Kickstart 2: GL.inet Opal SFT1200 router

This material is prepared for use in *PROSA Secure Network* and was prepared by Henrik Kramselund, `hkj@zencurity.com`.

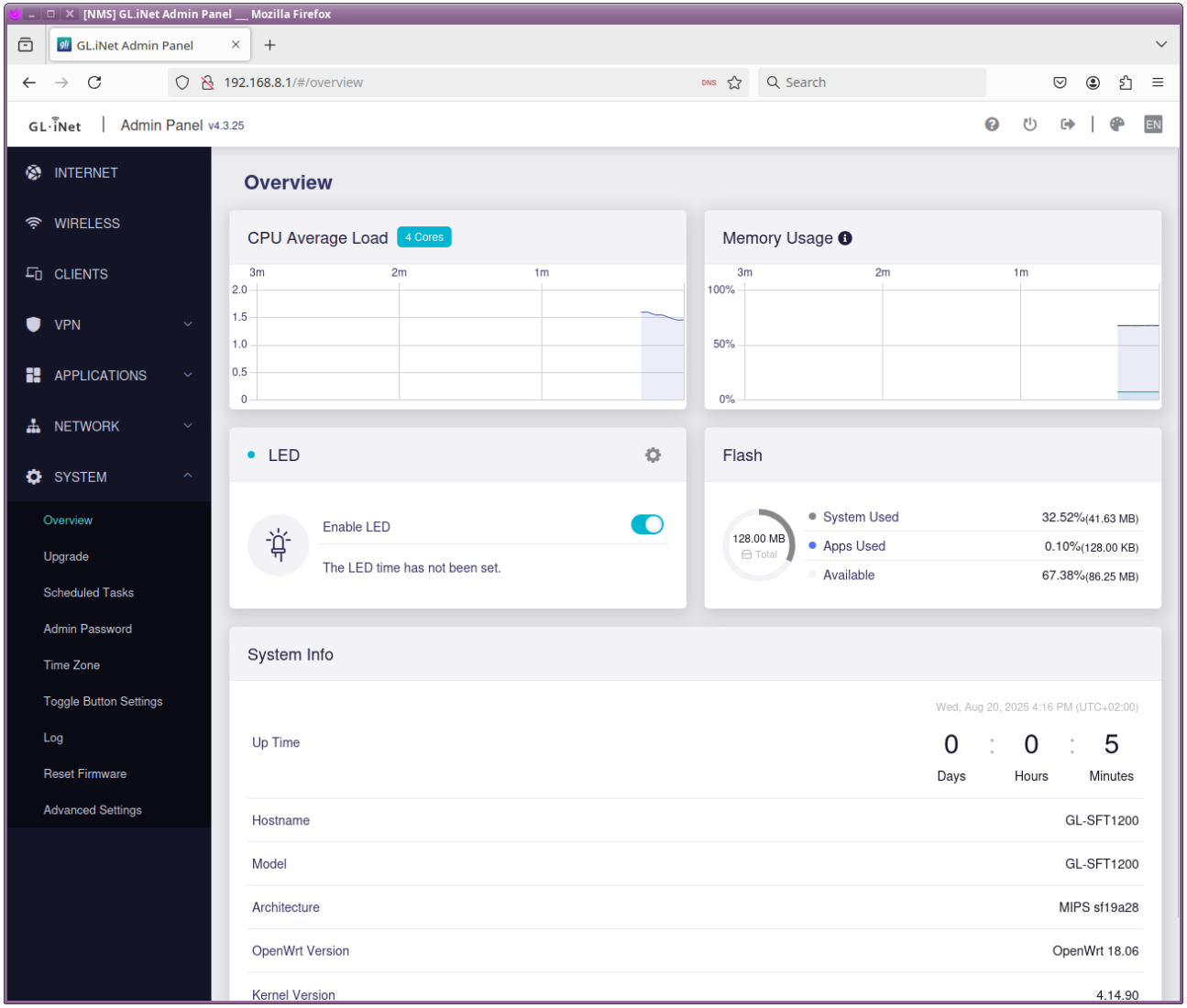
I have recommended buying a small router from GL.inet, which contains a lot of features.

- When learning and investigating it is nice to have a *lab network* – make changes, play with settings, break things
- If you live alone, and are not in a remote meeting – play with you own network!
- I recommended the small GL-Inet Opal (GL-SFT1200) Wireless Travel Router
  `https://store.gl-inet.com/products/opal-gigabit-wireless-pocket-sized-openwrt-ipv6-sft1200`
- It has 2 LAN ports for connecting, 1 WAN port for Internet or can act as a Wi-Fi client. All powered by USB-C etc.
- Manual and documentation `https://docs.gl-inet.com/router/en/4/user_guide/gl-sft1200/`

The following pages show screenshots with comments. The screenshots show some of the features that I find very interesting with the Opal router.

Kickstart 2: GL.inet Opal SFT1200 router

Opal router contains a modern web interface



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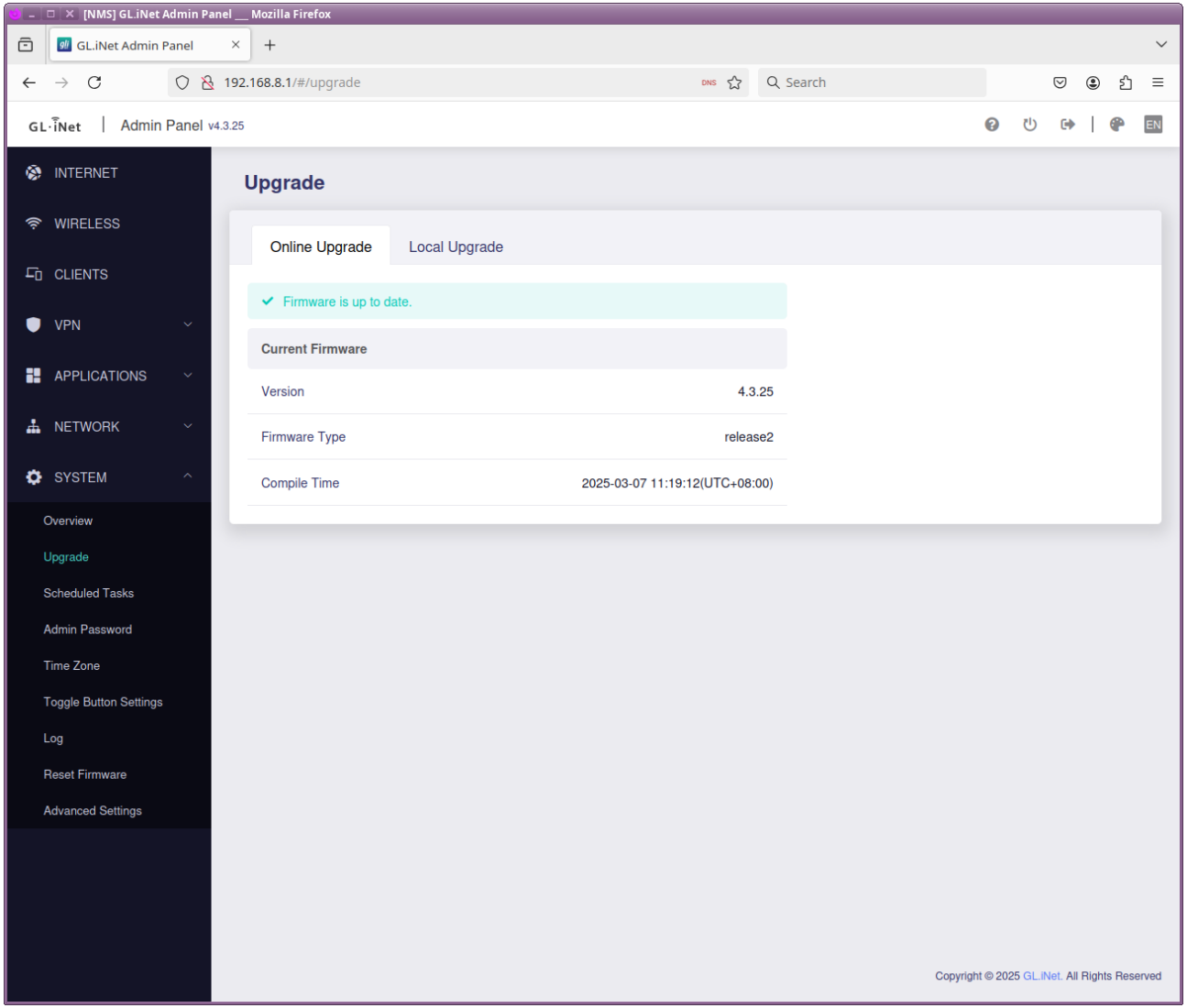
Firmware upgrade is easy to find and perform:



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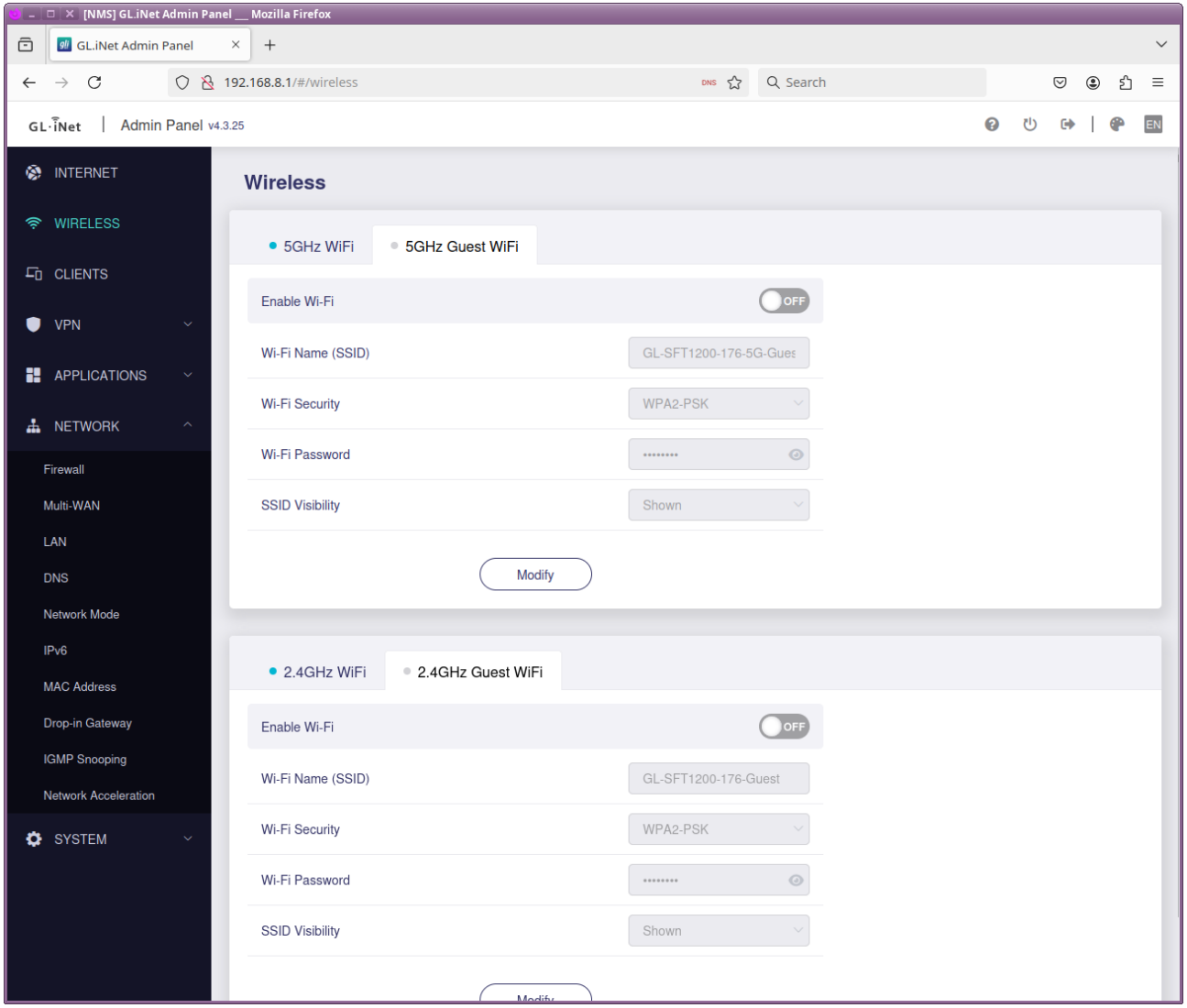
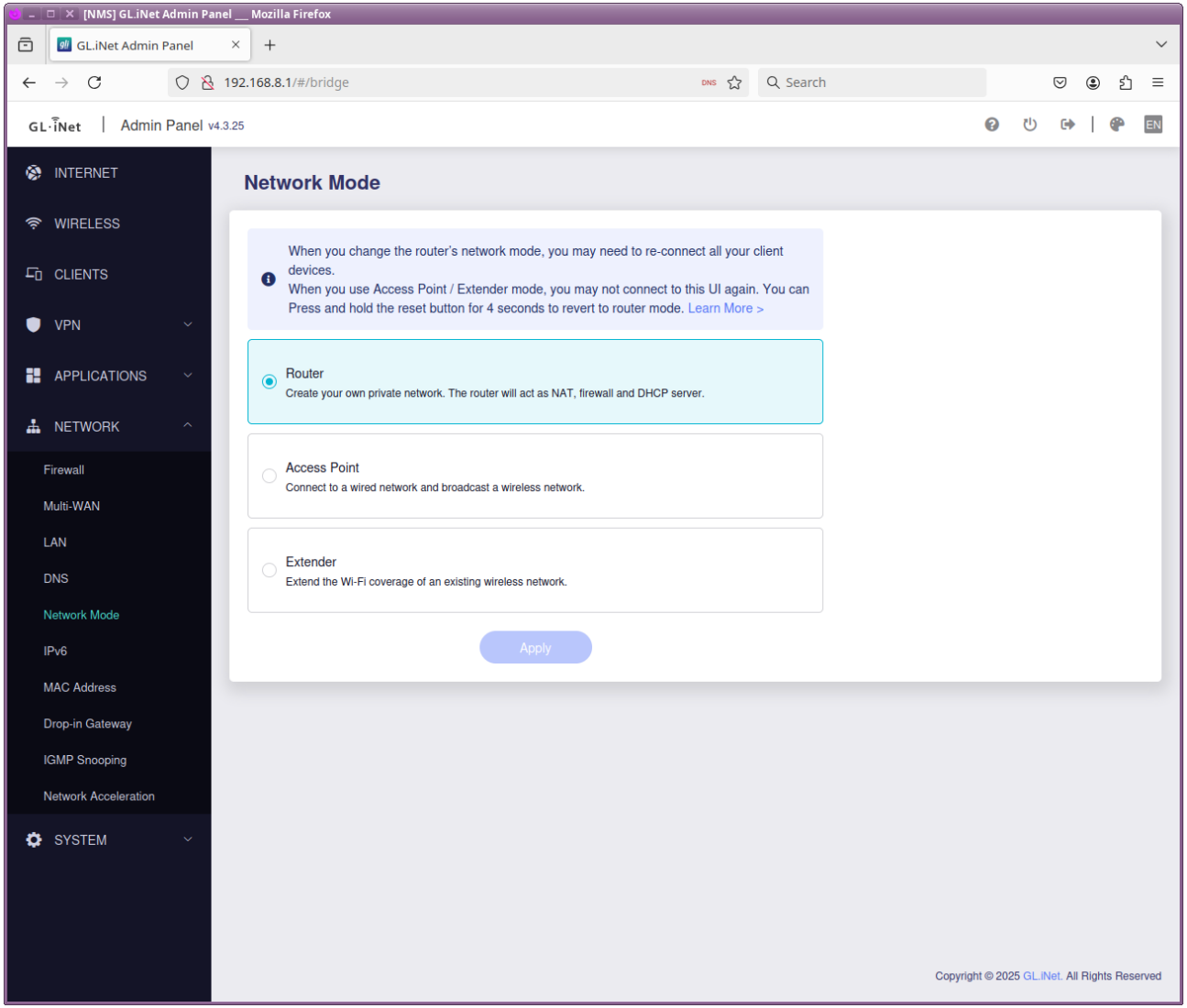
Guest wi-fi can be added on 2.4GHz or 5GHz or both:



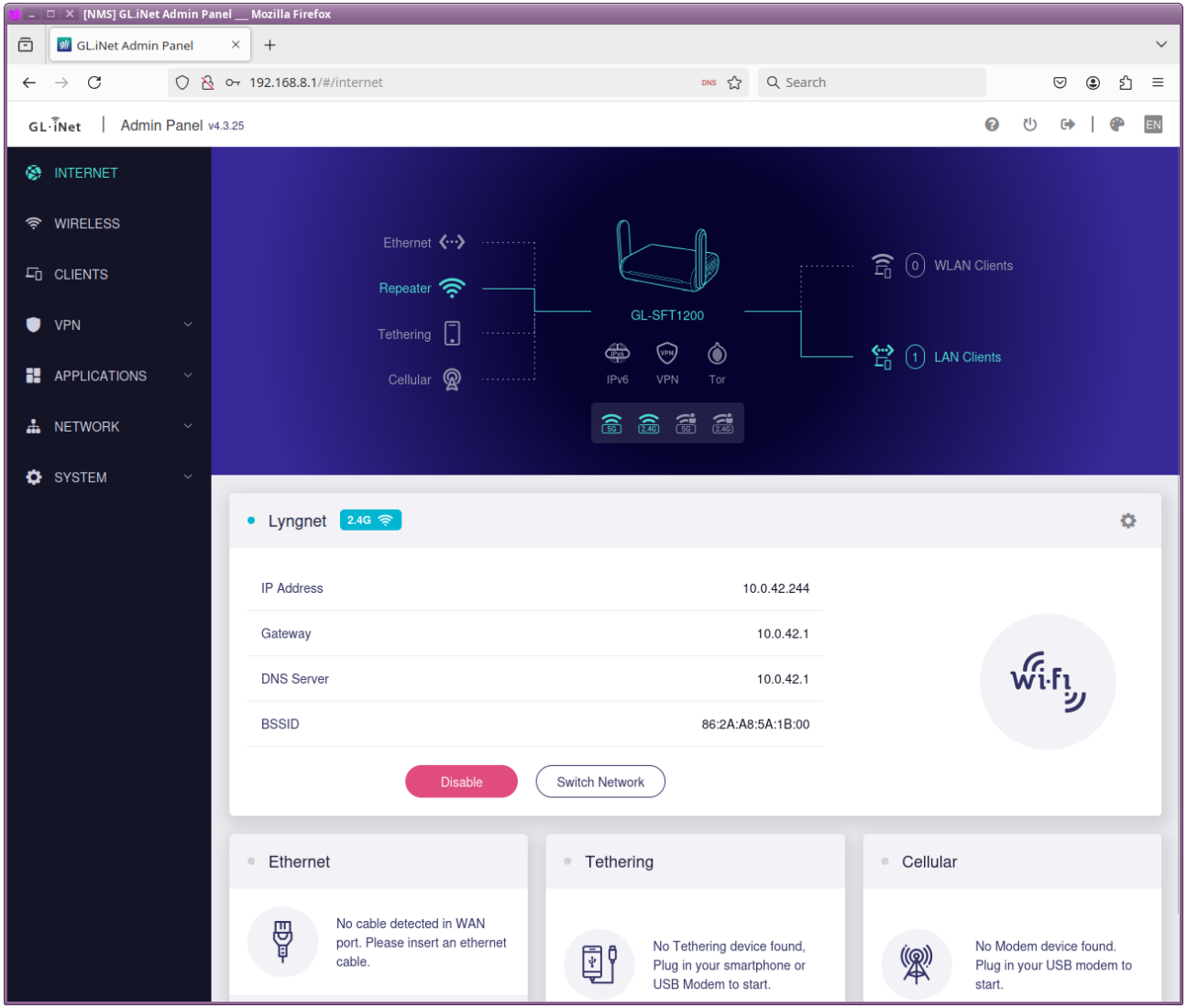
Kickstart 2: GL.inet Opal SFT1200 router

Router can be configured as a router, or just an Access Point:



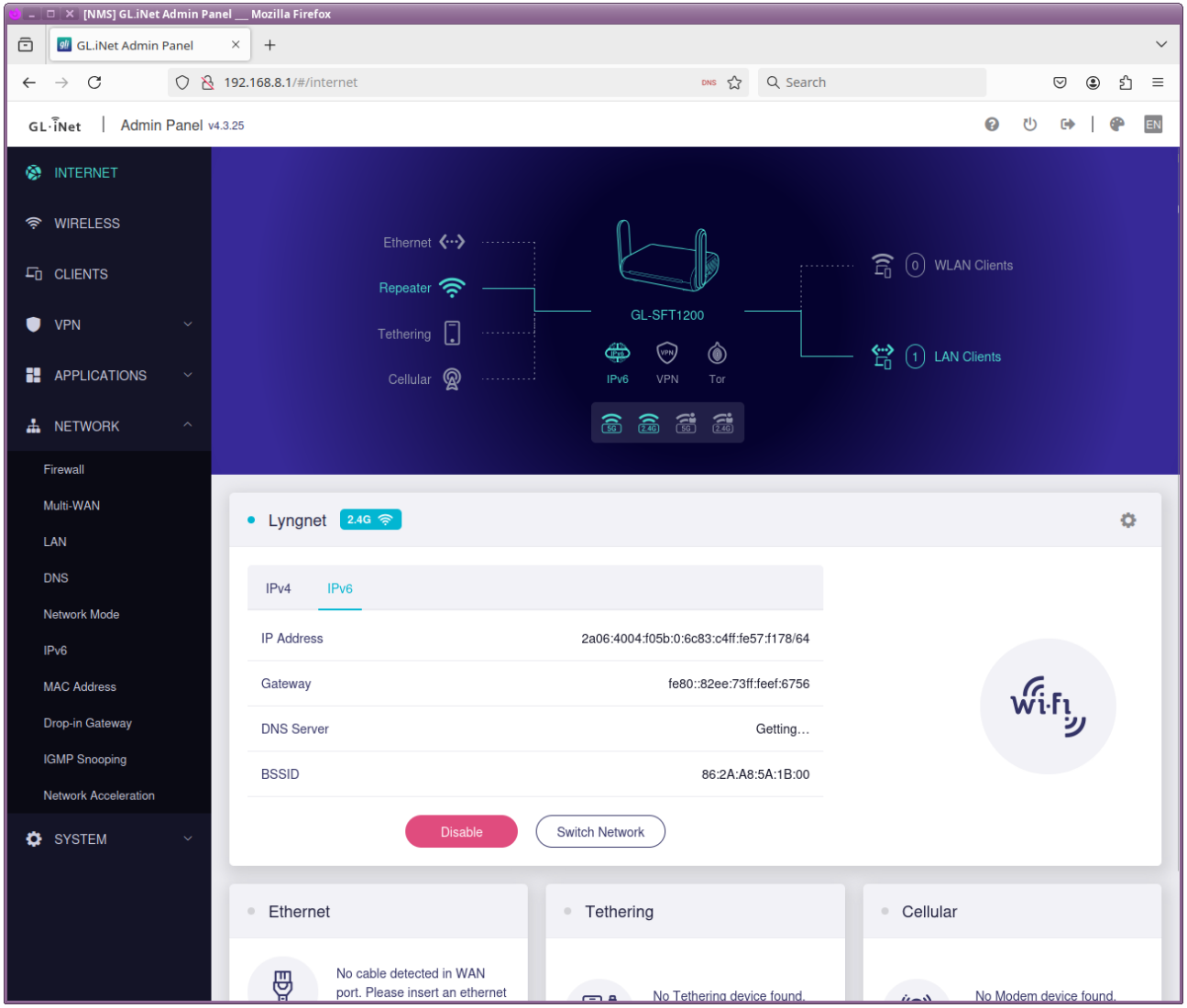
Kickstart 2: GL.inet Opal SFT1200 router

