

IEEE802.11b Wireless Adapter

User's Guide

Version A1
Aug 2003

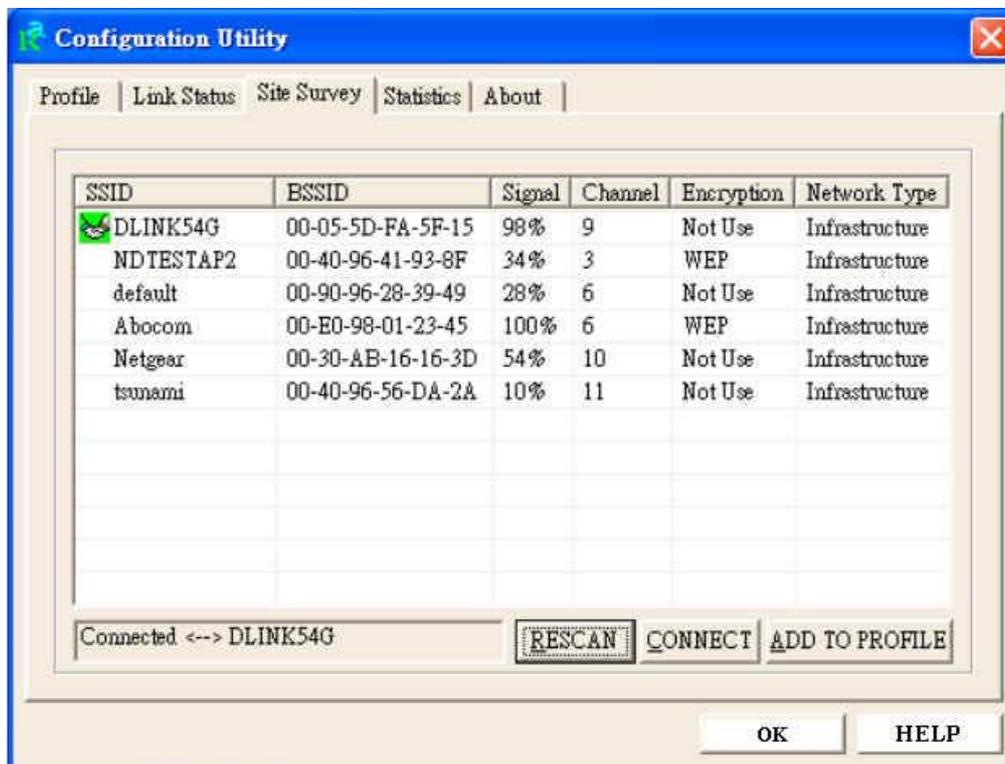
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1、RaConfig

The first time of using Configuration (RaConfig), system will ask you to select the located country. (See the following figure) Please directly choose the country where you are located and click OK.



System will automatically associate with AP(Access Point) which has the strongest signal without WEP(Wired Equivalent Privacy). The Site Survey Panel is showed as bellow.

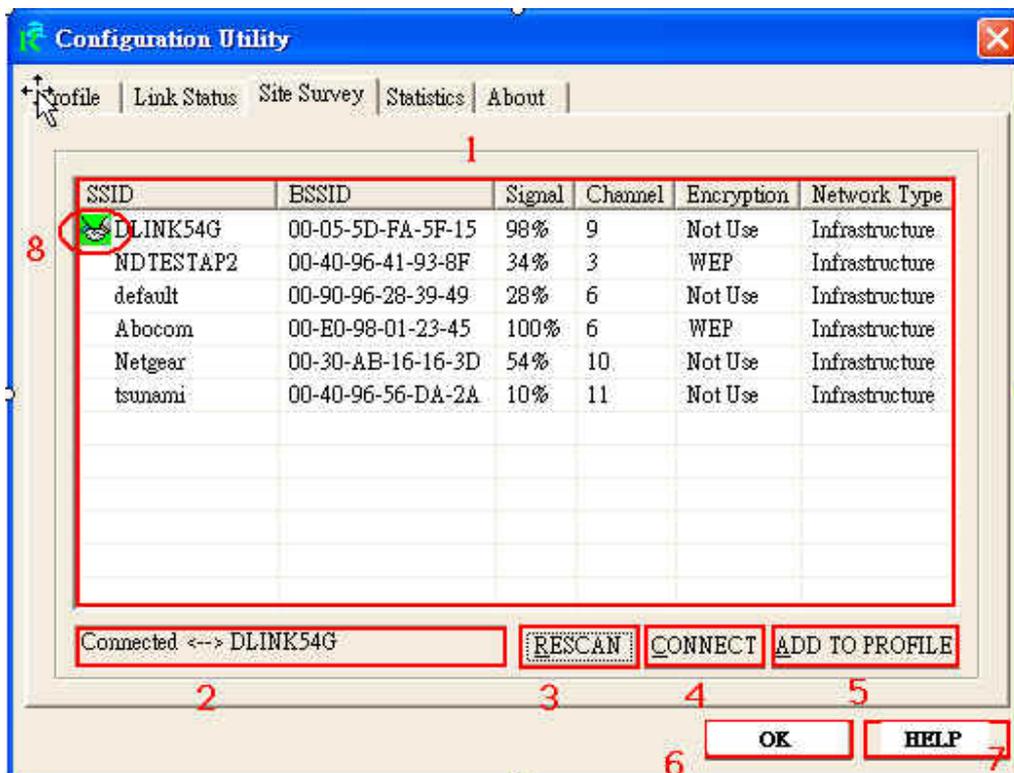


At the mean time, there will have a small icon shown on the tool bar.



