

**LINKSYS**<sup>®</sup>  
A Division of Cisco Systems, Inc.



**Package Contents**

- Wireless-G PrintServer for USB 2.0
- Setup Wizard CD-ROM
- User Guide on CD-ROM
- USB 2.0 Cable
- Network Cable
- Power Supply
- Quick Installation

**2.4GHz**  
802.11g

**Wireless-G**

**PrintServer for USB 2.0**  
Quick Installation Guide



Wireless

Model No.

**WPS54GU2-UK**



# 1

## Connect the PrintServer

Before starting the physical installation, note the PrintServer's Default Name, which is located on the bottom of the PrintServer.

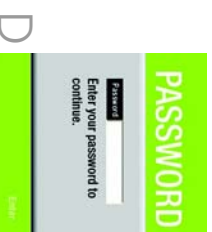
- A** Plug one end of the Ethernet network cable into the PrintServer's LAN port.
- B** Connect the other end to your networked hub, switch, or router.
- C** Use the USB cable to connect your USB printer to the PrintServer's USB port.
- D** Use the parallel printer cable (not included) to connect your parallel printer to the PrintServer's parallel port.
- E** Power on your printer.
- F** Plug the power adapter's cord into the PrintServer's Power port.
- G** Plug the power adapter into an electrical outlet.



# 2

## Configure the PrintServer

- A Insert the Setup CD-ROM into the computer's CD-ROM drive. The Setup Wizard should run automatically. If it does not, click **Start** and choose **Run**. In the box that appears, enter **D:\setupWizard.exe** (if "D" is the letter of your CD-ROM drive).
- B On the *Welcome* screen, click **Setup Wizard**.
- C The Setup Wizard will search for the PrintServer. After it has been found, the screen in Figure C will appear. If this is the first time you have run the Setup Wizard, make sure that **List only new (unconfigured) Print Servers** is selected and your PrintServer is listed by its default server name. If you have previously configured the PrintServer, select **List all compatible Print Servers**. Click **Next**.
- D On the *Password* screen, enter the default password, **admin**. Click **Enter**.
- E On the *Basic Settings* screen, you may change the Device Name and Domain Name settings if you want. Then click **Next**.
- F The *IP Settings* screen will appear. If your network uses a



router that automatically assigns IP addresses, select **Automatically obtain an IP address (DHCP)** and click **Next**. If you need to assign the PrintServer a static IP address, select **Set IP configuration manually**, and enter the IP Address, Subnet Mask, and Gateway in the fields provided. Then click **Next**.

**G** On the *Set PrintServer's Password* screen, enter the PrintServer's default password, **admin**, in the *Current Password* field. Enter a new password in the *New Password* field, and enter it again in the *Verify Password* field. Click **Next**.

**H** On the *Wireless Settings* screen, enter your wireless network's SSID or name. If your network is set to ad-hoc mode, select the channel at which the network broadcasts its wireless signal. For the Network Type setting, select **infrastructure** if the PrintServer will communicate using an access point or wireless router. Select **Ad-Hoc** if the PrintServer will communicate directly with wireless-equipped computers. Click **Next**.



On the *Wireless Security Settings* screen, select a level of WEP encryption, **64 Bit Keys** or **128 Bit Keys**. Then enter a Passphrase to automatically generate a WEP key.

If you would like to enter your WEP key manually, leave the *Passphrase* field blank and enter the WEP key on the next screen.

Click **Next**.

If you used a Passphrase, then a WEP key will appear on the following screen. Otherwise, enter your WEP key in the *Key 1* field. Click **Next**.

On the *Confirmation* screen, make sure your settings are correct. Click **Yes** to save your new settings.

On the *Congratulations* screen, click **User Install** to install the PrintServer's driver.



# 3

## Install and Configure the PrintServer's Driver

Linksys recommends that you set up your printer and install your printer's driver before you install the PrintServer's driver.

**A** On the *Print Server Driver Setup Welcome* screen, click **Next**.

**B** On the *Choose Destination Location* screen, select the location where the driver's folder will be installed. If you want the folder to be installed in a different location, click **Browse** and select the location. Click **Next**.

**C** The *Select Program Folder* screen will appear. An icon will be added to the program folder listed. If you want, you may change the name of the program folder. Click **Next**.

**D** After the driver is installed, the *Setup Complete* screen will appear. Make sure **Configure Print Driver now** is selected. Click **Finish** to end the driver installation and begin the driver configuration.



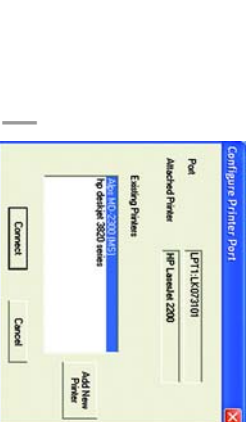
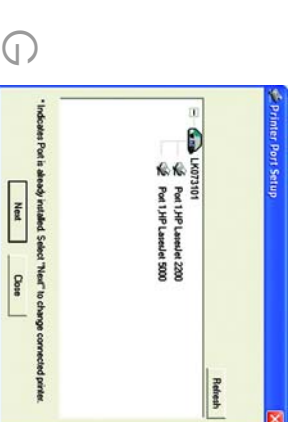
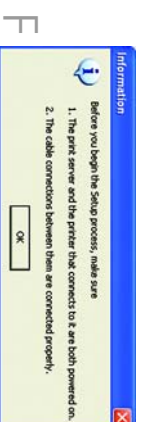
**E** Double-click the **Print Driver Setup** icon on your desktop. If you do not see the icon, click **Start, Programs, Print Server Utility**, and **Print Driver Setup**.

**F** Read the *Information* screen, and click **OK**.

**G** On the *Printer Port Setup* screen, select a printer port to add, and click **Next**.

**H** You will be informed that the PrintServer Port has been added successfully. Click **OK**.

**I** The *Configure Printer Port* screen will appear. Your installed printer(s) will appear in the *Existing Printers* field. Select the printer you want, and click the **Connect** button to associate the printer with your selected printer port. To add another printer, click **Add New Printer** and follow the on-screen instructions.





When you have finished configuring the PrintServer's driver, click **Close** on the *Printer Port Setup* screen.

**Congratulations! The installation of the PrintServer is complete.**



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For additional information or troubleshooting help, refer to the User Guide on the Setup CD-ROM. You can also call or e-mail for further support.

#### E-mail Support

United Kingdom and Ireland

[support.uk@linksys.com](mailto:support.uk@linksys.com)

Latin America

[support.la@linksys.com](mailto:support.la@linksys.com)

Website

<http://www.linksys.com/international> or

<http://www.linksys.com/uk>

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WPS54G12-UK-01G-31010NC J1



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#### Contenu de l'emballage

- Serveur d'impression sans fil G USB 2.0
- CD-ROM de l'Assistant de configuration
- Guide de l'utilisateur sur CD-ROM
- Cable USB 2.0
- Cable réseau
- Alimentation
- Guide d'installation rapide

**2,4GHz**  
802.11g

**Sans fil-G**



**Serveur d'impression  
USB 2.0**  
Guide d'installation rapide

Modèle

WPS54GU2-FR



# 1

## Connexion du serveur d'impression

Avant de commencer l'installation physique, notez le nom par défaut du serveur d'impression figurant en bas du serveur.

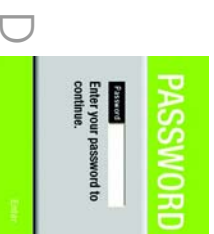
- A** Branchez l'une des extrémités du câble réseau Ethernet sur le port LAN du serveur d'impression
- B** Branchez l'autre extrémité du câble sur votre concentrateur, votre commutateur ou votre routeur en réseau.
- C** Reliez votre imprimante USB au port USB du serveur d'impression au moyen d'un câble USB.
- D** Utilisez le câble de l'imprimante parallèle (non fourni) pour brancher votre imprimante parallèle sur le port parallèle du serveur d'impression.
- E** Mettez votre imprimante sous tension.
- F** Branchez le cordon de l'adaptateur électrique sur le port d'alimentation du serveur d'impression.
- G** Branchez l'adaptateur électrique sur une prise secteur.



# 2

## Configuration du serveur d'impression

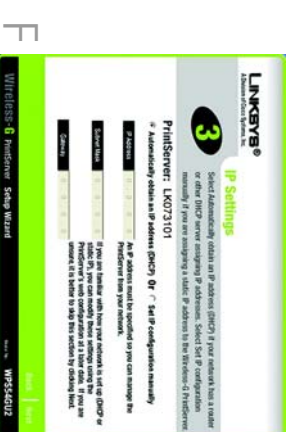
- A** Insérez le CD-ROM d'installation dans le lecteur de CD-ROM de votre ordinateur. L'Assistant de configuration doit s'exécuter automatiquement. Si ce n'est pas le cas, cliquez sur **Démarrer**, puis sur **Exécuter**. Dans le champ qui apparaît, entrez **D:\setupWizard.exe** (« D » représentant votre lecteur de CD-ROM).
- B** Dans l'écran *Welcome (Bienvenue)*, cliquez sur **Setup Wizard (Assistant de configuration)**.
- C** L'Assistant de configuration recherche le serveur d'impression. Une fois qu'il l'a détecté, l'écran de la figure C apparaît. Si c'est la première fois que vous exécutez l'Assistant de configuration, n'oubliez pas de sélectionner **List only new (unconfigured) Print Servers (Afficher uniquement la liste des nouveaux serveurs d'impression (non configurés))** et de vérifier que votre serveur d'impression est répertorié dans la liste sous son nom par défaut. Si vous avez déjà configuré le serveur d'impression, sélectionnez **List all compatible Print Servers (Afficher la liste de tous les serveurs compatibles)**. Cliquez sur **Next (Suivant)**.
- D** Dans l'écran *Password (Mot de passe)*, saisissez le mot de passe par défaut: **admin**. Cliquez sur **Enter (Entrée)**.
- E** Dans l'écran *Basic Settings (Paramètres de base)*, vous pouvez, si vous le souhaitez, modifier le Device Name (Nom du périphérique) et le Domain Name (Nom de domaine). Cliquez ensuite sur **Next (Suivant)**.



**F** L'écran *IP Settings (Paramètres IP)* apparaît. Si votre réseau utilise un routeur qui assigne automatiquement les adresses IP, sélectionnez **Automatically obtain an IP address (DHCP) (Obtenir une adresse IP automatiquement (DHCP))** et cliquez sur **Next (Suivant)**. Si vous devez assigner au serveur d'impression une adresse IP statique, sélectionnez **Set IP configuration manually (Définir la configuration IP manuellement)**, puis renseignez les champs IP Address (Adresse IP), Subnet Mask (Masque de sous-réseau) et Gateway (Passerelle). Cliquez ensuite sur **Next (Suivant)**.

**G** Dans l'écran *Set PrintServer's Password (Définir le mot de passe du serveur d'impression)*, saisissez le mot de passe par défaut du serveur d'impression, **admin**, dans le champ **Current Password (Mot de passe actuel)**. Entrez un nouveau mot de passe dans le champ **New Password (Nouveau mot de passe)**, et entrez-le de nouveau dans le champ **Verify Password (Vérifier le mot de passe)**. Cliquez sur **Next (Suivant)**.

**H** Dans l'écran *Wireless Settings (Paramètres sans fil)*, entrez votre nom ou votre nom SSID de réseau sans fil. Si votre réseau est configuré en mode Ad Hoc, sélectionnez le canal sur lequel le réseau diffuse son signal sans fil. Pour le paramètre **Network Type (Type de réseau)**, sélectionnez le mode **Infrastructure (Infrastructure)** si le serveur d'impression va communiquer au moyen d'un point d'accès ou d'un routeur sans fil. Sélectionnez le mode **Ad-Hoc (Ad-Hoc)** si le serveur d'impression va communiquer directement avec des ordinateurs sans fil. Cliquez sur **Next (Suivant)**.



Dans l'écran *Wireless Security Settings (Paramètres de sécurité sans fil)*, sélectionnez un niveau de cryptage WEP. **64 Bit Keys (Clés 64 bits)** ou **128 Bit Keys (Clés 128 bits)**. Entrez ensuite une phrase de mot de passe pour générer automatiquement une clé WEP.

Si vous souhaitez entrer votre clé WEP manuellement, ne remplissez pas le champ *Passphrase (Phrase de mot de passe)* et entrez la clé WEP à l'écran suivant.

Cliquez sur **Next (Suivant)**.

Si vous avez utilisé une phrase mot de passe, une clé WEP apparaîtra sur l'écran suivant. Sinon, entrez votre clé WEP dans le champ *Key 1 (Clé 1)*. Cliquez sur **Next (Suivant)**.

Dans l'écran *Confirmation (Confirmation)*, vérifiez que vos paramètres sont corrects. Cliquez sur **Yes (Oui)** pour enregistrer vos nouveaux paramètres.

Dans l'écran *Congratulations (Félicitations)*, cliquez sur **User Install (Installation par l'utilisateur)** pour installer le pilote du serveur d'impression.



# 3

## Installation et configuration du pilote du serveur d'impression

Linksys vous conseille de configurer votre imprimante et d'installer le pilote d'impression avant d'installer le pilote du serveur d'impression.

**A** Dans l'écran *Print Server Driver Setup Welcome (Bienvenue - Installation du pilote du serveur d'impression)*, cliquez sur **Next (Suivant)**.

**B** Dans l'écran *Choose Destination Location (Choisir un emplacement de destination)*, choisissez à quel emplacement vous souhaitez installer le dossier du pilote. Si vous souhaitez installer le dossier dans un autre emplacement, cliquez sur **Browse (Parcourir)**, puis sélectionnez l'emplacement qui vous convient. Cliquez sur **Next (Suivant)**.

**C** L'écran *Select Program Folder (Sélection du dossier du programme)* apparaît. Une icône est ajoutée pour le dossier du programme figurant dans la liste. Si vous le souhaitez, vous pouvez modifier le nom du dossier du programme. Cliquez sur **Next (Suivant)**.

**D** Une fois le pilote installé, l'écran *Setup Complete (Installation terminée)* apparaît. Vérifiez que l'option **Configure Print Driver now (Vérifier maintenant la configuration du pilote d'impression)** est sélectionnée. Cliquez sur **Finish (Terminer)** pour terminer l'installation du pilote et commencer la configuration du pilote.





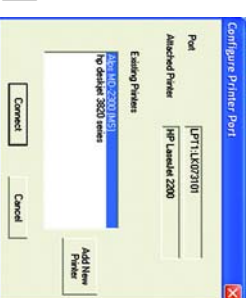
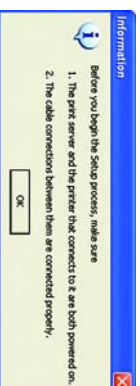
Double-cliquez sur l'icône **Print Driver Setup (Configuration du pilote d'impression)** sur votre bureau. Si l'icône n'apparaît pas, cliquez sur **Démarrer, Programmes, Print Server Utility (Utilitaire du serveur d'impression)** et **Print Driver Setup (Configuration du pilote d'impression)**.

Lisez l'écran *Information (Informations)* et cliquez sur **OK**.

Dans l'écran *Printer Port Setup (Configuration du port d'impression)*, sélectionnez un port d'impression à ajouter et cliquez sur **Next (Suivant)**.

Vous êtes averti que le port du serveur d'impression a été ajouté avec succès. Cliquez sur **OK**.

L'écran *Configure Printer Port (Configuration du port d'impression)* apparaît. Les imprimantes installées apparaissent dans le champ *Existing Printers (Imprimantes existantes)*. Sélectionnez l'imprimante qui vous intéresse et cliquez sur le bouton **Connect (Connexion)** pour associer l'imprimante au port d'impression sélectionné. Pour ajouter une autre imprimante, cliquez sur **Add New Printer (Ajout d'une nouvelle imprimante)** et suivez les instructions qui s'affichent.





Lorsque vous avez terminé la configuration du pilote du serveur d'impression, cliquez sur **Close (Fermer)** dans l'écran *Printer Port Setup* (Configuration du port d'impression).

**Félicitations ! L'installation du serveur d'impression est terminée.**



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Pour obtenir de plus amples informations ou une assistance technique, reportez-vous au Guide de l'utilisateur figurant sur le CD-ROM d'installation. Pour obtenir davantage d'aide, vous pouvez également envoyer un e-mail.

**E-mail du support technique**

support.fr@linksys.com

**Site Web**

<http://www.linksys.com/international> ou  
<http://www.linksys.com/fr>

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**Lieferumfang**

- Wireless-G-Druckserver für USB 2.0
- Setup-Assistenten-CD-ROM
- Benutzerhandbuch auf CD-ROM
- USB 2.0-Kabel
- Netzwerkkabel
- Stromversorgung
- Kurzanleitung

**2,4GHz**  
802.11g

**Wireless-G**

**Druckserver für USB 2.0**  
Kurzanleitung



Wireless

Modell

**WPS54GU2-DE**



# 1

## Anschließen des Druckerservers

Bevor Sie mit der physischen Installation beginnen, notieren Sie den Standardnamen des Druckerservers auf der Unterseite des Druckerservers.

- A** Schließen Sie ein Ende des Ethernet-Netzkabels an den LAN-Port des Druckerservers an.
- B** Schließen Sie das andere Ende an Ihren vernetzten Hub, Switch oder Router an.
- C** Schließen Sie Ihren USB-Drucker über das USB-Kabel an den USB-Port des Druckerservers an.
- D** Verwenden Sie das nicht im Lieferumfang enthaltene, parallele Druckerkabel, um Ihren Paralleldrucker an den Parallelport des Druckerservers anzuschließen.
- E** Schalten Sie den Drucker ein.
- F** Schließen Sie das Netzstromadapterkabel an den Stromanschluss des Druckerservers an.
- G** Stecken Sie den Netzstromadapter in eine Steckdose.



# 2

## Konfigurieren des Druckerservers

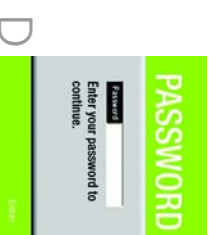
**A** Legen Sie die Installations-CD-ROM in das CD-ROM-Laufwerk des Computers ein. Der Setup-Assistent sollte automatisch ausgeführt werden. Wenn dies nicht der Fall ist, klicken Sie auf **Start** und wählen Sie **Ausführen** aus. Geben Sie im angezeigten Feld **D:\setupWizard.exe** ein (wobei „D“ für den Buchstaben Ihres CD-ROM-Laufwerks steht).

**B** Klicken Sie im *Willkommen*-fenster auf den **Setup Wizard (Setup-Assistenten)**.

**C** Der Setup-Assistent sucht nach dem Drucker. Wenn der Drucker gefunden wurde, wird das in Abbildung C dargestellte Fenster angezeigt. Wenn Sie den Setup-Assistenten das erste Mal ausführen, stellen Sie sicher, dass die Option **List only new (unconfigured) Print Servers** [Nur neue (unkonfigurierte) Drucker aufführen] ausgewählt und Ihr Drucker unter seinem Standard-Servicenamen aufgeführt ist. Wenn Sie den Drucker bereits zuvor konfiguriert haben, wählen Sie die Option **List all compatible Print Servers** (Alle kompatiblen Drucker aufführen) aus. Klicken Sie auf **Next** (Weiter).

**D** Geben Sie im Fenster *Password* (Kennwort) das Standard-Kennwort **admin** ein. Klicken Sie auf **Enter** (Eingabe).

**E** Im Fenster *Basic Settings* (Grundlegende Einstellungen) können Sie gegebenenfalls die Einstellungen für den Geräte- und den Domnamen ändern. Klicken Sie anschließend auf **Next** (Weiter).



Das Fenster *IP Settings* (IP-Einstellungen) wird angezeigt. Wenn Ihr Netzwerk einen Router verwendet, der automatisch IP-Adressen zuweist, wählen Sie die Option **Automatically obtain an IP address (DHCP)** (IP-Adresse (DHCP) automatisch beziehen) aus und klicken Sie auf **Next** (Weiter). Wenn Sie dem Drucker eine statische IP-Adresse zuweisen müssen, wählen Sie die Option **Set IP configuration manually** (IP-Konfiguration manuell einrichten) aus und geben Sie dann in die vorgesehenen Felder die IP-Adresse, die Subnetzmaske und das Gateway ein. Klicken Sie anschließend auf **Next** (Weiter).

Geben Sie im Fenster *Set PrinterServer's Password* (Druckserver-Kennwort festlegen) das standardmäßige Druckserver-Kennwort **admin** in das Feld *Current Password* (Aktuelles Kennwort) ein. Geben Sie ein neues Kennwort in das Feld *New Password* (Neues Kennwort) und nochmals in das Feld *Verify Password* (Kennwort bestätigen) ein. Klicken Sie auf **Next** (Weiter).

