



Range Plus

N⁺ Long Range USB Wireless Adapter

AU-4612

User Manual V 1.1

FCC Statement



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

1. The device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:
2. This device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation.
3. FCC RF Radiation Exposure Statement: The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.
4. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
5. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

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.

CE Mark Warning



This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

National Restrictions

Frequency range - 2400.0 - 2483.5 MHz

Country	Country	Reason/remark
Bulgaria	none	General authorization required for outdoor use and public service.
France	Outdoor use limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz	Military Radiolocation use. Refarming of the 2.4 GHz band has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012.
Italy	none	If used outside of own premises, general authorization is required.
Luxembourg	none	General authorization required for network and service supply (not for spectrum).
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund.
Russian Federation	none	Only for indoor applications.

Note: Please don't use the product outdoors in France

CE Statement of Conformity

Our product has been tested in typical configuration by Ecom Sertech Corp and was found to comply with the essential requirement of "Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility" (89/336/EEC; 92/31/EEC; 93/68/EEC). The Declaration of Conformity can be found at the Sapido regional website.

www.sapidotech.de

CE Information of Disposal



The electric and electronic equipment or unit which is labeled with crossed-out wheeled bin may not be disposed of with household waste. This mark is based on European Directive 2002/96/EC (for Waste Electric and Electronic Equipment=WEEE).

Please take it to the designated collection facilities. We will ensure the proper recycling, reuse and other forms of recovery of WEEE. WEEE has the potential effects on the environment and human health as a result of the presence of hazardous substances. You can contribute to eliminate these effects by your cooperation.

User Guide of AU-4612

Installing the software of AU-4612	5
Access Point Mode	13
Configuring your wireless network (with Microsoft Zero Configuration Tool)	17
Wi-Fi Protect Setup (WPS)	19
Pin Input Config (PIN).....	20
Push Button (PBC)	24
Disable Adapter	27
Uninstalling the software.....	28
Wireless Zero Configuration Troubleshooting	30

Installing the software of AU-4612

Step 1.

When installation CD-ROM starts, following language selection menu will appear and please select the preferred Language to begin with.



Step 2.

To run the Setup Wizard, please select "Driver" on the main menu.



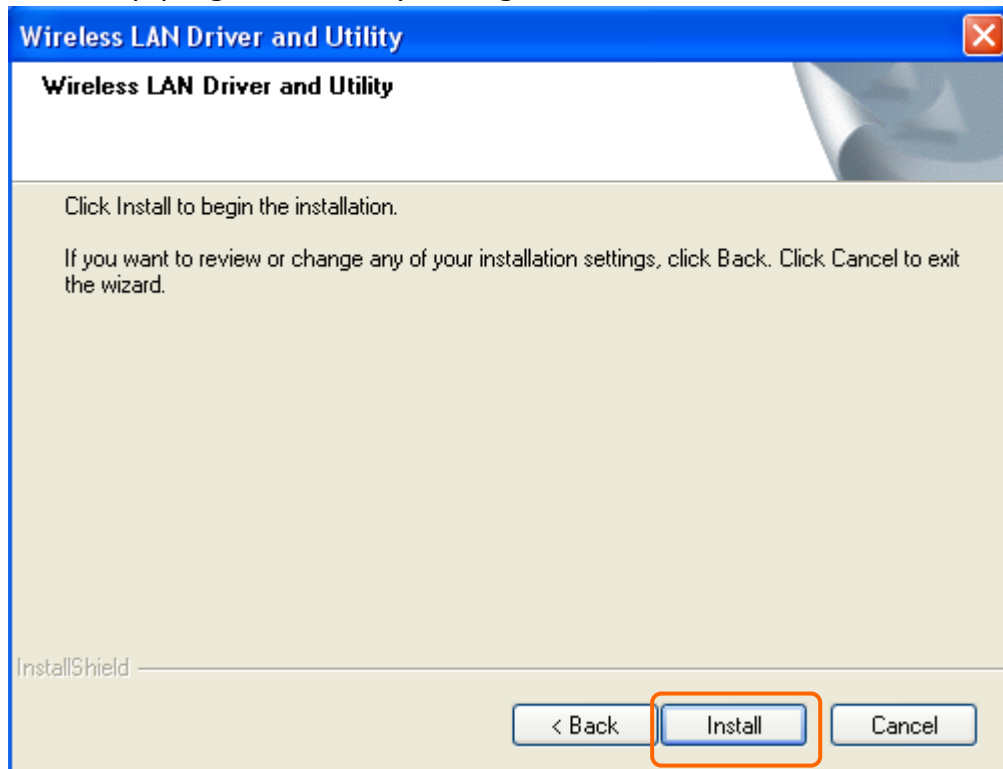
Step 3.

The setup program will install the driver and utility to your computer. Please click "Next" button to continue.



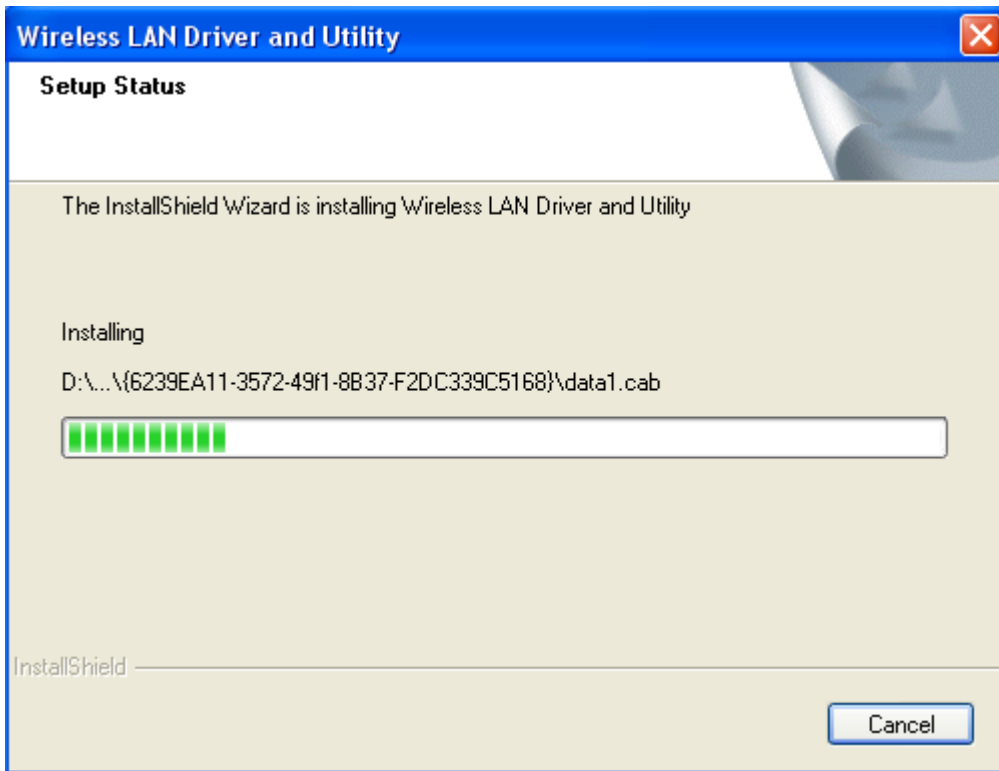
Step 4.

The setup program is ready to begin installation. Please click the **"Install"** button.



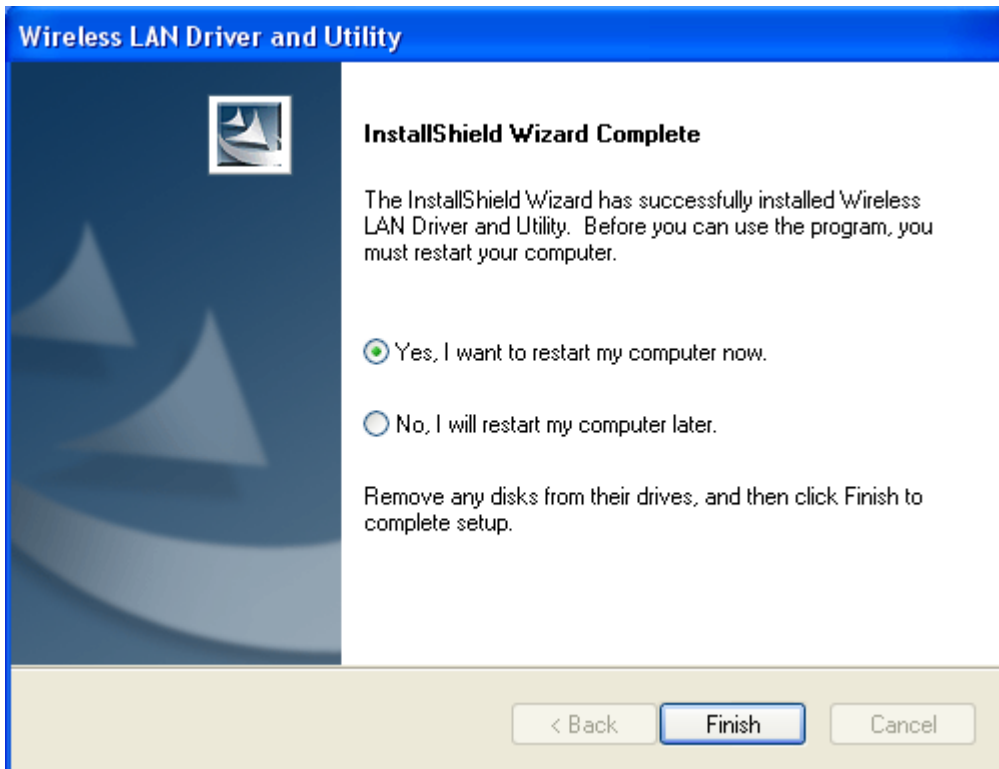
Step 5.

The software installation should begin. This may take a few minutes.



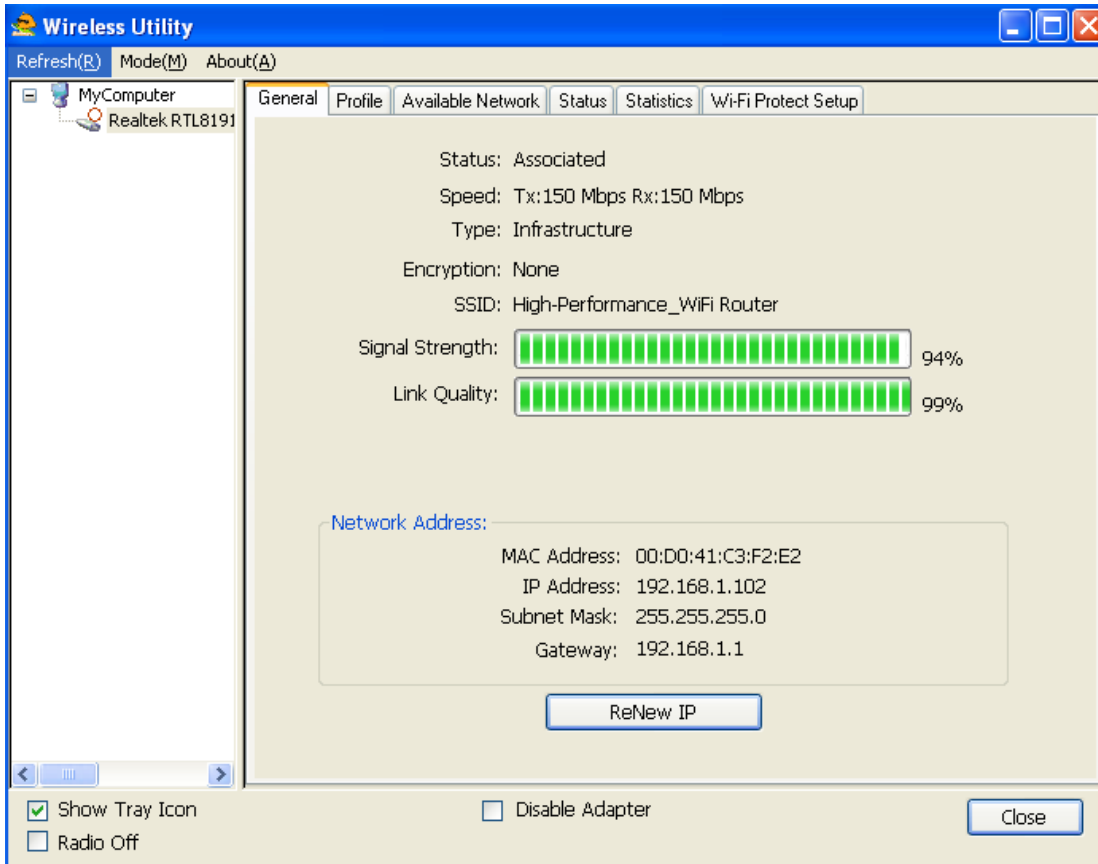
Step 6.