If you want to utilize the RaConfig, you can directly double click the icon anytime.

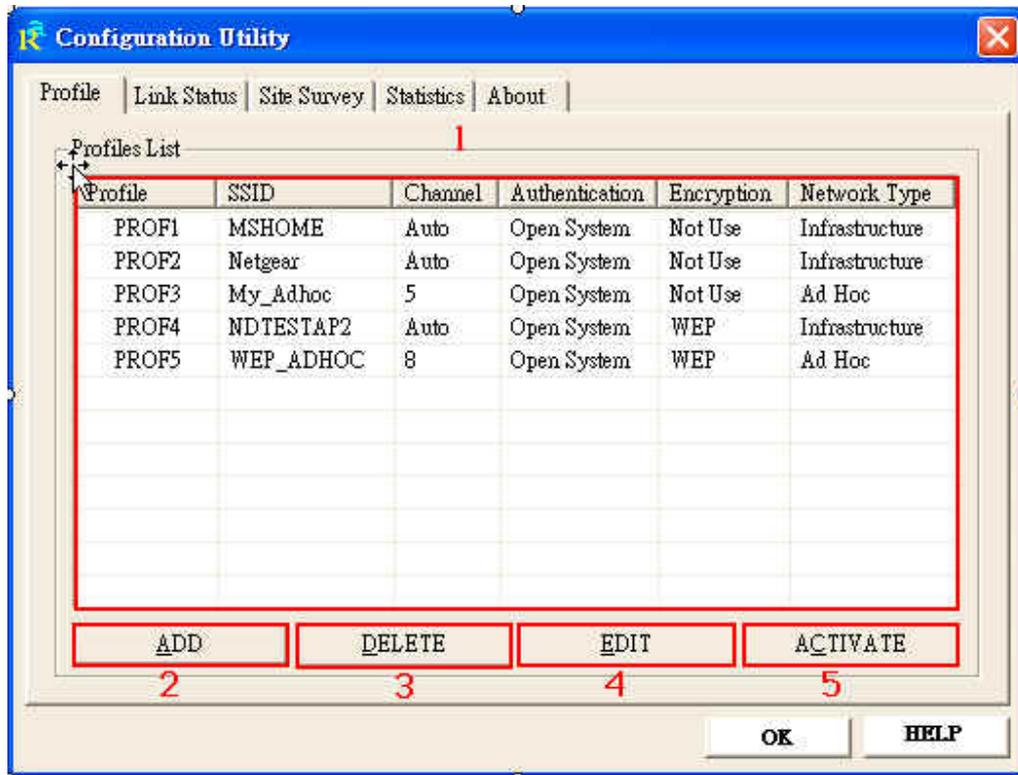
2、 Site Survey



Introduction of Site Survey

1. List detail data of AP (Access Point): For example SSID BSSID、Signal、Channel、Encryption(Not Use/WEP)、NetworkType(Infrastructure/Adhoc)
2. Connection Status: The above figure shows the associated AP, DLINK54G.
3. Press **RESCAN**. The panel will show the latest information for all AP.
4. Press **CONNECT**. Adapter can link with selected AP.
5. Press **ADD TO PROFILE** Save the setting into Profile
6. Press **OK** hide RaConfig. User can trigger RaConfig again from the icon on the tool bar.
7. Press **HELP** read the help file.
8. The green picture  means the adapter has been associated with AP.

3、Profile



Introduction Profile Panel

- 1、List all the profiles setting. You can set up your wireless networks by the following procedures.
- 2、Press Add a new Profile setting.
- 3、Press delete the Profile setting.
- 4、Press modify the Profile setting.
- 5、Press , set up the activate setting Profile. For example : Choose the second Profile (PROF2) SSID=Netgear. Then, press the . The symbol will show up on the PROF2 (Refer to the picture below). This means the successful of setting.

Profile	SSID	Channel	Authentication	Encryption	Network Type
PROF1	MSHOME	Auto	Open System	Not Use	Infrastructure
<input checked="" type="checkbox"/> PROF2	Netgear	Auto	Open System	Not Use	Infrastructure
PROF3	My_Adhoc	5	Open System	Not Use	Ad Hoc
PROF4	NDTESTAP2	Auto	Open System	WEP	Infrastructure
PROF5	WEP_ADHOC	8	Open System	WEP	Ad Hoc

How to add or modify 'Profile' setting

When you press **ADD** , **EDIT** , or select **ADD TO PROFILE** under Site Survey Panel. According to your selection, the utility will show up as below.

