**IEEE 802.11n/a/b/g**

# Wireless LAN USB Adapter

# QUICK START GUIDE

VERSION 1.1
2008/02/28

FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

CE
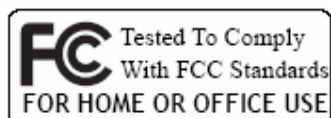
**BOX CONTENTS**

Wireless LAN Adapter          Quick Start Guide          Driver CD



**INSTALL DRIVER / UTILITY**

The installation & driver CD will automatically activate the autorun installation program after you insert the disk into your CD drive.

**Note: WLAN 11n ISM Band Dongle supports IEEE 802.11n/b/g**
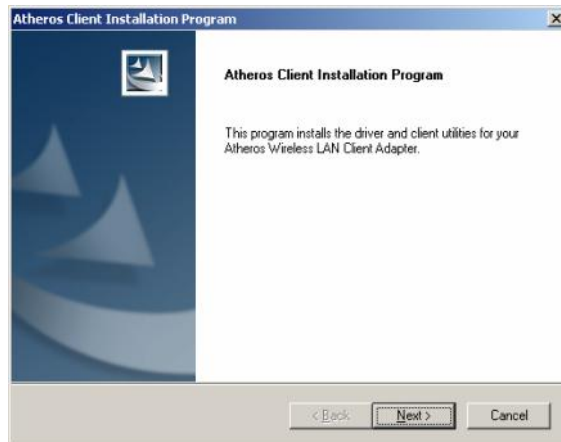          **WLAN 11n Dual Band Dongle supports IEEE 802.11n/a/b/g**

**Step 1 :**

Insert the installation & driver CD into your CD-ROM, choose your language and click **Next** to continue.
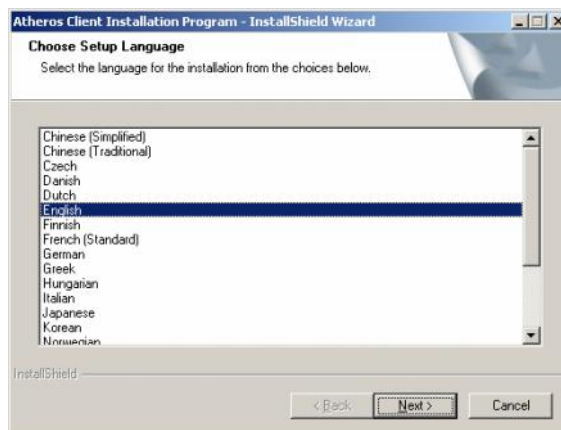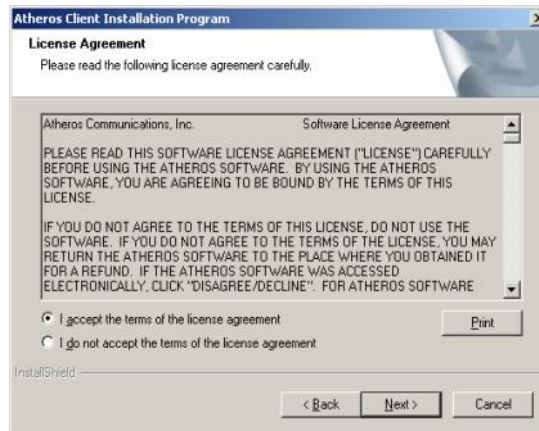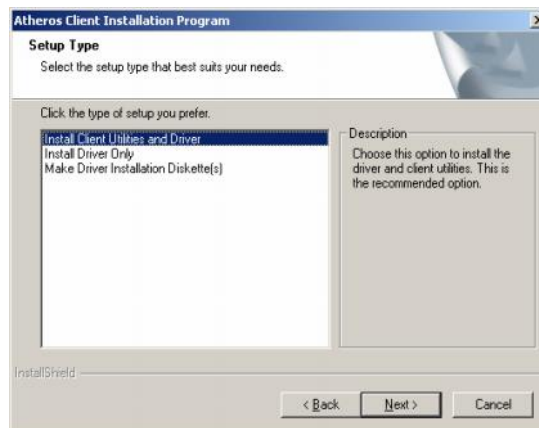
**Step 2 :**
Click **Next** to continue.



