

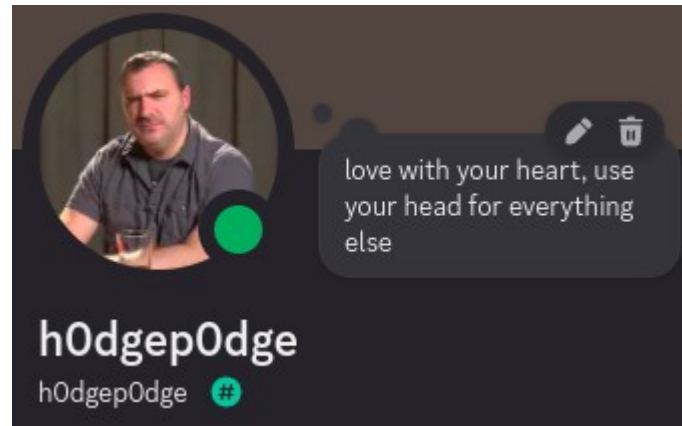
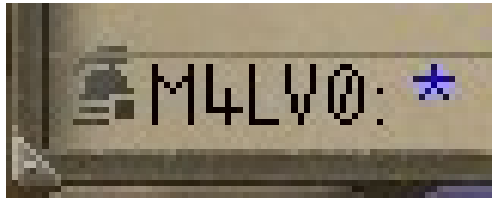
Wireless Freedom and New-Found Superpowers

Robbie Mckennie

Who am I?

Robbie

Black magic, voodoo, and radio waves



What is OpenWRT?



History

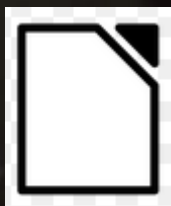


Round of applause for GNU



Forks













The Ecosystem

- LuCi, a well featured and expressive web UI

OpenWrt

StatusSystemVPNServicesNetworkLogout

OpenVPN

OpenVPN instances

Below is a list of configured OpenVPN instances and their current state

Name	Enabled	Started	Start/Stop	Port	Protocol		
custom_config	<input type="checkbox"/>	no	start	-	-	Edit	Delete
sample_server	<input type="checkbox"/>	no	start	1194	udp	Edit	Delete
sample_client	<input type="checkbox"/>	no	start	-	udp	Edit	Delete
NLMiramUDP443E3	<input checked="" type="checkbox"/>	yes (9992)	stop	443	udp	Edit	Delete

Template based configuration

Select template ...

Add

OVPN configuration file upload

Browse...

No file selected.

Upload

Save & Apply

Save

Reset

Build environment

- Well designed build system, good documentation on system requirements
- Docker <3

Build environment

- Integrate packages into the image to save space, remove packages to save memory
- Build for a million different targets
- Customize the kernel if you're brave

SDK

- Creates a cross compilation chain bespoke for your image
- Haven't used it, but theoretically a great idea

Package Manager

- Like any grown up distro

Package Manager

- Like any grown up distro

Demo?

- If I got around to setting it up

So why use it?

- It's cool

So why use it?

- Give your router super powers
- VPNs
- Packet capture, wireless monitoring
- Web services
- Docker, and all that implies

Freedom

- Freedom is weird to talk about
- Often abstract, hard to understand how it affects our lives

SXT 5HnD

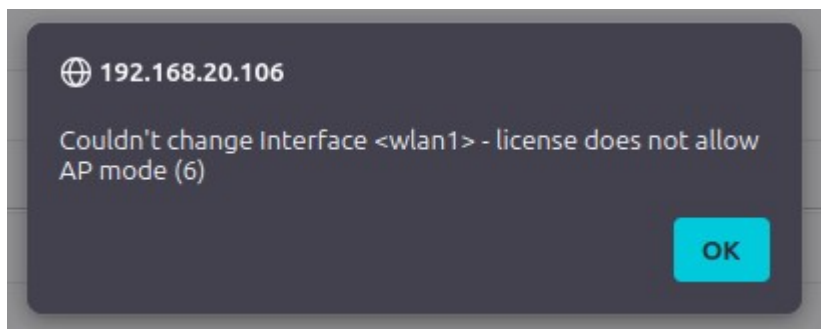
16dBi dual pol CPE or PtP 802.11n TDMA



Our integrated outdoor unit for Point-to-point, or as a CPE device for point-to-multipoint.

Mikrotik License Levels

Level number	0 (Trial mode)	1 (Free Demo)	3 (WISP CPE)	4 (WISP)	5 (WISP)	6 (Controller)
Price	no key ↗	registration required ↗	not sold separately	\$45	\$95	\$250



OpenWRT Saves the Day

- If Mikrotik get to decide what AP mode I get to use, do I really own that device?

Thanks