

VPN

- [Wireguard on Google Cloud](#)

Wireguard on Google Cloud

Server side

Install wireguard client

```
sudo apt update
sudo apt install wireguard
sudo apt install ufw
sudo apt install iptables
```

Generate private/public key

Private key

```
wg genkey | sudo tee /etc/wireguard/private.key
sudo chmod go= /etc/wireguard/private.key
```

Public key

```
sudo cat /etc/wireguard/private.key | wg pubkey | sudo tee /etc/wireguard/public.key
```

Create Wireguard config file

```
sudo nano /etc/wireguard/wg0.conf
```

add tihs inside (setup the client for get client public key)

```
[Interface]
Address = 192.168.10.1/24
DNS = 8.8.8.8
DNS = 1.1.1.1
SaveConfig = true
ListenPort = 51820
PrivateKey = <SERVER_PRIVATE_KEY>
PostUp = iptables -A FORWARD -i %i -j ACCEPT; iptables -t nat -A POSTROUTING -o <SERVER_INTERFACE> -j
```

```
MASQUERADE
```

```
PostDown = iptables -D FORWARD -i %i -j ACCEPT; iptables -t nat -D POSTROUTING -o <SERVER_INTERFACE> -j  
MASQUERADE
```

```
[Peer]
```

```
PublicKey = <CLIENT_PUBLIC_KEY>
```

```
AllowedIPs = 192.168.10.5/32 # Client ip
```

For add peer without restart Wireguard Server

```
wg set wg0 peer "<CLIENT_PUBLIC_KEY>" allowed-ips <CLIENT_IP>/32
```

Setup ip forwarding

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

Edit this line

```
net.ipv4.ip_forward=1
```

See the result

```
sudo sysctl -p
```

Setup firewall

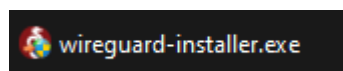
```
sudo ufw allow 51820/udp  
sudo ufw allow 22/tcp  
sudo ufw enable  
sudo ip link set dev wg0 mtu 1360
```

Launch server

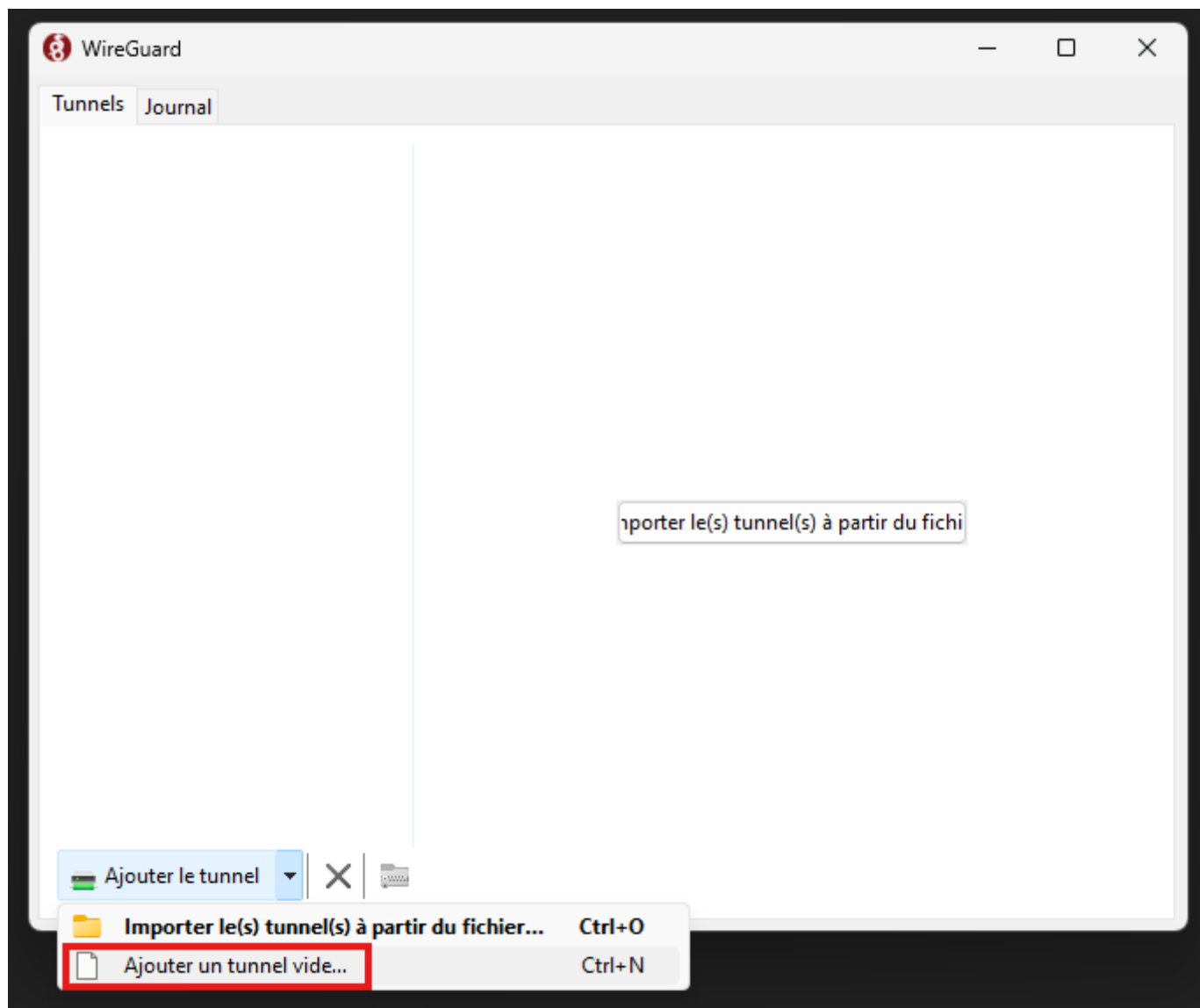
```
sudo wg-quick up /etc/wireguard/wg0.conf
```