H Geben Sie im Fenster *Wireless Settings* (Wireless-Einstellungen) die SSID oder den Namen Ihres drahtlosen Netzwerks ein. Wenn der Ad-Hoc-Modus für Ihr Netzwerk eingestellt ist, wählen Sie den Kanal aus, über den das drahtlose Netzwerksignal gesendet wird. Wählen Sie als Netzwerk-typeninstellung **Infrastructure** (Infrastruktur) aus, wenn der Drucker über einen Zugriffspunkt oder drahtlosen Router kommunizieren soll. Wählen Sie **Ad-Hoc** (Ad-Hoc) aus, wenn der Drucker direkt mit drahtlosen Computern kommunizieren soll. Klicken Sie auf **Next** (Weiter).



Wählen Sie im Fenster *Wireless Security Settings* (Drahtlose Sicherheitseinstellungen) eine WEP-Verschlüsselungsebene aus, **64 Bit Keys** (64-Bit-Schlüssel) oder **128 Bit Keys** (128-Bit-Schlüssel). Geben Sie anschließend eine Passphrase ein, damit automatisch ein WEP-Schlüssel erstellt wird.

Wenn Sie den WEP-Schlüssel manuell eingeben möchten, lassen Sie das Feld *Passphrase* (Passphrase) leer und geben Sie den WEP-Schlüssel im nächsten Fenster ein.

Klicken Sie auf **Next** (Weiter).

Wenn Sie eine Passphrase verwendet haben, wird im folgenden Fenster ein WEP-Schlüssel angezeigt. Wenn dies nicht der Fall ist, geben Sie Ihren WEP-Schlüssel in das Feld *Key 1* (Schlüssel 1) ein. Klicken Sie auf **Next** (Weiter).

Stellen Sie sicher, dass Ihre Einstellungen im Fenster *Confirmation* (Bestätigung) korrekt sind. Klicken Sie auf **Yes** (Ja), um die neuen Einstellungen zu speichern.

Klicken Sie im Fenster *Congratulations* (Herzlichen Glückwunsch) auf **User Install** (Benutzerdefinierte Installation), um den Druckervertreiber zu installieren.



# 3

## Installieren und Konfigurieren des Druckservertreibers

Linksys empfiehlt, dass Sie vor der Installation des Druckserver-Treibers Ihren Drucker einrichten und den Druckertreiber installieren.

**A** Klicken Sie im *Willkommenfenster für die Installation des Druckservertreibers auf Next* (Weiter).

**B** Wählen Sie im Fenster *Choose Destination Location* (Zielspeicherort auswählen) den Speicherort, an dem der Ordner für den Treiber installiert werden soll. Wenn Sie den Ordner an einem anderen Speicherort installieren möchten, klicken Sie auf **Browse** (Durchsuchen) und wählen Sie den Speicherort aus. Klicken Sie auf **Next** (Weiter).

**C** Das Fenster *Select Program Folder* (Programmordner auswählen) wird angezeigt. Dem aufgeführten Programmordner wird ein Symbol hinzugefügt. Der Name des Programmordners kann, gegebenenfalls geändert werden. Klicken Sie auf **Next** (Weiter).

**D** Nach der Installation des Treibers wird das Fenster *Setup Complete* (Setup abgeschlossen) angezeigt. Vergewissern Sie sich, ob die Option **Configure Print Driver now** (Druckertreiber jetzt konfigurieren) ausgewählt ist. Klicken Sie auf **Finish** (Fertig stellen), um die Treiberinstallation abzuschließen und mit der Konfiguration des Treibers zu beginnen.





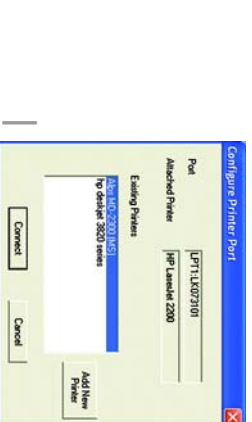
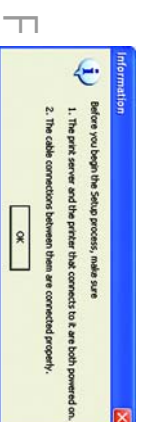
**E** Doppelklicken Sie auf das Symbol **Print Driver Setup** (Druckertreiber installieren) auf Ihrem Desktop. Wenn das Symbol nicht angezeigt wird, klicken Sie auf **Start - Programme - Print Server Utility** (Druckserver-Dienstprogramm) und **Print Driver Setup** (Druckserver installieren).

**F** Lesen Sie den Text im Fenster *Information* (Informationen), und klicken Sie auf **OK** (OK).

**G** Wählen Sie im Fenster *Printer Port Setup* (Drucker-Port installieren) den hinzuzufügenden Drucker-Port aus, und klicken Sie auf **Next** (Weiter).

**H** Sie erhalten die Meldung, dass der Druckserver-Port erfolgreich hinzugefügt wurde. Klicken Sie auf **OK** (OK).

**I** Das Fenster *Configure Printer Port* (Drucker-Port konfigurieren) wird angezeigt. Der bzw. die installierte(n) Drucker werden im Feld *Existing Printers* (Vorhandene Drucker) angezeigt. Wählen Sie den gewünschten Drucker aus, und klicken Sie auf die schaltfläche **Connect** (Verbinden), um den Drucker mit dem von Ihnen ausgewählten Drucker-Port zu verbinden. Klicken Sie auf **Add New Printer** (Neuen Drucker hinzufügen), um einen weiteren Drucker hinzuzufügen, und befolgen Sie die Anweisungen auf dem Bildschirm.



Wenn Sie die Konfiguration des Druckservertreibers abgeschlossen haben, klicken Sie im Fenster *Printer Port Setup* (Drucker-Port installieren) auf **Close** (Schließen).

**Herzlichen Glückwunsch! Die Installation des Druckservers ist abgeschlossen.**



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Weitere Informationen und Anleitungen zur Fehlerbehebung finden Sie im Benutzerhandbuch auf der Installations-CD-ROM. Sie können auch per Telefon oder E-Mail weitere Unterstützung anfordern.

**Unterstützung per E-Mail**

support.de@linksys.com

**Website**

<http://www.linksys.com/international> oder

<http://www.linksys.com/de>

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WPS54G12-DE-01G-31010NC J1

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**Contenuto della confezione**

- Wireless-G PrintServer per USB 2.0
- Setup Wizard CD-ROM (CD per l'installazione guidata)
- User Guide (Guida per l'utente) su CD-ROM
- Cavo USB 2.0
- Cavo di rete
- Alimentatore
- Guida di installazione rapida

**2,4 GHz**  
802.11g

**Wireless-G**

**PrintServer per USB 2.0**  
Guida di installazione rapida



Wireless

Modello

**WPS54GU2 (IT)**



# 1

## Collegamento di PrintServer

Prima di iniziare l'installazione fisica, prendere nota del nome predefinito di PrintServer riportato sulla parte inferiore dell'unità.

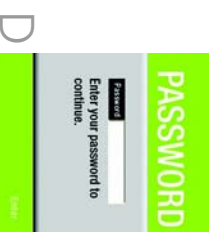
- A** Inserire un'estremità del cavo di rete Ethernet nella porta LAN di PrintServer.
- B** Connettere l'altra estremità all'hub, allo switch o al router collegato in rete.
- C** Collegare la stampante USB alla porta USB di PrintServer mediante il cavo USB.
- D** Collegare la stampante parallela alla porta parallela di PrintServer mediante il cavo per stampante parallela (non incluso).
- E** Accendere la stampante.
- F** Inserire il cavo dell'adattatore di corrente nella porta di alimentazione di PrintServer.
- G** Collegare l'adattatore di corrente a una presa elettrica.



# 2

## Configurazione di PrintServer

- A** Inserire il Setup CD-ROM (CD-ROM di installazione) nell'apposita unità del computer. L'installazione guidata dovrebbe avviarsi automaticamente. In caso contrario, fare clic sul pulsante **Start** e scegliere **Esegui**. Immettere **D:\setupWizard.exe** (dove "D" è la lettera dell'unità CD-ROM) nel campo visualizzato.
- B** Nella schermata *Welcome* (Benvenuti), fare clic su **Setup Wizard** (*Installazione guidata*).
- C** L'installazione guidata ricerca il PrintServer. Una volta trovato, viene visualizzata la schermata riportata nella figura C. Se è la prima volta che si esegue l'installazione guidata, accertarsi che l'opzione **List only new (unconfigured) Print Servers (Elenca solo nuovi server di stampa non configurati)** sia selezionata e che PrintServer sia riportato come server predefinito. Se si è configurato PrintServer in precedenza, selezionare l'opzione **List all compatible Print Servers (Elenca tutti i server di stampa compatibili)**. Fare clic su **Next** (*Avanti*).
- D** Nella schermata *Password*, immettere la password predefinita, **admin**. Fare clic su **Enter** (*Invia*).
- E** Nella schermata *Basic Settings* (Impostazioni di base), è possibile cambiare il nome del dispositivo e il nome del dominio. Quindi, fare clic su **Next** (*Avanti*).



Viene visualizzata la schermata **IP Settings** (Impostazioni IP). Se la rete utilizza un router che assegna automaticamente indirizzi IP, selezionare **Automatically obtain an IP address (DHCP)** (Ottieni automaticamente un indirizzo IP) e fare clic su **Next (Avanti)**. Se è necessario assegnare un indirizzo IP statico al PrintServer, selezionare **Set IP configuration manually** (Configura IP manualmente) e immettere l'indirizzo IP, la maschera di sottorete e il gateway negli appositi campi. Quindi, fare clic su **Next (Avanti)**.

Nella schermata **Set PrintServer's Password** (Imposta password PrintServer), immettere la password predefinita di PrintServer, **admin**, nel campo **Current Password** (Password corrente). Immettere la nuova password nel campo **New Password** (Nuova password) e nuovamente nel campo **Verify Password** (Conferma password). Fare clic su **Next (Avanti)**.

Nella schermata **Wireless Settings** (Impostazioni wireless), immettere il nome o l'indicativo SSID della rete wireless. Se la rete è impostata in modalità Ad hoc, selezionare il canale tramite il quale la rete trasmette il segnale wireless. Come impostazione di tipo di rete, selezionare **Infrastructure** (Infrastruttura) se il PrintServer comunica tramite un punto di accesso o un router wireless. Selezionare **Ad-Hoc** (Ad hoc) se il PrintServer comunica direttamente con PC wireless. Fare clic su **Next (Avanti)**.



Nella schermata *Wireless Security Settings* (Impostazioni protezione wireless), selezionare il livello di cifratura WEP, **64 Bit Keys (Chiavi a 64 bit)** o **128 Bit Keys (Chiavi a 128 bit)**. Immettere quindi una Passphrase per generare automaticamente una chiave WEP.

Se si desidera immettere la chiave WEP manualmente, lasciare il campo *Passphrase* vuoto e inserire la chiave WEP nella schermata successiva.

Fare clic su **Next (Avanti)**.

Se è stata utilizzata una passphrase, nella schermata successiva apparirà una chiave WEP. In caso contrario, immettere la chiave WEP nel campo *Key 1* (Chiave 1). Fare clic su **Next (Avanti)**.

Nella schermata *Confirmation* (Verifica), verificare che le impostazioni siano corrette. Fare clic su **Yes (Sì)** per salvare le nuove impostazioni.

Nella schermata *Congratulations* (Congratulazioni), fare clic su **User Install (Installazione utente)** per installare il driver di PrintServer.





# 3

## Installazione e configurazione del driver di PrintServer

Linksys raccomanda di installare lo stampante e il relativo driver prima di installare il driver di PrintServer.

- A** Nella schermata *Print Server Driver Setup Welcome* (Benvenuto nell'installazione del driver di PrintServer), fare clic su **Next (Avanti)**.
- B** Nella schermata *Choose Destination Location* (Scegli percorso di destinazione), selezionare la destinazione di installazione della cartella del driver. Per cambiare la destinazione, fare clic su **Browse (Sfoglia) e selezionare la destinazione desiderata. Fare clic su **Next (Avanti)**.**
- C** Viene visualizzata la schermata *Select Program Folder* (Seleziona cartella di programma). Un'icona viene aggiunta alla cartella di programma elencata. È possibile cambiare il nome della cartella di programma. Fare clic su **Next (Avanti)**.
- D** Al termine dell'installazione del driver, viene visualizzata la schermata *Setup Complete* (Installazione completata). Verificare che **Configure Print Driver now (Configura driver ora)** sia selezionato. Fare clic su **Finish (Fine)** per terminare l'installazione del driver e avviare la configurazione.



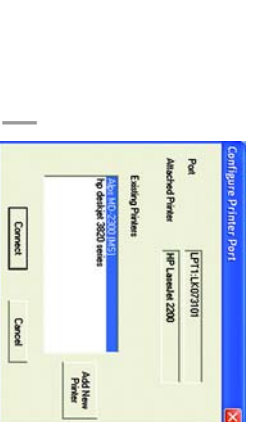
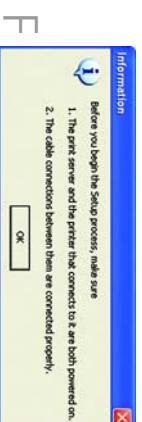
**E** Fare doppio clic sull'icona **Print Driver Setup (Installazione driver)** sul desktop. Se l'icona non è visualizzata, fare clic su **Start, Programmi, Print Server Utility (Utilità PrintServer) e Print Driver Setup (Installazione driver)**.

**F** Leggere la schermata **Information** (Informazioni) e fare clic su **OK**.

**G** Nella schermata **Printer Port Setup** (Installazione porta della stampante), selezionare la porta della stampante da aggiungere e fare clic su **Next (Avanti)**.

**H** Viene notificato che la porta di PrintServer è stata aggiunta. Fare clic su **OK**.

**I** Viene visualizzata la schermata **Configure Printer Port** (Configura porta della stampante). La stampante installata viene visualizzata nel campo **Existing Printers** (Stampanti esistenti). Selezionare la stampante desiderata e fare clic sul pulsante **Connect (Connetti)** per associare la stampante alla porta della stampante selezionata. Per aggiungere un'altra stampante, fare clic sul pulsante **Add New Printer (Aggiungi nuova stampante)** e seguire le istruzioni visualizzate sullo schermo.



Una volta terminata la configurazione del driver di PrintServer, fare clic su **Close** (**Chiudi**) nella schermata *Printer Port Setup* (installazione porta della stampante).

**Congratulazioni. La procedura di installazione di PrintServer è conclusa.**



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Per ulteriori informazioni o istruzioni relative alla risoluzione dei problemi, consultare la User Guide (Guida per l'utente) nel Setup CD-ROM (CD per l'installazione). Per richiedere assistenza, utilizzare uno dei seguenti contatti.

**Supporto e-mail**  
support.it@linksys.com  
**Sito Web**  
<http://www.linksys.com/international>

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WPS54G12-IT-01G-31010NC-JL

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**Conteúdo da embalagem**

- Servidor de Impressão sem fios G para USB 2.0
- CD-ROM do Setup Wizard (Assistente de configuração)
- Manual do Utilizador em CD-ROM
- Cabo USB 2.0
- Cabo de rede
- Fonte de alimentação
- Manual de Instalação Rápida

**2,4GHz**  
802.11g

**Sem fios-G**



Wireless

**Servidor de impressão  
para USB 2.0** Instalação rápida

Modelo **WPS54GU2 (P1)**



# 1

## Ligar o Servidor de impressão

Antes de iniciar a instalação física, tenha em atenção o nome predefinido do Servidor de impressão situado na parte inferior do Servidor de Impressão.

- A** Ligue uma extremidade do cabo de rede Ethernet à porta de rede local do Servidor de impressão.
- B** Ligue a outra extremidade do cabo ao concentrador, computador ou router de rede.
- C** Utilize o cabo USB para ligar a impressora USB à porta USB do Servidor de impressão.
- D** Utilize o cabo de impressora paralelo (não incluído) para ligar a impressora paralela à porta paralela do Servidor de impressão.
- E** Ligue a impressora.
- F** Ligue o cabo do transformador à porta de alimentação do Servidor de impressão.
- G** Ligue o transformador a uma tomada.



# 2

## Configurar o Servidor de impressão

- A** Coloque o CD-ROM de configuração na unidade de CD-ROM do computador. O Setup Wizard (Assistente de configuração) deverá ser executado automaticamente. Se tal não acontecer, clique em **Iniciar** e seleccione **Executar**. Na caixa apresentada, introduza **D:\setupWizard.exe** (se "D:" corresponder à letra da unidade de CD-ROM).
- B** No ecrã *Welcome* (Bem-vindo), clique em **Setup Wizard** (Assistente de configuração).
- C** O Setup Wizard (Assistente de configuração) procurará o Servidor de Impressão. Depois de ter sido encontrado, será apresentado o ecrã da Figura C. Se se tratar da primeira execução do Setup Wizard (Assistente de configuração), certifique-se de que a opção **List only new (unconfigured) Print Servers** (Listar apenas os servidores de impressão novos (não configurados)) está seleccionada e que o servidor de impressão é apresentado com o respectivo nome predefinido. Se tiver configurado anteriormente o Servidor de impressão, seleccione **List all compatible Print Servers** (Listar todos os servidores de impressão compatíveis). Clique em **Next** (Seguinte).
- D** No ecrã *Password* (Palavra-passe), introduza a palavra-passe predefinida, **admin**. Clique em **Enter**.
- E** No ecrã *Basic Settings* (Definições básicas), poderá alterar as definições do Device Name (Nome do dispositivo) e Domain Name (Nome de domínio) se pretender. Em seguida, clique em **Next** (Seguinte).



Seirá apresentado o ecrã **IP Settings** (Definições IP). Se a rede utilizar um router que atribua automaticamente endereços IP, selecione **Automatically obtain an IP address (DHCP)** (Obter automaticamente um endereço IP (DHCP)) e clique em **Next** (Seguinte). Se necessitar de atribuir um endereço IP estático ao Servidor de Impressão, selecione **Set IP configuration manually** (Definir manualmente a configuração IP) e introduza o IP Address (Endereço IP), a Subnet Mask (Máscara de sub-rede) e o Gateway nos campos fornecidos. Em seguida, clique em **Next** (Seguinte).

No ecrã **Set PrintServer's Password** (Definir palavra-passe do servidor de impressão), introduza a palavra-passe predefinida do Servidor de Impressão, **admin**, no campo **Current Password** (Palavra-passe actual). Introduza a nova palavra-passe no campo **New Password** (Nova palavra-passe) e introduza-a novamente no campo **Verify Password** (Verificar palavra-passe). Clique em **Next** (Seguinte).

No ecrã **Wireless Settings** (Definições da rede sem fios), introduza o SSID ou nome da rede sem fios. Se a rede estiver definida para o modo ad hoc, selecione o canal no qual será emitido o sinal da rede sem fios. Para a definição do Tipo de rede, selecione **Infrastructure** (Infra-estrutura) caso o Servidor de Impressão for comunicar utilizando um ponto de acesso ou router sem fios. Selecione **Ad-Hoc** caso o Servidor de Impressão for comunicar directamente com computadores equipados com uma rede sem fios. Clique em **Next** (Seguinte).





No ecrã *Wireless Security Settings* (Definições de segurança sem fios), seleccione um nível de encriptação WEP. **64 Bit Keys** (Chaves de 64 bits) ou **128 Bit Keys** (Chaves de 128 bits). Em seguida, introduza uma Frase-passe para gerar automaticamente uma chave WEP.

Se pretender introduzir a chave WEP manualmente, deixe o campo *Passphrase* (Frase-passe) em branco e introduza a chave WEP no ecrã seguinte.

Clique em **Next** (Seguinte).

Se utilizou uma Frase-passe, será apresentada uma chave WEP no ecrã seguinte. Caso contrário, introduza a chave WEP no campo *Key 1* (Chave 1). Clique em **Next** (Seguinte).

No ecrã *Confirmation* (Confirmação), certifique-se de que as definições estão correctas. Clique em **Yes** (Sim) para guardar as novas definições.

No ecrã *Congratulations* (Parabéns), clique em **User Install** (Instalação do utilizador) para instalar o controlador do Servidor de impressão.



# 3

## Instalar e configurar o Controlador do servidor de impressão

A Linksys recomenda que configure a impressora e que instale o respectivo controlador antes de instalar o controlador do Servidor de impressão.

**A** No ecrã *Print Server Driver Setup Welcome* (Bem-vindo ao controlador do servidor de impressão), clique em **Next** (Seguinte).

**B** No ecrã *Choose Destination Location* (Escolher localização de destino), seleccione a localização na qual será instalada a pasta do controlador. Se preferir que a pasta seja instalada numa localização diferente, clique no botão **Browse** (Procurar) e seleccione a localização. Clique em **Next** (Seguinte).

**C** Será apresentado o ecrã *Select Program Folder* (Seleccionar pasta do program). Será adicionado um ícone à pasta do programa apresentada. Se preferir, poderá alterar o nome da pasta do programa. Clique em **Next** (Seguinte).

**D** Depois de o controlador ser instalado, será apresentado o ecrã *Setup Complete* (Instalação concluída). Certifique-se de que a opção **Configure Print Driver now** (Configurar controlador de impressora agora) está seleccionada. Clique em **Finish** (Concluir) para terminar a instalação do controlador e iniciar a configuração.