Once the installation complete, click **"Yes"** to restart your computer (recommended). Otherwise, click "No" to restart your computer later.



Step 7.

Once the installation complete, you may now configure your wireless network.

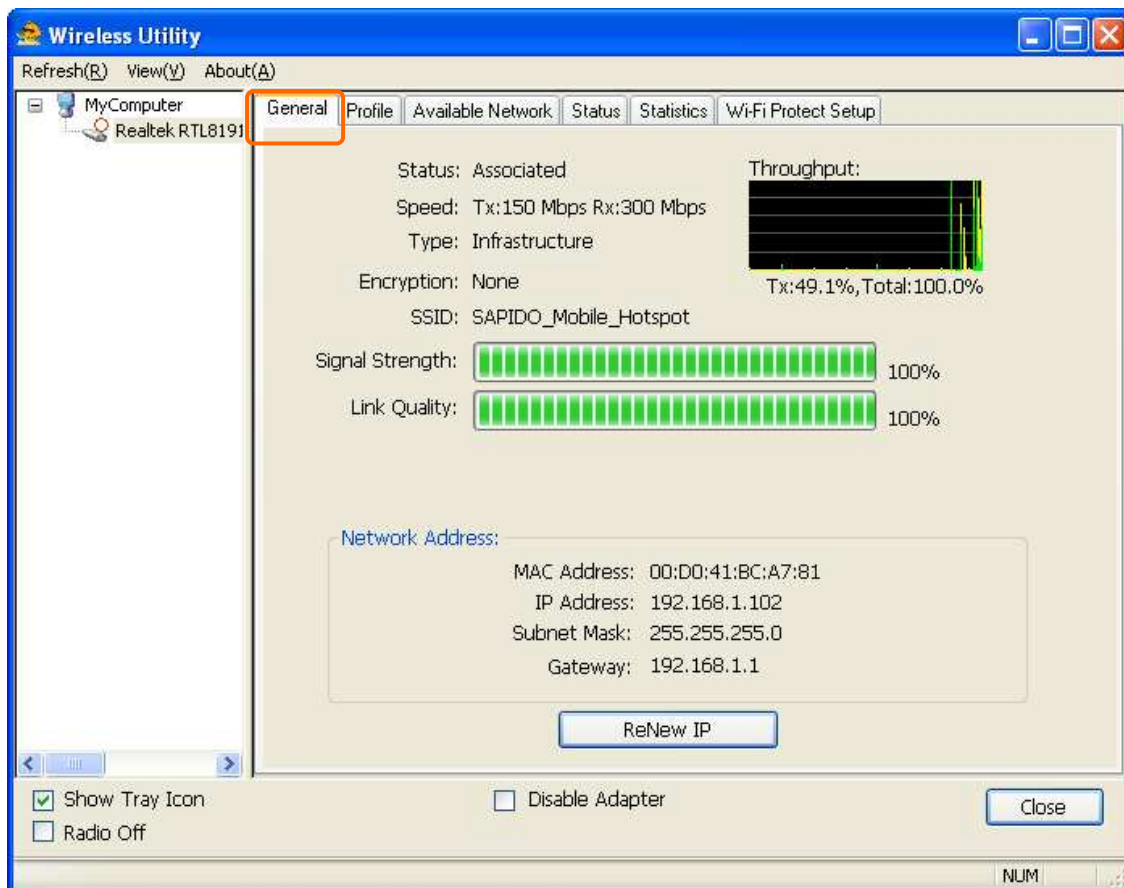


Configuring your wireless network (with AU-4612 Wireless Utility)

1. Windows XP users, if you choose "Microsoft Zero Configuration Tool" during the software installation, please skip to page 16.
2. Double click the wireless signal icon on your computer taskbar or the shortcut icon on the desktop.

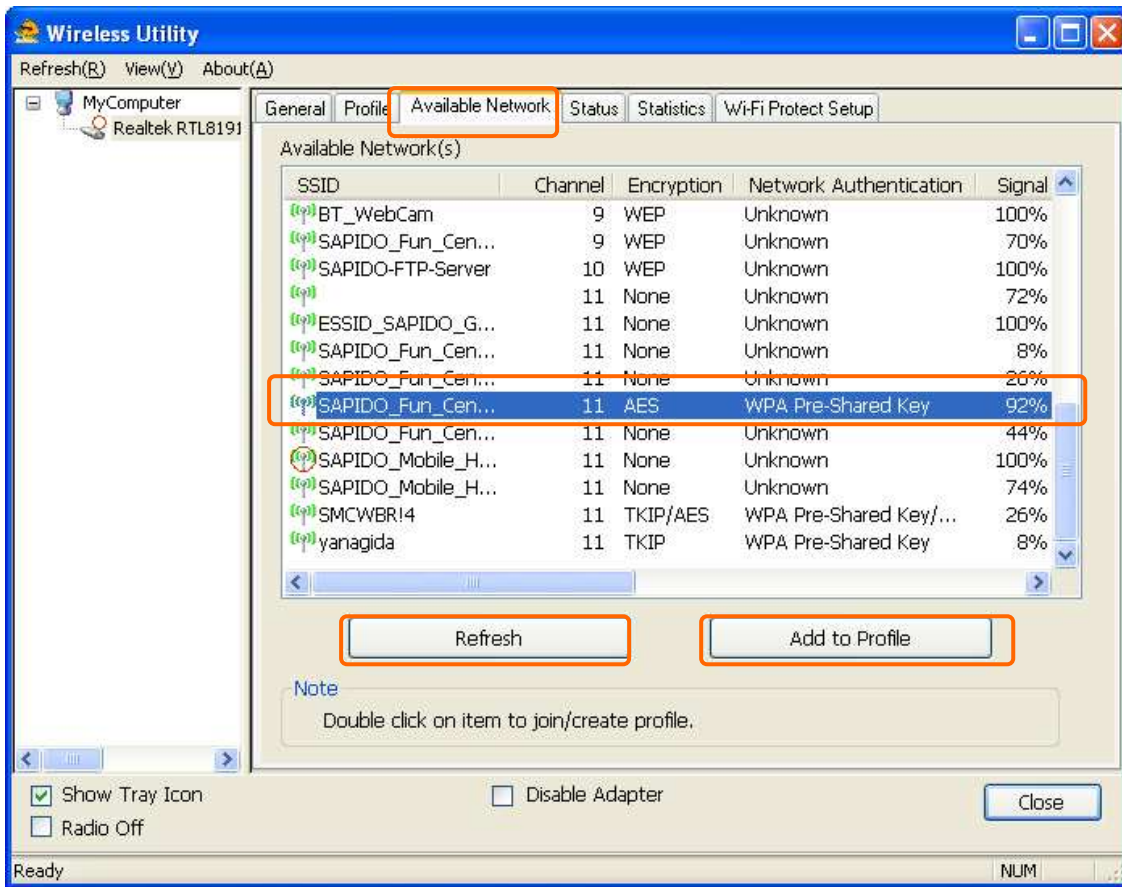


3. From AU-4612 Wireless Utility (General tab), it shows the default wireless network that SAPIDO Wireless USB adapter is connecting to.



4. Click "Available Network" tab to enter the available wireless network setting. Click

“Refresh” button to survey the available wireless networks. Once the site survey completes, select the desired wireless network from the list and double click it or have it added to Profile (Add to Profile button).



- Next, in Wireless Network Properties, if the wireless network you connect to is without wireless security key (WEP, WPA, WPA2, and etc.), just simply click “OK”

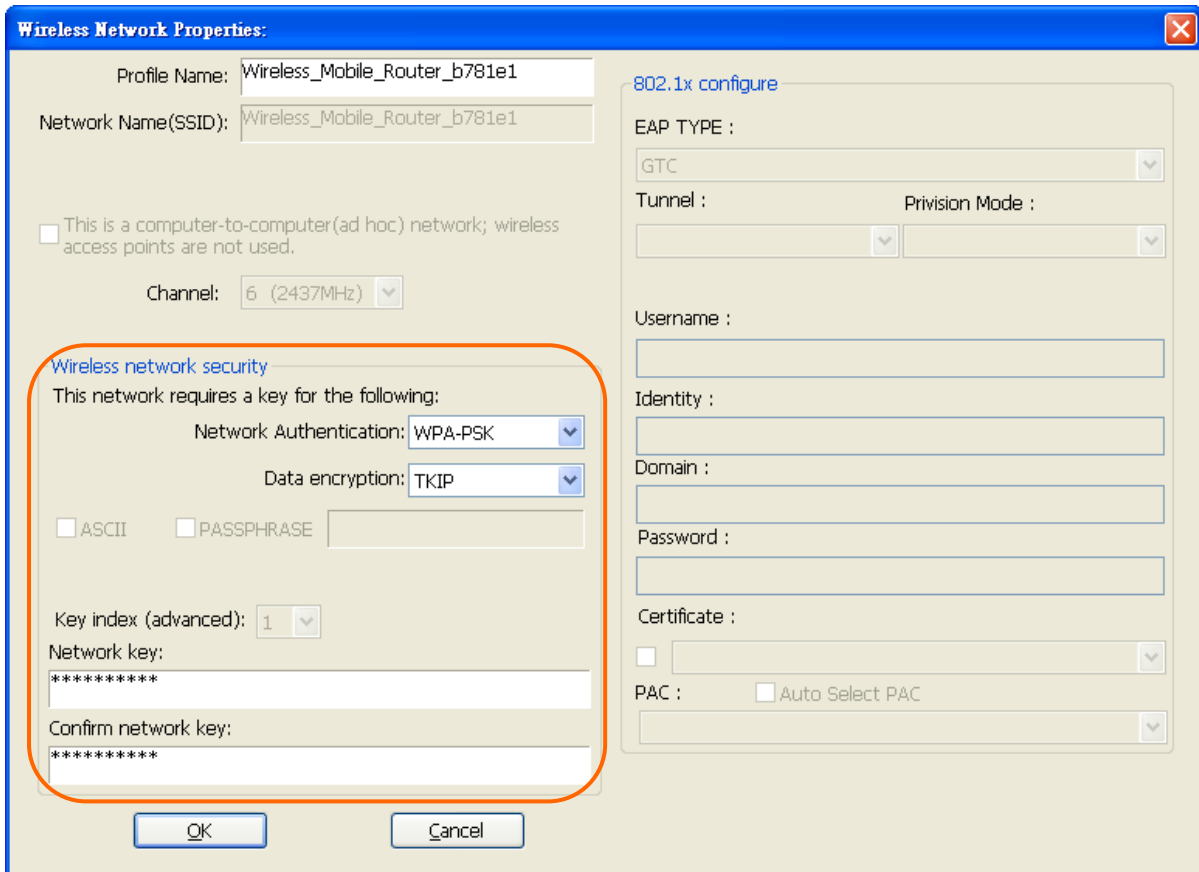
button and skip to step 7.

You will be requested to complete wireless security configuration if the connected wireless network is secured.

The screenshot shows the 'Wireless Network Properties' dialog box. The 'Profile Name' and 'Network Name (SSID)' are both 'Wireless_Mobile_Router_b781e1'. The 'Channel' is set to '6 (2437MHz)'. In the 'Wireless network security' section, 'This network requires a key for the following:' is checked. 'Network Authentication' is set to 'WPA-PSK' and 'Data encryption' is set to 'TKIP'. There are checkboxes for 'ASCII' and 'PASSPHRASE', and a 'Key index (advanced)' dropdown set to '1'. The 'Network key' and 'Confirm network key' fields are masked with asterisks. The '802.1x configure' section on the right includes 'EAP TYPE' (GTC), 'Tunnel' and 'Privision Mode' dropdowns, and fields for 'Username', 'Identity', 'Domain', 'Password', 'Certificate', and 'PAC' (with an 'Auto Select PAC' checkbox).

