

## DD-WRT - Multiple SSIDs - 1 for FON - 1 for Private Network

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### SCENARIO:

When version 24 of DD-WRT was released in beta, one of the first things I wanted to accomplish was to setup FON on 1 SSID and my internal network on another SSID. It took me a while to find the time to work on it but here is how I set it up. I tested this on a WRT54G v4, WRT54GS v1 and a Buffalo WHR-G54S running WPA and WEP for the internal network security.

### STEPS:

- 1) Install the v.24 dd-wrt standard beta version (we are using the 2006-0911 release) of firmware available [HERE](#) -- Instructions for installing DD-WRT on the WRT54G or GS are available [HERE](#)
- 2) Logon to the web management interface in DD-WRT. Click the Wireless tab, under the Virtual Interfaces click the Add button.
- 3) Set the Physical Interface SSID and the set Virtual Interface SSID to FON\_HotSpot. Enable AP Isolation and set the Network Configuration to Unbridged. Scroll to the bottom and select Save Settings.
- 4) The IP Address and Subnet Mask fields should now be present at the bottom of the form. Enter the IP Address of 192.168.181.1 and a subnet mask of 255.255.255.0. Scroll to the bottom and select Save Settings.
- 5) Click the Wireless Security sub-tab. Change the Security Mode for the Physical Interface to what ever security you want to use for your LAN. (On the FON interface the the Security Mode should remain at disabled.) Scroll to the bottom and select Save Settings.
- 6) Click the Administration tab and click the Info Site Password Protection check box. Scroll to the bottom and select Save Settings.
- 7) Click the Hotspot sub-tab. Verify that Chillispot is set to Disable. Scroll to the bottom and select Save Settings.
- 8) Click the Commands sub-tab. Select the following text and paste it into the Commands window. Scroll to the bottom and select Save Startup.

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

```
#!/bin/sh
```

```
##
```

```
# The following lines create /tmp/chilli.conf
```

```
echo -n `
dhcpif wl0.1
radiusserver1 radius01.fon.com
radiusserver2 radius02.fon.com
macauth
radiussecret garrafon
uamserver https://login.fon.com/cp/index.php
uamsecret garrafon
```

```
uamallowed www.fon.com,acceso.fon.com,en.fon.com,es.fon.com
uamallowed www.paypal.com,www.paypalobjects.com
uamanydns
net 192.168.182.0/24
dynip 192.168.182.0/24
' > /tmp/chilli.conf
```

```
echo -n "radiusnasid `nvram get w10_hwaddr|sed -e s/:-/g`" >>/tmp/chilli.conf
```

```
# We need to wait 5 seconds to make sure we have our WAN DHCP lease and DNS info.
```

```
sleep 5
```

```
echo `nvram get wan_get_dns` | sed -e 's/[0-9]/=&/' -e 's/ /%/' -e 's/=/\ndns1 /' -e 's/%/\ndns2 /' >> /tmp/chilli.conf
```

```
#The following statement adds a statement to cron.d that runs a heartbeat to fon each night at 2am.
```

```
echo '00 02 * * * root /usr/bin/wget "http://download.fon.com/heartbeat.php?mac=`nvram get w10_hwaddr|sed s/:-/g`" -O /tmp/inet.html' > /tmp/cron.d/heartbeat
```

```
# Runs the heartbeat to fon at startup.
```

```
/usr/bin/wget "http://download.fon.com/heartbeat.php?mac=`nvram get w10_hwaddr|sed s/:-/g`"
```

```
sleep 15
```

```
# Execute chillispot
```

```
/usr/sbin/chilli --conf /tmp/chilli.conf
```

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

I received a tip from the\_wanderer. If you have three DNS servers supplied by your ISP try replacing:

```
echo `nvram get wan_get_dns` | sed -e 's/[0-9]/=&/' -e 's/ /%/' -e 's/=/\ndns1 /' -e 's/%/\ndns2 /' >> /tmp/chilli.conf
```

With :

```
echo `nvram get wan_get_dns` | sed -e 's/[0-9]/=&/' -e 's/ /%/' -e 's/ // ' -e 's/=/\ndns1 /' -e 's/%/\ndns2 /' -e 's//\n# Extra Dns /' >> /tmp/chilli.conf
```

9) Again, select the following text and paste it into the Commands window. Scroll to the bottom and select Save Firewall. (You can change the DOWNLINK and UPLINK settings in the text below to whatever bandwidth you want to be available to your FON users. Setting is in kb/s)

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

```
#!/bin/sh
```

```
##
```

```
iptables -I INPUT -i tun0 -j ACCEPT
iptables -I FORWARD -i tun0 -o vlan1 -m state --state NEW -j ACCEPT
iptables -I FORWARD -i tun0 -o ppp0 -m state --state NEW -j ACCEPT
iptables -I FORWARD -i br0 -o tun0 -j logdrop
```

```
iptables -A FORWARD -i tun0 -j DROP;
iptables -t nat -I PREROUTING -i tun0 -d `nvram get lan_ipaddr`/`nvram get lan_netmask` -j DROP
```

```
DEV="tun0"
DOWNLINK="1024"
UPLINK="256"
```

```
tc qdisc del dev $DEV root
tc qdisc del dev $DEV ingress
```

```
# limit download
```

```
tc qdisc add dev $DEV root handle 1: htb
tc class add dev $DEV parent 1: classid 1:1 htb rate ${DOWNLINK}kbit burst 6k
tc filter add dev $DEV parent 1: protocol ip prio 16 u32 match ip dst 192.168.182.1/24 flowid 1:1
```

```
# limit upload
```

```
tc qdisc add dev $DEV ingress handle ffff:
tc filter add dev $DEV parent ffff: protocol ip u32 match ip src 0.0.0.0/0 police rate ${UPLINK}kbit burst 10k drop flowid :1
```

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

10) Click the Management sub-tab and scroll to the bottom and click the Reboot Router button.

11) Now connect to your router via the FON ssid and login to fon.com. Login or create your fon.com account. Once your router is registered your setup should be complete.

Good luck! (Don't forget to go to the Management sub-tab and change your routers password.)

\*\*\* Just a note... the drivers on some wireless cards handle the multi SSIDs differently. On some cards when connected to 1 of the SSIDs won't display the other SSID. Just disconnect from the currently connected SSID and you should be able to see both SSIDs. \*\*\*