

Wireless-G USB Dongle

User Manual

Ver 1.00

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1. Introduction

1.1 The Wireless-G USB Dongle

The Wireless-G USB Dongle installs in most desktop or notebooks and lets you put your computer almost anywhere in the building, without the cost and hassle of running network cables. Now you don't have to drill holes in your walls and climb through the attic or cellar to get connected to the network. Once you're connected, you can keep in touch with your e-mail, access the Internet, use instant messaging to chat with friends, and share files and other resources such as printers and network storage with other computers on the network.

The Wireless-G USB Dongle connects you with Wireless-G networks at an incredible 54Mbps! And for added versatility, it can also interoperate with all the 11Mbps Wireless-B (802.11b) products found in homes, businesses, and public wireless hotspots around the country. And in either mode, your wireless communications are protected by up to 256-bit encryption, so your data stays secure.

So don't hassle with running cables through your house - get your notebook connected the easy way with the Wireless-G USB Dongle.

1.2 Key Features

- ◆ Investment Protection: 5 Times Faster and Interoperate with Existing Wireless-B Equipment Seamlessly
- ◆ 64/128-bit WEP and Advanced 256-bit WPA (Wi-Fi Protected Access) Encryption Provides Maximum Wireless Security
- ◆ Ease of Use: Simple Installation with the Help of the Simple Setup Wizard
- ◆ Compatible with Windows 98SE/ME/2000/XP

2. Planning Your Wireless Network

2.1 Network Topology

A wireless local area network (WLAN) is exactly like a regular local area network (LAN), except that each computer in the WLAN uses a wireless device to connect to the network. Computers in a WLAN share the same frequency channel and SSID, which is an identification name for wireless devices.

2.2 AD-Hoc versus Infrastructure Mode

An Ad-Hoc wireless LAN is a group of computers, each equipped with one WLAN adapter, connected as an independent wireless LAN. Computers in a specific Ad-Hoc wireless LAN must be configured to share the same radio channel.



The adapter provides access to a wired LAN for wireless workstations. An integrated wireless and wired LAN is called an infrastructure configuration. A group of PC adapter/ card users and an Access Point can compose a Basic Service Set (BSS). Each PC adapter/card in a BSS can talk to any computer in the wired LAN infrastructure via the Access Point.



3. Getting to Know the Wireless-G USB Dongle

Wireless-G USB Dongle will be installed into your PC or Notebook like any other USB adapter using the USB port.

ACT LED Green. The ACT LED will blink when the Dongle transfers or receives data.

4. Installing Driver, Configuration Utility and Hardware for Windows 98SE/ME/2000/XP

4.1 For Windows XP/2000

4.1. 1 Hardware Installation

- 1-To install the Wireless-G USB Dongle in a Desktop or Notebook:
 - Select an available USB port on the notebook or Desktop PC
 - Insert the Wireless-G USB Dongle into the USB port
- 2-Windows will automatically detect the Dongle. In Windows XP, you will see Fig 4-1. Please click **"Cancel"**. Fig 4-2 is the screen in Windows 2000. Please click **"Cancel"**



Fig 4-1



Fig 4-2

3- Run the Auto Driver/Utility/ Installation

Insert the setup CD into your CD-ROM driver. Unless you have deactivated the auto-run feature of Windows, the screen in Fig 2-1 should appear automatically. If the screen doesn't appear automatically, you can access the installation by clicking the "Start" button and choose "Run". In the drop-down box type D:\setup.exe (where D: is the letter of your CD-ROM drive). Alternately, double-click "My Computer" and double-click the "Setup.exe" icon in the folder that appears.



Fig 4-2

4- Click **Install Wireless-G USB Dongle Driver and Utility**. Click **“Next>”**. (Fig 4-3)

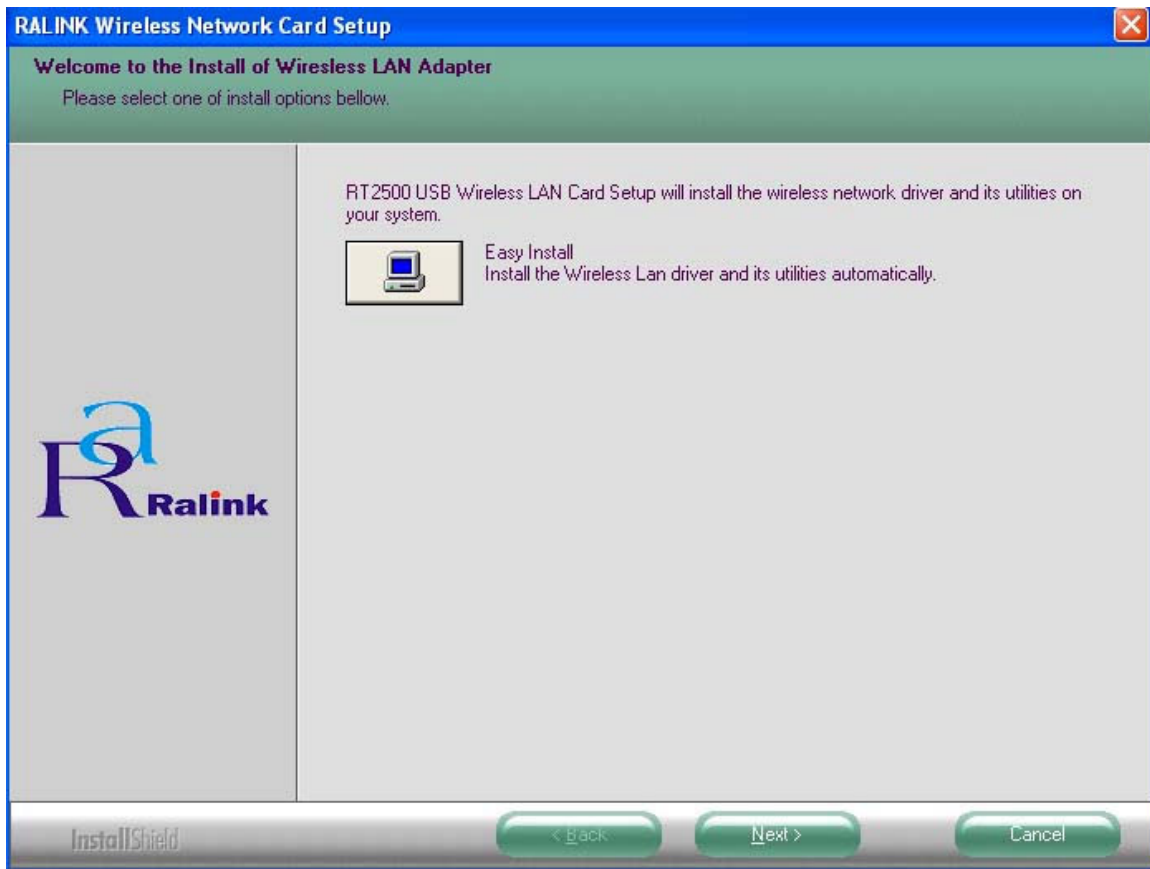


Fig 4-3

5- If your use Windows XP, you will see Fig 4-4. Please click **“Continue Anyway”**. If you use Windows 2000, you will see the Fig 4-5. Please click **“Yes”**



Fig 4-4



Fig 4-5

6- Then select the country Region. (Fig 4-6)



Fig 4-6

7- Click Finish on the Setup Page.(Fig 4-7)

