

802.11g USB2.0 WLAN Adapter

User's Guide

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Regulatory Information

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.

FCC Caution: To assure continued compliance, (example - use only shielded interface cables when connecting to computer or peripheral devices) any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. 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.

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1. Welcome

Thank you for purchasing our 802.11g USB 2.0 WLAN Adapter, and welcome to Wireless LAN—the easy way to wireless networking.

This user's guide introduces to you the 802.11g USB 2.0 WLAN Adapter and describes the most common configurations, which will help you connect to your network easily.

Please read this manual to get familiar with the IEEE802.11g Wireless LAN. This manual contains detailed instructions in operation of this product. Please keep this manual for future reference.

As this product is designed to run under Microsoft Windows, it is recommended that to be installed by people who are familiar with the installation procedures for network operating systems under Microsoft Windows.

1.1 Kit Contents

The 802.11g USB 2.0 WLAN Adapter kit should include the following items: One 802.11g USB 2.0 WLAN Adapter with USB cable, one CD and one Quick Start Guide.

- a. One 802.11g USB 2.0 WLAN Adapter



- b. One USB cable



- c. One Software CD including:
 1. Utility & Driver Installation Software
 2. Acrobat Reader
 3. User Manual PDF File
- d. Quick Start Guide

If any of the items mentioned above are damaged or missing, please contact your distributor.

1.2 Main Features of 802.11g USB 2.0 WLAN Adapter

A. Status LED



- **Off:** Power Off.
- **Blinking:** The USB adapter is powered on but no wireless connection is made yet.
- **Steady Green:** Wireless connection is linked.

B. USB Connector



802.11g USB 2.0 WLAN Adapter features:

1. High-speed wireless connection, up to 54 Mbps
2. IEEE802.11g (DSSS) standard for 2.4 GHz Wireless LAN
3. Plug-and-Play installation
4. Solid design with an integrated antenna
5. Full mobility and seamless cell-to-cell roaming
6. Automatic scale back at per packet level

802.11g USB 2.0 WLAN Adapter supports:

1. Automatic load balancing for optimized bandwidth
2. Advanced power management
3. Windows®98SE, ME, 2000 and XP (subject to availability).

1.3 Wireless Networking Scenarios

As our 802.11g USB 2.0 WLAN Adapter is interoperable and compatible with other IEEE 802.11g compliant products from other manufacturers, it offers you the most freedom to establish your ideal wireless network. Therefore, after installing 802.11g USB 2.0 WLAN Adapter, you can connect your computer to:

- a. A Peer-to-Peer Workgroup of 802.11g compliant wireless devices.
- b. A LAN (Local Area Network) constructed by Access Point(s) or other 802.11g compliant systems.
- c. Share your Internet access by using just one connection, share printers and other peripheral devices, share data and image files between networked PCs, play multi-player games, and use other network enabled sharing resources.

A. Peer-to-Peer Networking:

An Ad Hoc Network could be easily set up with some PCs and this 802.11g USB 2.0 WLAN Adapter or our other WLAN devices. Therefore, it is very suitable to build a network for temporary use, such as for demonstration in exhibition, for new sales point/branch use and alike.

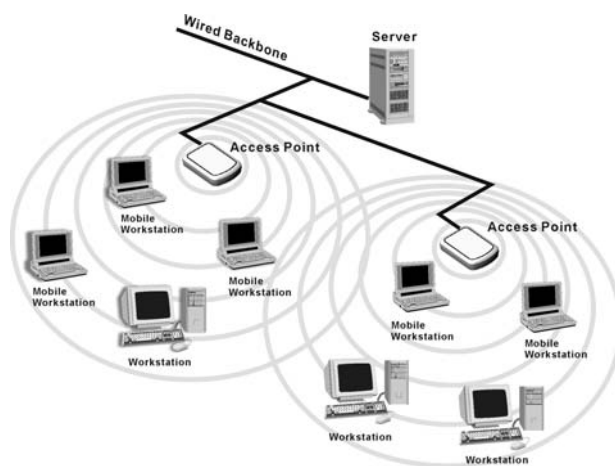


B. Cooperate LAN (Local Area Networking):

With some 802.11g USB 2.0 WLAN Adapters and Access Points, it is easy to construct a LAN with access to Internet for enterprise use.

The construction is quite easy that the 802.11g USB 2.0 WLAN Adapter and Access Point will automatically work at the most suitable frequency when Access Point is set within the proper range.

In addition, commonly manufacturers will bundle the Site-Survey tool for users to check the communication quality.



1.4 Advantages for Using Wireless Network

802.11g USB 2.0 WLAN Adapter can wirelessly transmit and receive data, minimizing the need for wired connections, at a speed of up to eleven megabit per second. With the 802.11g USB 2.0 WLAN Adapter you can locate your PC wherever you want without wires and cables.

The 802.11g USB 2.0 WLAN Adapter provides LAN users with an access to real-time information anywhere in their organization. The mobility provides effectiveness and efficiency, which are not available under wired networks.

The 802.11g USB 2.0 WLAN Adapter configuration is easy to switch between peer-to-peer networks, suitable for a small number of users, and full infrastructure networks of thousands of users that allow roaming around a broad area.

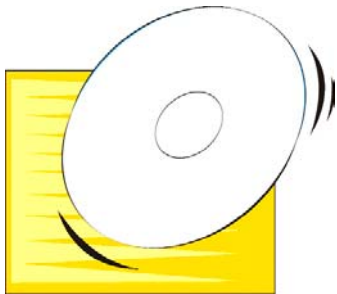
Therefore, you may see many advantages for adopting Wireless Networking as follows:

- *Less Space Limits:* The 802.11g USB 2.0 WLAN Adapter provides access to network services without wires; therefore, it gives you more freedom to allocate and style your living and working space. In addition, in some areas where is hard or expensive to connect to wired networks, such as historic buildings, classrooms or mobile connectivity, then you can count on wireless networking.
- *Flexible Workgroups and Lower Cost:* For workspaces that are frequently reconfigured for temporarily use such as demo in exhibitions, wireless networking is easy to set up of lower total cost—and all equipments are recyclable. You do not have to remove the old wires and then build up the new ones again and again.
- *Networked Conference Rooms:* Users can access the network as they move from a meeting to another, getting the access to information/data and the ability to communicate decisions while “on the go”.
- *Ad Hoc Networking:* On site consulting and small workgroups may increase productivity with quick network setup and collaboration software.
- *Branch office Networking:* With an Access Point to bridge between the LAN and Internet, wireless networking provides an easy to install, use and maintain network for a remote or sales office.
- *Campus-Wide Network Mobility:* The roaming capabilities allow enterprise to set up easy to use wireless networks that cover the entire campus transparently.

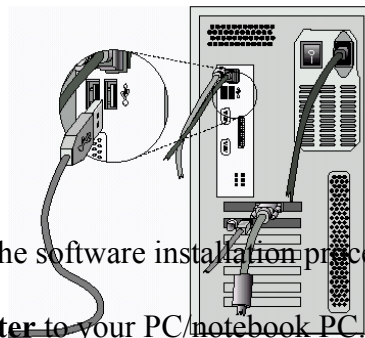
2. Quick Start to Wireless Networking

2.1 Installation

1. **Insert the installation CD.** It automatically starts the setup program for WLAN Utility and Driver.



2. **Follow the installation wizard** to complete the software installation process and restart your computer..
3. **Connect the 802.11g USB 2.0 WLAN Adapter** to your PC/notebook PC.



*able to connect the 802.11g USB 2.0 WLAN
book during normal operation.*

4. Operation System will detect new device and verify the driver automatically.

Note! *During installation procedure, each operating system may prompt different specific options:*



Windows 98SE: The system will request the original Windows CD during the installation process. When the installation is finished, you'll have to restart your computer.

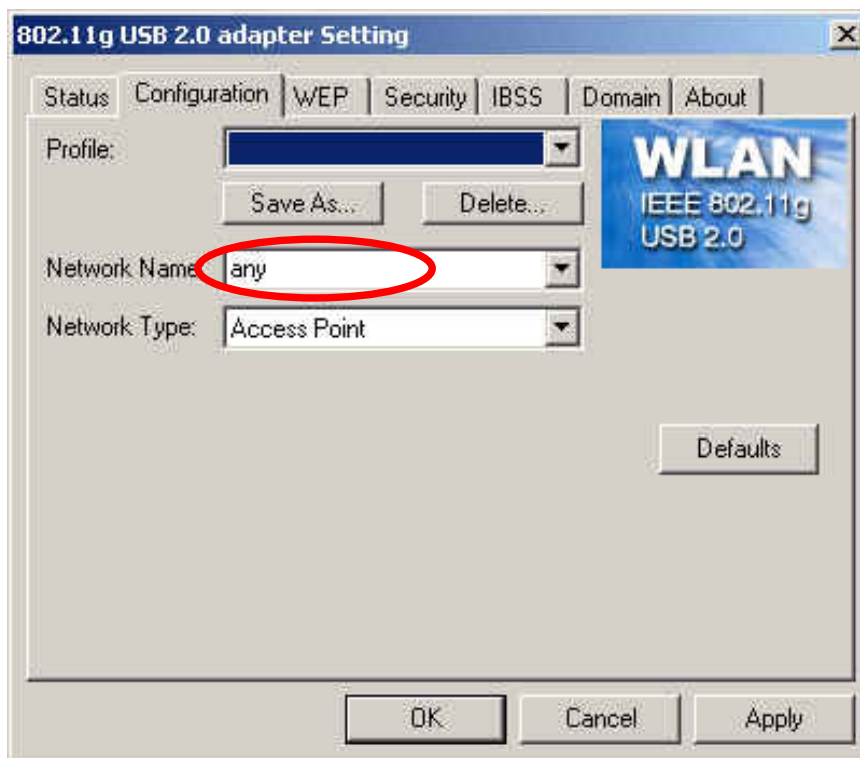
Windows Me: Please restart your computer when the installation is finished.

Windows 2000/XP: Select "Install the software automatically" when the window with this option appears, and then click "Next" to continue installation.

