01.04.2024

**Step by Step Notes for VPN Creation in AWS Cloud**

VPN LAB  
31.03.2024

1 - Jump Server

2 - VPN

- Physical VPN

- Virtual VPN

- Software VPN

VPN Lab

- Setup a VPN

- Connect your Private Subnet EC2 directly from your laptop using Private IP.

Launch a OpenVPN EC2

Launch a EC2

Go to Browse more AMI >>> Marketplace >>> VPN >>>> OpenVPN >>> Select

Caution >>> Downgrade your Instance type to >>>>> t2.micro

Choose your VPC >>> Public Subnet >>> Enable Public IP >>>> Look at those SG rules

Launch Instance

Username for this OpenVPN >>>> openvpnas

Once you login

Type "YES" to accept EULA

Enter

Will this be the primary Access Server node?

Type "YES"

Enter

Please specify the network interface and IP address to be

used by the Admin Web UI:

Type "2"

Enter

What public/private type/algorithms do you want to use for the OpenVPN CA?

Simply press "ENTER"

What public/private type/algorithms do you want to use for the self-signed web certificate?

Simply press "ENTER"

Please specify the port number for the Admin Web UI.

Simply press "ENTER"

Please specify the TCP port number for the OpenVPN Daemon

Simply press "ENTER"

Should client traffic be routed by default through the VPN?

Simply press "ENTER"

Should client DNS traffic be routed by default through the VPN?

Simply press "ENTER"

Should private subnets be accessible to clients by default?

Simply press "ENTER"

Do you wish to login to the Admin UI as "openvpn"? <<<<<<<<<< WEB UI User name >>>>>>>>>>>>>>>>>>>>

Simply press "ENTER"

Type a password for the 'openvpn' account (if left blank, a random password will be generated):

Type your PWD and press enter, as you know you can see that, type and press enter

Please specify your Activation key (or leave blank to specify later):

Simply press "ENTER"

Admin UI: https://3.127.222.59:943/admin

Client UI: https://3.127.222.59:943/

Try to login to the Admin UI >>> Advanced >>> proceed

Username - openvpn

PWD >>> yourpwd which you set above in the OS

Agree

Login

Status >> Status Overview >>> explore everything

HOw to set up a software VPN

whats next ???

Test your VPN by connecting to your Private subnet EC2 using private IP

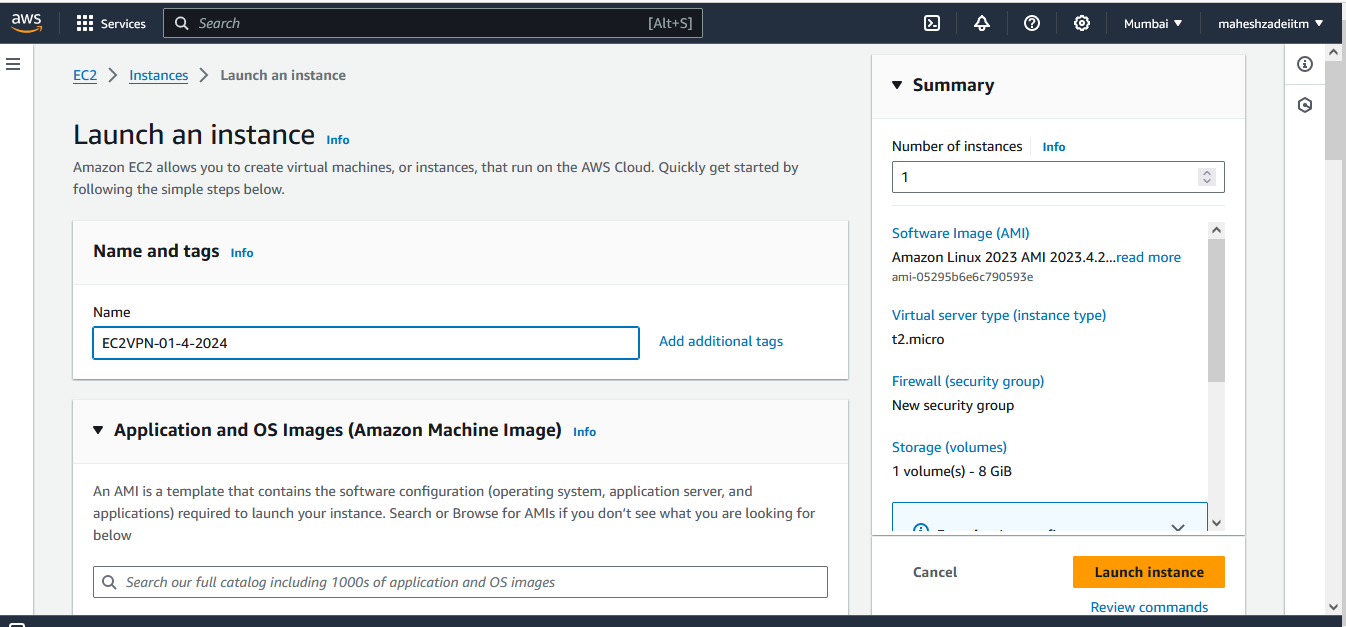
Now, open your client UI, Try to download and install the tool in your local machine and get that connected