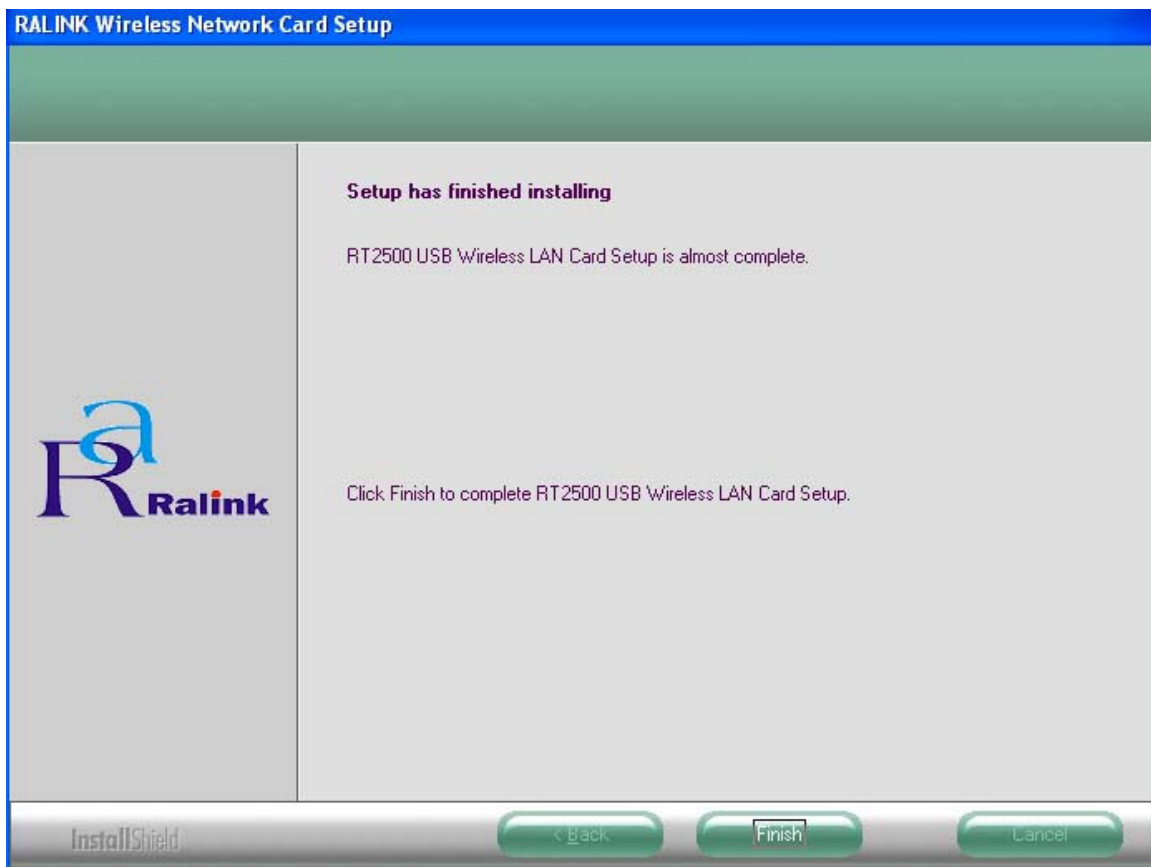


Fig 4-7

8- Please reboot the computer after the installation of drivers and utility.

4.2 For Windows 98SE/ME

4.1. 1 Hardware Installation

- 1- To install the Wireless-G USB Dongle in a Desktop or Notebook:
 - Select an available USB port on the notebook or desktop PC
 - Insert the Wireless-G USB Dongle into the USB port
- 2- Windows will automatically detect the Dongle. (Fig 4-8) Please click **“Cancel”**



Fig 4-8

- 3- Run the Auto Driver/Utility/ Installation
Insert the setup CD into your CD-ROM drive. Unless you have deactivated the auto-run feature of Windows, the screen in Fig 2-1 should appear automatically. If the screen doesn't appear automatically, you can access the installation by clicking the "Start" button and choose "Run". In the drop-down box provide type D:\setup.exe (where D: is the letter of your CD-ROM drive). Alternately, double-click "My Computer" and double-click the "Setup.exe" icon in the folder that appears.



Fig 4-9

4- Click **Install Wireless-G USB Dongle Driver and Utility**. Click **“Next>”**. (Fig 4-10)

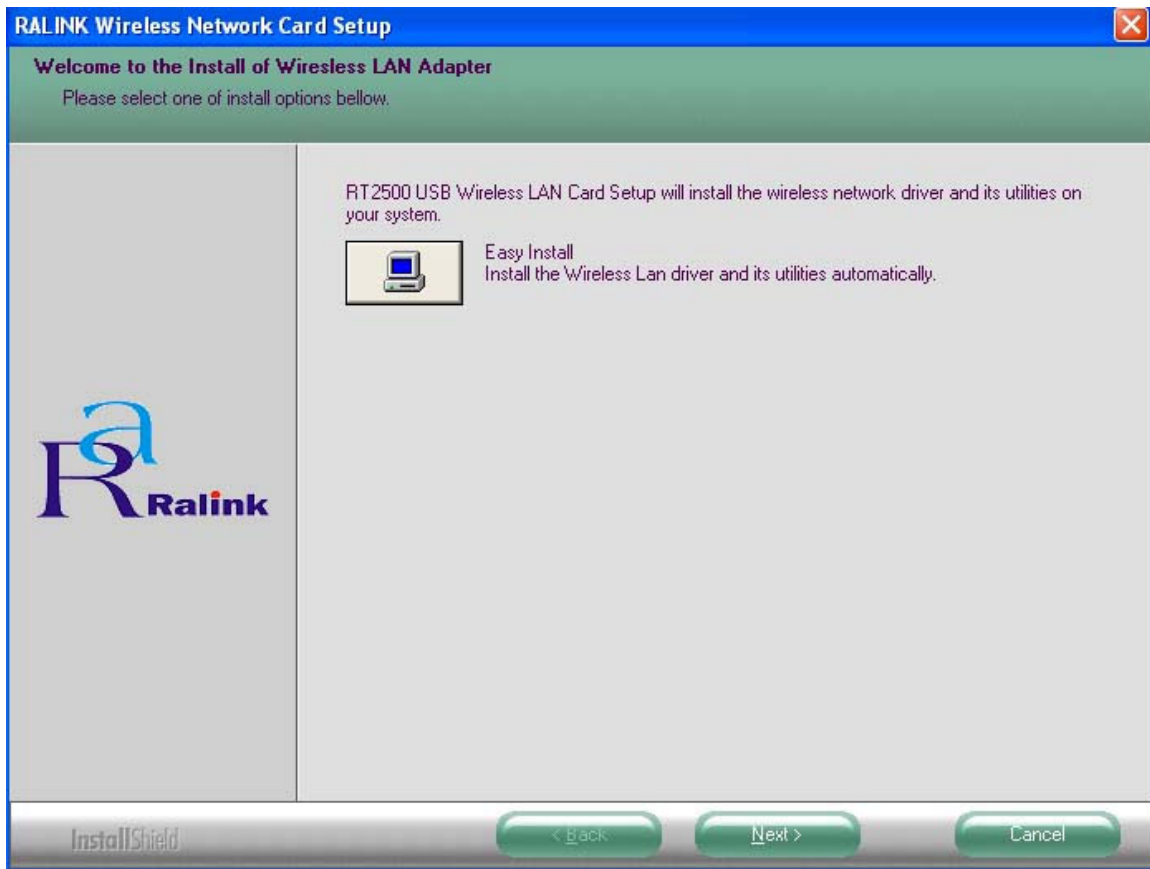


Fig 4-10

5- You will see the following page. (Fig 4-11)



Fig 4-11

6- Please click **“Install”** to install the 802.1x utility. You will see the following page. (Fig-4-12)



Fig 4-11

7- When you see Fig 4-11, the 802.1x utility has installed successfully. Please click **"Cancel"** to continue driver installation. Then select the country Region. (Fig 4-12)



Fig 4-12

8- Upon clicking "OK", you will see the following screen. Click OK on (Fig 4-13).



Fig 4-13

9. Click Finish on the Setup Page.(Fig 4-14)

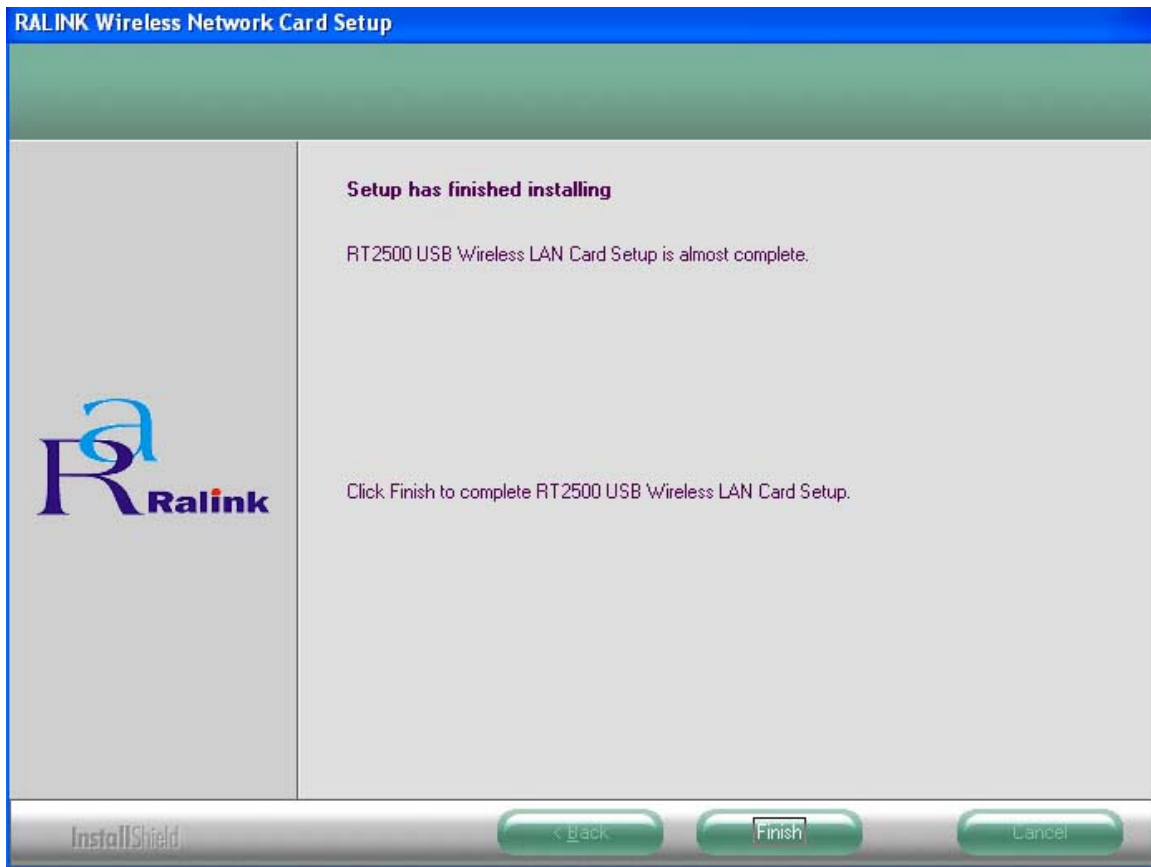


Fig 4-14

10- Please reboot the computer after the installation of drivers and utility is completed.

