

Setting Up Your OpenVPN Connection

Welcome to Cyber Range Poulsbo, Washington State's academic cyber range. Access to this secure environment requires a virtual private network (VPN) connection. This quick start will guide you through the one-time VPN setup.

OVERVIEW

To access the range platform, your device will need *OpenVPN* software and a connection profile file for the Cyber Range. (OpenVPN implements secure network extension using SSL/TLS and X.509 public key infrastructure.) You will be provided with the connection profile configuration file along with your access credentials (username and password). While setup details vary based on the operating system of your device, the basic steps are:

 1. Download 2. Install 3. Configure 4. Connect

INSTRUCTIONS

1. DOWNLOAD

Obtain *OpenVPN* client software specific to your operating system

- **Windows:** No download needed. OpenVPN client software is included in the configuration file provided to you. Skip to Step 3.
- **MacOS:** [Downloads - Tunnelblick | Free open source OpenVPN VPN client server software for macOS](#)
- **Linux:** [Community Downloads | OpenVPN](#)
- **Android/Chromebooks:** [OpenVPN for Android - Apps on Google Play](#).

2. INSTALL

Install OpenVPN client software on your device

- a. OpenVPN must be installed by a user who has administrative privileges
- b. Follow any installation directions provided with your download

3. CONFIGURE

Configure the OpenVPN Connection Profile for the Cyber Range

- a. Identify the operating-system-specific configuration file located in your "VPN bundle" provided by Cyber Range Poulsbo. This configuration file contains the required certificate and connection settings for the Cyber Range.
 - i. Windows uses the OpenVPN executable (File type: Application)
 - ii. All other operating systems will use the OpenVPN Config File

- b. Install the identified configuration file
 - i. **Windows:**
Run the executable file you identified in the previous step. This will install the connection profile with your credentials to the Cyber Range. When complete you will be able to connect using the OpenVPN menu in the next step.
 - ii. **MacOS:**
Drag and drop the OpenVPN configuration file into Tunnelblick
 - iii. **Linux:**
Use either of the two methods below:
 - 1. Install Open VPN Network Manager
Follow these instructions: <https://www.ovpn.com/en/guides/ubuntu-gui>
 - 2. Use the Command Line
 - a. For Ubuntu and other Debian-based Linux distributions, install OpenVPN package: **sudo apt-get -y install openvpn**
 - b. Move your config file (identified previously) into **etc/openvpn/**
 - iv. **Android/Chromebooks:**
Refer to this Chromebook Help page: [Set up virtual private networks \(VPNs\) - Chromebook Help \(google.com\)](#)

4. CONNECT

With Cyber Range credentials configured, you are ready to start a connection. You will connect to the VPN each time you use the Cyber Range. For now, start a connection to test your ability to reach the Cyber Range.

Each operating system has a slightly different process for starting a connection.

Windows

1. Locate the OpenVPN -GUI Tray Icon

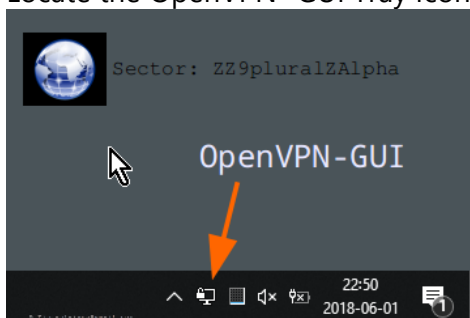


Figure 1: The OpenVPN-GUI Tray Icon

- a. If you cannot see the icon, it is likely in the hidden icons
- b. Open the system tray to reveal the hidden icons