Note! *In Windows XP, it is recommended that you use the 802.11g USB2.0 Utility. Please check Chapter 3.1.2 to disable the Zero-Configuration before using the Utility.*

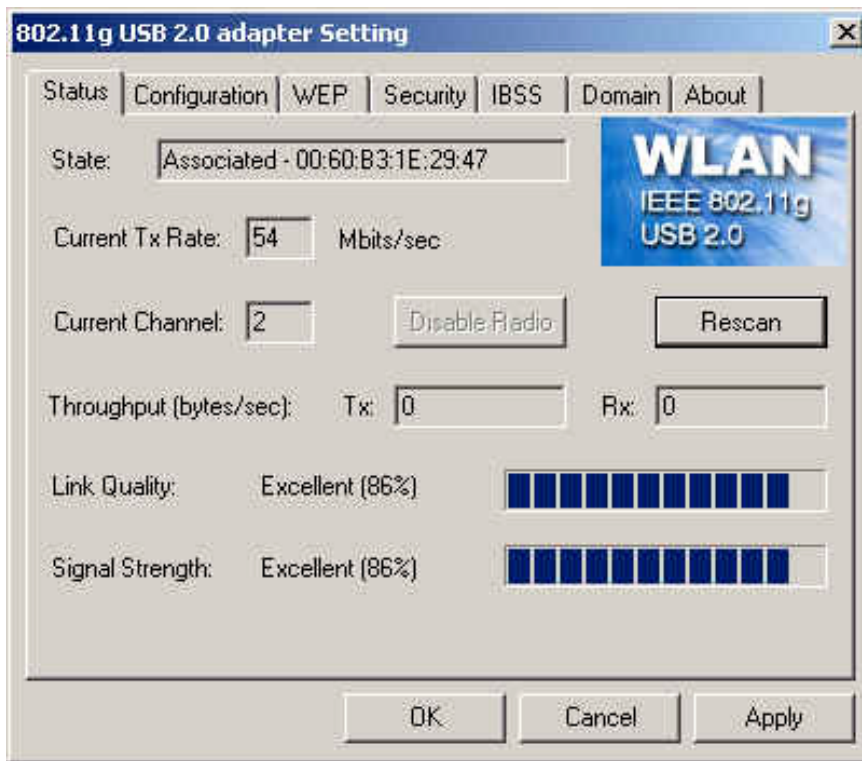
2.2 Connecting to an Existing Network

1. Go to windows **Startup > Program > 802.11g USB2.0 adapter Utility > 802.11g USB2.0 adapter Utility** to open the utility. The 802.11g USB2.0 adapter Utility window appears. You can also see a small red icon  in Windows System Tray.
2. Key in “**Any**” for Network name and click “Apply”. The **802.11g USB2.0 adapter** will search an available network automatically. Once connected, the utility icon will become .



- 3 If you would like to connect with certain Access Point, you may contact with MIS administrator for Network Name.

- 4 Go to “**Status**” Tab to view network link status.



5. For details of each tab in 802.11g USB2.0 WLAN Utility, please read User's Guide Chapter 4.

3. Step-by-Step Installation Guide

This section will lead you through the installation of 802.11g USB 2.0 WLAN Adapter and IEEE802.11g WLAN software in detail. People who are familiar with the installation and settings of wireless device may refer to quick start guide to establish a network in a snap.

To establish your wireless network connection, the following steps should be executed:

1. Install the software by using the installation CD.
2. Install the 802.11g USB 2.0 WLAN Adapter.
3. Install the required network protocols to communicate with your network.

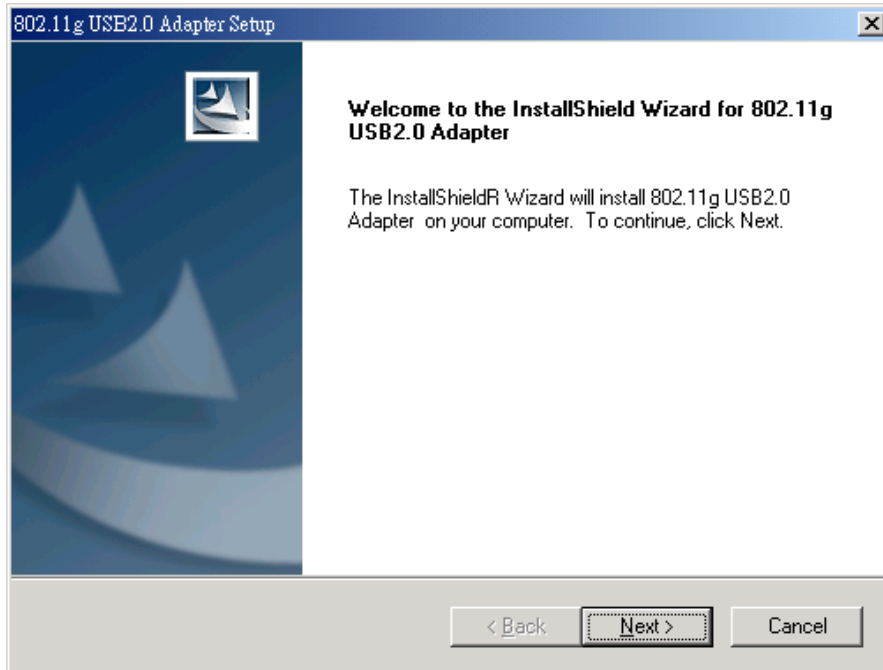
Mostly, you will need to set the TCP / IP protocol.

The product is designed to operate under Windows 98SE, ME, 2000, XP and Windows CE (subject to availability). The installation procedure is about the same. Please follow up the installation wizard that provided by your system to install the software.

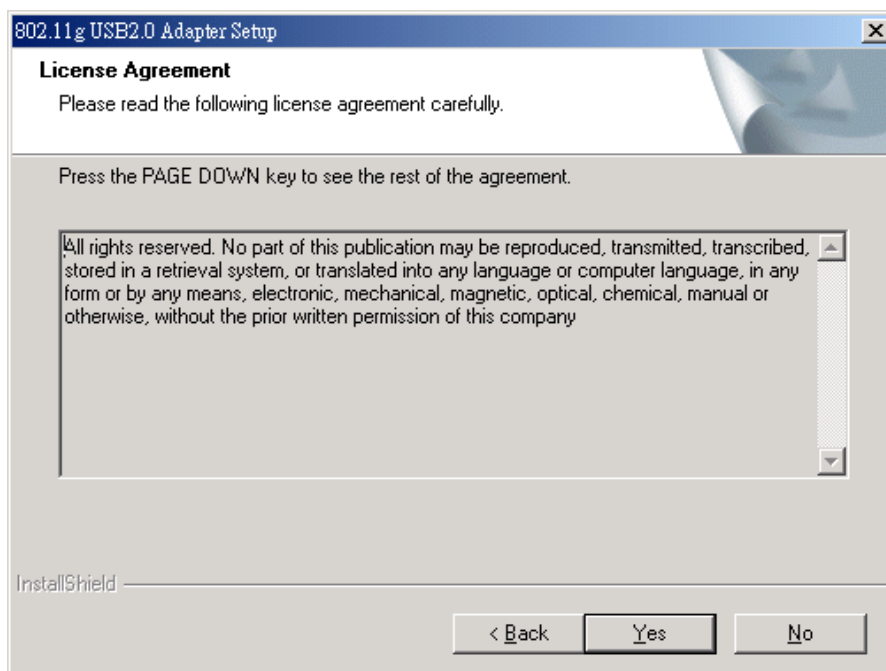
3.1 Install the 802.11g USB2.0 adapter Driver / Utility

Note! Please install the 802.11g USB WLAN Driver & Utility before inserting the 802.11g USB 2.0 WLAN Adapter.

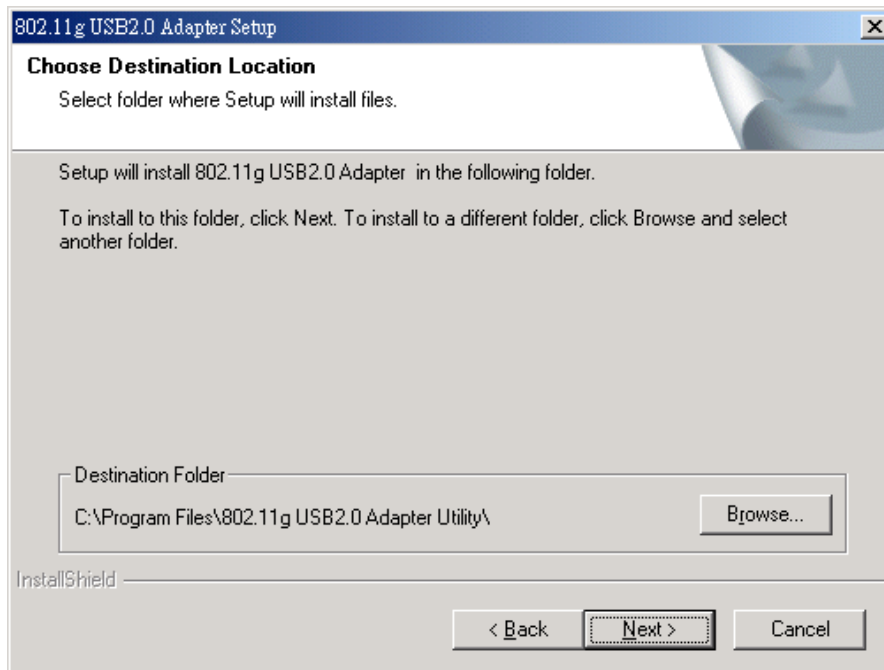
1. **Insert the installation CD.** Insert the installation CD into your CD-ROM drive. The setup program automatically starts.
2. **Click “Next”.**



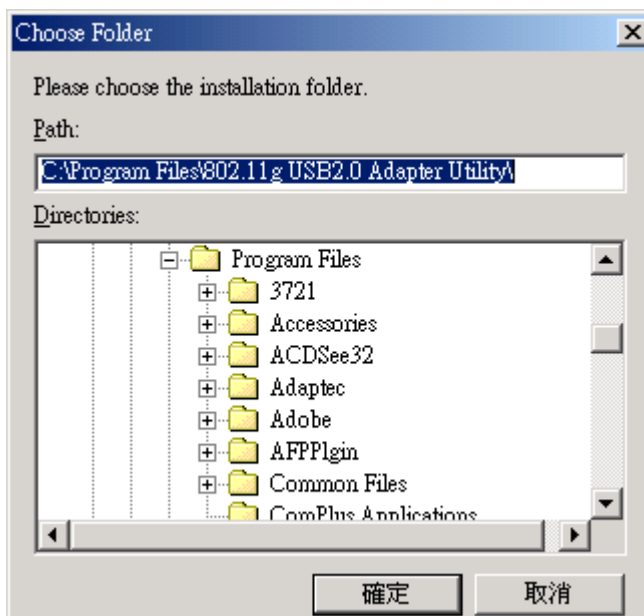
3. **Click “Yes”.**



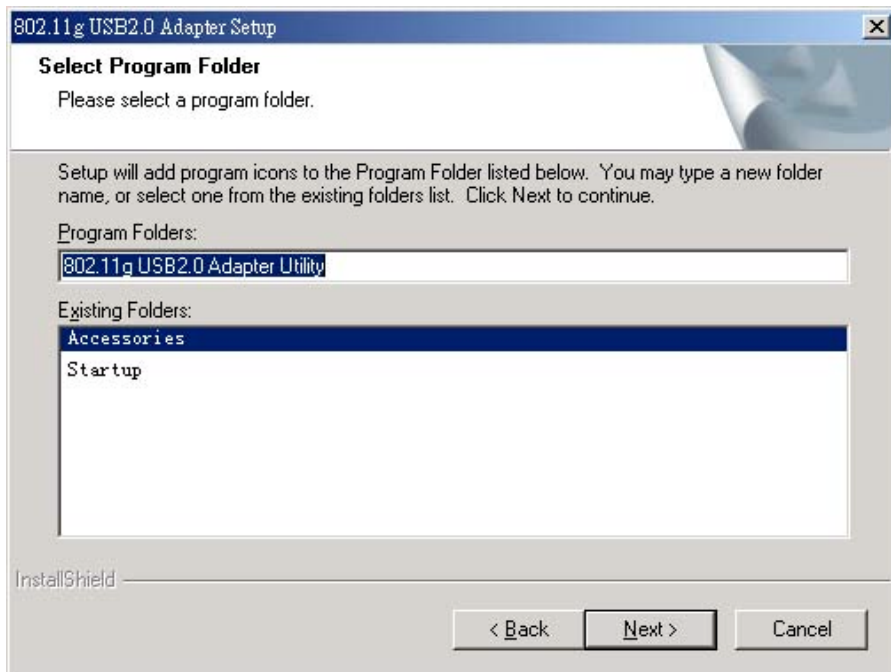
4. **Read the destination folder and click “Next”.** The default destination folder is displayed in the setup dialog box. Click “Next” to go on to Step 6. You may change the default folder by clicking “Browse” to select the destination folder you prefer (go on to Step 5). Click “Next” to go to the next screen.



