

# Ubuntu VPN Installation Guide

## Introduction

Providing effective network security is a difficult technical challenge and necessity. To achieve this, most organizations place their internal network behind a firewall that permits outgoing connections while rejecting all incoming connections. The University of Mississippi uses a firewall, and your home router probably also has a firewall.

Firewalls are designed so that selected incoming traffic is allowed. Examples are email and web servers. While these are important services, there needs to be a secure mechanism for granting individual users working outside the network access to internal resources. There are several ways to achieve this. A virtual private network (VPN) is a popular mechanism designed for this purpose, and the IT folks in the Department of Computer and Information Science have provided a VPN server.

## Prerequisites

To install the client, qualified users must obtain the following information from the network administrator:

1. Install the OpenVPN client if it is not already installed on your Ubuntu version:

```
$ sudo apt install openvpn
```

2. Install the Network Manager OpenVPN package so that OpenVPN appears in the VPN settings of the Network Manager GUI:

```
$ sudo apt install network-manager-openvpn
```

3. Start and enable the OpenVPN service:

```
$ sudo systemctl start openvpn  
$ sudo systemctl enable openvpn
```

4. A Computer Science network userid and password. (This is different from your University userid and password.)
5. A copy of the VPN certificate.

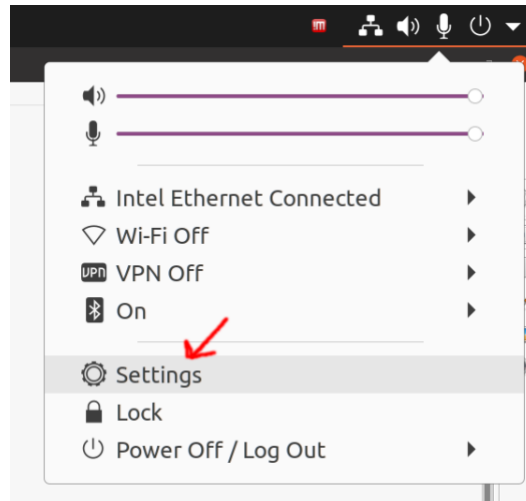
## Step-By-Step Instructions

The following instructions were developed using Ubuntu 20.04. You may need to make the appropriate adjustments for other versions.

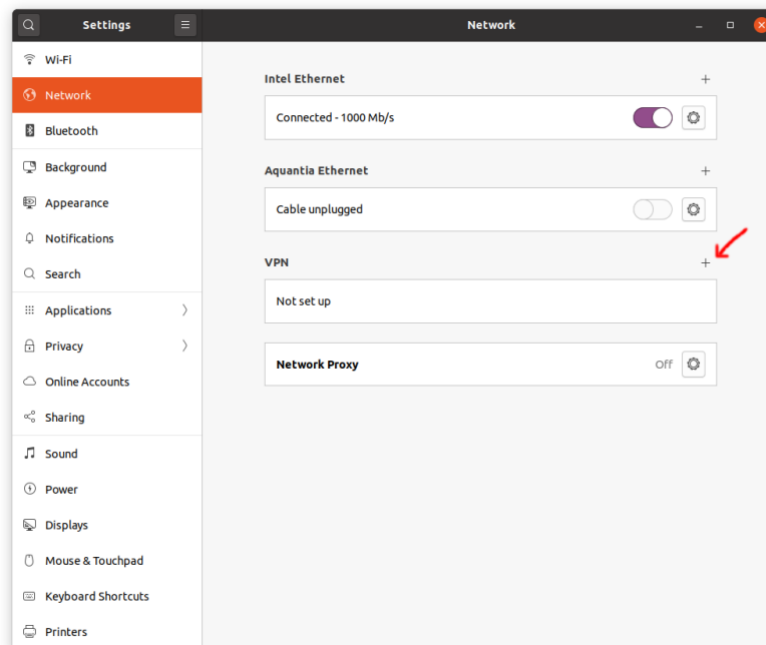
1. Obtain the above prerequisites. Place the certificate in a directory, and note where you placed it.
2. On the top left area of your Ubuntu screen, left click the network icon



