

# SD-WAN: Cisco Linksys WRT54GL – flashing firmware & config

**Overview:** upload SD-WAN firmware to router, reboot, and config ready for shipping to customer.

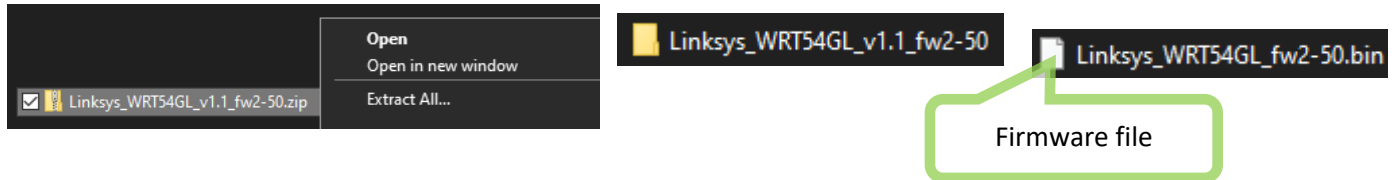
You will need:

- PC or Mac with an **Ethernet** port
- Custom SD-WAN **firmware** for the WRT54GL
- Unique SD-WAN **configuration** settings

WRT54GL v.4.0



Ensure that you already downloaded the firmware file “Linksys\_WRT54GL\_v1.1\_fw2-50.zip”. Right-click and extract the file and double-click into the folder “Linksys\_WRT54GL\_v1.1\_fw2-50” to locate the firmware file:



## Step 1: Upload firmware

Plug in the power and turn ON the WRT54 router.

Remove the sticker from the rear, and dispose.