**E** Faça duplo clique no ícone **Print Driver Setup**

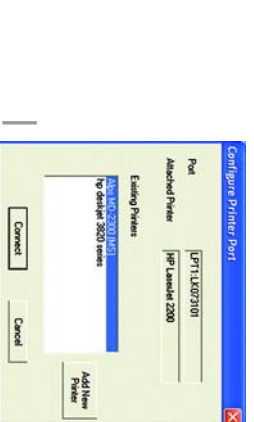
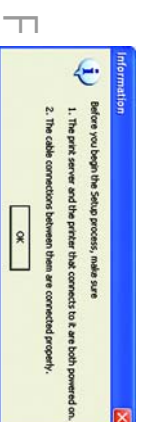
(Configuração do controlador de impressora) no ambiente de trabalho. Se o ícone não for apresentado, clique em **Start** (Iniciar), **Programs** (Programas), **Print Server Utility** (Utilitário do servidor de impressão) e **Print Driver Setup** (Configuração do controlador de impressora).

**F** Leia o ecrã **Information** (Informações) e clique em **OK**.

**G** No ecrã **Printer Port Setup** (Configuração da porta da impressora), seleccione uma porta de impressora para adicionar e clique em **Next** (Seguinte).

**H** Será fornecida a informação a indicar que a porta do Servidor de impressão foi adicionada com êxito. Clique em **OK**.

**I** Será apresentado o ecrã **Configure Printer Port** (Configurar porta da impressora). As impressoras instaladas serão apresentadas no campo **Existing Printers** (Impressoras existentes). Selecciona a impressora pretendida e clique no botão **Connect** (Ligar) para associar a impressora à porta seleccionada. Para adicionar outra impressora, clique em **Add New Printer** (Adicionar nova impressora) e siga as instruções apresentadas no ecrã.



Quando tiver terminado de configurar o controlador do Servidor de Impressão, clique em **Close** (Fechar) no ecrã *Printer Port Setup* (Configuração da porta da impressora).

Parabéns! A instalação do Servidor de impressão está concluída.



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Para obter informações adicionais ou ajuda para resolução de problemas, consulte o Manual do Utilizador no CD-ROM de configuração. Também poderá telefonar ou enviar uma mensagem de correio electrónico para obter suporte.

**Endereço de correio electrónico para suporte**

Brasil e Portugal

support.pt@linksys.com

América Latina

support.la@linksys.com

**Web site**

<http://www.linksys.com/international>

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**Contenido del paquete**

- Servidor de Impresión Wireless-G para USB 2.0
- Asistente de configuración en CD-ROM
- Guía del usuario en CD-ROM
- Cable USB 2.0
- Cable de red
- Fuente de alimentación
- Instalación rápida

**2,4GHz**  
802.11g

**Sem fios-G**

Wireless  
**Servidor de impresión  
para USB 2.0** Instalación rápida

Modelo

**WPS54GU2 (ES)**



# 1

## Conecte el servidor de impresión

Antes de iniciar la instalación física, anote el nombre predeterminado del servidor de impresión, que aparece en la parte inferior del servidor de impresión.

- A** Conecte un extremo del cable de red Ethernet al puerto LAN del servidor de impresión.
- B** Conecte el otro extremo al concentrador, conmutador o router de la red.
- C** Utilice el cable USB para conectar la impresora USB al puerto USB del servidor de impresión.
- D** Utilice el cable paralelo de la impresora (no incluido) para conectar la impresora paralela al puerto paralelo del servidor de impresión.
- E** Encienda la impresora.
- F** Enchufe el cable del adaptador de corriente al puerto de alimentación del servidor de impresión.
- G** Conecte el adaptador a la toma de corriente.



# 2

## Configure el servidor de impresión

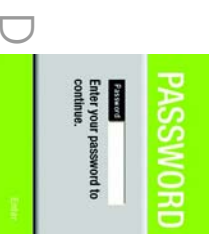
**A** Inserte el CD-ROM de configuración en la unidad de CD-ROM del ordenador. El asistente de configuración se ejecuta automáticamente. Si no es así, haga clic en el botón **Inicio** y seleccione **Ejecutar**. En el cuadro que aparece, escriba **D:\setup\Wizard.exe** (donde "D" es la letra de la unidad de CD-ROM).

**B** En la pantalla *Welcome* (pantalla de bienvenida), haga clic en **Setup Wizard (Asistente de configuración)**.

**C** El asistente de configuración busca el servidor de impresión. Una vez detectado, aparece la pantalla que se puede ver en la figura C. Si es la primera vez que ejecuta el asistente de configuración, debe seleccionar la opción **List only new (unconfigured) Print Servers (Sólo los servidores de impresión nuevos, sin configurar)** para que aparezca una lista de los servidores de impresión por el nombre predeterminado. Si ya ha configurado el servidor, seleccione **List all compatible Print Servers (Todos los servidores de impresión compatibles)**. Haga clic en **Next (Siguiente)**.

**D** En la pantalla *Password* (Contraseña), introduzca la contraseña predeterminada (**admin**). Haga clic en **Enter (Entrar)**.

**E** En la pantalla *Basic Settings* (Parámetros básicos), puede cambiar los parámetros **Device Name** (Nombre de dispositivo) y **Domain Name** (Nombre de dominio) si lo desea. Haga clic en **Next (Siguiente)**.





F

Aparece la pantalla *IP Settings* (Parámetros IP). Si la red utiliza un router que asigna direcciones IP de forma automática, seleccione **Automatically obtain an IP address (DHCP) (Obtener una dirección IP automáticamente, DHCP)** y haga clic en **Next (Siguiente)**. Si debe asignar una dirección IP estática al servidor de impresión, seleccione **Set IP configuration manually (Establecer la configuración IP manualmente)** y especifique la dirección IP (IP Address), la máscara de subred (Subnet Mask) y la puerta de enlace (Gateway) en los campos correspondientes. Haga clic en **siguiente**.

G

En la pantalla *Set Printer's Password* (Establecer la contraseña del servidor de impresión), introduzca la contraseña predeterminada del servidor de impresión (**admin**) en el campo *Current Password* (Contraseña actual). Escriba una contraseña nueva en el campo *New Password* (Nueva contraseña) y, a continuación, vuelva a escribirla en el campo *Verify Password* (Confirmar contraseña). Haga clic en **Next (Siguiente)**.

H

En la pantalla *Wireless Settings* (Configuración inalámbrica), introduzca el SSID o nombre de la red inalámbrica. Si la red se establece en modo ad-hoc, seleccione el canal en el que la red emite la señal inalámbrica. En el parámetro *Network Type* (Tipo de red), seleccione **Infrastructure (Infraestructura)** si el servidor de impresión va a establecer comunicación mediante un punto de acceso o router inalámbrico. Seleccione **Ad-Hoc** si va a establecer la comunicación directamente con ordenadores inalámbricos. Haga clic en **Next (Siguiente)**.

4

F



G



H



En la pantalla *Wireless Security Settings* (Parámetros de seguridad inalámbrica), seleccione un valor de encriptación WEP **64 Bit Keys** o **128 Bit Keys (Claves de 64 o 128 bits)**. A continuación, introduzca una frase de paso (Passphrase) para generar una clave WEP de forma automática.

Si desea introducir la clave WEP de forma manual, deje el campo *Passphrase* (Frase de paso) vacío e introduzca la clave WEP en la siguiente pantalla.

Haga clic en **Next (Siguiente)**.

Si ha utilizado una frase de paso, aparecerá una clave WEP en la siguiente pantalla. De lo contrario, introduzca la clave WEP en el campo *Key 1* (Clave 1). Haga clic en **Next (Siguiente)**.

En la pantalla *Confirmation* (Confirmación), asegúrese de que los parámetros son los correctos. Haga clic en **Yes (Sí)** para guardar los nuevos parámetros.

En la pantalla de enhorabuena (*Congratulations*), haga clic en **User Install (Instalación para usuario)** para instalar el controlador del servidor de impresión.



# 3

## Instale y configure el controlador del servidor de impresión

Linksys recomienda instalar la impresora y el controlador antes de instalar el controlador del servidor de impresión.

**A** En la pantalla *Print Server Driver Setup Welcome* (pantalla de bienvenida de instalación del servidor de impresión), haga clic en **Next (Siguiente)**.

**B** En la pantalla *Choose Destination Location* (Selecciónar ubicación de destino), seleccione la ubicación en la que se va a instalar la carpeta del controlador. Si desea instalarla en otro lugar, haga clic en **Browse (Examinar)** y seleccione otra ubicación. Haga clic en **Next (Siguiente)**.

**C** Aparece la pantalla *Select Program Folder* (Seleccionar carpeta de programas). Se agrega un icono a la carpeta de programas. Si lo desea, puede cambiar el nombre de la carpeta de programas. Haga clic en **Next (Siguiente)**.

**D** Una vez instalado el controlador, aparece la pantalla *Setup Complete* (Instalación finalizada). Asegúrese de seleccionar **Configure Print Driver now (Configurar controlador de impresión ahora)**. Haga clic en **Finish (Finalizar)** para finalizar la instalación del controlador e iniciar la configuración del mismo.



**E** Haga doble clic en el icono **Print Driver Setup (Configuración del controlador de impresión)** del escritorio. Si no ve el icono, haga clic en **Inicio, Programas, Print Server Utility (Utilidad del servidor de impresión)** y **Print Driver Setup (Configuración del controlador de impresión)**.

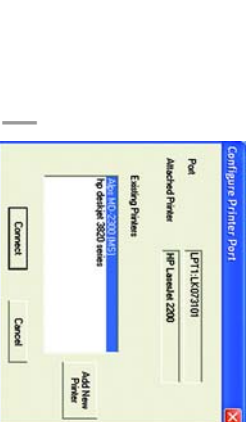
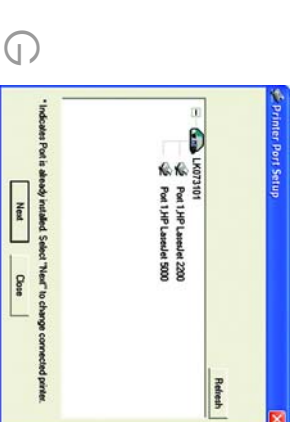
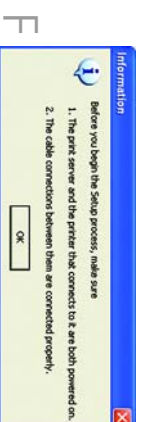
**F** Lea la pantalla *Information* (Información) y haga clic en **OK (Aceptar)**.

**G** En la pantalla *Printer Port Setup* (Configuración del puerto de impresora), seleccione el puerto de impresora que desea añadir y haga clic en **Next (Siguiente)**.

**H** Se le informará de que el puerto del servidor de impresión se ha agregado correctamente. Haga clic en **OK (Aceptar)**.

**I** Aparece la pantalla *Configure Printer Port* (Configurar puerto de la impresora). Las impresoras instaladas aparecen en el campo *Existing Printers* (Impresoras existentes).

Seleccione la impresora que desea y haga clic en el botón **Connect (Conectar)** para asociar la impresora al puerto seleccionado. Para añadir otra impresora, haga clic en **Add New Printer (Agregar nueva impresora)** y siga las instrucciones que aparecen en la pantalla.



Cuando termine de configurar el controlador del servidor de impresión, haga clic en **Cerrar** en la pantalla *Printer Port Setup* (Configuración del puerto de la impresora).

**Enhorabuena. La instalación del servidor de impresión ha finalizado.**



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Para obtener información adicional o ayuda para resolución de problemas, consulte la guía del usuario proporcionada en el CD-ROM. También puede solicitar más asistencia por teléfono o correo electrónico.

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WPS54GU2-ES-0IG-31010NC J1

# LINKSYS®

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## 2.4GHz 802.11g Wireless-G

### PrintServer for USB 2.0

### User Guide

WIRELESS

Model No. **WPS54GU2**

CISCO SYSTEMS



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## How to Use this User Guide

This User Guide has been designed to make understanding networking with the PrintServer easier than ever. Look for the following items when reading this User Guide:



This checkmark means there is a note of interest and is something you should pay special attention to while using the PrintServer.



This exclamation point means there is a caution or warning and is something that could damage your property or the PrintServer.



This question mark provides you with a reminder about something you might need to do while using the PrintServer.

In addition to these symbols, there are definitions for technical terms that are presented like this:

***word: definition.***

Also, each figure (diagram, screenshot, or other image) is provided with a figure number and description, like this:

### **Figure 0-1: Sample Figure Description**

Figure numbers and descriptions can also be found in the “List of Figures” section in the “Table of Contents”.



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# Chapter 1: Introduction

## Welcome

Thank you for choosing the Linksys Wireless-G PrintServer for USB 2.0. The Linksys Wireless-G PrintServer for USB 2.0 lets you connect a USB or parallel printer (or both) directly to your network, eliminating the need to dedicate a PC to print sharing chores. Using a PrintServer frees up your “print share PC” so you don’t have to leave it on all the time. It also removes the printing bottleneck, and sets your PC free to do more useful work.

Connect the PrintServer directly to your network by 10/100 Ethernet cable, or wireless over 54Mbps Wireless-G (802.11g). The wireless option lets you put your printers wherever you want to, without having to run cables. Whichever way the PrintServer is attached to your network, both your wireless and wired PCs will have access to it, and the printers it’s connected to. And if you don’t use wireless for general networking in your office, you can still use the Wireless-G connection in ad-hoc mode to print from visiting Wireless-G and Wireless-B PCs.

The USB port is compatible with USB 1.1 printers, as well as printers that support the new high-speed USB 2.0 specification for even faster throughput. There’s also a separate port for a standard parallel printer. For even more versatility, you can connect two printers, one to each port, and send your documents to whichever one is most appropriate for each print server.

A user-friendly Setup Wizard makes installation easy, the compact case fits anywhere, and the three megabyte print buffer size handles even large graphics-intensive print jobs. Let the Linksys Wireless-G PrintServer for USB 2.0 bring efficiency to your printing tasks.

## What’s in this Guide?

This user guide covers the steps for setting up and using the PrintServer.

- Chapter 1: Introduction  
This chapter describes the PrintServer’s applications and this User Guide.
- Chapter 2: Getting to Know the PrintServer  
This chapter describes the physical features of the PrintServer.
- Chapter 3: Connecting the PrintServer  
This chapter instructs you on how to connect the PrintServer to your network.
- Chapter 4: Configuring the PrintServer using the Setup Wizard  
This chapter instructs you on how to use the Setup Wizard to install your PrintServer.

*802.11g: an IEEE wireless networking standard that specifies a maximum data transfer rate of 54Mbps, an operating frequency of 2.4GHz, and backward compatibility with 802.11b devices.*

## Wireless-G PrintServer for USB 2.0

- **Chapter 5: Windows Driver Installation**  
This chapter explains how to install the Windows driver for the PrintServer.
- **Chapter 6: Configuring the PrintServer Using the Web-based Utility**  
This chapter explains how to configure the PrintServer using the web-based utility.
- **Chapter 7: Bi-Admin Management**  
This chapter explains how to configure the PrintServer using the Bi-Admin Management utility.
- **Chapter 8: Internet Printing Protocol (IPP)**  
This chapter instruct you on how to use the PrintServer as an IPP server so you can remotely print.
- **Appendix A: Troubleshooting**  
This appendix describes some potential problems and solutions regarding use of the PrintServer.
- **Appendix B: Wireless Security**  
This appendix explains the security risks in wireless networking and how you can help protect your network
- **Appendix C: About Bi-Directional Printing**  
This appendix describes bi-directional printing.
- **Appendix D: Upgrading Firmware**  
This appendix instructs you on how to upgrade the firmware on the PrintServer should you need to do so.
- **Appendix E: Windows Help**  
This appendix describes how you can use Windows Help for instructions about networking, such as installing the TCP/IP protocol.
- **Appendix F: Glossary**  
This appendix gives a brief glossary of terms frequently used in networking.
- **Appendix G: Specifications**  
This appendix provides the technical specifications for the PrintServer.
- **Appendix H: Warranty Information**  
This appendix supplies the warranty information for the PrintServer.
- **Appendix I: Regulatory Information**  
This appendix supplies the regulatory information regarding the PrintServer.
- **Appendix J: Contact Information**  
This appendix provides contact information for a variety of Linksys resources, including Technical Support.



# Chapter 2: Getting to Know the PrintServer

## The Back Panel

The PrintServer's ports are located on the back panel.



Figure 2-1: PrintServer's Back Panel

**Power** The **Power** port is where you will connect the power adapter.

**Parallel** The **Parallel** port is where you will connect the parallel printer to the PrintServer.

**USB** The **USB** port is where you will connect the USB printer to the PrintServer.

The USB icon (right) designates a USB port. The PrintServer comes with a USB cable. One end has a rectangular connector called Type A. The other end has a square connector called Type B. The USB cable's Type A end connects to the PrintServer, and the Type B end connects to the printer.



**USB Connector-Type A**



**USB Connector-Type B**

**LAN** The **LAN** port is where you will connect the PrintServer to your wired network.

**Reset Button** Use the **Reset Button** to reset the PrintServer to its factory defaults or print a test page. The instructions are provided on the right side of this page.



**Important:** Resetting the PrintServer will erase all of your settings and replace them with the factory defaults. Do not reset the PrintServer if you want to retain the settings.

### To reset the factory default settings

1. Unplug the PrintServer.
2. Press and hold the Reset button. While pressing the button, plug in the PrintServer.
3. If you continue pressing the button for 10 seconds, the PrintServer will be reset to factory defaults.

### To generate a diagnostic print-out

1. Ensure that both the PrintServer and the printer attached to the Printer port are ON.
2. Press the Reset button, and hold it in for 2 seconds.
3. The test page, which lists the current settings, will be printed.

PostScript printers are unable to print this page. If you have a PostScript printer on the Printer port, the test page will not be printed.

**LAN (Local Area Network):** the computers and networking products that make up the network in your home or office.

## The Front Panel

The PrintServer's LEDs are located on the front panel.



Figure 2-2: PrintServer's Front Panel

<b>Status</b>	Green/Orange. If the <b>Status</b> LED is continuously lit green, then the PrintServer is ready for use. The LED flashes green when the PrintServer is booting up, a system self-test is running, or the firmware is being upgraded. It lights up orange when there is an error.
<b>LAN</b>	Green/Orange. If the <b>LAN</b> LED is continuously lit green, the PrintServer is successfully connected to a device through the LAN port. The LED flashes green when the PrintServer is actively sending or receiving data from the wired network. It flashes orange when there are collisions detected on the LAN port.
<b>WLAN</b>	Green. The <b>WLAN</b> LED serves two purposes. If the LED is continuously lit, the PrintServer is successfully connected to the wireless network. If the LED is flashing, the PrintServer is actively sending or receiving data from the wireless network.
<b>Parallel</b>	Green/Orange. The <b>Parallel</b> LED lights up green when there is a printer connected to the parallel port. The LED flashes green when the PrintServer is sending data through the parallel port. It lights up orange when there is a problem with the parallel printer.
<b>USB</b>	Green/Orange. The <b>USB</b> LED lights up green when there is a printer connected to the USB port. The LED flashes green when the PrintServer is sending data through the USB port. It lights up orange when there is a problem with the USB printer.

# Chapter 3: Connecting the PrintServer

## Overview

Before starting the physical installation, make a note of the PrintServer's Default Name, which is located on the bottom of the PrintServer. There is a bar code sticker with an LK number printed on it (for example, LK71107). This number is used during the PrintServer driver installation.

## Connecting the PrintServer to Your Network

1. Plug one end of the Ethernet network cable into the PrintServer's LAN port. (See Figure 3-1.)
2. Connect the other end of the cable to your networked hub, switch, or router. The distance between the PrintServer and the other device should not exceed 328 feet (100 meters).
3. Use the USB cable to connect your USB printer to the PrintServer's USB port. Plug the Type A connector end into the PrintServer (Figure 3-2) and the Type B connector end into the printer.
4. Use the parallel printer cable to connect your parallel printer to the PrintServer's parallel port. Plug one end of the cable into the PrintServer (Figure 3-3) and the other end into the printer.
5. Power on your printer.
6. Plug the power adapter into the PrintServer's Power port. (See Figure 3-4.)
7. Plug the power adapter into an electrical outlet.



**IMPORTANT:** Make sure you use the power adapter supplied with the PrintServer. Use of a different power adapter could damage the PrintServer.



**NOTE:** The PrintServer does not have an on/off power switch. Whenever its power adapter is plugged into a power supply, the PrintServer is powered on. The PrintServer can be powered on before, during, or after your network is powered on.



Figure 3-1: Connecting to the LAN Port



Figure 3-2: Connecting to the USB Port



Figure 3-3: Connecting to the Parallel Port



Figure 3-4: Connecting to the Power Port

# Chapter 4: Configuring the PrintServer Using the Setup Wizard

## Installation

To install the PrintServer, you will use the Setup CD-ROM to run the Setup Wizard. It is highly recommended that you use a computer on the wired network to set up the PrintServer. However, if you only have a wireless network, then you can use a computer on the wireless network to set up the PrintServer.