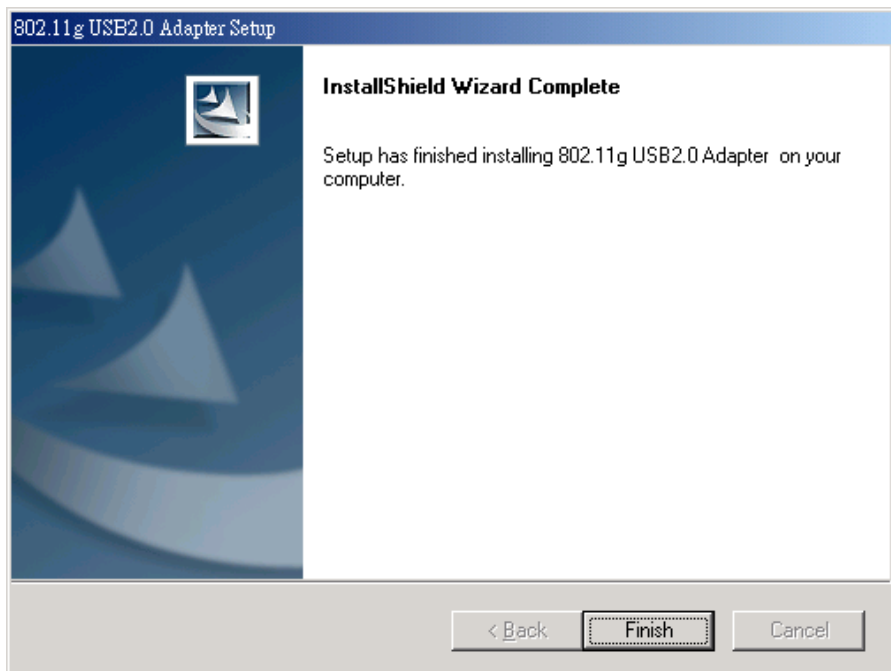
5. Select the Program Folder and click “Next”.



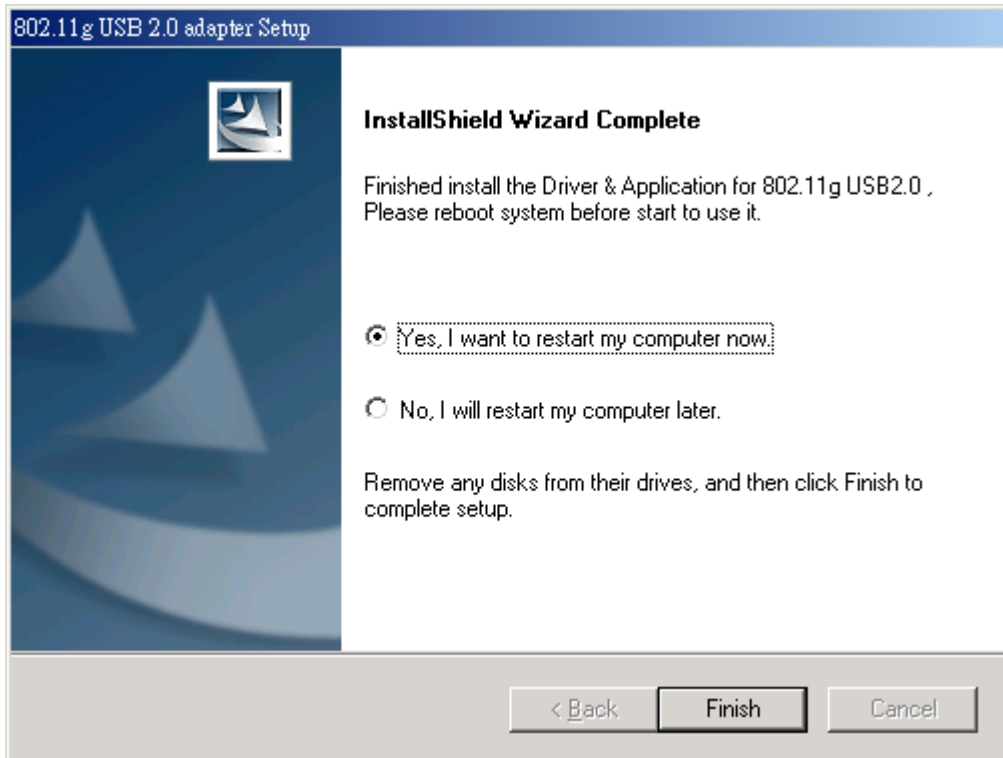
6. Click “Next”.



7. Click “Finish”. The installation is complete.



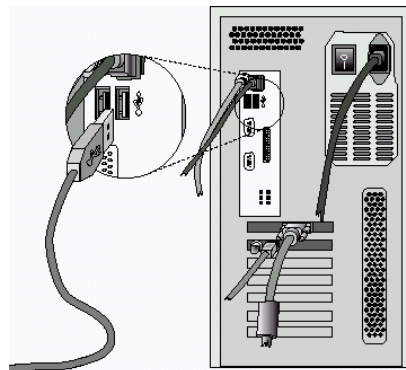
8. Choose “Yes” to restart computer and click “**Finish**”.



9. **Connect the 802.11g USB 2.0 WLAN Adapter** to your PC/notebook PC. To adjust the direction or position of the 802.11g USB 2.0 WLAN Adapter, please use the USB extension cable



Notebook



PC

Note! Please use USB extension cable to connect your 802.11g USB 2.0 WLAN Adapter with PC/Notebook during normal operation.

3.1.1 Additional Setup Processes

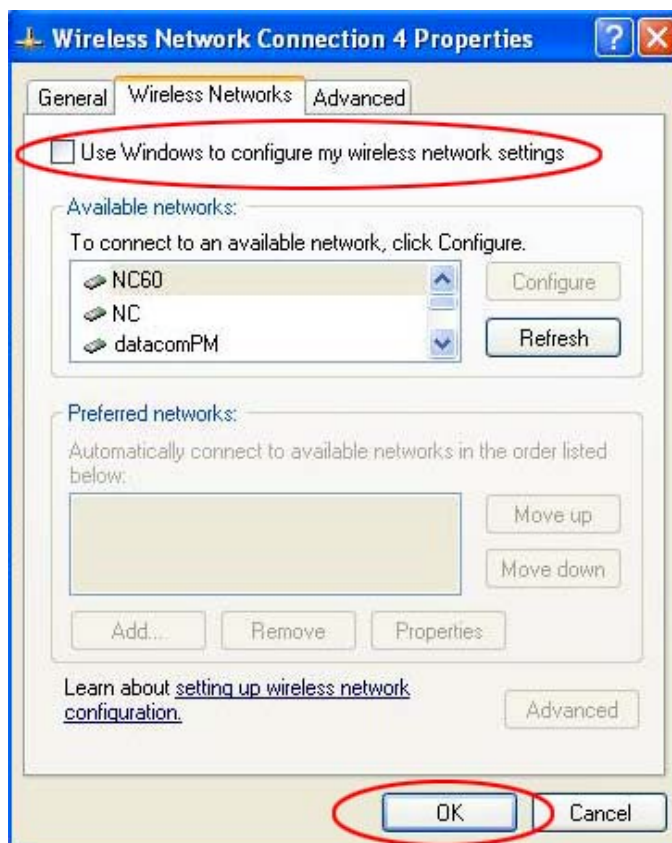
During software installation procedure, each operating system may prompt different specific options. Mostly, you will be asked to add some necessary protocols and to edit some networking settings.

1. **Windows 98SE:** The system may request the original Windows CD during the installation process. Please check with the network administrator for the values of the settings. When the installation is finished, you'll have to restart your computer.
2. **Windows Me:** Please check with the network administrator for the values of the settings. Please restart your computer when the installation is finished.
3. **Windows 2000:** Please check with the network administrator for the values of the settings. Select "Install the software automatically" when the window with this option appears, and then click "Next" to continue installation.
4. **Windows XP:** Select "Install the software automatically" when the window with this option appears, and then click "Next" to continue installation. Note that before using the 802.11g USB2.0 WLAN Utility, please disable the Windows XP Zero-Configuration first.

3.1.2 Disable Windows XP Zero-Configuration

In Windows XP, it is recommended that you use the 802.11g USB2.0 adapter Utility. Right after the installation, before opening the Utility, please follow the steps below to disable the Windows XP Zero Configuration:

1. Go to “Control Panel” and double click “Network Connections”.
2. Right-click “Wireless Network Connection” of 802.11g USB 2.0 WLAN Adapter, and select “Properties”.
3. Select “Wireless Networks” tab, and uncheck the check box of “Use Windows to configure my wireless network settings”, and then click “OK”.



3.2 Verifying the Driver/Utility

1. Windows 98SE/Me:

- Step 1. Right-click “My Computer” icon on the desktop and choose “Properties”.
- Step 2. Select “Device Manager” tab and open “Network adapters”. You should see your 802.11g USB 2.0 WLAN Adapter in the list. Highlight it and click “Properties” button.
- Step 3. From the “Device status”, you should see the line “This device is working properly”. If, instead, you see error messages displayed, please remove this Adapter (highlight this Adapter and click “Remove” button). Restart your PC and go through the installation process again.


2. Windows 2000:

- Step 1. Right-click “My Computer” icon on the desktop and choose “Properties”.
- Step 2. Select “Hardware” tab and click “Device Manager”. Open “Network adapters”. You should see your 802.11g USB 2.0 WLAN Adapter in the list. Right-click this Adapter and choose “Properties”.
- Step 3. From the “Device status”, you should see the line “This device is working properly”. If, instead, you see error messages displayed, please uninstall this Adapter (right-click this Adapter from the “Network adapters” list and choose “Uninstall”). Restart your PC and go through the installation process again.

3. Windows XP:


- Step 1. Click “Start>Control Panel> System”.
- Step 2. Select “Hardware” tab, and click “Device Manager”. Open “Network adapters”. You should see your 802.11g USB 2.0 WLAN Adapter in the list. Right-click this Adapter and choose “Properties”.
- Step 3. From the “Device status”, you should see the line “This device is working properly”. If, instead, you see error messages displayed, please uninstall this Adapter (right-click this Adapter from the “Network adapters” list and choose “Uninstall”). Restart your PC and go through the installation process again.

3.3 802.11g USB2.0 WLAN Utility

802.11g USB 2.0 WLAN Adapter has its own management software, named 802.11g USB2.0 Utility, and users can control all functions provided with it. The Utility icon  appears in the Windows System Tray. The Utility includes seven tabs: Status, Configuration, WEP, Security, IBSS, Domain and About.


