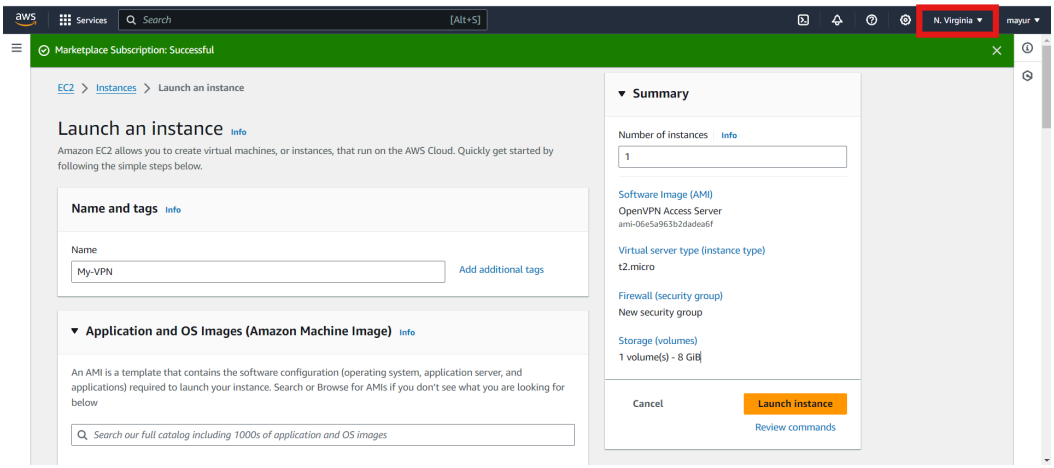
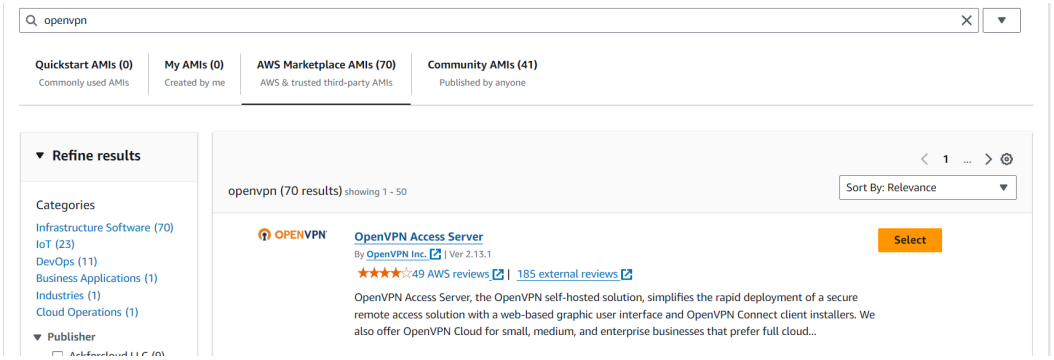
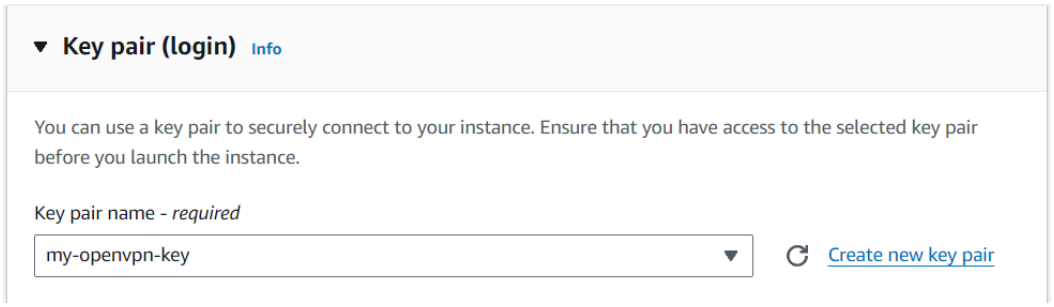
# Setting Up an OpenVPN Server on AWS EC2