1. Insert the Setup CD-ROM into the computer's CD-ROM drive. The Setup Wizard should run automatically. If it does not, click the **Start** button and choose **Run**. In the box that appears, enter `D:\setupWizard.exe` (if "D" is the letter of your CD-ROM drive).
2. When you see Figure 4-1, click **Setup Wizard** to continue. Click **Exit** to end the installation. Click **User Guide** button to view the User Guide.
3. After the Setup Wizard has found the PrintServer, the screen in Figure 4-2 will appear. If this is the first time you have run the Setup Wizard, make sure that **List only new (unconfigured) Print Servers** is selected and your PrintServer is listed by its default server name. Next to the PrintServer's Server Name is its IP Address. Note the IP Address so you can use it to access the PrintServer's web-based utility, as described in "Chapter 6: Configuring the PrintServer Using the Web-based Utility."

If you have previously configured the Print Server, select **List all compatible Print Servers**. Click **Next** to continue.

Click the **Refresh** button to refresh the screen. Click **Back** to return to the previous screen.



Figure 4-1: Welcome

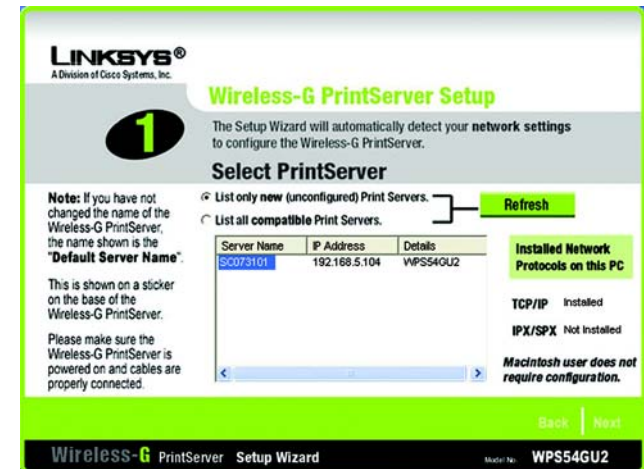


Figure 4-2: Wireless-G PrintServer Setup

*IP address: the address used to identify a computer or device on a network.*

4. The *Password* screen, Figure 4-3, will appear next. Enter the default password **admin** in the field provided. Click **Enter**.
5. The *Basic Settings* screen, shown in Figure 4-4, will appear. If you want to change the Device Name or Domain Name, enter the Device Name and Domain Name in the respective fields. Click **Next**.

Click **Back** to return to the previous screen.



Figure 4-3: Password



Figure 4-4: Basic Settings

- The *IP Settings* screen, Figure 4-5, will appear. If your network uses a router with a DHCP setting that automatically assigns IP addresses, select **Automatically obtain an IP address (DHCP)**. If your network uses a static IP address, select **Set IP configuration manually**, and enter the IP Address, Subnet Mask, and Gateway in the fields provided. Click **Next**.

Click **Back** to return to the previous screen.

- The *Set PrintServer's Password* screen, shown in Figure 4-6 will appear. If you want to change your password, enter your current password in the *Current Password* field. Enter the new password in the *New Password* field, then enter it again in the *Verify Password* field. Click **Next**.

Click **Back** to return to the previous screen.

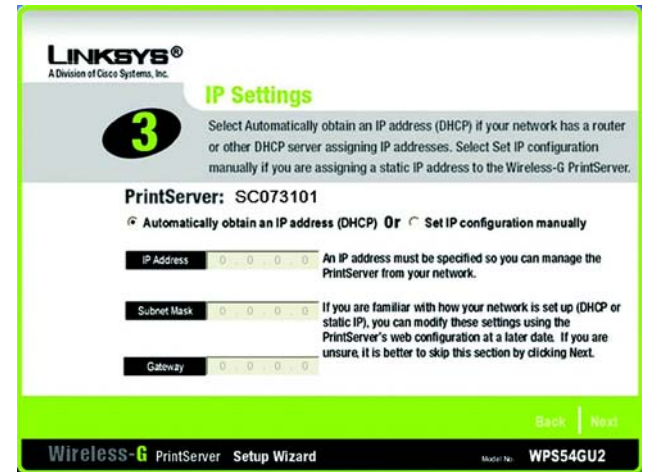


Figure 4-5: IP Settings

*Static IP address: a fixed address assigned to a computer or device connected to a network.*

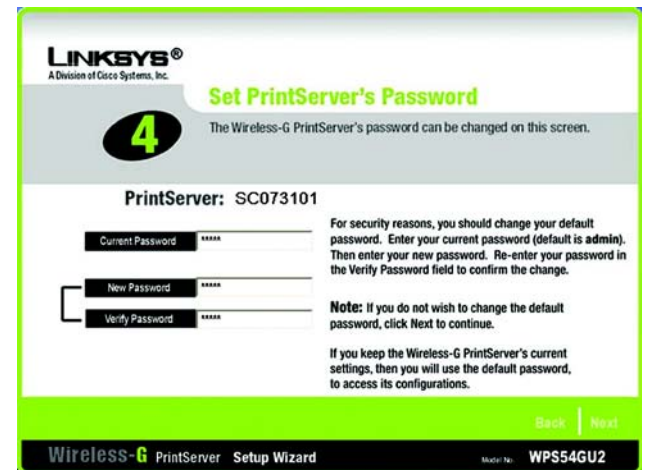


Figure 4-6: Set PrintServer's Password

8. The *Wireless Settings* screen will appear. In the *SSID* field, enter your wireless network's SSID or name. This is the unique name shared by all devices in a wireless network. The SSID is case-sensitive and should have 32 characters or fewer.

Select the channel at which the network broadcasts its wireless signal (available only if you selected Ad-Hoc for the Network Type setting).

The Network Type setting shows a choice of two wireless modes. Select **Infrastructure** if you want the PrintServer to communicate using an access point or wireless router. Select **Ad-Hoc** if you want the PrintServer to communicate without using an access point or wireless router.

Click the **Next** button to continue.

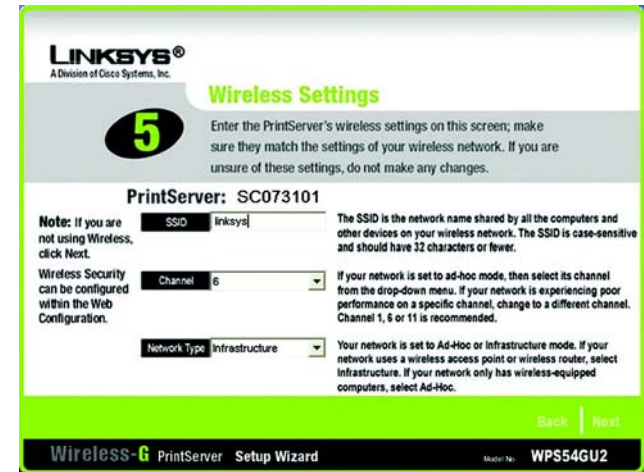


Figure 4-7: Wireless Settings

*SSID: your wireless network's name.*

*Infrastructure: configuration in which a wireless network is bridged to a wired network via an access point.*

*Ad-hoc: a group of wireless devices communicating directly to each other (peer-to-peer) without the use of an access point.*



- The *Wireless Security Settings* screen, shown in Figure 4-8, will appear. If you want to enable WEP encryption for greater wireless security, select the level of WEP encryption, **64 Bit Keys** or **128 Bit Keys**, and then enter a Passphrase. If you use a Passphrase, a WEP key will be automatically generated after you click the Next button. The Passphrase is case-sensitive and should have 16 alphanumeric characters or fewer. It must match the passphrase of your wireless network and is compatible with Linksys wireless products only. (You will have to enter the WEP key(s) manually on any non-Linksys wireless products.)

If you want to enter the WEP key manually, then leave the *Passphrase* field blank; you will be able to enter a WEP key on the following screen. If you want to disable WEP encryption, keep the default, **Disabled**.

Click the **Next** button to continue.

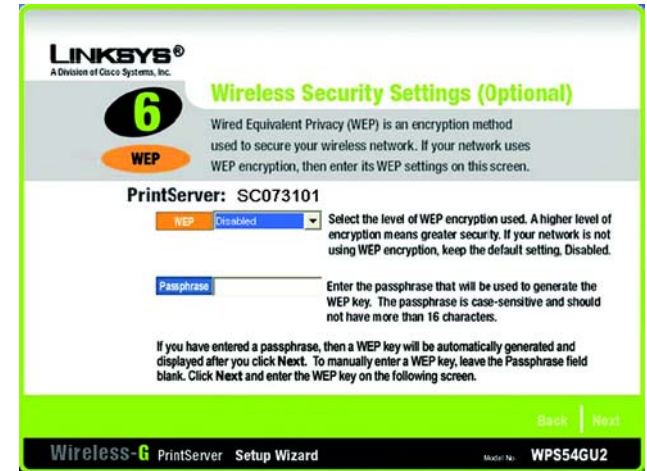


Figure 4-8: Wireless Security Settings

***WEP (Wired Equivalent Privacy):** a method of encrypting data transmitted on a wireless network for greater security.*

***Passphrase:** used much like a password, a passphrase simplifies the WEP encryption process by automatically generating the WEP encryption for Linksys products.*



10. If you entered a Passphrase, you will see the automatically generated WEP key on the following screen, as shown in Figure 4-9. Otherwise, enter the WEP key manually in the field provided. 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"-"9" and "A"-"F". Click **Next**.
11. The *Confirmation* screen will appear. See Figure 4-10. Your old and new settings will be displayed. If you want to make a change, click **No** and you will exit the Setup Wizard; you will have to start the Setup Wizard again. If the settings are correct and you want to save the changes, click **Yes**.

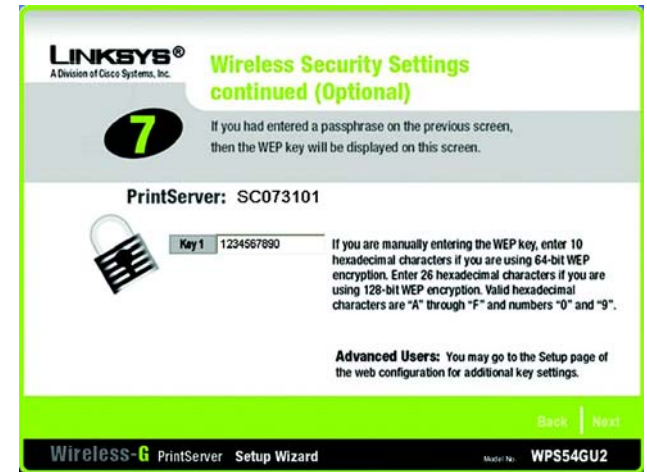


Figure 4-9: Wireless Security Settings - WEP Key



Figure 4-10: Confirmation

12. The *Congratulations* screen, shown in Figure 4-11, will appear. The setup is complete.

You will need to install the driver next. Click **User Install** at the bottom of the *Congratulations* screen, and go to “Chapter 5: Windows Driver Installation.”



Figure 4-11: Congratulations

# Chapter 5: Windows Driver Installation

## Overview

This section installs the PrintServer's software on your Windows 98, Me, 2000, or XP computers so they can use the PrintServer for print jobs. (The PrintServer is fully compatible with Windows 98, Me, 2000, and XP.)

At this point, you must have the following:

- the PrintServer hardware installed on your network. If not, see "Chapter 3: Connecting the PrintServer."
- TCP/IP installed on each of your computers.
- an IP address assigned to each of the computers on your network.
- an IP address assigned to the PrintServer by you or your network router. By default the PrintServer has DHCP enabled so the network router will automatically assign an IP address. If you need to manually assign an IP address, run the Setup Wizard on the Setup CD-ROM or go to "Chapter 7: Bi-Admin Management."

It is assumed that your CD-ROM drive's letter name is designated as "D". If your CD-ROM drive is named another letter, replace all instances of "D" with the appropriate letter.

If you need to install the PrintServer's driver on computers without a CD-ROM drive, you can create a setup disk by using a computer with a CD-ROM drive to copy the contents of D:\Driver\PTP onto a floppy disk.

## Installation

1. Make sure you have no programs or applications running on your computer.
2. If you haven't already done so, insert the Setup CD-ROM into the computer's CD-ROM drive. The Setup CD-ROM should run automatically. If it does not, click the **Start** button and choose **Run**. In the field that appears, enter **D:\setupWizard.exe** (if "D" is the letter of your CD-ROM drive).
3. When you see Figure 5-1, click **User Install** to continue. Click **Exit** to end the installation.



**HAVE YOU:** already set up your printer? Linksys recommends that you set up your printer and install your printer's driver before you install the PrintServer's driver.



Figure 5-1: Welcome

4. The *Welcome* screen of the driver installation program, Figure 5-2, will appear first. Click **Cancel** to quit the setup program and then close the open programs. Click **Next** to continue with the driver installation.
5. The *Choose Destination Location* screen, as shown in Figure 5-3, will appear. Choose the location where the driver's folder will be installed. To install the driver in the default location, click **Next**. If you want the folder to be installed in a different location, click the **Browse** button and select the location. Then click **Next**.

Click **Back** to return to the previous screen. Click **Cancel** to end the driver installation.

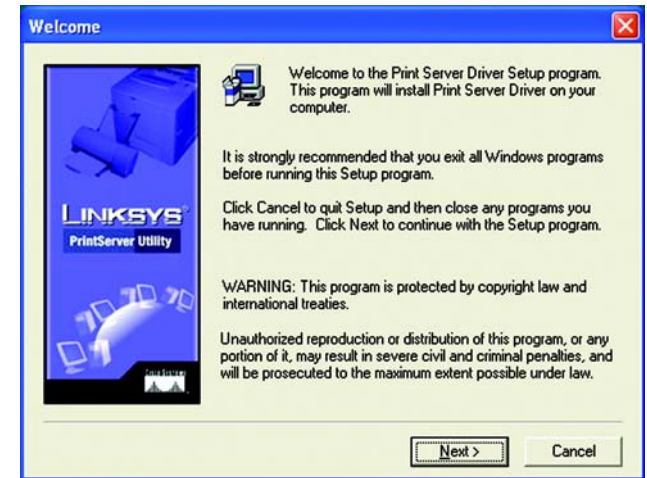


Figure 5-2: Driver Setup Welcome

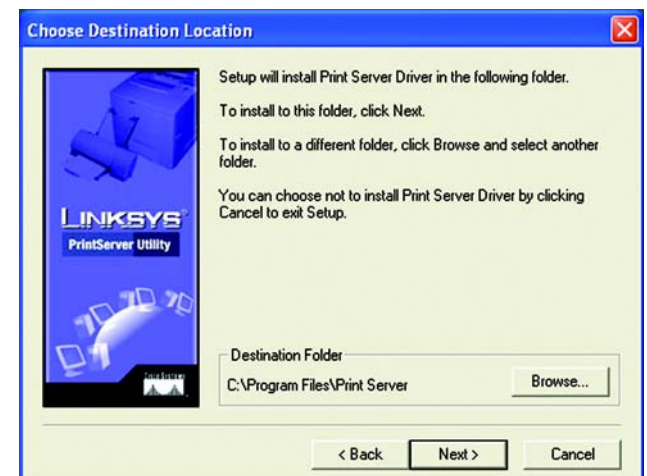


Figure 5-3: Choose Destination Location

6. The *Select Program Folder* screen will appear, as shown in Figure 5-4. An icon will be added to the program folder listed. You may change the name for the program folder, if you wish. Click **Next**.

Click **Back** to return to the previous screen. Click **Cancel** to end the driver installation.

7. When the driver is installed, the *Setup Complete* screen, Figure 5-5, will appear. The Print Driver must still be configured, so make sure that **Configure Print Driver now** is selected. Click **Finish** to end the driver installation and begin the driver configuration.



Figure 5-4: Select Program Folder

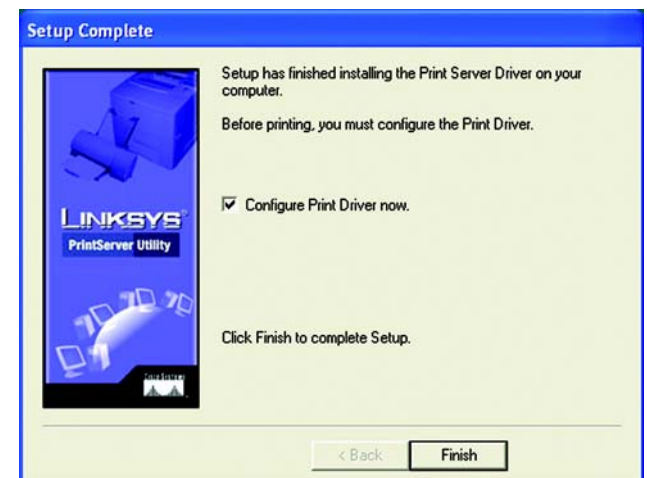


Figure 5-5: Setup Complete

## Starting the Print Driver Utility

1. Click **Start, Programs, Print Server Utility**, and then **Print Driver Setup**. If the Print Driver Setup icon has been created, you can double-click it instead.
2. The *Information* screen will appear; see Figure 5-6. Read the on-screen information, and then click **OK**.
3. The *Printer Port Setup* screen will appear, as shown in Figure 5-7, and list the PrintServer and its ports. Select a printer port to add, and then click **Next**.

If the PrintServer or printer isn't listed, make sure that the cable connections are good and the PrintServer and printer are powered on.

4. You will be informed that the PrintServer Port has been added successfully. Click **OK**.

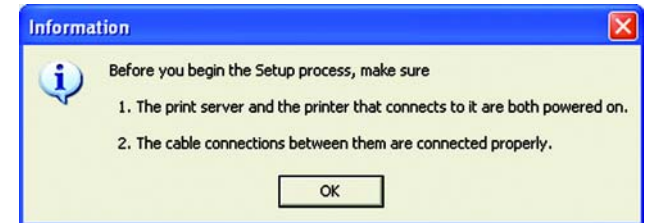


Figure 5-6: Information

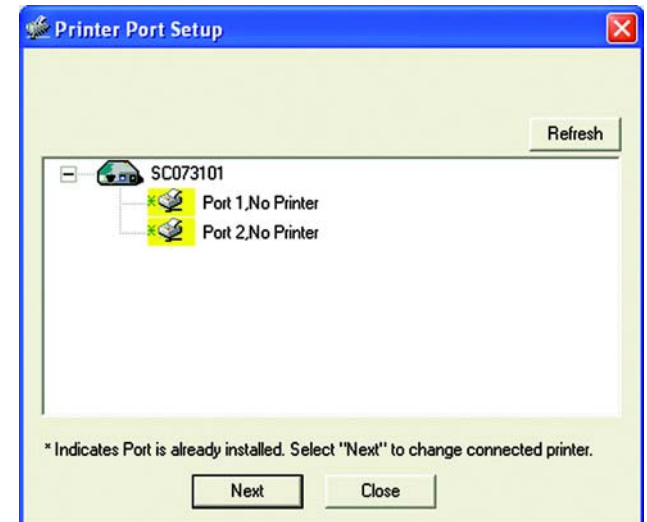


Figure 5-7: Printer Port Setup

5. The *Configure Printer Port* screen will appear, as shown in Figure 5-8. Your installed printer(s) will appear in the field. Select the printer you want, and click the **Connect** button to associate the printer with your selected printer port. To add another printer, click the **Add New Printer** button.

Click **Cancel** to cancel the setup.

6. Click **Close** to close the *Printer Port Setup* screen. Click **Refresh** to refresh the screen.
7. The driver installation and configuration is complete. You can now use the PrintServer.

If you would like to change the PrintServer's settings, use the PrintServer's web-based utility. For more information, refer to "Chapter 6: Configuring the PrintServer Using the Web-based Utility."

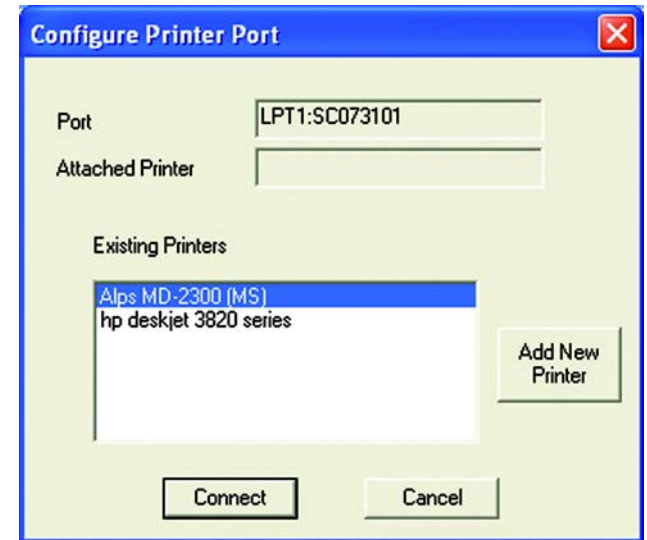


Figure 5-8: Configure Printer Port

# Chapter 6: Configuring the PrintServer Using the Web-based Utility

## Overview

After setting up the PrintServer with the Setup Wizard, the PrintServer will be ready for use. However, if you'd like to change its advanced settings, use the PrintServer's web-based utility. This chapter will describe each web page of the utility and each page's key functions. The utility can be accessed via your web browser through the use of a networked computer.