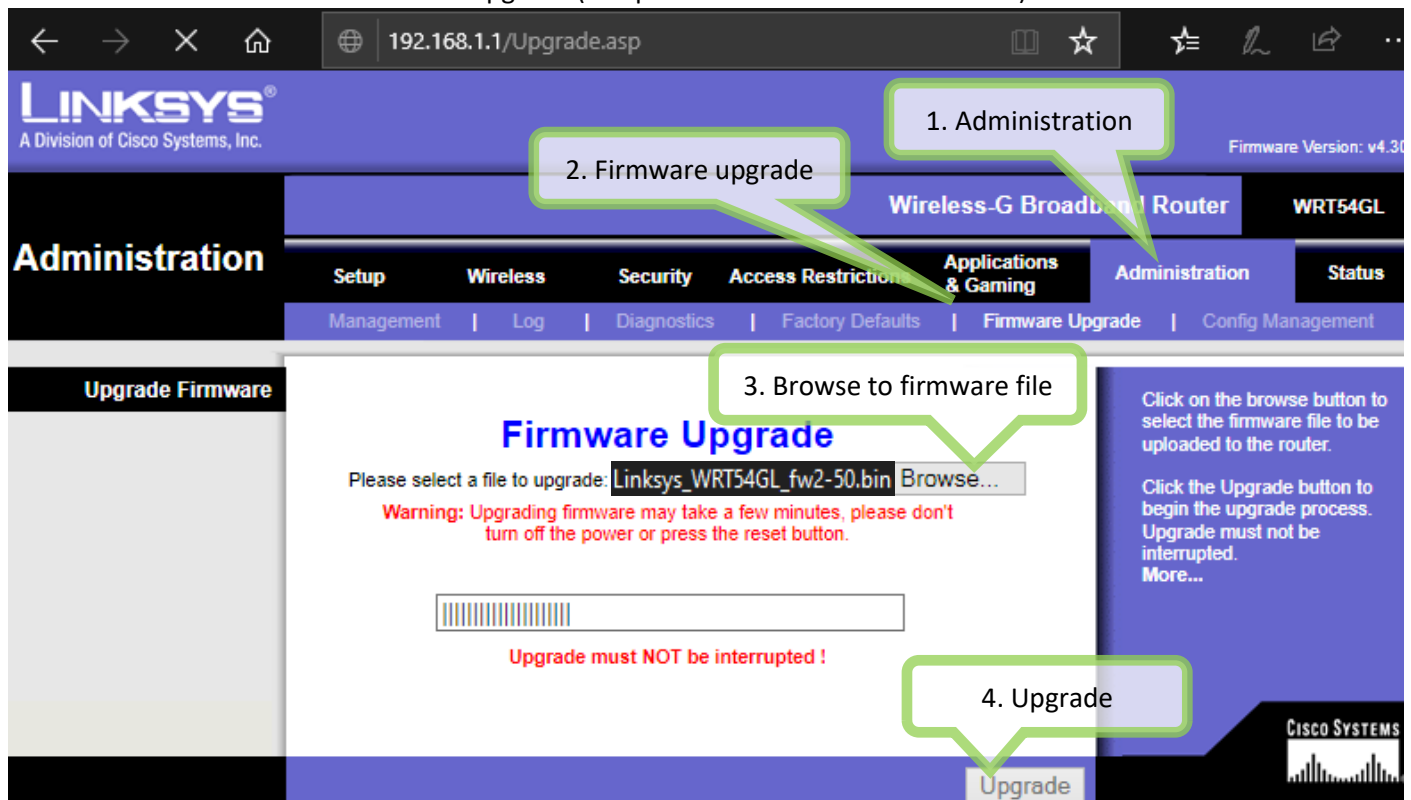


Turn off your WiFi, and connect the supplied LAN cable from your computer to LAN port 1 on the WRT54 router:



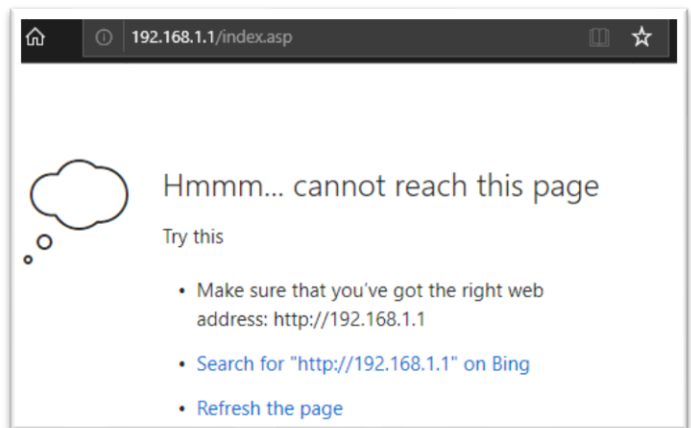
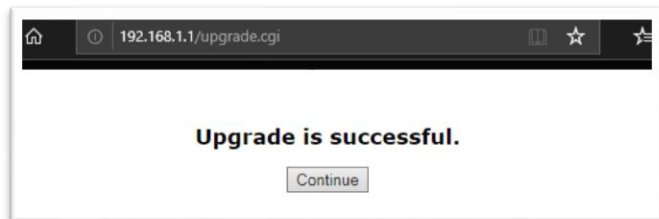
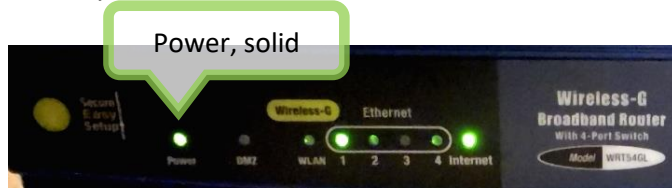
On your computer go to <http://192.168.1.1> and log in using the username **admin** and the password **admin**

...browse to the firmware file and click upgrade (this process will take over 5 minutes)



## Step 2: Remove unwanted items, reconnect LAN cable, log into SD-WAN

During the firmware upload process (**at least 5 minutes**) the lights will flash. Once the power light remains **solid**, remove your network cable for 1 minute, then reconnect (*the original IP address is no longer valid – it's changed*)



...whilst you are waiting dispose of (recycle) any unwanted items such as:



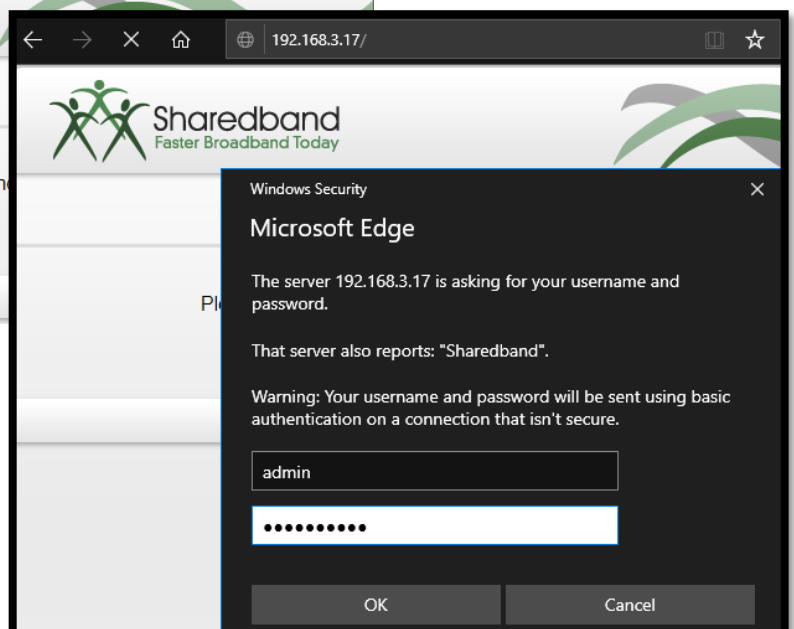
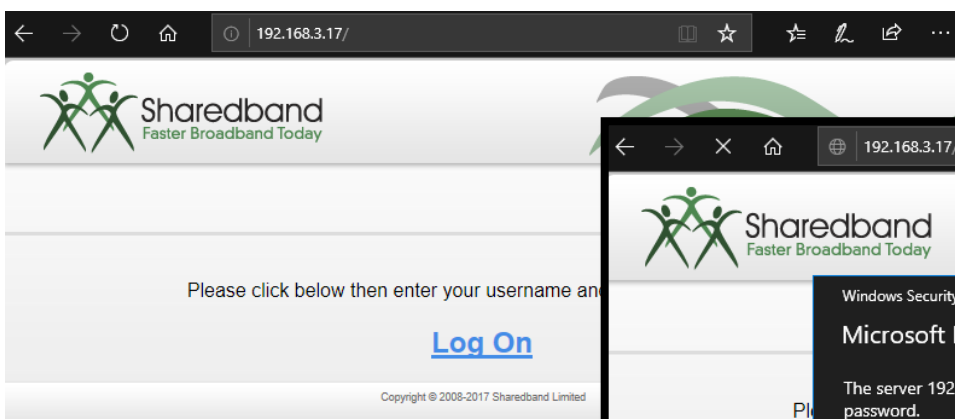
2 x antenna (**unscrew**)

1 x CD

All paperwork/manuals

*(We don't want these left in the box as they may confuse the customer!)*

On your computer go to <http://192.168.3.17> and login using the SD-WAN username **admin** and the password **Bonding123**



### Step 3: Configure and test

Navigate to **Settings > WAN connection setup**. Change the **WAN MTU** to **1456** and click **Save**.

**Main Menu**  
> **Settings**  
**Status**

**Interfaces**  
[LAN settings](#)  
[WAN connection setup](#)

## WAN Connection Setup

**Connection**  
Connection type:

**Hotspot Details**  
Hotspot provider:   
SSID:   
Username:   
Password:

**IP Addressing**  
IP Addressing Mode:   
IP Address:  .  .  .   
Subnet Mask:   
Default Gateway:  .  .  .   
DNS Server:  .  .  .   
PPP Username:   
PPP Password:

**Connection Mode**  
WAN MTU:   
Failover mode?:

Navigate to **Settings > WAN Web Access Control**. Select **Open** and click **Save**.

**Main Menu**  
> **Settings**  
**Status**

**Administration**  
[Change password](#)  
[WAN Web Access Control](#)

## WAN Web Access Control

Web Remote Access:

Restricted Range 1:  .  .  .  /   
Restricted Range 2:  .  .  .  /   
Restricted Range 3:  .  .  .  /   
Restricted Range 4:  .  .  .  /   
Restricted Range 5:  .  .  .  /

Now navigate to **Settings > Sharedband service configuration**. Enter the SD-WAN **settings** and click **Save and reboot** (it takes about 2 minutes to reboot)

Main Menu

> Settings

Status

Diagnostics

Contact Us

Log Out

Interfaces

[LAN settings](#)

[WAN connection setup](#)

Sharedband

[Sharedband service configuration](#)

Service Configuration

Your Username

bt123x45678

Your Password

••••••••

Community ID number

123

Router identifier

1

Aggregation Server IP Address

101

.

102

.

103

.

0

Save

Save and reboot

You will have been provided with the **unique SD-WAN settings** for this specific unit: *(the above are only an example)*

|                                 |  |
|---------------------------------|--|
| SD-WAN username                 |  |
| SD-WAN password                 |  |
| Community ID                    |  |
| Aggregation server IP           |  |
| Router serial number (on label) |  |

**Optional: test**

If you have an internet router and a spare cable, connect **1 end of the cable to the WAN** port of the WRT54 router and connect the **other end to your existing internet router**. After waiting for it to reboot (2 minutes) navigate to **Status** and confirm that the “Internet Connection” and “Aggregation Server” are both “Active”:



Main Menu

Settings

> Status

Diagnostics

Contact Us

Log Out

Service Status

Internet Connection Status **Active**

Aggregation Server Status **Active**

Routing Mode **Via WAN only**

Community Information

Number of live Sharedband routers 1 [\[diagnostics\]](#)

Number of accessible connections 1

#### Step 4: Box up for shipping

Make a note of the **serial number** on the label (we need to know which SD-WAN config has been saved to which router) and place the router in the box, ready for shipping, as follows:

- Power supply
- LAN cable
- Router



[End of article]