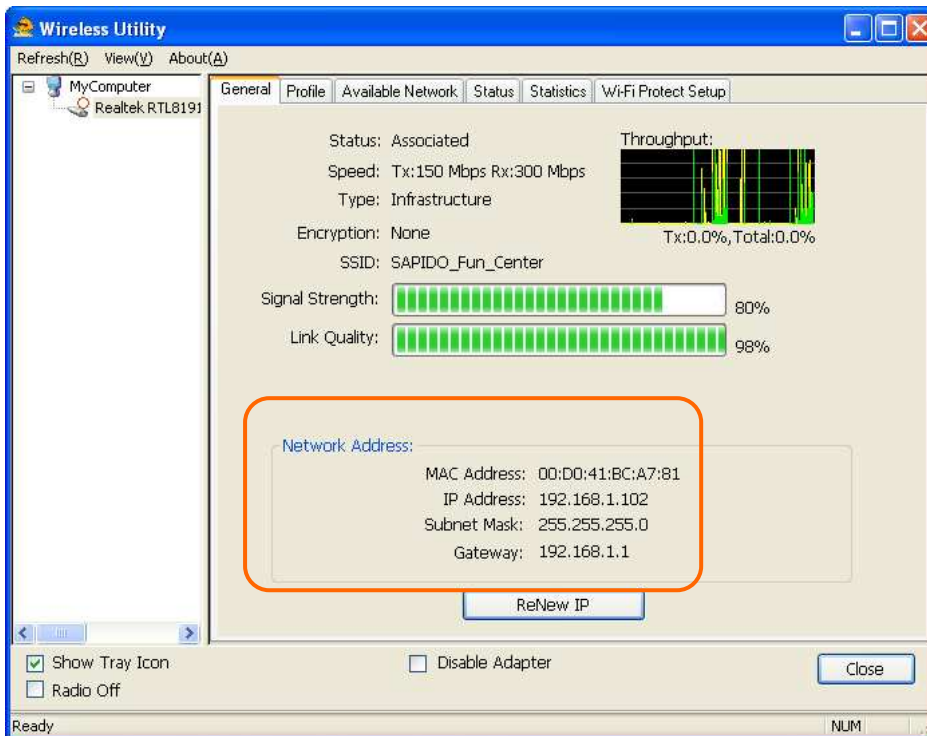
6. Wireless network security section: Please select the Network Authentication and Data encryption to set the encryption type.

- For wireless network security in WEP, just select WEP from network authentication and input its key in network key blank.
- For wireless network security in WPA-PSK or WPA2-PSK, please select WPA-PSK or WPA2-PSK in network authentication and input network key accordingly.
- For 802.1x network security, please select the same network authentication (802.1x) and input its network key.

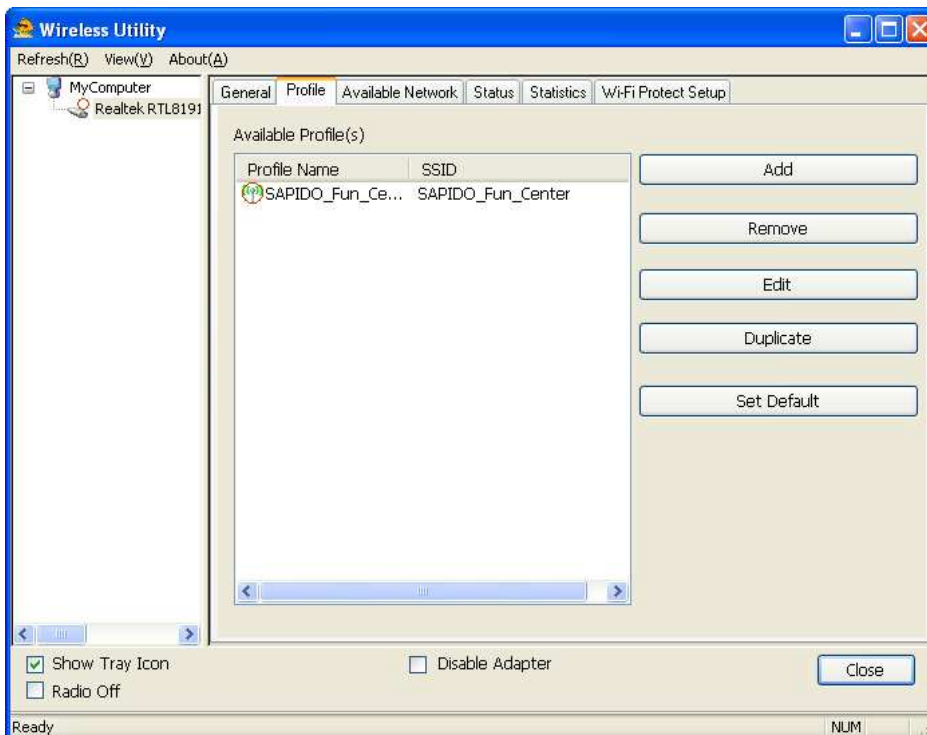


7. After finishing wireless network security section, please go back to "General" page to check the wireless network status. Once the wireless network is connected successfully, the Network Address will indicate AU-4612 IP address assigned from

DHCP server.

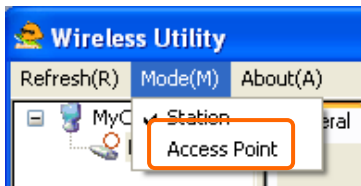


8. In the "Profile" page, you can check the added profiles from the available wireless networks. You may remove, edit, duplicate or set default from these profiles.

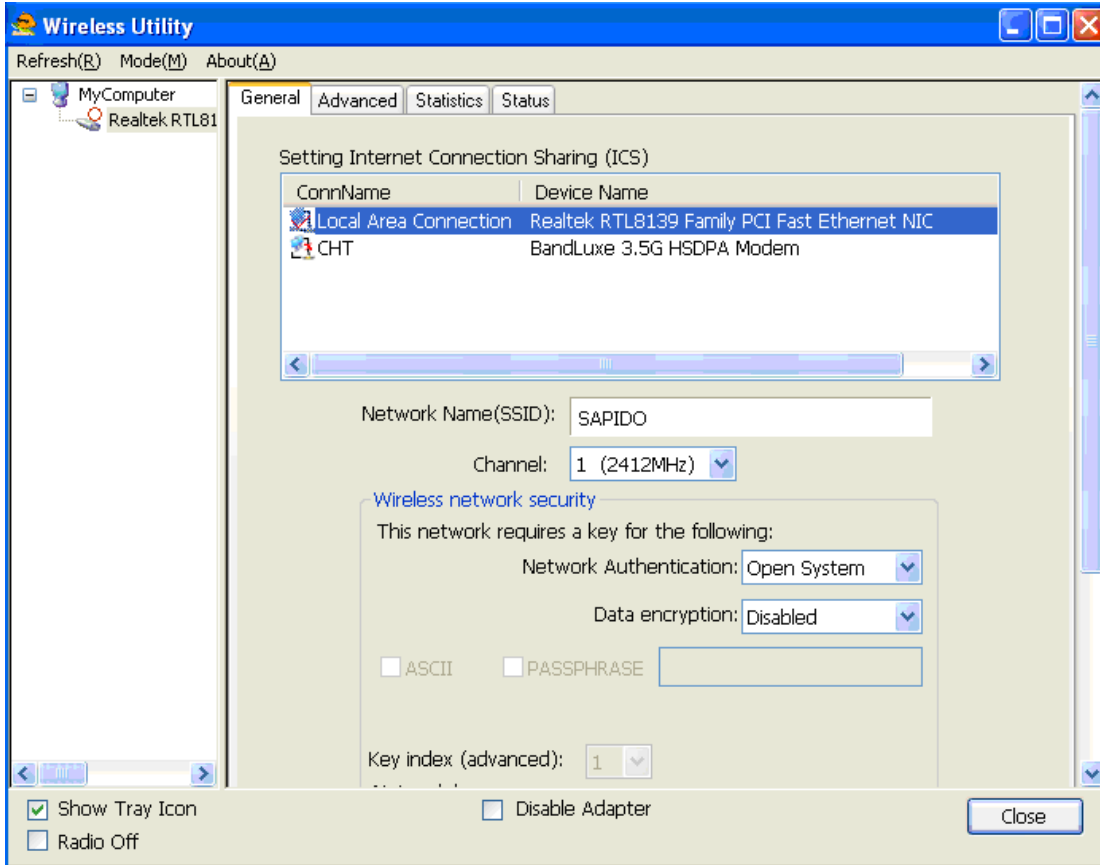
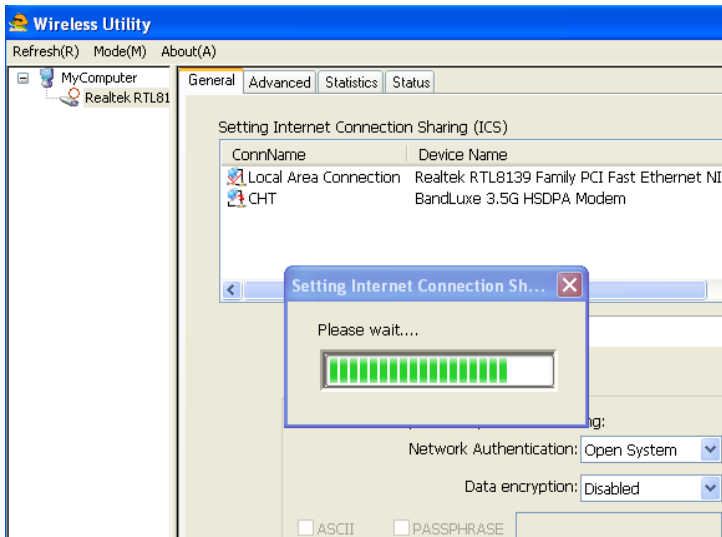


Access Point Mode

To switch from Station mode to Access Point mode.



Access Point Mode can share your network to others. In ICS panel users can select which network to be shared.



1. Network Name

Give a SSID to shared network.

2. Channel

Select a channel for shared network.

3. Network Authentication

Select authentication type for shared network.

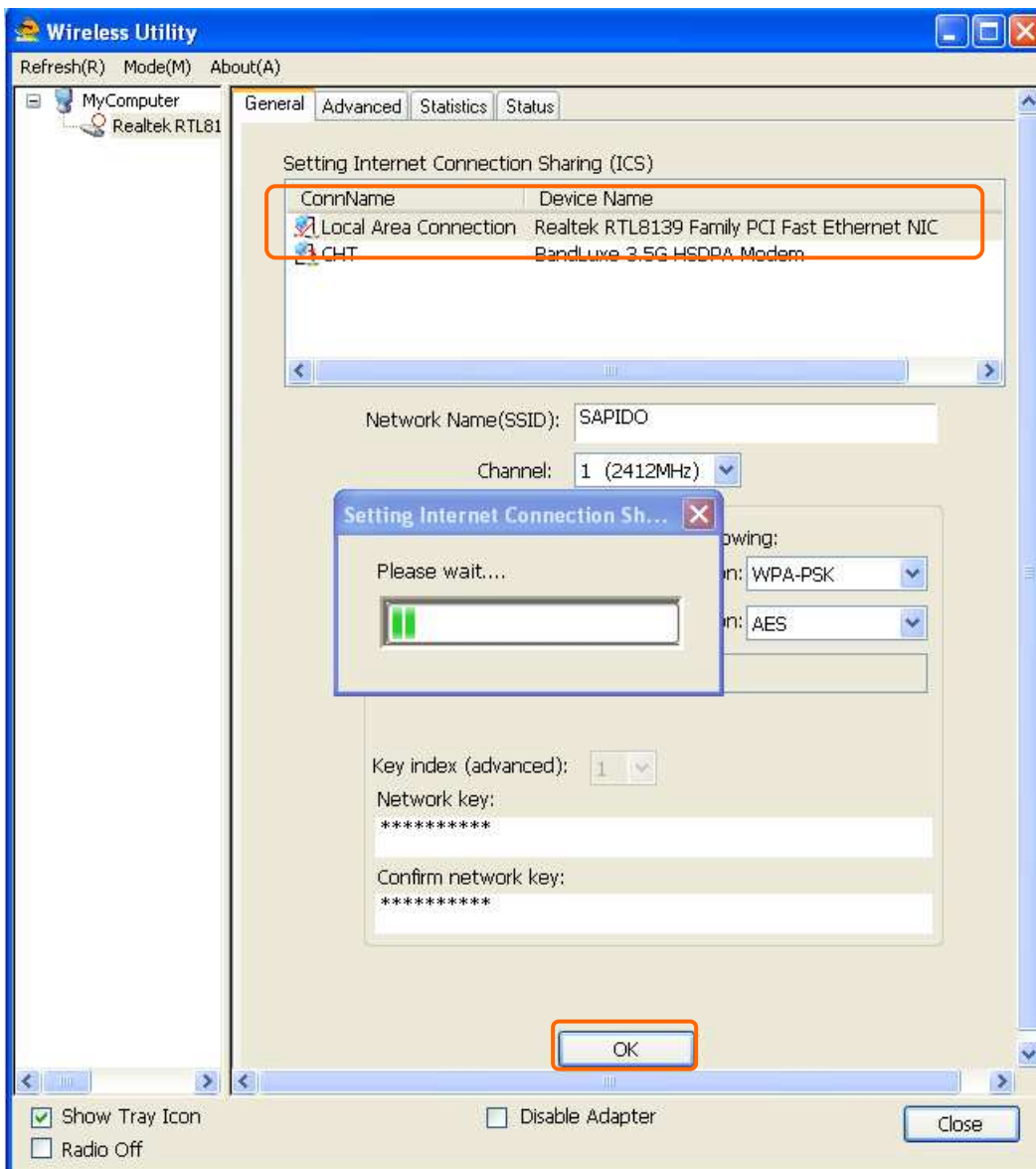
4. Data encryption

Select to enable/disable data encryption.

