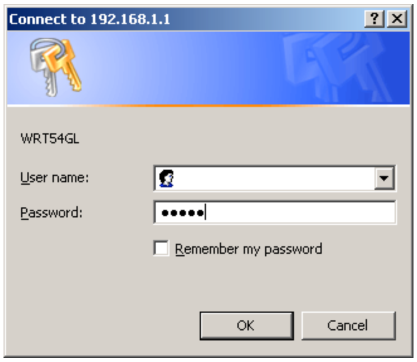
Securing Your Wireless Router and Connection

There are several security measures you can use on your wireless router to help to protect your network. The following measures will require configuring your router through its built-in interface. Make sure you have the documentation CD handy, as it provides more detail.

Please configure the router from a hardwired PC for simplicity. Whenever security is changed, wireless connections may be interrupted, so it's a good rule of thumb to make security changes from a hardwired PC.


Connect to 192.168.1.1

WRT54GL

User name:

Password: •••••

☐ Remember my password

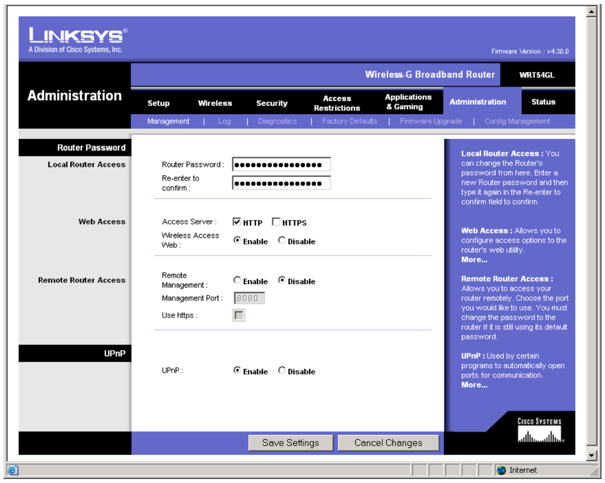
Access the Router's Configuration Interface

1. From your desktop, double click the Internet Explorer icon.
2. When Internet Explorer opens, type the router's IP address into the "Address" bar and press **[Enter]**
   (The Wireless router's default IP address is http://192.168.1.1)
3. Press [Tab] to skip the user name and type the default password "admin," and click **OK**

Change the Administration Password

Every manufacturer ships their devices with a default username and password. These values are well known, and could easily be used to compromise your network. The Linksys password is "admin" by default. Choose something you can remember. Hargray recommends using the password to your Internet account.

1. Click the 'Administration' tab
2. Enter your new password
3. Enter the password again to confirm
4. Click "Save Settings"


LINKSYS®
A Division of Cisco Systems, Inc.
Firmware Version : v4.30.0
Wireless-G Broadband Router
WRT54GL
Administration
Setup
Wireless
Security
Access Restrictions
Applications & Gaming
Administration
Status
Management | Log | Diagnostics | Factory Defaults | Firmware Upgrade | Config Management
Save Settings
Cancel Changes
Cisco Systems
Internet

Router Password

Local Router Access

Router Password : ••••••••••••••••

Re-enter to confirm : ••••••••••••••••

Web Access

Access Server : ☑ HTTP ☐ HTTPS

Wireless Access Web : ● Enable ○ Disable

Remote Router Access

Remote Management : ○ Enable ● Disable

Management Port : 8080

Use https : ☐

UPnP

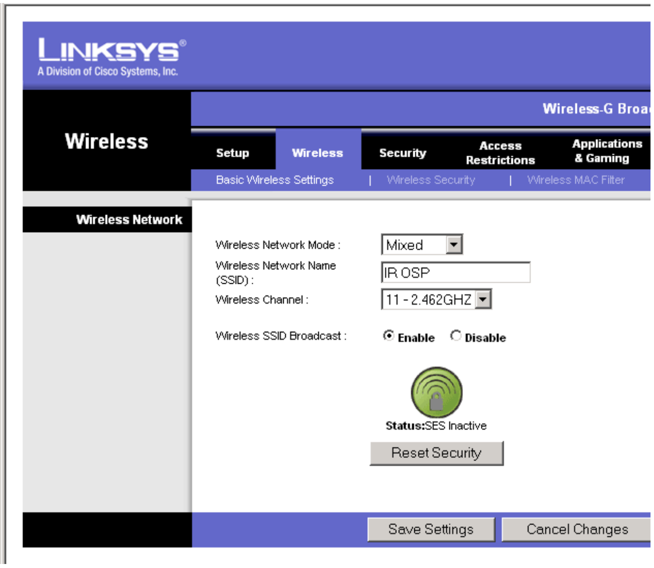
UPnP : ● Enable ○ Disable

Local Router Access : You can change the Router's password from here. Enter a new Router password and then type it again in the Re-enter to confirm field to confirm.

