

Setting up OpenVPN Access Server in AWS

Purpose:

Purpose of the document is to standardise the installation process of OpenVPN on AWS.

Intended Audience:

This is for all the client-facing Engineers and freshers who they can follow the steps in the document and install + configure the OpenVPN on AWS.

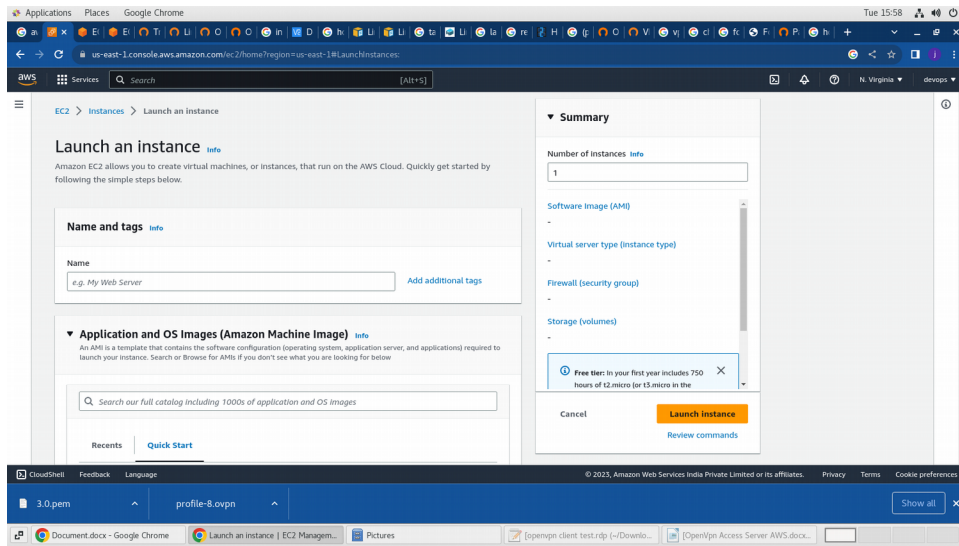
Objective:

OpenVPN Access Server Provides an enterprise VPN solution for businesses of all sizes, providing a securely encrypted connection to private networks over unsecured public internet. With this single solution, you can protect business data communications and provide encrypted remote access to on-premises, hybrid, and public cloud resources.

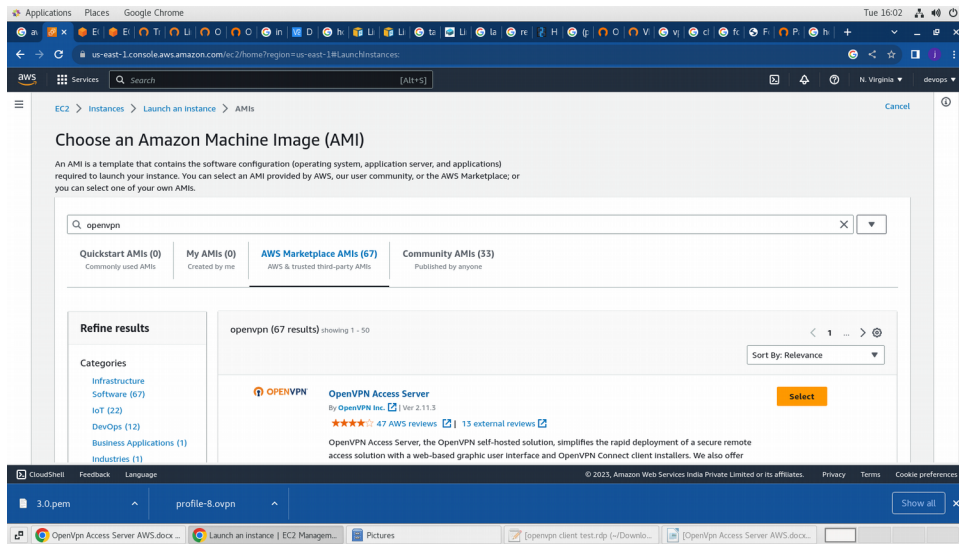
Execution steps:

STEP 1 — Launch OpenVPN Access Server from AWS Marketplace

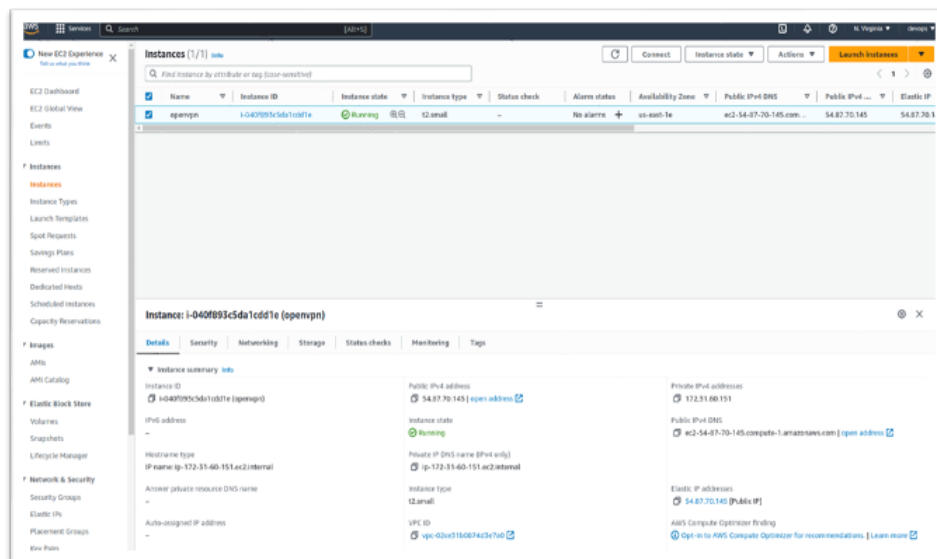
1. Sign into the AWS Management Console and navigate to the **EC2 service**
2. If you are in India change your region to nearby location (eg: Mumbai) Then click on Launch Instance.



3. In the dashboard, click AWS Marketplace menu and type OpenVPN Access Server



4. On the next page click Continue and Select t2.micro from the instance type list and click on Review and Launch button.
5. Create a new key pair (or use an existing one if you already have one), enter a name, and click download key pair. Then click Launch Instance and wait for the instance to go to running state.



STEP 2 — Configure the Server

- 1) If you're using a Linux or Mac machine, open your terminal and SSH to your server as openvpnas: **"ssh -i "{keyname}.pem" openvpnas@{Your-IPv4-Public-IP}"**
- 2) Next, type **yes** for the agreement, then you'll be prompted with how you want to configure your VPN.

```

AWS Services Search [Alt+S]
Welcome to OpenVPN Access Server Appliance 2.11.3
System information as of Mon May 1 16:08:28 UTC 2023
System load: 0.3173828125 Processes: 120
Usage of /: 29.9% of 7.57GB Users logged in: 0
Memory usage: 11% IPv4 address for eth0: 172.31.27.130
Swap usage: 0%

Updates can be applied immediately.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

OpenVPN Access Server
Initial Configuration Tool
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OpenVPN Access Server End User License Agreement (OpenVPN-AS EULA)
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1. Copyright Notice: OpenVPN Access Server License;
   Copyright (c) 2009-2022 OpenVPN Inc. All rights reserved.
   "OpenVPN" is a trademark of OpenVPN Inc.
2. Redistribution of OpenVPN Access Server binary forms and related documents,
   are permitted provided that redistributions of OpenVPN Access Server binary
   forms and related documents reproduce the above copyright notice as well as
   a complete copy of this EULA.
3. You agree not to reverse engineer, decompile, disassemble, modify,
   translate, make any attempt to discover the source code of this software,
   or create derivative works from this software.
4. The OpenVPN Access Server is bundled with other open source software
   components, some of which fall under different licenses. By using OpenVPN
   or any of the bundled components, you agree to be bound by the conditions
   of the license for each respective component. For more information, you can
   find our complete EULA (End-User License Agreement) on our website
   (http://openvpn.net), and a copy of the EULA is also distributed with the
   Access Server in the file /usr/local/openvpn.as/license.txt.
5. This software is provided "as is" and any expressed or implied warranties,
   including, but not limited to, the implied warranties of merchantability
   and fitness for a particular purpose are disclaimed. In no event shall
   OpenVPN Inc. be liable for any direct, indirect, incidental,
   special, exemplary, or consequential damages (including, but not limited
   to, procurement of substitute goods or services; loss of use, data, or

I-0443d7d9900781294 (newsrserver)
PublicIPs: 3.88.214.178 PrivateIPs: 172.31.27.130
```