**Step 3 :**
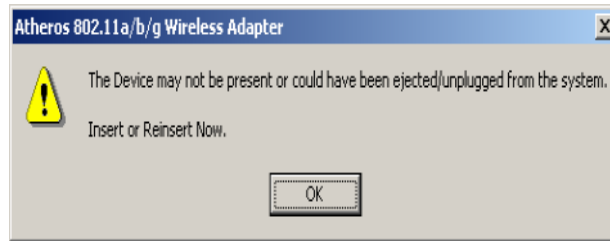Choose accept and click **Next** to continue.



**Step 4 :**
Choose the installation type. To install the client utilities and driver, select the appropriate button and click **Next**.
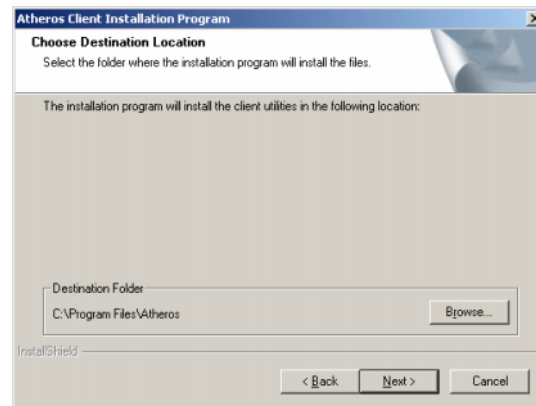
**Step 5 :**

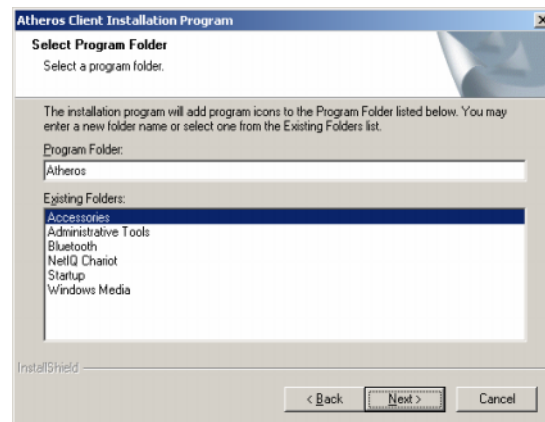Insert WLAN USB adapter into USB port and click OK to continue.

Atheros 802.11a/b/g Wireless Adapter

⚠ The Device may not be present or could have been ejected/unplugged from the system.

Insert or Reinsert Now.

OK

**Step 6 :**

Click **Next** to install at the designated folder. Or, click "Browse" to select different folder.

Atheros Client Installation Program

**Choose Destination Location**
Select the folder where the installation program will install the files.

The installation program will install the client utilities in the following location:

Destination Folder
C:\Program Files\Atheros

Browse...

InstallShield

< Back    Next >    Cancel

**Step 7 :**

Click **Next** to continue.

Atheros Client Installation Program

**Select Program Folder**
Select a program folder.

The installation program will add program icons to the Program Folder listed below. You may enter a new folder name or select one from the Existing Folders list.

Program Folder:
Atheros

Existing Folders:
Accessories
Administrative Tools
Bluetooth
NetIQ Chariot
Startup
Windows Media

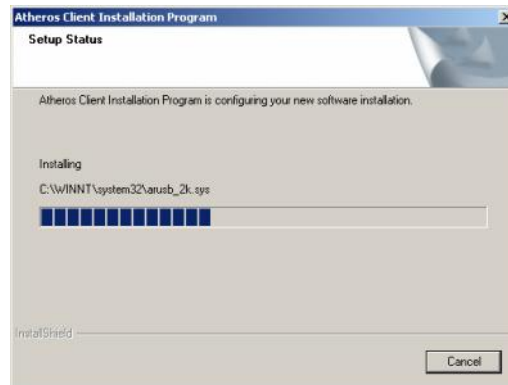InstallShield

< Back    Next >    Cancel

**Step 8 :**

If you have multiple computer s to access, choose SSO(Single sign on) feature set. Or you can choose "Do not install SSO feature set" and Click **Next** to continue.
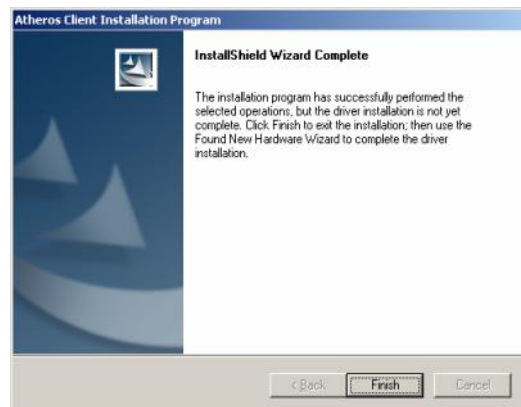
**Step 9 :**

Start copying files until it finishes the installation.