There are six main tabs: Setup, Protocol, Wireless, Printer, Status, and Exit. Additional tabs will be available after you click one of the main tabs.

To access the web-based utility, launch Internet Explorer or Netscape Navigator, and enter the PrintServer's IP address in the *Address* field. Then press **Enter**.



**NOTE:** Use the PrintServer's IP address that you noted when you ran the Setup Wizard. Otherwise, insert the Setup CD-ROM, and when the *Welcome* screen appears, click **Setup Wizard**. Follow the instructions until you reach the *Wireless-G PrintServer Setup* screen. Note the IP address, and then click **Back** until you reach the *Welcome* screen. Click **Exit**.

You will be asked to enter a User name and Password (see Figure 6-1). Leave the *User name* field blank, and enter **admin** in the *Password* field. Then click the **OK** button.



Figure 6-1: Password to Access Web-based Utility

## The Setup Tab

The first screen that appears is the Setup tab and allows you to change the PrintServer's general settings.

**Device Name.** Enter the PrintServer's name in the field provided. The name is located on a sticker on the bottom of the PrintServer.

**Password.** To change the PrintServer's password, enter the current password in the *Current Password* field. Enter the new password in the *New Password* field, and then enter the new password again in the *Verify Password* field.

**Protocols.** Check the box(es) for AppleTalk or NetBEUI, if they are used by your network.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.



Figure 6-2: Setup



## The Protocol Tab - TCP/IP

Click the TCP/IP tab to view or change the TCP/IP values of the PrintServer. (See Figure 6-3.)

**IP Address.** If your network router is using DHCP to assign IP addresses, select **Obtain an IP Address Automatically**. By default, **Obtain an IP Address Automatically** is enabled. If you need to assign the PrintServer a fixed IP address (also known as static IP address), select **Use the Following IP Address**, and enter the appropriate values under IP Address, Subnet Mask, and Gateway. Make sure the IP Address and Subnet Mask are appropriate for your network. If you change the PrintServer's IP address, make sure you that you reconnect to the PrintServer using that new IP address. Otherwise, you will not be communicating with the PrintServer. In most cases, the Gateway IP address is the IP address of your router, and you should complete the *Gateway* field if you will use the PrintServer for Internet printing. (To find out your router's IP address, consult your router's documentation.)

**Connection.** You can set how long you want the PrintServer to wait between connection attempts. You can also specify the number of times that the PrintServer will attempt to connect to the network. Enter your chosen values in the fields provided.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

## The Protocol Tab - AppleTalk

AppleTalk is a network communications protocol that allows computers to talk to each other using Ethernet. Typically only Macintoshes use AppleTalk, although other platforms can use it if they have the necessary, third-party software. (See Figure 6-4.)

**Communication.** Port 1 is the parallel port, while Port 2 is the USB port. The PrintServer's two ports have the same settings to configure for AppleTalk.

The Printer Object Type can be obtained from the manufacturer of the printer. Enter the type of printer in the field provided. For each printer connected to the PrintServer, you will choose the Communications Protocol that allows the devices on the network to communicate. Select the type of Communication Protocol you will use, **ASCII** or **Binary** for each printer, according to the recommendation of the printer's manufacturer. For more information, refer to the printer's documentation.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

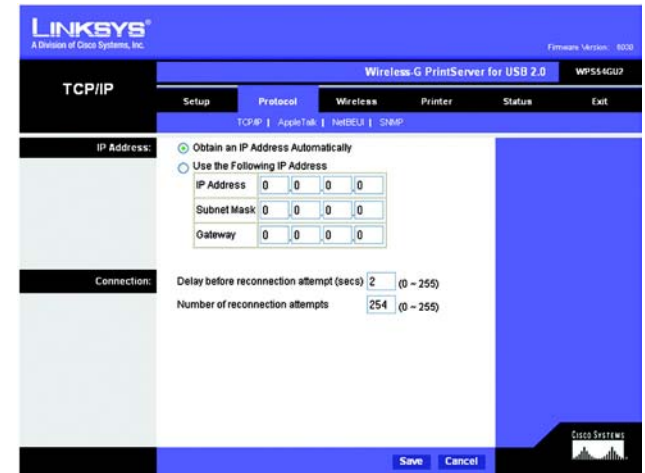


Figure 6-3: Protocol Tab - TCP/IP



Figure 6-4: Protocol Tab - AppleTalk

## The Protocol Tab - NetBEUI

NetBEUI connection settings of the PrintServer are available on this tab. (See Figure 6-5.)

**Domain Name.** Enter the name of the domain that you want the PrintServer associated with in the *Domain Name* field.

If you are unsure of the Domain Name, you can find it out by looking on any computer already on the network. In Windows 98, right-click **Network Neighborhood** and select **Properties**. Under the Identification tab, there will be listed that computer's name, and the Domain to which it is connected. For Windows Me, 2000, or XP, right-click **My Network Places**. In Windows Me, choose **Properties** from the menu that appears. In Windows 2000 or XP, choose **Properties** from the menu that appears. Then, right-click **Local Area Connection** and choose **Properties**. The Domain name will appear. If you want the PrintServer to be connected to that same Domain, enter that Domain name here. If no Domain name exists there, you will use the Workgroup name from that window.

**Options.** You can specify the Response Time that you prefer for the PrintServer. This is the amount of time (measured in seconds) that the PrintServer will wait for a response from the network before "timing out."

You also have the option to use this feature, Abort Print Job if Error. Selecting Yes here will terminate the printing if there is an error of any kind. If you select No, print jobs that have errors will be sent to the printer, but might not print properly.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.



Figure 6-5: Protocol Tab - NetBEUI

## The Protocol Tab - SNMP

Use the screen shown in Figure 6-6 to view or change the PrintServer's SNMP (Simple Network Management Protocol) settings.

The PrintServer supports SNMP, which allows network administrators to monitor and control the PrintServer through the use of network management platforms, such as HP OpenView.

The appropriate MIB file must be imported into your SNMP management program using the Import-Compile command. Check your program's documentation for details on this procedure. The MIB file is named *Mib2p.mib* and is provided in the MiB folder on the Setup CD-ROM.

**General.** Enter the name of the contact person in the *SysContact* field. Enter the location of the contact person in the *SysLocation* field.

**Management Stations.** Select the number of the management station from the *Station No.* drop-down menu (1-4). Click the **Get Data** button to display the information for the selected station.

In the *IP Address* fields, enter the IP address of the management station with the SNMP program installed. In the *Community* field, enter the name of the SNMP community, which is usually **public** or **private**. From the *Access* drop-down menu, select the desired level of access for this management station, **Not Accessible**, **Read-only**, or **Read/Write**.

**Trap Receivers.** Select the number of the trap receiver from the *Receiver No.* drop-down menu (1-4). Click the **Get Data** button to display the information for the selected trap receiver.

In the *IP Address* fields, enter the IP address of the trap receiver that will be sent the trap messages or notifications. In the *Community* field, enter the name of the SNMP community, which is usually **public** or **private**. To designate a severity level, click the checkbox next to *Enable with Severity level*. From the following drop-down menu, select the desired level of severity, with 1 meaning least severe.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

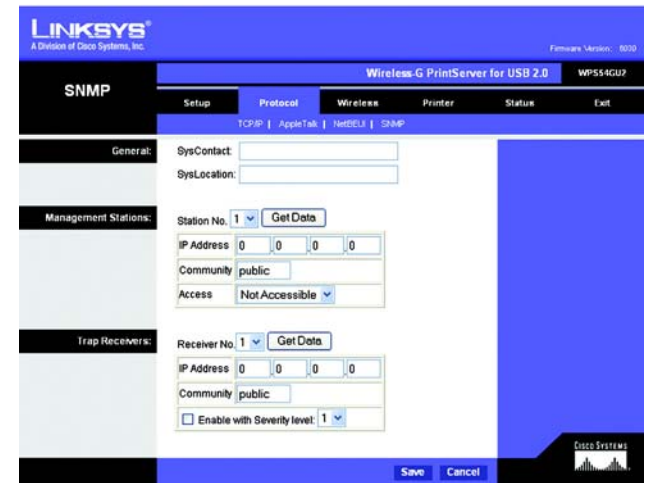


Figure 6-6: Protocol Tab - SNMP

## The Wireless Tab - Basic

This screen allows you to change the PrintServer's basic wireless settings.

**Configuration.** The PrintServer's Regulatory Domain and MAC Address are listed and cannot be changed. In the *SSID* field, enter the name of your wireless network. This is the unique name shared by all devices in a wireless network. The SSID is case-sensitive and should have 32 characters or fewer.

If your network is set to ad-hoc mode, select your network's channel setting from the *Channel No.* drop-down menu.

The Network Type setting shows a choice of two wireless modes. Select **Infrastructure** if you want the PrintServer to communicate using an access point or wireless router. Select **Ad-Hoc** if you want the PrintServer to communicate without using an access point or wireless router.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.



Figure 6-7: Wireless Tab - Basic

## The Wireless Tab - Security

Configure or alter the PrintServer's wireless security settings on this screen.

### Wireless Security

- **WEP Encryption.** If you want to enable WEP encryption for greater wireless security, select the level of WEP encryption, **64 Bit Keys (10 Hex chars)** or **128 Bit Keys (26 Hex chars)** from the drop-down menu. If you want to disable WEP encryption, keep the default, **None**.
- **Security Mode.** From the drop-down menu, select your wireless network's authentication type. The default is set to **Open System**, for which the sender and the recipient do NOT use a WEP key for authentication. You can also choose **Shared Key**, when the sender and recipient use a WEP key for authentication. If the PrintServer is set to the third setting, **Auto**, then the PrintServer will automatically use Open System or Shared Key authentication, depending on the authentication being used by your wireless network. The Security Mode setting should match the one on your network's access point or wireless router.
- **Default Transmit Key.** Select the Default Transmit Key used by your wireless network. This indicates which WEP key your network uses for WEP encryption.
- **Passphrase.** Enter a Passphrase in the field provided. If you use a Passphrase, WEP Keys 1-4 will be automatically generated after you click the **Generate Keys** button. The Passphrase is case-sensitive and should have 16 alphanumeric characters or fewer. It must match the passphrase of your wireless network and is compatible with Linksys wireless products only. (You will have to enter the WEP key(s) manually on any non-Linksys wireless products.)
- **Key 1 to Key 4.** If you want to enter the WEP keys manually, then leave the *Passphrase* field blank and enter the WEP keys in the fields provided. 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"-"9" and "A"-"F".

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

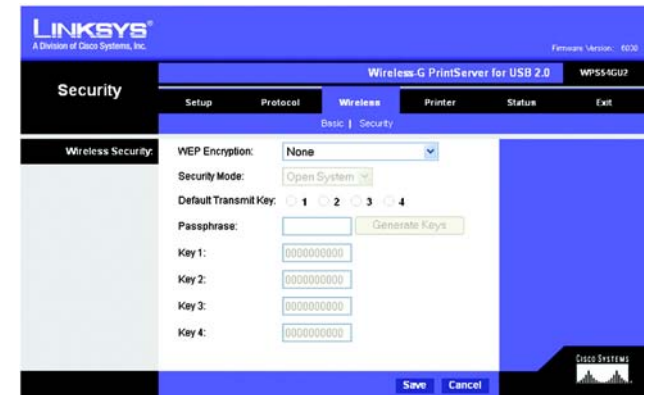


Figure 6-8: Wireless Tab - Security

## The Printer Tab - Internet Printing

Internet Printing allows you to automatically print any e-mails that are sent to a specific e-mail account on your network. This is especially useful for printing information when you are not connected to the network. You can print from any location where you can access e-mail. (See Figure 6-9.)

**Mail Server.** Enter the address of your mail server in the Mail Server IP Address. (This value must be a fixed IP address.) Enter the Account Name and Account Password next. Enter the password again in the *Verify Password* field. Then, enter the time interval for the PrintServer to check for e-mail to be printed, in hours and minutes in the *Check Mail every:* field. You may also specify an e-mail address to which mails that cannot be printed are routed; this is useful for both graphic-intensive e-mails and for troubleshooting purposes. Enter this e-mail address in the *Redirect unprintable Mail to:* field.

**Printer.** Enter the Printer Model in the field provided. You can find this in the Device Manager. Then choose the appropriate Printer Port from the drop-down menu:

- **Parallel 1.** This is the PrintServer's Parallel port.
- **USB 1.** This is the PrintServer's USB port.
- **Logical Printer 1-6.** The PrintServer has six logical or virtual printer ports. For example, you can have three different configurations for your parallel printer: Logical Printer 1 for landscape orientation, Logical Printer 2 for double-sided copies, and Logical Printer 3 for manual feed. Then configure the Logical Printers on the Logical Port tab, so Logical Printers 1, 2, and 3 will be mapped to the physical printer on the PrintServer's Parallel port.

**Options.** Place a check mark next to the options you want to enable: **Print every E-Mail**, **Print Banner Page** (enabled by default), or **Mail response when printed**.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

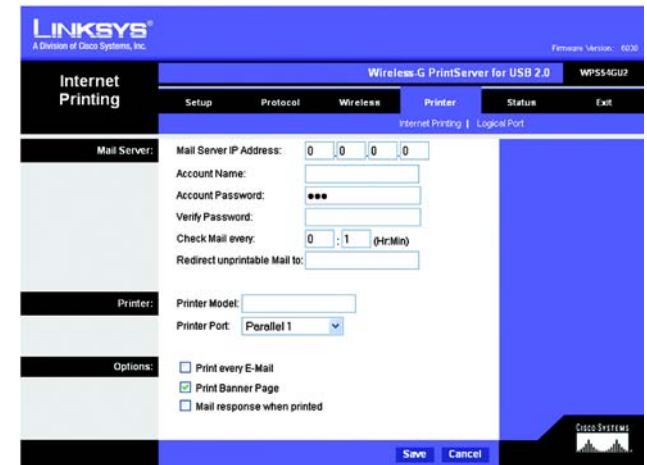


Figure 6-9: Printer - Internet Printing

## The Printer Tab - Logical Port

The Logical Printers tab contains the logical printer settings of the PrintServer. Configure them for each Logical Printer. (See Figure 6-10.)

The PrintServer has six logical or virtual printer ports. For example, you can have three different configurations for your parallel printer: Logical Printer 1 for landscape orientation, Logical Printer 2 for double-sided copies, and Logical Printer 3 for manual feed. Then you will map Logical Printers 1, 2, and 3 to the physical printer on the PrintServer's Parallel port.

**Select Printer.** From the *Logical Printer Port No:* drop-down menu, select the number (1-6) of the printer you wish to configure. From the *Port* drop-down menu, select the PrintServer's physical port, **Parallel 1** or **USB 1**. Click the **Get Data** button to update the display with the current data for the selected logical printer.

### Details

- **Pre-string (Hex).** Enter the printer control string (in hexadecimal characters) to be sent to the printer before each print job. This string cannot exceed 30 characters.
- **Post String (Hex).** Enter the printer control string (in hexadecimal characters) to be sent to the printer after each print job. This string cannot exceed 30 characters.
- **Convert LF to CR+LF.** If checked, LF (line feed) characters are changed to CR+LF (carriage return + line feed).

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.



Figure 6-10: Printer - Logical Port

## The Status Tab - Device

The Device tab allows you to view information about the PrintServer. No values can be changed on this screen. This screen is for information only. (See Figure 6-11.)

Clicking the **Refresh** button causes the PrintServer to retrieve this information again.

## The Status Tab - Printer

The Printer tab allows you to view information about the Printers. No values can be changed on this screen. This screen is for information only. (See Figure 6-12.)

Click the **Print Test Page** button to print a test page on the respective printer.

Clicking the **Refresh** button causes the PrintServer to retrieve the status information again.

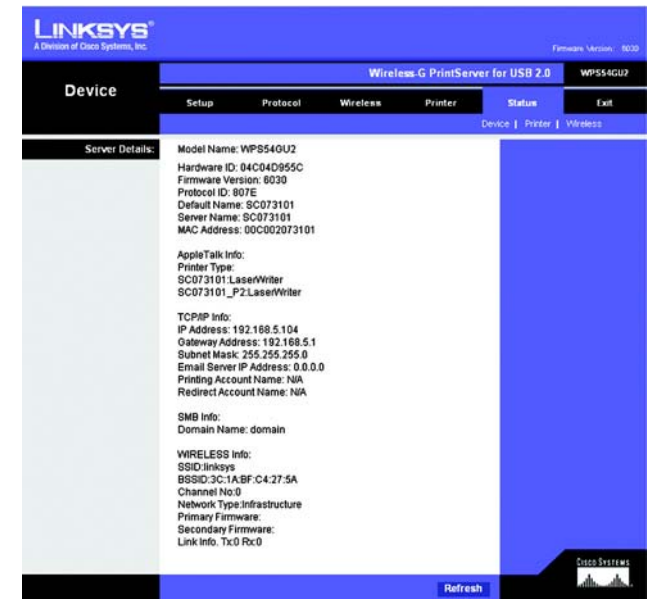


Figure 6-11: Status Tab - Device



Figure 6-12: Status Tab - Printer



## The Status Tab - Wireless

The Wireless tab allows you to view information about the PrintServer's wireless connection. No values can be changed on this screen. This screen is for information only. (See Figure 6-13.)

Clicking the **Refresh** button causes the PrintServer to retrieve information about the wireless connection again.



Figure 6-13: Status Tab - Wireless

## The Exit Tab

This tab is used exclusively for exiting the Web-based Utility.

Select the **Exit** tab, and the screen in Figure 6-14 will appear. Click the **Yes** button if you want to exit the Utility. Click **No** if you don't want to exit the Utility.



Figure 6-14: Exit

# Chapter 7: Bi-Admin Management

## Overview

If you use Windows, then you can manage the PrintServer using its web-based utility (see “Chapter 6: Configuring the PrintServer Using the Web-based Utility”) or a utility program called Bi-Admin, which is provided on the PrintServer’s Setup CD-ROM. (If you use a Macintosh or other non-Windows operating system, you can manage the PrintServer only by using its web-based utility.)

Fully compatible with Windows 98, Me, 2000, and XP, Bi-Admin allows you to change the PrintServer’s internal settings, check on the unit’s status, and perform basic diagnostic tests. Note that the Bi-Admin program must be installed only on the network administrator’s computer. First, you will install Bi-Admin on your computer. Then, you will be able to use the management utility.

## Bi-Admin Installation

1. Make sure you have no programs or applications running on your computer.
2. If you haven’t already done so, insert the Setup CD-ROM into the computer’s CD-ROM drive. The Setup CD-ROM should run automatically. If it does not, click the **Start** button and choose **Run**. In the box that appears, enter **D:\setupWizard.exe** (if “D” is the letter of your CD-ROM drive).
3. When you see Figure 7-1, click **Bi-Admin Install** to continue. Click **Exit** to end the installation.
4. The *Welcome* screen of the Bi-Admin Setup program, Figure 7-2, will appear first. Click **Cancel** to quit the setup program, and then close the open programs. Click **Next** to continue with the Bi-Admin installation.



Figure 7-1: Welcome



Figure 7-2: Bi-Admin Setup Welcome

5. The *Choose Destination Location* screen will appear, as shown in Figure 7-3. Choose the location where the B-Admin folder will be installed. To install the driver in the default location, click **Next**. If you want the folder to be installed in a different location, click the **Browse** button and select the location. Then click **Next**.

Click **Back** to return to the previous screen. Click **Cancel** to end the Bi-Admin installation.

6. The *Select Program Folder* screen, shown in Figure 7-4, will appear. An icon will be added to the program folder listed. You may change the name for the program folder, if you wish. Click **Next**.

Click **Back** to return to the previous screen. Click **Cancel** to end the Bi-Admin installation.

7. When the Bi-Admin is installed, the *Setup Complete* screen will appear. Click **Finish**.

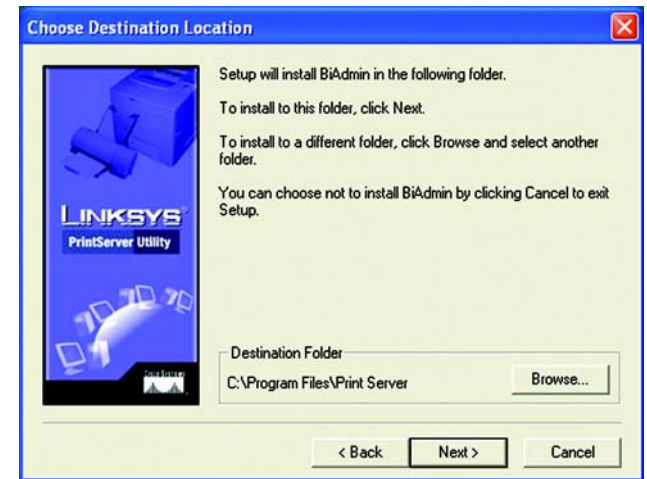


Figure 7-3: Choose Destination Location



Figure 7-4: Select Program Folder

## Starting the Bi-Admin Management Utility

1. To start the Bi-Admin program, click **Start, Programs, Print Server Utility**, and then **Bi-Admin Management Utility**. If the Bi-Admin Management Utility icon has been created, you can just double-click it instead. You can drag the shortcut icon onto your Desktop for easy access to the Bi-Admin Management Utility.
2. When the Bi-Admin Management Utility appears, it will ask for the Connected Protocol. (See Figure 7-5.) Make sure the box next to *TCP/IP* is checked. Click the **OK** button.
3. The Bi-Admin Management Utility will automatically scan the network for the PrintServer. (See Figure 7-6.)