## Part 1: Server-Side Setup

1. **Launch an EC2 Instance**
   - Launch your own EC2 instance in a country different from your current location.
   - 

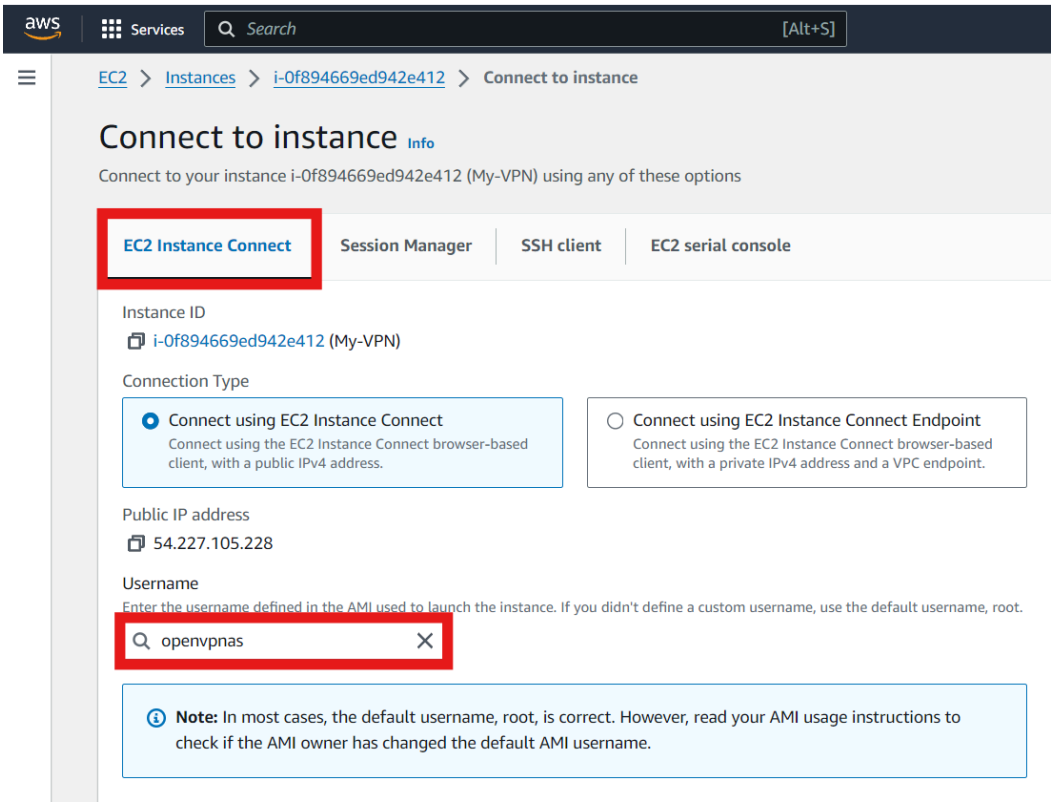
2. **Select OpenVPN Image**
   - Choose an OpenVPN image for your instance.
   - 