The definition of the color of the Utility icon is as follows:

 Connected (Green)

 Low quality (Yellow)

 Disconnected (Red)

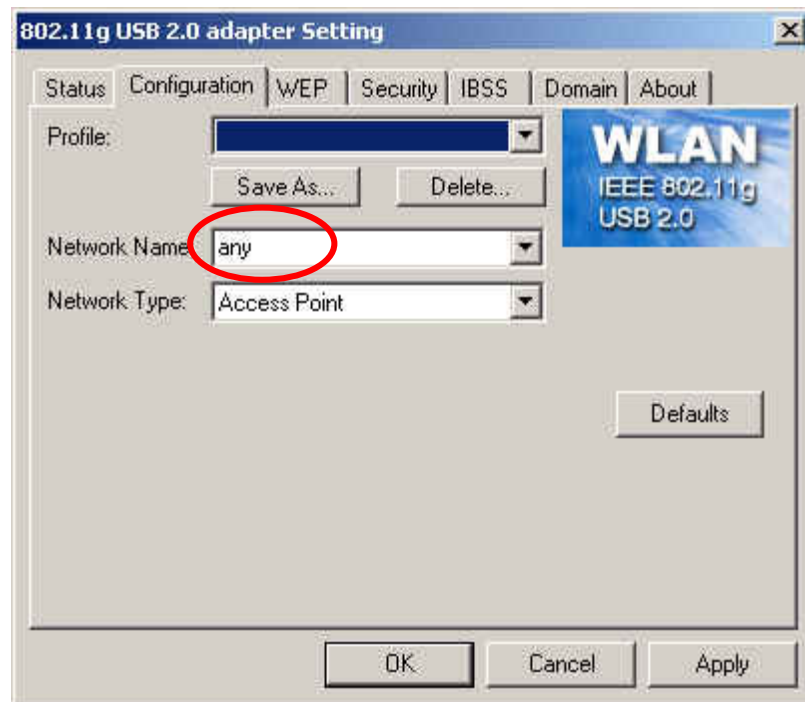
In Peer-to-peer (Ad Hoc) mode, in one workgroup, the Channel and SSID of each station must be the same—therefore they can communicate with each other within the local LAN properly. Moreover, all connected computers should have the same net ID and subnet ID.

 *To open 802.11g USB2.0 Utility, you may double click the status icon in the Windows System Tray.*

3.4 Basic Setting for Infrastructure Mode

To connect with an Access Point, please follow the process below:

1. Select the “Configuration” tab
 2. Select “Access Point” for Network Type
 3. Select or enter the correct SSID (Network Name)
 4. Press the “Apply” button.
- ◆ **SSID** is the group name that will be shared by every member of your wireless network .You will only be able to connect with an Access Point (AP), which has the same SSID. Note that the SSID will be case sensitivity.
 - ◆ **Profile** allows you to save five sets of default settings. After entering the values of the settings (SSID, Network Type, Channel etc.), set a name in the Profiles field. Click “Apply” button.



- ◆ You can key in “Any” for name work name so that the 802.11g USB2.0 adapter can search for the available network automatically.

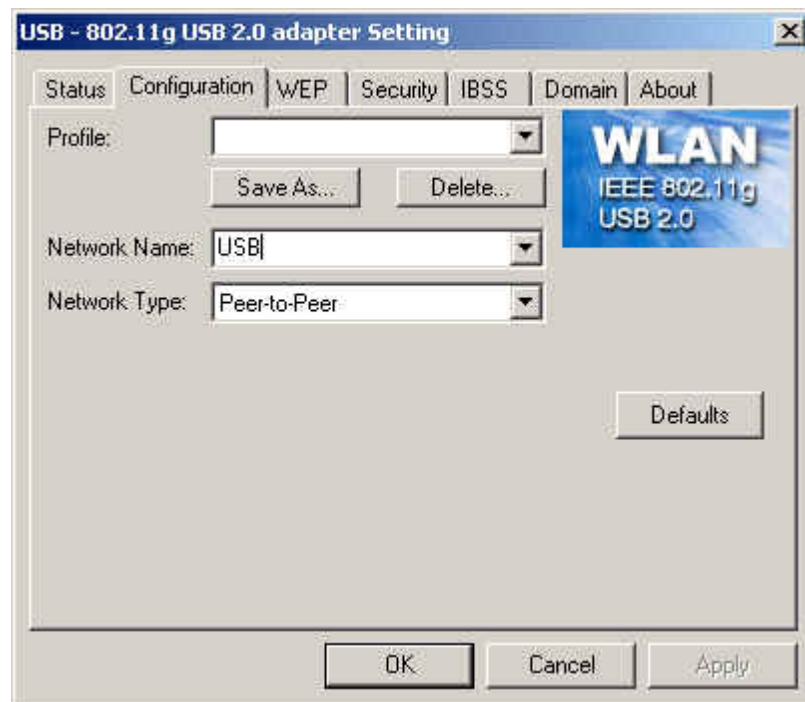
3.5 Basic Setting for Peer-to-peer Mode

If you have more computers and only want to place them in a local area network, or you want to communicate directly without using an Access Point or any connection to a wired network, then you can select the “Peer-to-peer” mode on your WLAN Utility.

A. Peer-to-peer

Please follow the procedures below to set the “Peer to peer”:

1. Select “Configuration” tab.
 2. Select “Peer-to-peer” for Network Type.
 3. Type in the SSID and set a channel, which you want to use in your 802.11 Wireless LAN.
 4. Press the “Apply” button.
- ◆ Every member of your peer-to-peer network must set to the same channel and SSID, which is case sensitive.



You must select a SSID if you use the Peer-to-peer (802.11 Ad hoc) mode.

3.6 Remove your 802.11g USB 2.0 WLAN Adapter

You can remove the device after you finished the action with the device. However, in Windows XP/ME and Windows 2000, please follow the safe removal procedure. You can find a safe removal icon in your computer's notification area.

1. Double click the **safe removal icon**.



2. The “Unplug or Eject Hardware” window will pop up. You can select the device you want to remove. Then, click the **Stop** button.

Note! *When removing the 802.11g USB 2.0 WLAN Adapter, you will lose your connection to the network. Make sure you have closed all files and network applications (such as e-mail) prior to removing the 802.11g USB 2.0 WLAN Adapter.*

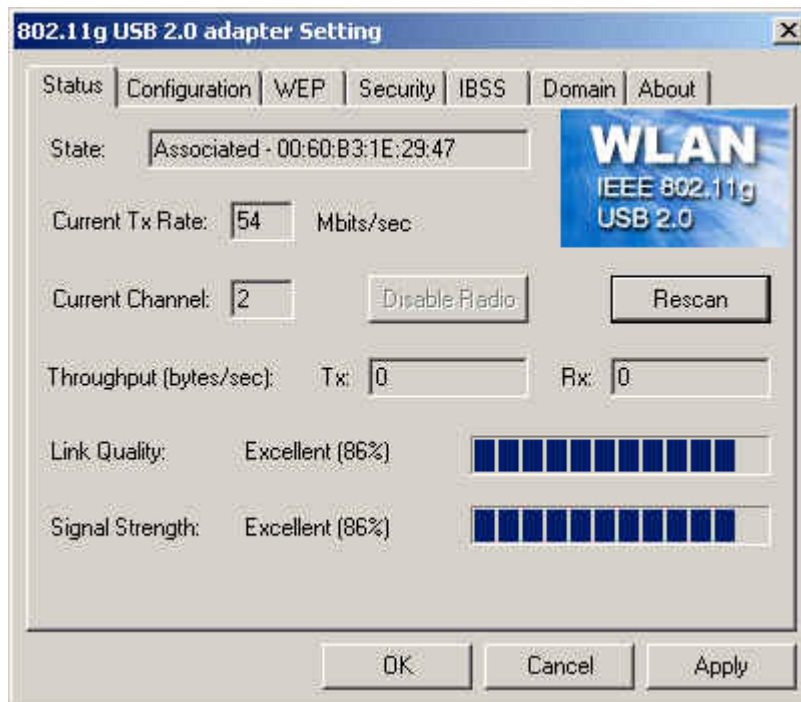
3.7 Uninstall the 802.11g USB2.0 WLAN Utility / Driver

1. Make sure the **Utility is closed**.
2. **Go to windows Startup > Program_>802.11g USB2.0 adapter Utility > Uninstall 802.11g USB2.0 adapter**
3. **Follow the uninstall wizard** to complete the uninstallation.
4. **Click “Finish”** when uninstallation is completed.
5. **You should restart your computer.**

4. Using the Utility

4.1 Status Tab

The Status menu displays information on the current status of your connection to the wireless LAN. You can display this menu by choosing the **Wireless Network Status...** command from the pop-up menu, or by clicking on the **Status** tab when the Configuration Utility is displayed on your desktop.



The fields in this menu provide the following information:

- ◆ **State:** shows the association state of your computer with the wireless LAN.
Possible values for this field are:
 - **AdHoc:** The adapter is operating in Peer-to-Peer mode. This field also shows the virtual MAC address used by computers participating in the AdHoc network.
 - **Associated:** The adapter is operating in Infrastructure mode. This field also shows the MAC address of the Access Point with which you are communicating.
 - **Listening:** Indicates that the adapter is listening on all allowed channels, but has not yet found a peer-to-peer or infrastructure network with which to associate.
 - **Stopped:** The radio has been stopped by the Disable Radio Button.
 - **Scanning:** The adapter is scanning for transmissions by other wireless adapters on all channels.
 - **Associating:** The adapter is in the process of associating with a network

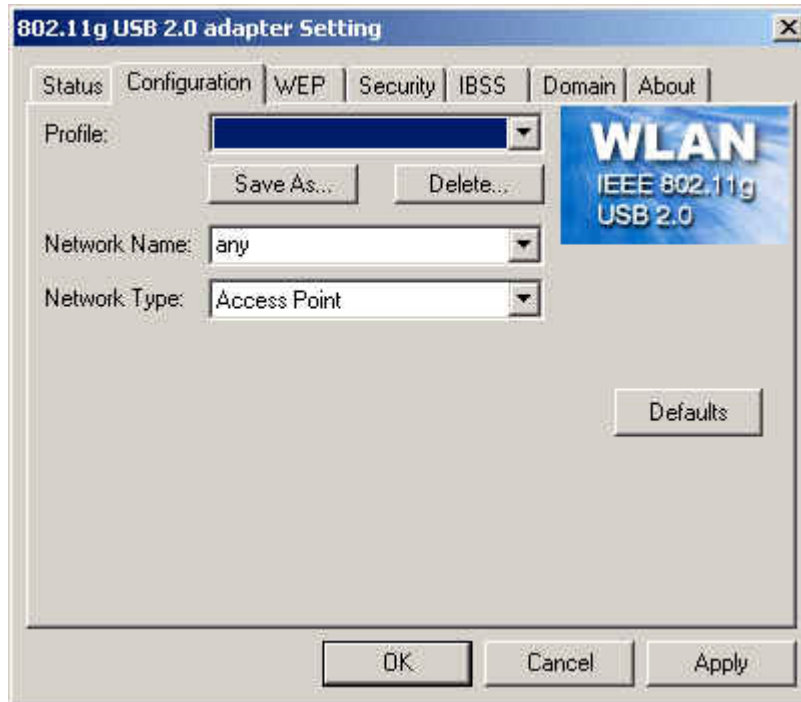
- **Not Associated:** The adapter has not found any network with which to associate.
- **Hardware Radio Switch OFF:** The radio has been disabled by moving the hardware radio switch to the off position. Note that not all adapters have a hardware switch.
- ◆ **Current Tx Rate:** shows the current transmit rate of the current association.
- ◆ **Current Channel:** shows the channel on which the connection is made. In Infrastructure mode, this number changes as the radio scans the available channels.
- ◆ **Throughput:** shows the short term transmit and receive throughput in bytes/second, and is continuously updated.
- ◆ **Link Quality:** is based on the quality of the received signal of the Access Point beacon.
- ◆ **Signal Strength:** is based on the received signal strength measurement of the baseband processor of the Beacon signal.