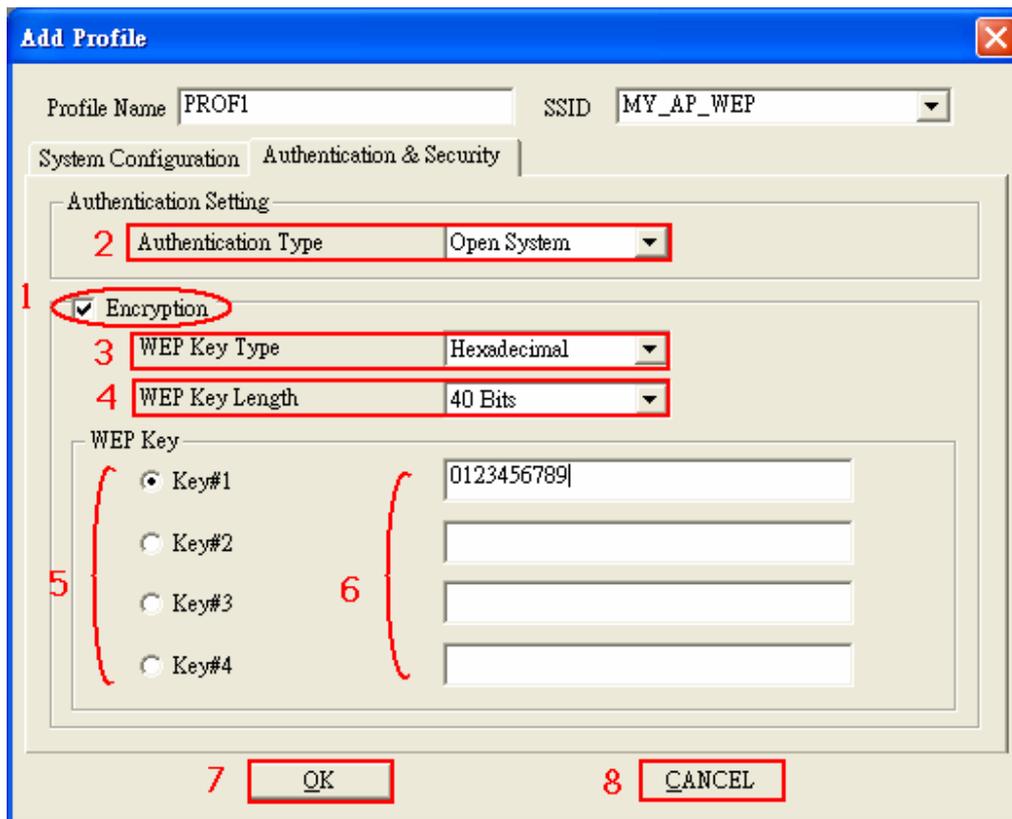
The screenshot shows the 'Add Profile' dialog box with the following settings:

- Profile Name: PROF1
- SSID: (empty)
- System Configuration Tab:
 - Power Saving Mode: CAM (Constantly Awake Mode) selected
 - Antenna Tx Diversity: Diversity selected
 - Antenna Rx Diversity: Diversity selected
 - Network Type: 802.11 Ad Hoc
 - Transmit Rate: Auto
 - Preamble Type: Auto
 - RTS Threshold: (checkbox) 0
 - Fragment Threshold: (checkbox) 256
 - Channel: 1
- Buttons: OK, CANCEL

- 1 、 Profile Name: insert a wanted and memorable name.
- 2 、 SSID: Set up the name of associated AP.
- 3 、 System Configurage Panel: This is the main setting panel.
- 4 、 Authentication & Security Panel: Set up WEP
- 5 、 Power Saving Mode: Allow minimizing your power consumption. The Power Saving Mode control setting, which only use in the infrastructure mode.
- 6 、 The Antenna diversity setting for transmitting.
- 7 、 The Antenna diversity setting for receiving.
- 8 、 Network type (Infrastructure/802.11 AdHoc) 。
The network type setting, which can be Infrastructure or 802.11 Ad Hoc.
- 9 、 Select Transmit Rate (Auto 、 1Mbps 、 2Mbps 、 5.5Mbps 、 11Mbps) 。
The transmit Rate setting, which can be Auto, 1Mbps, 2Mbps, 5.5Mbps or 11Mbps.
- 10 、 The preamble type setting, which can be Long, Short or Auto.
- 11 、 The RTS threshold setting. The default value is 2312.

- 12、The fragment threshold setting. The default value is 2312.
- 13、The channel control setting, which for use only in the Ad Hoc model.
- 14、Choose **OK** to save the setting.
- 15、Choose **CANCEL** to ignore the setting.

