



## Router Configuration Note

# Linksys Wireless G WRT54GS

## Version 1.0

### Scope

This document describes how to configure the Linksys Wireless G WRT54GS router to work with LucidLink™ Wireless Security Software, version 1.5. The document:

- Focuses on the manual configuration of the router.
- **Does not** address LucidLink software installation or configuration.
- Assumes the LucidLink server is installed and configured with an IP address and shared secret.

### Requirements

This document will work with routers that meet the following requirements:

<b>Product Model Number</b>	WRT54GS
<b>Firmware Version</b>	V2.07.1, Feb 26, 2004
<b>NICs</b>	

	The exact configuration of the router depends on the combination of router, wireless adapter card, and client operating system used. For a list of compatible and supported hardware combinations, go to: <a href="http://www.lucidlink.com/Tech_Support/Compatibility.asp">www.lucidlink.com/Tech_Support/Compatibility.asp</a>
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## Connecting to the Router

- 1 Connect the Router to the same network hub as the workstation you will use to configure it. This workstation does not necessarily have to be the LucidLink server host computer.
  - Connect the Ethernet Cable to the **Ethernet** connector port.
  - Connect the power pack output to the power port.
  - Reset to factory default with reset button in back.
- 3 Open an Internet browser and enter the default IP address **192.168.1.1** in the address field.
- 4 At the login box, enter **User Name** and **Password**.

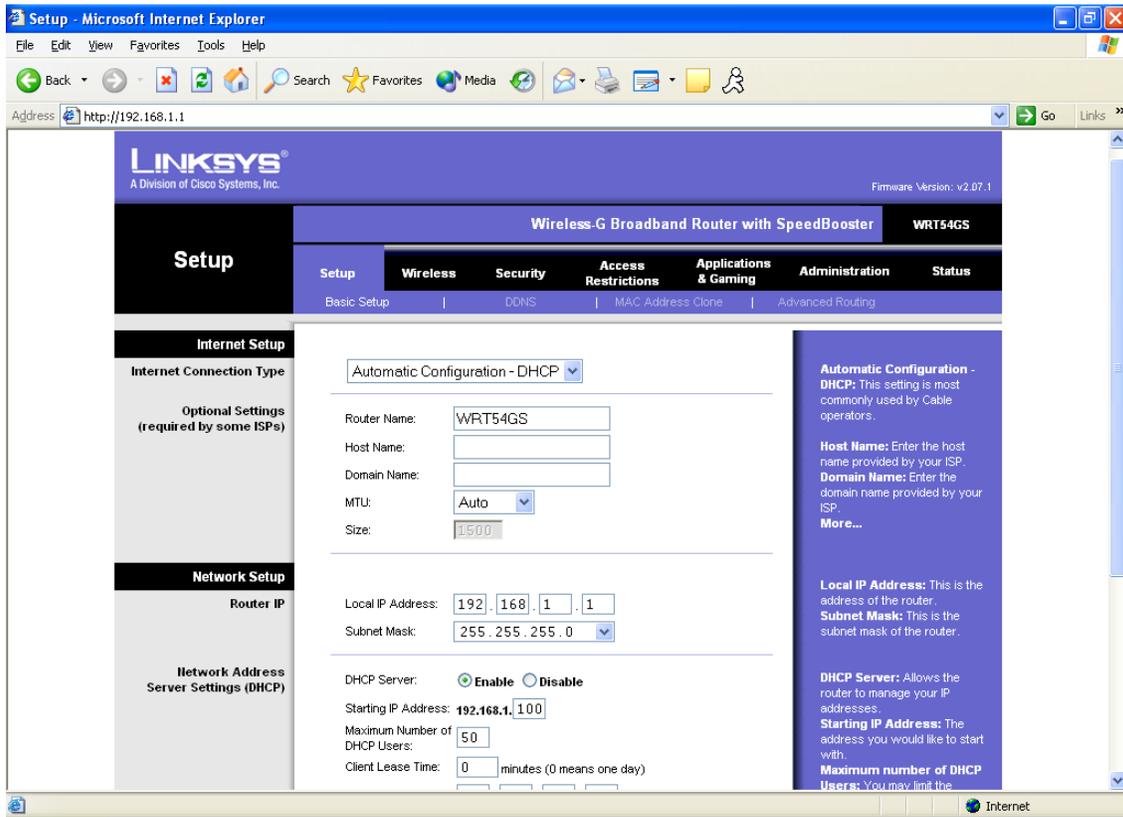
Linksys factory defaults are **blank** for User Name and **admin** for Password.