Currently running as a client on my home Wi-Fi:



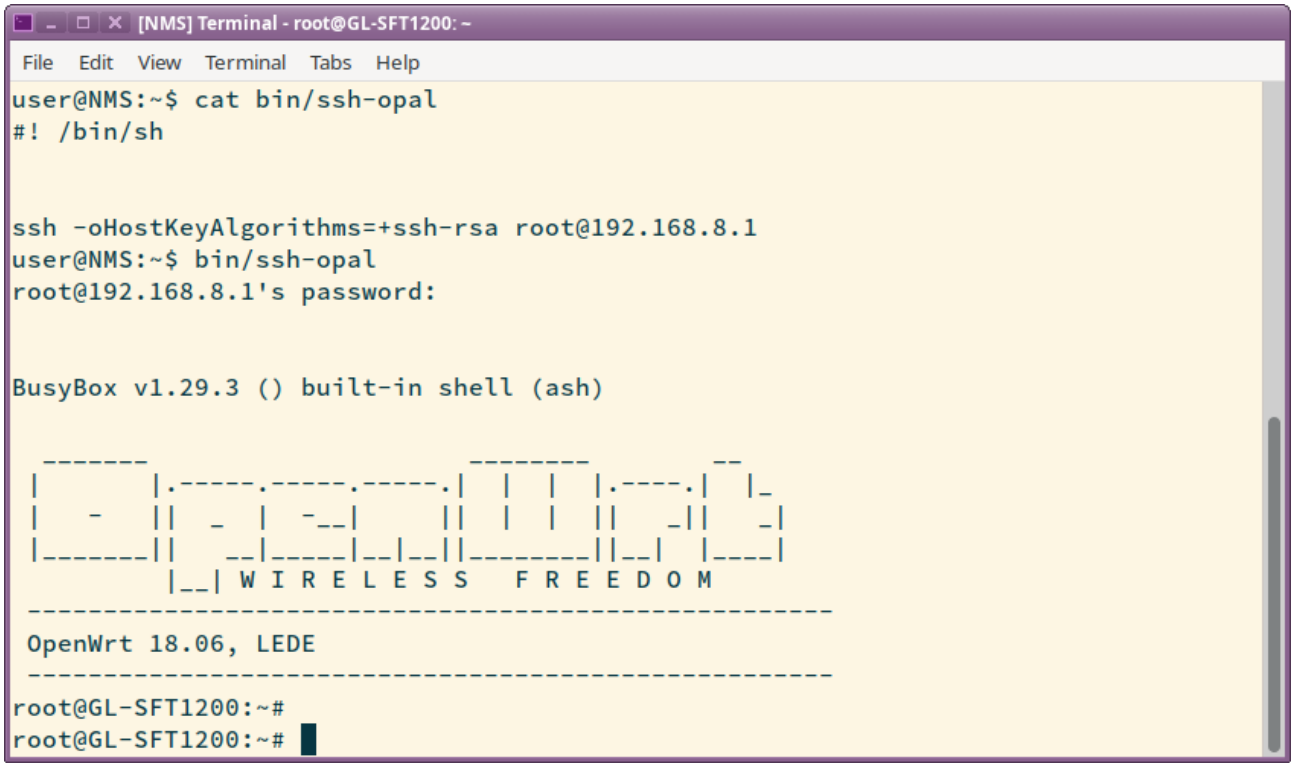
Kickstart 2: GL.inet Opal SFT1200 router

Router includes IP version 6:



Kickstart 2: GL.inet Opal SFT1200 router

When Secure Shell (ssh) is enabled you have a command line available:



Note: the current config did not agree with my modern OpenSSH client, so needed to add a small script/option:
`ssh -oHostKeyAlgorithms=+ssh-rsa root@192.168.8.1`

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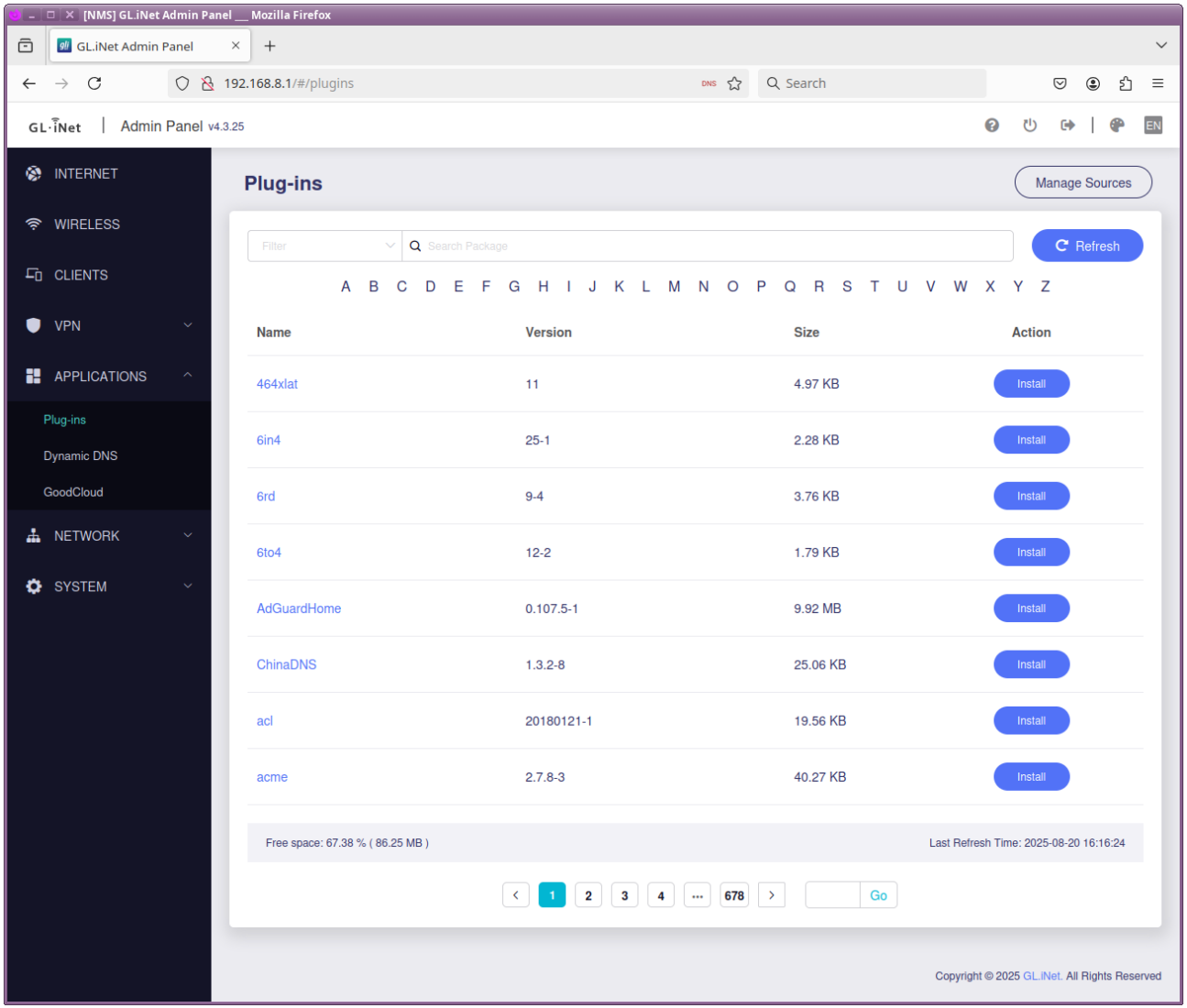
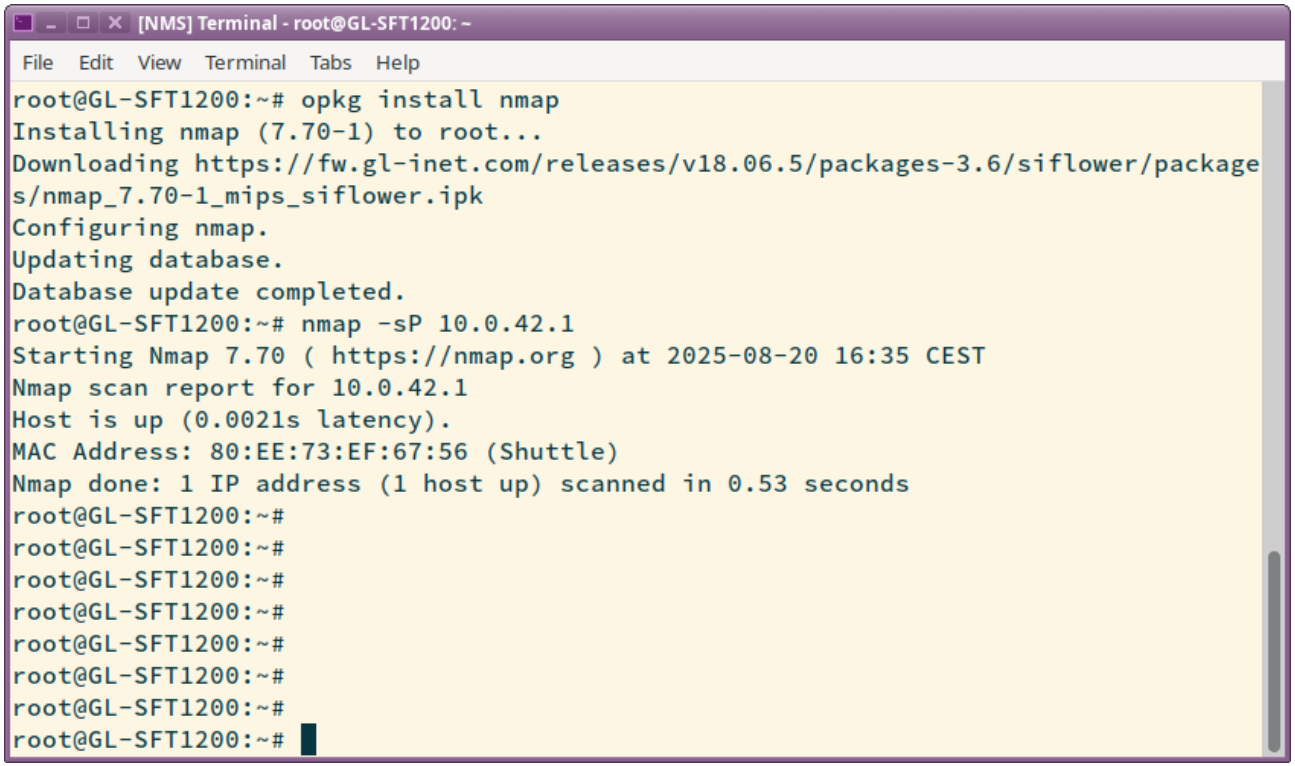
There are a lot of packages that can be installed with web interface or `opkg`:



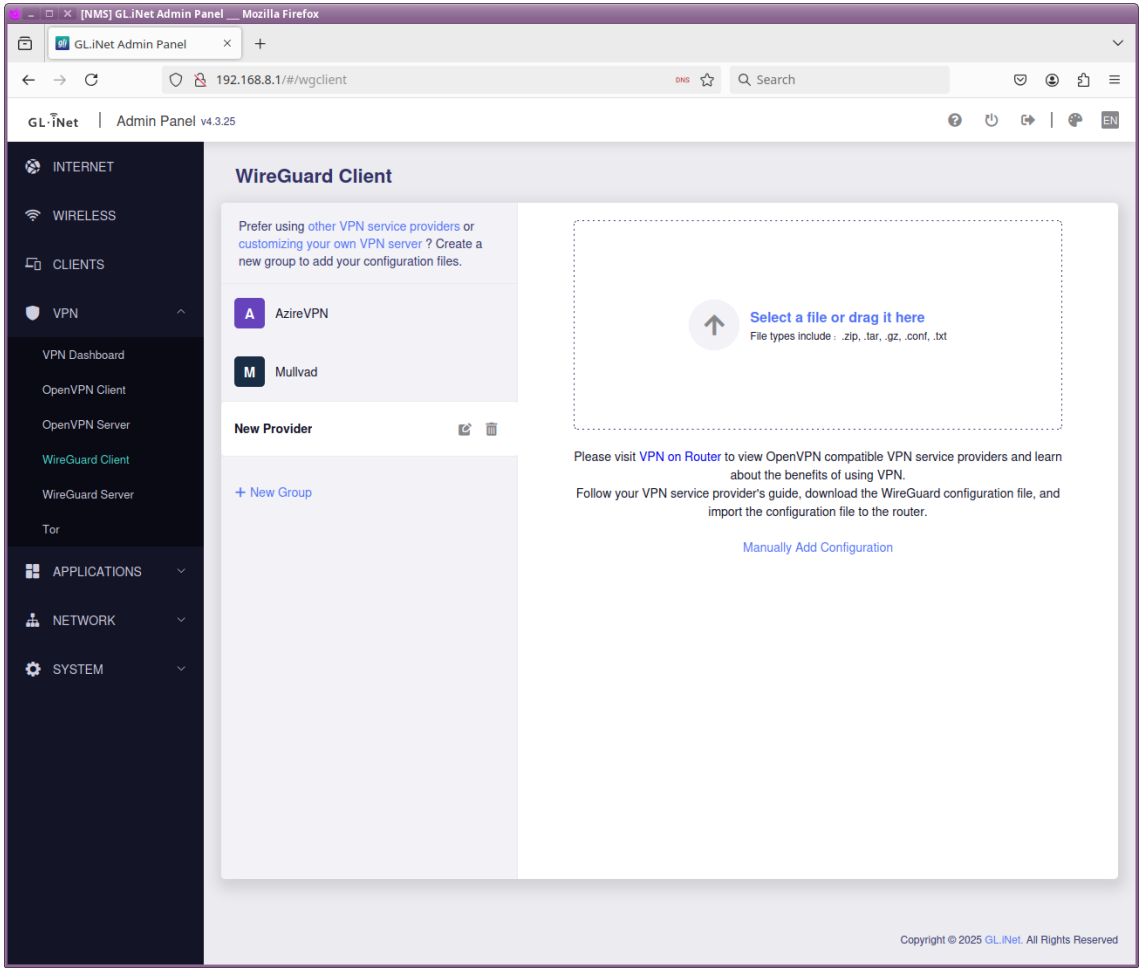
Kickstart 2: GL.inet Opal SFT1200 router



Virtual Private Network (VPN)

