4. The next screen to appear, shown in Figure 5-3, will display a list of access points on your network along with the status information for each access point. If this is the only access point on your network, it will be the only one displayed. If there are more than one displayed, select the Access Point by clicking on it and click the **Yes** button to continue or **No** to exit the Setup Wizard.

() Linksys	* Ins Wi	tant Wireless [®] Series reless-G Access Poin Setup	t Wizard ver. 1.05
One or More W Select the Wirelesse the left. Information r right. If you have more configured individually Selection	reless Access Poin Access Point you wish to garding that Wireless-G Jo than one Wireless-G Ac Status	nts Have Been Found! configure from the selection(s) on Access Point will be displayed to the cess Point, each will have to be	2,4 GHz Click Yes if you want to change any of
	Firmware Version IP Address MAC Address SSID Channel WEP (Security)	1.05 192.168.1.245 00-06-25-00-EA-01 LINKSYS 6 Disabled	these settings or No if you want to keep these settings. Yes No
Figure 5-3			

5. You will be asked to sign on to the Access Point you've selected, as shown in Figure 5-4. Enter the Password you've assigned. If none has been assigned, enter the default password: admin. Then, click the OK button. (This password can be changed from the Web-based Utility's Password tab.)

Linksys*	8
Security Log In	
Device: Linksys WAP54G	
IP Address: 192.168.1.245	-
Password:	
The default password is admin . You will use this password to access the Web-Based Utility. For enhanced security, change this password through the Web-based Utility's Password page.	
OK Cancel	
Copyright © 2002 L	inksys. All rights reserved.

Figure 5-4

6. As shown in Figure 5-5, the IP Settings screen will appear next. Enter an IP Address, Subnet Mask, and enter a unique access point name for the Access Point appropriate to your network. Then, click the **Next** button to continue or **Back** to return to the previous page.



- **IP** Address. This IP address must be unique to your network. (The default IP address is 192.168.1.245.)
- **Subnet Mask**. The Access Point's Subnet Mask must be the same as your Ethernet network.
- **AP Name.** Assign a name to the Access Point. Unique, memorable names are helpful, especially if you are employing multiple access points on the same network.

7. As shown in Figure 5-6, the Basic Settings screen will appear. Enter your wireless network's SSID and select the channel at which the network broadcasts its wireless signal. Then, click the **Next** button to continue or **Back** to return to the previous page.



Figure 5-6

- **SSID.** The SSID is the unique name shared among all points in a wireless network. The SSID must be identical for all points in the wireless network. It is case sensitive, must not exceed 32 characters, and may be any keyboard character. Make sure this setting is the same for all points in your wireless network.
- **Channel.** Select the appropriate channel from the list provided to correspond with your network settings, between 1 and 11 (in North America). All points in your wireless network must use the same channel in order to function correctly. All points in your wireless network must use the same channel in order to function correctly.

8. The *Security Settings* screen (Figure 5-7) will appear next. From this screen, you will set the Wired Equivalent Privacy (WEP) encryption for your wireless network. Select a WEP configuration method and a passphrase. Click the **Next** button to continue or **Back** to return to the previous page.



• WEP (Disable/64-bit (10 hex digits)/128-bit (26 hex digits)). In order to utilize WEP encryption, select the WEP setting from the pull-down menu, 64-bit (10 hex digits) or 128-bit (26 hex digits). If you do not wish to utilize WEP encryption, make sure Disabled is selected. The Access Point's WEP encryption is unique to Linksys and may conflict with other vendors' WEP encryption.



Note: WEP encryption should be used when communicating over a wireless network. Wireless transmissions are unprotected and WEP encryption helps to make your wireless network safer to use.

• **Passphrase.** Instead of manually entering WEP keys, you can enter a Passphrase. This Passphrase is used to generate one or more WEP keys. It is case-sensitive and should not be longer than 16 alphanumeric characters. (The Passphrase function is compatible with Linksys wireless products only. If you want to communicate with non-Linksys wireless products, you will need to enter your WEP keys manually on the non-Linksys wireless products.)



Note: The passphrase function doesn't work when mixing other manufacturers' products into your wireless network. Linksys products should always be used for optimum functionality. If using another company's wireless product, set the WEP key manually.

9. The second *Security Settings* screen, shown in Figure 5-8, shows the WEP key. If you entered a passphrase, then the *Key 1* field will display the automatically generated WEP key. If you did not enter a passphrase, then enter a WEP key in the *Key 1* field. Each point in your wireless network must use the same WEP key for the network to function properly. Click the **Next** button to continue or **Back** to return to the previous page.



• Key 1. WEP keys enable you to create an encryption scheme for wireless networks. If the WEP key hasn't been automatically generated, then manually enter a set of values. (Do not leave the field blank, and do not enter all zeroes. These are not valid key values.) If you are using 64-bit WEP encryption, then each key must consist of exactly 10 hexadecimal characters in length. If you are using 128-bit WEP encryption, then each key must consist of exactly 26 hexadecimal characters in length. Valid hexadecimal characters are "0"-"9" and "A"-"F".



