Windows XP Wireless Zero Configuration



Note for Windows XP users: Windows XP has a built-in configuration tool. Use Windows XP Wireless Zero Configuration (in the system tray at the bottom of your screen) to configure the Adapter.

1. After installing the Adapter, the Windows XP Wireless Zero Configuration icon will appear in your computer's system tray (see Figure 6-3). Double-click the icon.



Figure 6-3



Note: Steps 2 and 3 are the instructions and screenshots for Windows XP with Service Pack 1 installed.

If you have not installed Service Pack 1, select the network you want, and click the Connect button. If the network has WEP encryption enabled, enter the WEP key in the Network key field, and then click the **Connect** button.

2. The screen that appears will show any available wireless network. Select the network you want.

If this network has WEP encryption enabled, go to step 3.

If this network does not have WEP encryption enabled, then Figure 6-4 will appear. Make sure the box next to Allow me to connect to the selected wireless network, even though it is not secure is checked. Then click the **Connect** button, and go to step 4.



Figure 6-4

3. If WEP is enabled, the screen in Figure 6-5 will appear. Enter the WEP key of your wireless network in the Network key field, and re-enter it in the Confirm network key field. Then click the Connect button, and go to step 4.







Note: Windows XP Wireless Zero Configuration does not support the use of a passphrase. Enter the exact WEP key used by your access point.

4. The screen in Figure 6-6 will appear if your connection is active.



For more information about wireless networking on a Windows XP computer, click Start and then Help and Support. Enter the keyword wireless in the field provided, and press the Enter key.

Congratulations! The installation of the Wireless-B USB Network Adapter is complete.

Chapter 7: Using the WLAN Monitor for Windows 98SE, Me, and 2000

Overview

Use the WLAN Monitor to check the link information, search for available wireless networks, or create profiles that hold different configuration settings.



Important for Windows XP users: Windows XP has a built-in configuration tool. Use the Windows XP Wireless Zero Configuration (in the system tray at the bottom of your screen) to configure the Adapter. See "Chapter 6: Driver Installation and Configuration for Windows XP."

Accessing the WLAN Monitor

After installing the Adapter, the Wireless-B USB Network Adapter WLAN Monitor icon will appear in your system tray. Double-click the icon (see Figure 7-1).



The *Link Information* screen will appear. From this screen, you can find out how strong the current wireless signal is and how good the connection's quality is. You can also click the **More Information** button to view additional status information about the current wireless connection. To search for available wireless networks, click the **Site Survey** tab. To perform configuration

changes, click the **Profiles** tab.





Link Information

The *Link Information* screen displays network mode, signal strength, and link quality information about the current connection. It also provides a button to click for additional status information.



Figure 7-3

Ad-Hoc Mode or Infrastructure Mode - The screen indicates whether the Adapter is currently working in ad-hoc or infrastructure mode.

Signal Strength - The Signal Strength bar indicates signal strength, from 0 to 100%.

Link Quality - The Link Quality bar indicates the quality of the wireless network connection, from 0 to 100%.

Click the **More Information** button to view additional information about the wireless network connection.

Click the X (Close) button in the upper right corner to exit the WLAN Monitor.

A Division of Cisco	BYS [®] Systems, Inc.	Wireless-B USB N WLAN	etwork Adapter
Link Information Back	Site Survey	Profiles	0 4 ax
Wireless I Status SSID Network Mode Transfer Rate Channel WEP MAC	Intrastructure Infrastructure 11 Mbps 6 Disabled 00-02-DD-30-D2-A0	TCP/IP Setting IP Address 192.168.1.101 Subnet Mask 255.255.255.0 Default Gateway 192.168.1.1 DNS 192.168.0.1 DHCP Enabled Save to Profile	2,4GHz
Signal Strength Copyright © 2003 Cit	co Systems, Inc. All rights	Link Quality	WUSB11 is Active

Figure 7-4

Wireless Network Status

Status - The status of the wireless network connection.
SSID - The SSID of the wireless network.
Network Mode - The wireless mode currently in use.
Transfer Rate - The data transfer rate of the current connection.
Channel - The channel to which the wireless network devices are set.
WEP - The status of the WEP encryption security feature.
MAC - The MAC address of the wireless network's access point.

TCP/IP Setting

IP Address - The IP Address of the Adapter.
Subnet Mask - The Subnet Mask of the Adapter.
Default Gateway - The Default Gateway address of the Adapter.
DNS - The DNS address of the Adapter.
DHCP - The status of the DHCP client.
Save to Profile - Click the Save to Profile button to save the current settings in a configuration profile. Then the *Create connection profile* screen will appear. Enter a name for the new profile, and click the OK button.

Click the Back button to return to the initial Link Information screen.

Click the X (Close) button in the upper right corner to exit the WLAN Monitor.