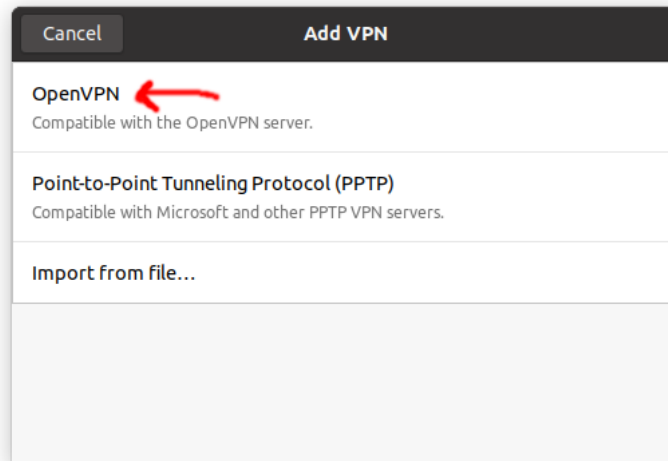
3. On the drop-down, left click on Select



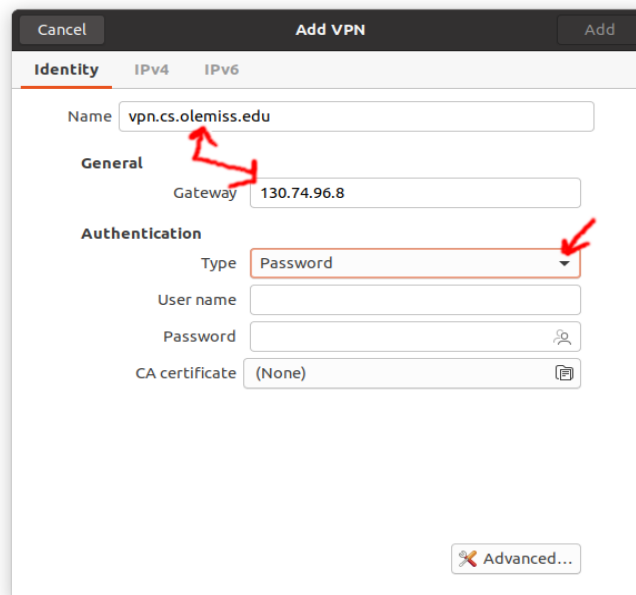
4. On the network settings dialog, left click the indicated “+”