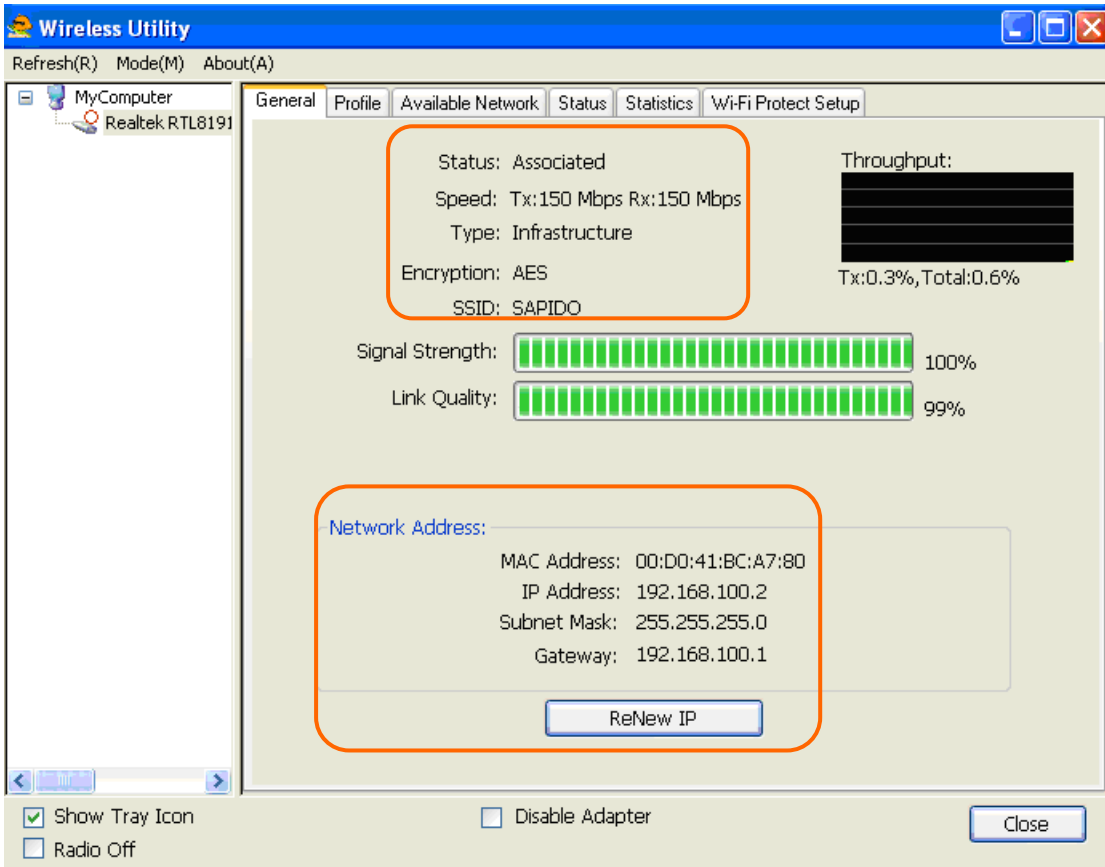
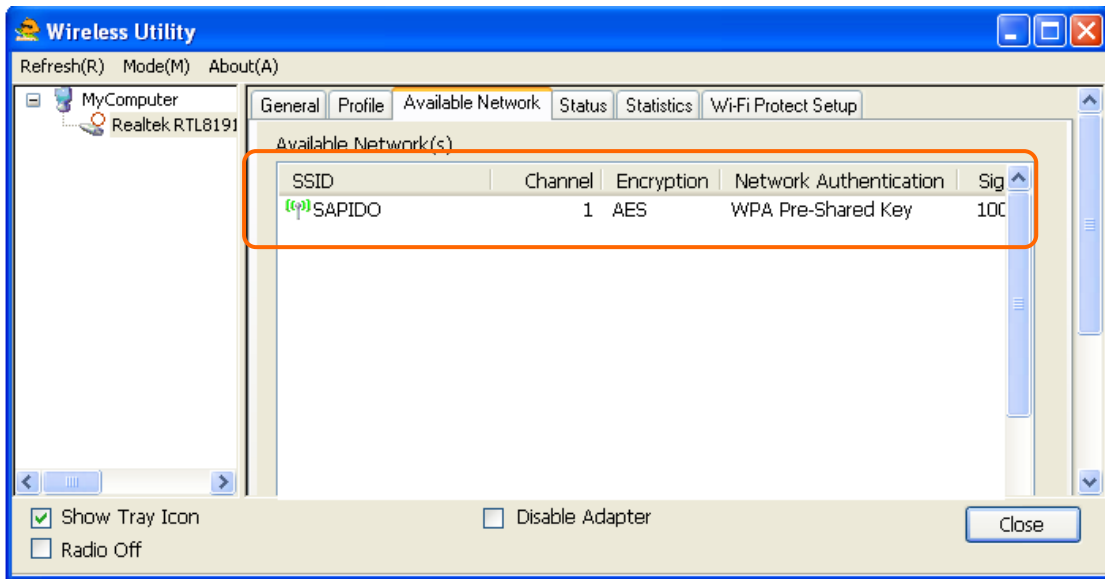
5. Network Key

Setup network key for shared network.

Click the network key and configure the network security. Then, click the “close” when finished.



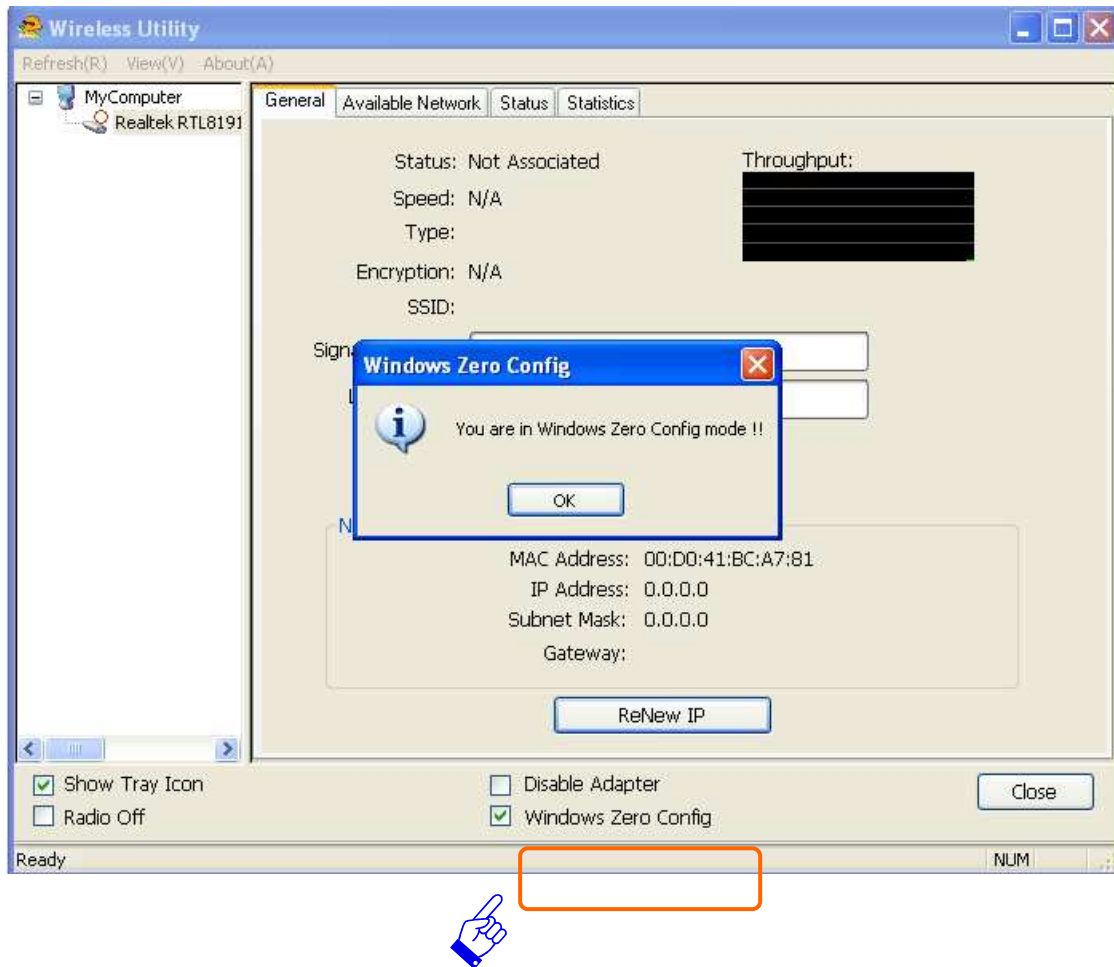
After setting finished, wireless utility page will show the available networks.



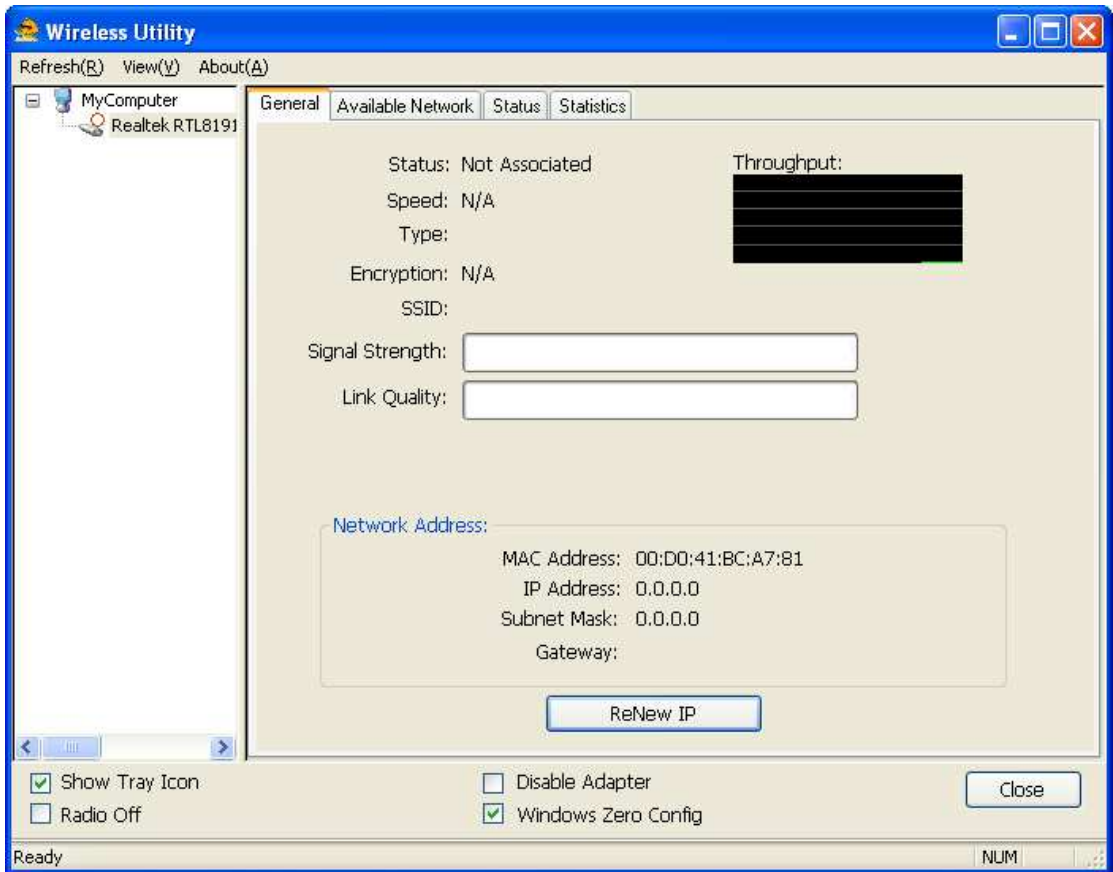
Configuring your wireless network (with Microsoft Zero Configuration Tool)

Warning: Due to security reasons, we strongly recommend updating your Windows XP to service pack 2 or above. If you do not want to update your XP system, please follow the following steps to switch the configuration tool from AU-4612 Wireless Utility to Microsoft Zero configuration tool.

