# CARPAL (VPN)

Sebelumnya, apa sih ini, soal susah banget tutorial buat ke vm dikit, ke router juga dikit
au ah gelap

Ini lebih drip daripada Kubernetes LMAO

# Kata Mutiara (Ini serius)

Soal ini sungguh menyebalkan, mencari tutorial kesana kemari blm juga ketemu. Kurang lebih begini

- Cari tutorial buat setup di local, oke ketemu, pas di-klik pakenya ACCESS SERVER
- Cari lagi, wah ketemu nih, tapi ROUTER-nya BEDA!!!
- Tidak menyerah, cari di youtube, kebanyakan ACCESS SERVER

Alhasil saya menyerah mengerjakan untuk setup di local dan mencoba setup di vm cloud (biar dapet public ip address alias garibet) karena dapet azure student juga ye kan.

Bikinlah tuh VM di azure pake ubuntu 24.04, terus cari tutorialnya. Oke ketemu nih bagus, bukan pake access server, pas dicoba ngerjain 2 HARI!!!!!! Server bisa connect / ter-setup, tapi client gak bisa connect!!!!!! RAHHHGHGHGHGHGH.

TIDAK MENYERAH!!!! Cari tutorial lagi. Eh ketemu orang yang bikin script. Markicob ye kan, eh ternyata bisa ke-connect yaudahlah lah yak arena dah bisa, kita pake script tersebut yang penting tujuannya tercapai, gak pake ACCESS SERVER

Step by Step

1. Bikin VM cloud di azure (ini bukan tentang VM) jadi skip langsung ke pembuatan VPN

| Name | Type | Last Viewed |
|------|------|-------------|
| sister-tunnel | Virtual machine | 37 minutes ago |
| sister-tunnel31_z1 | Network interface | 44 minutes ago |
| sister-tunnel-ip | Public IP address | 46 minutes ago |

2. Atur InBoundRule port pada network VM (I don't know why? Tutorialnya gitu)

| Priority ↑ | Name | Port | Protocol | Source | Destination | Action | |
|-----------|------|------|----------|--------|-------------|--------|---|
| Inbound port rules (8) | | | | | | | |
| 300 | ⚠ SSH | 22 | TCP | Any | Any | ⊘ Allow | 🗑 |
| 320 | HTTP | 80 | TCP | Any | Any | ⊘ Allow | 🗑 |
| 340 | HTTPS | 443 | TCP | Any | Any | ⊘ Allow | 🗑 |
| 350 | Allow-OpenVPN-UDP-32768 | 32768 | UDP | Any | Any | ⊘ Allow | 🗑 |
| 360 | ⚠ AllowAnyCustomAnyInbound | Any | ICMP | Any | Any | ⊘ Allow | 🗑 |
| 65000 | AllowVnetInBound ⓘ | Any | Any | VirtualNetwork | VirtualNetwork | ⊘ Allow | 🗑 |

Disini saya inbound rule buat port 32768, saya Allow ICMP biar bisa nge-ping server

3. Login ke VM pake ssh bisa dilihat di halaman ini



4. Nanti kalo udah terhubung dengan VM kurang lebih begini
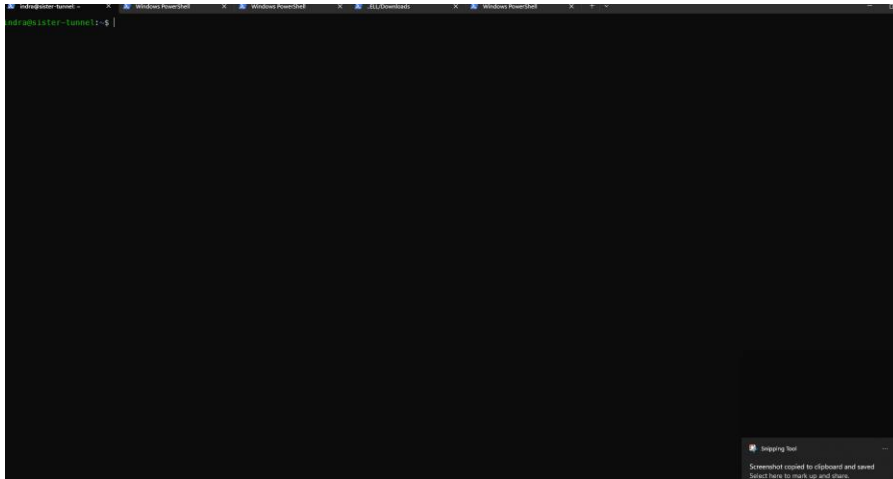
5. Tinggal download aja script-nya terus jalanin. Cara jalanin-nya
   ➢ sudo chmod +x script.sh
   ➢ sudo ./script.sh
6. nanti muncul tampilan begini

```
Welcome to this OpenVPN road warrior installer!

This server is behind NAT. What is the public IPv4 address or hostname?
Public IPv4 address / hostname [20.62.4.157]: |
```