You can click the **Disable Radio** button to turn off the wireless radio. When you click this button, the **State** field indicates that the radio has been stopped and the remaining fields in this window display either a zero or **Not Applicable**. Click this button again to turn the radio back on. However, if the radio has been disabled by the hardware switch on the adapter, clicking this button displays a popup message telling you that the radio cannot be enabled.

You can click the **Rescan** button to force the radio to rescan all available channels. If your link quality or signal strength is poor, rescanning can be used to push the radio off a weak Access Point and search for a better link with another Access Point.

4.2 Configuration Tab

The Configuration tab shows information of Network Name, Network Type. And **Profiles** allows you to save five sets of default settings. After entering the values of the settings (SSID, Network Type, Channel etc.), set a name in the Profiles field.



4.3 WEP Tab

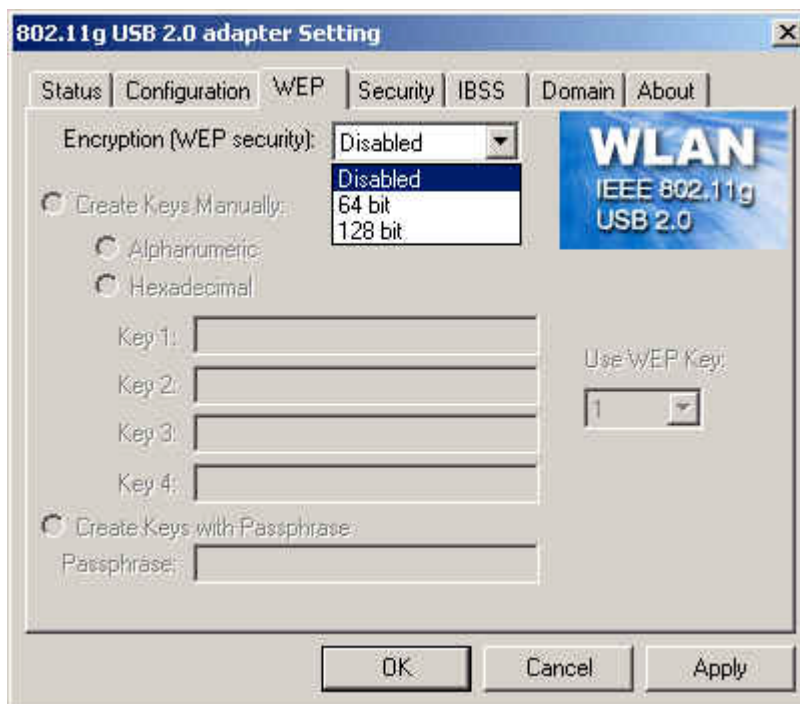
You may enhance the security of your network by enabling the “Encryption” function. The WEP Required Mode enables you to define the encryption keys that your 802.11g USB2.0 Adapter should use.

Caution:

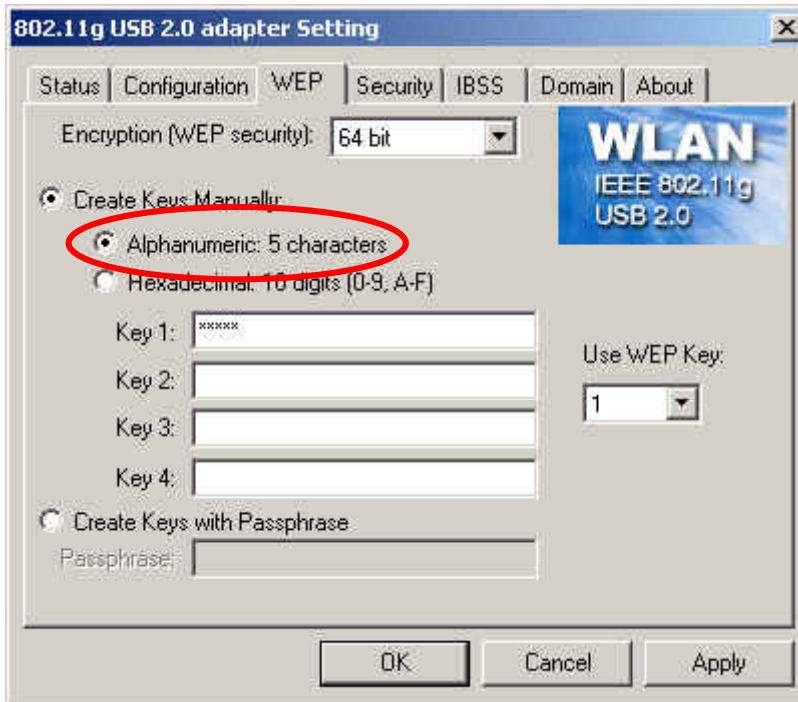
If you wish to enable the “Encryption” function, you must enable this function for all computers of your network, and the WEP key needs to be the same for all IEEE802.11g stations.

Follow the steps below to set your WEP Required Mode:

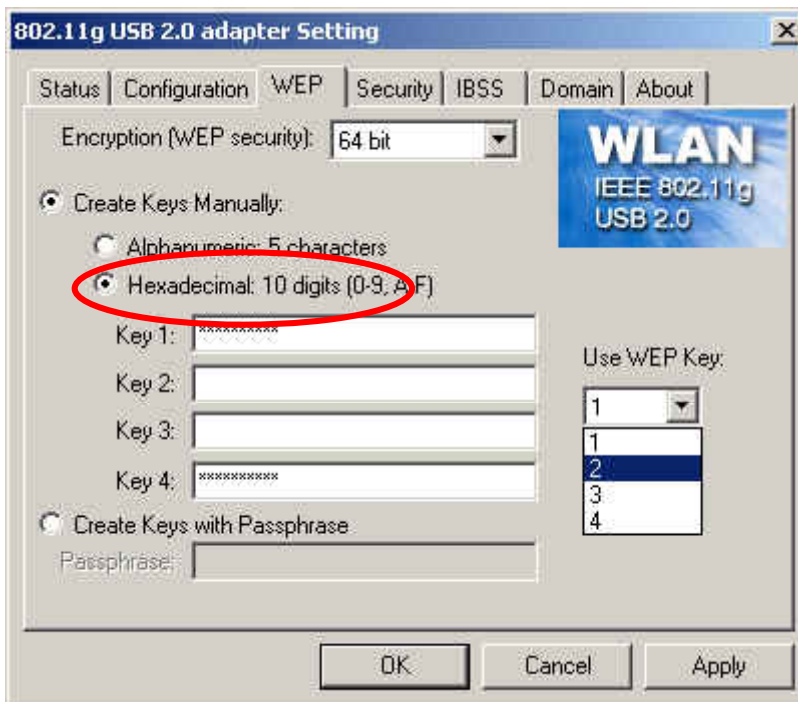
1. Select one mode from the drop down menu of WEP required Mode and set the WEP key. Two modes are available:
 - A. Manual 64 bits
 - B. Manual 128 bits
2. Press “Apply” button when finish the WEP setting.



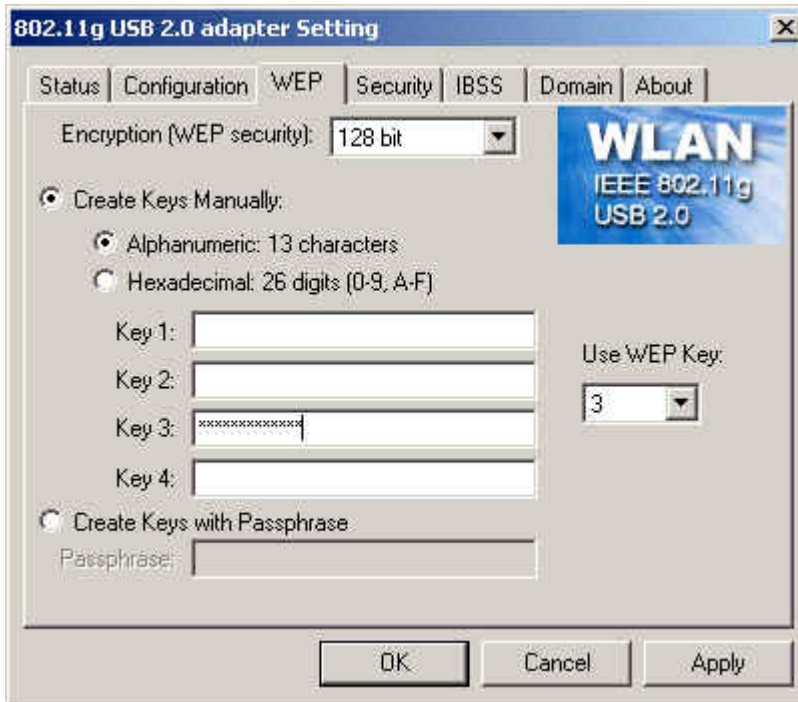
a. Select “64 bit” vs “Alphanumeric” and enter 5-digit WEP key.



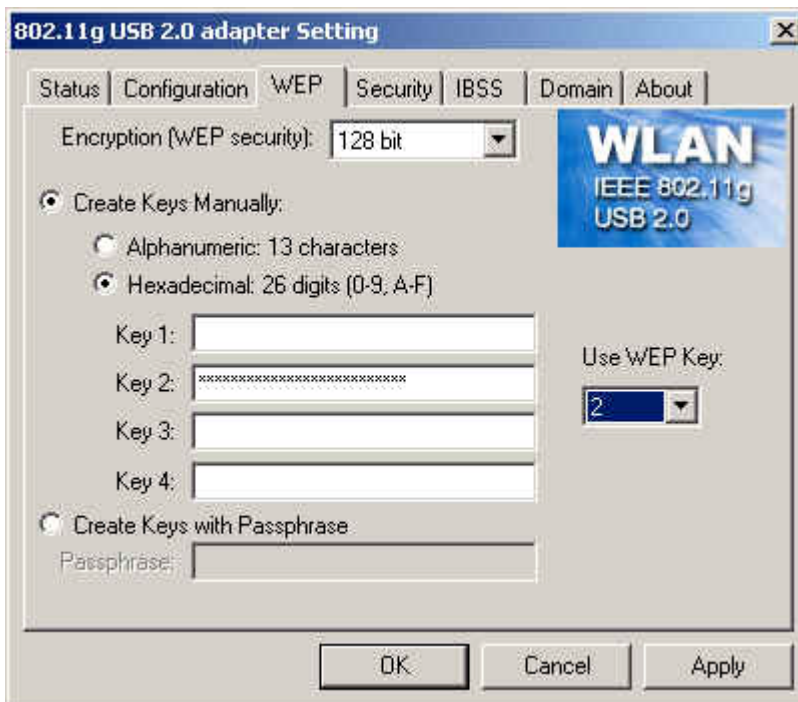
b. Select “64 bit” vs “Hexadecimal” and enter 10-digit WEP key.