NOw launch a new Linux EC2 in private Subnet and try to connect that using private IP

if it is working, your VPN is successful.

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Now Login to the AWS Console and go to EC2 Service to create the VPN



Click on Browse more AMI

A screenshot of a computer

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Select AWS Marketplace AMI

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Description automatically generated

Type VPN in search bar

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Select OPEN VPN access server

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Click on subscribe on instance Launch.

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Change the instance type from t2 small to t2.micro ( free tier eligible )

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Select the keypair for Mumbai region

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Edit Network setting choose you custom VPC and public subnet

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Select default security group

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Instance Launched

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Copy public IP

A screenshot of a computer

Description automatically generated

Paste in Mobaxterm

Type Public IP from ECVPN

Type User name as = openvpnas

And select the Private key for mumbai region

It will start VPN Installation automatically once you connect with openvpnas password .

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A screen shot of a computer

Description automatically generated

Username for this OpenVPN >>>> openvpnas

Once you login

Type "YES" to accept EULA

Enter

A screenshot of a computer screen

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Will this be the primary Access Server node?

Type "YES"

Enter

A screenshot of a computer screen

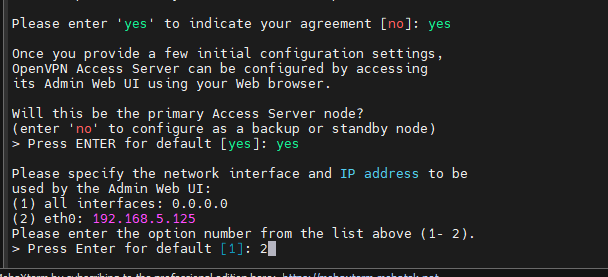
Description automatically generated

Please specify the network interface and IP address to be

used by the Admin Web UI:

Type "2"

Enter



What public/private type/algorithms do you want to use for the OpenVPN CA?

Simply press "ENTER"

A screen shot of a computer

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What public/private type/algorithms do you want to use for the self-signed web certificate?

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A screen shot of a computer

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Simply press "ENTER"

Should client DNS traffic be routed by default through the VPN?

Simply press "ENTER"

Should private subnets be accessible to clients by default?

Simply press "ENTER"

A screenshot of a computer screen

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Do you wish to login to the Admin UI as "openvpn"?

Do you wish to login to the Admin UI as "openvpn"? <<<<<<<<<< WEB UI User name >>>>>>>>>>>>>>>>>>>>

Simply press "ENTER"

Type a password for the 'openvpn' account ( India@123)

(if left blank, a random password will be generated):

Type your PWD and press enter, as you know you can see that, type and press enter

Please specify your Activation key (or leave blank to specify later):

Simply press "ENTER"

A screenshot of a computer

Description automatically generated

Initial Configuration Complete!

Pls copy the web url for admin and client.