**Step 10 :**

Click **Finish** to complete installation.

## 3 WIRELESS NETWORK CONFIGURATION

WLAN USB Adapter uses its own management software. All functions controlled by users are provided by this application. When you insert the WLAN USB Adapter into the USB port of your PC, a new icon should appear in the Windows System Tray automatically.



**3.1** TRAY ICON

The tray icon appears at the bottom of the screen, and shows the signal strength using colors and the received signal strength indication (RSSI).
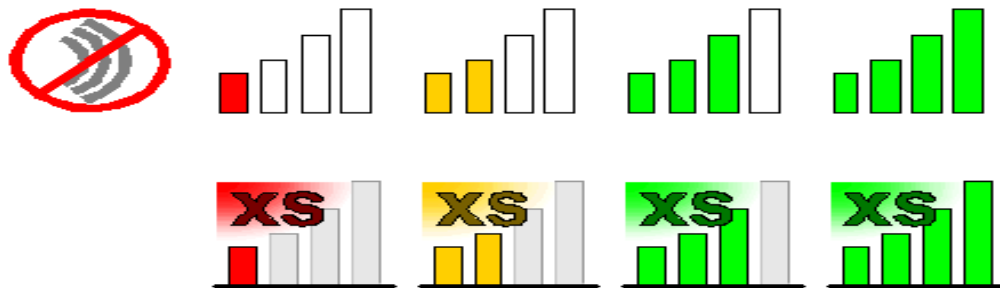


Hold the mouse cursor over the tray icon to display the current co nfiguration profile name and association, as well as transmit and receive speed and the wireless adapter name and IP address.

Enable or disable the tray icon in the Action menu.
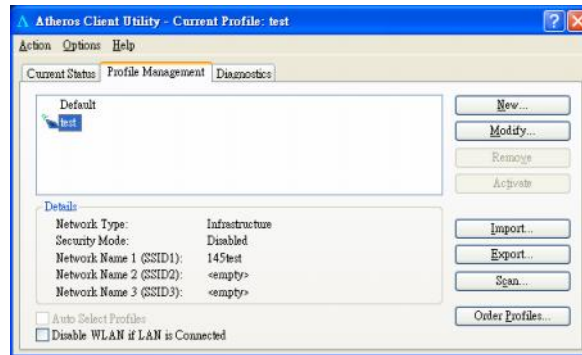
**3.2** GENERAL CONNECTION SETTING

### 3.2.1 Current Status

The Current Status tab contains general information about the program and its operations. The Current Status tab does not require any configuration.
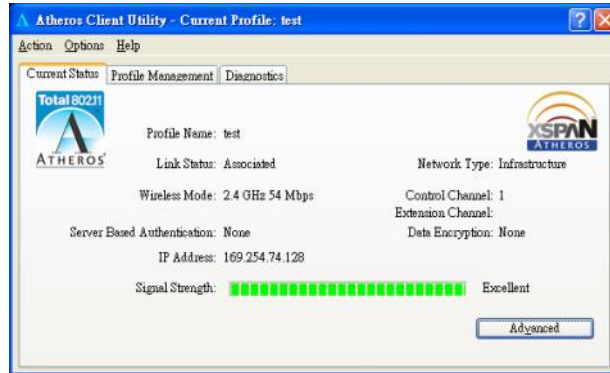


### 3.2.2 Profile Management

Configure the wireless network adapter (wireless card) from the Profile Management tab of the Atheros Client Utility.



a.  Create or Modify a Configuration Profile

To add a new configuration profile, click New on the Profile Management tab. To modify a configuration profile, select the configuration from the Profile list and click the Modify button.

To configure a profile for ad hoc or access point (infrastructure) mode, edit the Network Type field on the Advanced tab.