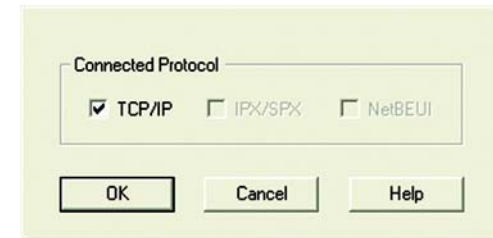


Figure 7-5: Connected Protocol

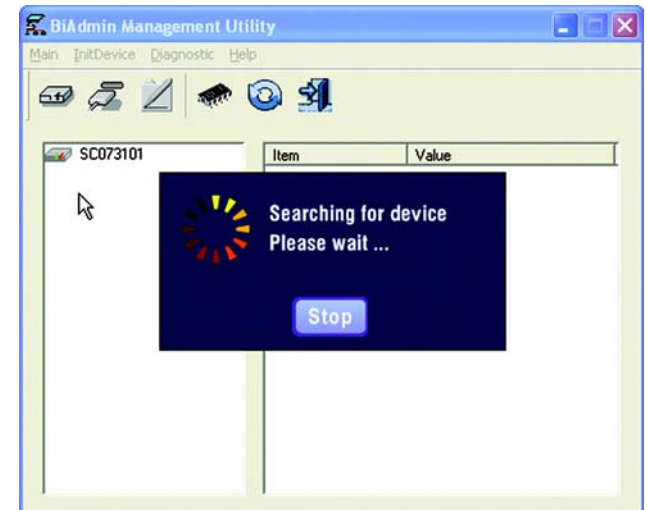


Figure 7-6: Searching for Device

## The Bi-Admin Management Utility

The *Bi-Admin Management Utility* screen will appear next. Any hardware found on the network will appear on the left-hand side of the screen, as shown in Figure 7-7. The Utility can be managed from this screen. The menu and icon options will be explained in this section.

### Menu Options

**Main.** The options are Device Status, Printer Status, Configure, Upgrade, Refresh, and Exit. These options are the same as the icons that are displayed below the menu options (viewed from left to right), and are described below:

- **Device Status.** This option allows you to view all of the device settings, optionally save the device settings to a file, or restore a previously saved file to the device.

If you click **Device Status**, the *Device Information* screen in Figure 7-8 will appear. A list of the PrintServer's device settings is displayed, including Hardware ID, Firmware version, Protocol ID, Default Name, Server Name, and MAC Address. To save the information in a .txt (text) file, click the **Save to file** button.

To choose a different device that you configured, click the **Open** button. You may then browse for your file, select it, and then click **Open**. The contents of the file will display on the right-hand side of the screen. To save the file to the PrintServer, click **Restore to Device**.

Click the **Exit** button to return to the *Bi-Admin Management Utility* screen. For more information, click the **Help** button.

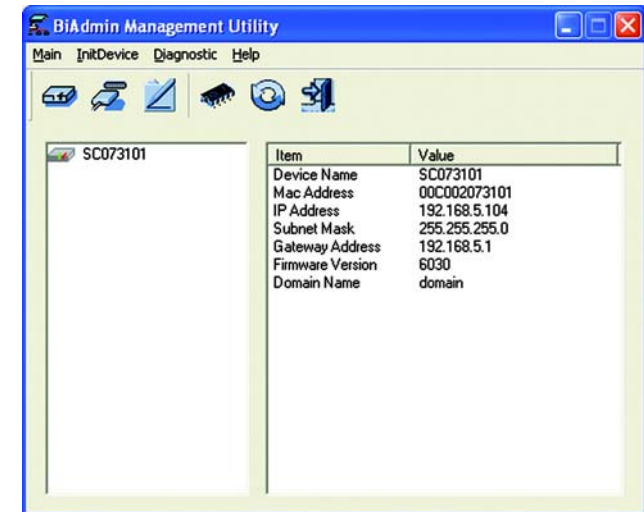


Figure 7-7: Bi-Admin Management Utility

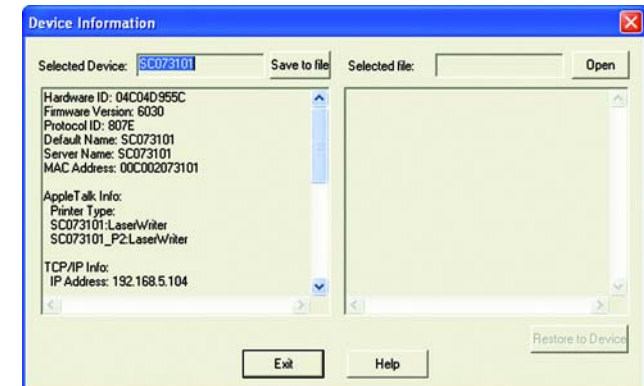


Figure 7-8: Device Information

- **Printer Status.** This option allows you to view the printer status, as well as set port and printer parameters.

If you click this option, a *Verify Password* screen will appear. Make sure that you enter the password in the field before you click OK, or else an Incorrect Password message will appear. If the message appears, then click **OK**. Enter the correct password in the field provided, and click **OK** again.

After the password has been successfully entered, the *Printer Status* screen will appear, as shown in Figure 7-10. The Device Name will be displayed and the Current Selected Port will be highlighted. The status information for this port will be displayed.

Click the **Back** button to return to the *Bi-Admin Management Utility* screen. Click **Refresh** to refresh the screen. For more information, click the **Help** button.

If the printer is bi-directional and not busy, the Printer Configuration button will appear on the *Printer Status* screen. Click this button to view the printer's Environmental Variable and Variable Value items. If the items are not read-only, you can change them based on the options of your printer.

For more information, click the **Help** button.



Figure 7-9: Verify Password

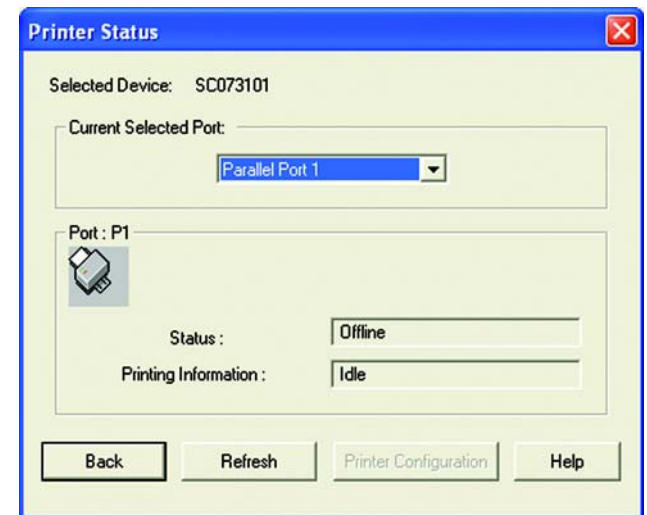


Figure 7-10: Printer Status

- **Configure.** You may configure the PrintServer with this option. If you click this option, a *Verify Password* screen will appear. Make sure that you enter the password in the field before you click OK, or else an Incorrect Password message will appear. If the message appears, click **OK**. Enter the correct password in the field provided, and click **OK** again.

After the password has been successfully entered, the *Configuration* screen will appear, as shown in Figure 7-12. It displays eight tabs: System, TCP/IP, AppleTalk, NetBEUI, Internet Printing, Port, Wireless, and SNMP. The tabs will be described below.

### System

- **Device Name.** Enter the Device Name in the field provided.
- **Comment.** Enter any comments in the *Comment* field.
- **Device Password.** To change the password, select **Change Device Password**, enter the new password in the *Password* field, and then re-enter the password in the *Confirm Password* field.
- **Protocol.** Select the protocol you want to use for your network: TCP/IP, AppleTalk, NetBEUI, IPX/SPX.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.



Figure 7-11: Verify Password

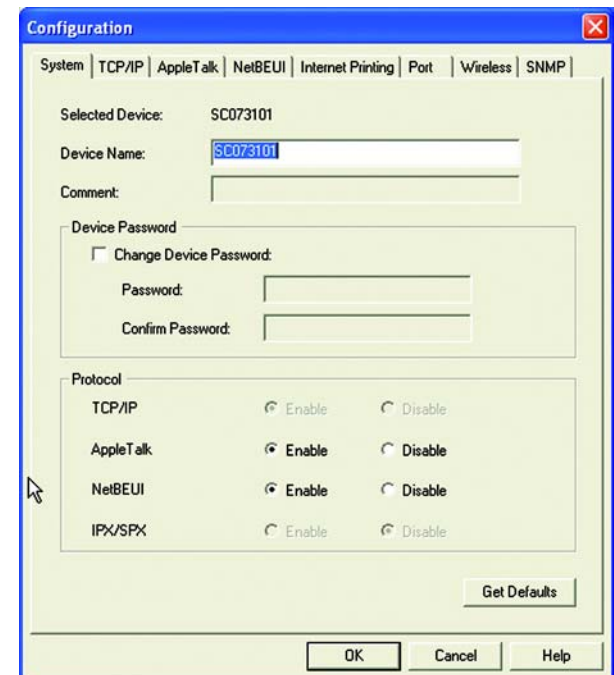


Figure 7-12: Configuration - System



## TCP/IP (Figure 7-13)

- **Dynamic IP Address (DHCP).** If your network router is using DHCP to assign IP addresses, select **Dynamic IP Address (DHCP)**. By default, **Dynamic IP Address (DHCP)** is enabled.
- **Fixed IP Address.** If you need to assign the PrintServer a fixed IP address (also known as static IP address), select **Fixed IP Address**, and enter the appropriate values under IP Address, Subnet Mask, and Gateway. Make sure the IP Address and Subnet Mask are appropriate for your network. If you change the PrintServer's IP address, make sure you that you reconnect to the PrintServer using that new IP address. Otherwise, you will not be communicating with the PrintServer. In most cases, the Gateway IP address is the IP address of your router, and you should complete the *Gateway* field if you will use the PrintServer for Internet printing. (To find out your router's IP address, consult your router's documentation.)
- **TCP session.** If your TCP session has ended, you can attempt a new connection. In the *Retry interval* field, enter how often you want the PrintServer to attempt a connection. In the *Retry count* field, enter the maximum number of attempts.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.

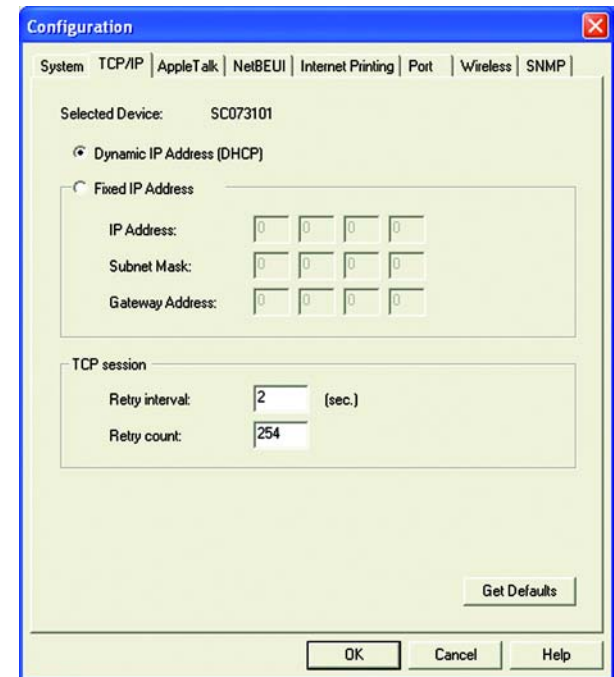


Figure 7-13: Configuration - TCP/IP



### Apple Talk (Figure 7-14)

- **Zone Name.** Typically only Macintoshes use AppleTalk, although other platforms can use it if they have the necessary, third-party software installed. Enter the Zone Name in the field provided.
- **Port Setting.** Select the port number from the drop-down menu. The Printer Type can be obtained from the manufacturer of the printer. Enter the type of printer in the *Printer Type* field. For each printer connected to the PrintServer, you will choose the Communications Protocol that allows the devices on the network to communicate. Select the type of Communication Protocol you will use, **ASCII** or **Binary** for each printer, according to the recommendation of the printer's manufacturer. For more information, refer to the printer's documentation.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.

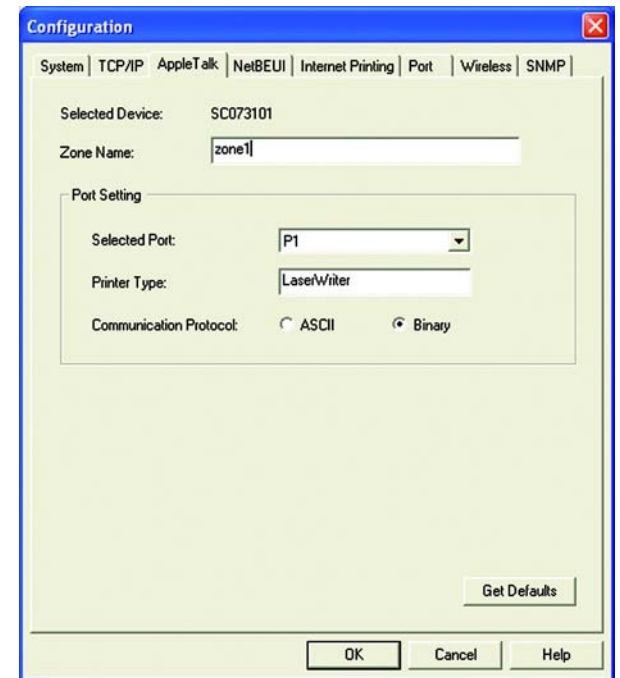


Figure 7-14: Configuration - AppleTalk

### NetBEUI (Figure 7-15)

- **Domain Name.** Enter the name of the domain that you want the PrintServer associated with in the *Domain Name* field. If you are unsure of the Domain Name, you can find it out by looking on any computer already on the network. In Windows 98, right-click **Network Neighborhood** and select **Properties**. Under the Identification tab, there will be listed that computer's name, and the Domain to which it is connected. For Windows Me, 2000, or XP, right-click **My Network Places**. In Windows Me, choose **Properties** from the menu that appears. In Windows 2000 or XP, choose **Properties** from the menu that appears. Then, right-click **Local Area Connection** and choose **Properties**. The Domain name will appear. If you want the PrintServer to be connected to that same Domain, enter that Domain name here. If no Domain name exists there, you will use the Workgroup name from that window.
- **Port Setting.** You can specify the Response Time that you prefer for the PrintServer. This is the amount of time (measured in seconds) that the PrintServer will wait for a response from the network before "timing out." You also have the option to use this feature, Abort Print Job if Error. Selecting Yes here will terminate the printing if there is an error of any kind. If you select No, print jobs that have errors will be sent to the printer, but might not print properly.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.

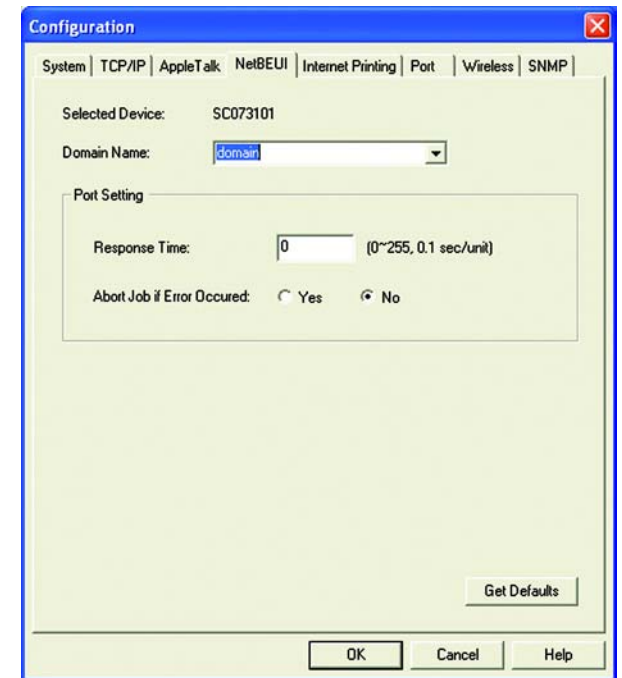


Figure 7-15: Configuration - NetBEUI

### Internet Printing (Figure 7-16)

- **Mail Server.** Enter the address of your mail server in the *Mail Server IP Address* fields. (This value must be a fixed IP address.) Enter the Mail Account name and Password next. Enter the password again in the *Confirm Password* field. Then, enter the time interval for the PrintServer to check for e-mail to be printed, in hours and minutes in the *Check Mail Interval* field. You may also specify an e-mail address to which mails that cannot be printed are routed; this is useful for both graphic-intensive e-mails and for troubleshooting purposes. Enter this e-mail address in the *Redirect Mail Account* field.
- **Printer.** Select the Default Printer Port from the drop-down menu. In the field provided, enter the Printer Model, which can be found through the Device Manager.
- **Options.** Place a check mark next to the options you want to enable: **Print Every Mail**, **Banner Printing** (enabled by default), or **Mail response when Printed**.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.

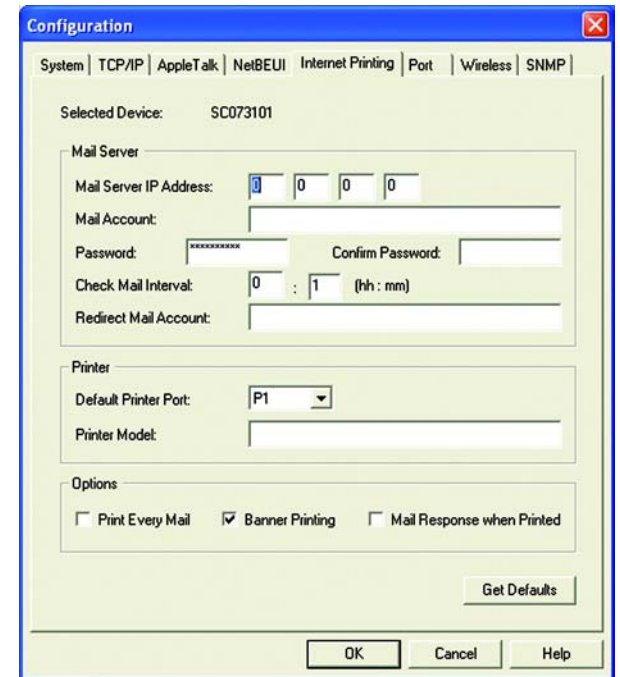


Figure 7-16: Configuration - Internet Printing

### Port (Figure 7-17)

- **Physical Port.** Select the number of the Selected Physical Port from the drop-down menu. Select the Handshake Signal, **Busy Only** or **Busy & Ack**. Select the Printer Type, **High Speed** or **Low Speed**.
- **Logical Port.** Select the Selected Logical Port from the drop-down menu and then the physical port you want to map it to from the drop-down menu for *Map to Physical Port*. If you select Yes for Convert LF to LF+CR, the LF (line feed) characters are changed to LF+CR (line feed + carriage return). In the field for *Prefix of Job*, enter the printer control string (in hexadecimal characters) to be sent to the printer before each print job. This string cannot exceed 30 characters. In the field for *Suffix of Job*, enter the printer control string (in hexadecimal characters) to be sent to the printer after each print job. This string cannot exceed 30 characters.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.