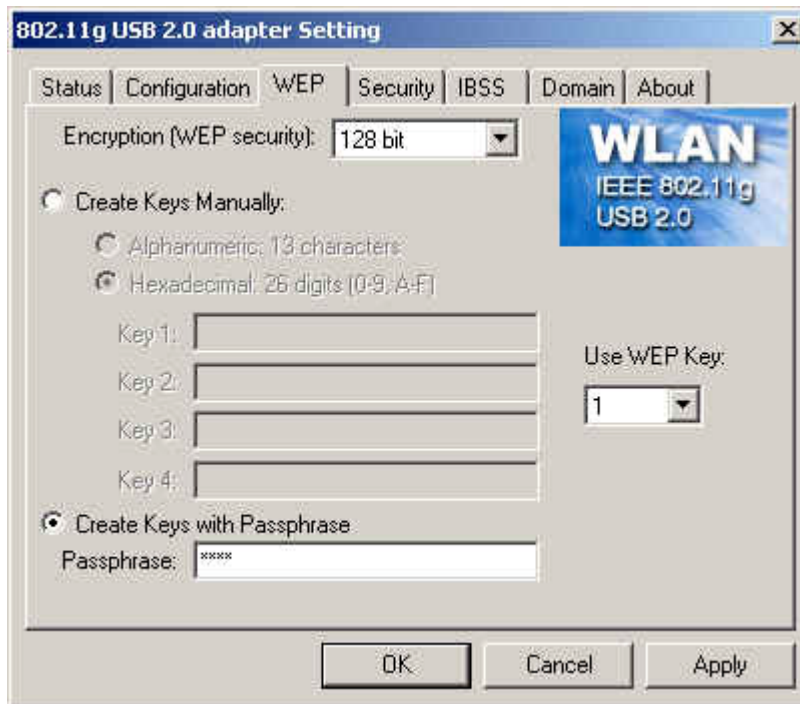
c. Select “128 bit” vs “Alphanumeric” and enter 13 digit WEP key.



d. Select “128 bit” vs “Hexadecimal” and enter 26 digit WEP key.

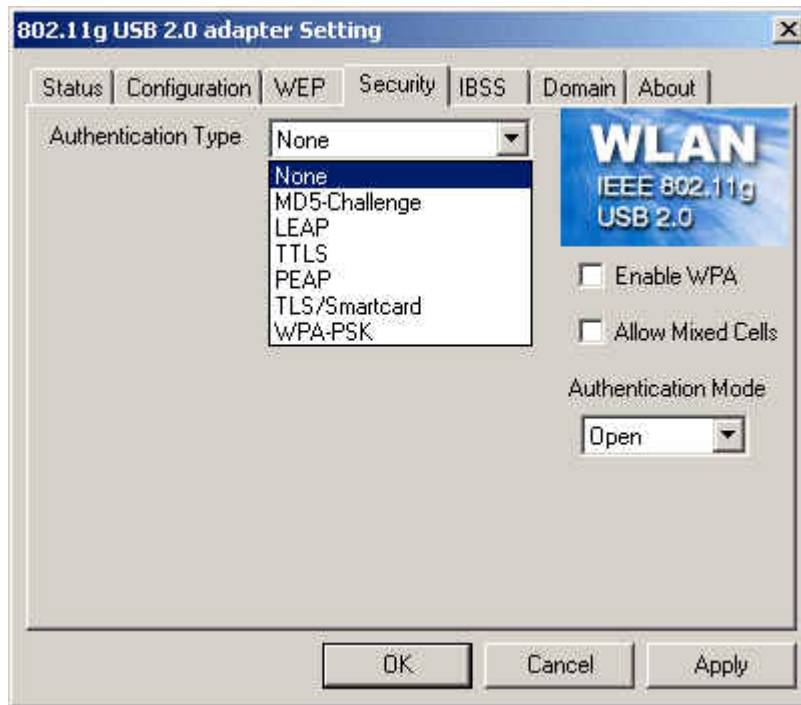


d. You may choose “Create Keys with Passphrase”.

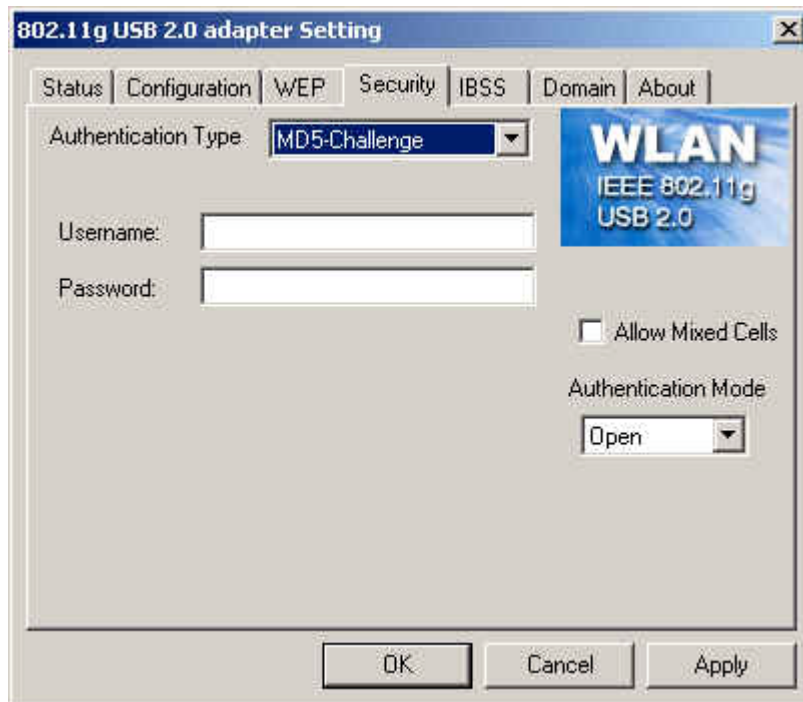


4.4 Security Tab

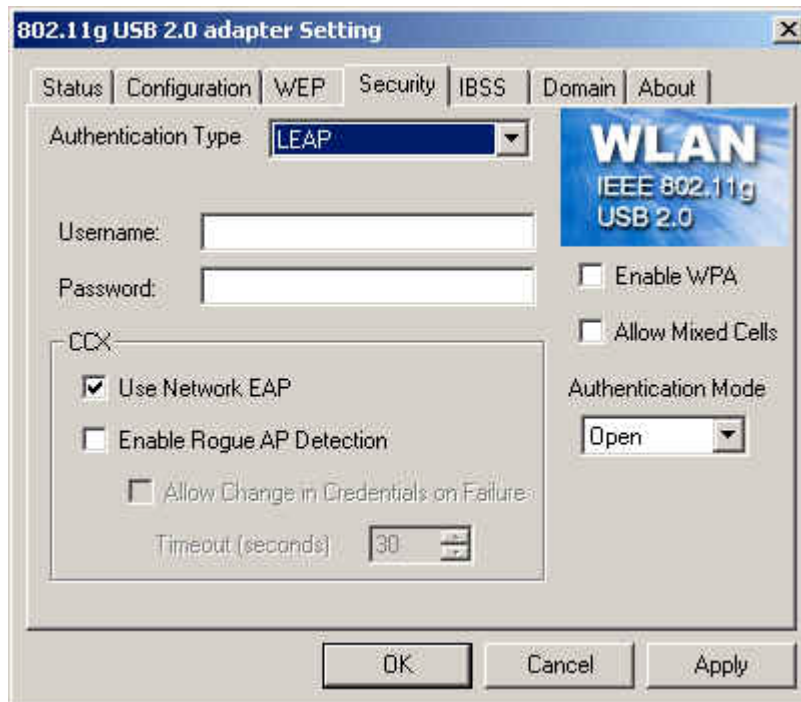
Except WEP Tab in previous page, this Tab provides you the enhancement of WEP security. You may choose the authentication type “MD5-Challenge”, “LEAP”, “TTLS”, “PEAP”, “TLS/Smartcard” or “WPA-PSK” which would require you to enter “Username”, “Password” and related data, please contact with MIS administrator for the settings.



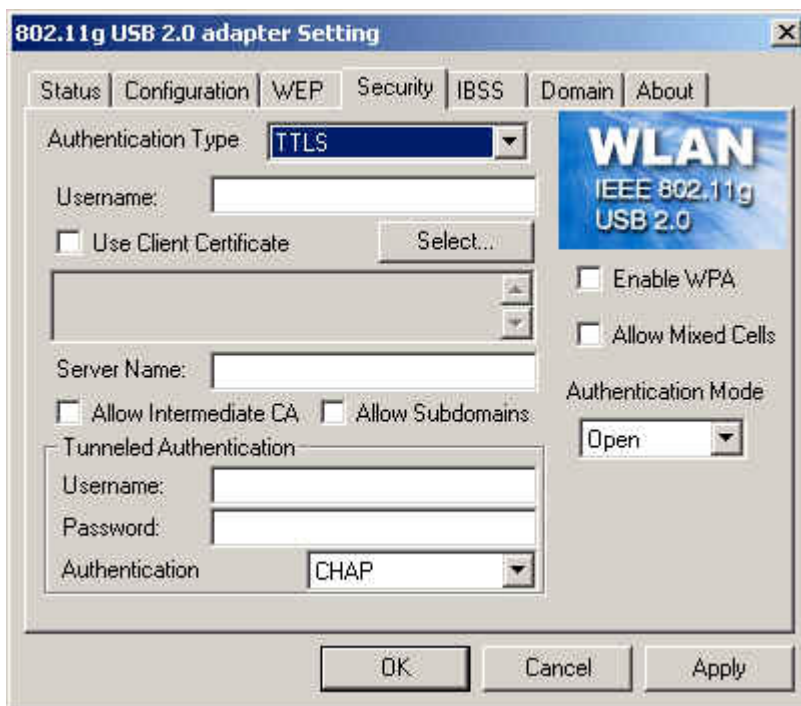
a. MD5-Challenge: **MD5** is an EAP-Type for authentication. It is analogous to the PPP CHAP protocol. A challenge string is sent from the **Authentication Server** to the **Supplicant** in the MD5-Challenge Request. The challenge string with the user password is hashed using MD5 and the hash is returned in the MD5-Challenge Response. The Authentication Server performs the same hash and compares the result with that returned by the Supplicant to determine whether the authentication is a Success or Failure.