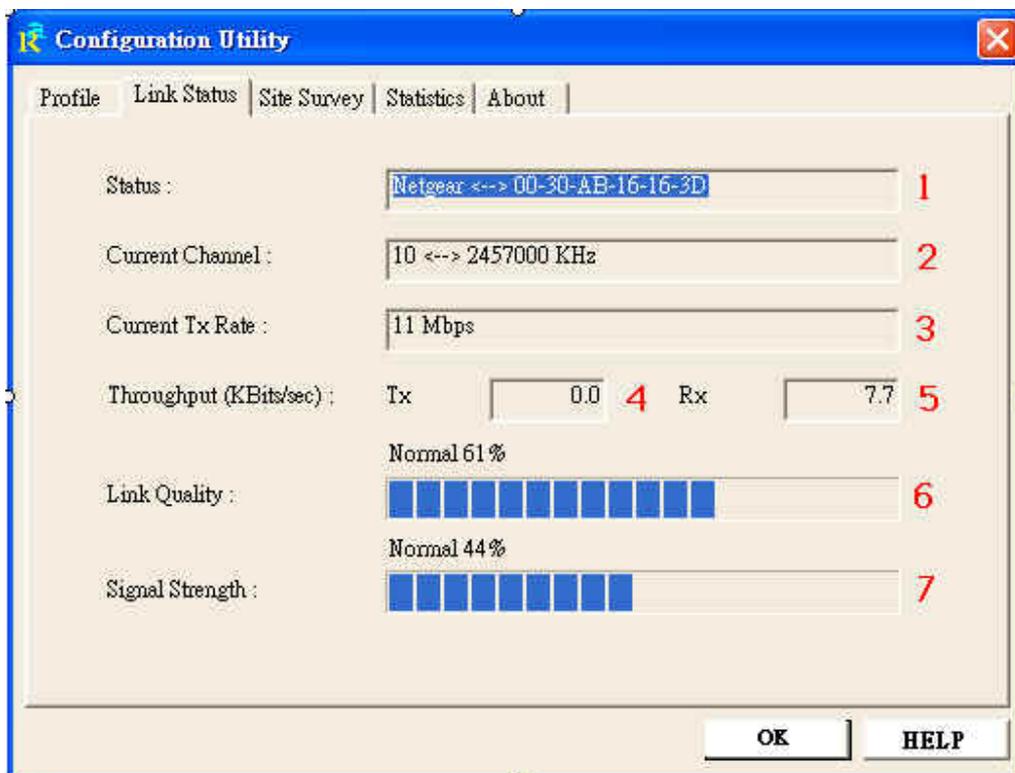
Authentication & Security Setting



- 1、Encryption, choose to enable the WEP function.
- 2、The authentication type setting, which can be open system or shared key.
- 3、The WEP key type setting, which can be hexadecimal or ascii.
- 4、The WEP key length setting, which can be 40 Bits or 104 Bits.
- 5、The WEP key ID setting, which can be key#1 to key#4.
- 6、Entry of the WEP key. Typing hex input (123...ABC..F) when hexadecimal mode selected. The length of text or number is as below:

KEY Length Len	WEP Type	Ascii	Hexadecimal
		40 Bits	5
104 Bits		13	26

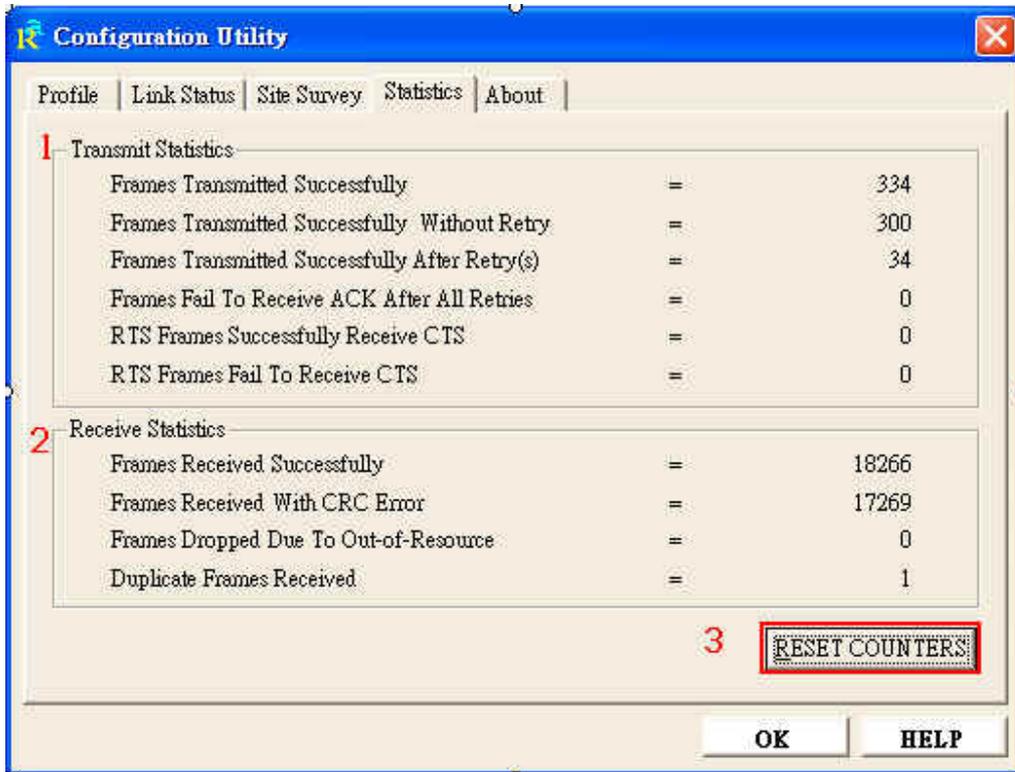
4、Link Status



Link Status

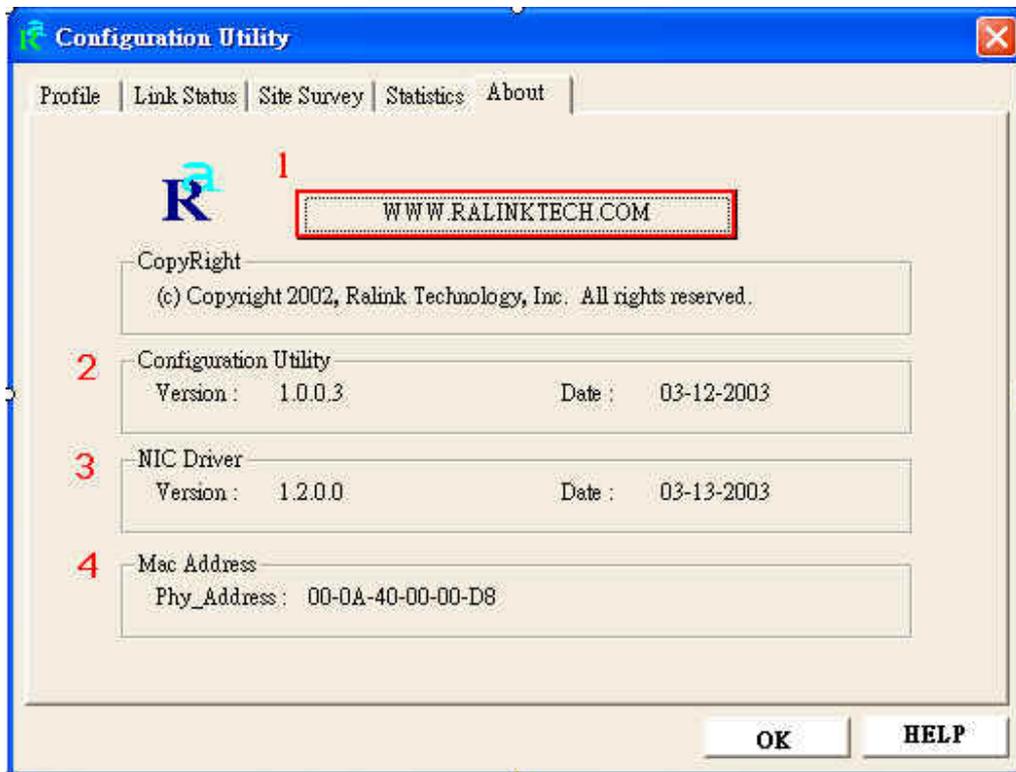
- 1、Display the status of current connection.
- 2、Display the operated channel for the current connection.
- 3、Display the transmit rate of the current connection.
- 4、Display the throughput value for the current transmitting.
- 5、Display the throughput value for the current receiving. °
- 6、Display the current link quality.
- 7、Display the current signal strength.

5 、 Statistics



- 1 、 Display the statistical data of transmitting.
- 2 、 Display the statistical data of receiving.
- 3 、 Choose **RESET COUNTERS** to reset the statistical data from zero.