Web Access : Allows you to configure access options to the router's web utility. **More...**

Remote Router Access : Allows you to access your router remotely. Choose the port you would like to use. You must change the password to the router if it is still using its default password.

UPnP : Used by certain programs to automatically open ports for communication. **More...**



Wireless Network

Wireless Network Mode : Mixed

Wireless Network Name (SSID) : IR OSP

Wireless Channel : 11 - 2.462GHZ

Wireless SSID Broadcast : ● Enable ○ Disable

Status:SES Inactive

Change the SSID

Your router broadcasts a default SSID (System Set Identifier), used to identify the wireless network. It is never a good idea to name your wireless access point with your name, a business name, or address. For example, both "Jones Family" and "2200 Mission Blvd" are bad choices for a SSID as they reveal too much about whose network may be behind the security measures (if there are any applied).

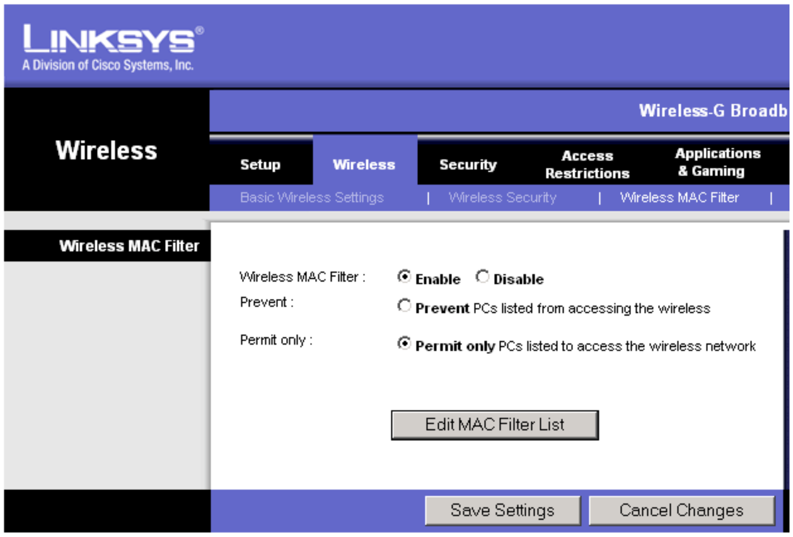
1. Click the Wireless Setup tab
2. Delete "linksys" from the "SSID" field
3. Enter your own unique SSID. Choose something easy to remember that doesn't identify you.
   A good option is your street name with no number, so people can't easily determine where your signal originates.
4. Click "Save Settings."

Enable Wireless MAC Filtering

Wireless MAC Filtering is a security feature that denies access to all wireless clients except those listed. A Media Access Control address (also known as a physical address) is a unique hardware identifier assigned to every network device. Please be aware that MAC filtering can be defeated by a skilled technician using a network traffic capture program. There are rarely attempts to discover and duplicate MAC addresses to access home networks, so the security is sufficient for most users.

1. Click the" Wireless" tab, then the "Wireless MAC filter" sub-heading
2. Click the "Enable" button to enable filtering.
3. Click the button labeled "Permit Only PC's Listed"
4. Click the "Edit MAC Filter List" button to display the list of authorized wireless devices, which should be empty initially.

5. **IMPORTANT**: Power on all wireless devices that will be connected to your network before proceeding.

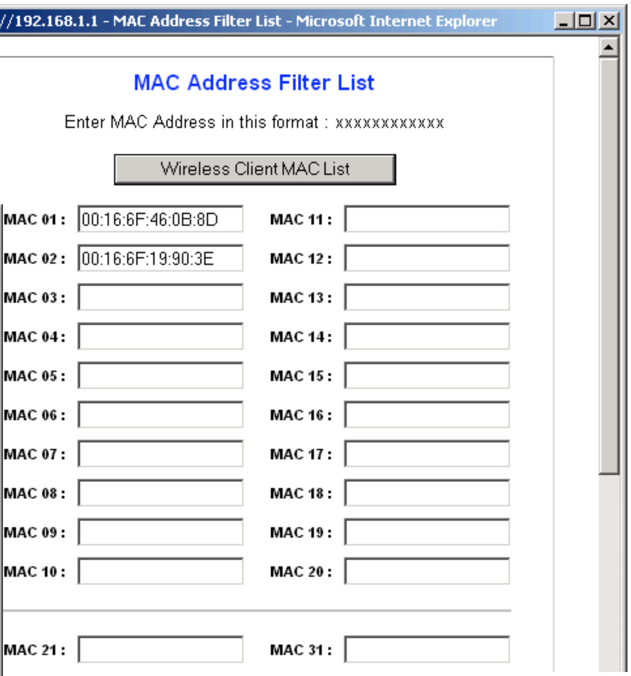


Wireless MAC Filter : ● Enable ○ Disable

Prevent : ○ **Prevent** PCs listed from accessing the wireless

Permit only : ● **Permit only** PCs listed to access the wireless network

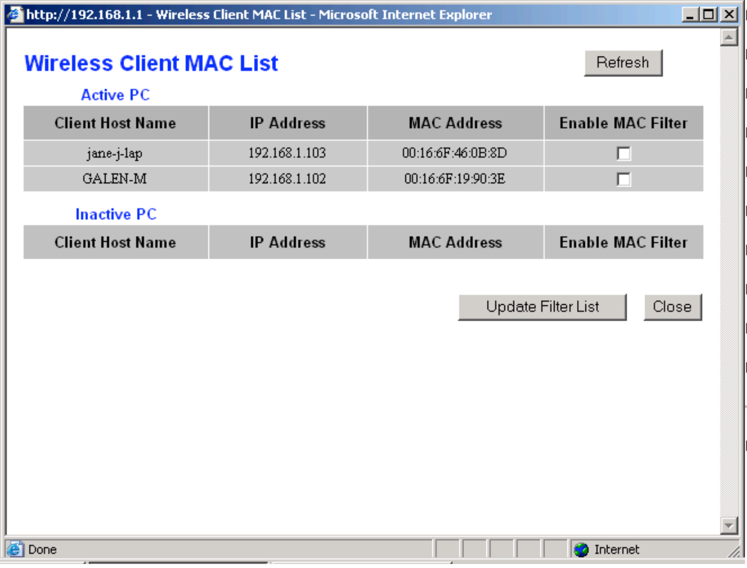
6. Click the "Wireless Client MAC list" button to show all active wireless devices.
7. Check the "Enable MAC filter" box next to all known wireless devices.
8. Click the "Update Filter List" button to add the checked MAC addresses to the MAC Address Filter List.
9. Click "Close" to exit the list of active clients


http://192.168.1.1 - MAC Address Filter List - Microsoft Internet Explorer

MAC Address Filter List

Enter MAC Address in this format : xxxxxxxxxxxx

MAC 01 :	00:16:6F:46:0B:8D	MAC 11 :	
MAC 02 :	00:16:6F:19:90:3E	MAC 12 :	
MAC 03 :		MAC 13 :	
MAC 04 :		MAC 14 :	
MAC 05 :		MAC 15 :	
MAC 06 :		MAC 16 :	
MAC 07 :		MAC 17 :	
MAC 08 :		MAC 18 :	
MAC 09 :		MAC 19 :	
MAC 10 :		MAC 20 :	
MAC 21 :		MAC 31 :	


http://192.168.1.1 - Wireless Client MAC List - Microsoft Internet Explorer
Refresh

Wireless Client MAC List

Active PC

Client Host Name	IP Address	MAC Address	Enable MAC Filter
jane-j-lap	192.168.1.103	00:16:6F:46:0B:8D	□
GALEN-M	192.168.1.102	00:16:6F:19:90:3E	□

Inactive PC

Client Host Name	IP Address	MAC Address	Enable MAC Filter

Update Filter List
Close
Done
Internet

10. Scroll down to the bottom of the MAC Address Filter List and click "Save Settings"
11. Click "Save Settings" at the bottom of the Wireless MAC Filter security screen.

If you get new hardware or have guests that need to access your network, simply add them to the MAC Address Filter List. You can go to a Windows Command Prompt screen and type the command "ipconfig/all" to display the physical (MAC) address of any computer's wireless interface. Alternatively, repeat the process above to refresh the filter list and click the Enable MAC filter button next to the MAC address of the new device.