

# How to set up Linksys WRT54G as wireless access point only (Version 2)

<a href="#">How to set up Linksys WRT54G as wireless access point only (Version 2)</a>	1
<a href="#">Why might you want to do this?</a>	1
<a href="#">Network</a>	1
<a href="#">WRT54G configuration</a>	2
<a href="#">1) Reset the WRT54G to factory defaults</a>	2
<a href="#">2) Connect a computer to the WRT54G</a>	3
<a href="#">3) Sign in to configure the WRT54G</a>	3
<a href="#">4) Setup/Basic Setup</a>	3
<a href="#">5) Rewire the LAN</a>	5
<a href="#">6) Setup/Advanced Routing</a>	5
<a href="#">Notes</a>	7

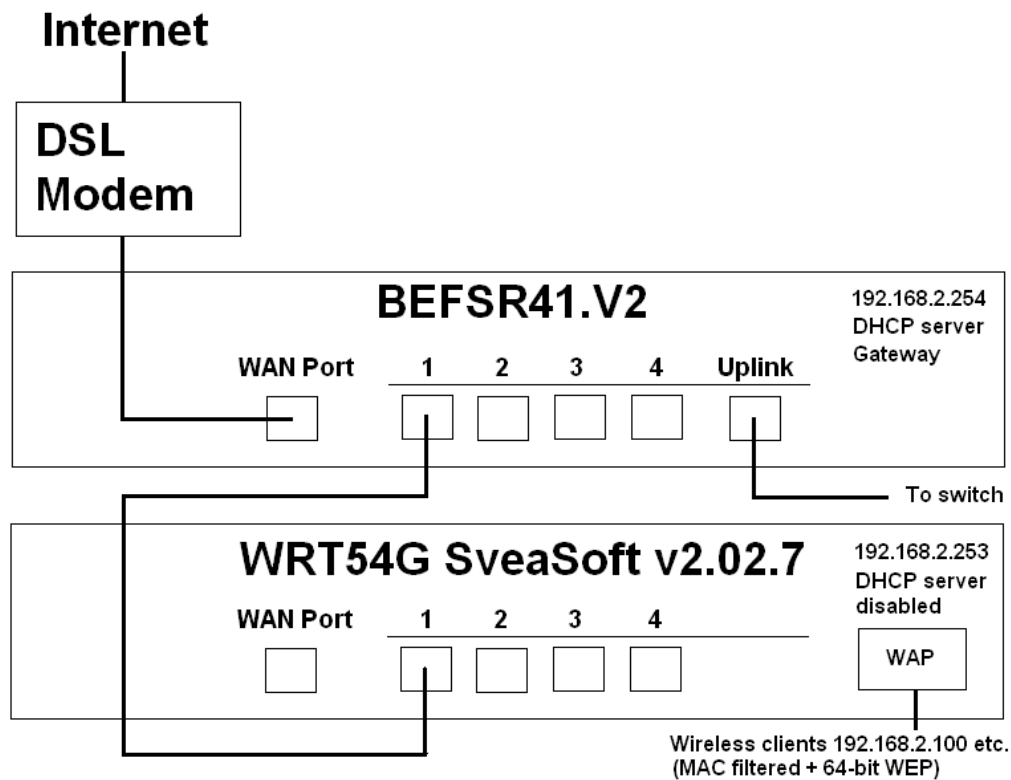
## ***Why might you want to do this?***

A few folks asked me this. My main reason was that my Linksys BEFSR41V2 wired router gave me the opportunity to forward WAN connection log records to Wallwatcher using SNMP. This feature did not exist on the WRT54G using the standard Linksys firmware, so I wanted to be able to use the BEF\* as my primary router and hang the WRT54G off it as a wireless access point.

Other reasons why you might want do to this include using the WRT\* unit as a wireless range extender, or to separate wireless clients from a wired router for security reasons. You also get to use the WRT54G as a switch for the connection of additional wired devices.

## ***Network***

The following diagram shows how I connected the equipment. Note that my WRT54G is a Version 2 unit. At the time I was using SveaSoft firmware.



As you can see, the network contains a mixture of wired and wireless clients. The DHCP server of the WRT54G is disabled, and its WAN connection is not used. The BEF\* router is the gateway for the LAN and manages the WAN connection. It also includes static DNS settings from my ISP. You might not need to worry about this, but if in doubt check with your ISP to find out what you need.

### ***WRT54G configuration***

There are other ways to “get there from here”, but this depends on how you are set up initially. Needless to say, I can’t be responsible for any problems that you might encounter.

