LAB: OpenVPN

Lab Environment

The workshop WiFi:

- SSID: `workshop`
- PASS: `iij/2497`

Hosts - Virtual machines (Ubuntu 18.04LTS/LXC)

- Hostname: `nsXX.workshop`
- IPv6: `fd00:2497:1::X`
- IPv4: `10.0.0.X`

Where `X` and `XX` is yoru group ID. For group 1, hostname is `ns01.workshop`, IPv6 address is `fd00:2497:1::1`, and IPv4 is `10.0.0.1`.

Install script

Copy the install script `openvpn-install.sh` from the workshop repository and put it to your virtual machine. The script is developed by Nyr and the original repository is located at `https://github.com/Nyr`.

Install OpenVPN server

Log in to your virtual machine and run `openvpn-install.sh` script.

```
$ export HTTP_PROXY=http://10.0.255.1:3128
$ export HTTPS_PROXY=http://10.0.255.1:3128
$ export http_proxy=http://10.0.255.1:3128
$ export https_proxy=http://10.0.255.1:3128
$ sudo bash openvpn-install.sh
```

You will be asked several questions for OpenVPN server setup.

1. IP address: Enter the IP address of your virtual server (e.g. `10.0.0.X`)
2. Protocol to use: Select `UDP`
3. Port: Enter `1194`
4. DNS server address: Select `Current system resolvers`
5. Client name: Enter arbitrary name of your identifier (e.g. `client1`)

You will find a OpenVPN client configuration file as `client1.ovpn`. Copy the file to your PC for later use.

Start OpenVPN server

Start the OpenVPN service.

```
$ sudo systemctl start openvpn
```

To check if the server is running prolerly, use the `status` subcommand.

```
$ sudo systemctl status openvpn
```

Install OpenVPN client

Go back to your PC, and install an OpenVPN client. Client software can be downloaded from `https://openvpn.net/`.

Install VPN configuration

Create a new profile for your client using `.ovpn` file created when you setup your OpenVPN server.