Site Survey

The *Site Survey* screen displays a list of infrastructure and ad-hoc networks available for connection.

Link A Division of Cisc	SYS [®] to Systems, Inc.	Wireless-B USB Network Adapter WLAN Monitor Version 2.0
Link Information	Site Surve	ey Profiles
Below is the list of Adapter. To refree on the list, select states of the list, select ssip	of last found wireless or sh the list, click the Ref the desired connection Signal	onnections available to your Wireless USB fresh button. To connect to one of the connection a then click Connect button to connect.
linksys	Excellent	Network Mode - Infrastructure Channel - 6 WEP - Disable MAC - 00-04-05-35-CE-61 Surveyed at - 01:40 PM
Refresh Copyright © 2003	Connect Cisco Systems, Inc. All righ	its reserved.

Figure 7-5

For all networks detected, the following are listed: **SSID** - The SSID, unique name, of the wireless network. **Signal** - The qualitative strength of the wireless signal.

Site Information

For each network selected, the following settings are listed:
Network Mode - The wireless mode currently in use.
Channel - The channel to which the wireless network devices are set.
WEP - The status of the WEP encryption security feature.
MAC - The MAC address of the wireless network's access point.
Surveyed at - The time at which the wireless network was scanned.

Refresh - Click the **Refresh** button to perform a new search for wireless devices.

Connect - To connect to one of the networks on the list, select the wireless network, and click the **Connect** button. If the wireless network has WEP encryption enabled, you will see the screen shown in Figure 7-6.

WEP Key Needed for Connection						
This wireless network has WEP encryption enabled. To connect to this network, select the level of WEP encryption. Enter the required passphrase or WEP key in the appropriate field below. Then press the OK button.						
	WEP Level 64-bit / 10 hex. characters V					
The Passphrase	The Passphrase is case-sensitive, and should be 16 characters or fewer.					
	Passphrase					
You may manua Valid hexadecin	You may manually enter your WEP key in hexadecimal format below. Valid hexadecimal characters are "0" - "9" and "A" - "F".					
	Key 1					
	OK Cancel					

Figure 7-6

In the *WEP* drop-down box, select the type of WEP encryption used by the wireless network: **64-bit / 10 hex. characters** or **128-bit / 26 hex. characters**.

If the wireless network uses a passphrase, enter the passphrase in the *Passphrase* field. If the wireless network uses a WEP key, enter the WEP key in the *Key 1* field.

Click the **OK** button to complete the network connection and return to the *Site Survey* screen, or click the **Cancel** button to cancel the network connection and return to the *Site Survey* screen.

On the *Site Survey* screen, click the \mathbf{X} (Close) button in the upper right corner to exit the WLAN Monitor.

Profiles

The *Profiles* screen lets you save different configuration profiles for different network setups. You can also import or export profiles. The default profile holds the initial configuration saved when you ran the Setup Wizard.

		WLA	N Monitor version
nk Informatio	n Site Surv	vey Profiles	
Profiles and Ad	vanced settings.		2.4GH
Profiles and Ad Profile Default	ssip linksys	Profile Information	2.4 GH 802.1
Profiles and Ad Profile Default	vanced settings. SSID linksys	Profile Information Network Mode - Infrastructure Transfer Rate - Auto Channel - 6 WFP - Disable	2.4 GH
Profiles and Ad Profile Default	stings.	Profile Information Network Mode Infrastructure Transfer Rate - Auto Channel - 6 WEP - Disable	2,4 GH

Figure 7-7

For all profiles, the following are listed: **Profile** - Name of the connection profile. **SSID** - The wireless network's SSID, as set in the connection profile.

Profile Information

For each profile selected, the following are listed:

Network Mode - The mode of the wireless network currently in use. Transfer Rate - The Adapter is set to Auto mode, so it will dynamically shift to the fastest data transfer rate possible at any given time. Channel - The channel to which the wireless network devices are set. WEP - The status of the WEP encryption security feature.

Connect - To connect to a wireless network using a specific profile, select the profile, and click the **Connect** button.

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

New - Click the **New** button to create a new profile. See the next section, "Creating a New Profile," for detailed instructions.

Import - Click the **Import** button to import a profile that has been saved in another location. Select the appropriate file, and click the **Open** button.

Open						<u>?</u> ×
Look jn: 🖳	My Computer	-	(•	•	
31⁄2 Floppy Win2000 (Backup (D: Compact D	·(A:) C:)) isc (E:)					
File <u>n</u> ame:	<u> </u>				<u>O</u> per	1
Files of <u>type</u> :	Cfg file(*.cfg)		•		Canc	el //

Figure 7-8

Export - Select the profile you want to save in a different location, and click the **Export** button. Direct Windows to the appropriate folder, and click the **OK** button.

