

# How to Install and Configure Linksys WUSB54G Version 1 on Windows XP SP1

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## Notice 2007-08-25

This document was written in 2004 using Windows XP Service Pack 1 and a Linksys WUSB54G Version 1 wireless network adapter. Its an informal document, the information has not been maintained, and it is OUT-OF-DATE. NO SUPPORT IS PROVIDED FOR THIS UNOFFICIAL DOCUMENT. IN ALL CASES YOU SHOULD PLEASE REFER to the CURRENT INFORMATION provided by your hardware and software product manufacturers.

If you have lost your product documentation or installation software, then please visit the manufacturer's web site <http://www.linksys.com> and get the current support information and/or software for your exact product model and version number (usually on a label underneath the unit).

## Summary

Here is very short UNOFFICIAL and UNSUPPORTED summary of the steps for people who are in a special hurry:

- 1 Make sure you know your wireless network name (SSID), security type (e.g. 64-bit WEP, 128-bit WEP, or WPA-Personal), passphrase, and/or key.  
If you don't know how to get this information, consult the documentation that came with your wireless router, or visit the manufacturer's web site to find it.
- 2 Make sure you have the CORRECT Linksys driver software for YOUR PRODUCT VERSION.  
It's best to have the original CD, but if not you can download the drivers in a .zip file which you then have to extract.
- 3 Use Control Panel to uninstall the old Linksys software and device driver if these are present.
- 4 Unplug the network adapter.
- 5 Shut down.
- 6 Reboot.
- 7 Install the Linksys software.
- 8 EITHER: attach the network adapter when the system tells you that you can;  
OR: Shut down, count to ten, plug in the network adapter, and reboot. The network adapter should now be operational.
- 9 Now configure the network adapter and make sure you save your profile.
- 10 DO NOT UNPLUG YOUR USB NETWORK ADAPTER. IT'S A NETWORK ADAPTER. YOU WANT TO LEAVE IT PLUGGED IN ALL THE TIME.

NOTE: The screen shots in this document show Windows XP at Service Pack 1 level. The network adapter used was a Linksys WUSB54G Version 1. By 8/2007, your Microsoft Windows XP level should now be Service Pack 2, and the latest hardware version of the Linksys WUSB54G is Version 4, but check which one YOU have. Some of the configuration screens look different now, but most of the information is still good otherwise.

## Installing the network adapter

Don't plug the adapter in yet. First install the driver. This is standard operating procedure for USB devices.

Insert the Linksys CD for your WUSB54G and it should auto-play. If the CD does not start automatically, you can browse the CD from Windows Explorer or My Computer and run the Setup program that you will find in the "Drivers" folder.

If you lost your Linksys CD and you have downloaded a .zip file, then extract it and run the Setup program that you will find in the top-level folder.

You might have to bypass a warning message about the driver not being signed.

After files get copied, if you get a message telling you to connect the adapter, then do so. Otherwise shut down your computer, count to ten, then plug in the adapter, and restart the computer.

Initially, your wireless connection may be disabled as the adapter is by default configured in “Ad-hoc” mode.

## Choosing a Configuration Method

If you are using Windows XP there are two ways you can configure your wireless connection:

- 1 Linksys Wireless LAN Monitor
- 2 Windows XP “Wireless Zero Configuration”

Usually by now you will have already installed the “Linksys WLAN Monitor” configuration utility. This should create a new icon in the “System Notification Area” which is usually at the right-hand end of the Taskbar where the clock and other icons appear. However, this might not be installed automatically if CD autoplay starts and stops immediately. You might just see a window flash across the screen, in which case only the driver got installed.

[Installing and using the “Linksys WLAN Monitor Version1.05”](#) tells you how to install the Linksys utility manually, how to configure your adapter using it, and how to save a profile.

Alternatively, you can use Windows XP to configure the wireless networking. See [How to configure using MS Wireless Zero Configuration](#)

# Installing and using the “Linksys WLAN Monitor Version1.05” configuration utility

To install the “Linksys WLAN Monitor Version1.05” (configuration utility) manually, run setup.exe from the Utility folder on the install CD. Then a new icon “Linksys Wireless-G USB Adapter” should appear in the System Notification Area:

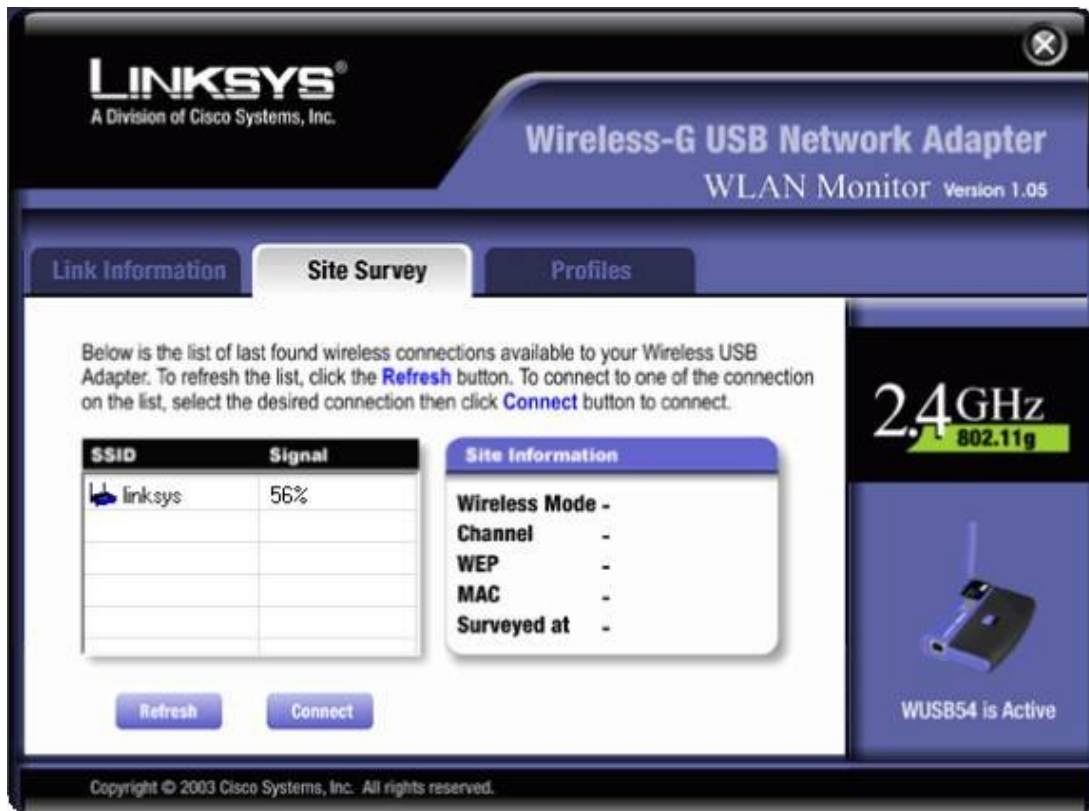


Double-click on this icon and the utility will start:

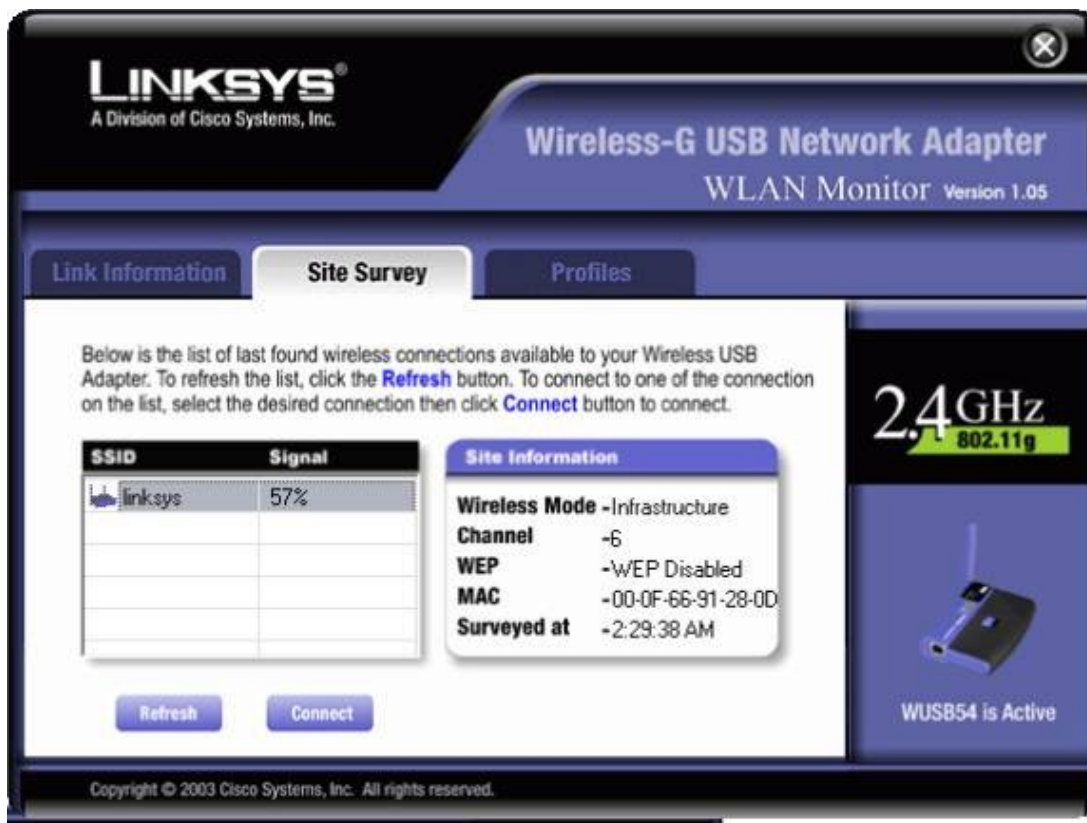


Initially you may get “Wireless connection unavailable” on the connection, and see the message “Ad-Hoc network not found” as shown above.

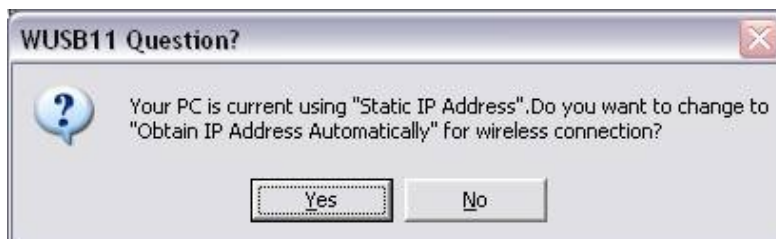
This occurs because the adapter is not running in Infrastructure mode. Click on Site Survey:



Select the network you want to connect to, and then click on “Connect”:

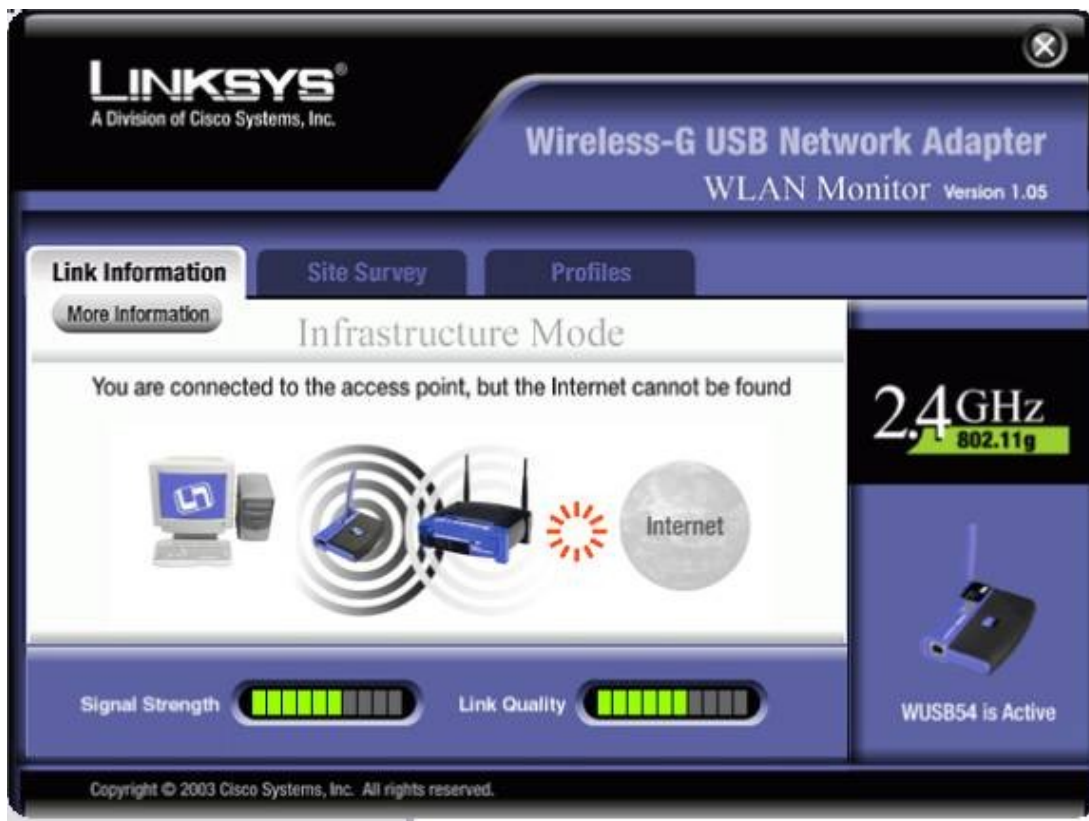


You may see this message if you are using a static IP address:

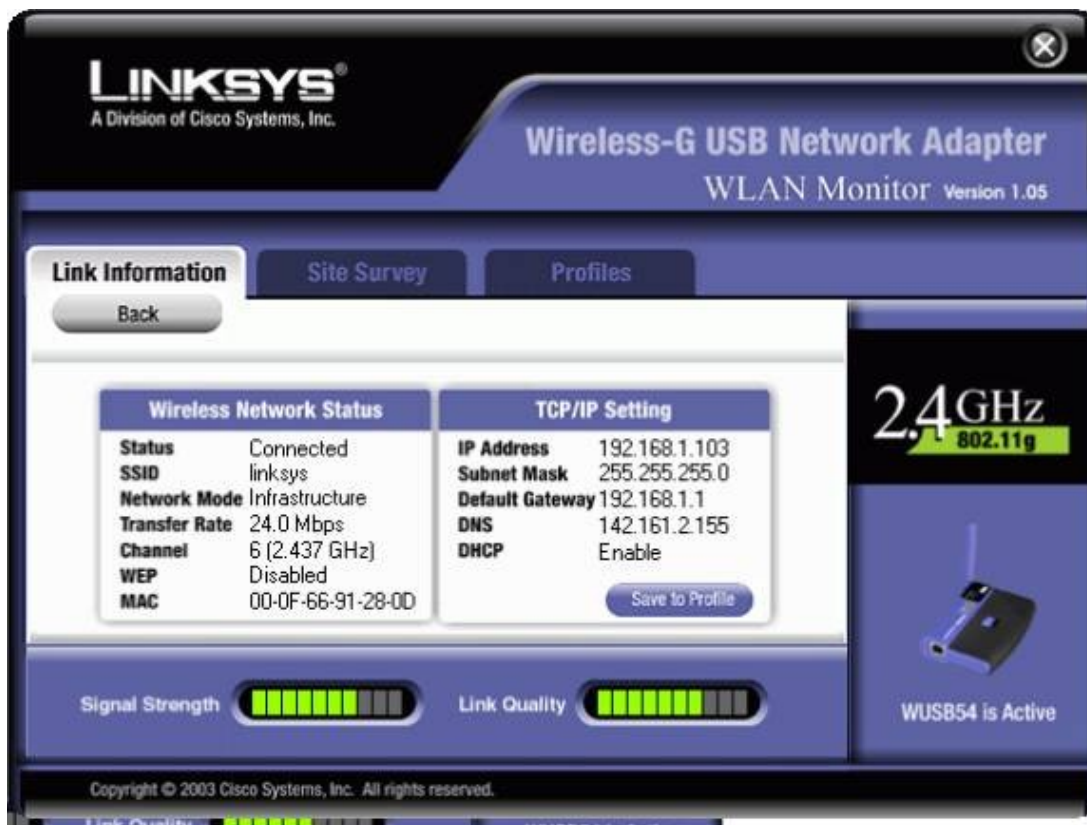


Click on "Yes".

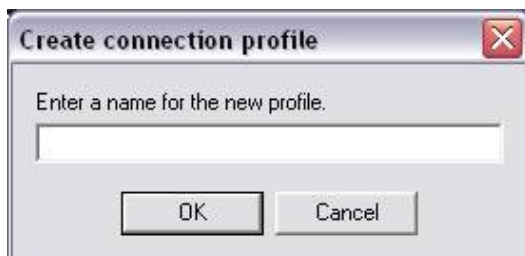
After a few seconds the connection should now become active:



Click on "More Information":



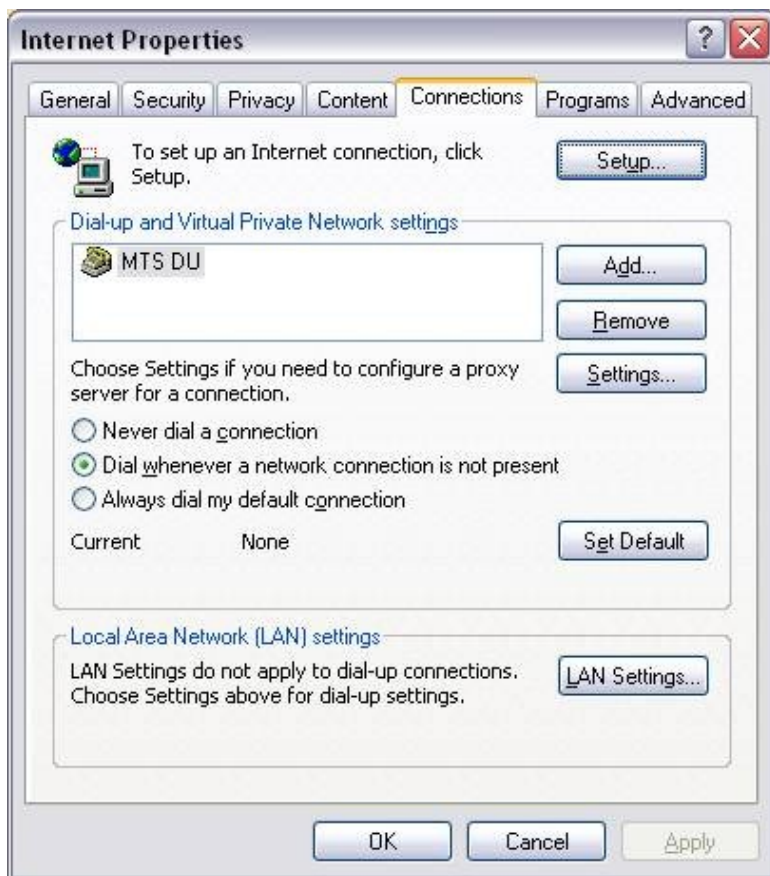
Click on "Save to Profile". You will be prompted to provide a name for the profile:



For example, use "linksys-infrastructure". (In fact the default profile "linksys" already exists.)