3. **Create an SSH Key**
   - Generate your own SSH key for secure access.
   - 

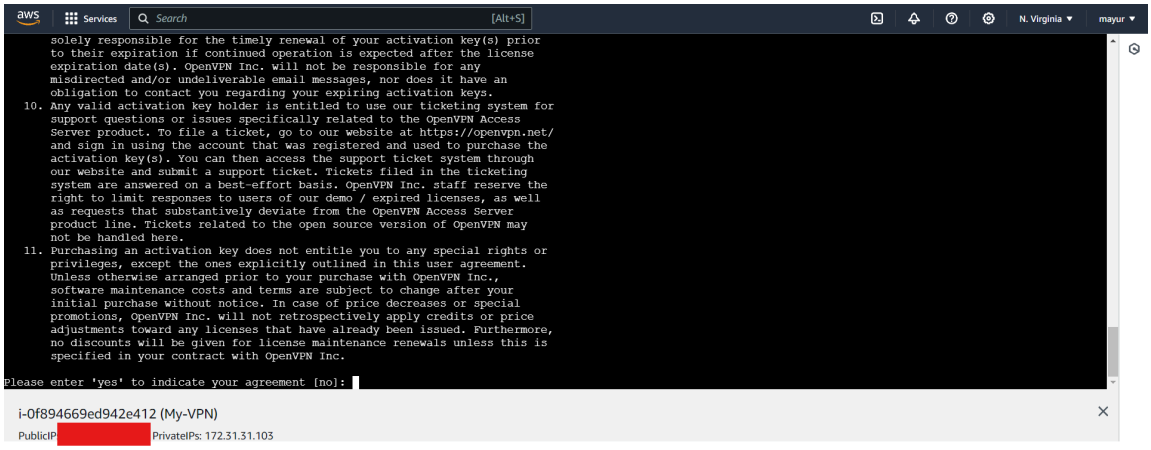
4. **Launch the Instance**

- Proceed to launch the instance.

5. **Connect to Your Instance (Windows Users)**
   - Use EC2 Instance Connect, and change the username to `openvpnas` from `root`.




6. **Configure OpenVPN on the VM**

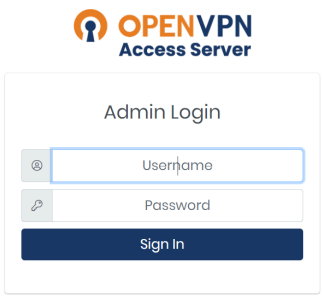



   - Configure OpenVPN on your VM. During the configuration, pay attention to these two settings (other settings can be set to default by pressing enter):

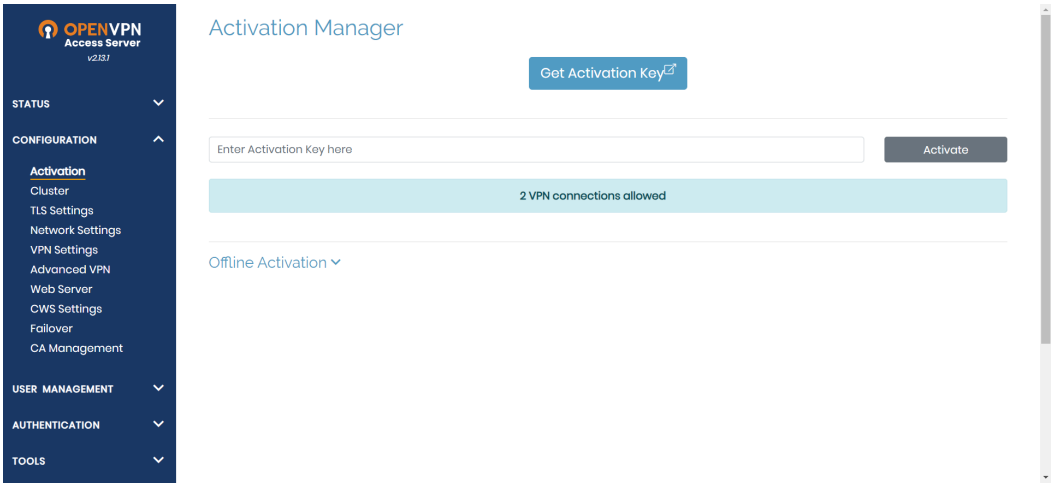
```
Will this be the primary Access Server node?
(enter 'no' to configure as a backup or standby node)
> Press ENTER for default [yes]: yes

Please specify the network interface and IP address to be
used by the Admin Web UI:
(1) all interfaces: 0.0.0.0
(2) eth0: 172.31.31.103
Please enter the option number from the list above (1- 2).
> Press Enter for default [1]: 1
```