6 、 About

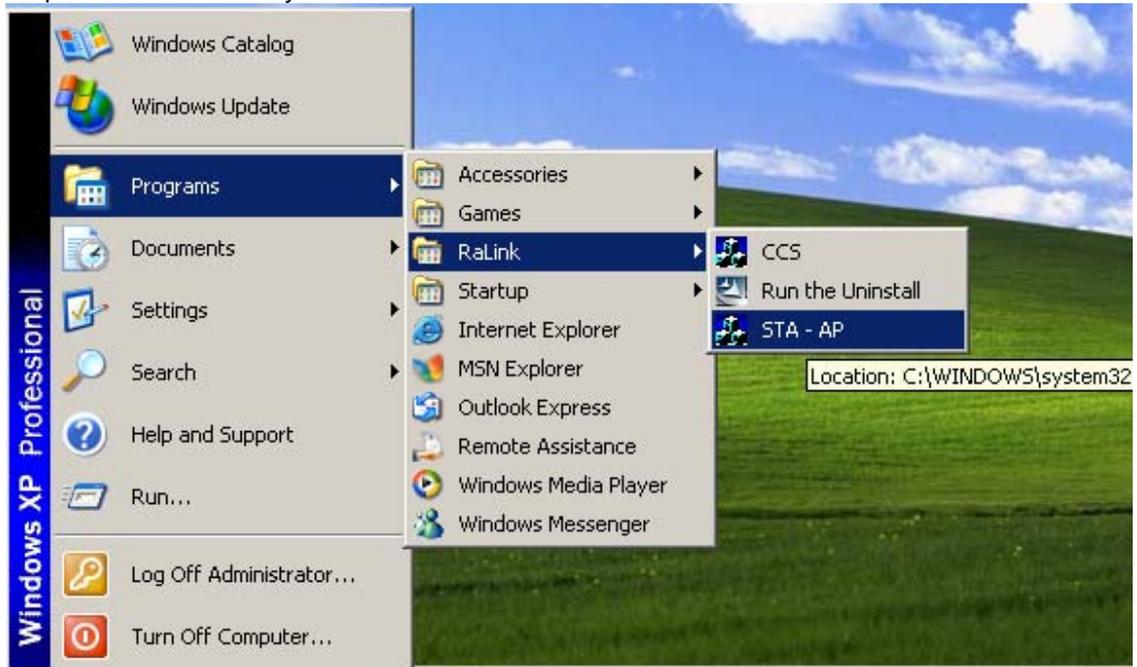


- 1 、 Official hyper link to Ralink: <http://www.ralinktech.com/>
- 2 、 Display the version information of this configuration utility.
- 3 、 Display the version information of the driver.
- 4 、 Display the Wireless adapter card's MAC address.

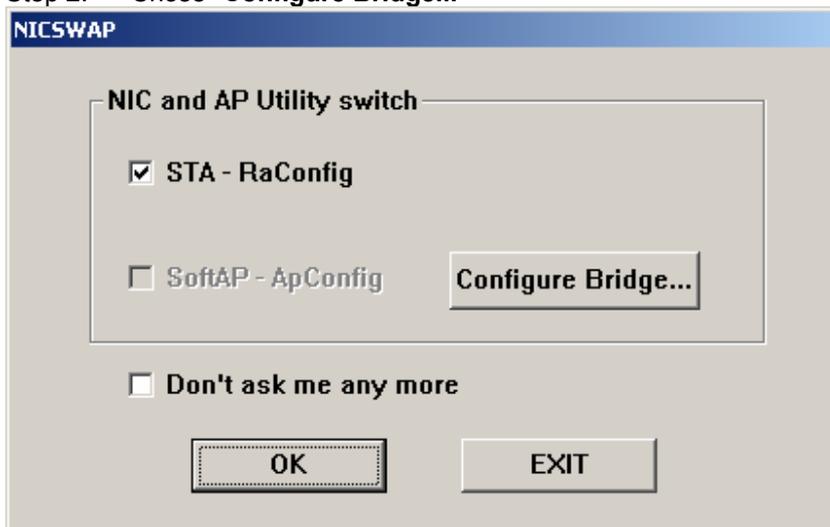
Appendix Software AP

802.11b Wireless PCI Adapter features software AP which can act as an Wireless Access Point. The User's Guide is following:

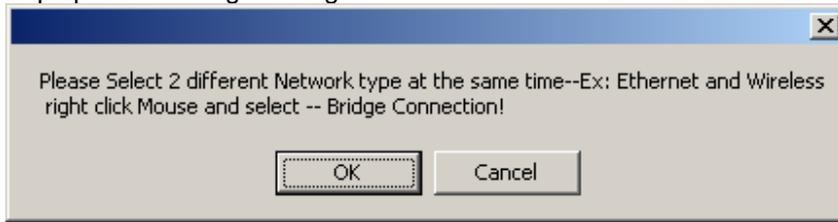
Step 1. Click the utility



Step 2. Chose "Configure Bridge..."