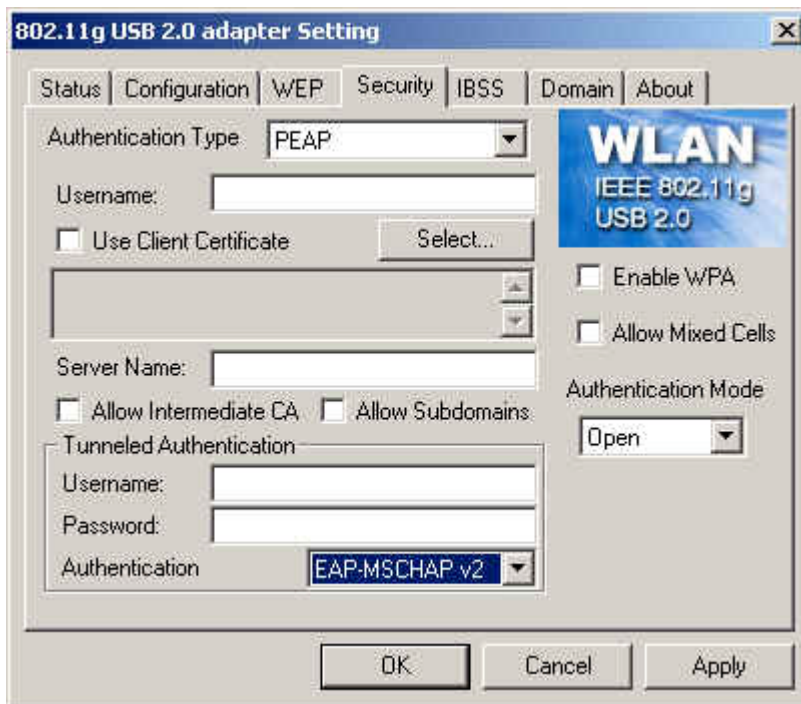
b. LEAP: **LEAP** (Lightweight Extensible Authentication Protocol) is a Cisco proprietary EAP-Type. It is designed to overcome some basic wireless authentication concerns through **Mutual Authentication** and the use of dynamic **WEP** keys.



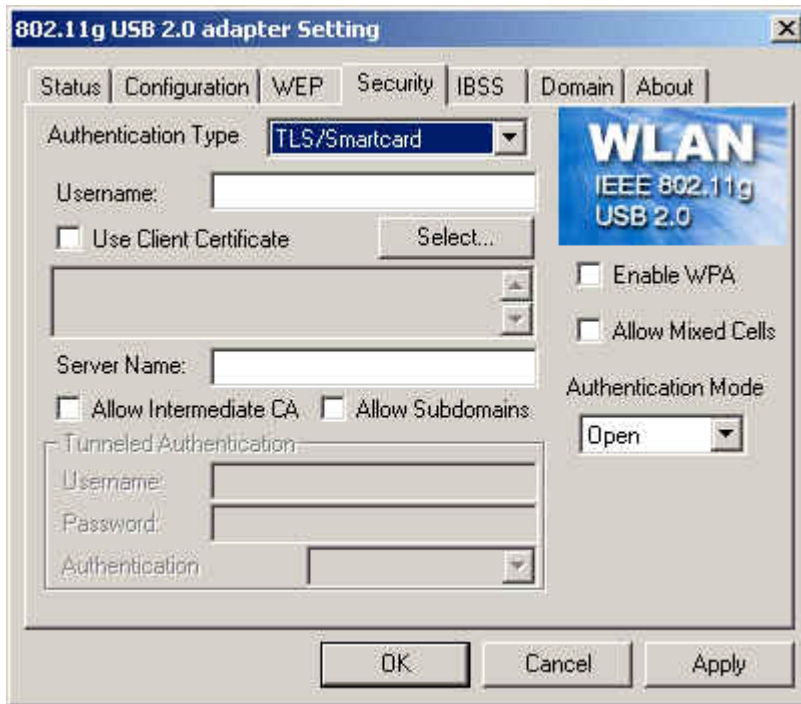
C. TTLS: (Tunneled TLS) is an EAP-Type for authentication that employs a two-phase authentication process. In the first phase the **Authentication Server** is authenticated to the **Supplicant**. Using TLS, a secure channel is established through which the Supplicant can be authenticated to the **Authentication Server** using legacy PPP authentication protocols such as PAP, CHAP, and MS-CHAP. **TTLS** has the advantage over **TLS** that it only requires a certificate at the **Authentication Server**. It also makes possible forwarding of **Supplicant** requests to a legacy RADIUS server. **TTLS** also supports identity hiding where the **Authenticator** is only aware of the anonymous username used to establish the TLS channel during the first phase but not the individual user authenticated during the second phase.



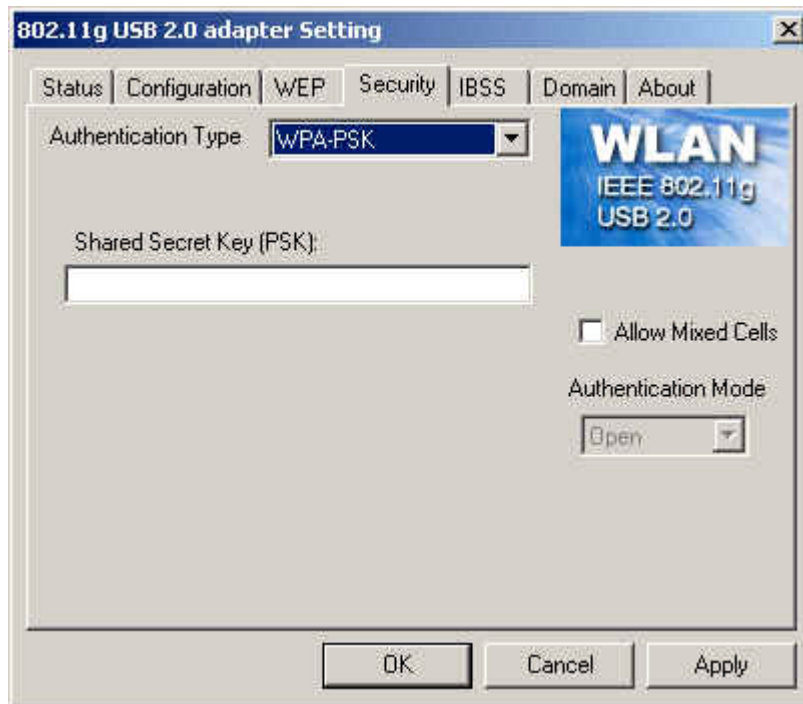
d. PEAP: (Protected Extensible Authentication Protocol) is a two-phase authentication like TLS. In the first phase the Authentication Server is authenticated to the **Supplicant**. Using TLS, a secure channel is established through which any other EAP-Type can be used to authenticate the **Supplicant** to the **Authentication Server** during the second phase. A certificate is only required at the **Authentication Server**. **PEAP** also supports identity hiding where the **Authenticator** is only aware of the anonymous username used to establish the TLS channel during the first phase but not the individual user authenticated during the second phase.



e. TLS/Smartcard: **TLS** is an EAP-Type for authentication based upon X.509 certificates. Because it requires both the **Supplicant** and the **Authentication Server** to have certificates, it provides explicit **Mutual Authentication** and is resilient to man-in-the-middle attacks. After successful authentication a secure TLS link is established to securely communicate a unique session key from the **Authentication Server** to the **Authenticator**.



f. WPA-PSK: Wi-Fi Protected Access (**WPA**) is a replacement security standard for **WEP**. It is a subset of the IEEE 802.11i standard being developed. **WPA** makes use of **TKIP** to deliver security superior to WEP. 802.1X access control is still employed. The **Authentication Server** provides the material for creating the keys.

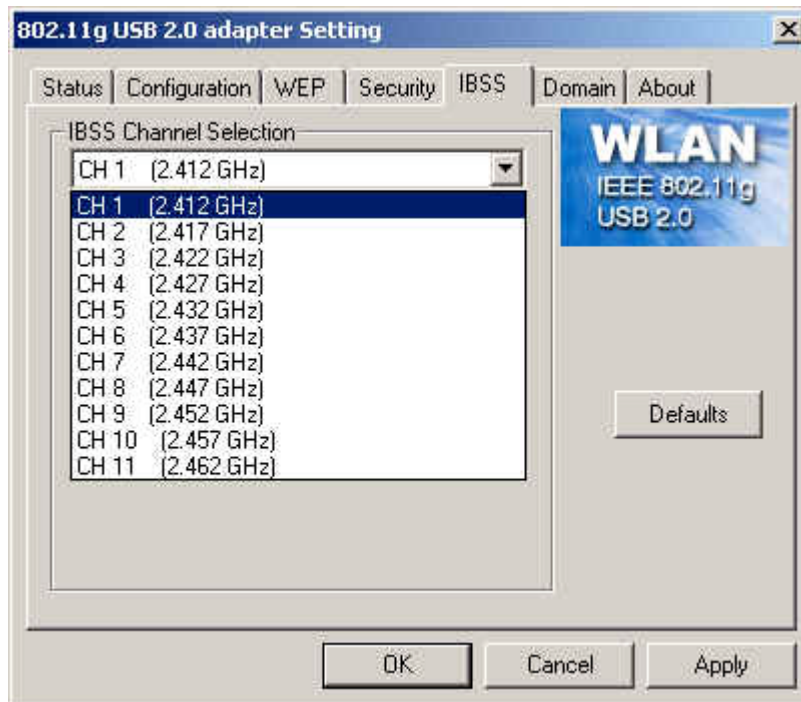


4.5 IBSS Tab

When communicating in a peer-to-peer network, you may specify a channel on which you prefer communications to take place. To specify a channel, click on the channel to select it, and then click the **Apply** button.

Note that this is not necessarily the channel on which peer-to-peer communications will be established. If the IBSS network names (SSID) are the same for nodes in the peer-to-peer network but they have different preferred channels, a network can still be established. In this case, if it cannot find a network with the specified network name on the preferred channel, a station will scan other channels until it finds a peer-to-peer network with the specified network name on which to communicate.

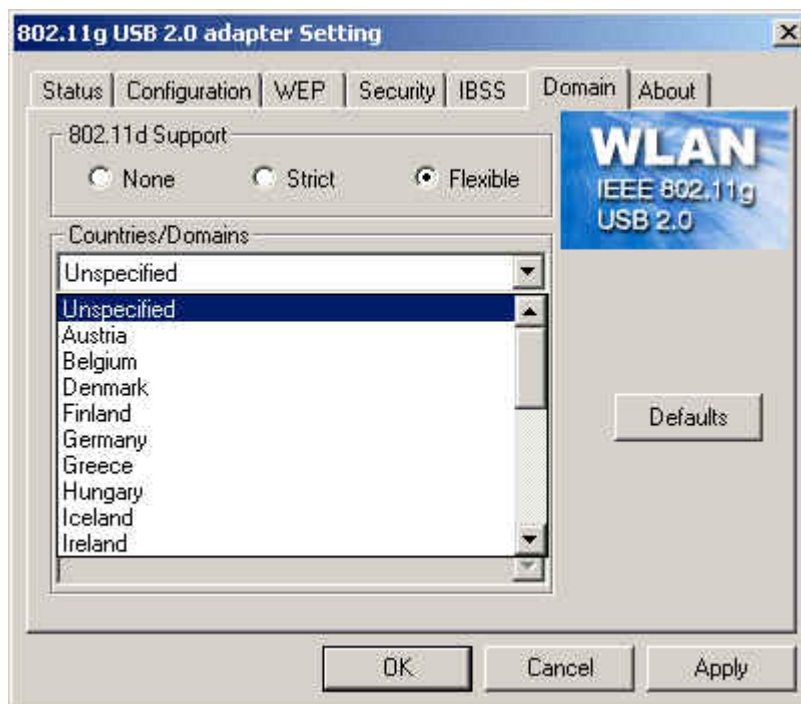
If you specified **Access Point** as the network type (in the **Configuration** Tab), choosing a channel in this field has no effect until you change the network type to **Peer-to-Peer**.