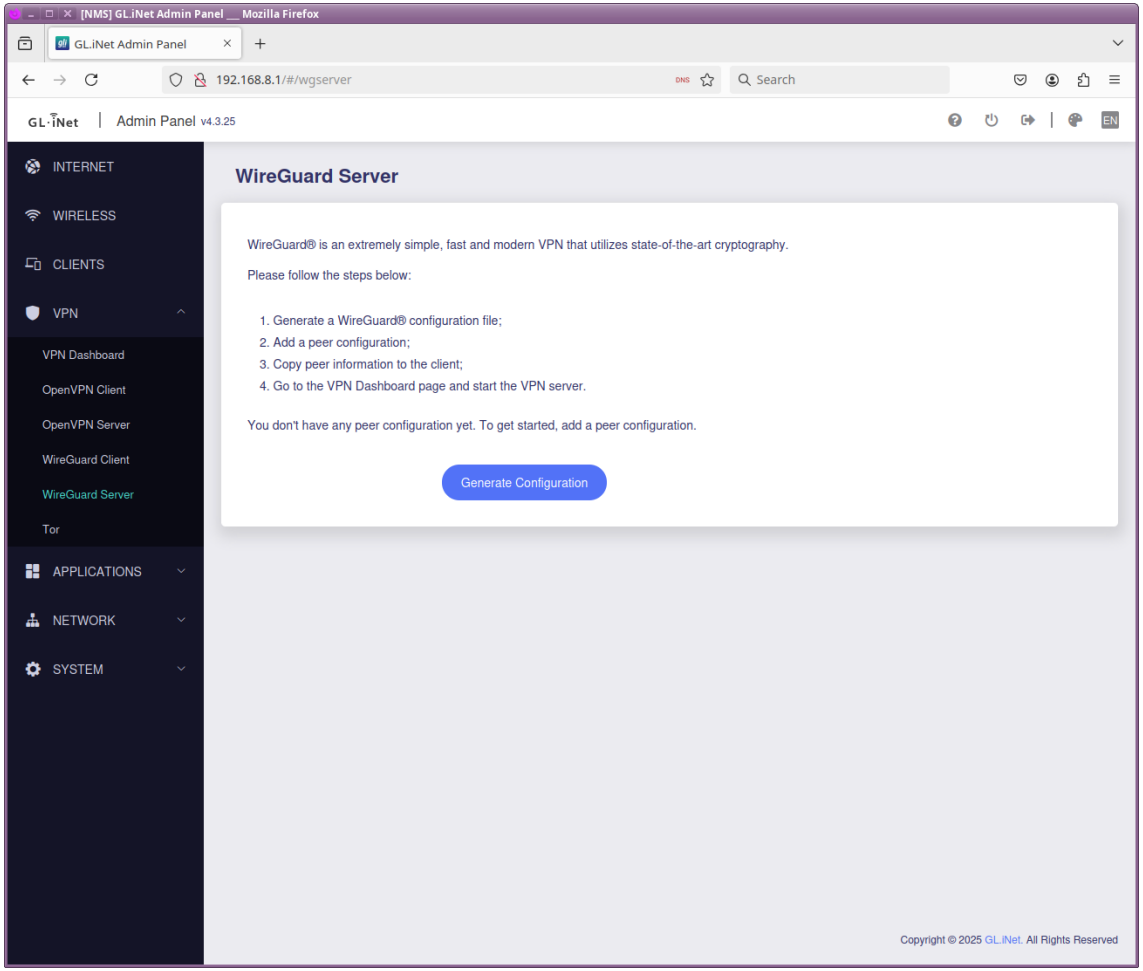
You can enable VPN functionality as a client or server.

Client would be connecting you to your *home network* when travelling:



Kickstart 2: GL.inet Opal SFT1200 router

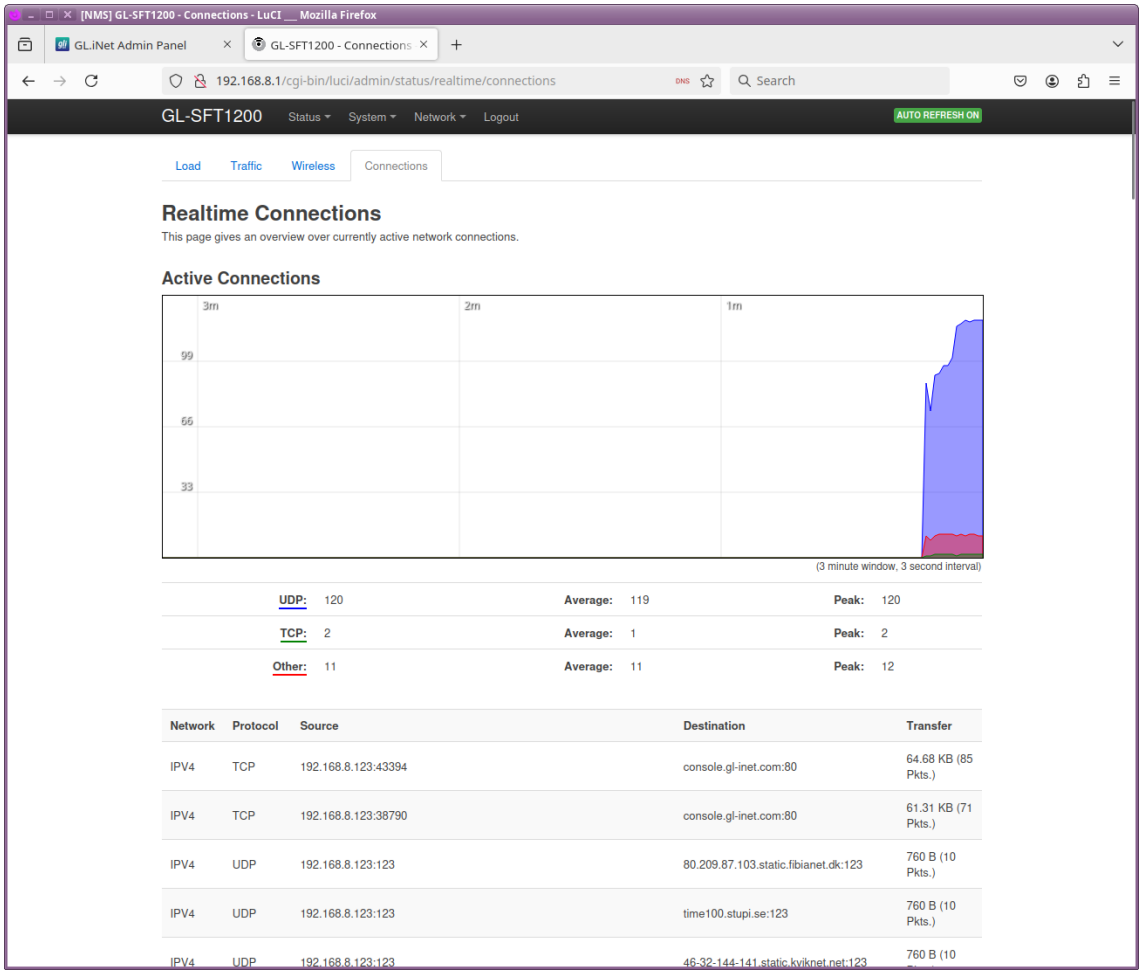
Server would be if this was your home router:



We recommend Wireguard as a modern alternative to OpenVPN

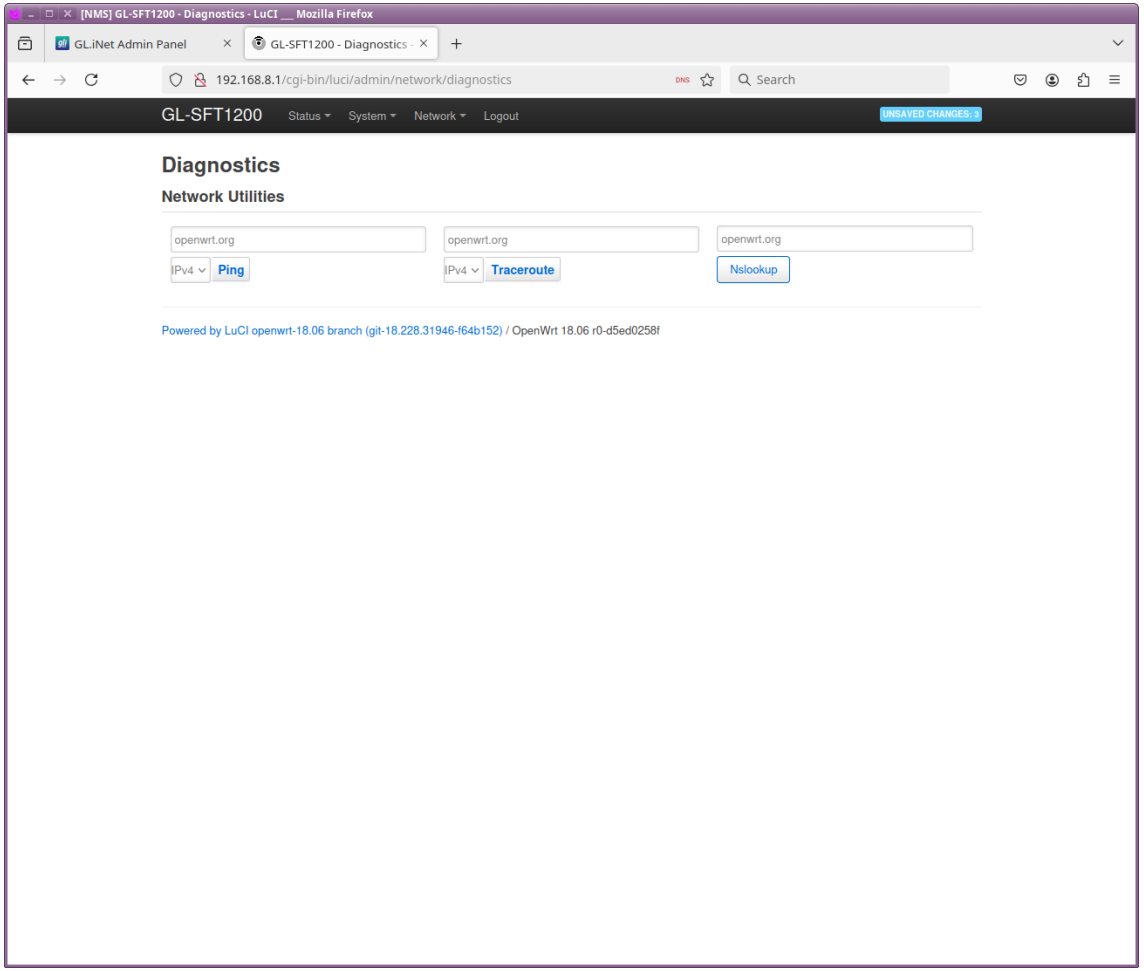
Advanced Features – through the LuCI interface