5. Using the Configuration Utility for 98SE/ME/2000/XP

5.1 Overview

The wireless Configuration Utility can be used to check link information, search for available wireless networks, or to create profiles that hold different configuration settings.

5.2 Access the Configuration Utility

After installing the adapter, the Configuration Utility icon will appear in your system tray. Double-click the icon. (Fig 5-1)



Fig 5-1

The utility is divided into six parts: **Profile**, **Link Status**, **Site Survey**, **Statistics**, **Advance**, and **About**. You should change all your configuration settings for your Wireless-G USB Dongle by using this utility and not with the Network Properties section in your Control Panel.

5.3 Profile

The Profile screen (Fig 5-2) lets you save different configuration profiles for different network setups.

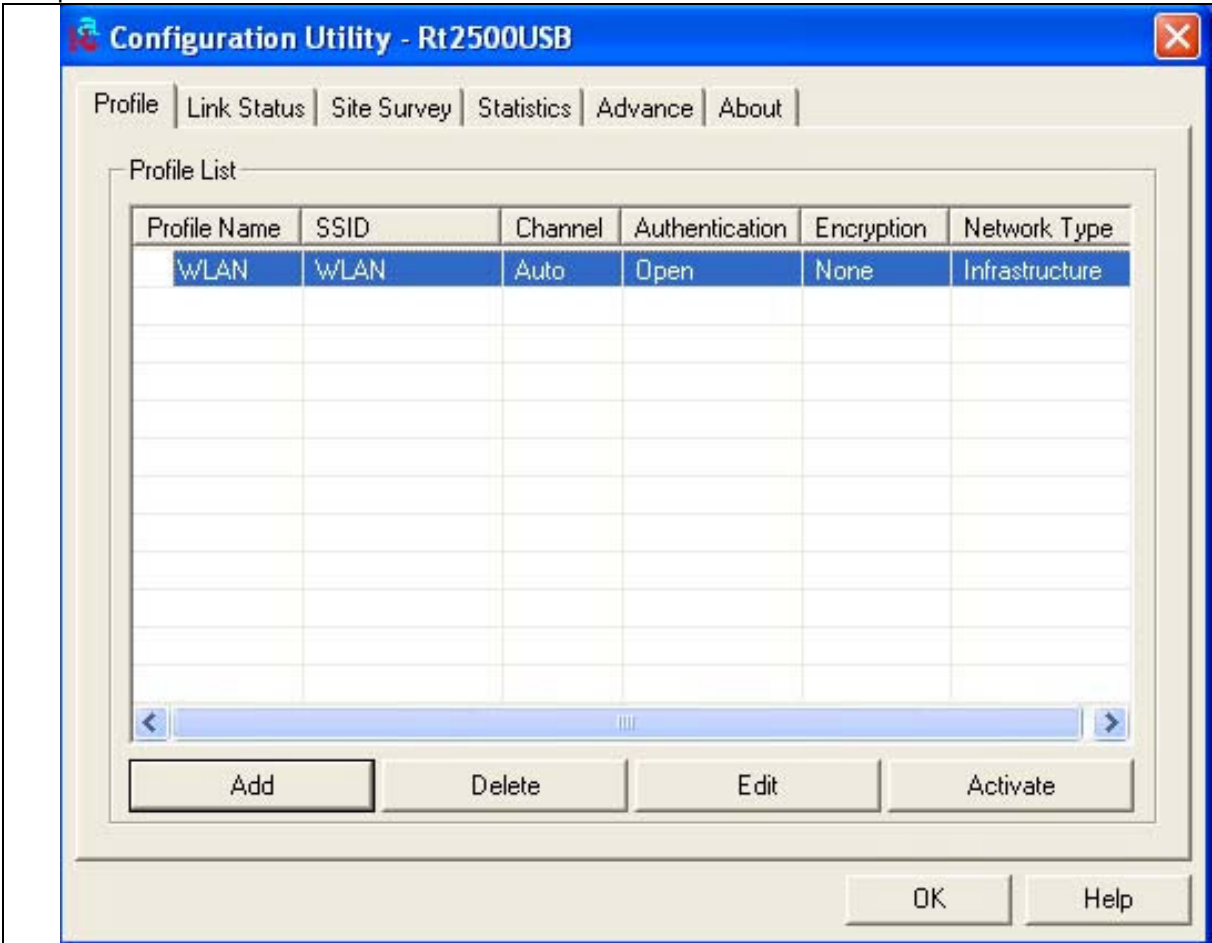


Fig 5-2 Profile

Profile Name – Connection profile name.

SSID – The Wireless unique name of the profile.

Channel – The channel which the wireless network devices are set on.

Authentication – The Authentication method used in this profile.

Encryption – The Encryption type used for this profile.

Network Type – The Network type used for this profile.

Add- Click the Add button to create a new profile. Please refer the “5.4 Create a New Profile”.

Delete - Click the Delete button to delete a profile.

Edit- Select a profile, and click the Edit button to change an existing profile.

Activate- To activate a specific profile, select the profile, and click the Activate button.

5.4 Create a New Profile

1- Enter the Profile Name.