Public IP address otomatis diatur langsung (enaknya pake VM), tinggal ikutin langkah terus aja.

7. Pilih UDP

```
Which protocol should OpenVPN use?
    1) UDP (recommended)
    2) TCP
Protocol [1]: |
```

8. Pilih current system alias VM itu sendiri

```
What port should OpenVPN listen to?
Port [1194]: 32768
```

9. Masukin nama client buat .ovpn client

```
Enter a name for the first client:
Name [client]: client-sister|
```

10. Tunggu hingga selesai
11. Oke mantap, dah selesai

```
Notice
------
An updated CRL has been created.
CRL file: /etc/openvpn/server/easy-rsa/pki/crl.pem
2024-08-22 06:49:51 DEPRECATED OPTION: The option --secret is deprecated.
2024-08-22 06:49:51 WARNING: Using --genkey --secret filename is DEPRECATED.  Use --genkey secret filename instead.
Created symlink /etc/systemd/system/multi-user.target.wants/openvpn-iptables.service → /etc/systemd/system/openvpn-iptables.service.
Created symlink /etc/systemd/system/multi-user.target.wants/openvpn-server@server.service → /usr/lib/systemd/system/openvpn-server@.service.

Finished!

The client configuration is available in: /root/client-sister.ovpn
New clients can be added by running this script again.
indra@sister-tunnel:~$
```

12. Tinggal download client-nya pake scp

```
scp ./home/indra/client-sister.ovpn: No such file or directory
PS C:\Users\DELL\Downloads> scp -i ./sister-indra.pem indra@20.62.4.157:~/client-sister.ovpn ./
client-sister.ovpn
```

- Sister-indra.pem: private key buat access VM

- Argument selanjutnya file yang bakalan di download dari VM

- Argument ./ file yang di download mau disimpen dimana.