#### **1) Reset the WRT54G to factory defaults**

The first thing you will probably need to do will be to “hard reset” the WRT54G to factory default settings. This WILL destroy any custom router settings, so be sure to make written notes of these so you will be able to recreate them later. This is NOT covered in this document. Refer to your router’s manual and your ISP as may be required.

To reset the router, use a paper clip or something similar to hold down the recessed switch marked “Reset” for at least twenty seconds. If in doubt, refer to your router manual.

## **2) Connect a computer to the WRT54G**

Next, connect a computer to one of the four numbered ports on the back of the router using a regular Ethernet patch cable. It should be set up to use DHCP to acquire a dynamic address.

## **3) Sign in to configure the WRT54G**

Now use your web browser to sign in to the configuration web site on the router using the default gateway address <http://192.168.1.1>, and the default password “admin”. Refer to your router manual if you are not sure.

## **4) Setup/Basic Setup**

Setup/Basic Setup options should now be configured as follows:

1. Disable the router's DHCP server (clients will use the server on the BEF\* router at 192.168.2.254, which is also the gateway).
2. Set a static IP address for the WRT54G itself (I used 192.168.2.253).
3. Set the gateway address.

Setup

Setup

Wireless

Security

Access  
Restrictions

Applications  
& Gaming

Administration

Status

Basic Setup

DDNS

MAC Address Clone

Advanced Routing

VLANs

Internet Setup

Internet Connection Type

Optional Settings  
(required by some ISPs)

Automatic Configuration - DHCP

Router Name:

Host Name:

Domain Name:

MTU:

Size:

Network Setup

Router IP

Local IP Address:  .  .  .

Subnet Mask:

Gateway:  .  .  .

Local DNS:  .  .  .

Network Address  
Server Settings (DHCP)

DHCP Server:  Enable  Disable

Starting IP Address:

Maximum Number of DHCP Users:

Client Lease Time:  minutes

Static DNS 1:  .  .  .

Static DNS 2:  .  .  .

Static DNS 3:  .  .  .

WINS:  .  .  .

Time Setting

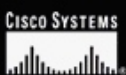
Time Zone:

Automatically adjust clock for daylight saving changes

Save Settings

Cancel Changes

Enhanced By  
SVEASOFT



When you have made your changes, hit the "Save Settings" button at the foot of the page. The WRT54G will then reboot and you will lose your connection.

## 5) Rewire the LAN

Now you have to connect the equipment as shown in the “Network” diagram above.

## 6) Setup/Advanced Routing

The following steps might not be required, but this is what I did to get it working for me.

Configure Setup/Advanced Routing as below.