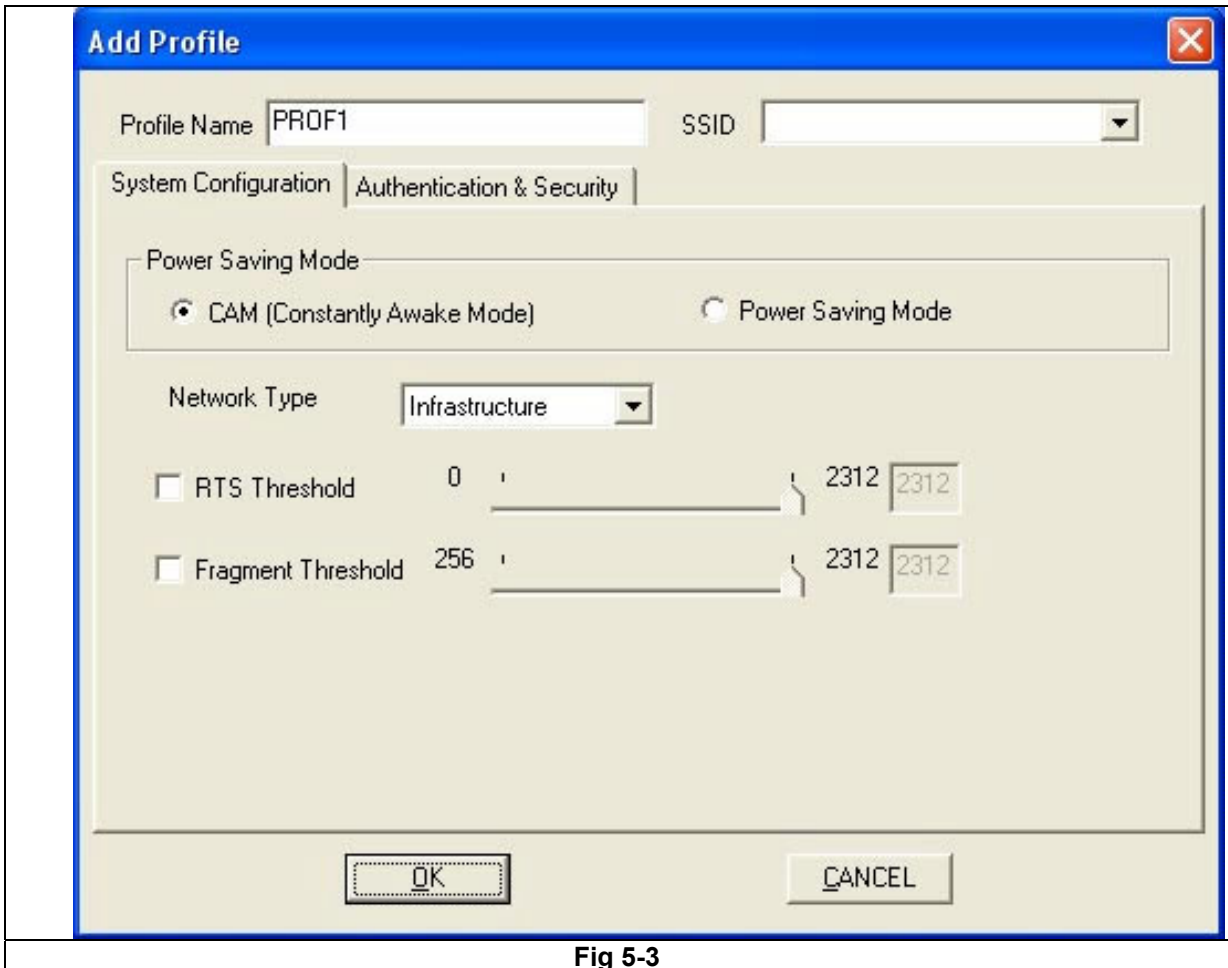


Fig 5-3

2- Fill the following information.

SSID: Enter the SSID for the wireless network.

Network Type: There are two wireless modes.

(A) Infrastructure - This mode allows wireless and wired networks to communicate through an access point.

(B) Ad Hoc - This mode allows wireless-equipped computers to communicate directly with each other.

3- Setup the Security Configuration

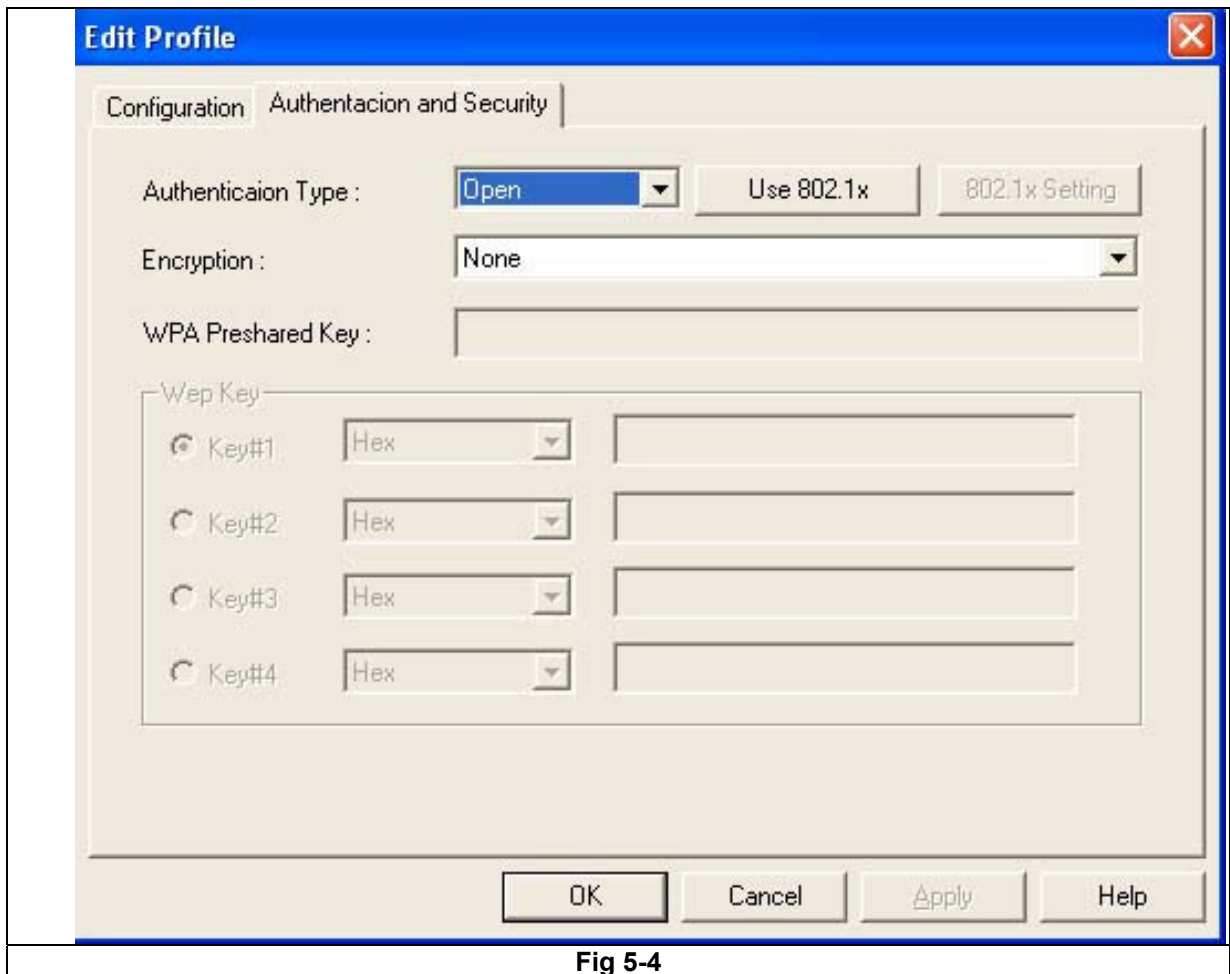


Fig 5-4

A. If encryption is not required; please click “OK” to save the profile.

For configuring encryption, please follow the steps below:

B. WEP

1. Select Authentication type: **Open System** or **Shared Key**.
2. Select the key number that will be used
3. Enter the key
4. Click "OK" to save the profile. Please see the Fig 5-5.

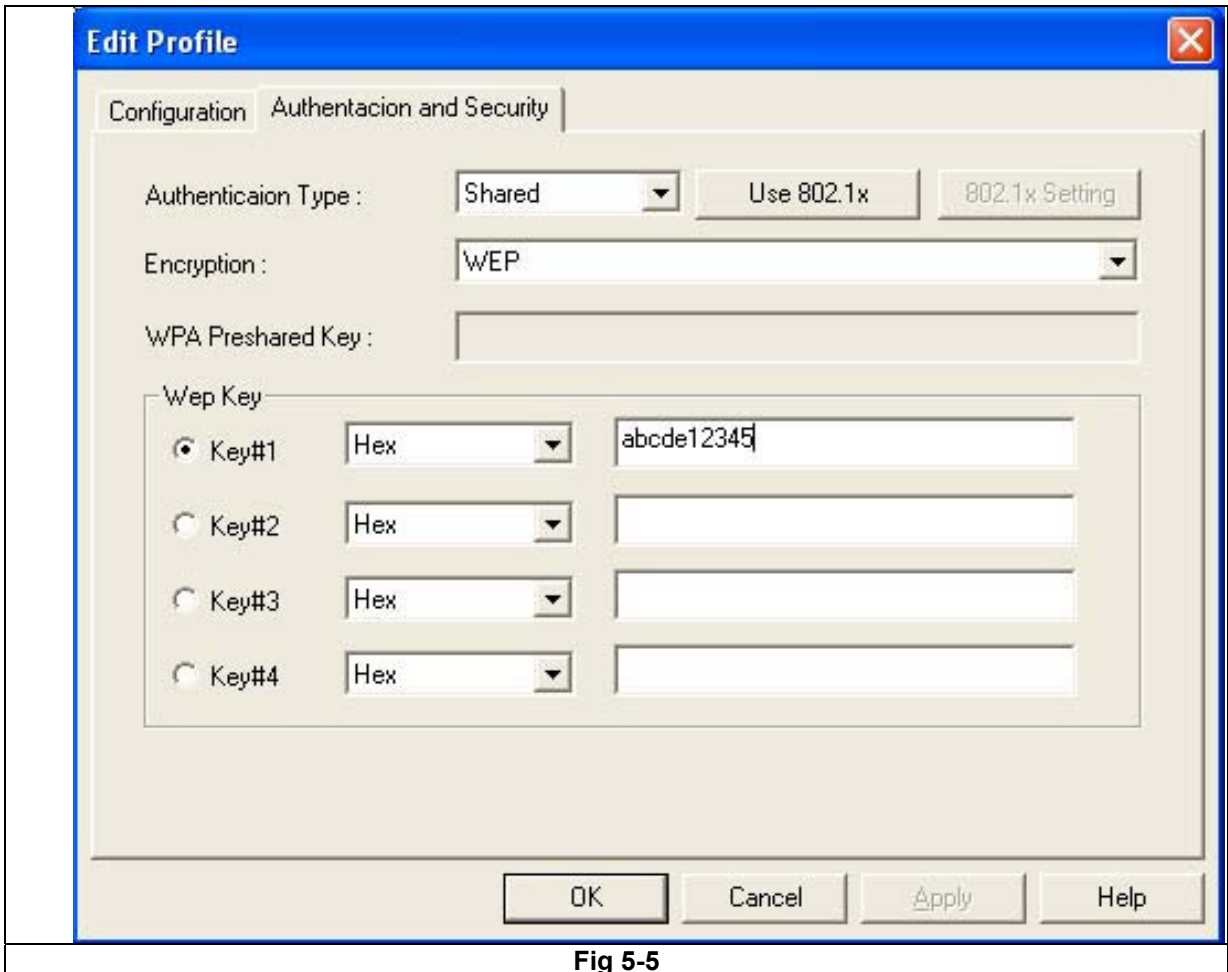


Fig 5-5

C. WPA

1. Select Authentication type: **WPA**
2. Select Encryption type: **TKIP** or **AES**. Please see the Fig 5-6

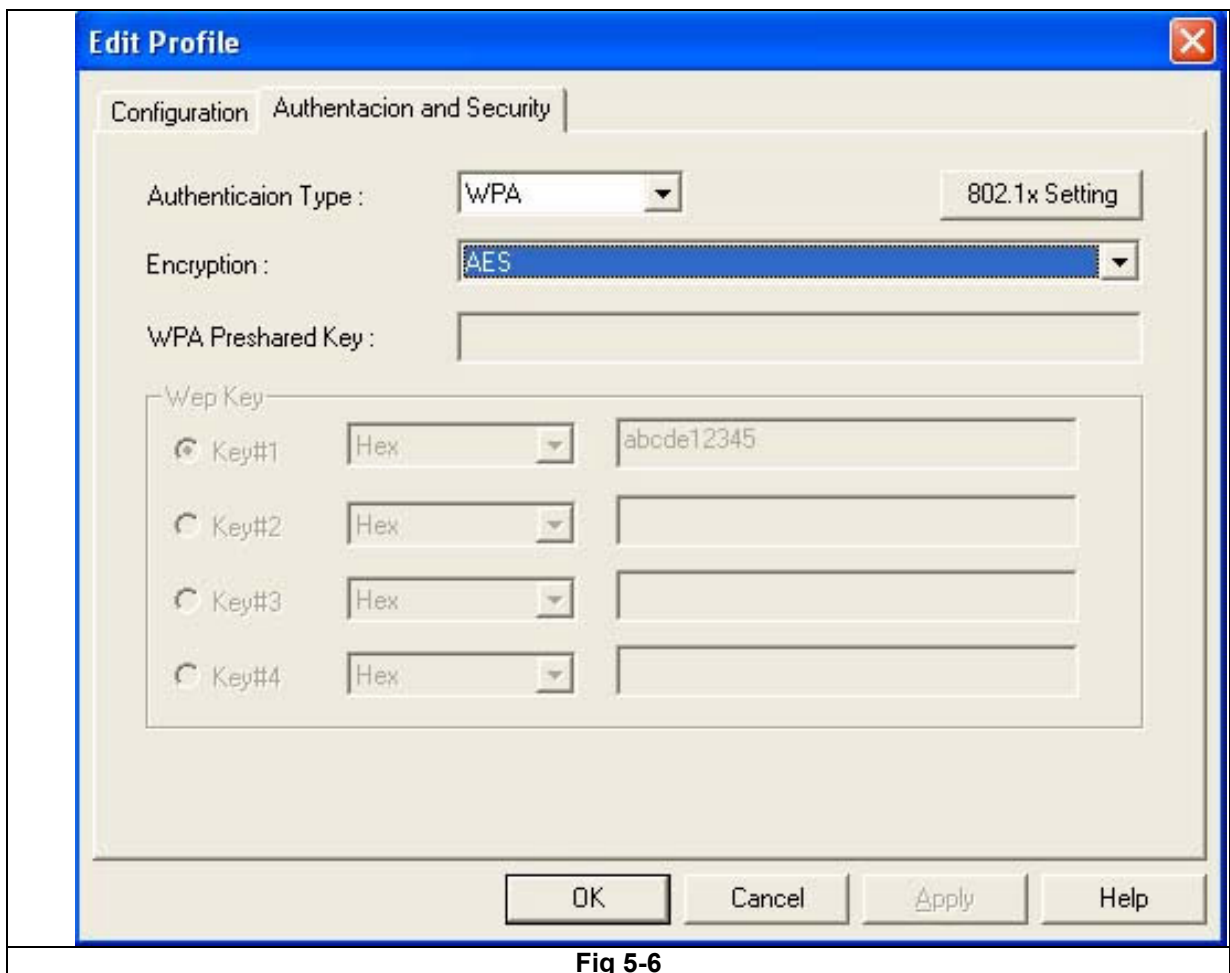
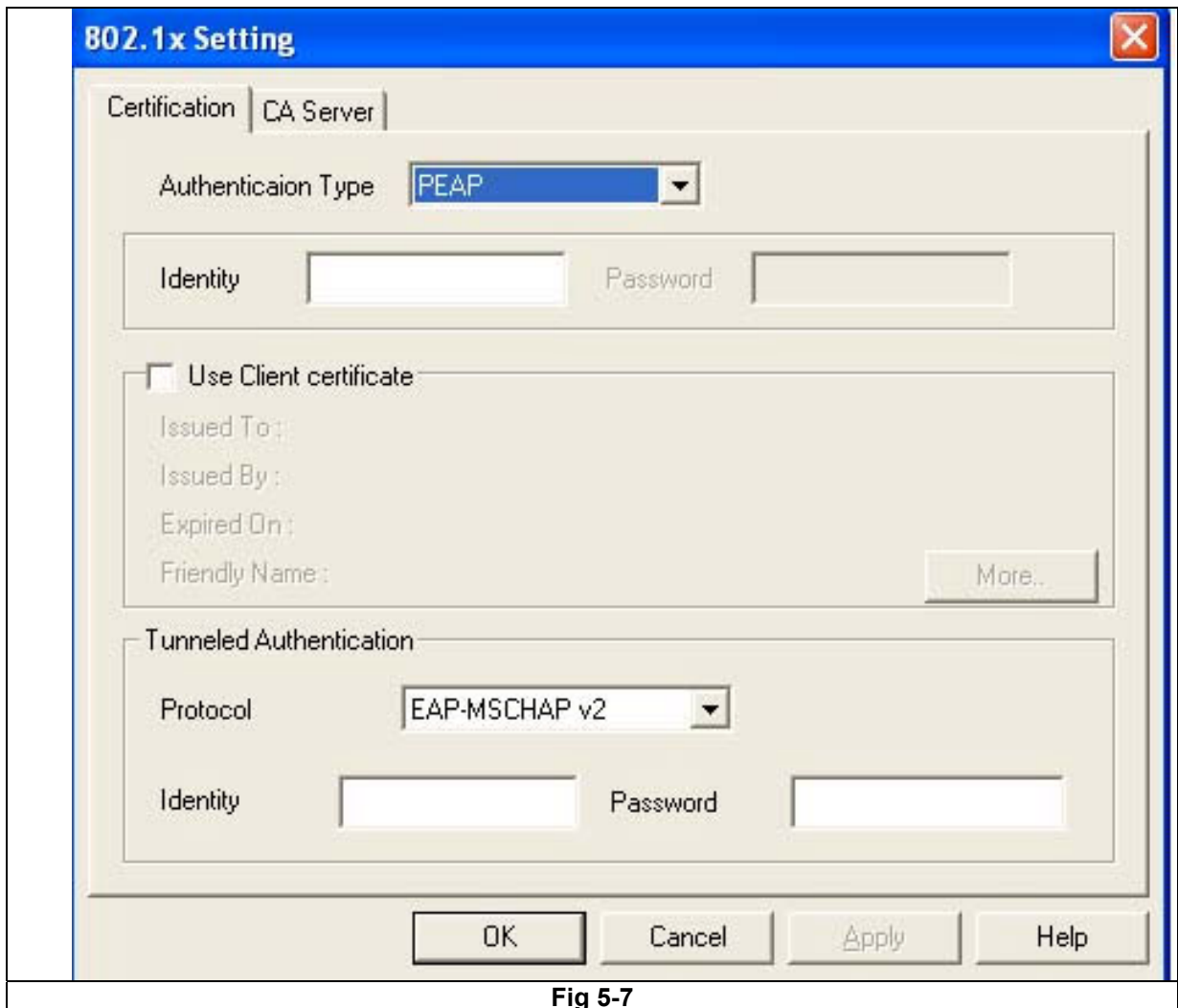


Fig 5-6

3. Click “802.1x Setting” button. Please see the Fig 5-7



The image shows a Windows-style dialog box titled "802.1x Setting". It has a blue title bar with a close button (X) in the top right corner. The dialog is divided into two tabs: "Certification" and "CA Server", with "CA Server" currently selected. Under the "CA Server" tab, there is a section for "Authenticaiton Type" (note the typo) with a dropdown menu set to "PEAP". Below this are two text input fields labeled "Identity" and "Password". A checkbox labeled "Use Client certificate" is unchecked. Below the checkbox are four labels: "Issued To:", "Issued By:", "Expired On:", and "Friendly Name:", each followed by a text input field. A "More.." button is located to the right of the "Friendly Name:" field. Below these fields is a section titled "Tunneled Authentication". It contains a "Protocol" dropdown menu set to "EAP-MSCHAP v2" and another set of "Identity" and "Password" text input fields. At the bottom of the dialog are four buttons: "OK", "Cancel", "Apply", and "Help".