13. Oh, untuk mengecek server jalan atau tidak bisa gunakan

   ➢ Sudo systemctl status openvpn-server@server

```
indra@sister-tunnel:~$ sudo systemctl status openvpn-server@server
● openvpn-server@server.service - OpenVPN service for server
     Loaded: loaded (/usr/lib/systemd/system/openvpn-server@.service; enabled; preset: enabled)
     Active: active (running) since Thu 2024-08-22 06:49:52 UTC; 4min 47s ago
       Docs: man:openvpn(8)
             https://community.openvpn.net/openvpn/wiki/Openvpn24ManPage
             https://community.openvpn.net/openvpn/wiki/HOWTO
   Main PID: 51311 (openvpn)
     Status: "Initialization Sequence Completed"
      Tasks: 1 (limit: 1004)
     Memory: 1.4M (peak: 1.6M)
        CPU: 17ms
     CGroup: /system.slice/system-openvpn\x2dserver.slice/openvpn-server@server.service
             └─51311 /usr/sbin/openvpn --status /run/openvpn-server/status-server.log --status-version 2 --suppress-timestamps --config server.conf

Aug 22 06:49:52 sister-tunnel openvpn[51311]: Socket Buffers: R=[212992->212992] S=[212992->212992]
Aug 22 06:49:52 sister-tunnel openvpn[51311]: UDPv4 link local (bound): [AF_INET]10.0.0.4:32768
Aug 22 06:49:52 sister-tunnel openvpn[51311]: UDPv4 link remote: [AF_UNSPEC]
Aug 22 06:49:52 sister-tunnel openvpn[51311]: UID set to nobody
Aug 22 06:49:52 sister-tunnel openvpn[51311]: GID set to nogroup
Aug 22 06:49:52 sister-tunnel openvpn[51311]: Capabilities retained: CAP_NET_ADMIN
Aug 22 06:49:52 sister-tunnel openvpn[51311]: MULTI: multi_init called, r=256 v=256
Aug 22 06:49:52 sister-tunnel openvpn[51311]: IFCONFIG POOL IPv4: base=10.8.0.2 size=253
Aug 22 06:49:52 sister-tunnel openvpn[51311]: IFCONFIG POOL LIST
Aug 22 06:49:52 sister-tunnel openvpn[51311]: Initialization Sequence Completed
```
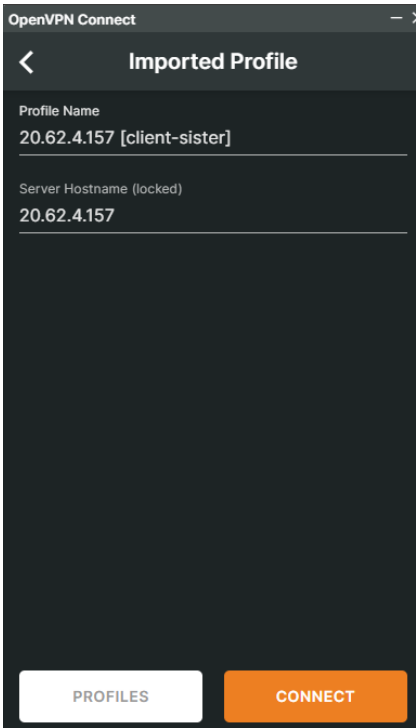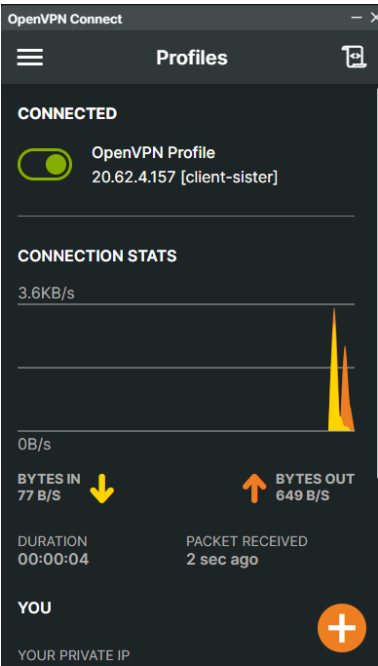
Mantap, servernya jalan

14. Tinggal kita connect aja (kita coba connect pake openvpn connect punya windows
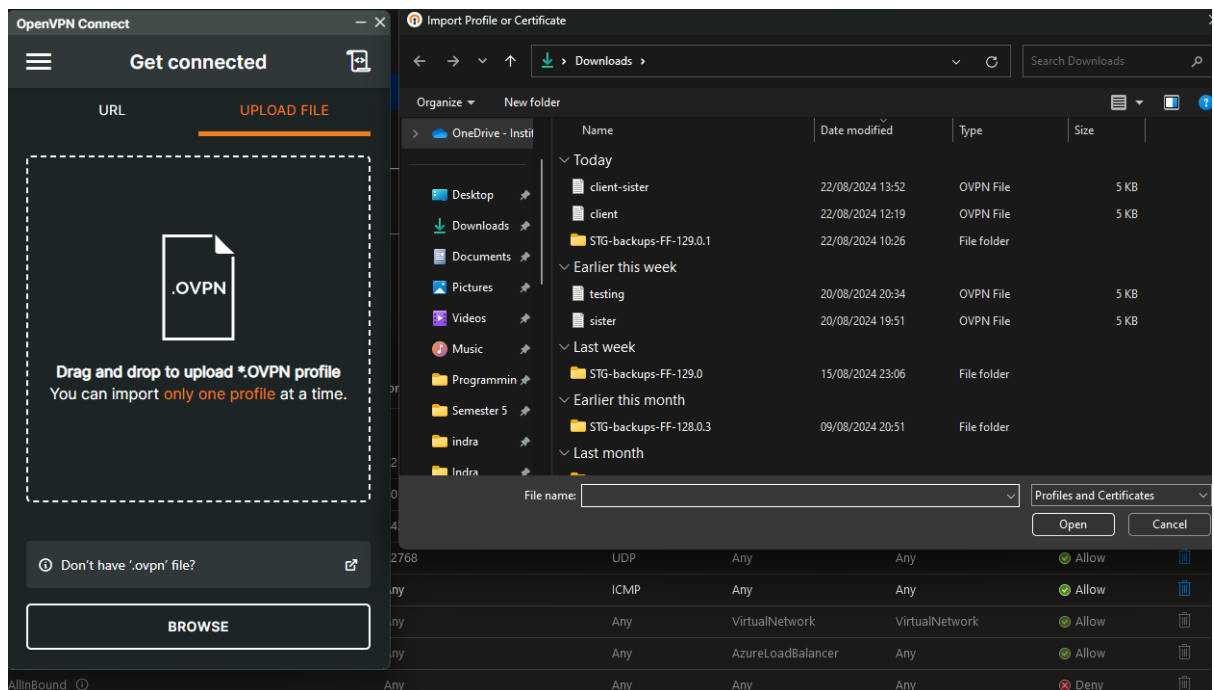