There is a more advanced web interface named LuCI that can be accessed with the Advanced Settings menu – directing you to `http://192.168.8.1/cgi-bin/luci`:



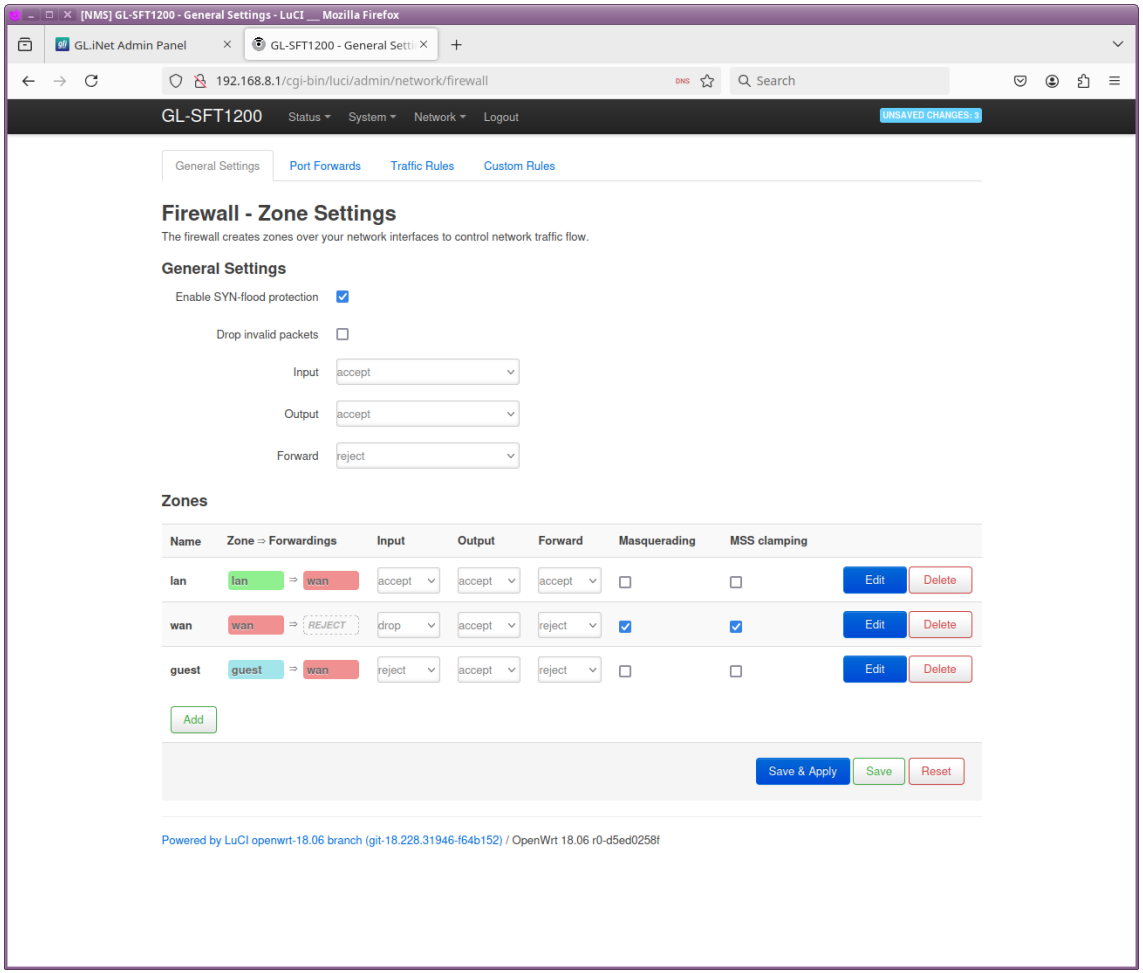
Kickstart 2: GL.inet Opal SFT1200 router

This includes small network diagnostics tools:

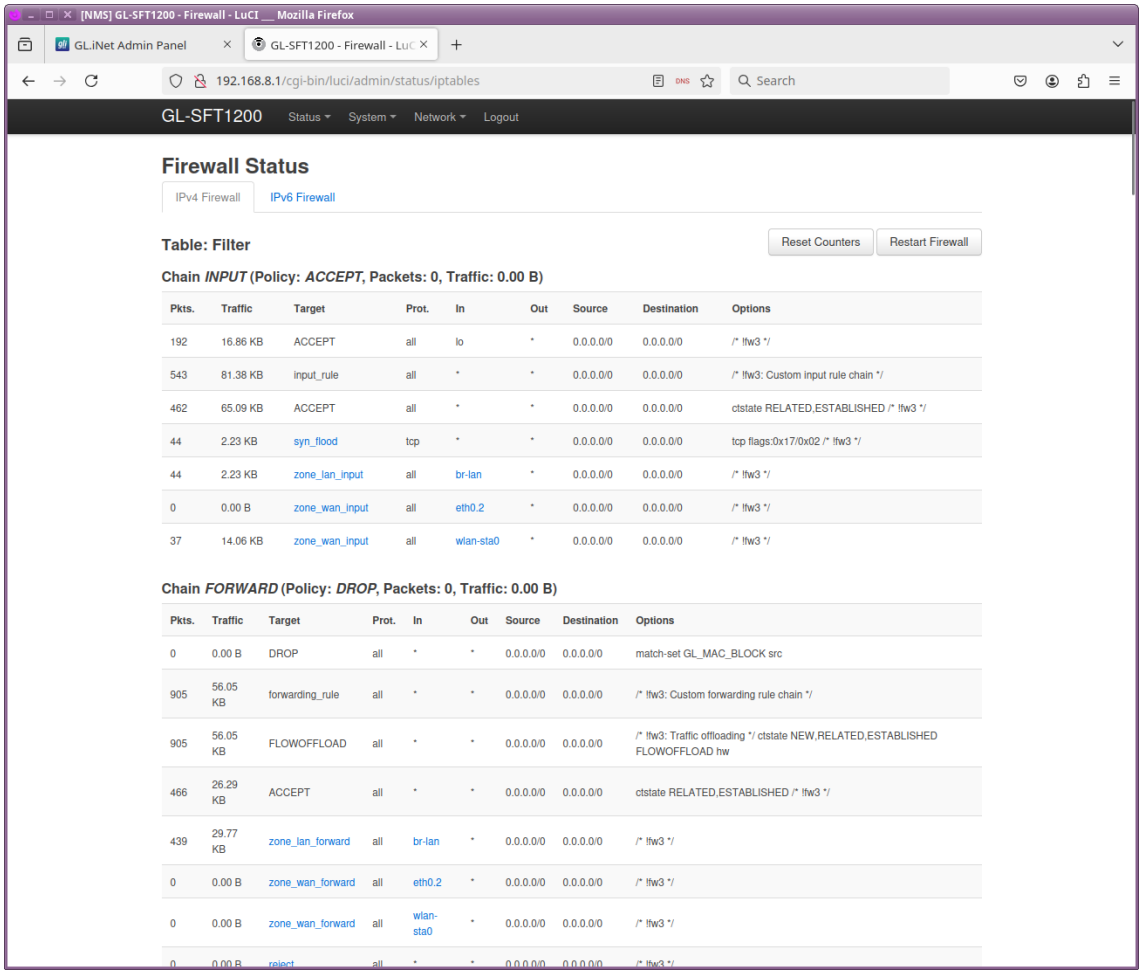


Various firewall administration options:

Kickstart 2: GL.inet Opal SFT1200 router



Kickstart 2: GL.inet Opal SFT1200 router



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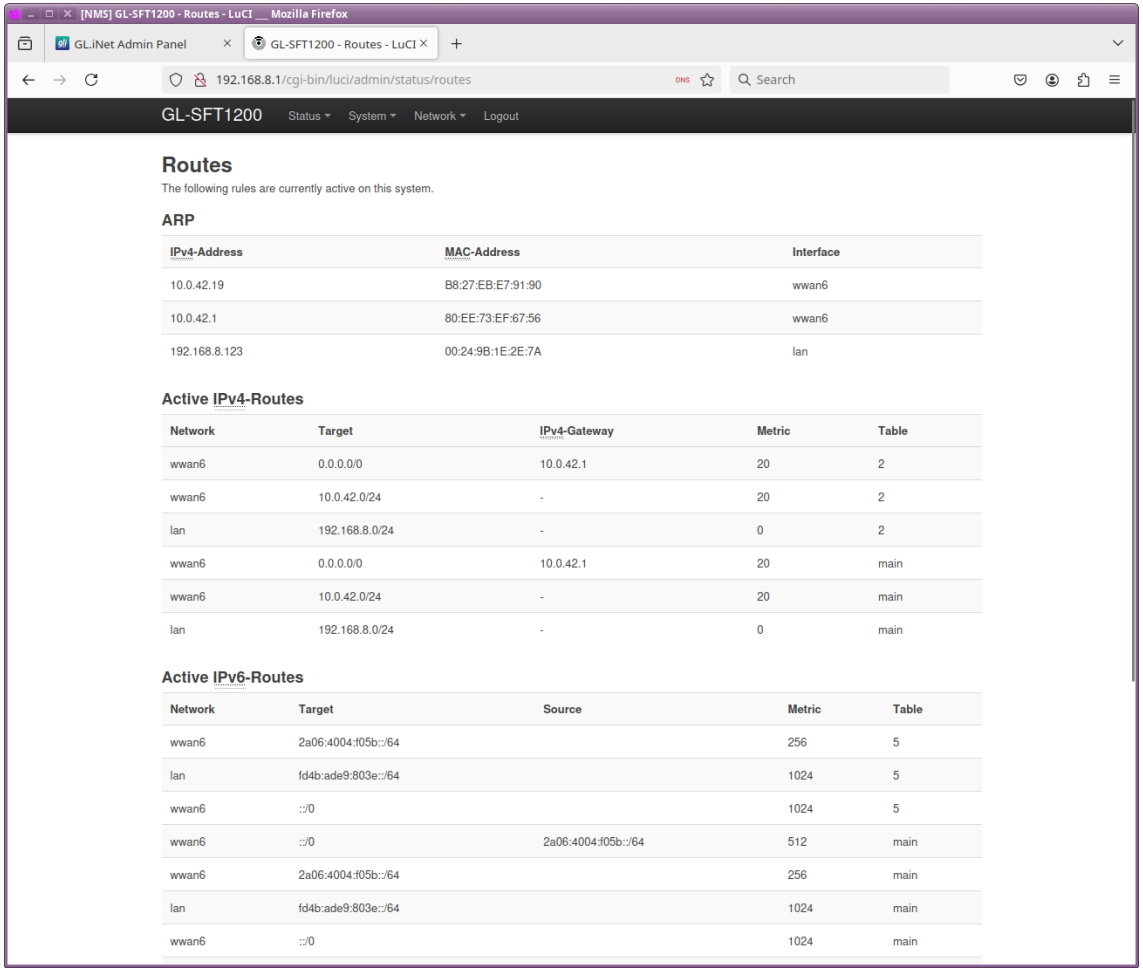
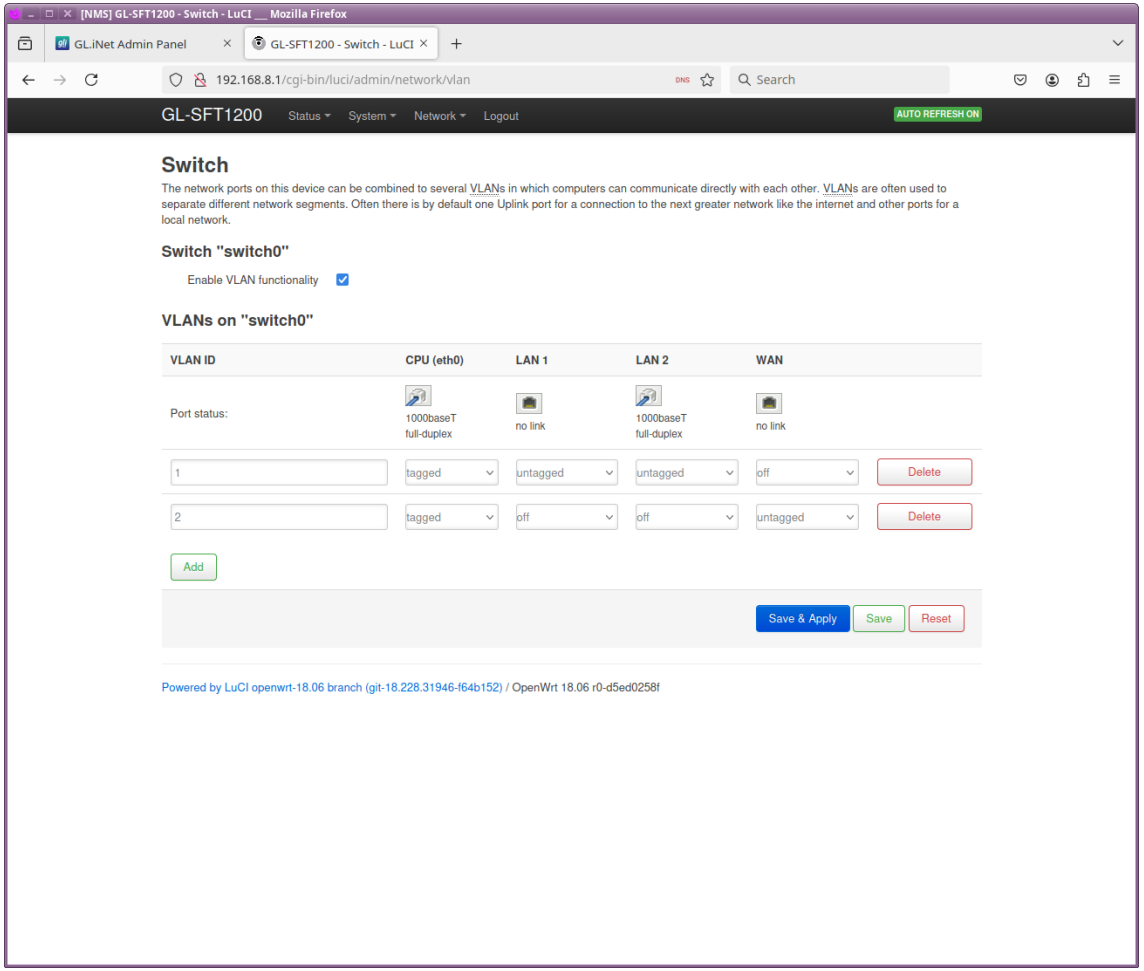
You can change network configuration, show and add static routes:



Kickstart 2: GL.inet Opal SFT1200 router

Reconfigure ports for various VLANs:

Add the WAN to become just another LAN port, or add VLAN tagging – and perhaps some switch connected to the router.



Kickstart 2: GL.inet Opal SFT1200 router

Even review changes before saving them: