

# Diffusion Models Bootcamp Step 2 - Vector VPN Setup Instructions

Please follow these instructions to set up a secure VPN connection to the Vector cluster (named Vaughan) and access the JupyterHub Python notebook environment.

**If you have already participated in a Vector bootcamp, and you've set up your VPN connection, you can skip these instructions.**

**Note:** The Jupyter notebooks started using this interface use 1 Nvidia T4 GPU, 4 CPUs, 20 GB RAM, QoS high and they have a 12 hour time limit. We strongly encourage you to save your work often, including interim data, models, and results.

1. First create a ssh tunnel to Vaughan from your local system (replace **username** with your own Vector username).

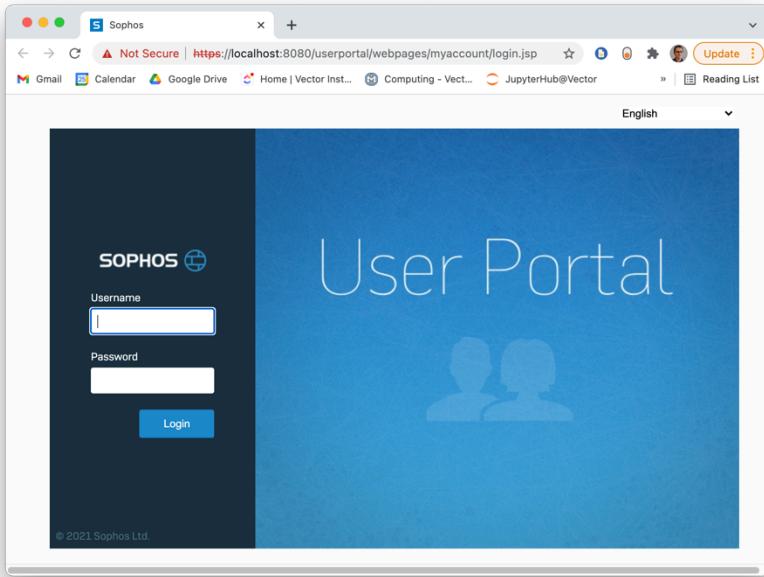
**From your local computer, not the Vector cluster:** Run this command from PowerShell (Windows users), or Terminal (MacOS and Linux).

```
ssh -L 8080:172.17.8.254:443 <username>@v.vectorinstitute.ai
```



After you enter your password successfully, you will see a prompt in the Vector cluster, ie `username@v2:~`. This means that everything worked.

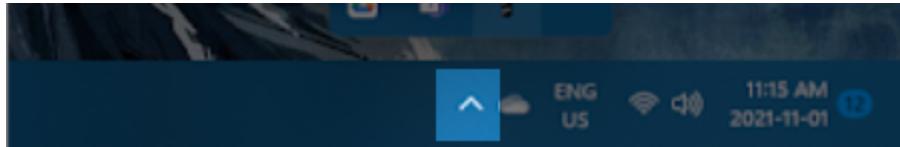
2. Visit <https://localhost:8080/>. You will need to accept the warning about the security risk (the firewall's SSL cert is self-signed).



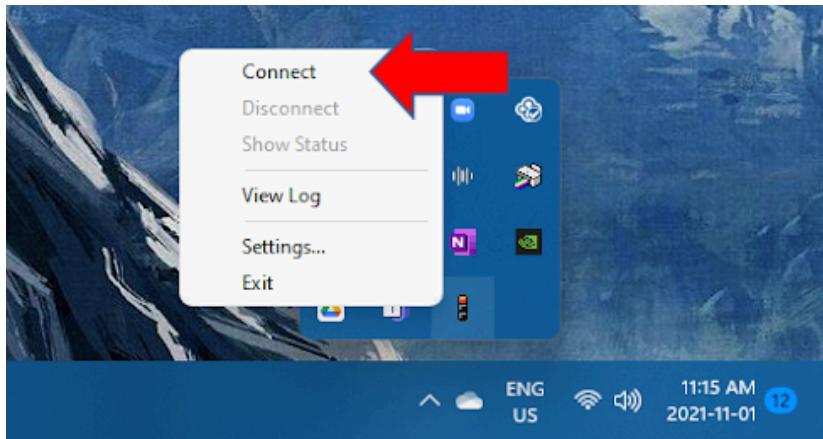
3. Login with your Vector credentials in the "User Portal", then visit the "VPN" tab and download the configuration for your operating system.

A screenshot of the Sophos User Portal showing the "VPN" tab selected. The left sidebar has links for Home, Personal, Download client, VPN (which is highlighted), Internet usage, Email, and Logout. The main content area is titled "User portal for ethanj". It shows sections for "Sophos Connect client (IPsec and SSL VPN)" and "SSL VPN client". Under "SSL VPN client", there are four download options: "Download client and configuration for Windows", "Download configuration for Windows", "Download configuration for other OSs", and "Download configuration for Android/iOS". A red box highlights the first option, and a large blue arrow points to it from the bottom right.

3a. If you are using Windows, select “Download client and configuration for Windows”. Install using the executable file. After installation, connect to the VPN by right-clicking on the icon in your taskbar tray icons.