Pilih konfigurasi client-sister yang tadi di download, lalu klik connect

MANTAP!!!

# Ping Server

Tinggal ping aja public ip address-nya

```
PS C:\Users\DELL\Downloads> ping 20.62.4.157

Pinging 20.62.4.157 with 32 bytes of data:
Reply from 20.62.4.157: bytes=32 time=255ms TTL=249
Reply from 20.62.4.157: bytes=32 time=254ms TTL=249
Reply from 20.62.4.157: bytes=32 time=251ms TTL=249
Reply from 20.62.4.157: bytes=32 time=293ms TTL=249

Ping statistics for 20.62.4.157:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 251ms, Maximum = 293ms, Average = 263ms
```

# Revoke

Tinggal jalanin aja lagi openvpn-install.sh sekarang dia menghasilkan menu yang berbeda karena sebelumnya udah install openvpn-install.sh di awal

> Sudo ./openvpn-install.sh

```
OpenVPN is already installed.

Select an option:
    1) Add a new client
    2) Revoke an existing client
    3) Remove OpenVPN
    4) Exit
Option:
```

1. Buat client baru
2. Buat revoke client yang udah ada
3. Buat uninstall OpenVPN

## Revoke


```
OpenVPN is already installed.

Select an option:
    1) Add a new client
    2) Revoke an existing client
    3) Remove OpenVPN
    4) Exit
Option: 2

Select the client to revoke:
     1) client-sister
Client: 1

Confirm client-sister revocation? [y/N]: y

* Using SSL: openssl OpenSSL 3.0.13 30 Jan 2024 (Library: OpenSSL 3.0.13 30 Jan 2024)

* Using Easy-RSA configuration: /etc/openvpn/server/easy-rsa/pki/vars
WARNING
```
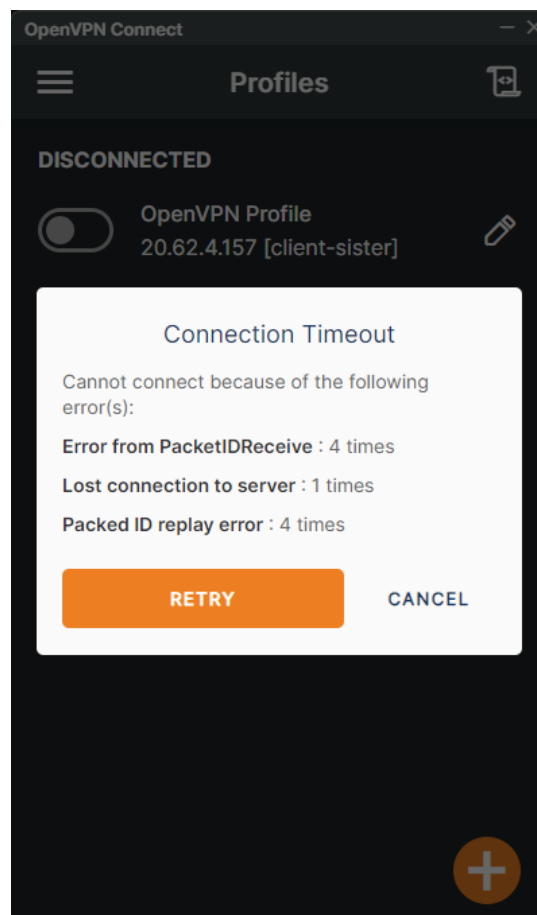
Karena sudah berhasil, kalau kita connect lagi pake openvpn connect, dia bakalan connection timeout



Sesuai praduga, karena udah di-revoke gabisa dijalanin lagi

## Issue

Buat Issue? Ehe, bikin client-baru aja lagi... pake nomor 1

THIS SCRIPT IS GOATED BRUH!!!!