Note that the ACU only allows the creation of 16 configuration profiles.   After the creation of 16 profiles, clicking the New button displays

an error message.    Remove an old profile or modify an existing profile for a new use.

b. Remove a Configuration Profile

1. Go to the Profile Management tab.
2. Select the profile to remove from the list of configuration profiles.
3. Click the Remove button.

c. Activate a Configuration Profile

1. To switch to a different profile, go to the Profile Management tab.
2. Click on the profile name in the Profile List.
3. Click the Activate button.

The Profile List provides icons that specify the operational  state for that profile. The list also provides icons that specify the signal strength for that profile.

d. Import and Export Profiles

Importing a Profile :

1. From the Profile Management tab, click the Import button. The Import Profile window appears.
2. Browse to the directory where the profile is located.
3. Highlight the profile name.
4. Click Open. The imported profile appears in the profiles list.

Exporting a Profile :

1. From the Profile Management tab, highlight the profile to export.
2. Click the Export button. The Export Profile window appears.
3. Browse to the directory to export the profile to.
4. Click Save. The profile is exported to the specified location.

e. Ordering Profiles

Including a profile in the auto selection feature allows the wireless adapter to automatically select that profile from the list of profiles and use it to connect to the network.

**Including a profile in auto profile selection:**

1. On the Profile Management tab, click the Order Profiles button.
2. The Auto Profile Selection Management window a ppears, with a list of all created profiles in the Available Profiles box.
3. Highlight the profiles to add to auto profile selection, then click Add. The profiles appear in the Auto Selected Profiles box.

**Ordering the auto selected profiles:**

1. Highlight a profile in the Auto Selected Profiles box.
2. Click Move Up, Move Down, or Remove as appropriate.

   The first profile in the Auto Selected Profiles box has highest priority, and the last profile has lowest priority.

3. Click OK.
4. Check the Auto Select Profiles box.
5. Save the modified configuration file.

   When auto profile selection is enabled by checking Auto Select Profiles on the Profile Management tab, the client adapter scans for an available network. The profile with the highest priority and the same SSID as one of the found networks is the one that is used to connect to the network. If the connection fails, the client adapter tries the next highest priority profile that matches the SSID, and so on.

With auto profile selection enabled, the wireless adapter sc ans for available networks. The highest priority profile with the same SSID as a found network is used to connect to the network. On a failed connection, the client adapter tries with the next highest priority profile.

### 3.2.3 Diagnostics

The Diagnostics tab of the Atheros Client Utility provides buttons used to retrieve receive and transmit statistics. The Diagnostics tab does not require any configuration.

The Diagnostics tab lists the following receive and transmit diagnostics for frames received by or transmitted by the wireless network adapter:

- Multicast packets transmitted and received
- Broadcast packets transmitted and received
- Unicast packets transmitted and received
- Total bytes transmitted and received

Click the Adapter Information button for more general information about the the wireless network adapter and the network driver interface specification (NDIS) driver.

### 3.3 Security

In the Atheros Client Utility, access the Security tab by clicking New or Modify on the Profile Management tab.   Click the Security tab in the Profile Management window.

Edit the fields in the Security   tab of Profile Management   to configure the profile. To define the security mode, select the radio button of the desired security mode.   Make sure to also edit the General and Advanced tabs.

*Note: If the Profile Locked checkbox is checked, Profile cannot be removed or modified. However the password fields can be edited. Contact your system administrator.*

The type of security mode the station is using. The options include the following:

### 3.3.1 **WPA/WPA2**

Enables the use of Wi-Fi Protected Access (WPA).

Choosing WPA/WPA2 opens the WPA/WPA2 EAP drop -down menu. The options include:

- EAP-FAST

To use EAP-FAST security, the machine must already support EAP -FAST. Check with the IT manager.

- EAP-TLS

To use EAP-TLS security In the Atheros Client Utility, access the Security tab in the Profile Management window.

1. On the Security tab, choose the WPA radio button.
   OR: On the Security tab, choose the 802.1x radio button.
2. Choose EAP-TLS from the drop-down menu.

- EAP-TTLS

To use EAP security In the Atheros Client Utility, access the Security tab in the Profile Management window.

1. On the Security tab, choose the WPA/WPA2 radio button.
   OR: On the Security tab, choose the 802.1x radio button.
2. Choose EAP-TTLS from the drop-down menu.

- PEAP (EAP-MSCHAP V2)

To use PEAP-MSCHAP V2 security In the Atheros Client Utility, access the Security tab in the Profile Management window.

1. On the Security tab, choose the WPA radio button.
   OR: On the Security tab, choose the 802.1x radio button.
2. Choose PEAP (EAP-MSCHAP V2) from the drop-down menu.

- LEAP

To use security In the Atheros Client Utility, access the  Security tab in the Profile Management window.

LEAP security requires that all infrastructure devices (e.g. access points and servers) are configured for LEAP authentication. Check with the IT manager.

- Configuring LEAP
- Enabling LEAP

### 3.3.2  **802.1x**

Enables 802.1x security.   This option requires IT administration.

Choosing 802.1x opens the 802.1x EAP type drop-down menu.   The options include:

- EAP-FAST
- EAP-TLS
- EAP-TTLS
- PEAP (EAP-GTC)
- PEAP (EAP-MSCHAP V2)
- LEAP

Please refer to 3.3.1 WPA/WPA2

If the access point that the wireless adapter is associating to has WEP set t o Optional and the client has WEP enabled, make sure that Allow Association to Mixed Cells is checked on the Security Tab to allow association.

### 3.3.3 WPA Passphrase

To use WPA Passphrase security In the Atheros Client Utility, access the Security tab in the Profile Management window.

1. On the Security tab, choose the WPA Passphrase radio button.
2. Click on the Configure button.
3. Fill in the WPA Passphrase.
4. Click OK.

### 3.3.4 Pre-Shared Key (Static WEP)

Enables the use of pre-shared keys that are defined on both the access point and the station.

To define pre-shared encryption keys, choose the Pre -Shared Key radio button and click the Configure button to fill in the Define Pre-Shared Keys window.

If the access point that the wireless adapter is associ ating to has WEP set to Optional and the client has WEP enabled, make sure that Allow Association to Mixed Cells is checked on the Security Tab to allow association.

### 3.3.5 None

No security (not recommended).

**3.4** JumpStart for Wireless

Run Setup.exe in "JSW_Install_CD" folder, after installation complete, Start "Jumpstart" program from Windows Start → Programs → Atheros → Jumpstart or an icon called "Jumpstart" on desktop.

Choose "Join a wireless network" and click **Next** to continue.

Users have three ways to connect to an AP :

a. Push Button Configuration :

1. Click "Push Button Configuration" in the configuration web page of your AP that you want to connect.

2. Within two minutes, choose
   the first option and click **Next**
   to continue.



3. Search for the AP.
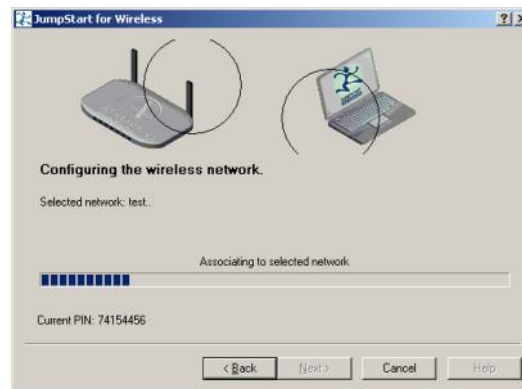


4. Connect Successfully.

b. Enter a Pin code into AP :

1. Choose the second option
   and you'll get a Pin number.
2. Enter the Pin number in the
   configuration web page into
   the Client PIN Number
   blank and click "Start PIN".



## Wi-Fi Protected Setup

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

☐ **Disable WPS**

**WPS Status:** ⊙ Configured ○ UnConfigured

**Self-PIN Number:** 95661469   [ Regenerate PIN ]

**Push Button Configuration:** [ Start PBC ]

[ Apply Changes ] [ Reset ]

**Current Key Info:**

| Authentication | Encryption | Key |
|---|---|---|
| Open | None | N/A |

**Client PIN Number:** [          ] [ Start PIN ]

3. Click **Next** to continue.

4.Connect Successfully.



c. Enter a Pin from AP :

1. Choose the third option and enter PIN number from the configuration web page of your AP.

2. Click **Next** and continue.



## Wi-Fi Protected Setup

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

☐ **Disable WPS**

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**Self-PIN Number:** 95661469 [Regenerate PIN]

**Push Button Configuration:** [Start PBC]

[Apply Changes] [Reset]

**Current Key Info:**

| Authentication | Encryption | Key |
|---|---|---|
| Open | None | N/A |

**Client PIN Number:** [ ] [Start PIN]

3.Connect Successfully.