## Check Internet Options

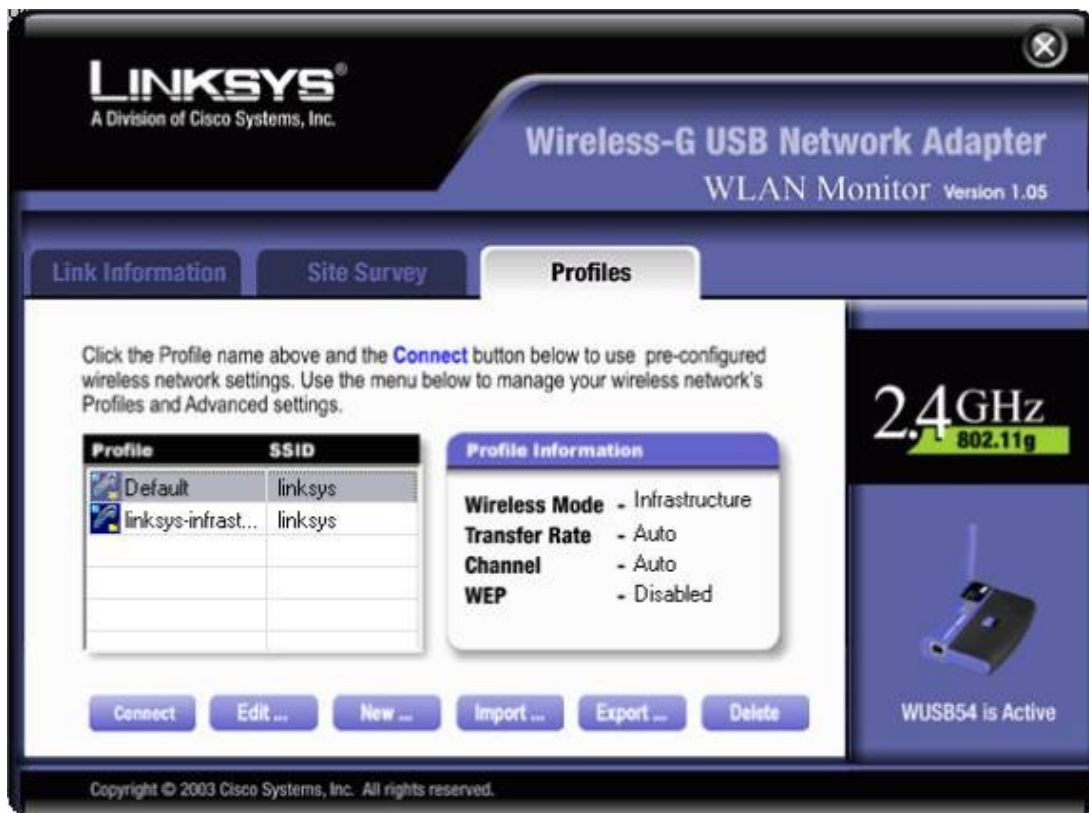
Note that in Internet Options your proxy and default connection settings may have been changed. (see the "Connections" tab, from Start/Control Panel/Internet Options):



If so, reset “Choose Settings” to use “Never dial a connection”, and use “LAN Settings” to uncheck “Automatically detect settings” for your proxy.

Your connection should now be working, and you are ready to configure SSID and encryption, or else your Wireless MAC filter.

## **How to configure SSID and WEP key in a new profile**



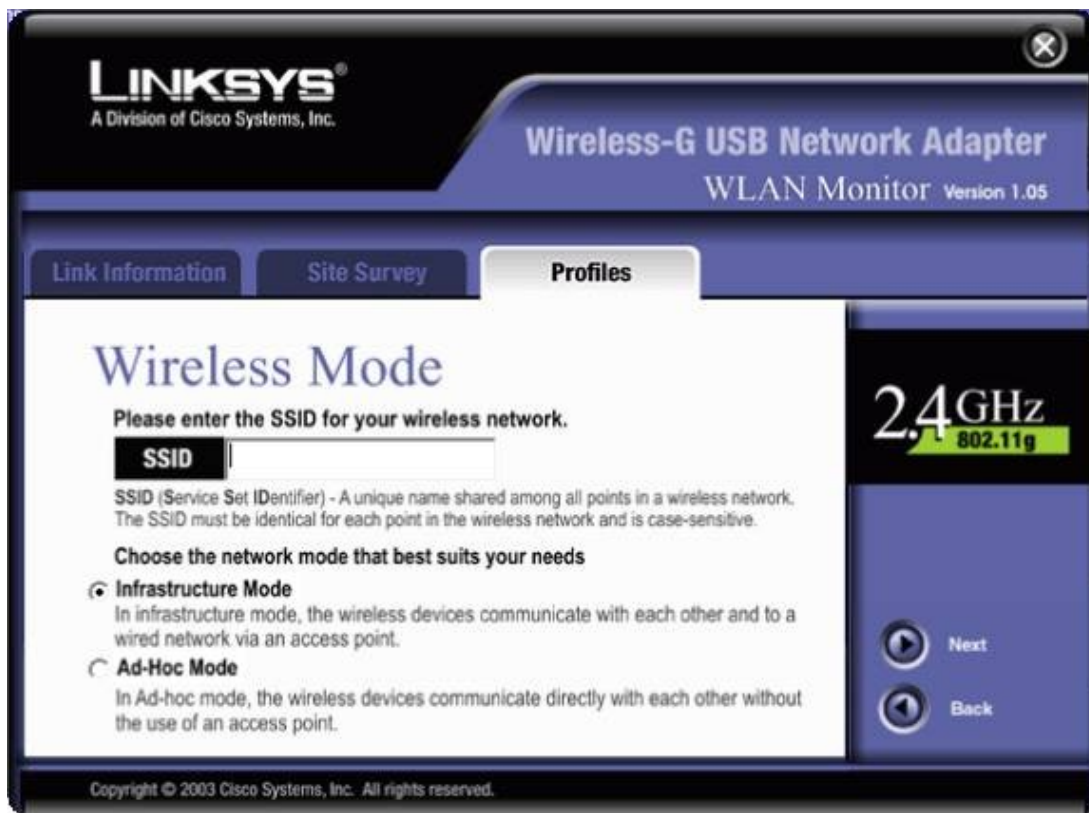
Click on New:



Provide a new profile name and click on OK.