3) Just hit enter for the rest to have all the defaults confirmed.

```

AWS Services Search X
Removing Cluster Admin user login...
useradd admin...
Writing as configuration file...
Performing as init...
Removing any previous userdb...
Creating default profile...
Modifying default profile...
Adding new user to userdb...
Modifying new user as superuser in userdb...
Setting password in db...
Setting hostname...
Hostname: 3.88.214.178
Generating web certificates...
Setting web user account...
Adding web group account...
Adding web group...
Adjusting license directory ownership...
Initializing confdb...
Initial version is not set. Setting it to 2.11.3...
Generating PAM config for openvpnas...
Enabling service
Created symlink /etc/systemd/system/multi-user.target.wants/openvpnas.service → /lib/systemd/system/openvpnas.service.
Starting openvpnas...

NOTE: Your system clock must be correct for OpenVPN Access Server
to perform correctly. Please ensure that your time and date
are correct on this system.

Initial Configuration Complete!

You can now continue configuring OpenVPN Access Server by
directing your Web browser to this URL:

https://3.88.214.178:943/admin

During normal operation, OpenVPN AS can be accessed via these URLs:
Admin UI: https://3.88.214.178:943/admin
Client UI: https://3.88.214.178:943/
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/

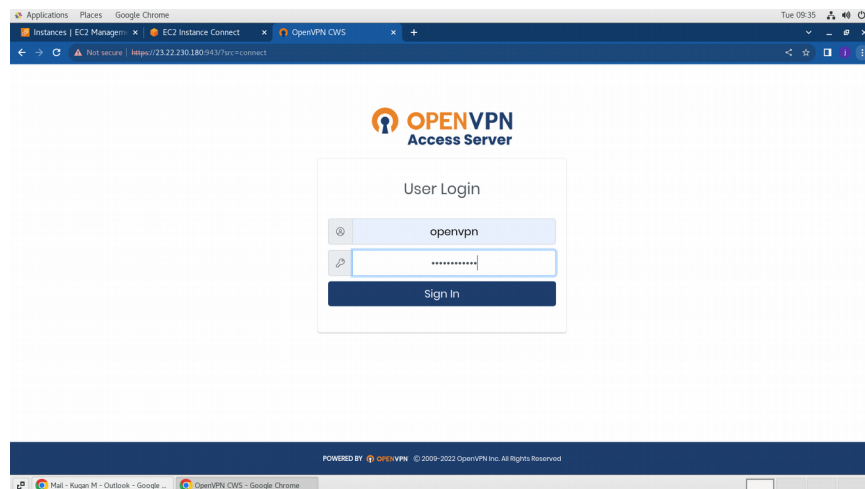
root@ip-172-31-27-130:~#

I-0443d7d9900781294 (newsrserver)
PublicIPs: 3.88.214.178 PrivateIPs: 172.31.27.130
```