1. Please open AU-4612 Wireless Utility and enable "Windows Zero Config". After enabling this function, "Windows Zero Config" will pop out a message and just click "OK" to continue.



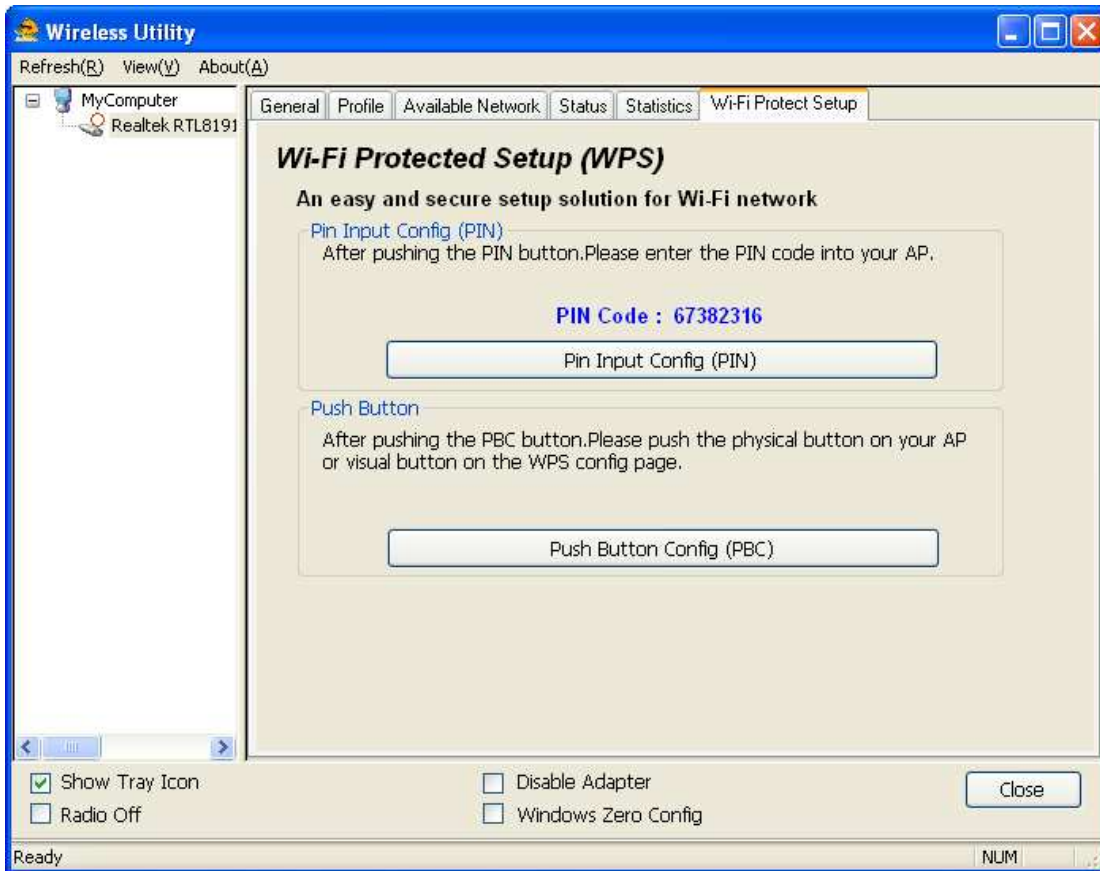
2. Once Microsoft Zero Configuration Tool is enabled, Wireless Utility is disabled.



Wi-Fi Protect Setup (WPS)

WPS is an easy and secure setup solution for Wi-Fi network. Please click the Wi-Fi

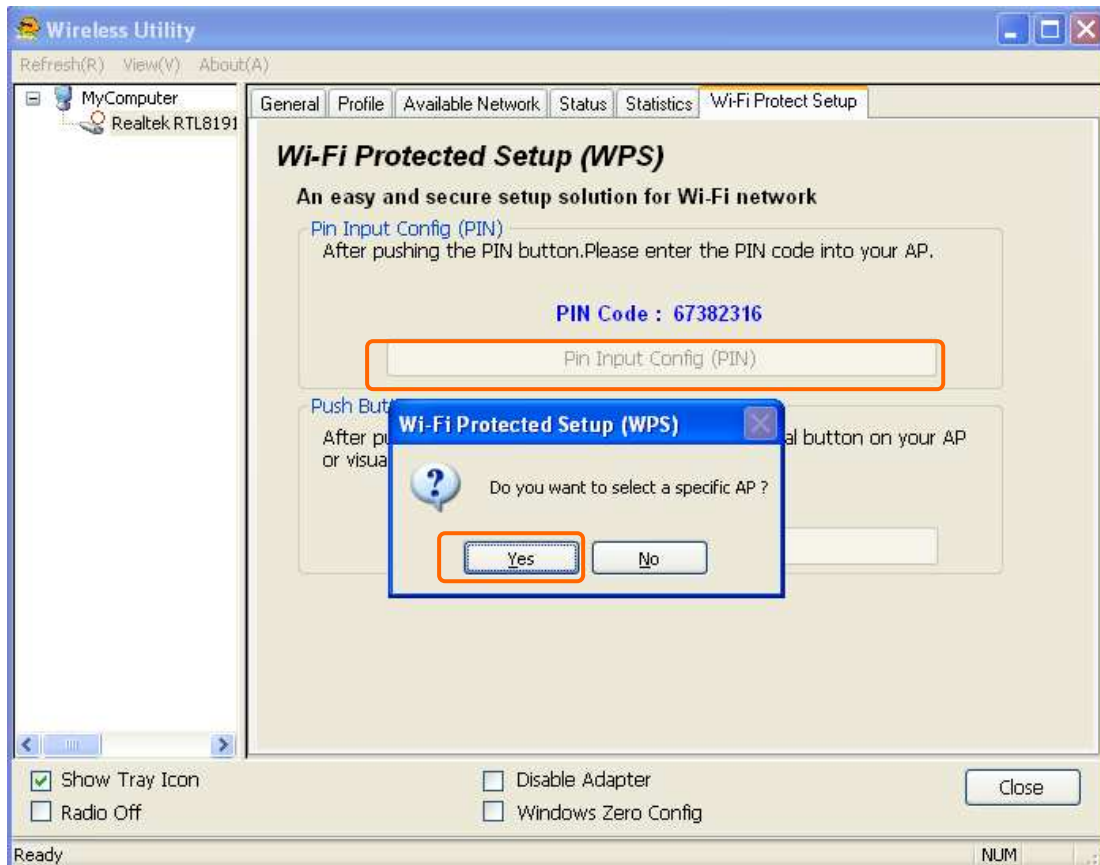
Protect Setup tab. AU-4612 provides two WPS methods to complete network security: PIN (Pin Input Config) and PBC (Push Button Config)



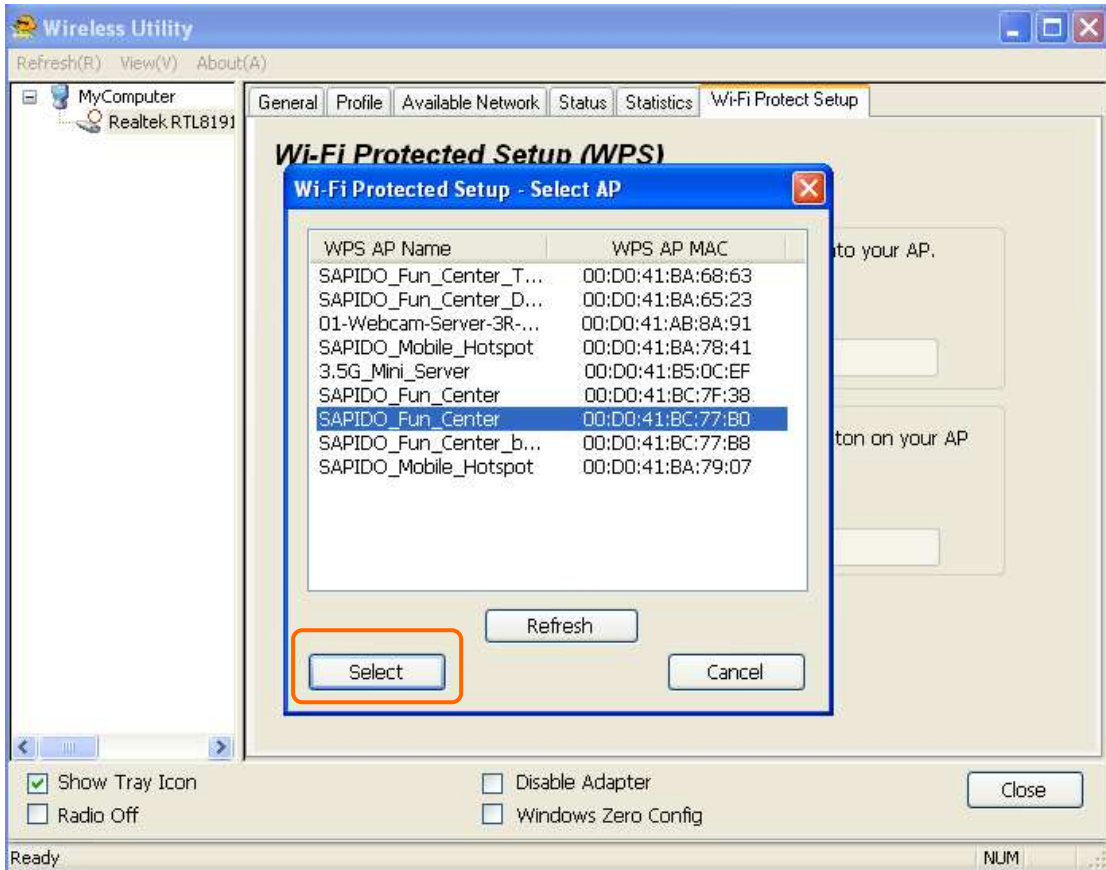
Pin Input Config (PIN)

1. Click "Pin Input Config (PIN)" button. If you want to connect to a specific AP, please click "Yes". Or click "No" to continue and skip to step3.

Note: The PIN code shows in this page will vary each time.

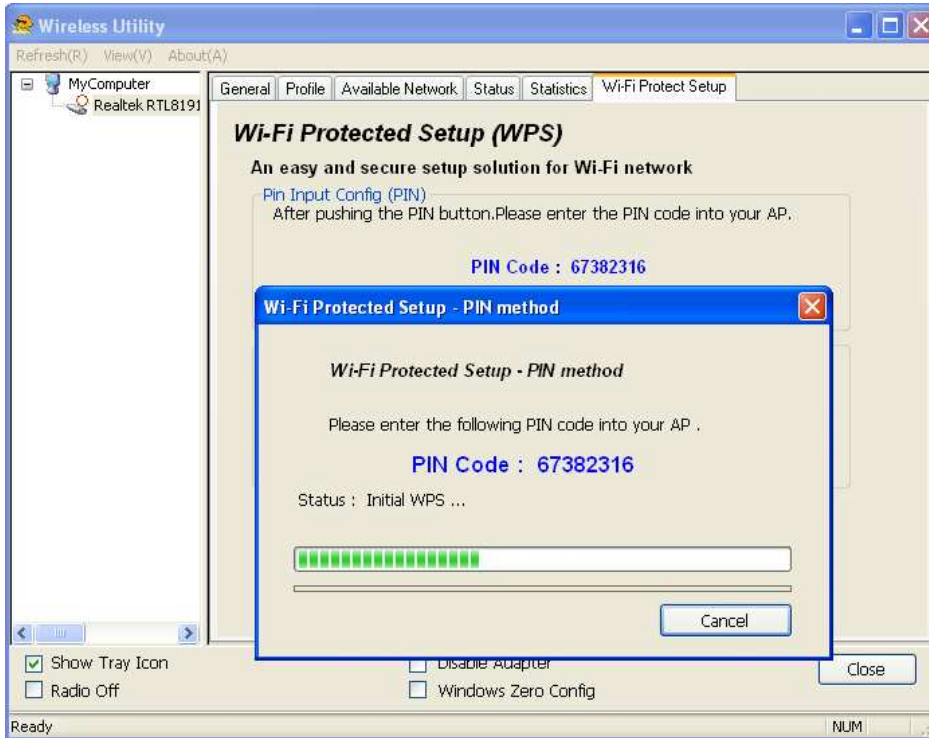


2. Select the specific AP which you want to connect. If you can not find the WPS AP in this page, please click "Refresh" button. And then click "Select" button.