Note: WEP encryption should be used whenever communicating over a wireless network. Wireless transmissions, by their very nature, are unprotected and WEP encryption helps to close this hole in security and make your wireless network safer to use.

10. The next screen (Figure 5-9) will allow you to review your settings. If these settings are correct, click the **Yes** button to save these settings. If there are any problems with the settings, click the **No** button to exit the Setup Wizard.



11. At this point, the configuration performed with the Setup Wizard is complete, as shown in Figure 5-10. To configure any other access points in your network, you can run this Setup Wizard again. Click the **Exit** button to exit the Setup Wizard.



Figure 5-10

Chapter 6: Configuring the Wireless-G Access Point



Note: The Access Point is designed to function properly after using the Setup Wizard. This chapter is provided solely for those who wish to perform more advanced configuration or monitoring.

The Access Point has been designed to be functional right out of the box, with the default settings in the Setup Wizard. However, if you'd like to change these settings, the Access Point can be configured through your web browser with the Web-Based Utility. This chapter explains how to configure the Access Point in this manner.



ter Netv	vork Passwo	rd	<u>? ×</u>
?>	Please type y	our user name and password.	
8	Site:	192.168.1.245	
	Realm	Linksys WAP54G	
	User Name	ļ	
	Password		_
	🗖 Save this	password in your password list	
		OK	Cancel
Figure 6-1			

The Setup Tab

The first screen that appears, shown in Figure 6-2, is the *Setup* tab. This allows you to change the Access Point's general settings. Change these settings as described here, and click the **Apply** button to apply your changes or **Cancel** to cancel your changes. If you require online help, click the **Help** button.

- **Firmware Version.** This displays the current version of the Access Point's firmware. Firmware should only be upgraded if you experience problems with the Access Point and can be upgraded from the *Help* tab.
- **AP Name.** You may assign any name to the Access Point. Unique, memorable names are helpful, especially if you are employing multiple access points on the same network. Verify this is the name you wish to use and click the **Apply** button to set it.

LAN

- MAC Address. The MAC Address of the LAN interface is displayed here.
- Configuration Type. Select Static IP Address if your ISP provided you with the IP Address, Subnet Mask, and default Gateway address or Select Automatic Configuration DHCP if your ISP assigns IP addresses via DHCP.
- **IP Address.** The IP address must be unique to your network. We suggest you use the default IP address of 192.168.1.245. This is a private IP address, so there is no need to purchase a separate IP address from your service provider. Verify the address and click the **Apply** button to save changes.
- Subnet Mask. The Access Point's Subnet Mask (or IP Mask) must be the same as your Ethernet network. Verify this is correct and click the Apply button to set it.
- **Gateway.** If you have assigned a static IP address to the Access Point, then enter the IP address of your network's Gateway, such as a router, in the *Gateway* field. If your network does not have a Gateway, then leave this field blank.

C) LINKSYS'	Setup Password AP Mode Status Log Help Advanced
Setup	This screen contains all of the Access Point's basic setup functions. Most users will be able to use the Access Point's default settings without making any changes. Click the Apply button at the bottom of the page to save your changes.
Firmware Version: AP Name:	v1.03, Oct 30 2002 Linksys WAP54G
LAN Configuration Type: IP Address: Subnet Mask: Gateway:	MAC Address: 00:90:4B:02:77:22 Static IP Address 192 . 168 . 1 . 245 This is the IP address, Subnet Mask and Default 255 . 255 . 255 . 0 Gateway of the Access Point as it is seen by 192 . 168 . 1 . 1 your local network.
Wireless 2.4 GHz Wireless-G	MAC Address: 00:06:25:0C:48:AA Mode: Mixed SSID: [inksys SSID Broadcast: Enable Channel: 6 (Regulatory Domain: US) WEP: C Enable C Disable Edit WEP Settings Apply Cancel Help

Figure 6-2

Wireless

- MAC Address. The MAC Address of the 2.4 GHz, Draft 802.11g interface is displayed here.
- **Mode.** Select **Mixed** and both Wireless-G and Wireless-B computers will be allowed on the network, but the speed will be reduced. Select **G-Only** for maximum speed, but no Wireless-B users will be allowed on the network. If you want to disable wireless networking, select **Disable**.
- **SSID.** The SSID is the unique name shared among all points in a wireless network. The SSID must be identical for all points in the wireless network. It is case-sensitive and must not exceed 32 alphanumeric characters, which may be any keyboard character. Make sure this setting is the same for all points in your wireless network. For added security, Linksys recommends that you change the SSID from the default *linksys* to a unique name.
- SSID Broadcast. Allows the SSID to be broadcast on your network. You may want to enable this function while configuring your network, but make sure that you disable it when you are finished. With this enabled, someone could easily obtain the SSID information with site survey software and gain unauthorized access to your network. Click **Enable** to broadcast. Click **Disable** to increase network security and prevent the SSID from being seen on networked PCs.
- **Channel.** Select the appropriate channel from the list provided to correspond with your network settings, between 1 and 11 (in North America). All points in your wireless network must use the same channel in order to function correctly.
- WEP. The WEP (Wired Equivalent Privacy) Encryption method is set to **Disable** by default. To enable WEP, click the **Enable** radio button, and then click the **Edit WEP Settings** button to configure the WEP settings.