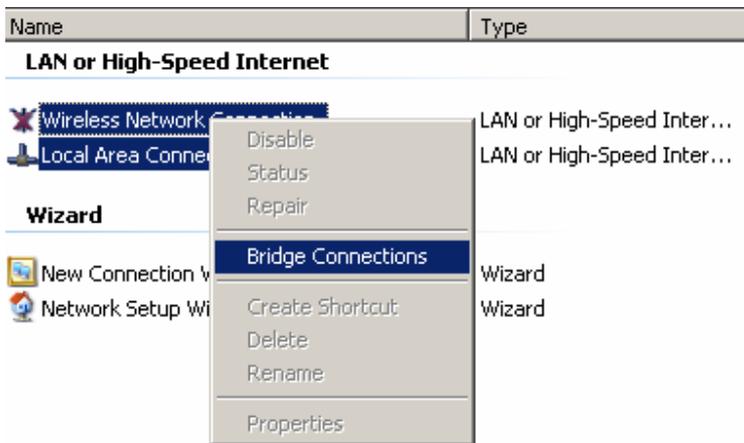


Pop up the following message

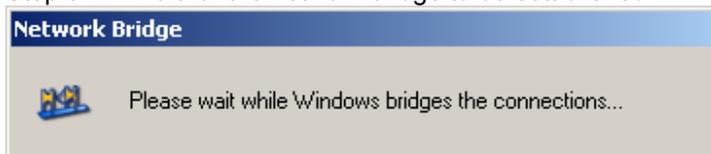


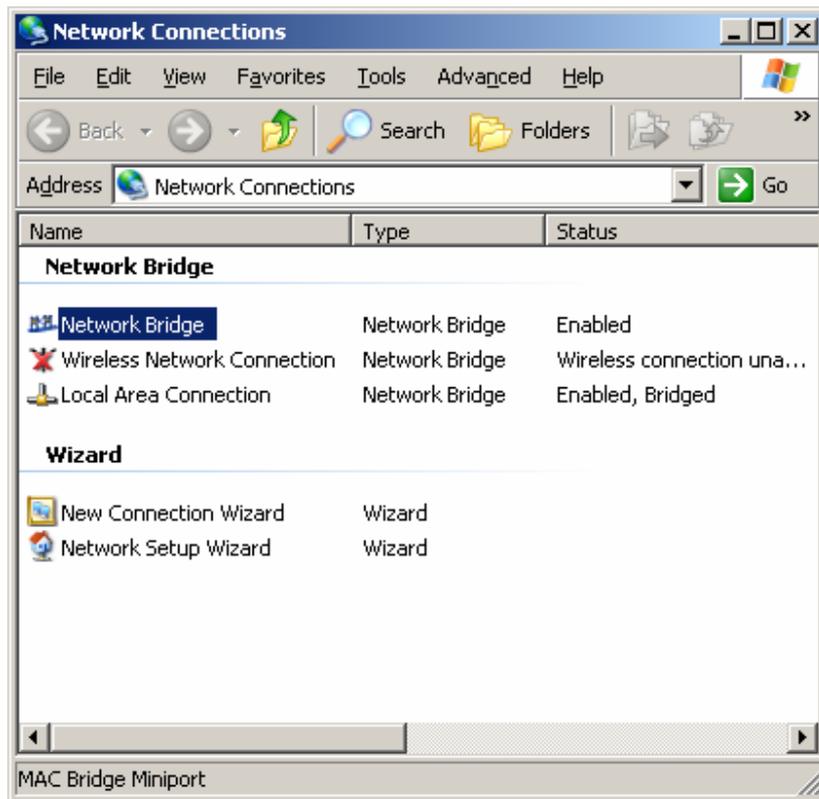
Step 3. Chose "OK", and then the Network Connect screen will be opened.

Step 4. Select "Wireless Network Connection" and Local Area Connection".
Right click Mouse and select "Bridge Connections"

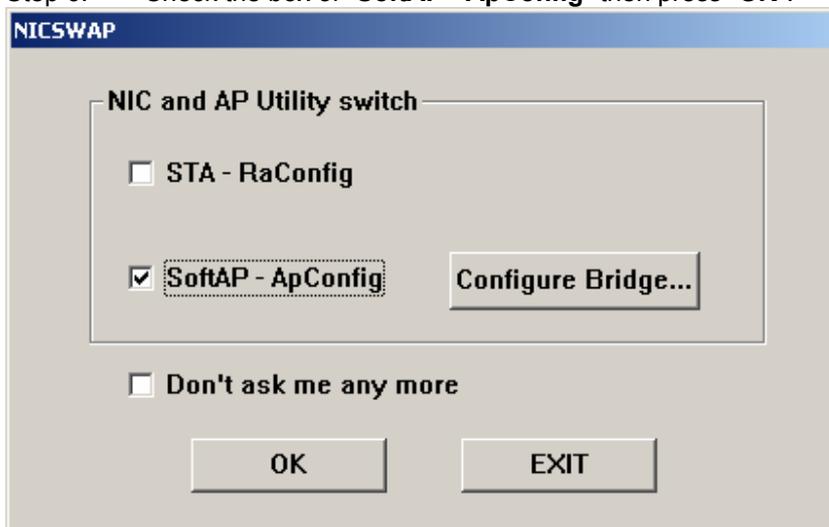


Step 5. Wait for the network bridge to be established.

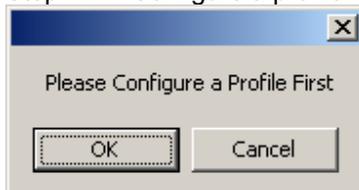




Step 6. Check the box of **"SoftAP - ApConfig"** then press **"OK"**.



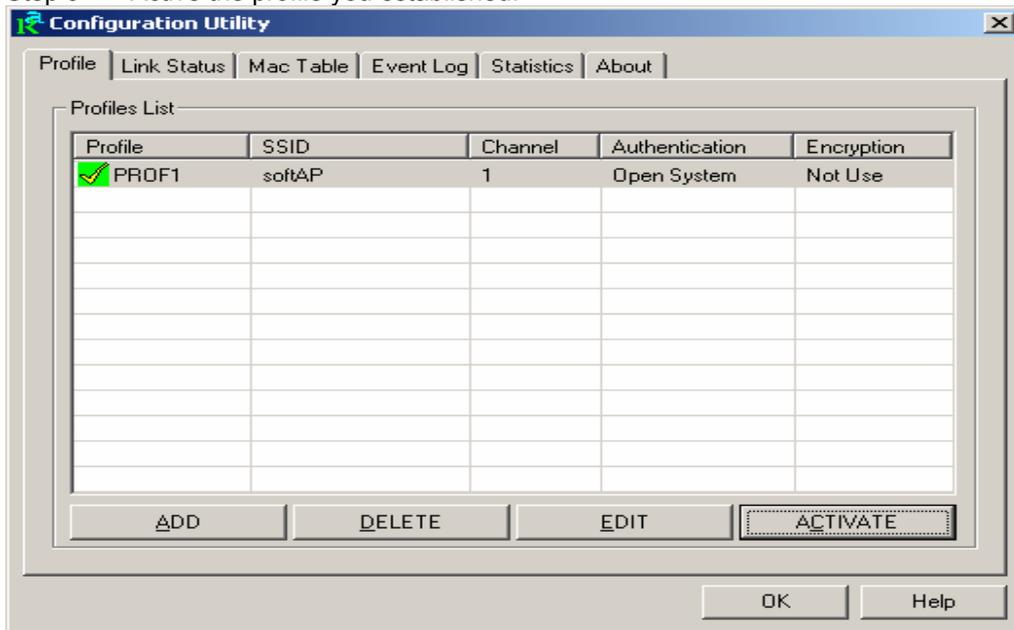
Step 7. Configure a profile.



