

Linux 408 – NordVpn

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NordVPN challenges. OpenVPN is native to Linux, but it still must connect to servers and it is relatively slow. NordVPN is the large profile provider. It is located in Panama outside the 5/9/14-eyes. It has over 6,000 servers. I have used it for years on Windows, but in Nord's belated operations, they have not provided a viable, workable Linux GUI app.

Netplan. Two legacy Linux network control systems are 'networkd' and 'NetworkManager'. Since Ubuntu V21.10 the former 'network-manager' is now 'NetworkManager'. Yes it is different. As a reminder Linux names are case-sensitive.

These have a wide array of folders and files to set up the network. So Ubuntu developed a utility, Netplan, to manage the configuration with readable yaml files. The yaml files will specify which of the back-end control systems is 'renderer'.

There are three locations where Netplan configuration files are placed, in order of priority: /run/netplan, /etc/netplan, /lib/netplan. Users put configuration in /etc/netplan. Regardless of location, files are executed in lexicographical order.

No good app. The Nord site shows several ways to install, but try this one. <https://nordvpn.com/download/linux/> This requires using command-line-interpreter (CLI) on the terminal. Follow the yellow-brick road below. Just copy the highlights and paste to the terminal.

Prep. Since Nord is not native to Ubuntu, the repository must be added. Add the 'Curl' app to load the repository. Open Discover bag. Search for Curl. It is a Snap <Install>. Curl app is now available. Download the shell.

```
sh <(curl -sSf https://downloads.nordcdn.com/apps/linux/install.sh)
```

Add current user to the group, which allows invoking NordVPN without superuser.

```
sudo usermod -aG nordvpn $USER
```

To reflect changes in user group. <Restart>

Account. Who paid to use the servers?

Login to an active account from Terminal CLI.

```
nordvpn login
```

Terminal returns instructions. Continue with browser to the address that pops-up. Follow several instructions.

Connect. Nord icon is on system tray. Click on it for pop-up menu and quick connect. Join local Client to Server.

Foreign. VPN links to nearest server. Open Discover bag. Search for 'nordvpn'. Select Plasmoid for server options.

Local Network. The local network is blocked by the VPN.

```
nordvpn set lan-discovery on
```

Occasional CLI set.

```
nordvpn set autoconnect on ; Auto-connect when Ubuntu starts.
nordvpn set killswitch on ; Put kill switch if VPN is off.
nordvpn set defaults ; Restore defaults.
nordvpn status ; Connections
nordvpn settings ; What is set
```

Check security. <https://proprivity.com/vpn/guides/a-complete-guide-to-ip-leaks#webrtc>

Disable webrtc in your browser of choice. Webrtc may leak your original IP address. For Brave use default 1.

Remove it. Linux commands to remove all but configuration file.

```
sudo apt remove nordvpn ; remove package
sudo apt autoremove ; removes dependencies
```

Patch. This is questionable. Make local network routing permissions in parallel with nord. This is questionable.

```
https://askubuntu.com/questions/1276829/nordvpn-local-network-addresses-not-reachable-when-connected
```

Whitelist your internal subnet IP addresses. Adjust to your address.

```
nordvpn whitelist add subnet 192.168.2.0/24
```

To include hostnames for the network devices, add DNS Server. First find the address.

```
grep "nameserver" /etc/resolv.conf
```

Results returned.

```
nameserver 127.0.0.53
```

Then add your private DNS server to nord configuration. Can also use router IP??? or default 127.0.0.1.???

```
nordvpn set dns 127.0.0.53 <restart>. This does not work.
```