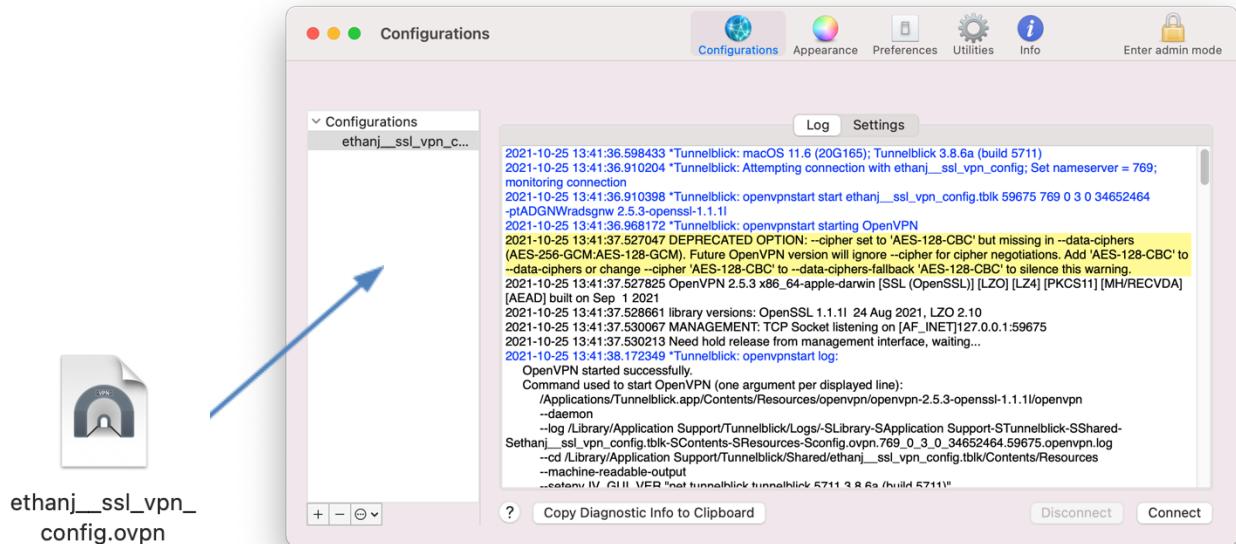
Right-click on the traffic light icon in your system tray, then hit **Connect**. This will prompt you for your cluster username and password.



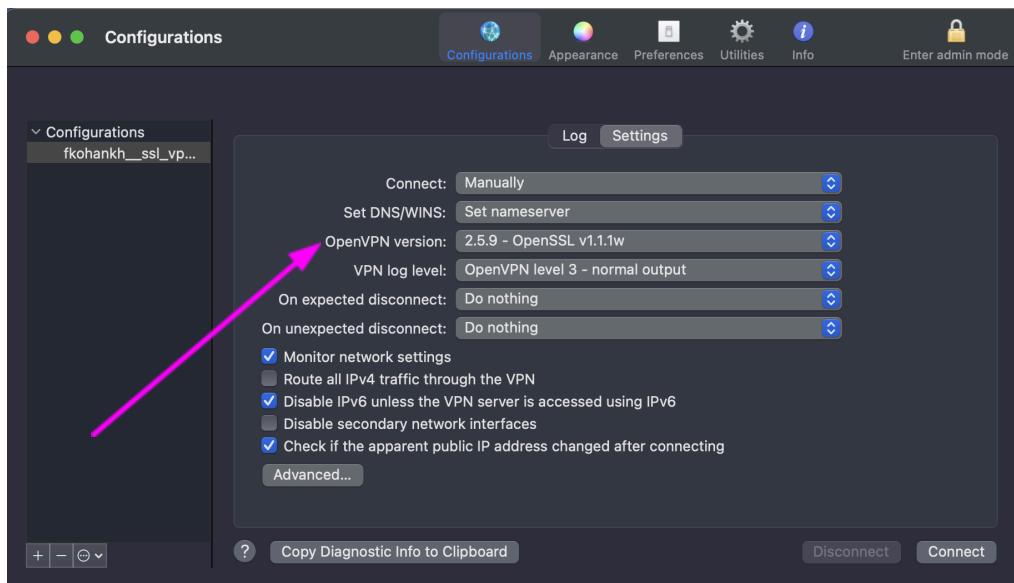
3b. If you are using **MacOS**, select “Download configuration for other OSs”. Next, install [Tunnelblick](#) on your local system.

3c. Load the config file downloaded in step 3 in your VPN client.

3d. Using Tunnelblick on MacOS, for example, open the client window, then drag and drop your config file onto the Configurations panel.



3e. Make sure you change the OpenVPN version to 2.5.9. You can do this by clicking on Configurations and then under the setting tab.



4. Establish the SSL VPN tunnel (ignore any deprecation warnings you might receive)

5. Verify your local system has connected. For Windows, check the VPN connection from the stoplight icon in your taskbar at the bottom-right. For MacOS in Tunnelblick, click on the Menu Bar item  to view the drop-down menu:



**6. If you are running Linux**, please contact the Vector team so we can provide you with the installation instructions.

Note to Vector team: these instructions are available on the wiki under  
[https://support.vectorinstitute.ai/Vaughan\\_SSL\\_VPN\\_and\\_JupyterHub](https://support.vectorinstitute.ai/Vaughan_SSL_VPN_and_JupyterHub)