802.1x Setting

Certification | CA Server

Authenticaiton Type: PEAP

Identity: [] Password: []

☐ Use Client certificate

Issued To: []
Issued By: []
Expired On: []
Friendly Name: [] More..

Tunneled Authentication

Protocol: EAP-MSCHAP v2

Identity: [] Password: []

OK Cancel Apply Help

Fig 5-7

4. Fill all the information which you wan to use. If you want to use CA server, please click “CA Server” page. Please see the Fig 5-8

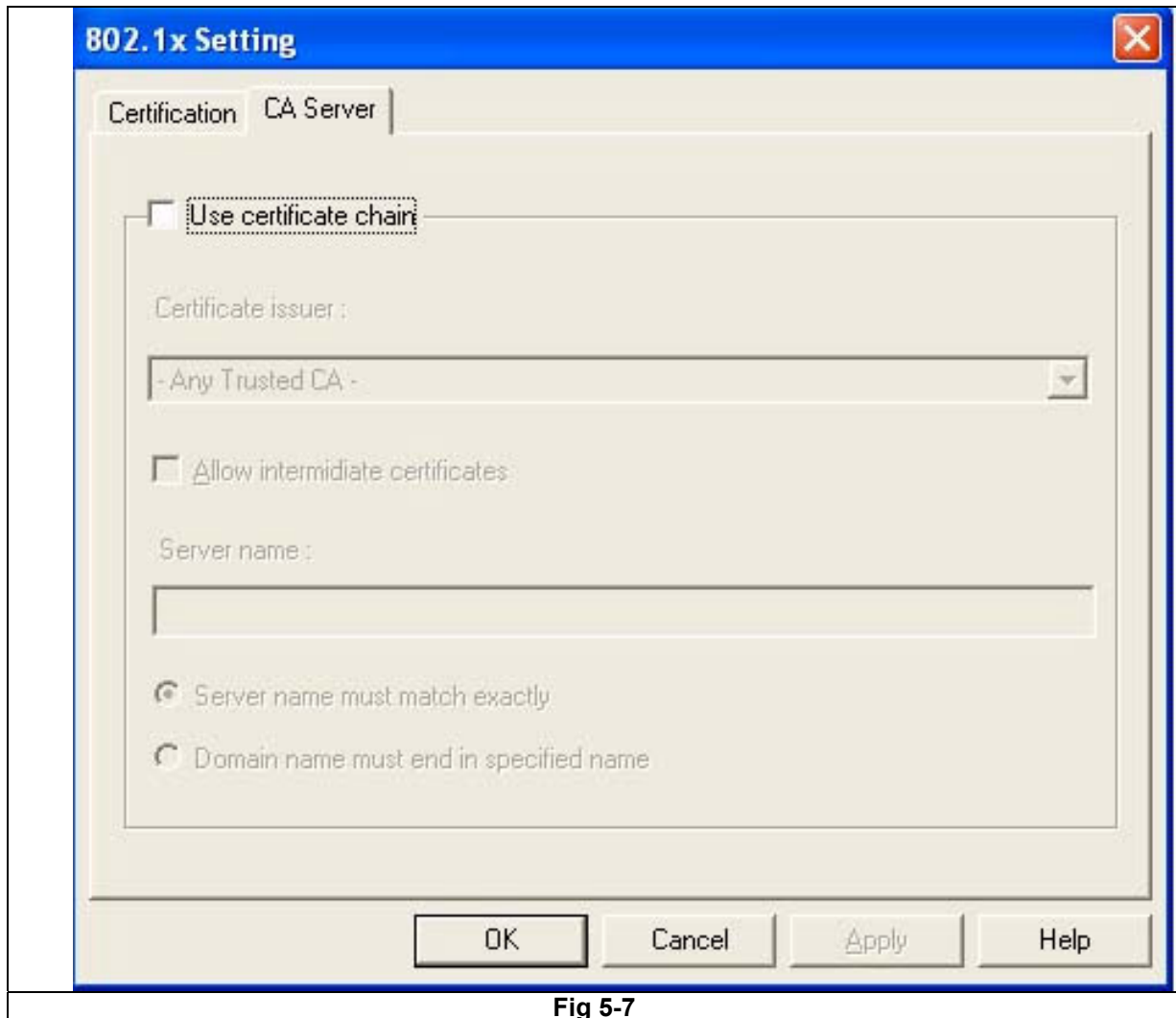


Fig 5-7

5. Fill the information which you want to use. Please click “OK” to save the profile.

D. WPA-PSK

1. Select Authentication type: **WPA-PSK**
2. Select Encryption type: **TKIP** or **AES**
3. Enter the Key
4. Click "OK" to save the profile. Please see the Fig 5-9

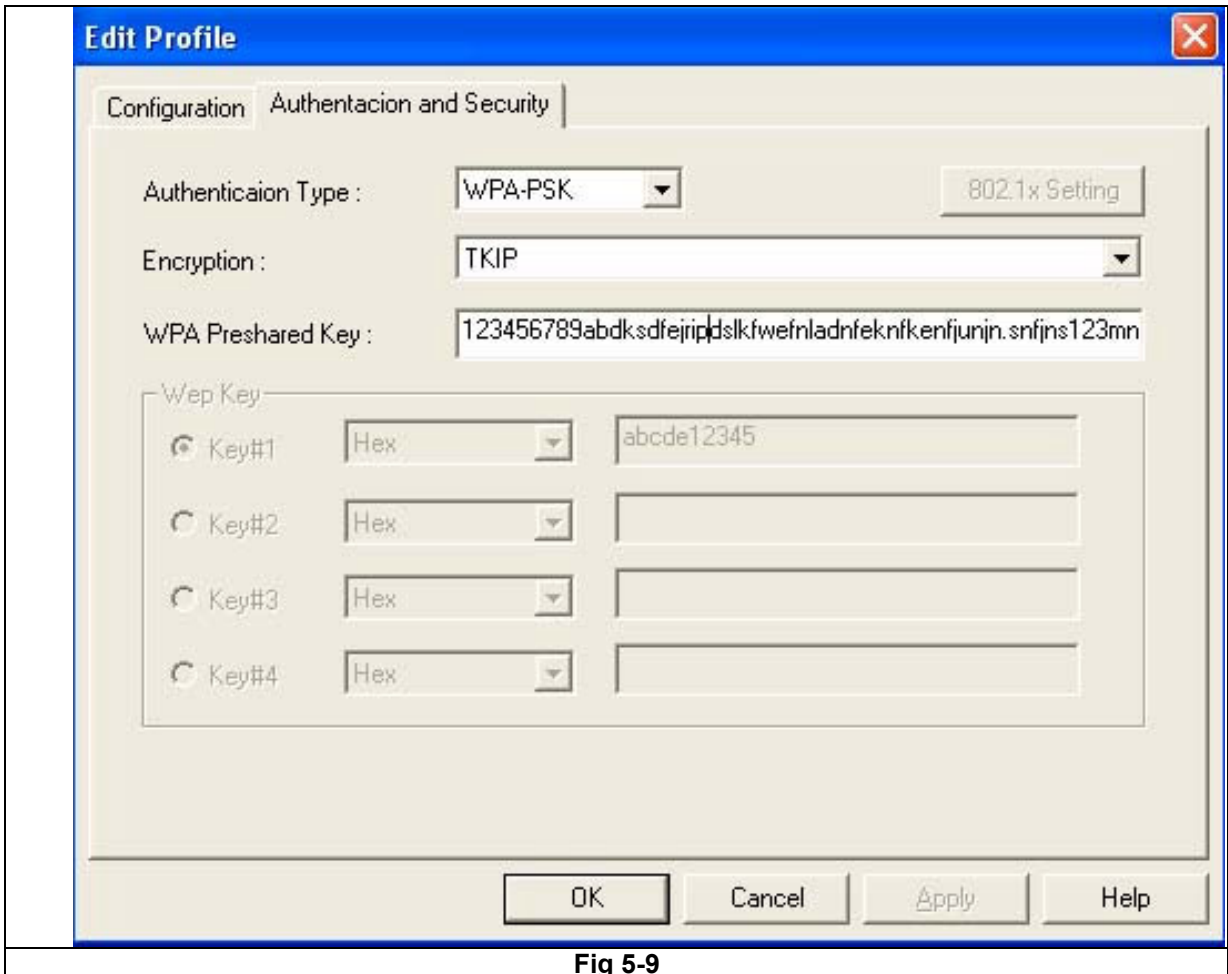


Fig 5-9

5.5 Link Status

The Link Status (Fig 5-10) provides the link information of the Wireless-G USB Dongle.