The image shows a Windows-style dialog box titled "Connect to 192.168.1.1". The dialog has a blue header bar with a question mark icon and a close button. Below the header is a blue banner with a key icon. The main area is light beige and contains the text "WRT54GS". There are two input fields: "User name:" with a dropdown arrow and a small user icon, and "Password:" with a masked field of six dots. Below the password field is a checkbox labeled "Remember my password". At the bottom are "OK" and "Cancel" buttons.

5 Click **OK**

The *Setup* screen is displayed:



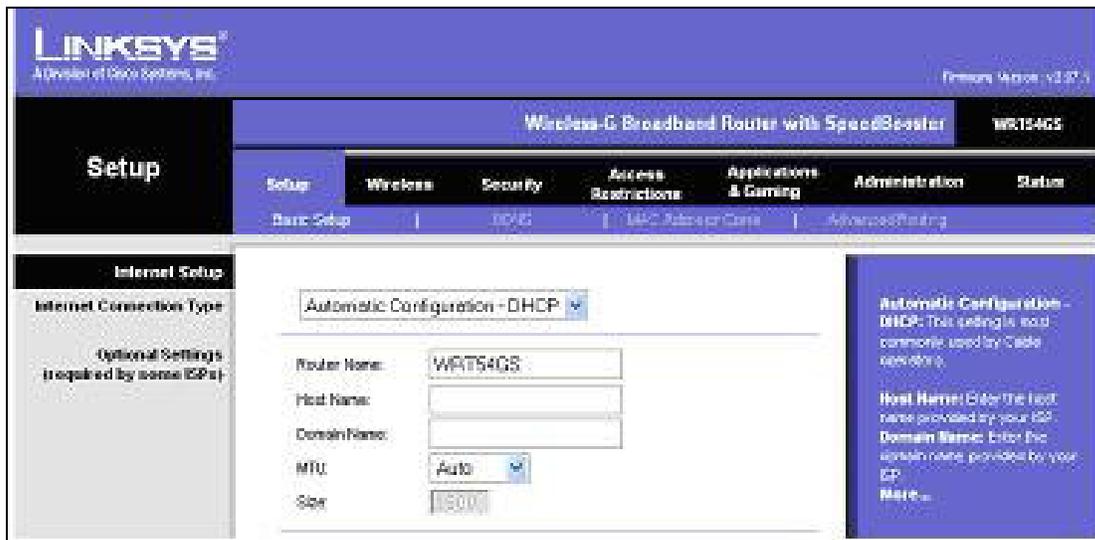
# Configuring the Router

Once you've connected to the router, follow these steps to configure it to work with LucidLink software.

## IP Addresses

- 1 Click **Setup** from the top navigation bar.

*Internet Setup* section of screen is displayed.



- 2 In **Internet Connection Type**, choose from list based on information from your ISP.
- 3 In the *Router IP* section, enter:
  - **Local IP Address**— IP address for Router
  - **Subnet Mask** — Portion of your internal wired LAN shared by the router and the LucidLink Server computer.
- 4 In *Network Address Server Settings (DHCP)* section, enter:
  - **DHCP** — Enable
  - **Starting IP Address** — 100.
  - **Number of DHCP Users** — 50
- 5 In *Time Settings* section:
  - Choose the appropriate **Time Zone** for the router.
  - Select *Daylight Saving* settings if appropriate.

Leave defaults for rest of page.

The screenshot shows the 'Network Setup' page of a Linksys WRT54GS router. The page is divided into three main sections: Router IP, Network Address Server Settings (DHCP), and Time Setting. The Router IP section shows the Local IP Address set to 192.168.1.1 and the Subnet Mask set to 255.255.255.0. The DHCP Server section has the DHCP Server checked as 'Enable', with a Starting IP Address of 192.168.1.100, a Maximum Number of DHCP Users of 50, and a Client Lease Time of 0 minutes. The Time Setting section shows the Time Zone set to '(GMT-05:00) Eastern Time (USA & Canada)' and the checkbox for 'Automatically adjust clock for daylight saving changes' checked. On the right side, there is a blue sidebar with explanatory text for Local IP Address, Subnet Mask, DHCP Server, Starting IP Address, Maximum number of DHCP Users, and Time Setting. At the bottom, there are 'Save Settings' and 'Cancel Changes' buttons, and the Cisco Systems logo.