4.6 Domain Tab

A *domain* refers to a territory in which radio frequency transmissions must conform to the standards set by a single regulatory agency. For example, in the United States, the allowed frequencies and channels for wireless data communications are set by the FCC. Every country is free to set its own standards, although in practice many countries may use the same standards.

The IEEE 802.11d standard provides a means for a wireless LAN adapter to detect the domain in which it is located and conform its transmissions to the standards set by the controlling regulatory agency. Not all PRISM adapters include this mechanism, however, so the version of the **Domain** menu displayed by the Configuration Utility depends on the versions of driver and firmware for your adapter.



-802.11d Support

If you specify **None** in the **802.11d support** field, you must then choose the county in the **Countries/Domains** field which corresponds to your location. In this case your adapter operates according to the standards set by the appropriate regulatory agency.

Note: If you specify **Peer-to-Peer** as the network type, you must specify **None** in the **802.11d support** field.

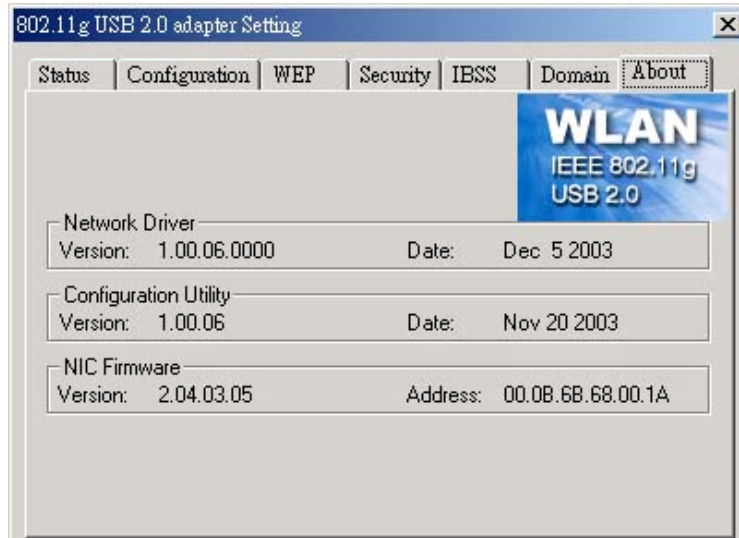
If you choose **Strict** in the **802.11d support** field, your adapter will only communicate with Access Points which provide 802.11d support. In this case, the adapter scans all communications channels for an Access Point which provides information on the channels, frequencies, and power levels permitted in your location. Once it finds such an Access Point, the adapter conforms its operations to these standards. The adapter will not communicate with an Access Point that does not provide this information, nor will it join or create a peer-to-peer network if Strict 802.11d support is specified in this field.

If you choose **Flexible** in this field, your adapter can communicate with any Access Point it finds. In this case, you must also choose the county in the **Countries/Domains** field which corresponds to your location. Your adapter then searches for an Access Point which provides information on the channels, frequencies, and power levels permitted in your location. If it finds such an Access Point, the adapter conforms its operations to these standards.

If it does not find an Access Point which provides this information, it then will establish communications with any Access Point it finds.

4.7 About Tab

This tab provides you the version information of Firmware, Driver and Utility.



5. Network Application

This section consists of the network applications of 802.11g USB 2.0 WLAN Adapter, including:

- A. To Survey the network neighborhood
- B. To Share Your Folder with Your Network Member(s)
- C. To Share Your Printer with Your Network Member(s)
- D. To Access the Shared Folder(s)/File(s) of Your Network Members(s)
- E. To Use the Shared Printer(s) of Your Network Member(s)

In fact, the network applications of 802.11g USB 2.0 WLAN Adapter are the same as they are in a wired network environment. You may refer to the following 3 examples of Surveying the Network Neighborhood, File Sharing and Using the Shared Folder.

5.1 Surveying the Network Neighborhood

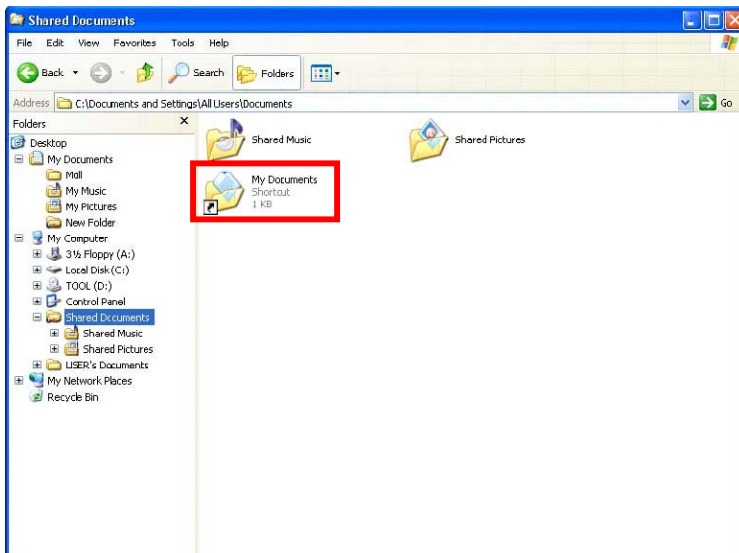
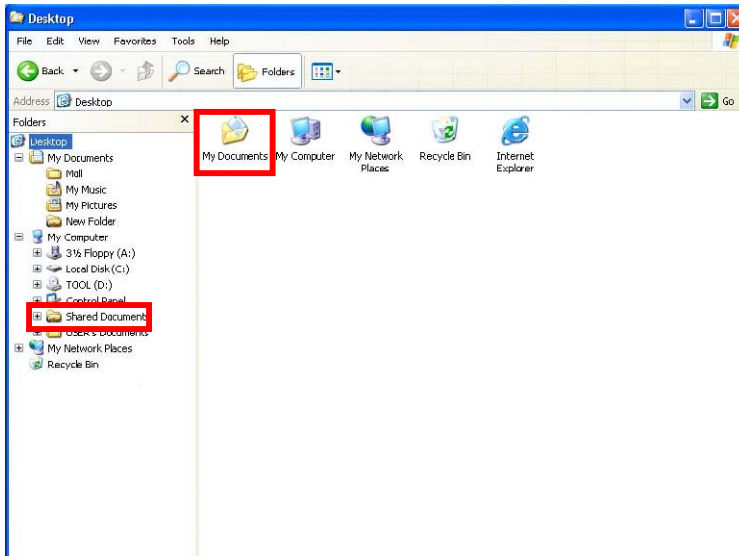
When multiple base stations are up and running in your wireless network, you can use the procedure described below to display the other computers:

1. **Double-click My Network Places** to display all stations in your Microsoft Windows Network Group.
2. To display other workgroups in the network environment, **double-click Entire Network**.
3. If there is a **second network operating system** running in your network environment (for example a Novell NetWare network), the “Entire Network” window will also display available servers running under the second network operating system. If you click on these servers, you may be asked to **enter your user name and password** that applies to the other network operating system. If you cannot find it, verify whether the other wireless computers are:
 - Powered up and logged on to the network.
 - Configured to operate with identical Microsoft Network settings concerning:
 - Networking Protocol.
 - Wireless Network Name.

To enable the sharing of **Internet access**, you should set your WLAN mode as “**Infrastructure**” and connect to the access point.

5.2 File Sharing

802.11g USB 2.0 WLAN Adapter allows the sharing of files between computers that are logged onto the same wireless network. If you want to share your folder “My Documents” with other computers of the wireless network, please **highlight the folder “My Documents”** and drag it to **Shared Documents** folder.



Sharing files in the IEEE802.11g wireless network will be like sharing files on a wired LAN.

5.3 Using the Shared Folder

If you would like to access a shared folder stored in other stations of same network, please follow the process below:

1. Double-click the “My Network Places” icon, and then double-click the computer where the shared folder is located.
2. Double-click the folder you want to connect to.
3. Now you may open the needed file(s).

Note! *If a password is required, the Windows will prompt a password column to you. Then you need to enter the password that had been assigned to this shared folder.*

6. Product Specifications

Item	Key specifications
Frequency range	<ul style="list-style-type: none"> ➤ U-NII: 2.412 ~ 2.484Ghz ➤ Europe: 2.412 ~ 2.484Ghz ➤ Japan: 2.471 ~ 2.497Ghz
Modulation technique	<ul style="list-style-type: none"> ➤ 802.11b: DSSS (CCK, BPSK, QPSK) ➤ 802.11g: OFDM
Host interface	<ul style="list-style-type: none"> ➤ USB 2.0
Channels support	<ul style="list-style-type: none"> ➤ US/Canada: 11 (1 ~ 11) ➤ Major European country: 13 (1 ~ 13) ➤ France: 4 (10 ~ 13) ➤ Japan: 14 (1~13 or 14th)
Operation voltage	<ul style="list-style-type: none"> ➤ 5V +/- 10%
Current consumption	<ul style="list-style-type: none"> ➤ Transmission mode 467mA @ 5VDC(Ave) ➤ Receive mode 506mA @ 5VDC(Ave) ➤ standby mode 384 mA @5VDC(Ave)
Output power <pre>(preliminary)</pre>	<ul style="list-style-type: none"> ➤ 13 dBm@ 802.11g mode ➤ 18 dBm@ 802.11b mode
Operation distance <pre>(preliminary)</pre>	<ul style="list-style-type: none"> ➤ Indoor: 0-80m ➤ Outdoor: 50-350m
Operation System supported	<ul style="list-style-type: none"> ➤ Windows® 98SE, Me, 2K, XP
Dimension	<ul style="list-style-type: none"> ➤ 72mm (L) * 49mm(W) * 13mm(H)
Security WEP	<ul style="list-style-type: none"> ➤ 64-bit WEP, 128-bit WEP
Operation mode	<ul style="list-style-type: none"> ➤ Infrastructure & Ad-hoc mode
Transfer data rate	<ul style="list-style-type: none"> ➤ 802.11g: 54, 48, 36, 24, 18, 12, 9, 6Mbps, auto-fallback ➤ 802.11b: 11, 5.5, 2, 1Mbps, auto-fallback
LED indicator	<ul style="list-style-type: none"> ➤ WLAN activity indicator
Operation temperature	<ul style="list-style-type: none"> ➤ 0° ~ 55° C
Storage temperature	<ul style="list-style-type: none"> ➤ -25° ~ 70° C
Wi-Fi®	<ul style="list-style-type: none"> ➤ WiFi Alliance Compliant
WHQL	<ul style="list-style-type: none"> ➤ Microsoft® XP, 2K Complaint
EMC certificate	<ul style="list-style-type: none"> ➤ FCC part 15 (USA) ➤ IC RSS210 (Canada) ➤ Telec (Japan) ➤ ETSI (Europe) ➤ The above regulation depends on customer's request