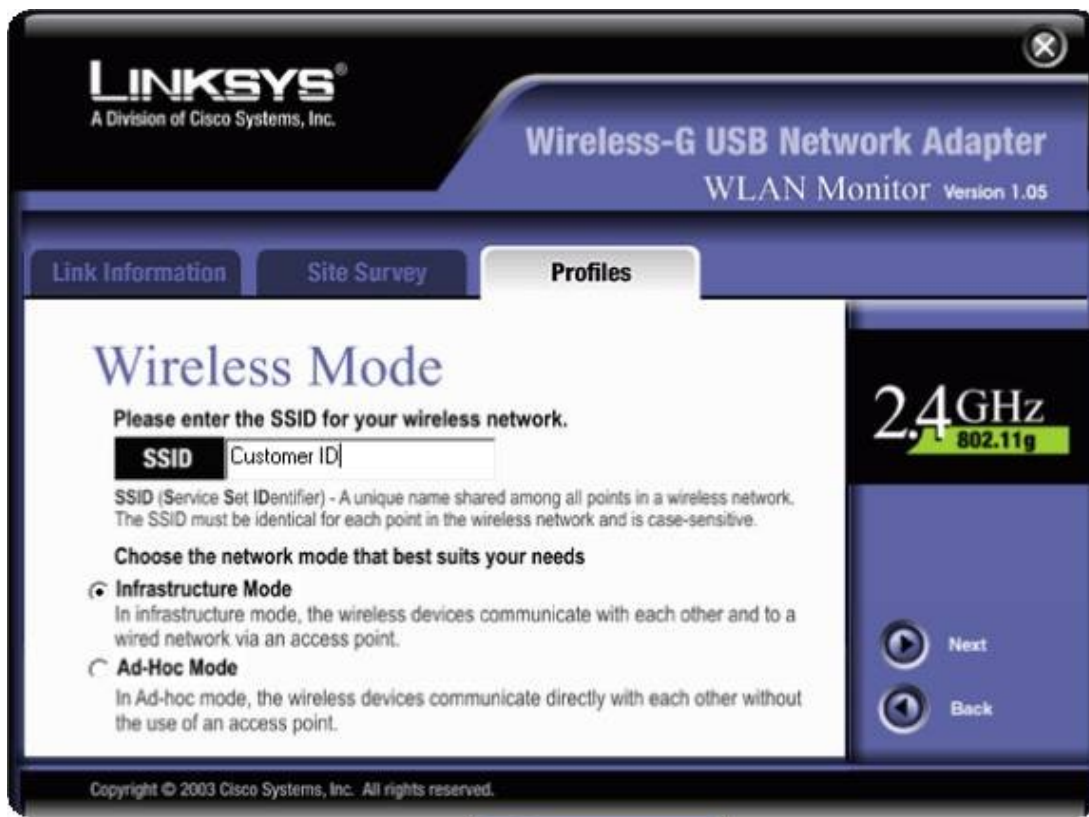


Click on Next:



Enter your SSID and select Infrastructure Mode.

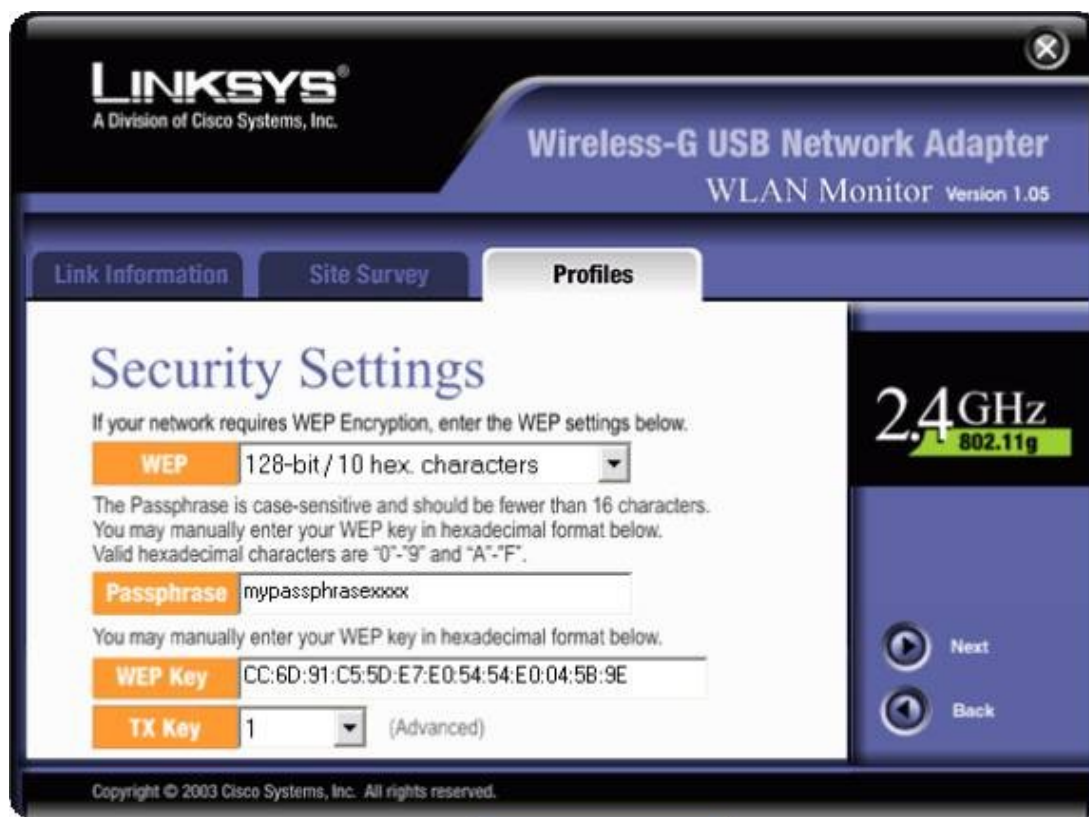
Click on Next:



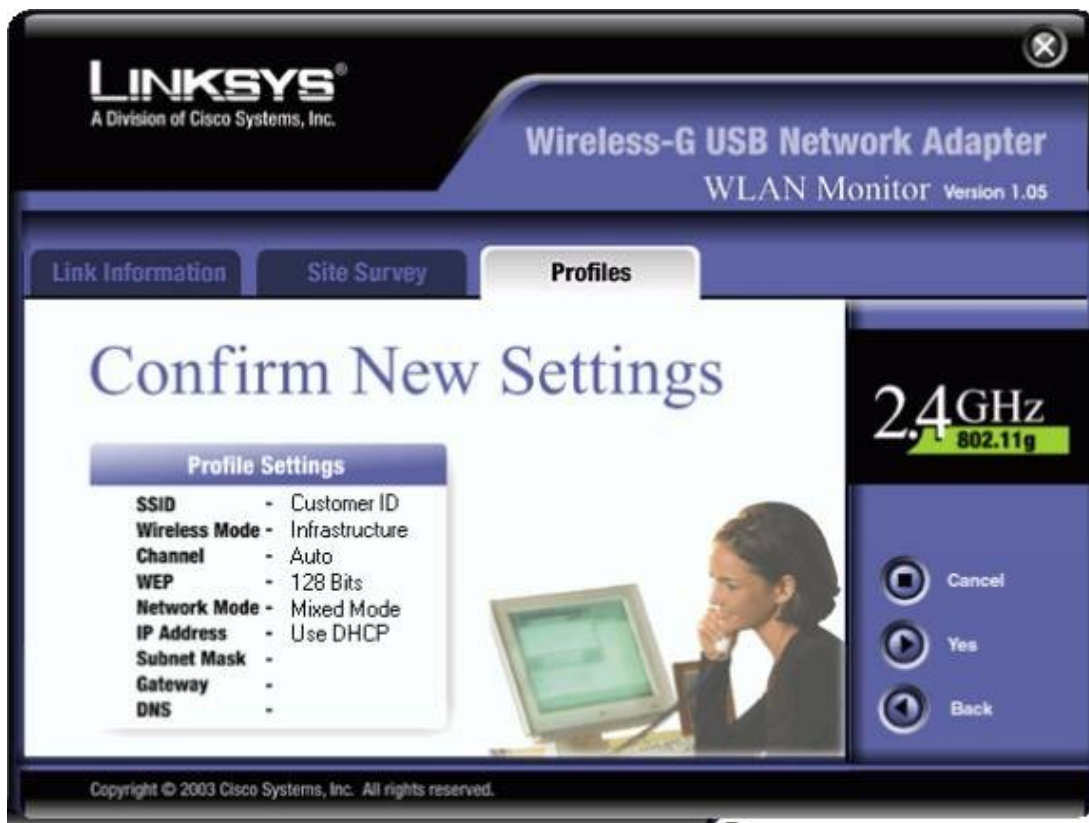
At the next screen you are prompted for WEP key strength and passphrase:



Set the WEP strength you want (Disabled, 64-bit, or 128-bit) and key in a Passphrase if required. Note that 128-bit WEP generates a key 26 hexadecimal characters in length, and 64-bit WEP generates a key of 10 hex characters:



Leave TX Key as 1 in most cases. Click on Next:



Click on “Yes” to confirm.

Before you can use this profile you need to configure the router.

## How to configure using MS Wireless Zero Configuration

Microsoft Wireless Zero Configuration (WZC) replaces the use of the LinkSys WLAN Monitor or Instant Wireless Configuration Utility. You either use one method or the other, and it is simplest to go with whichever is already set up on your computer.

Usually WZC is already installed, but if it is not and you still want to use it, please refer to the Microsoft web site for instructions.

To enable the WZC service, if you don't see the Wireless Network tab in your Wireless Connection Properties, most likely the service did not start. Open **Administrative Tools** in **Control Panel** and select **Services**. Scroll down to **Wireless Zero Configuration**, Right-click on it, and select **Start**. The service should now be enabled, and the Wireless Network tab should now be visible in the connection properties (select the Wireless Network Connection under Start/Control Panel/Network connections).

Note that when you enable the WZC service, the wireless connection will be reset (i.e. the

current connection will be lost).

You must disable, then re-enable the connection in order to regain it and you should see a message like :



Click on the connection icon in the System Tray, and continue below.

## Wireless Network Connection Properties (using WZC)

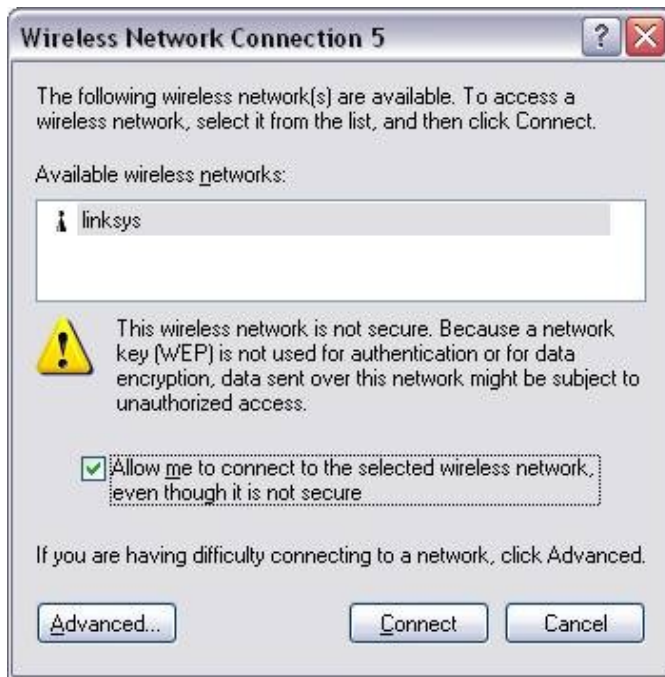
When you double-click on the balloon:



(Service Pack 1)

Click on Advanced to proceed to configure the connection for WEP, etc., as at [Wireless Network Connection Properties:Wireless Networks](#) below.

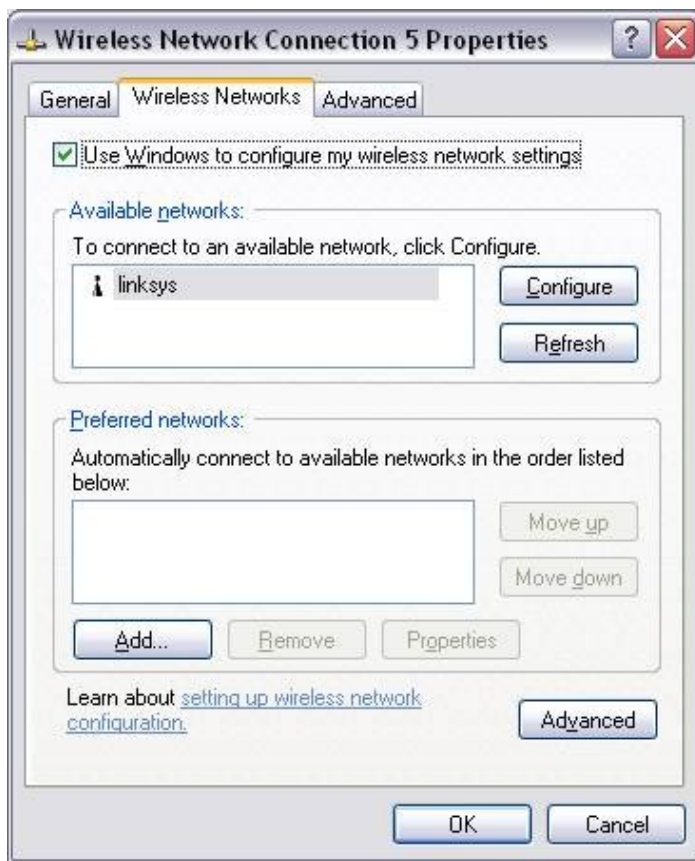
Otherwise, check Allow me to connect to the selected wireless network even though it is not secure:



(Service Pack 1)

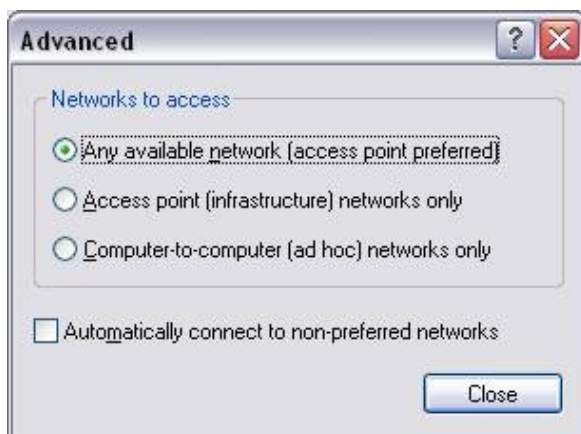
The Connect button is then enabled. Click on this to connect, and you are done.

## **Wireless Network Connection Properties: Wireless Networks**



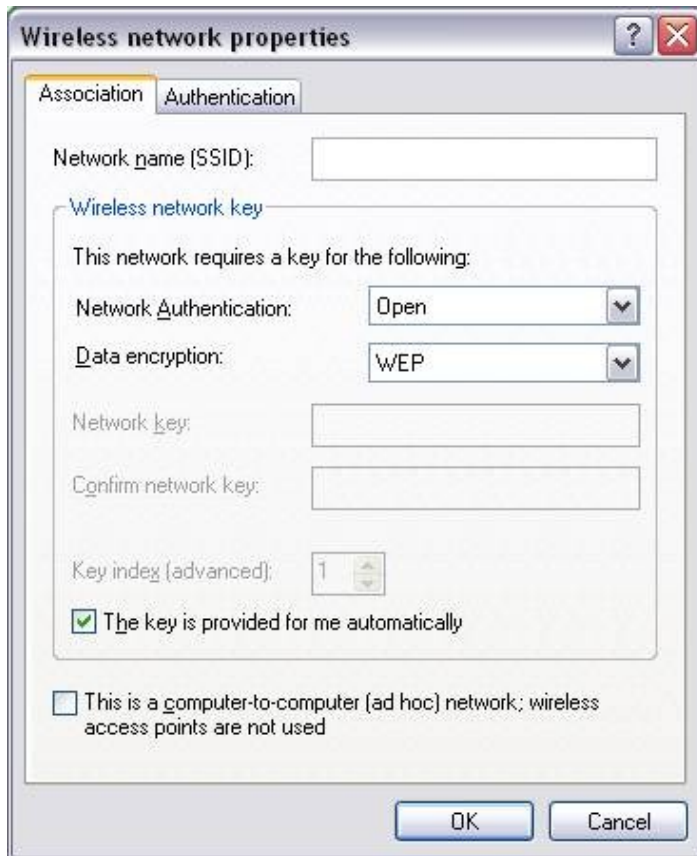
Click on Add, and proceed below for WEP configuration, etc.

NOTE: Clicking on Advanced yields this pop-up menu:



Usually you will want to select "Access point networks only".

## Wireless network properties Association tab

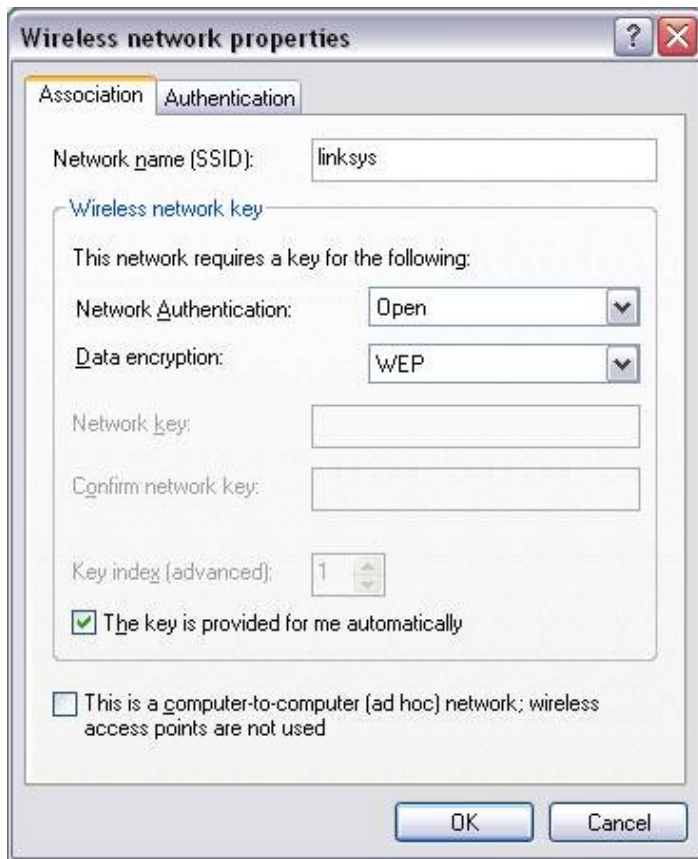


The image shows a Windows-style dialog box titled "Wireless network properties". It has two tabs: "Association" (selected) and "Authentication". The "Association" tab contains the following fields and options:

- Network name (SSID): [Empty text box]
- Wireless network key section:
  - This network requires a key for the following:
  - Network authentication: [Open] (dropdown menu)
  - Data encryption: [WEP] (dropdown menu)
  - Network key: [Empty text box]
  - Confirm network key: [Empty text box]
  - Key index (advanced): [1] (spin box)
  - The key is provided for me automatically
- This is a computer-to-computer (ad hoc) network; wireless access points are not used