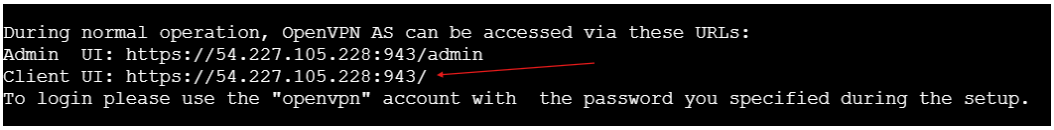
7. **Access Admin and Client URLs**
   - After completing the steps, you will get the admin and client URLs.
   - 
```
During normal operation, OpenVPN AS can be accessed via these URLs:
Admin  UI: https://54.227.105.228:943/admin
Client UI: https://54.227.105.228:943/
To login please use the "openvpn" account with  the password you specified during the setup.
```
8. **Access the Admin URL**
   - Copy the admin URL to your browser tab to access the OpenVPN admin page.




   -
9. **Login to OpenVPN Admin Page**
   - Enter the username as openvpn and the password you set during the configuration part.
10. **Complete VPN Server Configuration**
    - Your VPN server configuration is now complete.

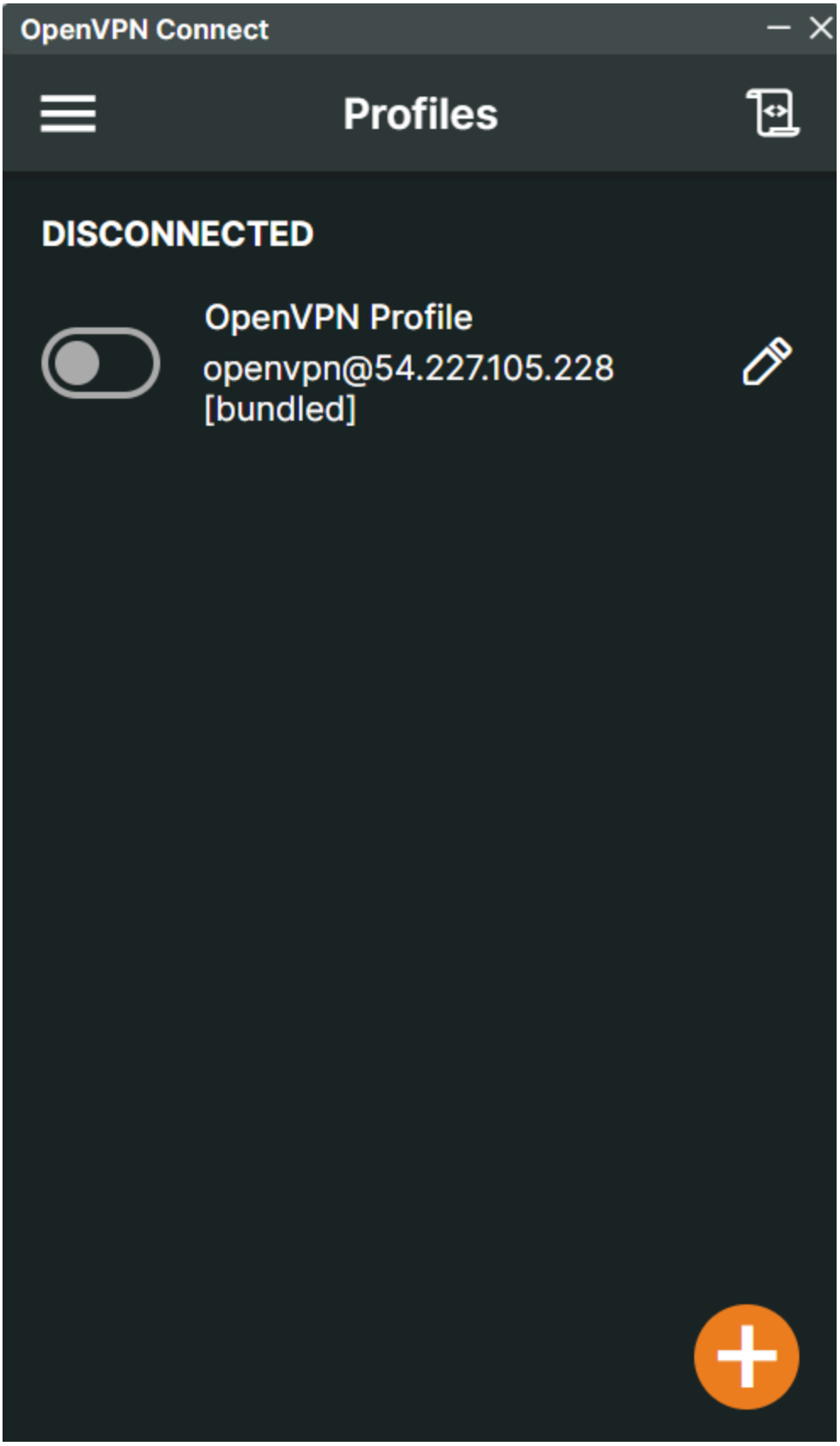
- 


## Part 2: Client-Side Setup

1. **Use the Client URL**
   - Use the client URL provided.
   - 

2. **Download the Recommended VM**
   - After pasting the client URL, you will see a page to download the recommended VM with pre-configured VPN settings (Encryption/Decryption key, methods like IPsec, GRE, GRE over IPsec, AES, etc.).
   - 

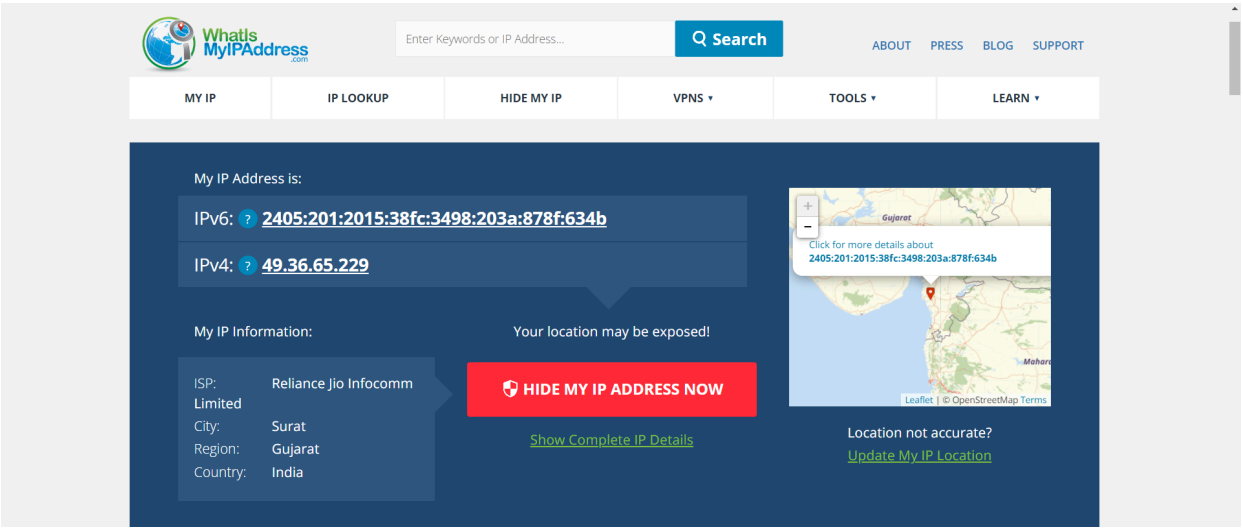
3. **Install the Program**
   - Install the program once the download is complete.
4. **Verify VPN Connection**
   - After installation, the application will pop up showing the VPN status.


