# wireguard

- Raspberry 4 (192.168.24.70) -> VPN Wireguard + DNS → pivpn basado en wireguard

## simple network interface

```
wg genkey > private
wg pubkey < private # client

sudo ip link add dev wg0 type wireguard
ip address add dev wg0 192.168.2.1/24
sudo wg set wg0 private-key ./private
sudo ip link set wg0 up

wg

# machine A
wg set wg0 peer <PUB-KEY-MACHINE-B> allowed-ips 10.0.0.1/32 endpoint <IP-MACHINE-
B>:<PORT>

#machine B
wg set wg0 peer <PUB-KEY-MACHINE-A> allowed-ips 10.0.0.2/32 endpoint <IP-MACHINE-
A>:<PORT>

wg show
wg showconf
```

```
# machine B

# machine C
```

- keys gen:

  ```
  wg genkey | tee privatekey | wg pubkey > publickey
  ```

### local install

- 10.0.0.1: raspi4
- 10.0.0.2: myKDE
- 10.0.0.3: k1
- 10.0.0.10: W10
- 10.0.0.20: Mac

```
[Peer]
# Raspi
PublicKey = wLyNz+pIEHuLkHZat7JJlKRJ/BjMLHfG9F0Lp+2cWTU=
AllowedIPs = 10.0.0.1/32
Endpoint = 192.168.1.70:41724

[Peer]
# Mac
```

```
PublicKey = xsYHyM1j5djbCYsF8/56HmXff5Q6UKxgy1VCZyJ84lU=
AllowedIPs = 10.0.0.20/32
Endpoint = 192.168.1.111:61216

[Peer]
# W10
PublicKey = X7UzoJ8RHokM7sCByD7X3gk8FMqIjv77saWndQPQB3Y=
AllowedIPs = 10.0.0.10/24
Endpoint = 192.168.1.186:57873
```

## tunel edit

- https://www.stavros.io/posts/how-to-configure-wireguard/
- https://www.procustodibus.com/blog/2021/01/wireguard-endpoints-and-ip-addresses/
- https://upcloud.com/community/tutorials/get-started-wireguard-vpn/

server

```
[Interface]
PrivateKey = <%%***%%>
Address = 10.0.0.X
ListenPort = 57873
```

peer

```
[Peer]
PublicKey = wLyNz+pIEHuLkHZat7JJlKRJ/BjMLHfG9F0Lp+2cWTU=
AllowedIPs = 10.0.0.1/32
Endpoint = 192.168.1.70:41724

# This is for if you're behind a NAT and
# want the connection to be kept alive.
PersistentKeepalive = 25
```

- ufw:

```
sudo ufw allow XXXXX/udp
```