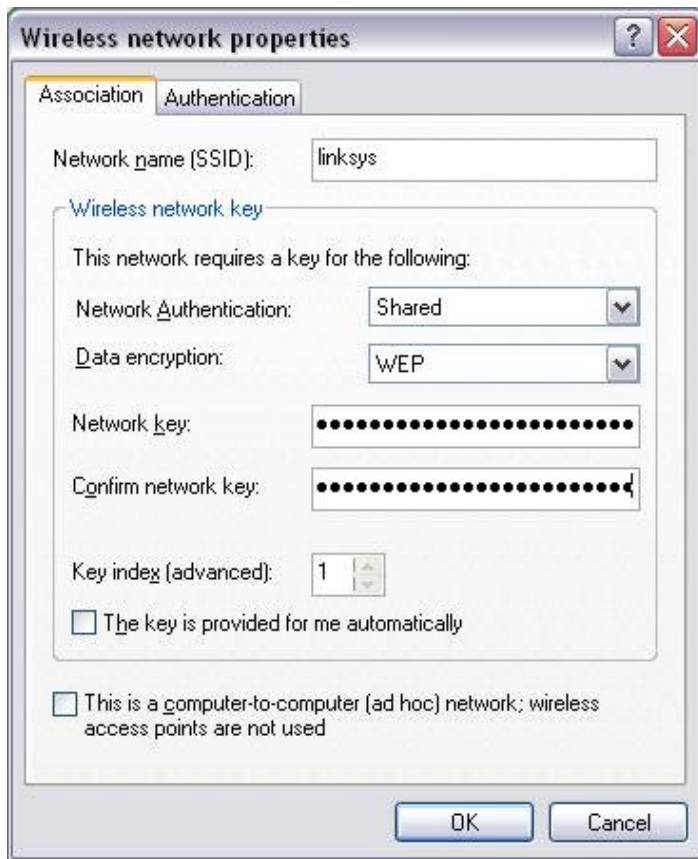
At the bottom of the dialog are "OK" and "Cancel" buttons.

Enter the desired network name, etc.:



## NOTES:

- 1 Network Authentication should normally be set to Open.
- 2 Data encryption should be set to WEP.
- 3 To enter the Network key here you must uncheck "The key is provided for me automatically", and then provide the WEP key in the Network key and Confirm network key fields. Use the hexadecimal value for the key (either 10 or 26 digits), using lower case. A handy tip is to type up the key using Notepad and then copy and paste it where required.



Finally, click on OK and then disable and re-enable the connection in order to re-establish it.

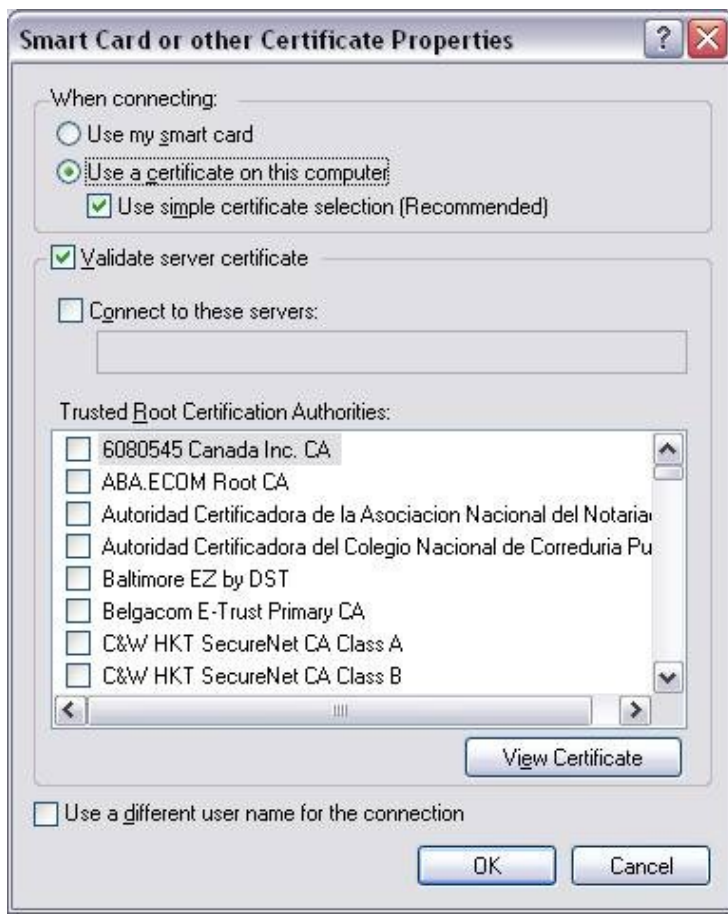
## **Wireless network properties Authentication tab**

The Authentication tab looks like this:



No changes should be necessary. Click on Properties:

## **SmartCard or other Certificate Properties**



Again, no changes should be necessary.

## How to configure Linksys WRT54G Wireless Router

This is big topic outside the scope of this document. You need to refer to the documentation that came with your router in order to be able to connect to the router configuration.

### Managing the SSID

Make sure that you have set (and are able to use) the same SSID on both the router and the client.

A change to SSID must be done separately because the WRT54G router configuration application manages SSID in a different place in the web dialogue, and you will immediately lose your wireless connection when you change the SSID

Only when the SSID has been changed successfully should you proceed to configure WEP.

## How to configure WEP



Select settings as above, click on “Generate”, and then click on “Save Settings”.

You will lose your Wireless connection until you reconnect with the correct profile.

## How to configure Wireless MAC Filtering

You can use the router’s DHCP client list to make a list of the adapter addresses that you want to permit on the Wireless LAN.

To check adapter MAC addresses otherwise, you can:

- | Look on the box.
- | In Windows 2000 or XP use **ipconfig/all**
- | In Windows 98 or ME use **wiipcfg**.

| On OSX check the TCP/IP tab in Network Settings for the Airport device.

Then, on a LinkSys WRT54G router (for example), configure the appropriate settings:



Click on “Edit MAC Filter List” to add MAC addresses, and then save these settings.

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## Document History

The original document “Installing and Configuring Linksys WUSB54G on Windows XP.4.htm” was created in 2004.

Updated 2005-07-29 (Version 6).

Updated 2007-08-30 (Version 7). To clean up formatting, provide Notice, correct and clarify product version information, provide additional explanations, rework ToC.

Date 31/08/07 Time 02:22:25 Page number 26 Page count 26 Subject Title Author Michael Cook

Pages 26 Paragraphs 241 Words 1969 Characters 11908 Tables 1 Graphics 30 Objects 0

/home/mcook/Sites/Archive/HowTo/WUSB54G/Installing and Configuring Linksys WUSB54G on Windows XP.7.odt Total editing time 00:00:00.00

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