5. In the Add VPN dialog, left click OpenVPN

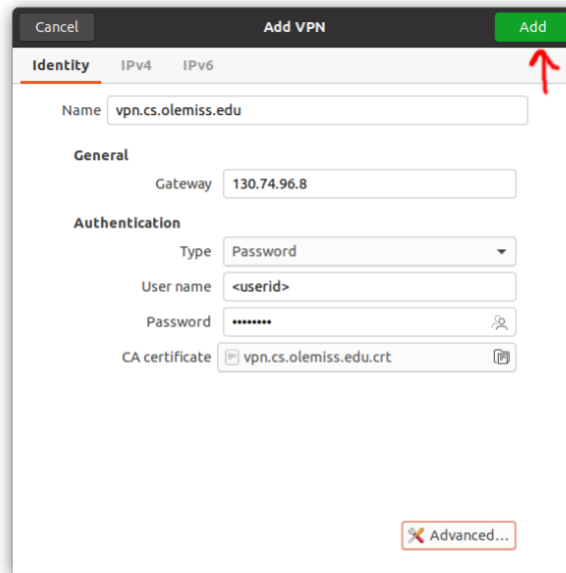


6. In the Add VPN dialog, enter the name, gateway and change the type to "Password". You screen should look like this

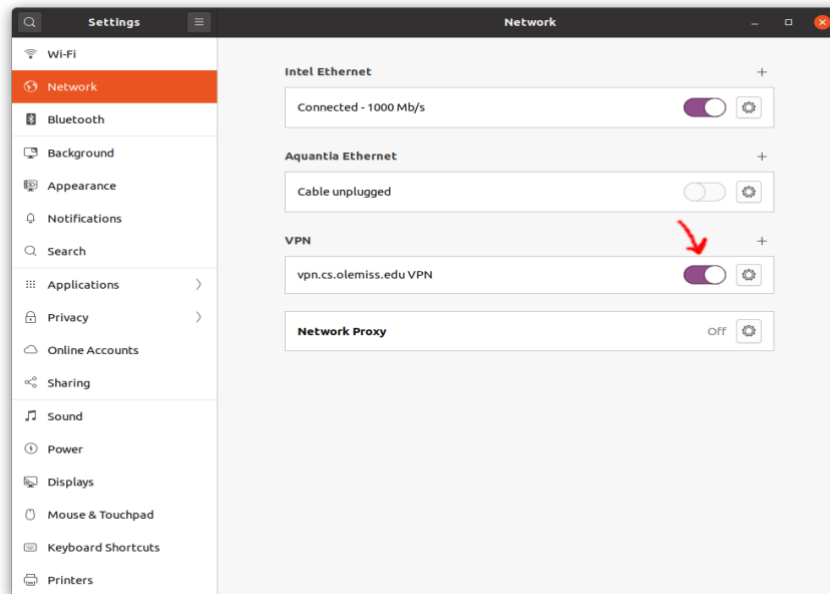


7. Enter the userid and password provided to you by the network administrator. Click the open icon and select the certificate file provided to you by the network administrator

8. On the “Add VPN” dialog, left click Add



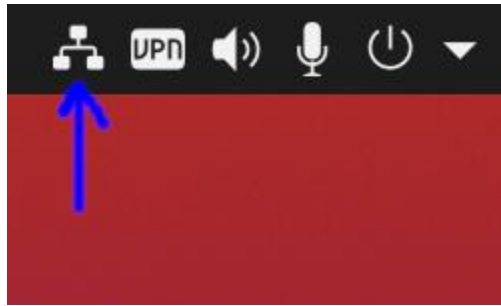
9. In the network settings dialog, slide the indicated switch to ON



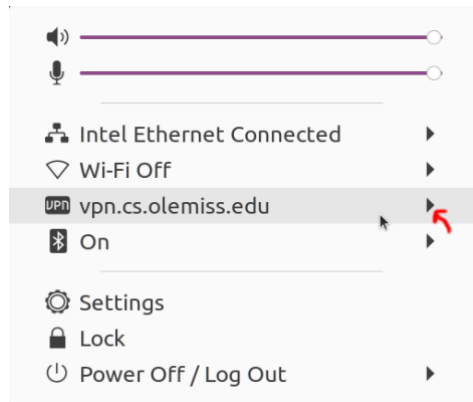
10. In a few moments the VPN will activate, and the status area on the top right of your screen will look like



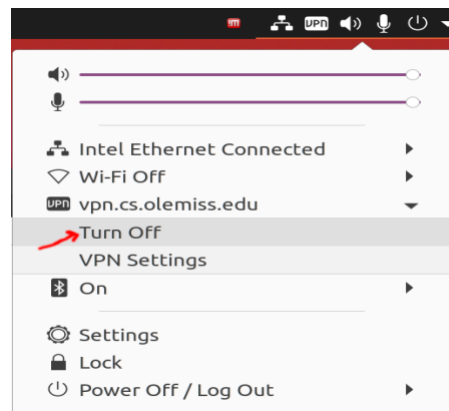
11. To turn off the VPN, click the network



12. Left click the indicated icon



13. Then left click Turn Off



**While the VPN is active, your workstation will work as if you were plugged into the on-campus network. So, remember while connected you are subject to all University rules and policies. Your connection is logged, and activity can be traced back to you**