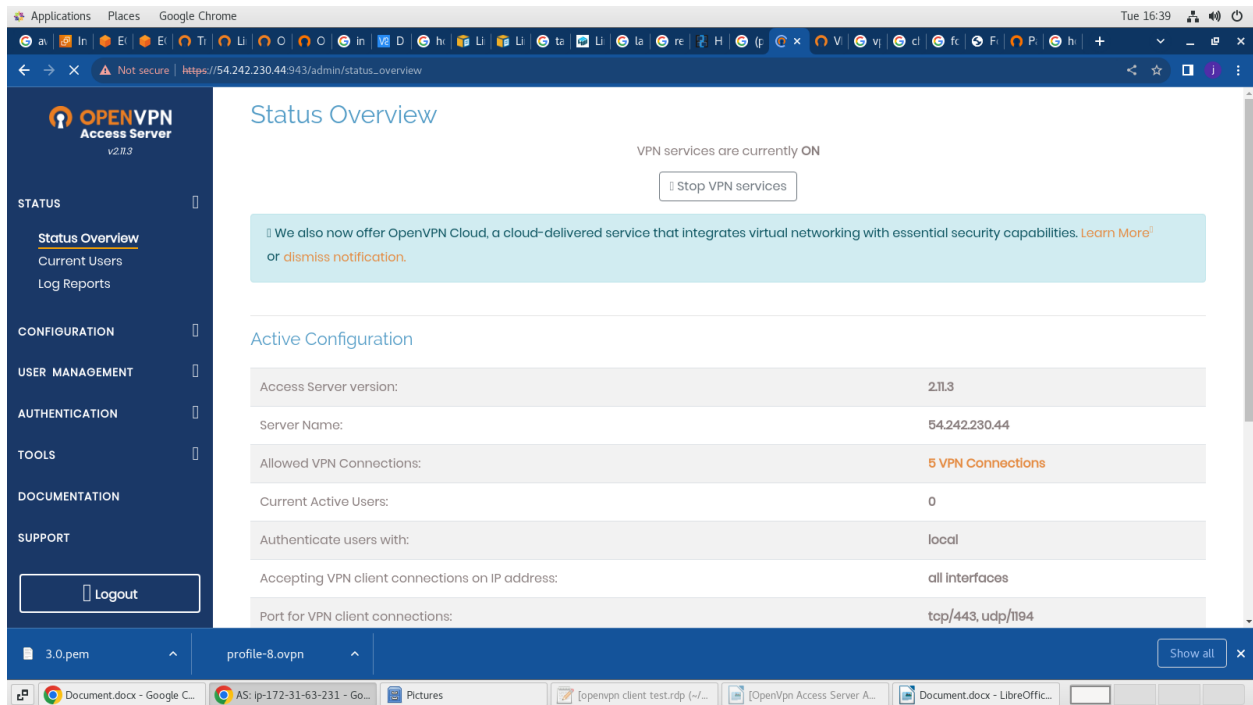
4) Once you reach the end, change the password for the user. Enter a new password twice and you're all set.

5) Command to change password: `sudo passwd openvpn`

6) Next, open a browser window and type: `https://{Your-IPv4-Public-IP-address}:943/admin`



7) Login with openvpn and the password you just set and agree the terms and conditions to get into the OpenVPN access server dashboard.