## 4.1
The installation driver CD will automatically activate the autorun  installation program after you insert the disk into your CD drive. Please refer to page 1 "INSTALL DRIVER/UTILITY"

## 4.2
Install Manually :

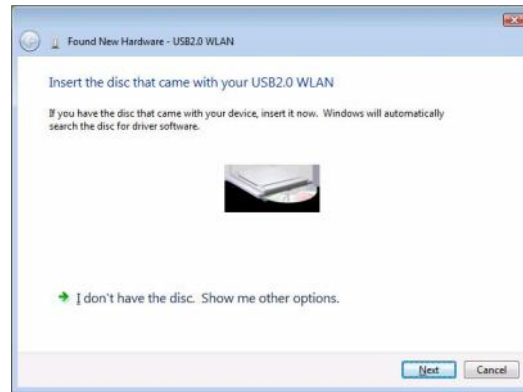Plug your USB dongle into USB interface, windows Vista will search for compatible driver to install.

**Step 1 :**
Select "Locate and install the driver software", Windows will guide you through the process of installing driver software for your device.
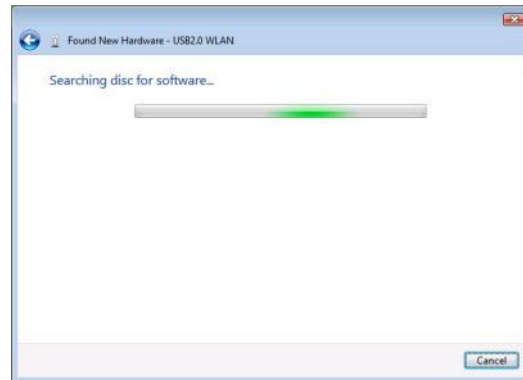
**Step 2 :**

Insert the installation disc into the CD-ROM and click "next" to continue installation.
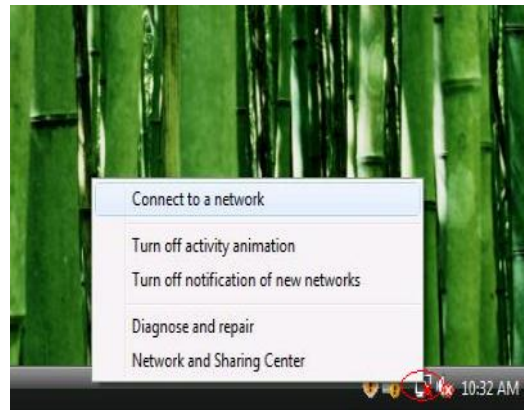


**Step 3 :**

Windows Vista search for the software and it will be installed successfully.
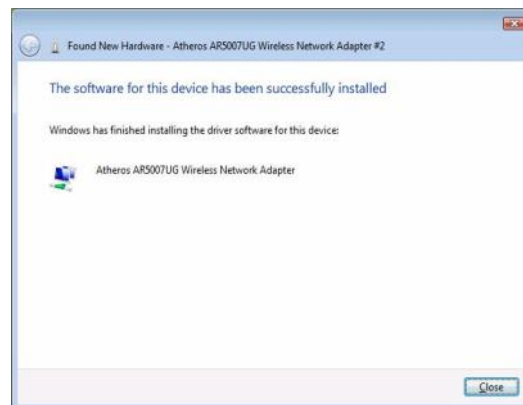
**Step 4 :**

After installation, right click the network icon on the Windows Vista System Tray, and click "Connect to a network".
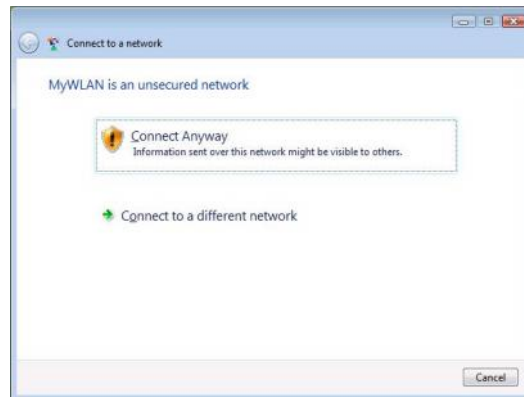


**Step 5 :**

Select a network to connect to and click "Connect".



**Step 6 :**

Click "Connect Anyway" if the network is an unsecured network.

**Step 7:**
USB Dongle successfully connected
to network, Click "Close"