3. After selection, the specific AP will establish the connection with AU-4612 meanwhile you will get a PIN code (here example is 67382316) and you need to input this PIN code into the specific AP before initial WPS completes. For example,

the AP SSID here is **GR-1222** and in its WPS configuration page, you have to input AU-4612 PIN code into client pin number blank and then click "Start PIN" button. Note: The PIN function in AP should be started before AU-4612 initial WPS status ends.



Wi-Fi Protected Setup **AP: GR-1222**

This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Access Point in a minute without any hassle.

Disable WPS

WPS Status: Configured Un-Configured

Self-PIN Number: 37096533

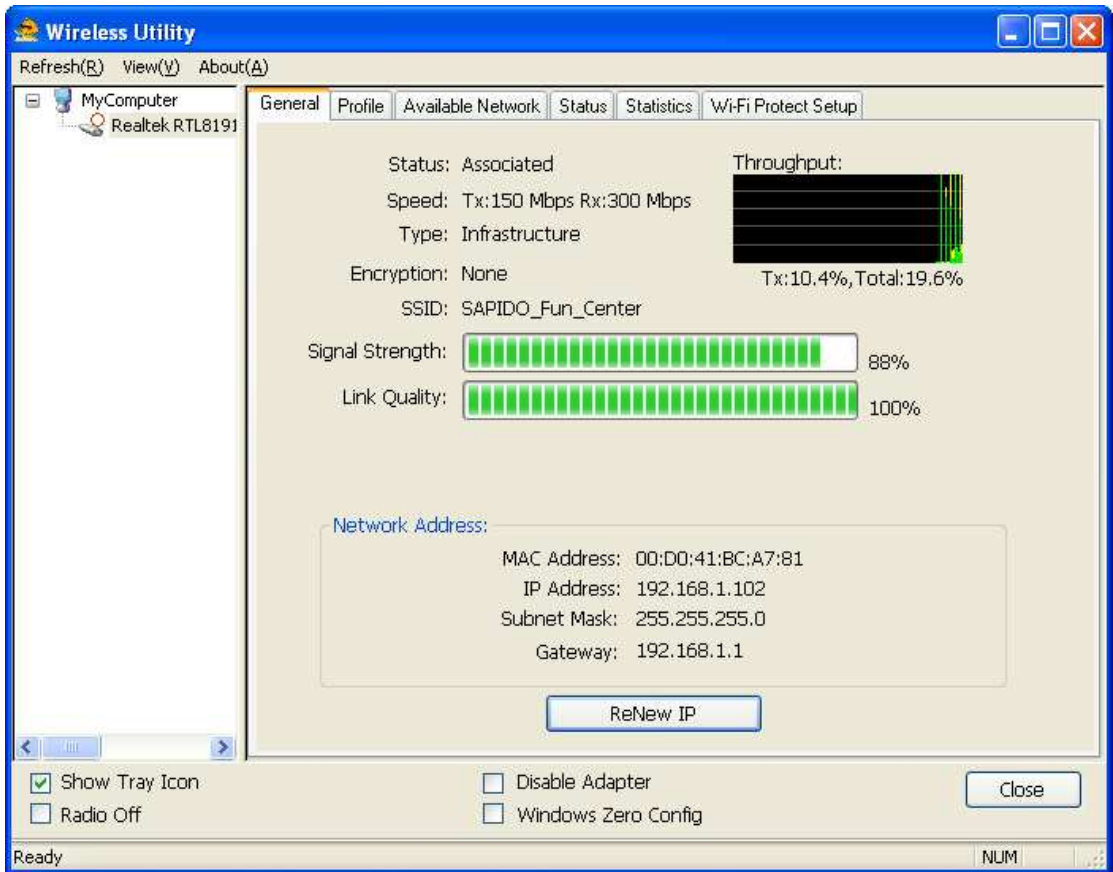
Push Button Configuration:

Current Key Info:

Authentication	Encryption	Key
Open	None	N/A

Client PIN Number:

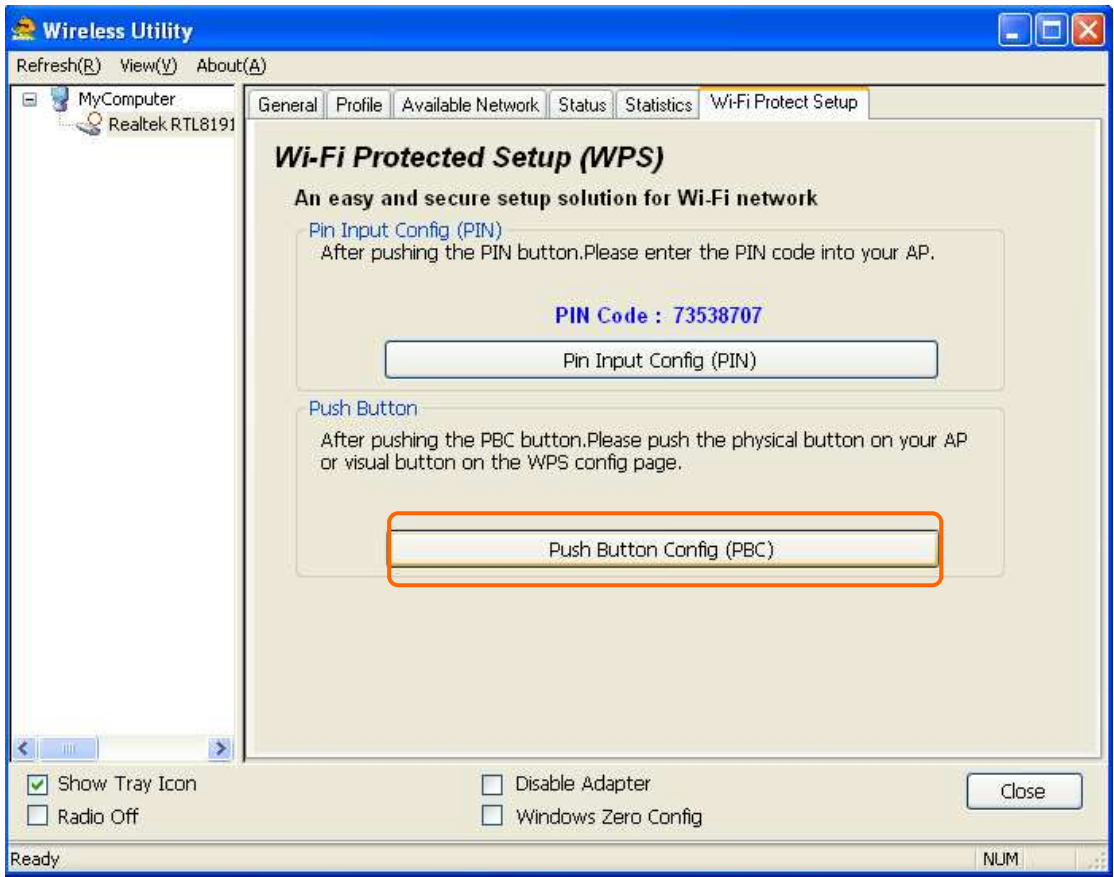
- Once the WPS completes successfully, AU-4612 Wireless Utility will indicate the connection status.



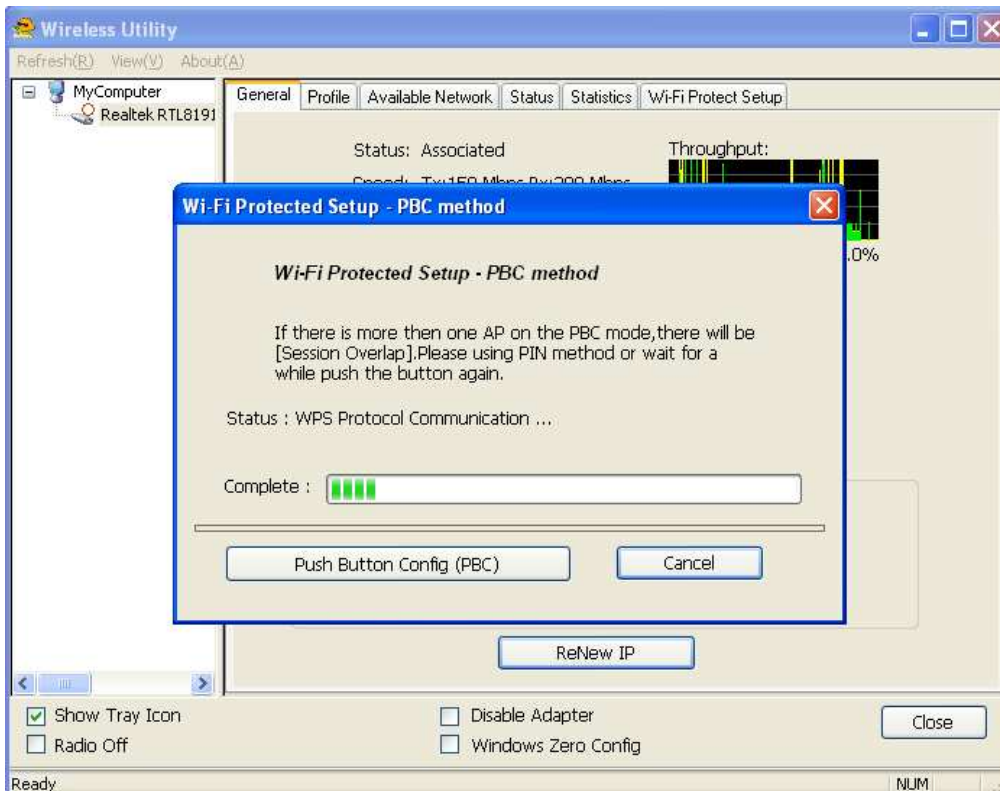
Push Button (PBC)

1. Click "Push Button Config (PBC)" button.

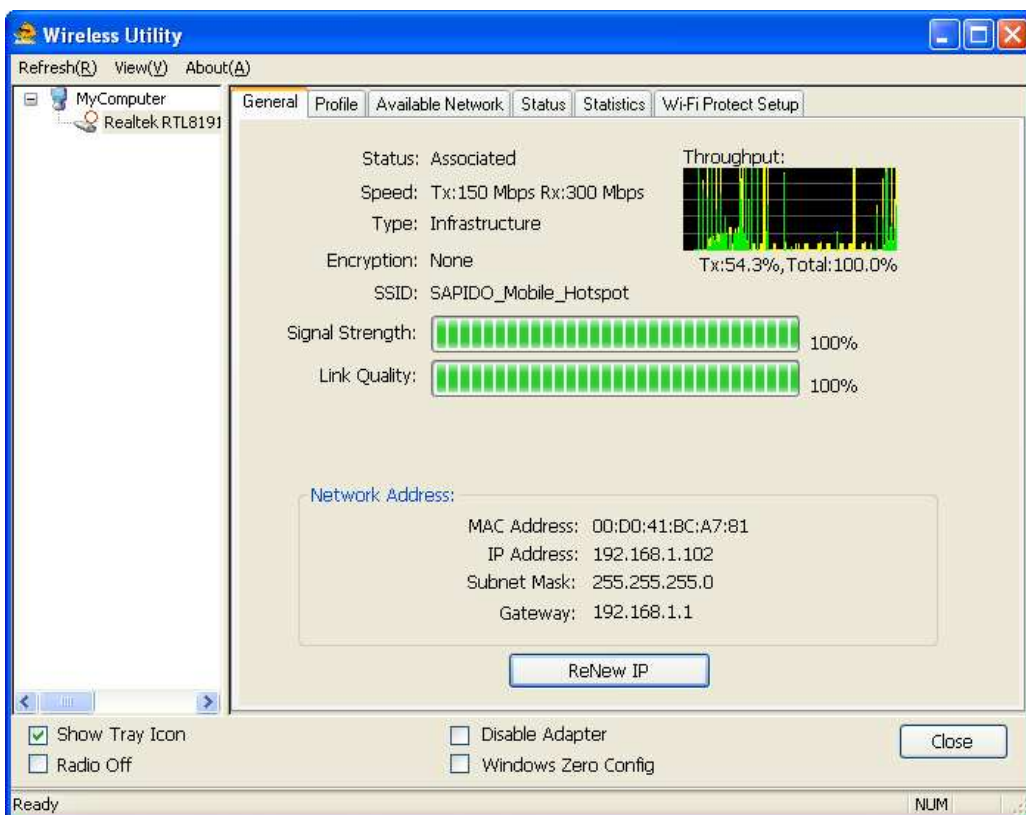
Note: You can click the PBC button from this the page or push the physical button on AP device.