OpenVPN Connect
Profiles
DISCONNECTED
OpenVPN Profile
openvpn@54.227.105.228
[bundled]

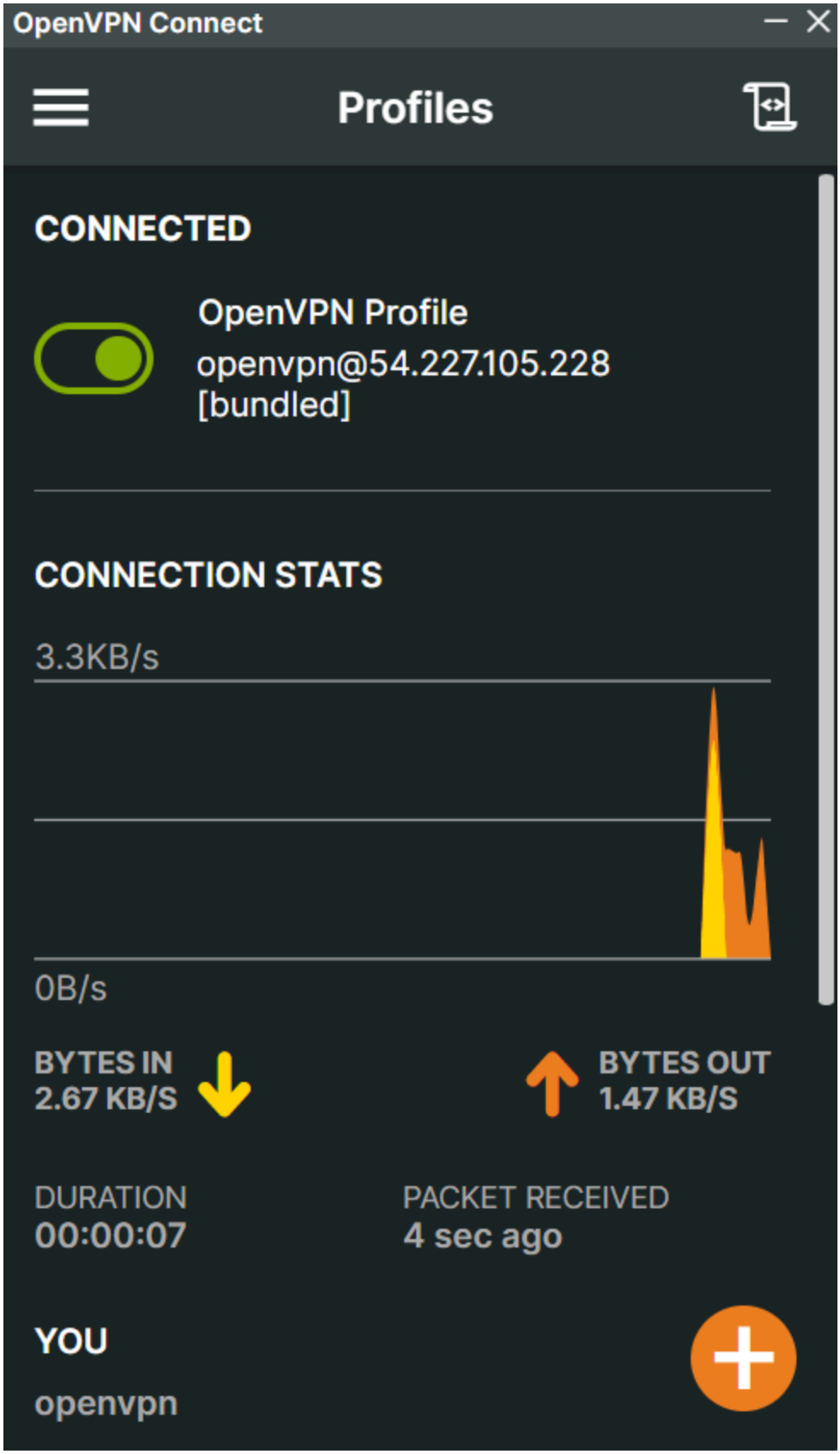
5. **Monitor VPN Usage**
    - Check how many users are using your VPN service.

