# OpenVPN setup for aws

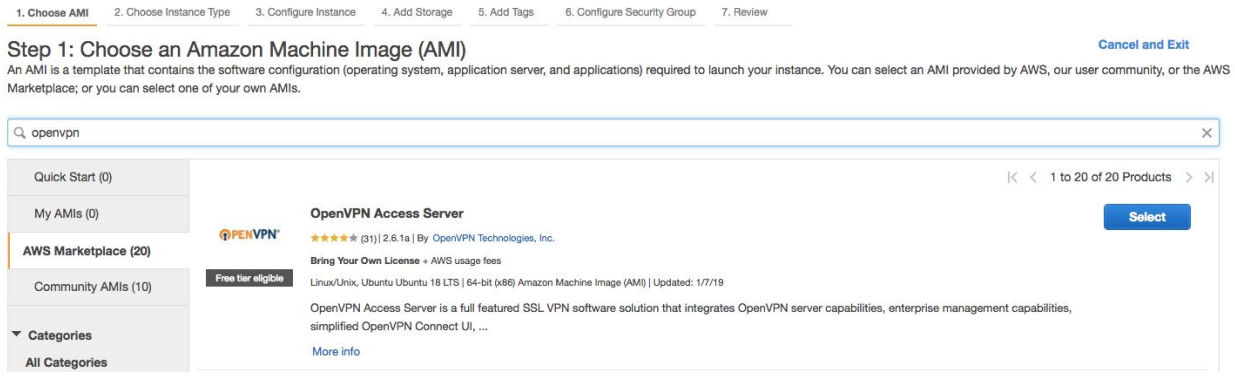
**What is OpenVPN:**
OpenVPN is is an open-source commercial software that implements virtual private network (VPN) techniques to create secure point-to-point or site-to-site connections in routed or bridged configurations and remote access facilities. It uses a custom security protocol that utilizes SSL/TLS for key exchange.

**Why we need OpenVPN:**
To create a secure connection(ssh) between our local system and EC2, We need OpenVPN. Using OpenVPN we can allow only particular devices to access EC2.

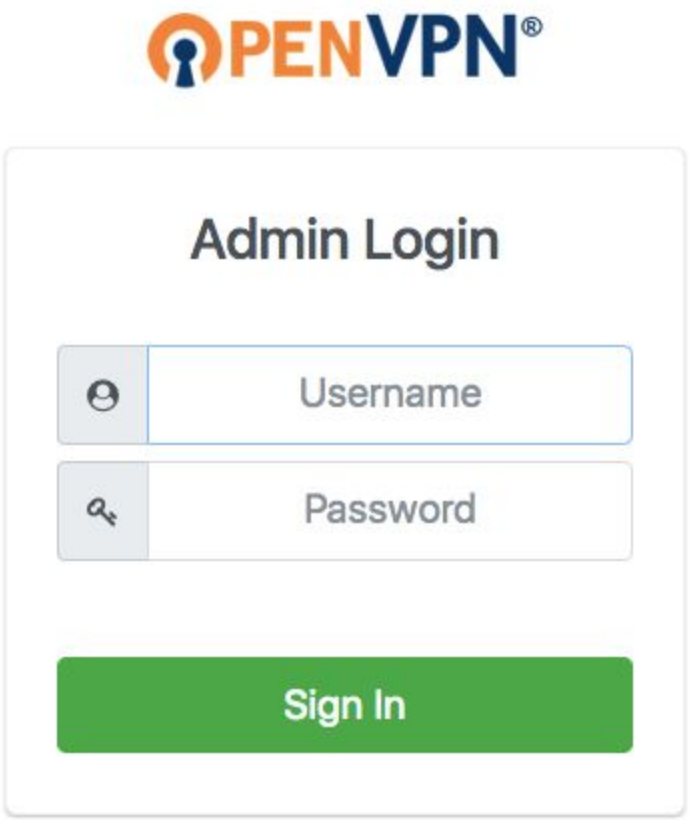
**To learn more:**
https://www.cactusvpn.com/beginners-guide-to-vpn/what-is-openvpn/#definition