2. AU-4612 is waiting for the AP device to start the PBC function. The AP device PBC function should be started before AU-4612 WPS setup.



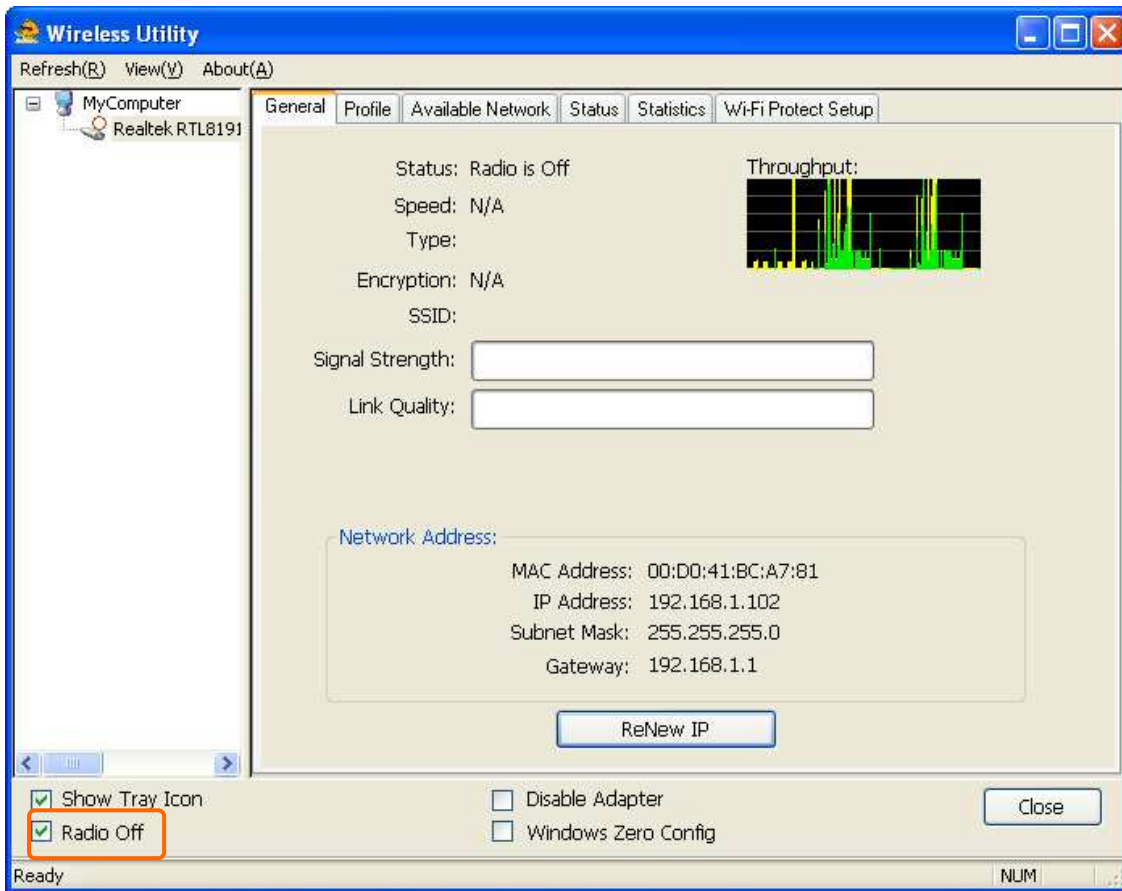
3. Once WPS completes successfully, AU-4612 Wireless Utility will indicate the connection status.



Radio Off

Enable the Radio Off will turn off the radio function. It means AU-4612 wireless

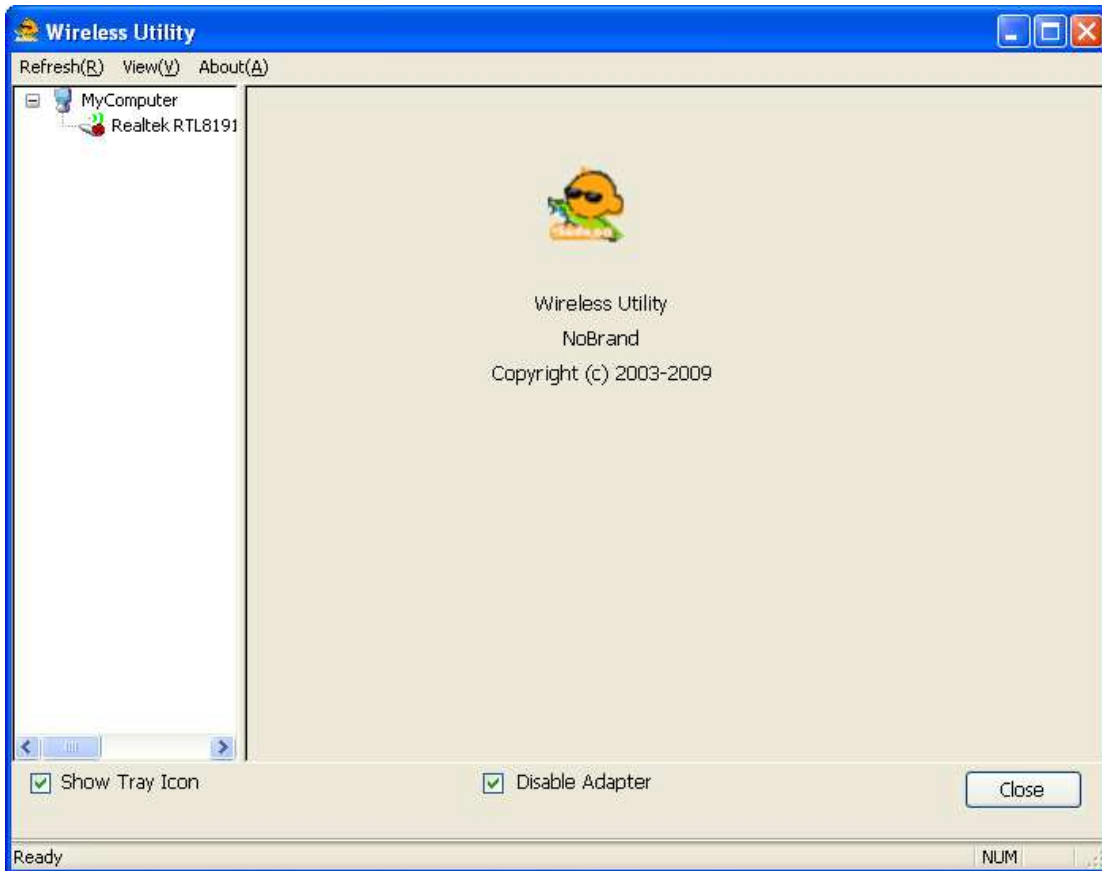
connection is disabled.



Disable Adapter

Disable adapter is to shut off AU-4612 operation. It means all functions of AU-4612

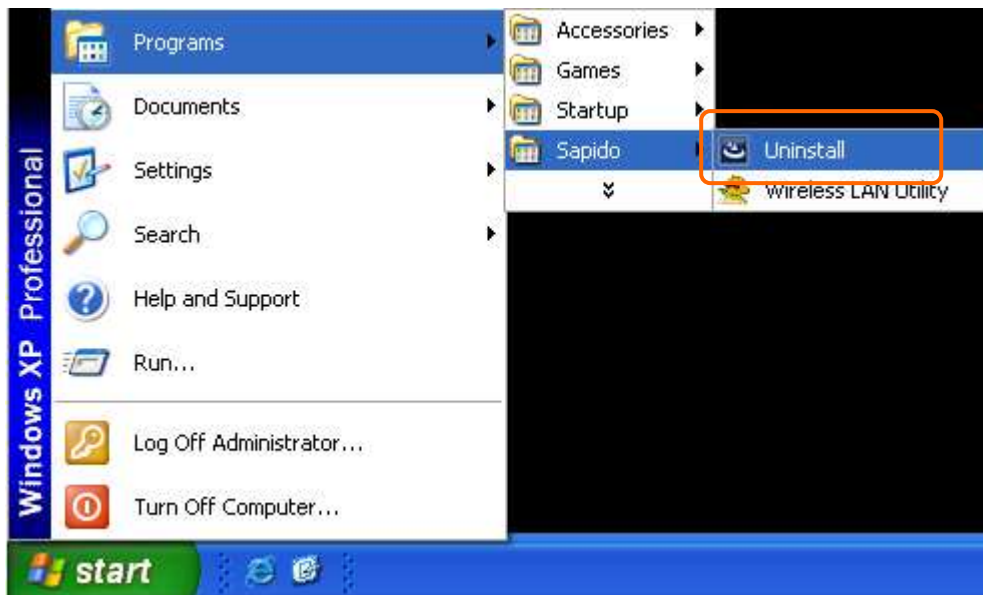
will be disabled.



Uninstalling the software

1. Click your computer OS start menu and move to "Programs" then "Sapido".

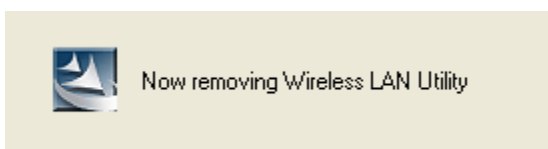
Next select "Uninstall".



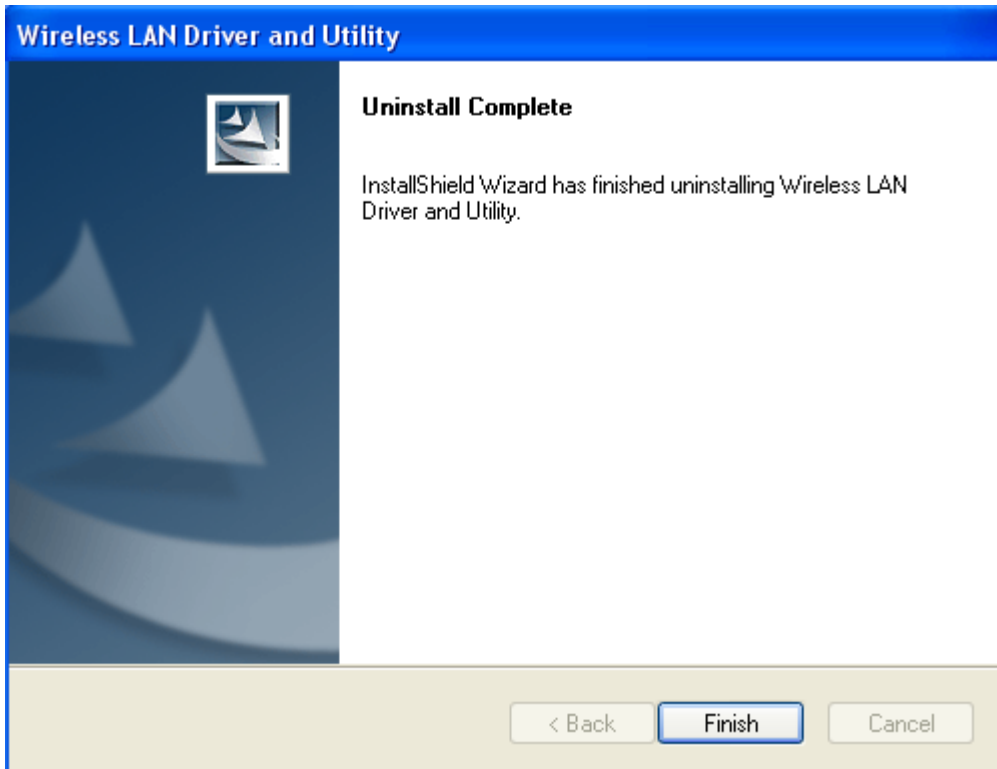
2. Click "YES" on the uninstall window.