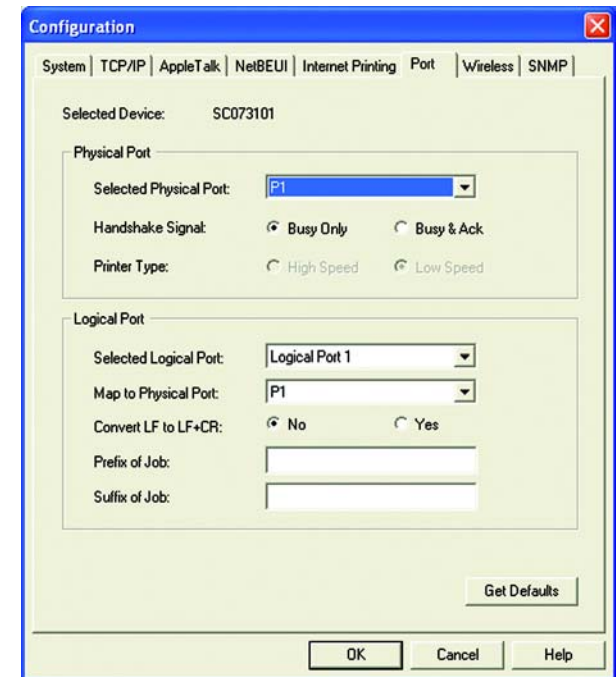


Figure 7-17: Configuration - Port

**Wireless** (Figure 7-18)

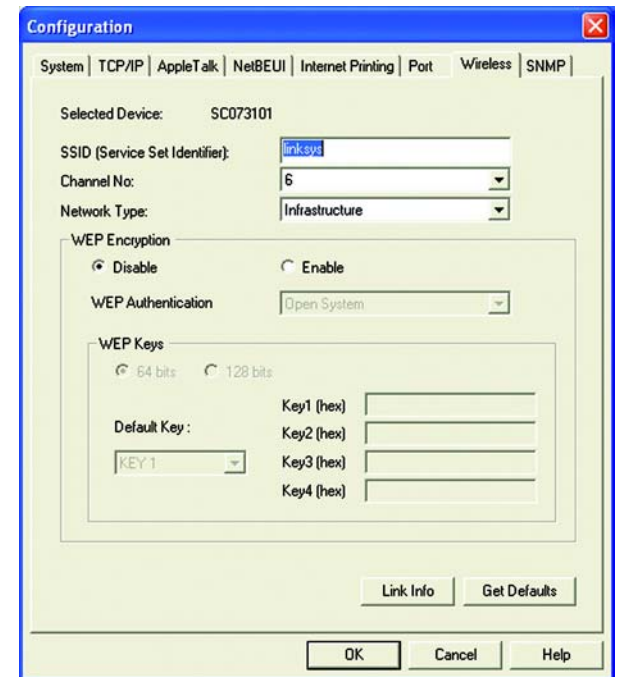
- **SSID (Service Set Identifier).** In the *SSID* field, enter the name of your wireless network. This is the unique name shared by all devices in a wireless network. The SSID is case-sensitive and should have 32 characters or fewer.
- **Channel No.** If your network is set to ad-hoc mode, select your network's channel setting from the *Channel No.* drop-down menu.
- **Network Type.** The Network Type setting shows a choice of two wireless modes. Select **Infrastructure** if you want the PrintServer to communicate using an access point or wireless router. Select **Ad-Hoc** if you want the PrintServer to communicate without using an access point or wireless router.
- **WEP Encryption.** If you want to enable WEP encryption for greater wireless security, click the **Enable** radio button. If you want to disable WEP encryption, keep the default, **Disable**. From the *WEP Authentication* drop-down menu, select your wireless network's authentication type. The default is set to **Open System**, for which the sender and the recipient do NOT use a WEP key for authentication. You can also choose **Shared Key**, when the sender and recipient use a WEP key for authentication. This setting should match the one on your network's access point or wireless router.

In the *WEP Keys* section, select the level of WEP encryption, **64 bits** or **128-bits**. From the drop-down menu, select the Default Key used by your wireless network. This indicates which WEP key your network uses for WEP encryption. In the **Key1 (hex)** to **Key4 (hex)** fields, enter your network's WEP keys. 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"-"9" and "A"-"F".

Click the **Link Info** button if you want to view information about the wireless connection.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.



**Figure 7-18: Configuration - Wireless**

**SNMP** (Figure 7-19)

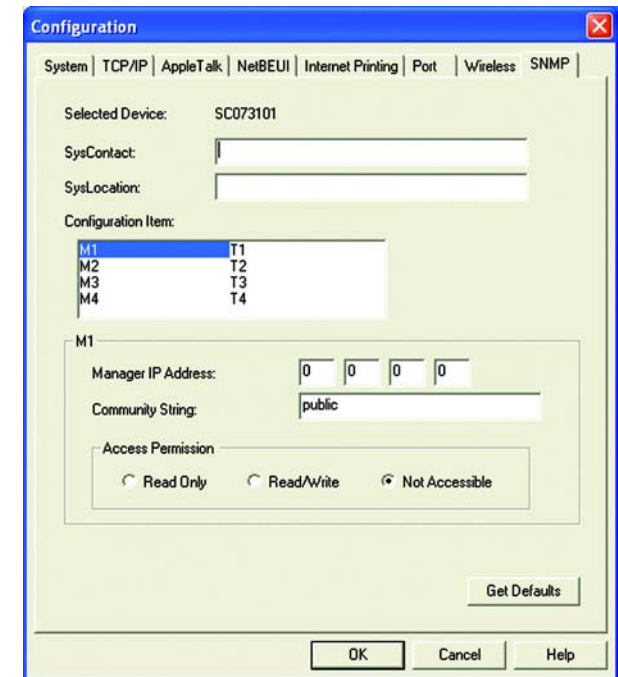
- **SysContact.** Enter the name of the contact person in the *SysContact* field.
- **SysLocation.** Enter the location of the contact person in the *SysLocation* field.
- **Configuration Item.** From the *Configuration Item* box, select the number of the management station (M1-M4) or trap receiver (T1-T4). The selected item's information will be displayed below.

For management stations, you can change the station's IP address, Community String, and Access Permission level. In the *Manager IP Address* fields, enter the IP address of the management station with the SNMP program installed. In the *Community String* field, enter the name of the SNMP community, which is usually **public** or **private**. In the *Access Permission* section, select the desired level of access for this management station, **Read Only**, **Read/Write**, or **Not Accessible**.

For trap receivers, you can change the trap receiver's IP address, Community String, Trap Option, and Trap Severity level. In the *Trap Receive IP Address* fields, enter the IP address of the trap receiver that will be sent the trap messages or notifications. In the *Community String* field, enter the name of the SNMP community, which is usually **public** or **private**. For the Trap Option setting, select **Enable** or **Disable**. For the Trap Severity setting, select the desired level of severity, with 1 meaning least severe.

Click the **Get Defaults** button if you want to cancel your changes and use the default settings.

When finished making your changes on this tab, click the **OK** button to save these changes, or click the **Cancel** button to undo your changes. For more information, click the **Help** button.



**Figure 7-19: Configuration - SNMP**

- **Upgrade.** You may use this option to upgrade the firmware of the PrintServer. Follow these instructions:
  - 1 On the *Upgrade* screen shown in Figure 7-20, click the **Files** button.
  - 2 The *Detected LAN Cards* screen will appear, as shown in Figure 7-21. Select the LAN card the PrintServer is connected to, and then click the **OK** button.
  - 3 Follow the on-screen instructions, and select the firmware file you want to use.
  - 4 View the *BIN File Information* screen (see Figure 7-22), and click the **OK** button if you have selected the correct firmware file. Click the **Cancel** button to select a different firmware file.
  - 5 On the *Upgrade* screen, click the **Upgrade** button. Click the **Cancel** button to cancel the firmware upgrade. For more information, click the **Help** button.
- **Refresh.** This option allows you to refresh the device list after you change the name or IP address of a device. The screen does not refresh automatically.
- **Exit.** This option allows you to exit the Bi-Admin program.

**InitDevice.** The available options are Reset Device, Restore to Factory Default, Attached Remote, and Connected Protocol.

If you click Attached Remote, the screen in Figure 7-23 appears. To add a cross segment print server, enter its IP address in the fields provided, and click the **Set** button.

Click **Cancel** to undo any changes. For more information, click the **Help** button.

**Diagnostic.** Diagnostic allows you to print a test page from either of the PrintServer's ports.

**Help.** The two options are Help Topics and About Bi-Admin. These help files offer extensive advice and details about all of the PrintServer's functions and capabilities.

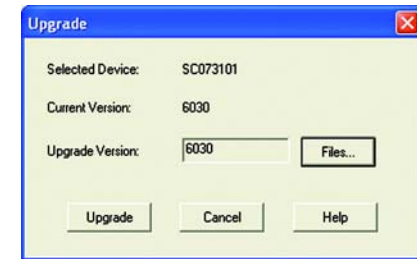


Figure 7-20: Upgrade



Figure 7-21: Detected LAN Cards

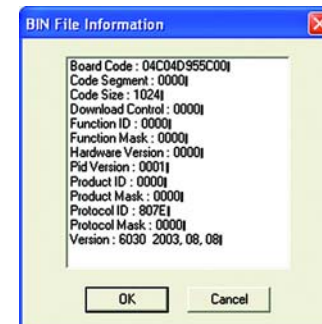


Figure 7-22: BIN File Information

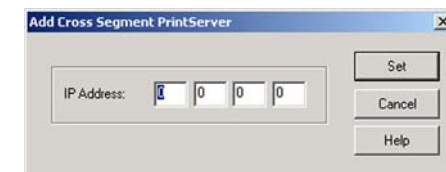


Figure 7-23: Add Cross Segment PrintServer



# Chapter 8: Internet Printing Protocol (IPP)

## Overview

Internet Printing Protocol (IPP) is a standards-based system that allows remote printing from a PC to any accessible printer. Normally, the printer will be attached to a computer or other device that functions as an IPP Server. For client PCs, it is necessary to install a compatible IPP Client program. The Client must also know the IP Address or URL of the IPP Server.

The PrintServer contains the necessary firmware to act as an IPP Server. No additional configuration is necessary. However, the following requirements must be met:

- The PrintServer must have a valid IP Address. For printing via the Internet, the PrintServer's IP Address must be external (allocated by your ISP), rather than an IP Address on your local LAN.
- Any Router, Gateway, or Firewall linking your LAN to the Internet must NOT block IPP. (IPP uses Port Services 631/TCP)
- You must advise clients of the correct URL or IP Address of the IPP Server. To use a URL rather than an IP Address, you need to register the domain name for the URL.
- Unless clients are using Windows 2000, you must provide your clients with the supplied IPP Client software. If it is not convenient to provide the CD-ROM, supply the setup.exe file, located in the IPP folder.

## Windows IPP Client Setup

### Installing using setup.exe

1. Run this program, located at d:\driver\ipp\setup.exe, to unzip the included files.
2. The IPP Setup program will then run.
3. Follow the prompts to complete the installation.

### IPP Client Configuration for Windows 98, Me, 2000, and XP

1. Run the **Add IPP Port program** entry created by the installation. A screen like the one shown in Figure 8-2 will be displayed.

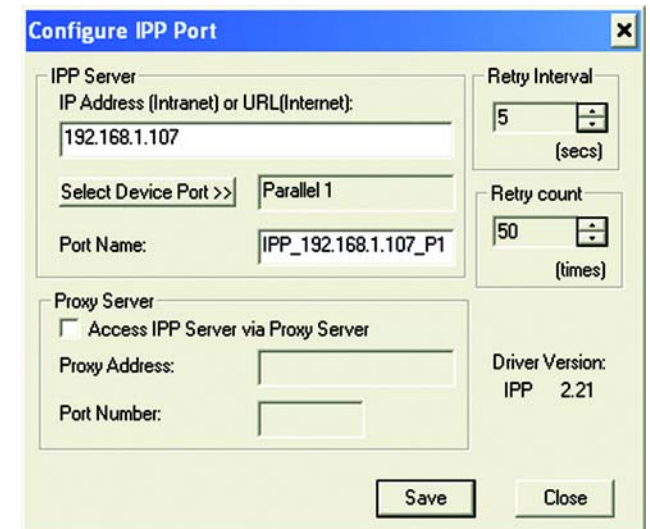


Figure 8-1: Configure IPP Port



2. Enter the IP Address or URL of the IPP Server.
3. If Internet access from your location is via a Proxy Server, check **Access IPP Server via Proxy Server**, and enter details of your Proxy Server. (This will be the same as your browser configuration.)
4. Click **Select Device Port** to view the available ports on the IPP Server, and select the appropriate port. (See Figure 8-2.) A connection to the IPP Server will be established at this time.
5. Click **OK** to create the IPP port on your system. You will see a message confirming that the port has been created, and then you will see Figure 8-3.
6. Perform one of these steps.

Select an existing printer to use the new port, and click **OK**.

OR

Click the **Add New Printer** button to create a new printer that will use the IPP port. This will start the Add Printer Wizard. Follow the prompts to complete the process. Make sure that the new printer uses the IPP port.

**Installation is now complete.**

- To create additional IPP ports, repeat the entire procedure.
- The Proxy Server and other options are set individually for each IPP port.



Figure 8-2: Output Select

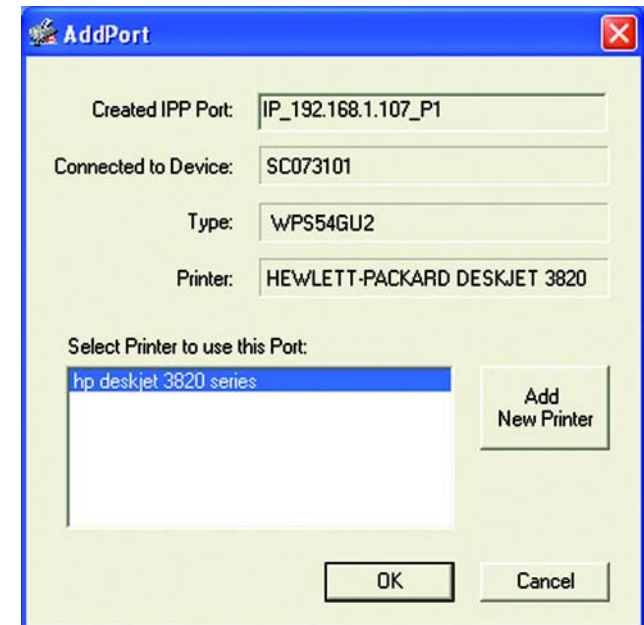


Figure 8-3: AddPort

## Changing the IPP Port Settings

After the IPP port is created, you can reach the *Configure IPP Port* screen by performing these steps:

1. Open the **Printers** folder (**Start => Settings => Printers**).
2. Right-click **IPP Printer** and select **Properties**.
3. Click the **Port Settings** or **Configure Port** button (Details or Port tab, depending on your version of Windows). The *Configure IPP Port* screen (shown in Figure 8-4) will appear.

There are two settings, Retry Interval and Retry Count, which can be adjusted if you have problems connecting to the IPP Server.

- The Retry Interval sets the time interval (in seconds) between connection attempts. Increase this number if you have a poor connection, or the remote server is very busy.
- The Retry Count sets how many connection attempts will be made. Increase this number if you have a poor connection, or the remote server is very busy.

## IPP Client Setup for Windows 2000 and XP

Windows 2000 and XP have their own IPP Client, and there is no need to install the supplied IPP Client Software. To use this IPP Client with the PrintServer, follow this procedure:

1. Start the Add Printer Wizard.
2. Select **Network Printer** and click **Next** to see the *Locate your Printer* screen, as shown in Figure 8-5.
3. Select **Connect to a printer on the Internet or on your intranet**, and enter the URL of the IPP Server as follows, where `ip_address` represents the IP Address of the IPP Server, and 631 represents the port number.

Port 1    `ip_address:631/ipp/P1`



**NOTE:** These entries are case-sensitive. They must be entered as shown, with "ipp" in lowercase and P1 in uppercase.

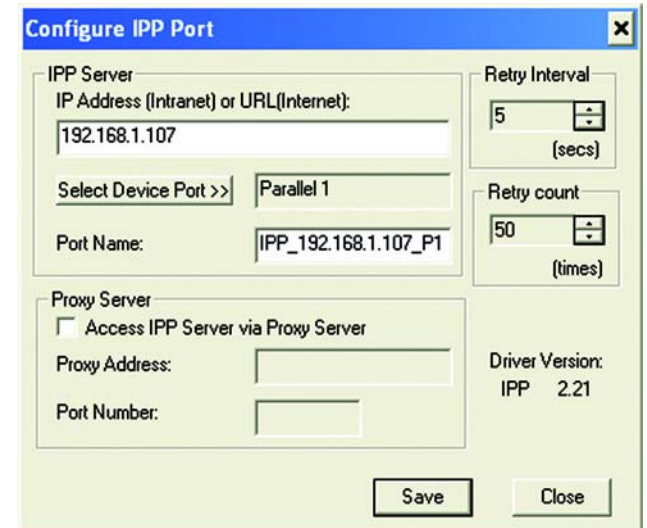


Figure 8-4: Configure IPP Port



Figure 8-5: Locate Your Printer

4. If the connection can be established, and the printer on that port is online, the dialog box shown in Figure 8-6 will be displayed. This screen notifies you that the printer driver is not installed. Click the **OK** button.
5. Select the printer manufacturer and model to match the printer connected to the appropriate port on the IPP Server.
6. Click **Next** and complete the Wizard.

**The IPP printer is now ready for use.**

## Using IPP Printers

The IPP Printer can be selected and used like any other Windows printer. If the IPP Server is not on your network, your Internet connection needs to be active.

If you wish to check the availability of the remote IPP Server, you can use the Query IPP Printer program installed with the Add IPP Port program.

An IPP Server may be unavailable for any of the following reasons:

- It is powered off.
- A printer problem has caused the IPP Server to cease responding, and a restart (reboot) is required.
- The Server's IP Address has changed.
- The Internet connection for the IPP Server is down.
- Network congestion causes the connection attempt to time out.

If using the supplied IPP Client software, there are two settings, Retry Interval and Retry Count, which can be adjusted if you have problems connecting to the IPP Server.

See the previous section, "Changing the IPP Port Settings," for details.



**Figure 8-6: Connect to Printer**

# Appendix A: Troubleshooting

This appendix consists of “Common Problems and Solutions”. Provided are possible solutions to problems that may occur during the installation and operation of the PrintServer. Read the descriptions below to help you solve your problems. If you can't find an answer here, check the Linksys website at [www.linksys.com](http://www.linksys.com).

## Common Problems and Solutions

If the PrintServer is not working correctly, follow the advice in this chapter. If you have trouble printing, see Chapter 3 first, and then go to Chapter 8. If this Troubleshooting section does not resolve your problem, please see Appendix I to contact Technical Support.

**1. All the LEDs on the front of the PrintServer are off.**

Check the power supply and the power connection.

**2. The PrintServer's Status LED lights up orange or flashes continuously.**

Reset the PrintServer. Unplug the power supply and plug it back in, or press the **Reset** button on the back of the PrintServer for approximately ten seconds.

**3. I am using DHCP, and the PrintServer gets an IP address conflict involving the PrintServer.**

If the PrintServer is left on when the DHCP server is turned off, the PrintServer will retain its IP address without informing the DHCP server. Reset the PrintServer so it will obtain a new IP address. This problem may also occur if you assigned a static IP address within the range used by the DHCP server. If so, use another address NOT within the range used by the DHCP server.

**4. The PrintServer's LAN LED is not lighting up.**

Check your cabling and make sure that the Link LED on your hub or switch is lit.

**5. A printer connected to the PrintServer cannot print or prints garbage.**

Do the following:

- Check the cable connection between the PrintServer and printer.
- Make sure the printer driver in the application program or Windows matches the printer.
- Make sure the cable distance is not too long, less than 10 feet.

**6. The Configuration button on the Printer Status screen in Bi-Admin is grayed out, even though my printer is bi-directional.**

The button is unavailable until the printer has finished its print jobs and sits idle.

**7. To start over, I need to set the PrintServer to its factory default settings.**

Unplug the PrintServer's power adapter. Press the **Reset** button while you plug in the PrintServer's power adapter. Continue to hold the **Reset** button for 10 seconds and then release it. This will reset the password, wireless, and other settings on the PrintServer to the factory defaults. In other words, the PrintServer will revert to its original factory configuration.

**8. I need to upgrade the firmware.**

In order to upgrade the firmware with the latest features, you need to go to the Linksys website and download the latest firmware at [www.linksys.com](http://www.linksys.com).

Follow these steps:

1. Go to the Linksys website at <http://www.linksys.com/international> and download the latest firmware.
2. To upgrade the firmware, follow the steps in "Appendix D: Upgrading Firmware."

# Appendix B: Wireless Security

Linksys wants to make wireless networking as safe and easy for you as possible. The current generation of Linksys products provide several network security features, but they require specific action on your part for implementation. So, keep the following in mind whenever you are setting up or using your wireless network.

## Security Precautions

The following is a complete list of security precautions to take (at least steps 1 through 5 should be followed):

1. Change the default SSID.
2. Disable SSID Broadcast.
3. Change the default password for the Administrator account.
4. Enable MAC Address Filtering.
5. Change the SSID periodically.
6. Enable WEP 128-bit Encryption. Please note that this may reduce your network performance.
7. Change the WEP encryption keys periodically.

For information on implementing these security features, refer to "Chapter 4: Configuring the PrintServer Using the Setup Wizard" or "Chapter 6: Configuring the PrintServer Using the Web-based Utility."



**Note:** Some of these security features are available only through the network router or access point. Refer to the router or access point's documentation for more information.

## Security Threats Facing Wireless Networks

Wireless networks are easy to find. Hackers know that in order to join a wireless network, wireless networking products first listen for "beacon messages". These messages can be easily decrypted and contain much of the network's information, such as the network's SSID (Service Set Identifier). Here are the steps you can take:

**Change the administrator's password regularly.** With every wireless networking device you use, keep in mind that network settings (SSID, WEP keys, etc.) are stored in its firmware. Your network administrator is the only person who can change network settings. If a hacker gets a hold of the administrator's password, he, too, can change those settings. So, make it harder for a hacker to get that information. Change the administrator's password regularly.