SETTING WEP ENCRYPTION:

If the *Disable* radio button is selected and you click the Edit *WEP Settings* button, then the screen shown in Figure 6-3 will appear. Click the **OK** button to enable WEP encryption or **Cancel** to return to the *Setup* screen.

Microsoft Internet Explorer 🛛 🔀		
?	Do you want change WEP status to Mandatory?	
	OK Cancel	
Figure 6-3		

Set WEP Encryption through the Web-based Utility by clicking the **Edit WEP Settings** button on the *Setup* screen as shown in Figure 6-2.

This will open the *WEP Keys* screen, Figure 6-4. From this screen, you can select the type of WEP encryption to use and set the Passphrase for that encryption.

WEP Keys - Microsoft Internet	Explorer provided by Linksys Group
Default Transmit Key: WEP Encryption: Passphrase: Key 1: Key 2: Key 3: Key 4:	Generate

Figure 6-4



Important: Always remember that each point in your wireless network MUST use the same WEP encryption method and encryption key, or else your wireless network will not function properly.

- **Default Transmit Key**. Select the number of the key you want to use for the Access Point to send data. Use the same key for the receiver of data.
- WEP encryption. From the pull-down menu, select **64-bit 10 hex digits** or **128-bit 26 hex digits** for WEP encryption. Higher encryption levels offer higher levels of security, but may decrease the network speed.
- **Passphrase.** This will allow you to set a passphrase used to generate a WEP key. The passphrase is case sensitive and must be 16 or less alphanumeric characters. Click the **Generate** button to create the WEP key(s).
- **Keys 1-4.** WEP key fields allow you to manually enter the WEP encryption keys. Use hexadecimal characters, which are the letters "A" through "F" and the numbers "0" through "9". Do not leave a key field blank and do not enter all zeroes. For 64-bit WEP encryption, each key must consist of exactly 10 hexadeciamal characters. For 128-bit WEP encryption, each key must consist of exactly 26 hexadecimal characters.

Click the **Apply** button to apply your changes, or click **Cancel** to cancel your most recent change.

The Password Tab

The *Password* tab, shown in Figure 6-5, allows you to change the Access Point's password and restore factory defaults.

C) LINKSYS*	Setup Password AP Mode Status Log Help Advanced	
Password	For security reasons, you should change the password on the Access Point. Your password must be fewer than 32 characters long, and it cannot contain any spaces.	
AP Password:	(Enter New Password)	
Restore Factory Defaults:	CYes © No	
Backup/Restore Setting:	CAUTION: Any settings you have saved will be lost when the default settings are restored. Backup Restore Note: Click "Backup" to store Access Point configuration on your local PC. Click "Restore" to restore Access Point configuration from your local PC.	
	Apply Cancel Help	



- **AP Password.** Changing the password for the Access Point is as easy as typing the password into the *AP Password* field. Then, type it again into the second field to confirm.
- **Restore Factory Defaults.** To restore the Access Point's factory default settings, click the **Yes** button beside *Restore Factory Defaults*. You will lose any settings you have saved.



Important: Restoring the Access Point's factory defaults will erase all of your settings (WEP Encryption, Wireless and LAN settings, etc.), replacing them with the factory defaults. Do not reset the Access Point if you want to retain these settings

• **Backup/Restore Setting.** To back up your Access Point configuration, click the Backup button. To restore your Access Point configuration, click the Restore button.

Click the **Apply** button to apply your changes or **Cancel** to cancel your changes. If you require online help, click the **Help** button.

The AP Mode Tab

The Access Point offers two modes of operation for the 2.4 GHz, draft 802.11g: Access Point and Wireless Bridge. For all bridging modes, make sure the channel, SSID, and WEP key settings are the same.

LINKSYS*	Setup Password AP Mode Status Log Help Advanced
AP Mode	This page enables you to select the operating mode for this device. For "Wireless Bridge" mode, enter the MAC Addresses in this format: xxxxxxxxxxxx.
LAN MAC Address:	00:90:4B:02:77:22
2.4 GHz Wireless-G	Access Point Wireless Bridge Remote Wireless Bridge's LAN MAC Addresses: Note: When set to "Wireless Bridge" mode, this device will only communicate with another Linksys Access Point (WAP54G, WAP51AB, WAP11). Apply Cancel Help



- Access Point The operational mode is set to Access Point by default. This connects your wireless PCs to a wired network. In most cases, no change is necessary.
- Wireless Bridge If you are trying to make a wireless connection between two or more wired networks, as shown in Figure 6-7, select Wireless Bridge. This mode connects two physically separated wired networks with two access points.

To configure a Wireless Bridge environment, click **Wireless Bridge** and enter the LAN MAC address of the remote access point in the *Remote Wireless Bridge's LAN MAC Addresses* field. The remote access point also needs to be set up as a Wireless Bridge.

Note: All devices on each wired network must be connected through a hub or switch.

Click the **Apply** button to apply your changes or **Cancel** to cancel your changes. If you require online help, click the **Help** button.