You can now continue configuring OpenVPN Access Server by

directing your Web browser to this URL:

https://43.205.239.96:943/admin

During normal operation, OpenVPN AS can be accessed via these URLs:

Admin UI: https://43.205.239.96:943/admin

Client UI: https://43.205.239.96:943/

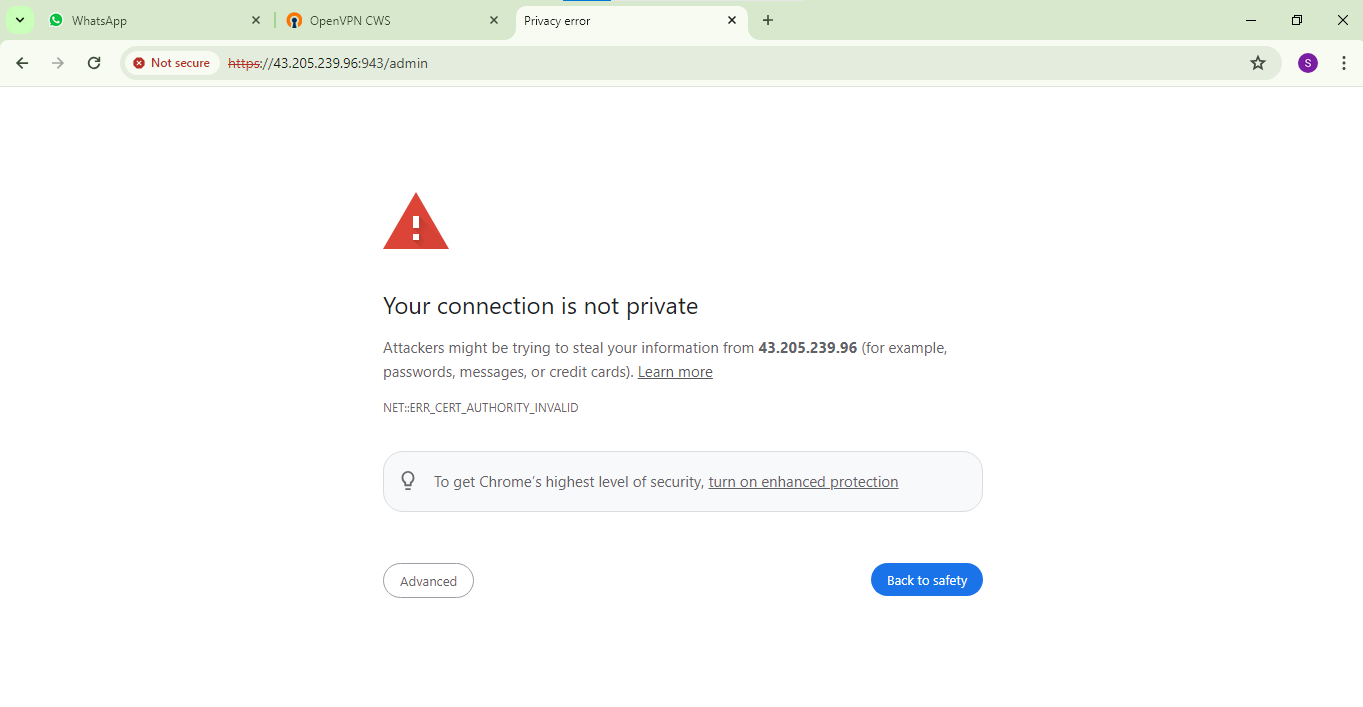
To login please use the "openvpn" account with the password you specified during the setup.

See the Release Notes for this release at:

https://openvpn.net/vpn-server-resources/release-notes/

openvpnas@ip-192-168-5-125:~$

Copied the Admin URL I Chrome Broweser



Click on Advanced

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Description automatically generated

Then click on A screenshot of a computer

Description automatically generated

Type user name and password as

User name : Openvpn

Password : India@123

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Description automatically generated