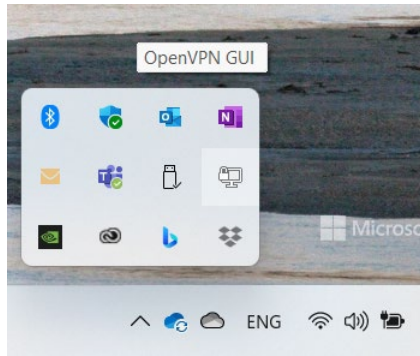


Figure 2: Hidden icons revealed

2. Right click on the OpenVPN-GUI icon and select *Connect*

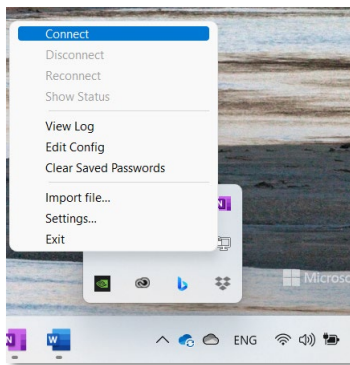


Figure 3: OpenVPN-GUI menu via right-click on icon

3. Enter your Cyber Range provided username and password in the dialogue box

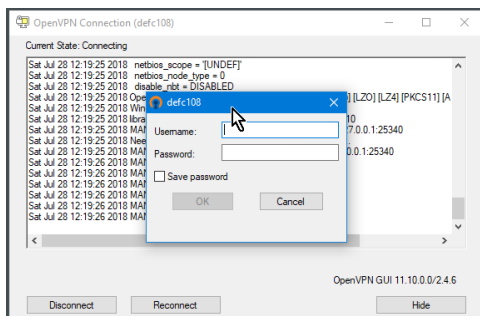


Figure 4: User credential dialogue box

4. Wait a few seconds for your connection to complete
5. Test your connection to Cyber Range
 - a. In a browser, navigate to the Cyber Range: <https://platform.cyberangepoulsbo.com>
 - b. If you reach login the login screen, your VPN connection is working.
6. For troubleshooting using the OpenVPN-GUI for Windows: <https://community.openvpn.net/openvpn/wiki/OpenVPN-GUI-New>

MacOS

1. Open Tunnelblick OpenVPN client

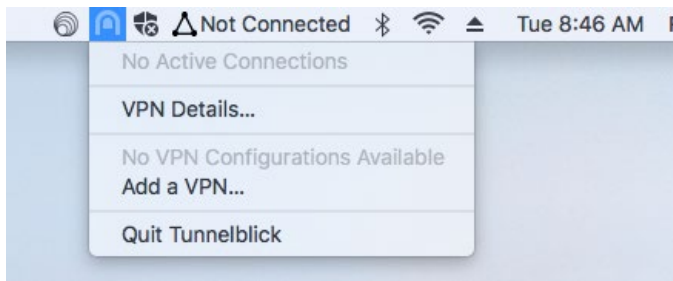


Figure 5: Tunnelblick icon to open Tunnelblick OpenVPN client software

2. Select your configuration
3. Add username and password when prompted, select OK

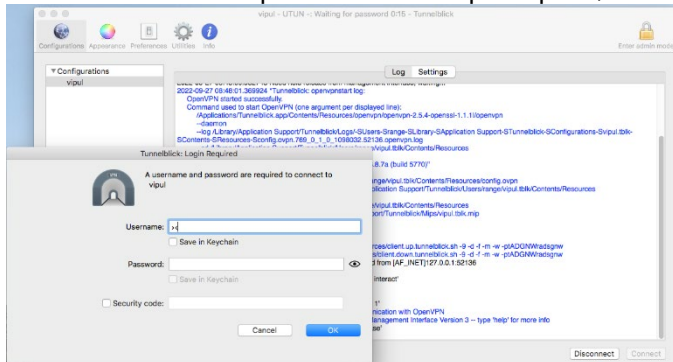


Figure 6: Tunnelblick OpenVPN connection and login

4. Test your connection to the Cyber Range
 - a. In a browser, navigate to the Cyber Range: <https://platform.cyberrangepoulsbo.com>
 - b. If you reach login the login screen, your VPN connection is working.

Linux

1. From OpenVPN Network Manager: select **Connect**
2. From the command line: run the process in the background via screen/deamon

Option 1: **sudo openvpn <config> --daemon**

Option 2: **screen <enter>**
sudo openvpn <config>
<exit screen>

3. Enter your Cyber Range provided username and password when prompted
4. Test your connection to Cyber Range platform
 - a. In a browser, navigate to Cyber Range: <https://platform.cyberrangepoulsbo.com>
 - b. If you reach login the login screen, your VPN connection is working.