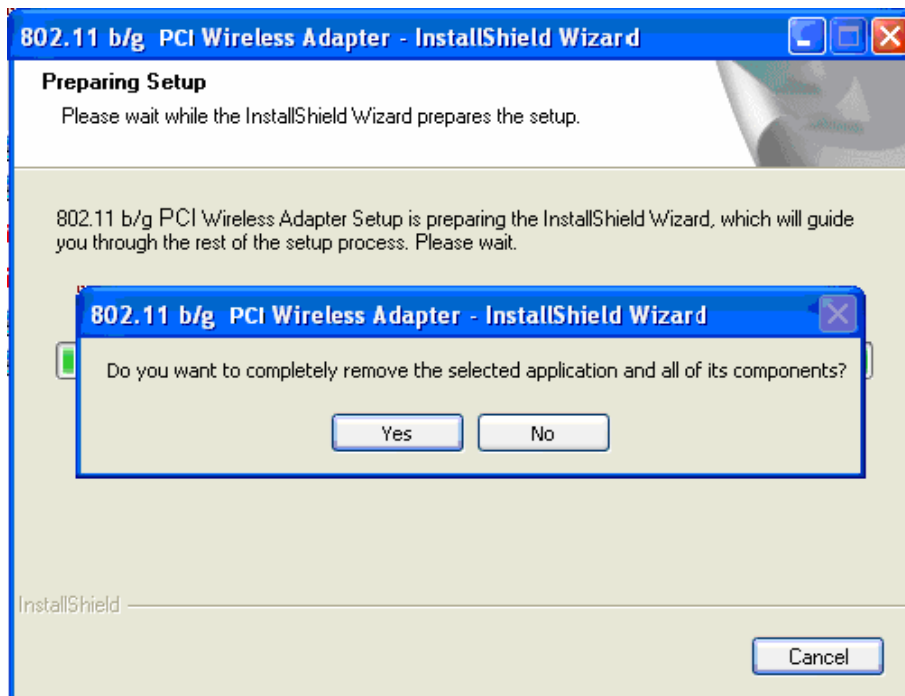


Uninstalling the Wireless Adapter Driver and Utility

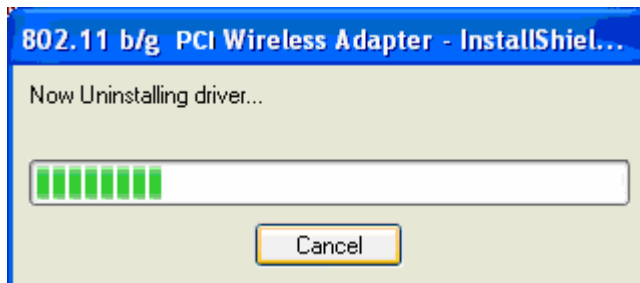
1. For uninstalling the Wireless Adapter, please go to: **Start → Settings → Control Panel → Add or Remove Programs → Winbond WLAN** under Windows environment. Then click **Remove**.



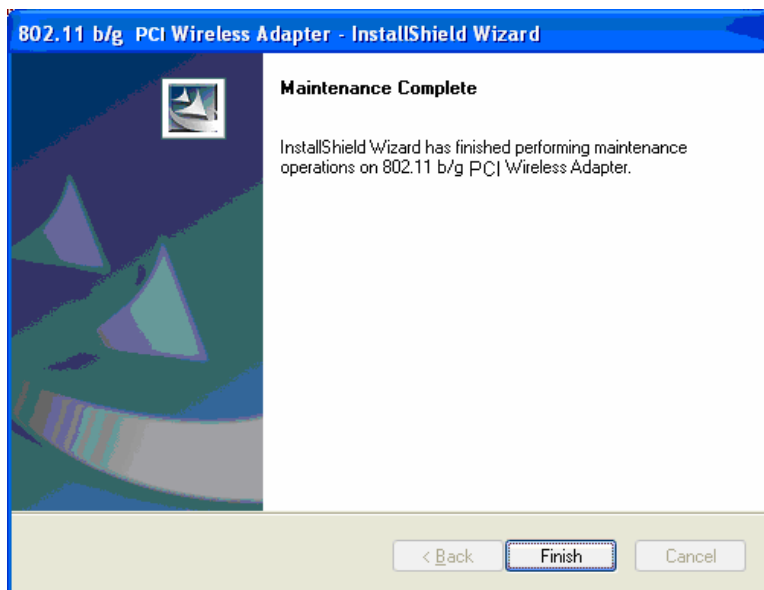
2. On the next screen, click **Yes** button to accept automatically uninstall for Wireless LAN Driver and Utility.



3. **InstallShield Wizard** will uninstall the driver and utility automatically.



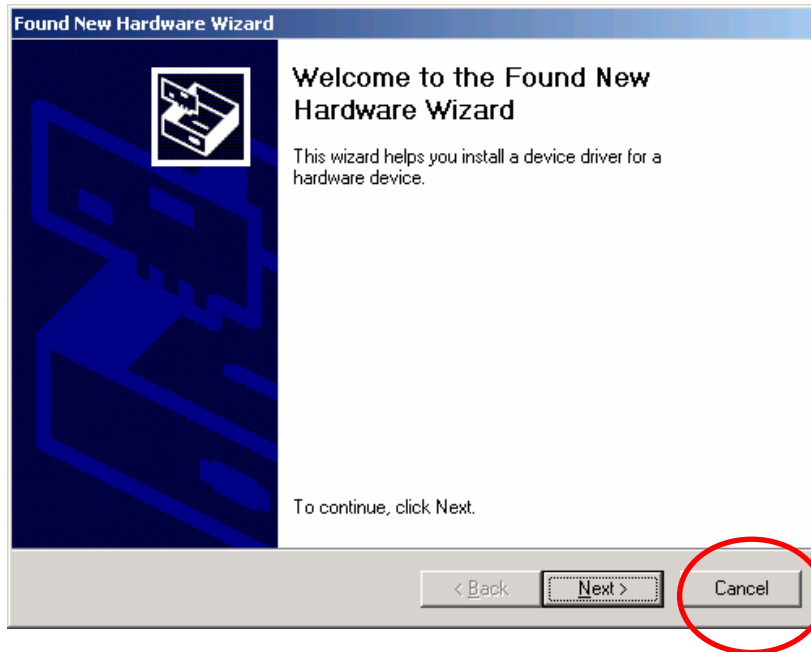
4. The un-installation is now complete, please click **Finish**.



5. The **Wireless Adapter** can now be safely removed from the system when the un-installation is done.

◆ Windows 2000:

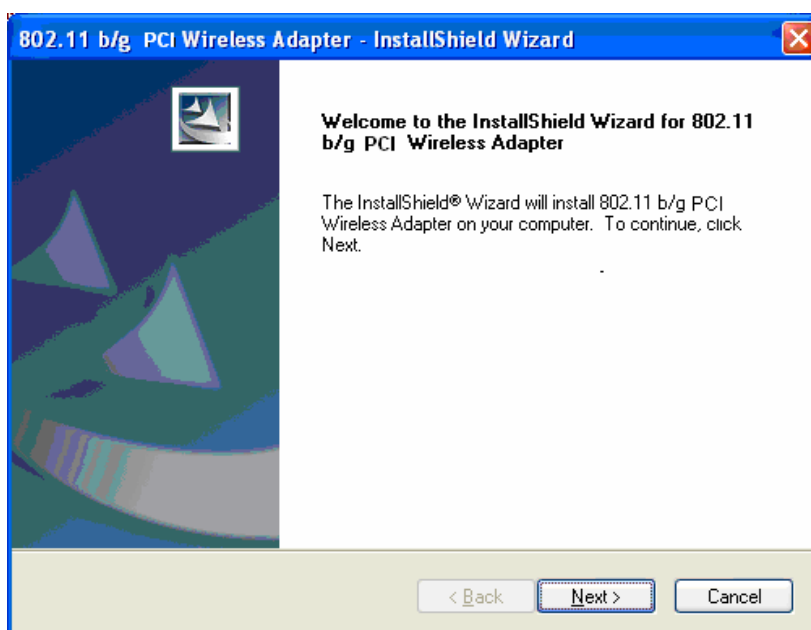
1. After you have installed the Wireless Adapter on your computer will display a **Found New Hardware Wizard** screen, click **Cancel** to continue.



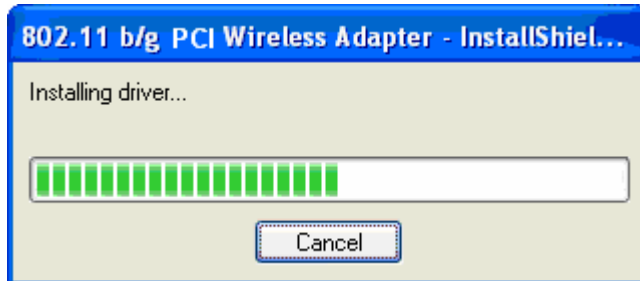
2. Insert **Wireless Adapter Installation and User's Manual** CD into your CD-ROM; then the installation will be activated automatically. Click the **Driver Install** icon to begin the installation.



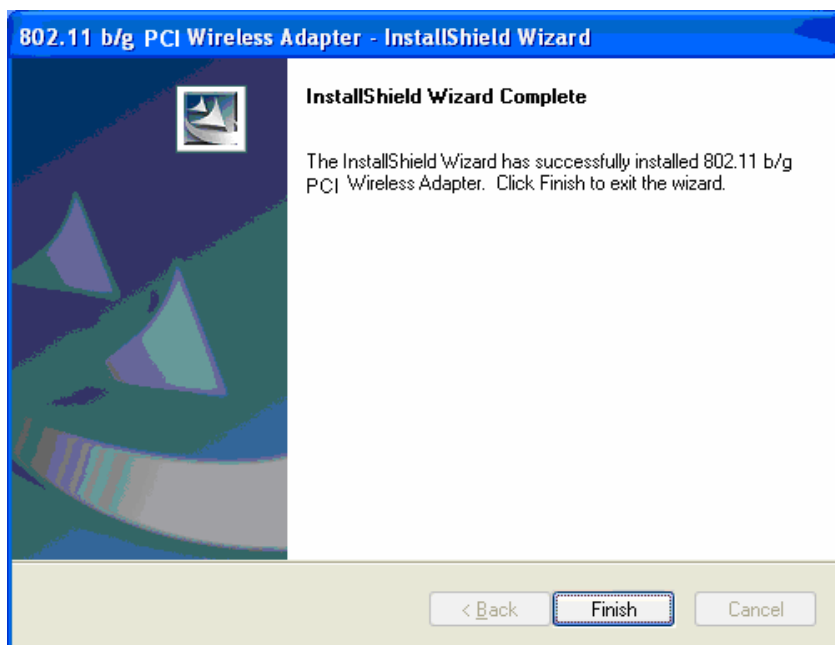
3. **InstallShield Wizard** will install the driver and utility on your system, click **Next** to continue.



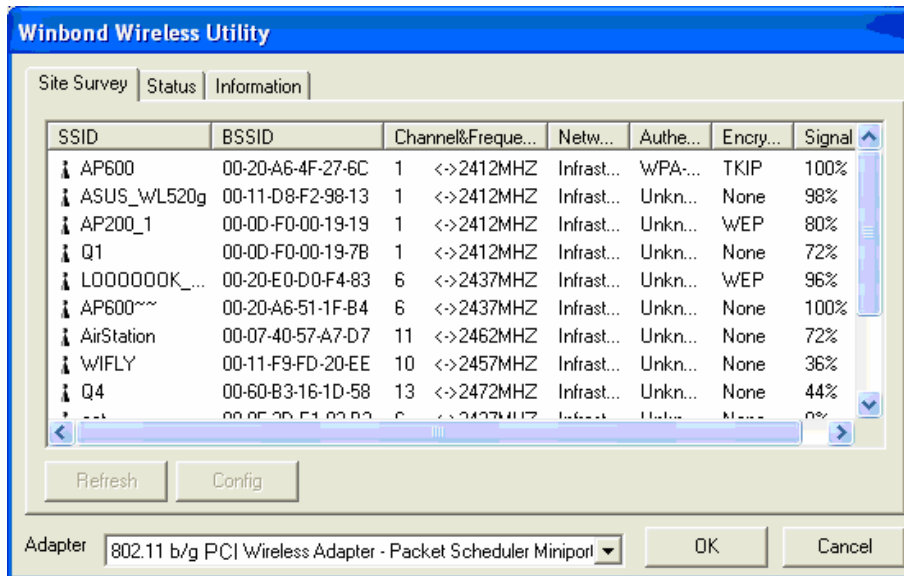
4. Wireless Adapter Driver and Utility are installing.



5. The installation is now complete, please click **Finish**.



6. After you have finished the Wireless Adapter driver and utility installation, your computer will display the **Winbond Wireless Utility** screen, click **Cancel** to continue.

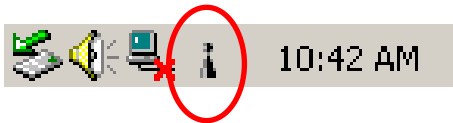


NOTE:

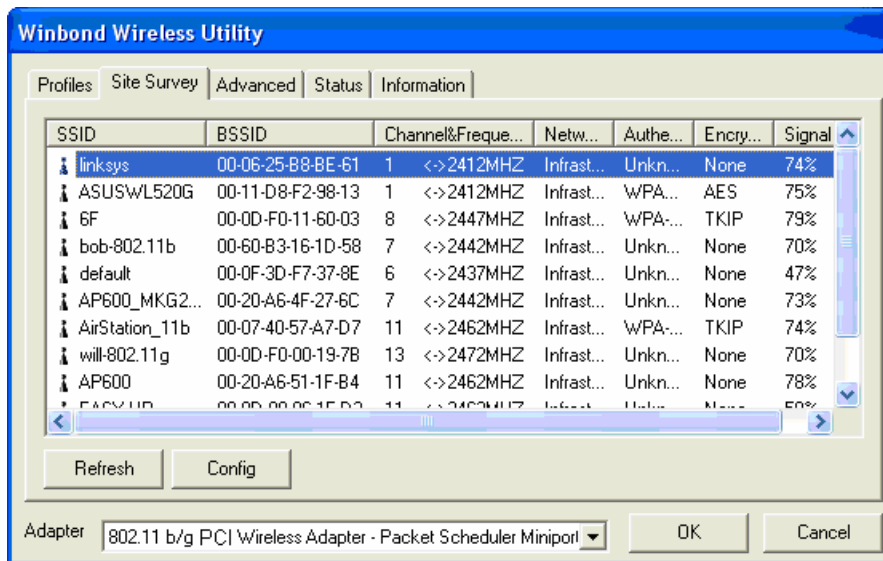
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Configuring the Winbond Wireless Utility

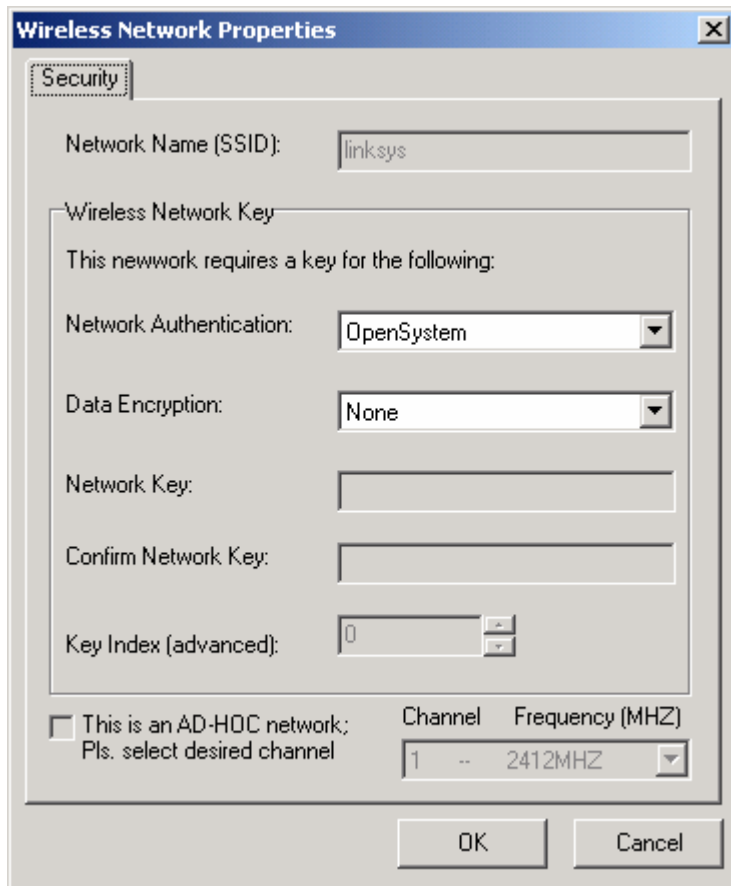
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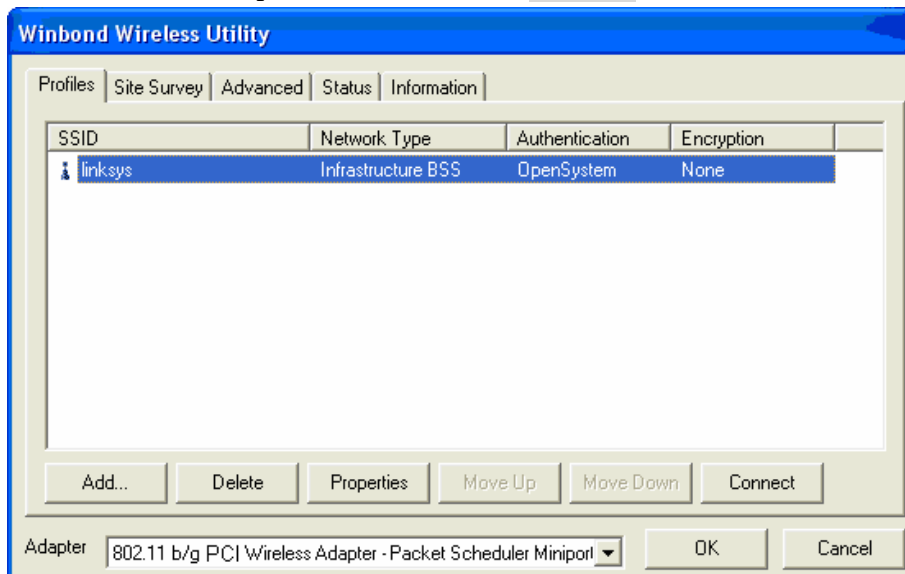


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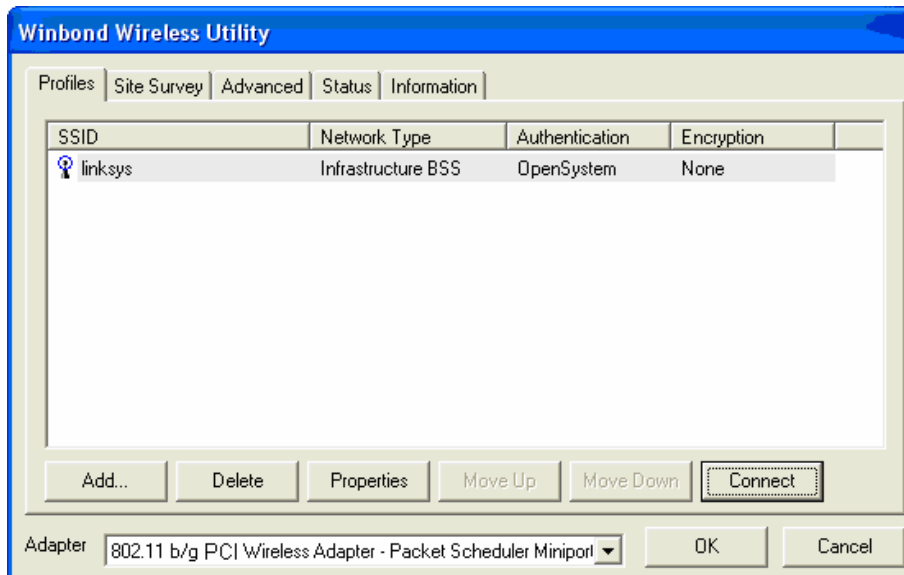
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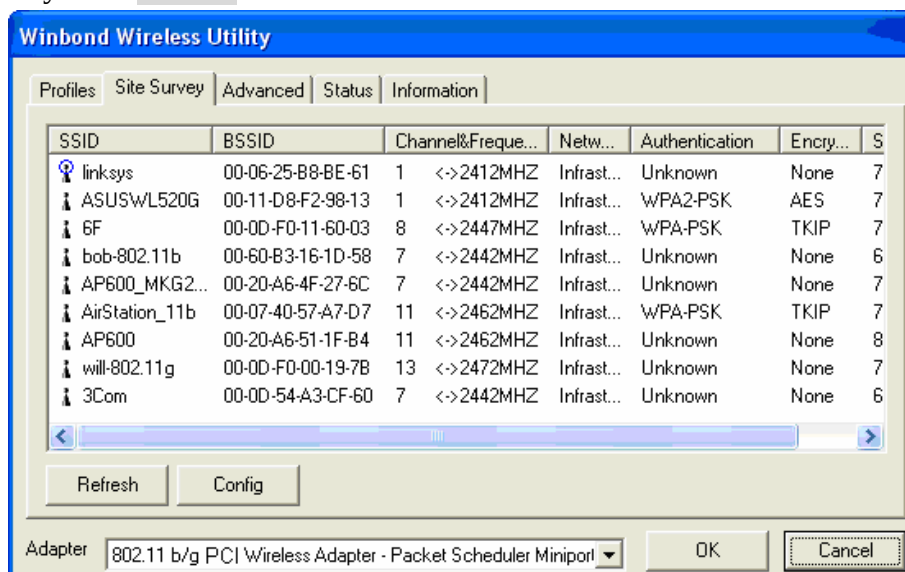
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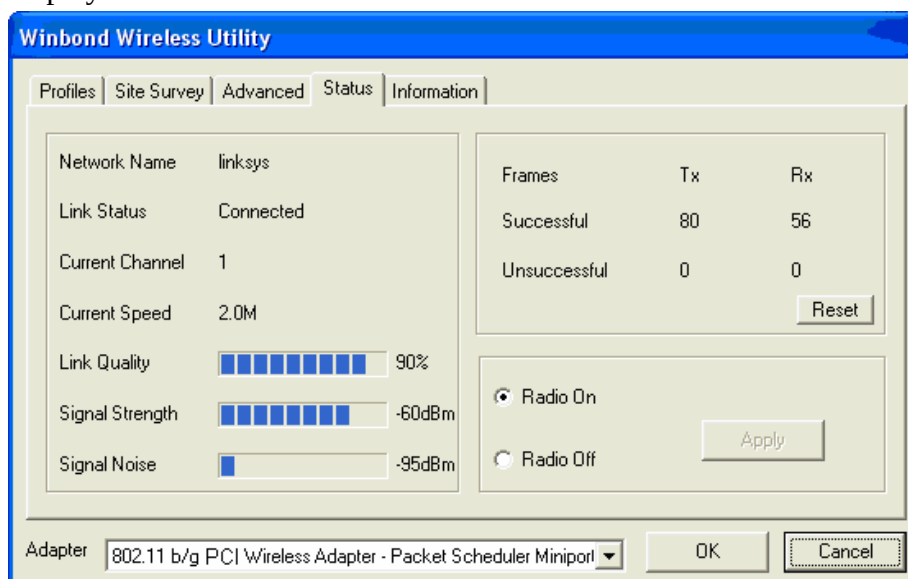
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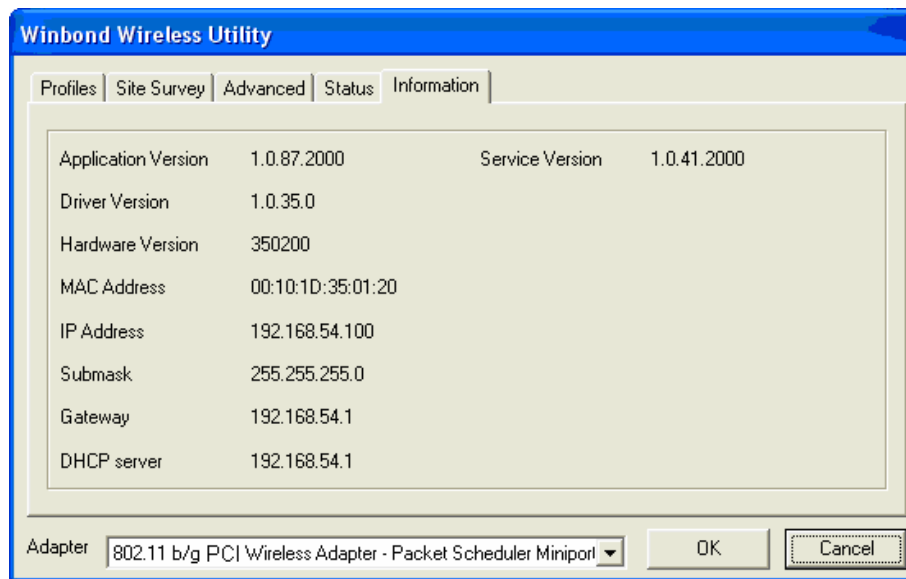
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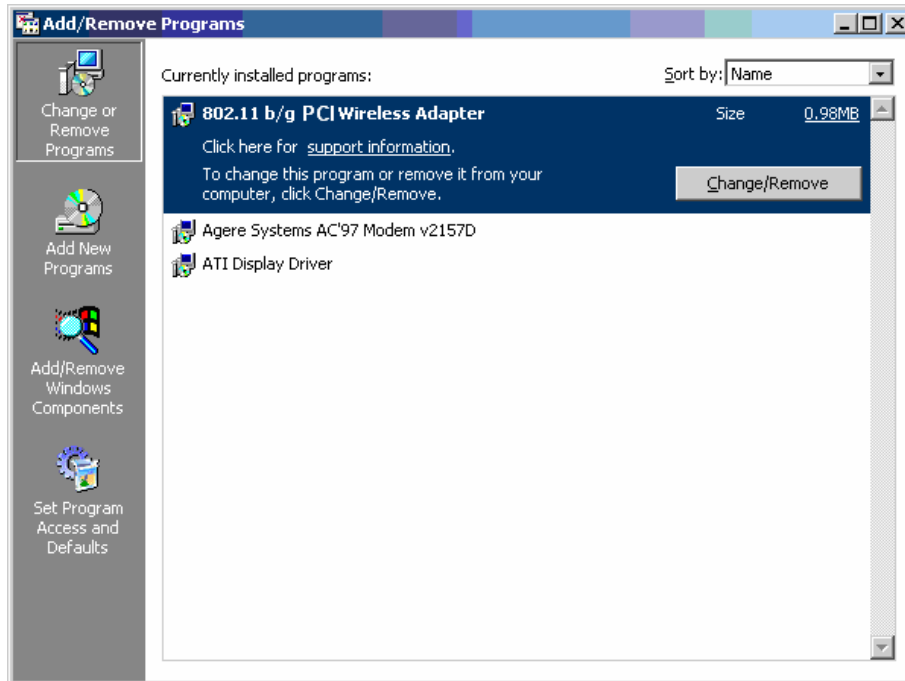
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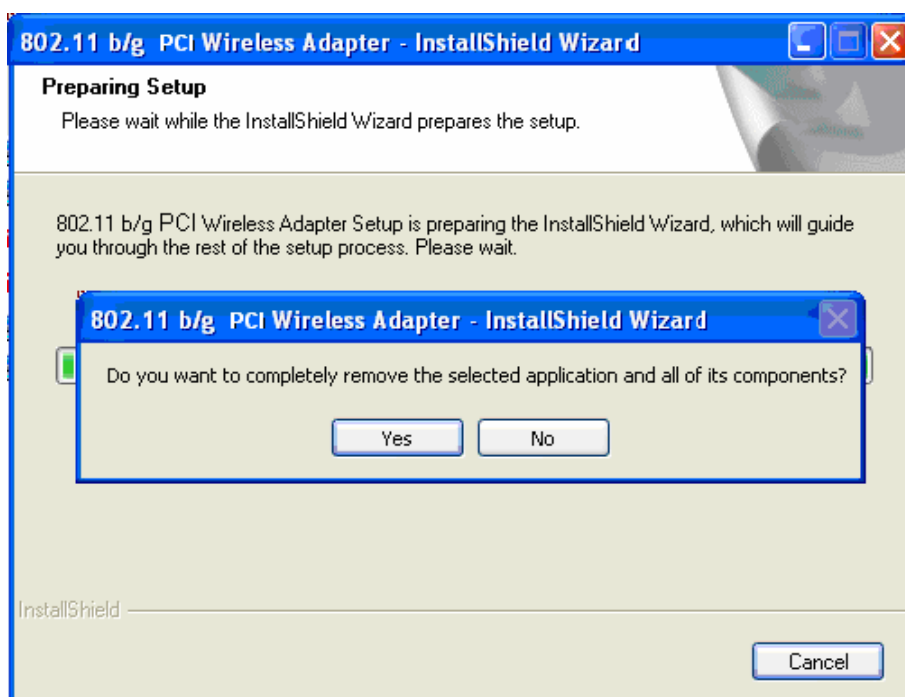