When in Infrastructure Mode, **Status** will display the connection statistics for the network segment that you are on.

The **Channel** field shows the channel which the wireless network devices are currently using.

The **Link Speed: Tx(Mbps)** field shows the transfer rate in megabits per second.
Rx(Mbps) field shows the receive rate in megabits per second.

The **Throughput (Kbps)** field is the amount of data moved successfully form one place to another in a given time period.

The **Link Quality** field will display a bar indicating percentage, between 0 and 100 percent.

The **Signal Strength** field will display a bar indicating percentage, between 0 and 100 percent.

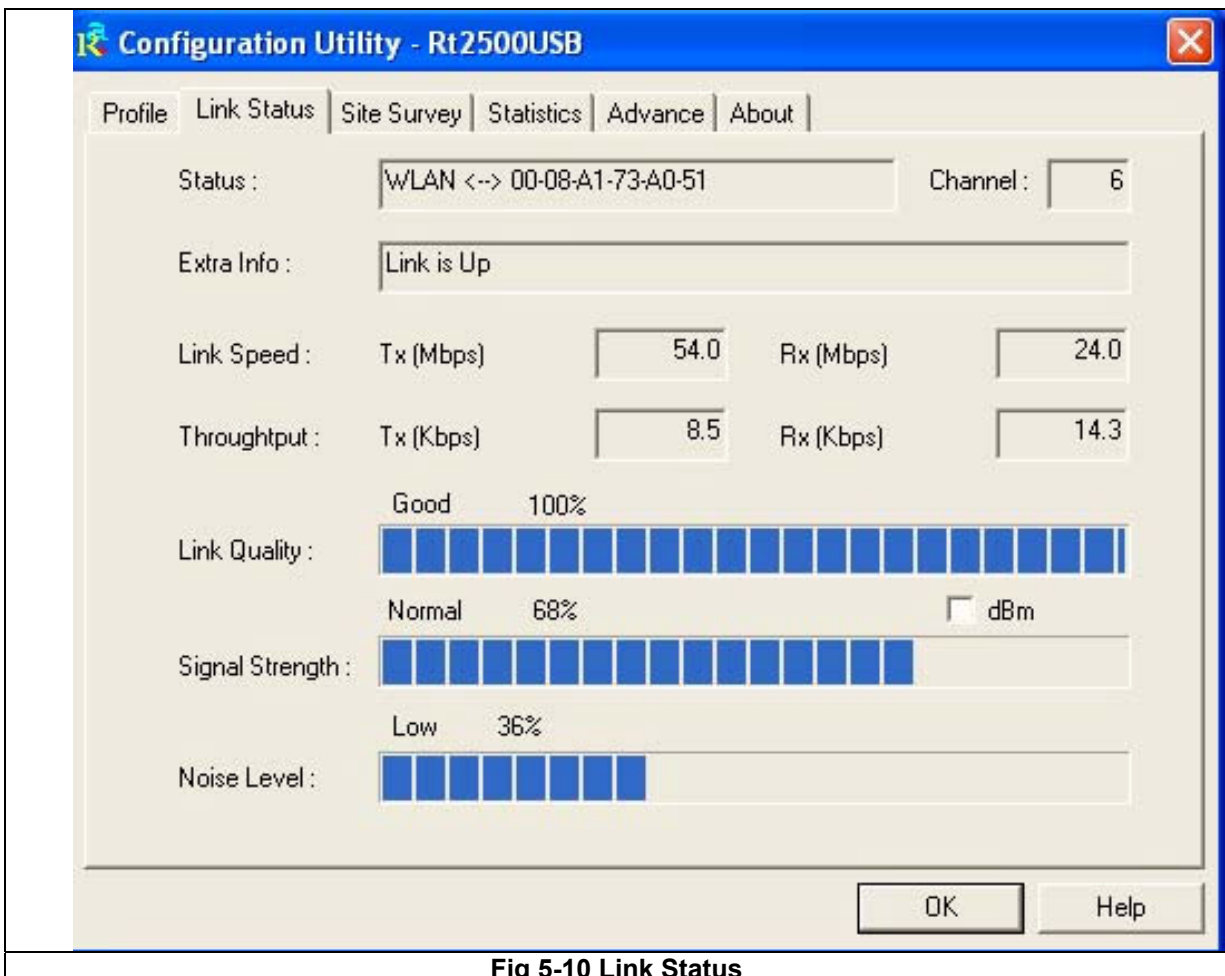


Fig 5-10 Link Status

5.6 Site Survey

The site survey page displays a list of all infrastructure and ad-hoc networks available for connection. (Fig 5-11)

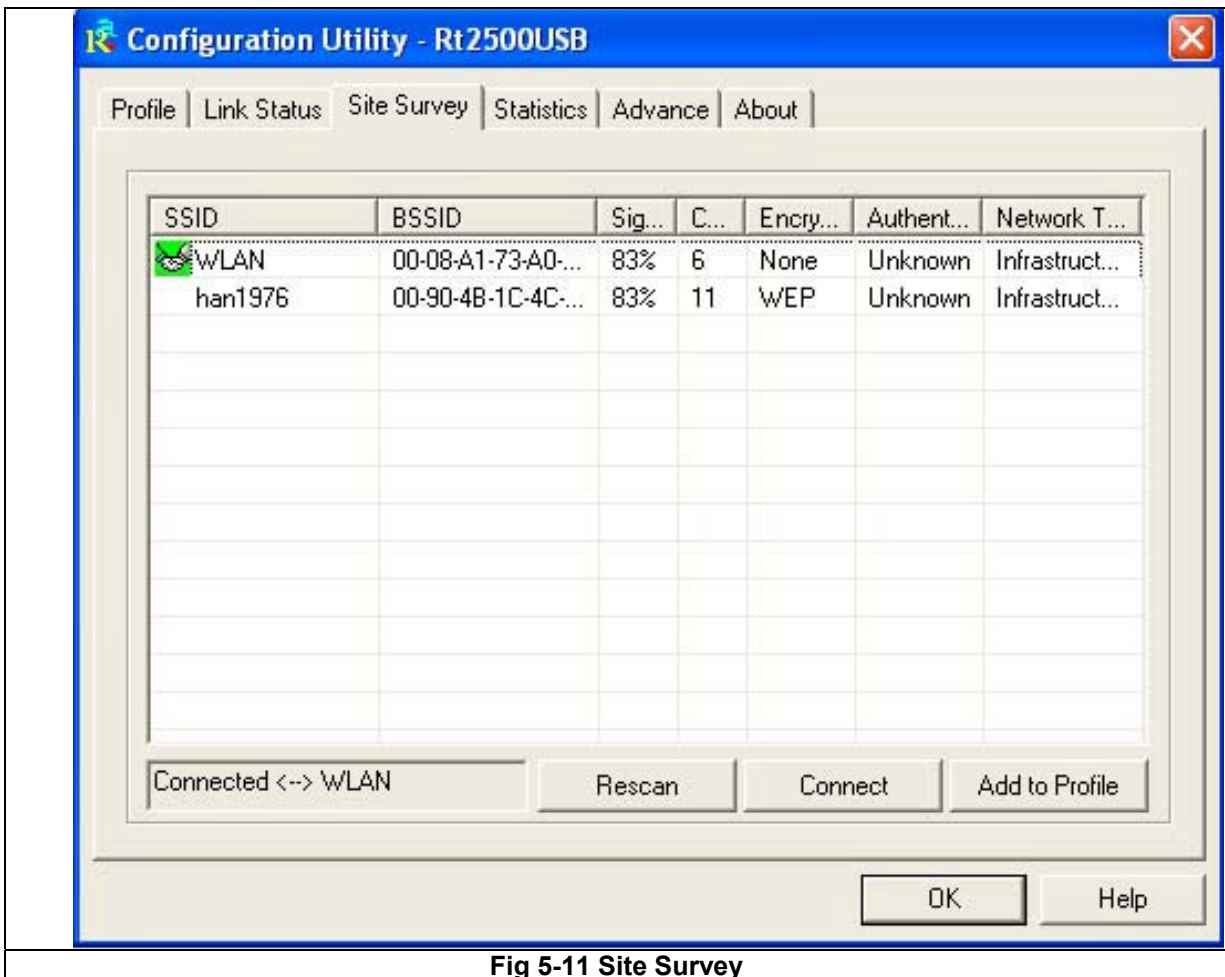


Fig 5-11 Site Survey

Information:

SSID – Service Set ID of the Wireless Network.