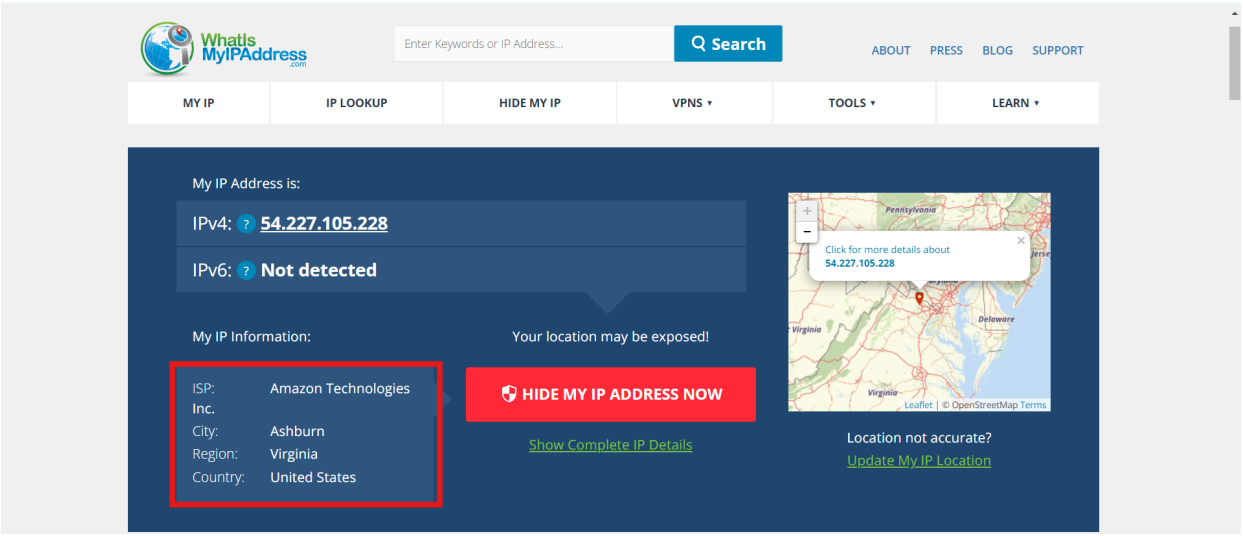
| Node | Username | Start Time | Duration | Service | Real IP | VPN IP | Proto | Port | Bytes In | Bytes Out | Error | Version | Gui Version | Platform |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ip-172-31-31-103 | openvpn | 07/09/24 07:35 | | WEB_ADMIN | 49.36.65.229 | | | | | | | | | |
| ip-172-31-31-103 | openvpn | 07/09/24 07:41 | | WEB_CLIENT | 49.36.65.229 | | | | | | | | | |
| ip-172-31-31-103 | openvpn | 07/09/24 07:52 | 0d 00:04 | VPN | 49.36.65.229 | 172.27.232.2 | UDP | 1194 | 1.90 MB | 1.50 MB | | 3.8.2connect3 | OCWindows_3.4.3-3337 | win |
| ip-172-31-31-103 | openvpn | 07/09/24 07:58 | 00:00 | VPN | 49.36.65.229 | 172.27.232.3 | UDP | 1194 | 2.87 KB | 1.90 KB | | 3.8.2connect3 | OCWindows_3.4.3-3337 | win |

Before VPN is off




After VPN is on


OpenVPN Connect
Profiles
CONNECTED
OpenVPN Profile
openvpn@54.227.105.228
[bundled]
CONNECTION STATS
3.3KB/s
0B/s
BYTES IN
2.67 KB/S
BYTES OUT
1.47 KB/S
DURATION
00:00:07
PACKET RECEIVED
4 sec ago
YOU
openvpn




As we can see now traffic is going from our VM that we have created in our AWS