Client Side (Windows)

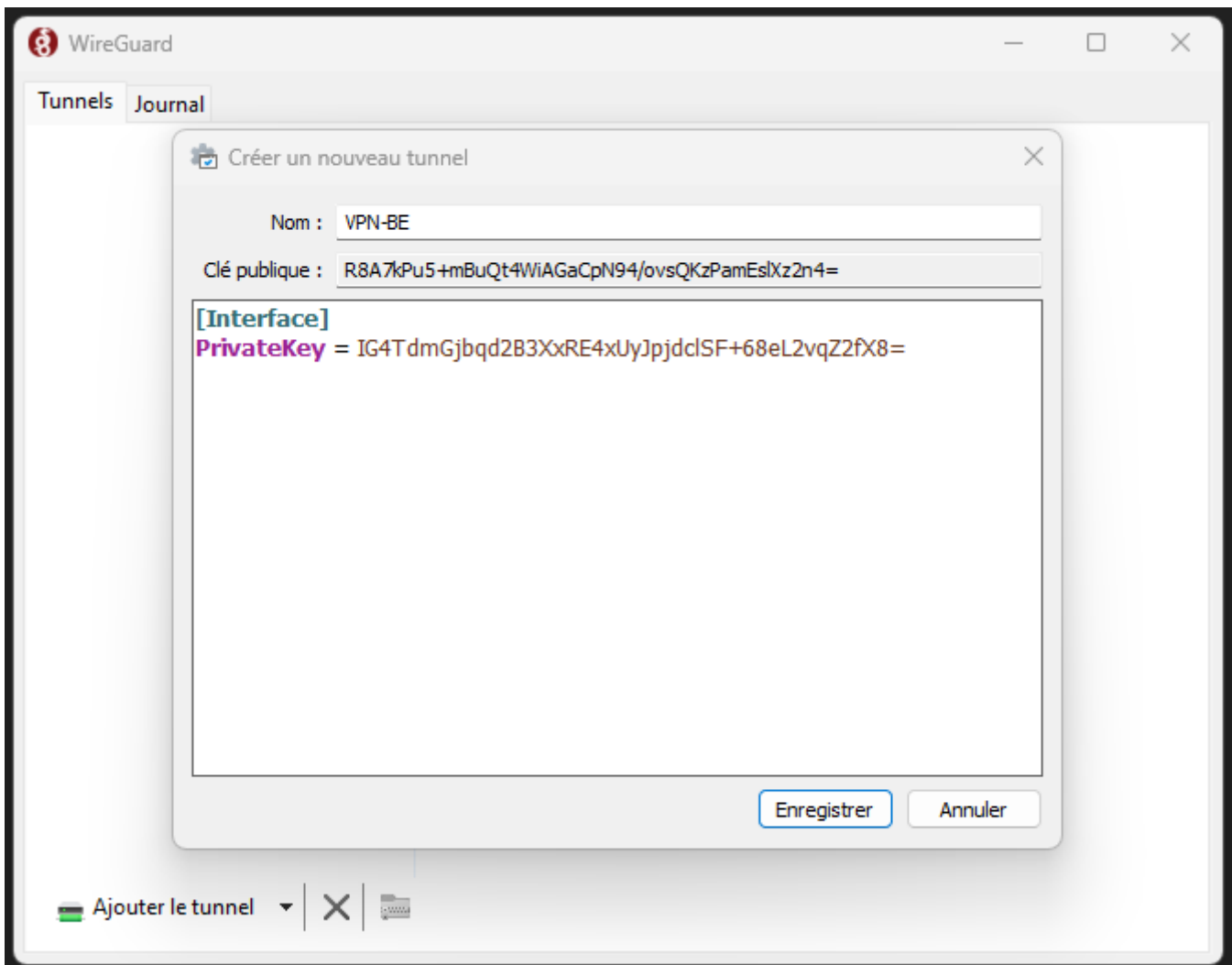
Go on Wireguard web site and download the client [Wireguard](#) and install it.



Open it and setup new tunnel



Select name of this tunnel (anything is good)



and add it inside

```
Address = <CLIENT_IP_ADDRESS>/24 #Client IP address
```

```
DNS = 8.8.8.8
```

```
[Peer]
```

```
PublicKey = <SERVER_PUBLIC_KEY>
```

```
AllowedIPs = 0.0.0.0/0
```

```
Endpoint = 35.195.77.67:51820 #Server's public ip
```