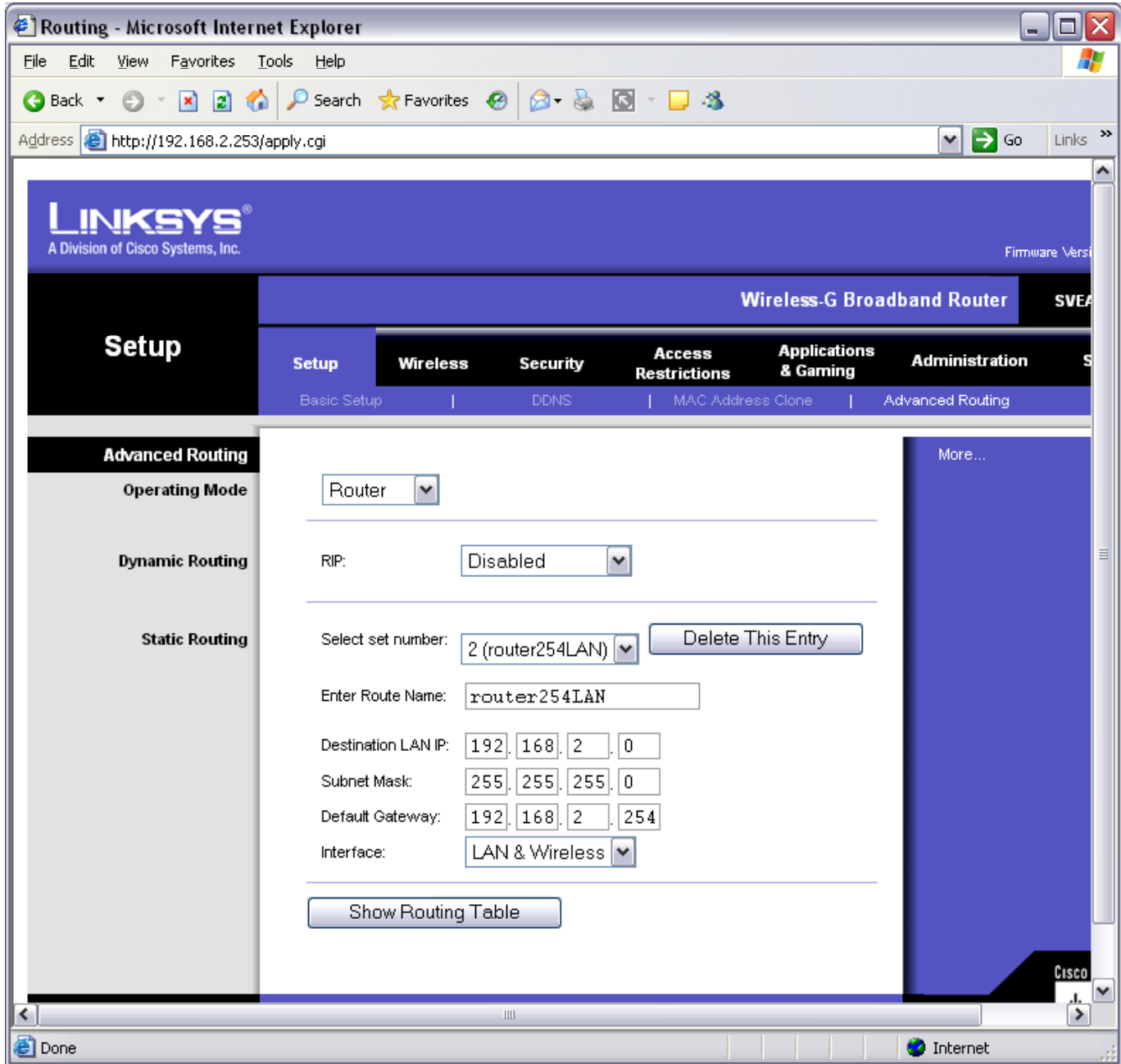
1. Configure the default route:

The screenshot shows the Linksys router's web interface in Microsoft Internet Explorer. The browser address bar shows `http://192.168.2.253/Router.asp`. The page title is "Routing - Microsoft Internet Explorer". The interface is for a "Wireless-G Broadband Router". The "Setup" menu is open, and the "Advanced Routing" section is selected. Under "Advanced Routing", the "Static Routing" tab is active. The "Operating Mode" is set to "Router". The "RIP" option is "Disabled". A static route is configured with the following details:

- Select set number: 1 (router245def)
- Enter Route Name: router245def
- Destination LAN IP: 0 . 0 . 0 . 0
- Subnet Mask: 255 . 255 . 255 . 255
- Default Gateway: 192 . 168 . 2 . 254
- Interface: LAN & Wireless

Buttons for "Show Routing Table", "Save Settings", and "Cancel Changes" are visible at the bottom of the configuration area.

2. Route for the LAN:



3. The Routing Table now looks like this:

The screenshot shows a web browser window with the address bar containing 'http://192.168.2.253 - Routing Table - Microsoft Internet Explorer'. The main content area displays a table titled 'Routing Table Entry List' with a 'Refresh' button in the top right corner. The table has four columns: 'Destination LAN IP', 'Subnet Mask', 'Gateway', and 'Interface'. It contains three rows of data. Below the table is a 'Close' button. The browser's status bar at the bottom shows 'Done' and 'Internet'.

Destination LAN IP	Subnet Mask	Gateway	Interface
0.0.0.0	255.255.255.255	192.168.2.254	LAN & Wireless
192.168.2.0	255.255.255.0	192.168.2.254	LAN & Wireless
192.168.2.0	255.255.255.0	0.0.0.0	LAN & Wireless

## Notes

I wrote up the first version of this document so I'd be able to remember how recreate the configuration. Since then, the information has proved to be quite popular, so I updated it and provided additional explanations. If you have any comments or questions you can e-mail me here: [info@michaelcook.ca](mailto:info@michaelcook.ca).

You can check out other HOWTO's [here](#) and various Hints and Tips [here](#).

My other web site is at [www.michaelcook.ca](http://www.michaelcook.ca).

Right now I am using Sveasoft's free Alchemy-V1.0 v3.37.6.8svV1.0 v3.37.6.8sv firmware. See <http://www.linksysinfo.org/> for more information on this and other 3<sup>rd</sup> party firmware for the WRT54G.

[End of document – Version 2 – 2006-08-22]