**Steps for setup OpenVPN on aws**

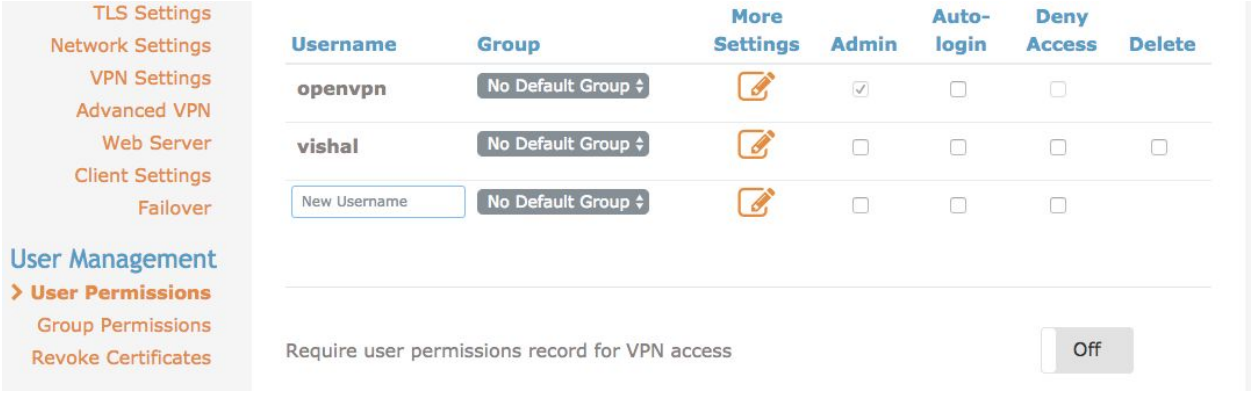
1. Login to aws dashboard.
2. Search **OpenVPN** in aws marketplace and select any image depends on how many users you need for. Let's select **free tier eligible** image.



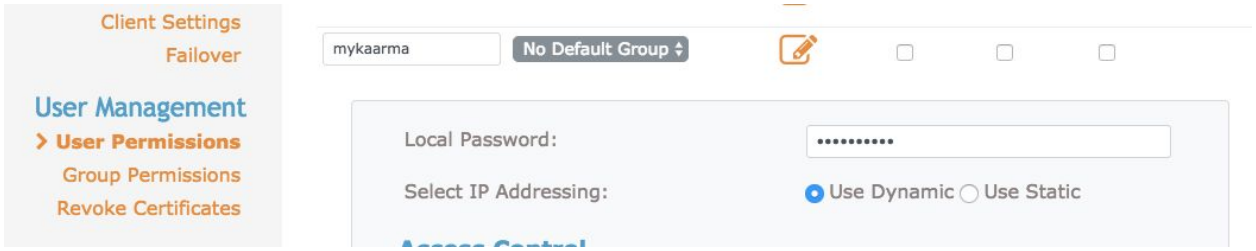

3. Now it would be create a EC2 instance with a security group and provide the elastic IP also.
4. Access this EC2 instance via ssh using following command let's suppose IP is 10.20.30.40 .
   ssh -i ssh_key openvpnas@10.20.30.40
   **ssh_key** : ssh key .pem for linux based system and .ppk for windows based systems.
   **openvpnas** : this is default user for OpenVPN based EC2 instance.
   **10.20.30.40** : this is public IP of openvpn EC2 instance.
5. Run the following commands from the terminal & reset the password for **openvpn** user
   :~$ sudo passwd openvpn
6. Go to browser and type https://10.20.30.40:943/admin
   Where User: openvpn
   Password: ******** (you have reset above)




7. After logged in go to **User Permissions** on left side of menu.




8. Here you can create only two users because we are using free license of OpenVPN . Enter the any username then click on More Setting.




9. Here we are using username mykaarma and enter the password also.

10. Then click on Save Setting most down.

11. Now login via mykaarma user into browser using.
    https://10.20.30.40:943
User: mykaarma
Password: **********

12. Click on Go you will get following.

13. Download the OpenVPN app for your platform and then install, i have installed this for MAC.

Click on Connect, now you are connected.

14. Now you can Create an EC2 instance on aws copy the security group id of OpenVPN instance and past this into new instance's group for ssh like this.

Now you can connect to new ec2 instance via private IP from you local system.

For more understanding:
https://www.youtube.com/watch?v=QwEzn99KYXc