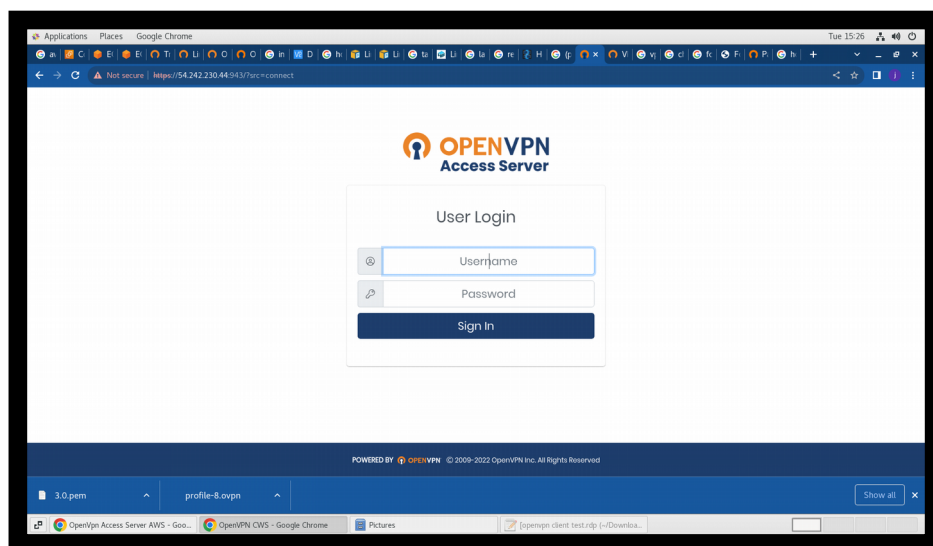


STEP 3 — Using the VPN

A VPN Client is required that can handle capturing the traffic you wish to send through the OpenVPN tunnel, encrypting it, and passing it to the OpenVPN server.

1. Open a browser and enter the below client URL to download the OpenVpn Client

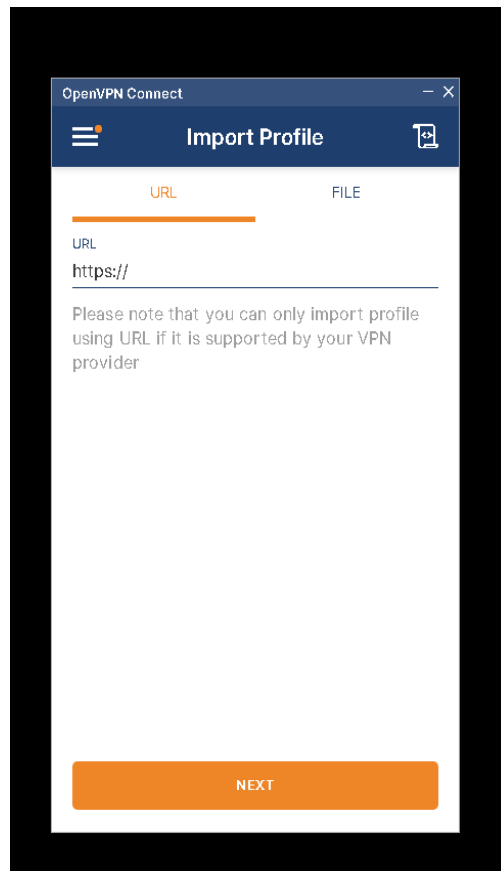
Client URL: <https://public-ip-of-server:943/>



2. Once logged in download the OpenVPN Client according to the OS flavor



3. Open the OpenVPN client and enter the public URL followed by Username and password to get the VPN client connected to the VPN server in AWS



1:07

0 KB/s 49%

← Import Profile

Username

openvpn

Password

Password@123



Profile Name

openvpn@54.242.230.44

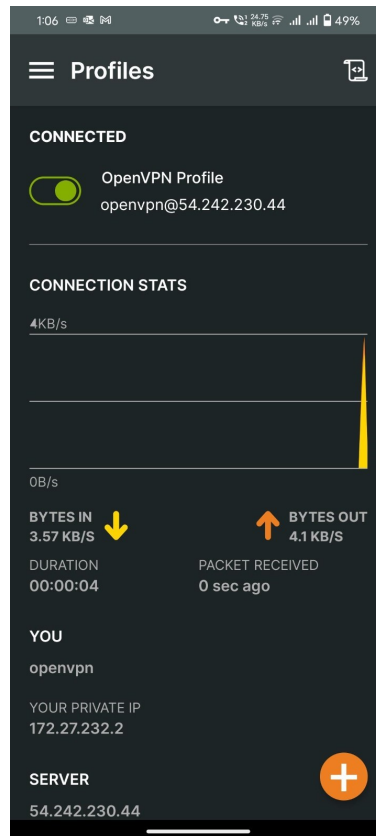
Port (optional)

☐ Import autologin profile

☐ Connect after import

IMPORT

4. Post entering the required details import the profile and click on connect



5. OpenVPN is connected