Save As
Save in: 🖳 My Computer 💽 🗢 💼 📰 🗸
3½ Floppy (A:)
Win2000 (C:) Backup (D:)
Scompact Disc (E:)
File name: Save
Save as tupe: Cfo file(* cfo)
Figure 7-9



Note: If you want to export more than one profile, you have to export them one at a time.

Delete - Click the Delete button to delete a profile.

Click the X (Close) button in the upper right corner to exit the WLAN Monitor.

Creating a New Profile

- 1. On the *Profiles* screen, click the New button to create a new profile.
- 2. Enter a name for the new profile, and click the **OK** button. Click the **Cancel** button to return to the *Profiles* screen.

A Division of Cis	(SYS [®] cco Systems, Inc.	Wireless-B USB Network Adapter WLAN Monitor Version 2.0
Link Informatio	n Site Surv	ey Profiles
Click the Profile wireless networ Profiles and Adv	name above and the C k settings. Use the men vanced settings.	onnect button below to use pre-configured u below to manage your wireless network's Profile Information
Default	linksys	Network Mode - Infrastructure Transfer Rate - Auto Channel - 6 WEP - Disable
Connect Copyright © 2003	Edit New 3 Cisco Systems, Inc. All rig	Import Export Delete

Figure 7-10

Create conn	ection profile	×	1
Enter a name	for the new prol	file.	
Office			
	OK	Cancel	

Figure 7-11

3. The *Network Setting* screen will appear next. If your network has a DHCP server, click the radio button next to *Obtain an IP address automatically (DHCP)*. Click the **Next** button to continue, or click the **Cancel** button to return to the *Profiles* screen.

If your network does not have a DHCP server, click the radio button next to *Specify the IP Address*. Enter an **IP Address**, **Subnet Mask**, **Default Gateway**, and **DNS** appropriate for your network. You must specify the IP Address and Subnet Mask on this screen. If you are unsure about the Default Gateway and DNS address, then leave these fields alone. Click the **Next** button to continue, or click the **Cancel** button to return to the *Profiles* screen.



Figure 7-12

IP Address - This IP Address must be unique to your network.

Subnet Mask - The Adapter's Subnet Mask must be the same as your wired network's Subnet Mask.

Default Gateway - Enter the IP address of your network's Gateway here.

DNS 1 and **DNS 2** - Enter the DNS address of your Ethernet (wired) network here.

4. The *Network Mode* screen shows a choice of two network modes. Click the **Infrastructure Mode** radio button if you want your wireless computers to communicate with computers on your wired network via a wireless access point. Click the **Ad-Hoc Mode** radio button if you want multiple wireless computers to communicate directly with each other.

Then complete the *SSID* field. Click the **Next** button to continue or the **Back** button to return to the previous screen.



Figure 7-13

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

Ad-Hoc Mode - This mode allows wireless-equipped computers to communicate directly with each other. No access point is used.

SSID - The SSID is the unique name shared by all devices in a wireless network. The SSID must be identical for all devices in the wireless network. It is case-sensitive and must not exceed 32 characters (use any of the characters on the keyboard). Make sure this setting is the same for all devices in your wireless network.

5. If you chose Infrastructure Mode, then proceed to step 6. If you chose Ad-Hoc Mode, then the *Wireless Channels* screen will now appear. Select the channel at which the network broadcasts its wireless signal. Then click the Next button to continue or the **Back** button to return to the previous screen.





Channel - From the drop-down box, select the appropriate channel that corresponds with your network settings. All devices in your wireless network must use the same channel in order to communicate.

6. The Security Settings screen will appear (see Figure 7-15). Choose the Wired Equivalent Privacy (WEP) encryption settings for your wireless network. If you enable WEP, enter a passphrase or WEP key. Then click the Next button to continue or the Back button to return to the previous screen.

WEP - If you do not want to use WEP encryption, keep the default setting, **Disable**. To use WEP encryption (recommended to increase wireless network security), select **64-bit / 10 hex. characters** or **128-bit / 26 hex. characters** from the drop-down menu, and enter a passphrase or WEP key.





Passphrase - Instead of manually entering a WEP key, you can enter a passphrase in the *Passphrase* field, so a WEP key is automatically generated. It is case-sensitive and should not be longer than 16 alphanumeric characters. This passphrase must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (If you have any non-Linksys wireless products, enter the WEP key manually on those products.)

WEP Key - The WEP key you enter must match the WEP key of your wireless network. If you are using 64-bit WEP encryption, then the key must consist of exactly 10 hexadecimal characters. If you are using 128-bit WEP encryption, then the key must consist of exactly 26 hexadecimal characters. Valid hexadecimal characters are "0" to "9" and "A" to "F".

Tx Key - The default transmit key number is **1**. If your network's access point or wireless router uses transmit key number 2, 3, or 4, then select the appropriate number in the Tx Key drop-down box.