3. The uninstall process should begin and may take a few minutes.

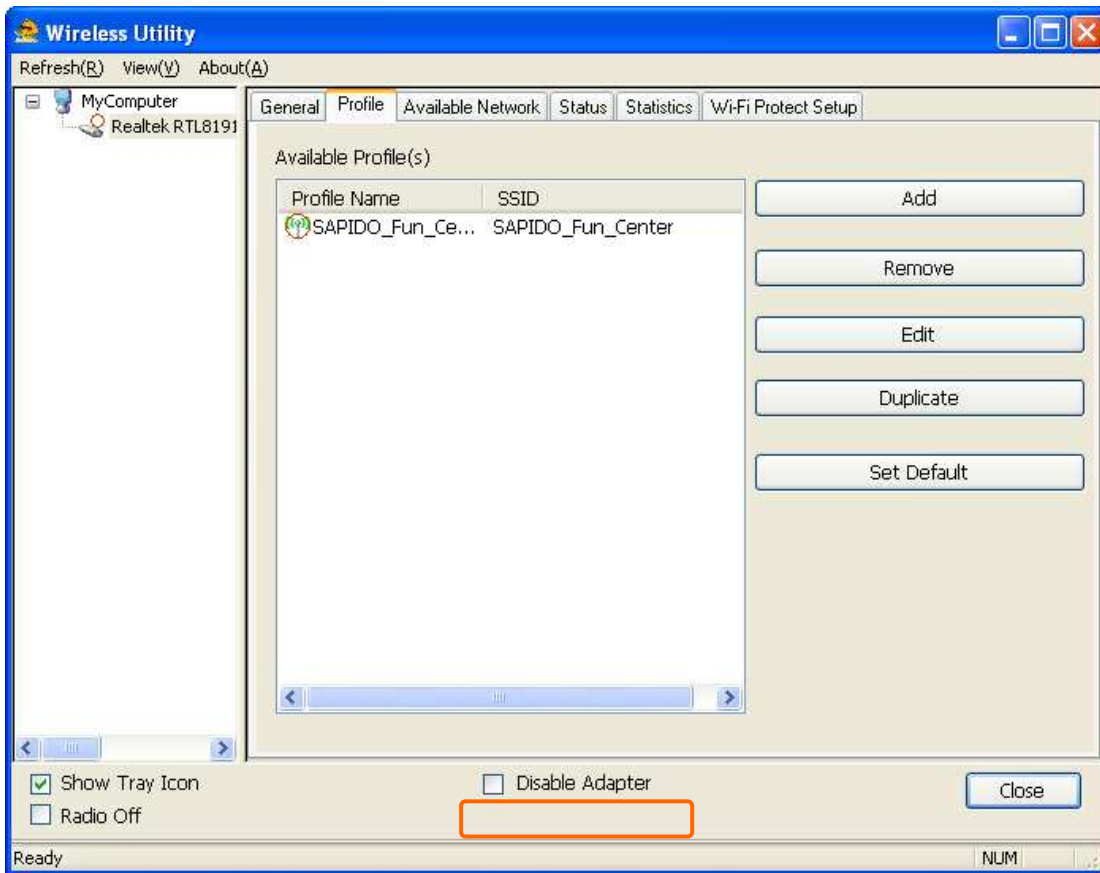


4. Once the uninstall completes, click "Finish" to exit the program.



Wireless Zero Configuration Troubleshooting

If you are Windows XP user and can not find the option of “Windows Zero Config” in AU-4612 Wireless Utility (as following picture), please follow following steps.

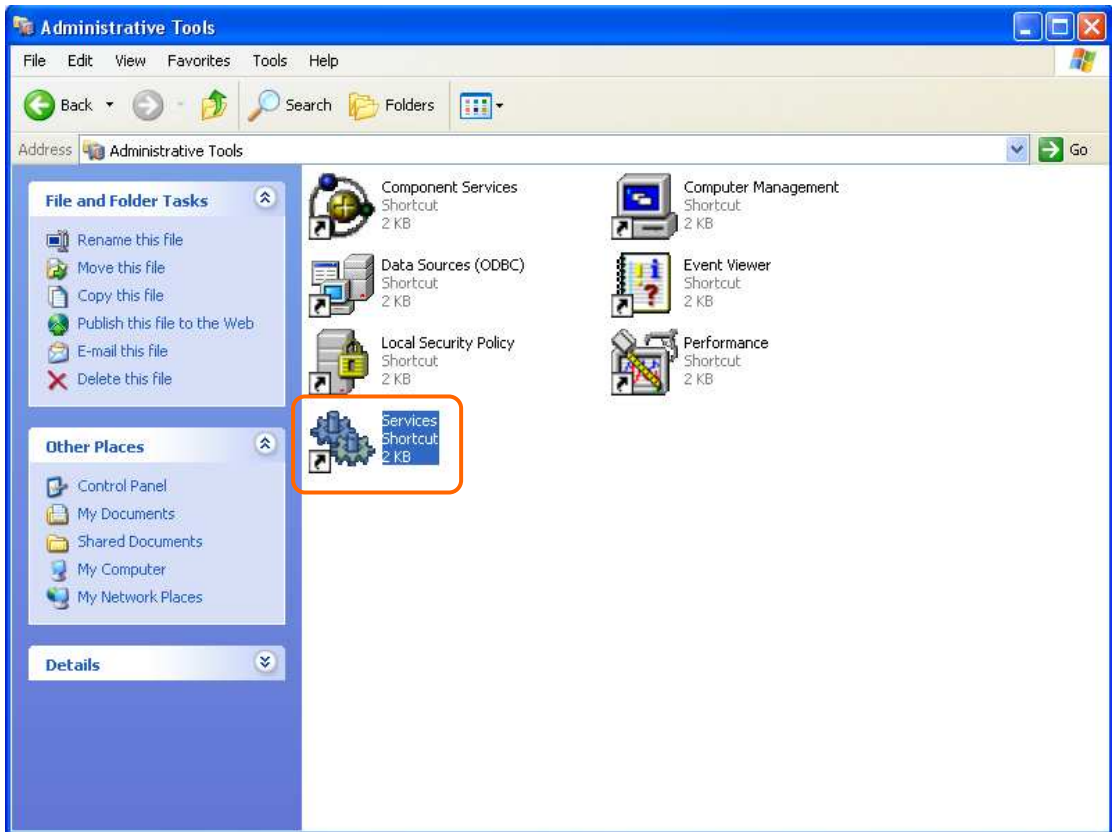


1. Click your computer OS start menu and move to “control panel”. Next select the “Administrative Tools”.

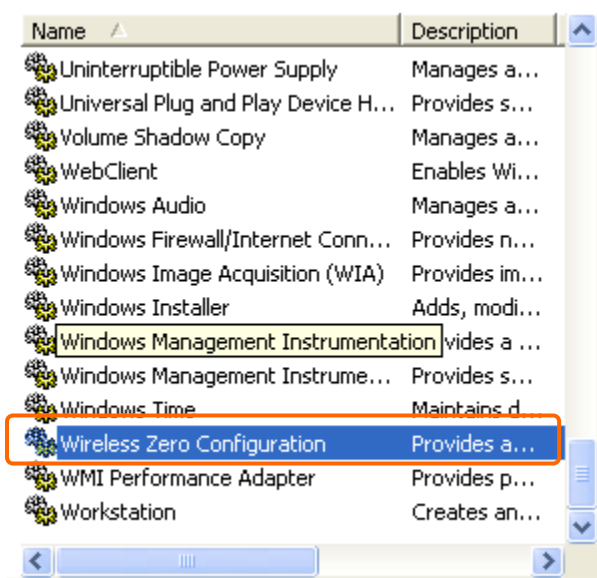
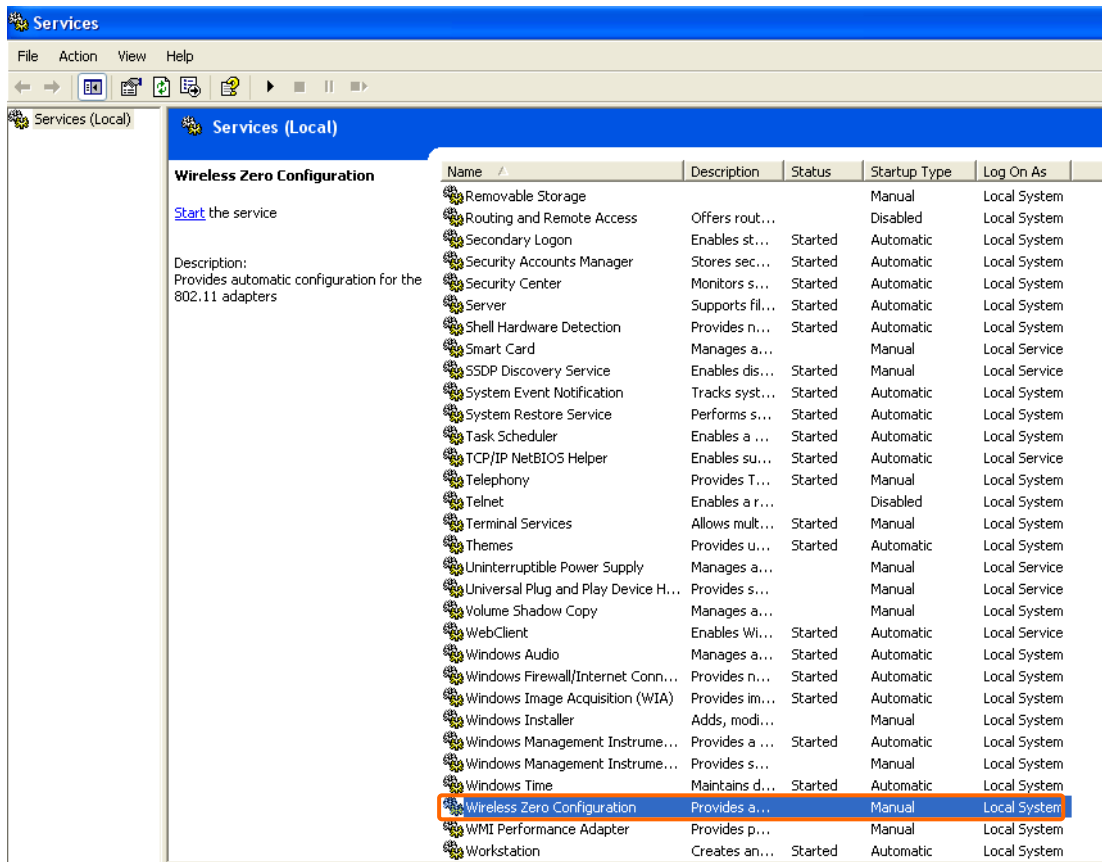




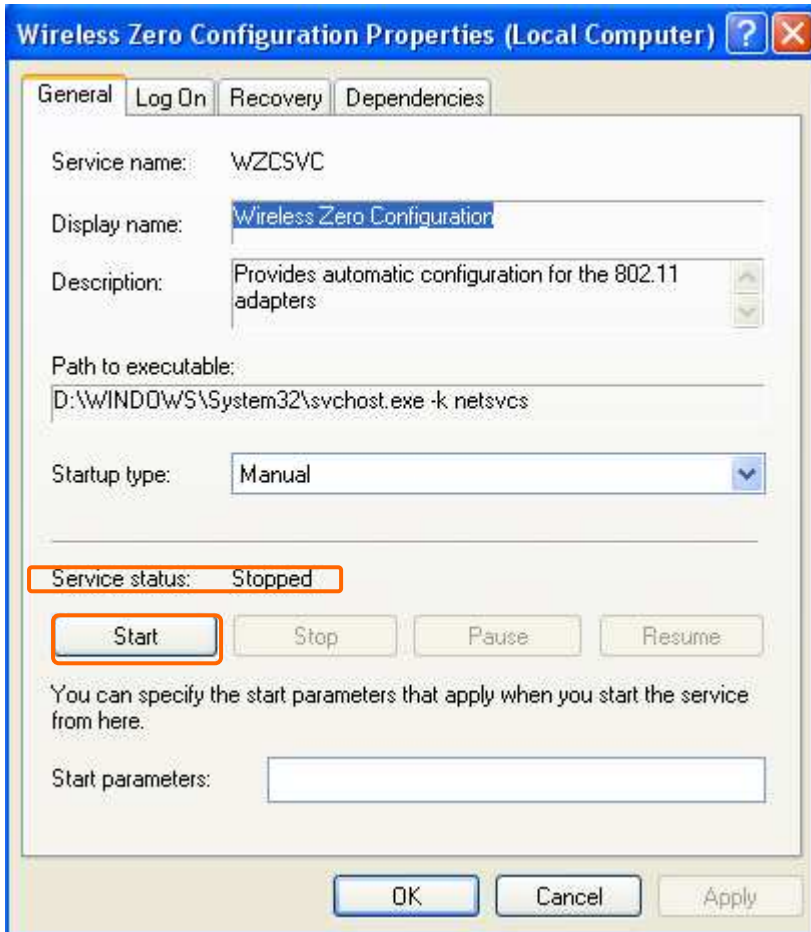
2. Click the "Services Shortcut".



- In the Services window, please find and select the "Wireless Zero Configuration" or "Wireless Configuration" and double click it.



4. It will pop up the Wireless Zero Configuration Properties window. The "Service status" is shown as "Stopped". Click "Start" to enable the Wireless Zero Configuration function.



5. Once this setting is completed, the "Service status" is "Started". Click "OK" to finish and exit. Lastly, you will find the option of "Windows Zero Config" shown in AU-4612 Wireless Utility.