Click on agree

A screenshot of a computer

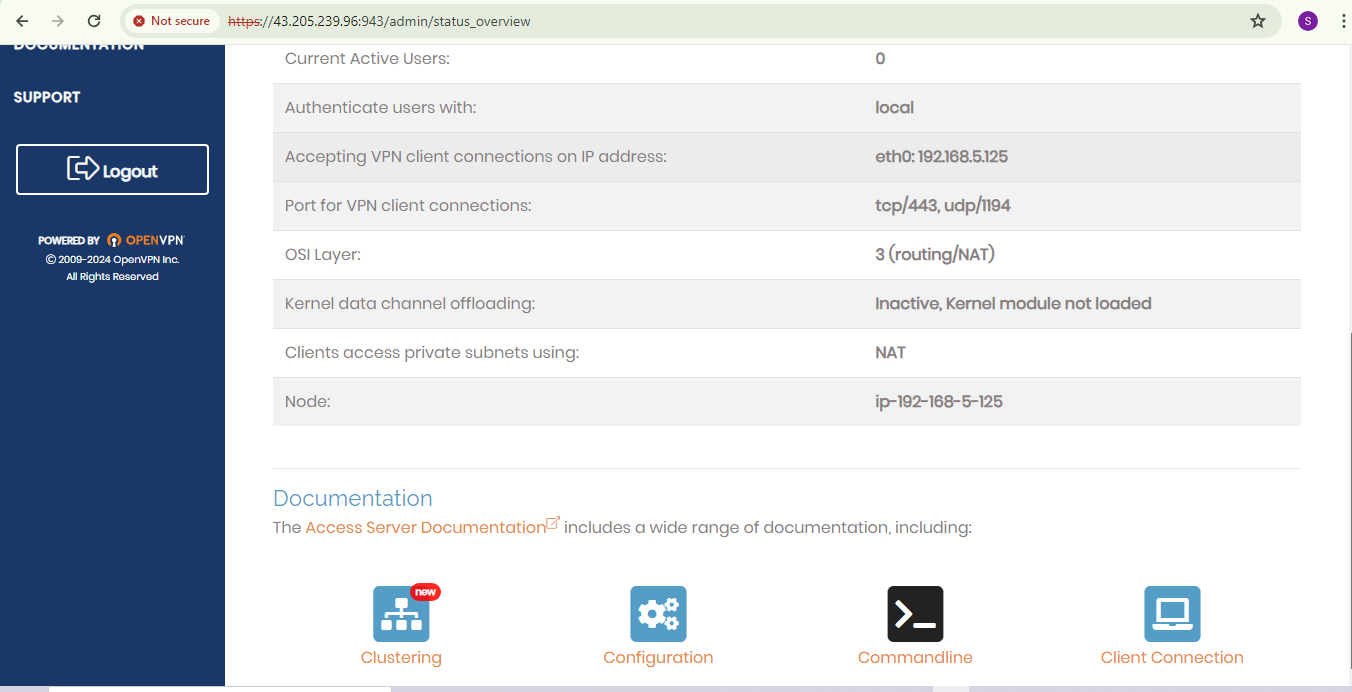
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Go to status over view

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Description automatically generated

2 VPN connections are allowed



Now Copy the Client vpn url in incognito in chrome and configure

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

User name : Openvpn

Password : India@123

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A screenshot of a computer

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Download windows VPN Client from the icon windows

A screenshot of a computer

Description automatically generated

Click on more info

A screenshot of a computer error

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Click on run away

A screenshot of a computer

Description automatically generated

Click on Next

A screenshot of a computer screen

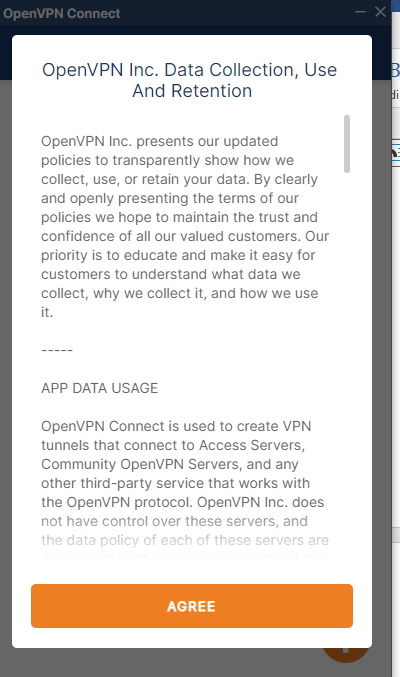
Description automatically generated

Click on Install

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Description automatically generated