Uninstalling the Wireless Adapter Driver and Utility

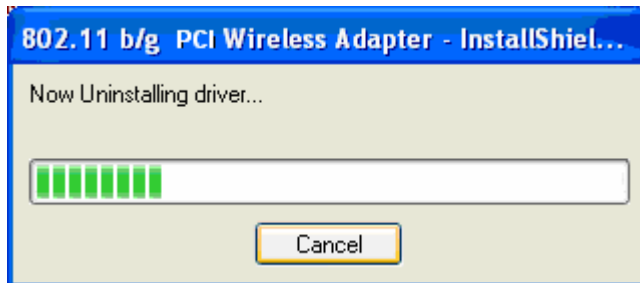
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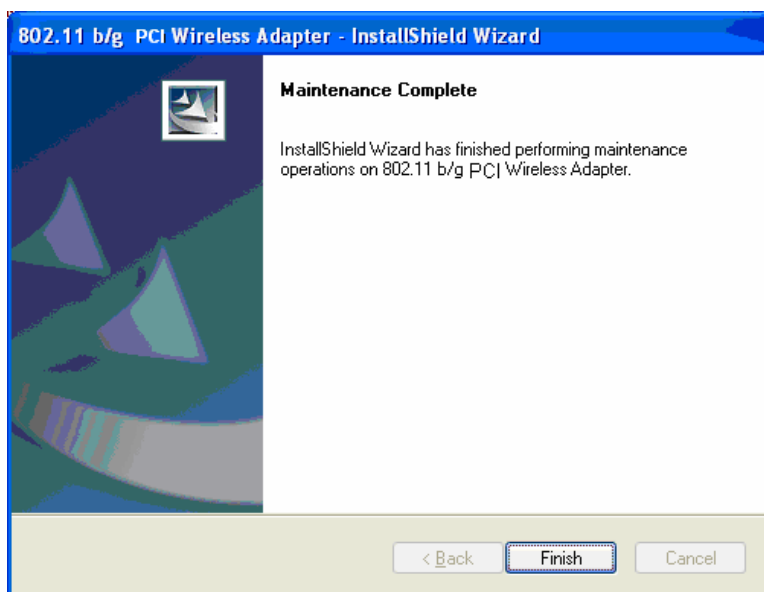
2. On the next screen, click **Yes** button to accept automatically uninstall for Wireless LAN Driver and Utility.



3. **InstallShield Wizard** will uninstall the driver and utility automatically.



4. The un-installation is now complete, please click **Finish**.



5. The **Wireless Adapter** can now be safely removed from the system when the un-installation is done.

Trouble shooting

PING

This section discusses possible solutions using ping command to find your problem if you can't connect to the network.

1. Check if you have a valid IP address
2. Test if your TCP/IP works. Under MS-DOS (command prompt), type "ping local-host". If you didn't receive a reply, then you need to re-install your TCP/IP. Proceed to next step if you have received replies.
3. Using the same procedure, try to ping your Wireless Adapter's IP. If the Ping command fails, check the following:
 - Your WLAN is connected
 - Check that your driver is correctly installed.

Checking Valid IP Addresses

There are restrictions on which IP and addresses you can and cannot use. Some IP addresses are reserved for testing, multicasting and some IP are restricted by your ISP.

Following IP addresses **cannot** be used:

- **127.x.x.x** – this is a loop back address, used for testing
- **0.0.0.0** – this IP address represent the host address
- **255.255.255.255** – this is local broadcast address
- First portion of IP cannot exceed 224, that is, IP addresses which is in the range of 224~239.x.x.x is not valid. This range of IP is for multicasting. IP range from 240~255.x.x.x are reserved IP addresses and cannot be used.
- 0 or 255 in host ID portion of your IP are not valid. This represent local host or broadcast address for your class of IP

IP has five classes, namely class A, B, C, D and E. For each class, the host ID portion in the IP field is different for each of the classes. Figure below illustrate this.

Class A:	1 ~ 127	.		Host ID
Class B:	128 ~ 191	.	X	Host ID
Class C:	192 ~ 223	.	X	X
Class D:	224 ~ 239	.	Used for Multicasting (no Host ID)	
Class E:	240 ~ 255	.	Reserved IP address	

Host ID cannot be all 0's or all 255's.

Note: X denote don't cares in the above example.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. "Qcom Technology Inc. declares that Q802PWG is limited in CH1~CH11 by specified firmware controlled in USA."

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.