BSSID – MAC Address of the Wireless Network.

Signal – Signal Strength status.

Channel – The Channel Wireless Network devices are using.

Encryption - Encryption type.

Authentication – Authentication type used.

Network Type - Wireless Network mode

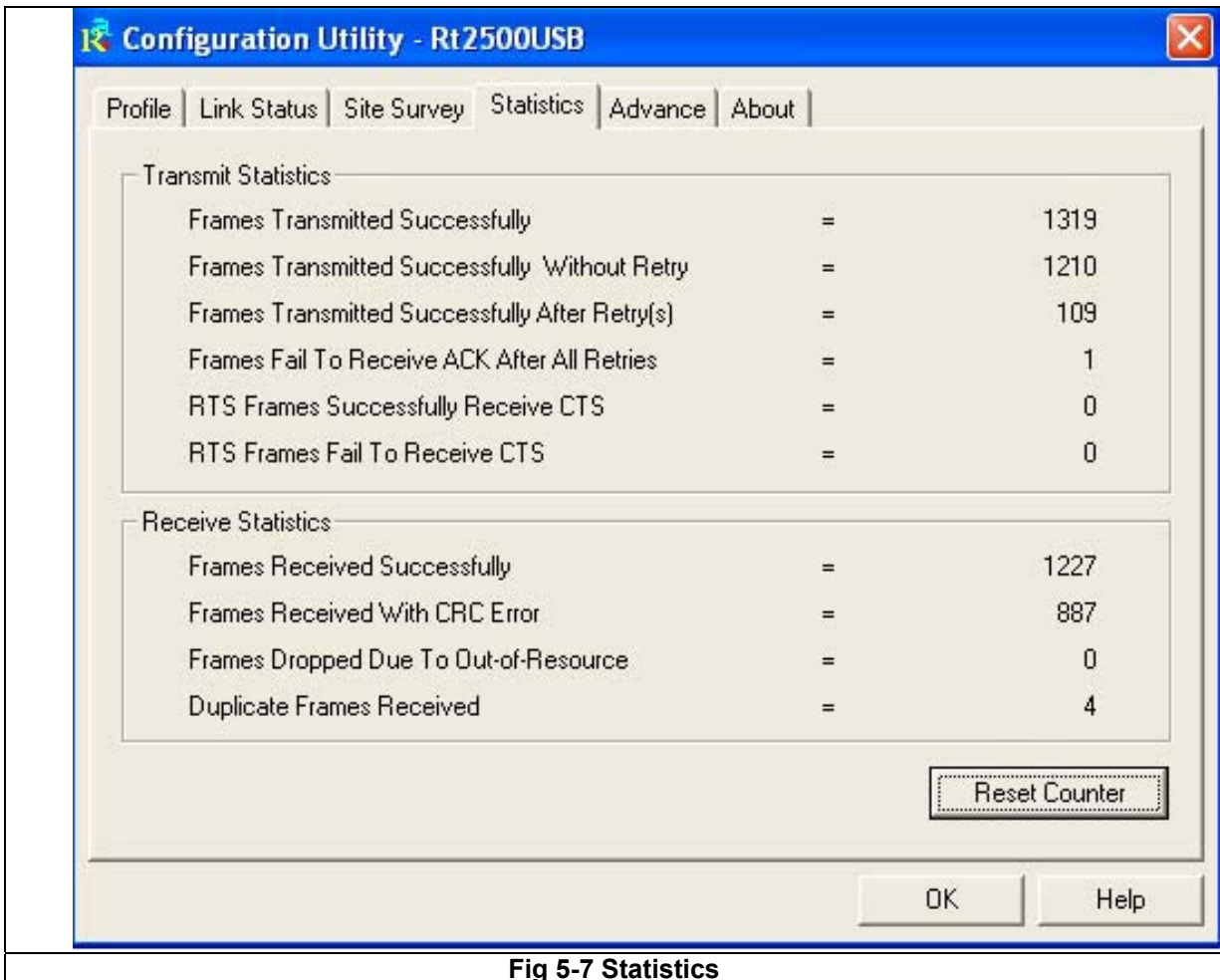
Rescan - Click the **Rescan** button to search for wireless networks.

Connect – Select one of the networks on the list, and click the **Connect** button. Please note that if the wireless network has encryption enabled, you can't connect. If you want to connect you must add a profile in the Profile Tab.

Add Profile – If you click this button, the Profile screen (Figure 5-4) will appear.

5.7 Statistics

The Statistics screen (Shown in Fig 5-7) provides information about the Transmit Statistics and Receive Statistics. You can reset counters if you need, otherwise click **OK**.



5.8 Advance

The Advanced screen (Fig 5-8) allows you to set Wireless Mode, Ad hoc wireless mode, TX BURST, B/G Protection, Tx Rate and Antenna On/Off.

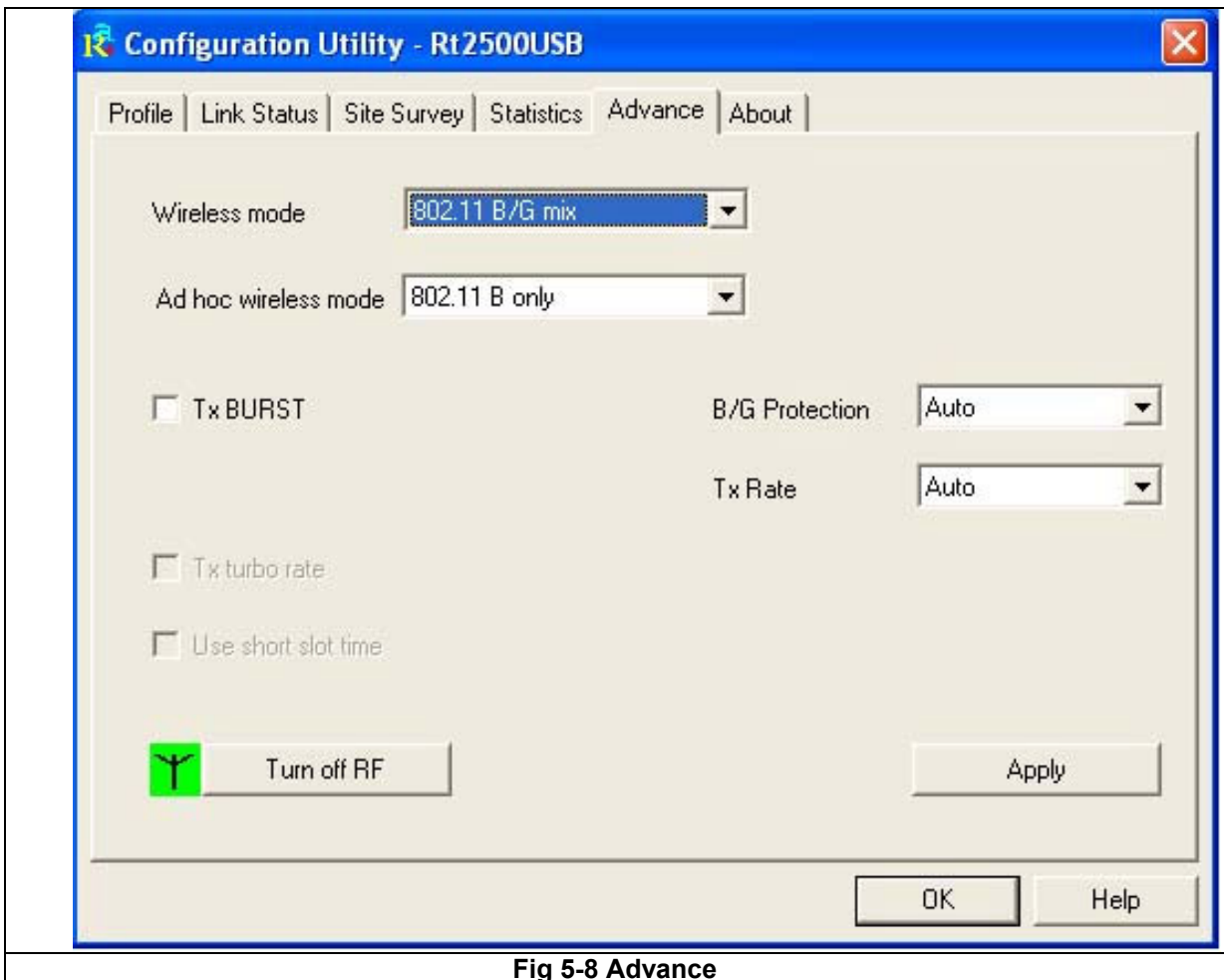


Fig 5-8 Advance

5.9 About

The About screen shows release dates as well as driver/utility versions and the MAC/IP address of the card.