6 Click **Save Settings**.

7 Click **Continue**

## SSID and Channel

The SSID (Network Name) is used by the wireless clients to identify your network. The SSID appears to users when they connect to the network. You can use the same or different SSIDs for each router. The default SSID should be changed, as this is an un-secure SSID and can be a potential security threat to your network.

- 1 Click the **Wireless** tab.

The *Wireless Settings* screen is displayed.

The screenshot shows the Linksys web interface for a Wireless-G Broadband Router with SpeedBooster (TS-WRT54GS). The 'Wireless' tab is selected, and the 'Wireless Network' configuration page is displayed. The 'Wireless Network Mode' is set to 'Mixed', the 'Wireless Network Name (SSID)' is 'linksys', the 'Wireless Channel' is '6 - 2.437GHz', and 'Wireless SSID Broadcast' is set to 'Enable'. A 'Save Settings' button is located at the bottom of the configuration area.

- 2 In **Wireless Network Mode** choose **Mixed**.
- 3 In **Wireless Network Name (SSID)** enter the SSID for this router.
- 4 In **Wireless Channel** leave default.
- 5 In **Wireless SSID Broadcast** select **Enable**.
- 6 Click **Save Settings**.
- 7 Click **Continue**.

## Security

Routers can be configured for *Maximum Security* (WPA-RADIUS with TKIP), or *Maximum Compatibility* (68/128-bit dynamic WEP key encryption), depending on the capabilities of the client wireless adapter cards. To learn your hardware capabilities, see the Compatibility Chart at.

[www.lucidlink.com/Tech\\_Support/Compatibility.asp](http://www.lucidlink.com/Tech_Support/Compatibility.asp)

- 1 Click **Wireless Security** from the navigation bar on the Wireless tab.

The *Wireless Security* screen is displayed.

The screenshot shows the Linksys configuration interface for the Wireless Security section. The main heading is 'Wireless Security'. The configuration fields are as follows:

- Security Mode: PSK RADIUS (dropdown menu)
- WPA Algorithms: TKIP (dropdown menu)
- RADIUS Server Address: 0 . 0 . 0 . 0 (four separate input boxes)
- RADIUS Port: 1812 (input box)
- Shared Key: (empty input box)
- Key Renewal Timeout: 3600 (input box) seconds

At the bottom of the page, there are two buttons: 'Save Settings' and 'Cancel Changes'. On the right side, there is a 'Security Mode' help box with the text: 'You may choose from Disable, WEP, Pre-Shared Key, PSK RADIUS, or RADIUS. All devices on your network must use the same security mode in order to communicate. More...'. The Cisco Systems logo is visible in the bottom right corner.

- 2 Enter:
  - **Security Mode – PSK-Radius.** (The Security Mode list is miss-labeled. The entry for PSK-Radius is actually WPA-Radius.)
  - **WPA Algorithm –TKIP**
  - **RADIUS Server Address –** LucidLink server IP address.
  - **RADIUS Port– 1812**
  - **Secret Key–** Shared Secret configured on LucidLink server *Settings* dialog. The Shared Secret is autogenerated when you install the server. Copy this value from the Management Console *Settings* dialog to the router's interface page.
  - **Left Key Renewal Timeout–** leave default.

- 3 Click **Save Settings**.
- 4 Click **Continue**.

## Change Administrator Password

To secure your router, we recommend that you change the default administrator password

- 1 Click the **Administration** tab.
- 2 Enter the new **Password** and re-enter it to confirm it.
- 3 Click **Save Settings**.
- 4 Click **Continue**.

## Rechecking Connection

- 1 Reopen your browser and enter the router's **IP address** in the Address field.
- 2 At the Login, enter the new router **User Name** and **Password**.  
You should once again see the *Home* screen.
- 2 You may optionally bookmark this URL or create a shortcut to it from your desktop for future access to the Linksys Wireless G WRT54GS configuration screens.

## Installing Router

Connect the router to the same network hub or switch as the LucidLink server computer, if it is not already there.