**SSID.** There are several things to keep in mind about the SSID:

1. Disable Broadcast
2. Make it unique
3. Change it often

Most wireless networking devices will give you the option of broadcasting the SSID. While this option may be more convenient, it allows anyone to log into your wireless network. This includes hackers. So, don't broadcast the SSID.

Wireless networking products come with a default SSID set by the factory. (The Linksys default SSID is "linksys".) Hackers know these defaults and can check these against your network. Change your SSID to something unique and not something related to your company or the networking products you use.

Change your SSID regularly so that any hackers who have gained access to your wireless network will have start from the beginning in trying to break in.

**MAC Addresses.** Enable MAC Address filtering. MAC Address filtering will allow you to provide access to only those wireless nodes with certain MAC Addresses. This makes it harder for a hacker to access your network with a random MAC Address.

**WEP Encryption.** Wired Equivalent Privacy (WEP) is often looked upon as a panacea for wireless security concerns. This is overstating WEP's ability. Again, this can only provide enough security to make a hacker's job more difficult.

There are several ways that WEP can be maximized:

1. Use the highest level of encryption possible
2. Use "Shared" Key authentication
3. Use multiple WEP keys
4. Change your WEP key regularly

Implementing encryption may have a negative impact on your network's performance. If you are transmitting sensitive data over your network, encryption should be used.

These security recommendations should help keep your mind at ease while you are enjoying the most flexible and convenient technology Linksys has to offer.



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

# Appendix C: About Bi-Directional Printing

Normal printing only sends print signals from a PC to a printer. Bi-directional printing, also called bitronic printing, refers to a printer's ability to do just the opposite—talk back to a PC to notify it of a print job status, paper jams, etc. This two-way communication technology can be found in HP, IBM, Panasonic, and other laser or color printers where close contact between the PC and printer is key. In color printing, for example, the printer “informs” the PC of its constant status in order to mix color inks correctly for optimal quality output.

Bi-directional communication, communication from a printer to a PC, is normally handled by a combination of the printer hardware and special software on your computer. Bi-directional printers generally have highly advanced parallel interfaces. These printers often require special parallel ports in order to take full advantage of their features.

Using a bi-directional printer on a network poses unique challenges. Unlike a direct PC-to-printer connection during which a bi-directional printer can easily send its signals back to the host PC through the computer's parallel port (which is normally located only a few feet away from the printer), a networked printer faces the problem of having to route messages bound for a particular PC through a large array of hubs, switches, file servers, and computers. Unfortunately, most printers are not equipped to handle the complexities of printer-to-PC communication across a network. That does not mean that they can't be used on a network, however.

Linksys designed the PrintServers to function with both regular as well as bi-directional printers. Standard print servers cannot work with bi-directional printers, but the PrintServer features a custom design to support both parallel as well as bi-directional parallel interfaces. However, the PrintServer cannot pass messages from the printer back to the printing PC—this limitation is simply an industry standard, and not one of the PrintServer itself.

However, the PrintServer can check any printer's online and printing status on the network using the Bi-Admin management utility software packaged with the PrintServer. The status-checking feature built into the management software does not require a bi-directional printer to function. If your printer came with special bi-directional software allowing you to monitor printer status, do not use it with the PrintServer—the software is most likely not network-capable. For best results, turn off the printer's bi-directional function either by (1) removing any bi-directional printing software from your network computers, and/or (2) turning off the printer's bi-directional print feature inside of the printer's on-board menus (if it has menus). Your printer's user guide should be able to provide specific instructions for doing this.



# Appendix D: Upgrading Firmware

The PrintServer's firmware is upgraded through the Bi-Admin Management utility. Follow these instructions:

1. Download the firmware from Linksys's website at [www.linksys.com/international](http://www.linksys.com/international).
2. Open the Bi-Admin Management utility.
3. Click **Main => Upgrade Firmware**.
4. Click the **Files...** button to browse for the file.
5. The *Detected LAN Cards* screen will appear, as shown in Figure C-2. Select the LAN card the PrintServer is connected to, and then click the **OK** button. Select the firmware file you want to use.
6. View the *BIN File Information* screen, and click the **OK** button if you have selected the correct firmware file. Click the **Cancel** button to select a different firmware file.
7. On the *Upgrade* screen, click the **Upgrade** button. Click the **Cancel** button to cancel the firmware upgrade. For more information, click the **Help** button.



Figure D-1: Upgrade Firmware



Figure D-2: Detected LAN Cards

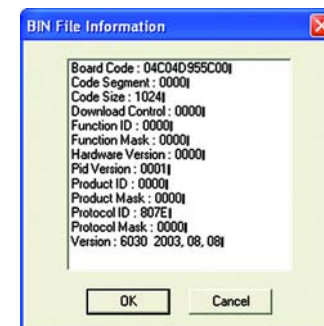


Figure D-3: BIN File Information

# Appendix E: Windows Help

All Linksys wireless products require Microsoft Windows. Windows is the most used operating system in the world and comes with many features that help make networking easier. These features can be accessed through Windows Help and are described in this appendix.

## TCP/IP

TCP/IP is a set of instructions, or protocol, all PCs follow to communicate over a network. This is true for wireless networks as well. Your PCs will not be able to utilize wireless networking without having TCP/IP enabled. Windows Help provides complete instructions on enabling TCP/IP.

## Shared Resources

If you wish to share printers, folder, or files over your network, Windows Help provides complete instructions on utilizing shared resources.

## Network Neighborhood/My Network Places

Other PCs on your network will appear under Network Neighborhood or My Network Places (depending upon the version of Windows you're running). Windows Help provides complete instructions on adding PCs to your network.

# Appendix F: Glossary

**802.11a** - An IEEE wireless networking standard that specifies a maximum data transfer rate of 54Mbps and an operating frequency of 5GHz.

**802.11b** - An IEEE wireless networking standard that specifies a maximum data transfer rate of 11Mbps and an operating frequency of 2.4GHz.

**802.11g** - An IEEE wireless networking standard that specifies a maximum data transfer rate of 54Mbps, an operating frequency of 2.4GHz, and backward compatibility with 802.11b devices.

**Access Point** - Device that allows wireless-equipped computers and other devices to communicate with a wired network. Also used to expand the range of a wireless network.

**Adapter** - This is a device that adds network functionality to your PC.

**Ad-hoc** - A group of wireless devices communicating directly with each other (peer-to-peer) without the use of an access point.

**Backbone** - The part of a network that connects most of the systems and networks together, and handles the most data.

**Bandwidth** - The transmission capacity of a given device or network.

**Beacon Interval** - The frequency interval of the beacon, which is a packet broadcast by a router to synchronize a wireless network.

**Bit** - A binary digit.

**Boot** - To start a device and cause it to start executing instructions.

**Bridge** - A device that connects two different kinds of local networks, such as a wireless network to a wired Ethernet network.

**Broadband** - An always-on, fast Internet connection.

**Browser** - A browser is an application program that provides a way to look at and interact with all the information on the World Wide Web.

**Buffer** - A block of memory that temporarily holds data to be worked on later when a device is currently too busy to accept the data.

**Cable Modem** - A device that connects a computer to the cable television network, which in turn connects to the Internet.

**CSMA/CA** (Carrier Sense Multiple Access/Collision Avoidance) - A method of data transfer that is used to prevent data loss in a network.

**CTS** (Clear To Send) - A signal sent by a device to indicate that it is ready to receive data.

**Daisy Chain** - A method used to connect devices in a series, one after the other.

**Database** - A collection of data that is organized so that its contents can easily be accessed, managed, and updated.

**DDNS** (Dynamic Domain Name System) - The capability of having a website, FTP, or e-mail server-with a dynamic IP address-use a fixed domain name.

**Default Gateway** - A device that forwards Internet traffic from your local area network.

**DHCP** (Dynamic Host Configuration Protocol) - A protocol that lets one device on a local network, known as a DHCP server, assign temporary IP addresses to the other network devices, typically computers.

**DMZ** (Demilitarized Zone) - Removes the Router's firewall protection from one PC, allowing it to be "seen" from the Internet.

**DNS** (Domain Name Server) - The IP address of your ISP's server, which translates the names of websites into IP addresses.

**Domain** - A specific name for a network of computers.

**Download** - To receive a file transmitted over a network.

**DSL** (Digital Subscriber Line) - An always-on broadband connection over traditional phone lines.

**DSSS** (Direct-Sequence Spread-Spectrum) - A type of radio transmission technology that includes a redundant bit pattern to lessen the probability of data lost during transmission. Used in 802.11b networking.

**DTIM** (Delivery Traffic Indication Message) - A message included in data packets that can increase wireless efficiency.

**Dynamic IP Address** - A temporary IP address assigned by a DHCP server.

**Encryption** - Encoding data to prevent it from being read by unauthorized people.

**Ethernet** - An IEEE standard network protocol that specifies how data is placed on and retrieved from a common transmission medium.

**Finger** - A program that tells you the name associated with an e-mail address.

**Firewall** - Security measures that protect the resources of a local network from intruders.

**Firmware** - 1. In network devices, the programming that runs the device. 2. Programming loaded into read-only memory (ROM) or programmable read-only memory (PROM) that cannot be altered by end-users.

**Fragmentation** - Breaking a packet into smaller units when transmitting over a network medium that cannot support the original size of the packet.

**FTP (File Transfer Protocol)** - A standard protocol for sending files between computers over a TCP/IP network and the Internet.

**Full Duplex** - The ability of a networking device to receive and transmit data simultaneously.

**Gateway** - A system that interconnects networks.

**Half Duplex** - Data transmission that can occur in two directions over a single line, but only one direction at a time.

**Hardware** - The physical aspect of computers, telecommunications, and other information technology devices.

**HTTP (HyperText Transport Protocol)** - The communications protocol used to connect to servers on the World Wide Web.

**IEEE (The Institute of Electrical and Electronics Engineers)** - An independent institute that develops networking standards.

**Infrastructure** - Currently installed computing and networking equipment.

**Infrastructure Mode** - Configuration in which a wireless network is bridged to a wired network via an access point.

**IP (Internet Protocol)** - A protocol used to send data over a network.

**IP Address** - The address used to identify a computer or device on a network.

**IPCONFIG** - A Windows 2000 and XP utility that displays the IP address for a particular networking device.

**IPSec** (Internet Protocol Security) - A VPN protocol used to implement secure exchange of packets at the IP layer.

**ISM band** - Radio band used in wireless networking transmissions.

**ISP** (Internet Service Provider) - A company that provides access to the Internet.

**LAN** (Local Area Network) - The computers and networking products that make up the network in your home or office.

**MAC** (Media Access Control) Address - The unique address that a manufacturer assigns to each networking device.

**Mbps** (Megabits Per Second) - One million bits per second; a unit of measurement for data transmission.

**Multicasting** - Sending data to a group of destinations at once.

**NAT** (Network Address Translation) - NAT technology translates IP addresses of a local area network to a different IP address for the Internet.

**Network** - A series of computers or devices connected for the purpose of data sharing, storage, and/or transmission between users.

**NNTP** (Network News Transfer Protocol) - The protocol used to connect to Usenet groups on the Internet.

**Node** - A network junction or connection point, typically a computer or work station.

**OFDM** (Orthogonal Frequency Division Multiplexing) - A type of modulation technology that separates the data stream into a number of lower-speed data streams, which are then transmitted in parallel. Used in 802.11a, 802.11g, and powerline networking.

**Packet** - A unit of data sent over a network.

**Passphrase** - Used much like a password, a passphrase simplifies the WEP encryption process by automatically generating the WEP encryption keys for Linksys products.

**Ping** (Packet INternet Groper) - An Internet utility used to determine whether a particular IP address is online.

**POP3** (Post Office Protocol 3) - A standard protocol used to retrieve e-mail stored on a mail server.

**Port** - 1. The connection point on a computer or networking device used for plugging in a cable or an adapter. 2. The virtual connection point through which a computer uses a specific application on a server.

**PPPoE** (Point to Point Protocol over Ethernet) - A type of broadband connection that provides authentication (username and password) in addition to data transport.

**PPTP** (Point-to-Point Tunneling Protocol) - A VPN protocol that allows the Point to Point Protocol (PPP) to be tunneled through an IP network. This protocol is also used as a type of broadband connection in Europe.

**Preamble** - Part of the wireless signal that synchronizes network traffic.

**RJ-45** (Registered Jack-45) - An Ethernet connector that holds up to eight wires.

**Roaming** - The ability to take a wireless device from one access point's range to another without losing the connection.

**Router** - A networking device that connects multiple networks together, such as a local network and the Internet.

**RTS** (Request To Send) - A packet sent when a computer has data to transmit. The computer will wait for a CTS (Clear To Send) message before sending data.

**Server** - Any computer whose function in a network is to provide user access to files, printing, communications, and other services.

**SMTP** (Simple Mail Transfer Protocol) - The standard e-mail protocol on the Internet.

**SNMP** (Simple Network Management Protocol) - A widely used network monitoring and control protocol.

**Software** - Instructions for the computer. A series of instructions that performs a particular task is called a "program".

**Spread Spectrum** - Wideband radio frequency technique used for more reliable and secure data transmission.

**SSID** (Service Set Identifier) - Your wireless network's name.

**Static IP Address** - A fixed address assigned to a computer or device that is connected to a network.

**Static Routing** - Forwarding data in a network via a fixed path.

**Subnet Mask** - An address code that determines the size of the network.

**Switch** - 1. Device that is the central point of connection for computers and other devices in a network, so data can be shared at full transmission speeds. 2. A device for making, breaking, or changing the connections in an electrical circuit.

**TCP/IP** (Transmission Control Protocol/Internet Protocol) - A network protocol for transmitting data that requires acknowledgement from the recipient of data sent.

**Telnet** - A user command and TCP/IP protocol used for accessing remote PCs.

**TFTP** (Trivial File Transfer Protocol) - A version of the TCP/IP FTP protocol that uses UDP and has no directory or password capability.

**Throughput** - The amount of data moved successfully from one node to another in a given time period.

**Topology** - The physical layout of a network.

**TX Rate** - Transmission Rate.

**UDP** (User Datagram Protocol) - A network protocol for transmitting data that does not require acknowledgement from the recipient of the data that is sent.

**Upgrade** - To replace existing software or firmware with a newer version.

**Upload** - To transmit a file over a network.

**URL** (Uniform Resource Locator) - The address of a file located on the Internet.

**VPN** (Virtual Private Network) - A security measure to protect data as it leaves one network and goes to another over the Internet.

**WAN** (Wide Area Network) - The Internet.

**WEP** (Wired Equivalent Privacy) - A method of encrypting data transmitted on a wireless network for greater security.

**WINIPCFG** - A Windows 98 and Millennium utility that displays the IP address for a particular networking device.

**WLAN** (Wireless Local Area Network) - A group of computers and associated devices that communicate with each other wirelessly.



# Appendix G: Specifications

Model	WPS54GU2
Standards	IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u, IEEE 1284, USB 2.0
Ports	Power, USB, Parallel, LAN
Button	Reset
Cabling Type	USB 2.0, UTP CAT5, DB25 Parallel
LEDs	Status, LAN, WLAN, Parallel, USB
Security Features	WEP
WEP Key Bits	64, 128
Dimensions (W x H x D)	105 mm x 30 mm x 135 mm (4,13" x 1,18" x 5,31")
Unit Weight	0,2 kg (7,05 oz.)
Power	12V, 1A
Certifications	FCC, IC-03, CE
Operating Temp.	0°C to 40°C (32°F to 104°F)
Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Operating Humidity	10% to 85%, Non-Condensing
Storage Humidity	5% to 90%, Non-Condensing

# Appendix H: Warranty Information

## LIMITED WARRANTY

Linksys warrants to You that, for a period of three years (the “Warranty Period”), your Linksys Product will be substantially free of defects in materials and workmanship under normal use. Your exclusive remedy and Linksys' entire liability under this warranty will be for Linksys at its option to repair or replace the Product or refund Your purchase price less any rebates. This limited warranty extends only to the original purchaser.

If the Product proves defective during the Warranty Period call Linksys Technical Support in order to obtain a Return Authorization Number, if applicable. BE SURE TO HAVE YOUR PROOF OF PURCHASE ON HAND WHEN CALLING. If You are requested to return the Product, mark the Return Authorization Number clearly on the outside of the package and include a copy of your original proof of purchase. RETURN REQUESTS CANNOT BE PROCESSED WITHOUT PROOF OF PURCHASE. You are responsible for shipping defective Products to Linksys. Linksys pays for UPS Ground shipping from Linksys back to You only. Customers located outside of the United States of America and Canada are responsible for all shipping and handling charges.

ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THE WARRANTY PERIOD. ALL OTHER EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF NON-INFRINGEMENT, ARE DISCLAIMED. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to You. This warranty gives You specific legal rights, and You may also have other rights which vary by jurisdiction.

This warranty does not apply if the Product (a) has been altered, except by Linksys, (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Linksys, or (c) has been subjected to abnormal physical or electrical stress, misuse, negligence, or accident. In addition, due to the continual development of new techniques for intruding upon and attacking networks, Linksys does not warrant that the Product will be free of vulnerability to intrusion or attack.

TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL LINKSYS BE LIABLE FOR ANY LOST DATA, REVENUE OR PROFIT, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, REGARDLESS OF THE THEORY OF LIABILITY (INCLUDING NEGLIGENCE), ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE THE PRODUCT (INCLUDING ANY SOFTWARE), EVEN IF LINKSYS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL LINKSYS' LIABILITY EXCEED THE AMOUNT PAID BY YOU FOR THE PRODUCT. The foregoing limitations will apply even if any warranty or remedy provided under this Agreement fails of its essential purpose. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to You.

**This Warranty is valid and may be processed only in the country of purchase.**

Please direct all inquiries to: Linksys, P.O. Box 18558, Irvine, CA 92623 USA.

# Appendix E Regulatory Information

## FCC STATEMENT

This product has been tested and complies with the specifications 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 according to 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 is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna

Increase the separation between the equipment or devices

Connect the equipment to an outlet other than the receiver's

Consult a dealer or an experienced radio/TV technician for assistance

## 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 and your body.

## INDUSTRY CANADA (CANADA)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations.

## EC DECLARATION OF CONFORMITY (EUROPE)

Linksys declares that the Wireless-G Broadband Router conforms to the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 301 489-1, 301 489-17 General EMC requirements for Radio equipment.

EN 609 50 Safety

## Wireless-G PrintServer for USB 2.0

EN 300-328-1, EN 300-328-2 Technical requirements for Radio equipment.

Caution: This equipment is intended to be used in all EU and EFTA countries. Outdoor use may be restricted to certain frequencies and/or may require a license for operation. Contact local Authority for procedure to follow.

Note: Combinations of power levels and antennas resulting in a radiated power level of above 100 mW equivalent isotropic radiated power (EIRP) are considered as not compliant with the above mentioned directive and are not allowed for use within the European community and countries that have adopted the European R&TTE directive 1999/5/EC.

For more details on legal combinations of power levels and antennas, contact Linksys Corporate Compliance.

Linksys vakuuttaa täten että Wireless-G Broadband Router tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien näiden direktiivien muiden ehtojen mukainen.

Linksys déclare la Wireless-G Broadband Router est conforme aux conditions essentielles et aux dispositions relatives à la directive 1999/5/EC.

Belgique:

Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, au-dessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de l'IBPT est requise. Pour une utilisation publique à l'extérieur de bâtiments, une licence de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.

France:

2.4 GHz Bande : les canaux 10, 11, 12, 13 (2457, 2462, 2467, et 2472 MHz respectivement) sont complètement libres d'utilisation en France (en utilisation intérieur). Pour ce qui est des autres canaux, ils peuvent être soumis à autorisation selon le département. L'utilisation en extérieur est soumis à autorisation préalable et très restreint.

Vous pouvez contacter l'Autorité de Régulation des Télécommunications (<http://www.art-telecom.fr>) pour de plus amples renseignements.

# Chapter J: Contact Information

Need to contact Linksys?

Visit us online for information on the latest products and updates to your existing products at:

<http://www.linksys.com/international>

If you experience problems with any Linksys product, you can e-mail us at:

In Europe	E-mail Address
Austria	support.at@linksys.com
Belgium	support.be@linksys.com
Denmark	support.dk@linksys.com
France	support.fr@linksys.com
Germany	support.de@linksys.com
Italy	support.it@linksys.com
Netherlands	support.nl@linksys.com
Norway	support.no@linksys.com
Portugal	support.pt@linksys.com
Spain	support.es@linksys.com
Sweden	support.se@linksys.com
Switzerland	support.ch@linksys.com
United Kingdom & Ireland	support.uk@linksys.com

Outside of Europe	E-mail Address
Latin America	support.la@linksys.com
U.S. and Canada	support@linksys.com

### **User Information**

This device complies with part 15 of FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

The FCC require the user to be notified that any changes or modification made to this device that are not expressly approved by Cisco-Linksys, LLC may avoid the user's authority to operate the equipment.

To comply with FCC RF exposure requirement, this device and its antenna must no be co-located or operating in conjunction with any other antenna or transmitter.

“Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.”