

Thanks to the efforts of Bill Becks (WA8WG), and Dick Wilcox (W7IF) we have a fix for some dropout issues some of the DMR users have been experiencing, along with the WPSD Dashboard software that some of us use.

WPSD WIFI Deletion Bug Fix

Just a heads-up that Chip, WOCHP pushed a fix for the newer Bookworm OS versions of the WPSD Dashboard to address

an issue that Dick and I discovered recently whereby we could not delete WIFI connections via the Dashboard UI.

Prior to todays update (fix), it was necessary to SSH into the Hotspot to manually delete unwanted/unused WIFI connection definitions.

87c8801703 - (61 minutes ago) Fix wifi connection deletion issue - Chipster (HEAD-> master, origin/master, origin/HEAD)
admin/wifi-manager.php | 6 +++---

DMR Packet Loss Fix

Dick, W7IF and I were in communications earlier today that lead to analysis of short duration Internet packet loss that naturally resulted in

the loss of words or parts of sentences to be lost at the receiving end of a DMR (Spokane Valley) transmissions. Initial internet testing from

Dick's home network did not reveal any latency or packet loss using various Linux tools as well as having run a couple of Internet speed tests

from Dick's Windows computer.

The thought then focused on Brand Meister Server 3103 (Los Angeles) as possibly experiencing congestion due to the volume of users linked to that server. As a test, Dick and I both configured our DMR Masters in Pi-Star/WPSD to use BM3104 for a test and immediately the drop outs were far and few between as compared to BM3103. A while later, I took a look at my own WPSD Dashboard and found that Internet V6 was enabled in addition to Internet Version 4.

The significances being that from my experience, the network stack in most Windows and Linux devices will sometimes attempt to route traffic via the live Internet V6 network stack. I disabled IPV6 in my WPSD Dashboard then contacted Dick to disable his as well. We repeated our test again, with long winded transmissions (Easy for me to do) and found that there were even fewer noticeable drop outs. Not that our initial findings are conclusive by any means, the improvements were very noticeable.

If any of you would like to join our trial, it's easy enough to change the BM Master Server in your Dashboard configurations. However, I would encourage disabling of the IPV6 protocol stack in your dashboards as well and am including the Linux command line commands below for reference.

Login via SSH, or through the Dashboard GUI as your particular dashboard permits and submit the Linux terminal commands listed below.

```
sudo nano /etc/sysctl.conf
```

(Add the following to the bottom of the existing file)

```
net.ipv6.conf.all.disable_ipv6=1
```

```
net.ipv6.conf.default.disable_ipv6=1
```

```
net.ipv6.conf.lo.disable_ipv6=1
```

```
net.ipv6.conf.eth0.disable_ipv6=1
```

(Save the file, save and exit)

```
sudo service procs force-reload
```

That's it. IPV6 has been disabled. You can confirm by submitting **ifconfig** while still logged into your Pi-Star or WPSD Dashboard.

Look for the active network interface that should only display an IPV4 address.

IE:

```
pi-star@pi-star:~ $ ifconfig
```

```
eth0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
```

```
    ether dc:a6:32:02:81:41 txqueuelen 1000 (Ethernet)
```

```
    RX packets 0 bytes 0 (0.0 B)
```

```
    RX errors 0 dropped 0 overruns 0 frame 0
```

TX packets 0 bytes 0 (0.0 B)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536

inet 127.0.0.1 netmask 255.0.0.0

loop txqueuelen 1000 (Local Loopback)

RX packets 279870 bytes 21039520 (20.0 MiB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 279870 bytes 21039520 (20.0 MiB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

inet 192.168.0.75 netmask 255.255.255.0 broadcast 192.168.0.255

ether dc:a6:32:02:81:42 txqueuelen 1000 (Ethernet)

RX packets 389647 bytes 84932009 (80.9 MiB)

RX errors 0 dropped 10507 overruns 0 frame 0

TX packets 408445 bytes 132118734 (125.9 MiB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0