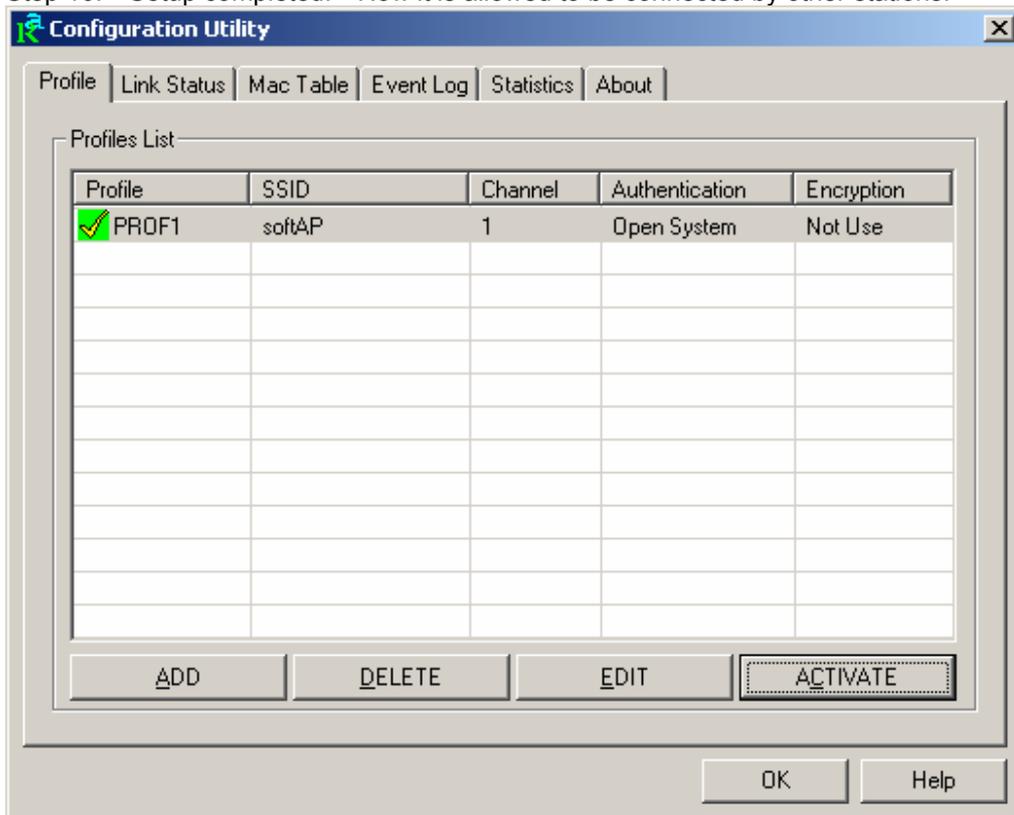
Press **"OK"**.

Step 8. Chose **"ADD"** to add a new profile

Step 9 Active the profile you established.



Step 10. Setup completed. Now it is allowed to be connected by other stations.



Specifications

Standards Compliance	IEEE802.11b
Interface	32-bit CardBus
Antenna	Diversity Patch Antenna
RF Spreading Scheme	Direct Sequence Spread Spectrum (DSSS)
Frequency Band	2.4GHz
Transmission Rate	11/5.5/2/1Mbps with auto fallback
Operating Channels	14 Channels (Japan) 11 Channels (North America and South America) 13 Channels (Europe)
Security	64/128-bit WEP Encryption; IEEE802.1x Authentication: MD5 challenge and EAP-TLS Authentication supported on Windows XP
Security	64/128-bit WEP Encryption
RF Output Power	15dBm (Typical)
Power Consumption (preliminary)	Transmission mode: 550mA (Max.) Receive mode: 350mA (Max.)
Power Voltage	3.3 Volt \pm 5%
Dimension	118 x 54 x 5 mm (3.5 x 2.1 x 0.2 inch)
Software Supports	Software Access Point (Support Wireless PCI Adapter under Windows XP only) Dynamic Rate Shifting (11/5.5/2/1 Mbps); Profile Management; Roaming; RF Signal Quality Monitor; Site Survey
OS Support	Windows 98SE/Me/2000/XP