Click on agree



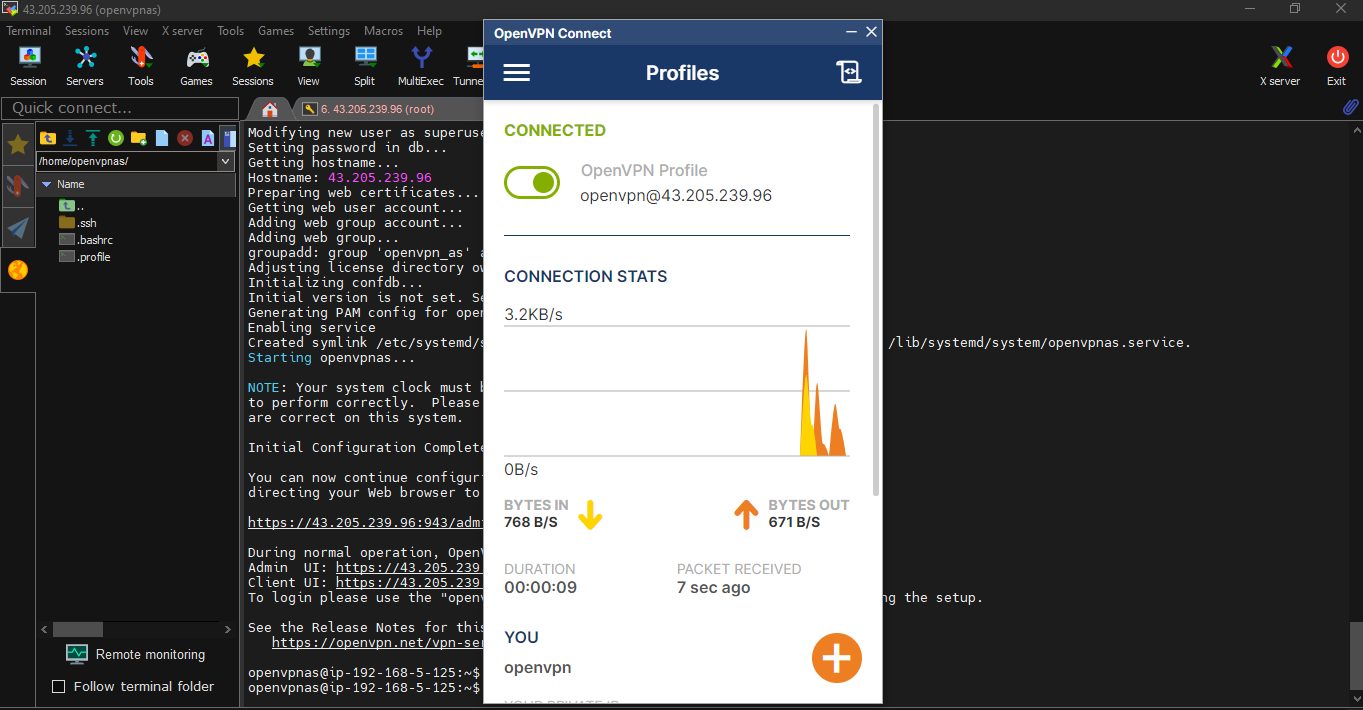
A screenshot of a password

Description automatically generated

Type the password India@123

A screenshot of a login page

Description automatically generated



VPN Connected

Wehave setup a VPN

HOw to set up a software VPN is successfully done now .

whats next ???

Test your VPN by connecting to your Private subnet EC2 using private IP

Now, open your client URL, Try to download and install the tool in your local machine and get that connected

Now launch a new Linux EC2 in private Subnet and try to connect that using private IP

if it is working, your VPN is successful.

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Edit Network Settings

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Disable the public IP and selected private subnet .

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Description automatically generated

Security group is default

A screenshot of a computer

Description automatically generated

Click on launch Instance

A screenshot of a computer

Description automatically generated

A green line on a white background

Description automatically generated

No Public IP assigned

A screenshot of a computer

Description automatically generated

Copy Private IP

A screenshot of a computer

Description automatically generated

Paste in Bobaxterm

A screenshot of a computer

Description automatically generated

Click on OK

A screenshot of a computer

Description automatically generated

Now successfully connected the EC2 Linux Instance by Client VPN in my Laptop .

A screenshot of a phone

Description automatically generated

if it is working, your VPN is successful.

Thanks

Pls check my Hands on done today taught us in yesterday class by Mahesh Babu Sir .

Pls check and updated .