

## DD-WRT - Setting up a separate / isolated VLAN on Port 4 with DHCP

Contributed by Kevan

Our scenario:

We wanted to separate 1 port on our WRT54G/S/L or Buffalo WHR-G54s and provide access to the internet but prevent access to the other ports on VLAN0. There were several reasons we came up with to configure a router this way:

- Create a separate VLAN to customers or vendors to connect to while they are in the office.
- Create a separate VLAN to connect a FON community router.
- Keep your roommate isolated from your network but share your internet connection. In this example we will separate port 4 from ports 1, 2 and 3. It will move to VLAN2 on a network of 192.168.2.0. DHCP will also be setup to hand out IP addresses on the new network.

Our scenario:

We wanted to separate 1 port on our WRT54G/S/L or Buffalo WHR-G54s and provide access to the internet but prevent access to the other ports on VLAN0. There were several reasons we wanted to configure our router this way:

- Create a separate VLAN to customers or vendors to connect to while they are in the office.
- Create a separate VLAN to connect a FON community router.
- Keep your roommate isolated from your network but share your internet connection. In this example we will separate port 4 from ports 1, 2 and 3. It will move to VLAN2 on a network of 192.168.2.0.

1) Install the v.23 dd-wrt SP1 final, SP2 beta or v.24 alpha version of firmware available [HERE](#) -- Instructions for installing DD-WRT are available [HERE](#)

2) Telnet to your router and enter the username of root and your administrative password.

3) Copy the following script and paste on the command line.

----- Copy starting below this line. -----

```
nvramp set vlan0ports="1 2 3 5*"
nvramp set vlan2ports="4 5*"
nvramp set rc_startup='
#!/bin/ash
PATH="/sbin:/usr/sbin:/bin:/usr/bin:${PATH}"

ifconfig vlan2 192.168.2.1 netmask 255.255.255.0

ifconfig vlan2 up
,
nvramp set rc_firewall='
iptables -I INPUT -i vlan2 -j ACCEPT
iptables -I FORWARD -i vlan2 -o vlan1 -m state --state NEW -j ACCEPT
iptables -I FORWARD -i vlan2 -o ppp0 -m state --state NEW -j ACCEPT
iptables -I FORWARD -i br0 -o vlan2 -j logdrop
,
nvramp commit
```

----- Stop here when selecting text to copy -----

4) Back to the web management interface in DD-WRT. Select the Setup tab and then select the VLAN sub-tab.

5) On port 4 de-select VLAN 0 and select VLAN 2.

6) Click the Save Settings button at the bottom of the page.

7) Select the Administration tab and then the Management sub-tab.

8) Scroll down until you find the DNS MASQ section of the Management tab.

9) In the Additional DNS Options box paste the following:

----- Copy starting below this line. -----  
interface=vlan2  
dhcp-range=192.168.2.100,192.168.2.149,255.255.255.0,1440m

----- Stop here when selecting text to copy -----

10) Click the Save Settings button at the bottom of the page.

11) Back to the telnet window. At the prompt type reboot and hit <enter>

You should now have a WRT54G/S/L running DD-WRT with port 4 on its own VLAN/Network with access to the internet.

If you have any questions or issues please leave a comment and we will see if we can help.