

Wireguard

Keys

Key Type	Server	Client
Server Private Key	[Interface]	
Server Public Key		[Peer]
Client Private Key		[Interface]
Client Public Key	[Peer]	
Preshared Key	[Peer]	[Peer]

Server

apt install wireguard

cd /etc/wireguard

umask 077

wg genkey | tee server-private.key | wg pubkey > server-public.key

wg genpsk > preshared.key

wg genkey | tee client-private.key | wg pubkey > client-public.key

cat server-private.key client-public.key preshared.key > wg0.conf

cat client-private.key server-public.key preshared.key > client.txt

rm server-private.key server-public.key client-private.key client-public.key

nano wg0.conf

```
GNU nano 7.2                               wg0.conf
[Interface]
Address = 10.1.30.1/24, 2001:db8:1001:30::1/64
ListenPort = 51820
PrivateKey = 8M6cTrcyOpQixW1Tv3wGY790CcDD+PXoEG808kp7cmo=

PostUp = iptables -t nat -A POSTROUTING -o ens192 -j MASQUERADE
PostUp = ip6tables -t nat -A POSTROUTING -o ens192 -j MASQUERADE

PostDown = iptables -t nat -D POSTROUTING -o ens192 -j MASQUERADE
PostDown = ip6tables -t nat -D POSTROUTING -o ens192 -j MASQUERADE

[Peer]
PublicKey = xV6DqwmGCsCuTrtaCIBNuk9zxvE9pB0kbBQ2uSHSiEw=
PresharedKey = KHQ/r9S34C98+ZkxPlkCBN/SgchtrTJNmJYs7cIoJMc=
AllowedIPs = 10.1.30.2/32, 2001:db8:1001:30::2/128
```

Note! Peer IP needs to be allowed!

systemctl enable wg-quick@wg0

systemctl start wg-quick@wg0

Client

apt install wireguard

apt install resolvconf

cd /etc/wireguard

scp root@CLIENT:/etc/wireguard/wg0.conf .

scp root@CLIENT:/etc/wireguard/client.txt .

chmod 600 wg0.conf

cat client.txt >> wg0.conf

rm client.txt

nano wg0.conf

```
GNU nano 7.2                                     wg0.conf
[Interface]
Address = 10.1.30.2/24, 2001:db8:1001:30::2/64
PrivateKey = 0ETJ0WSW+V08XXGd000+9j7HkyArVtmBpUXCHK7fYWI=
DNS = 10.1.10.10, 2001:db8:1001:10::10

[Peer]
PublicKey = TBBKdNwwULtM9Ywegbb/vjh/kE4kwcHtjzphdYmCs=
PresharedKey = KHQ/r9S34C98+ZkxPlkCBN/SgchtrTJNmJYs7cIoJMc=
Endpoint = 1.1.1.10:51820
AllowedIPs = 0.0.0.0/0, ::/0
```

Note! Peer IP needs to be allowed!

Activate it using wg-quick:

```
systemctl enable wg-quick@wg0
```

```
systemctl start wg-quick@wg0
```

Activate it using Network Manager:

```
nmcli connection import type wireguard file /etc/wireguard/wg0.conf
```

```
nmcli connection up wg0
```

Best practice is to go back to the server and:

```
rm /etc/wireguard/client.txt
```