Name : Vishakha Shelke

Roll no : 06

UID : 2309009

Setting Up a Plex Media Server on AWS

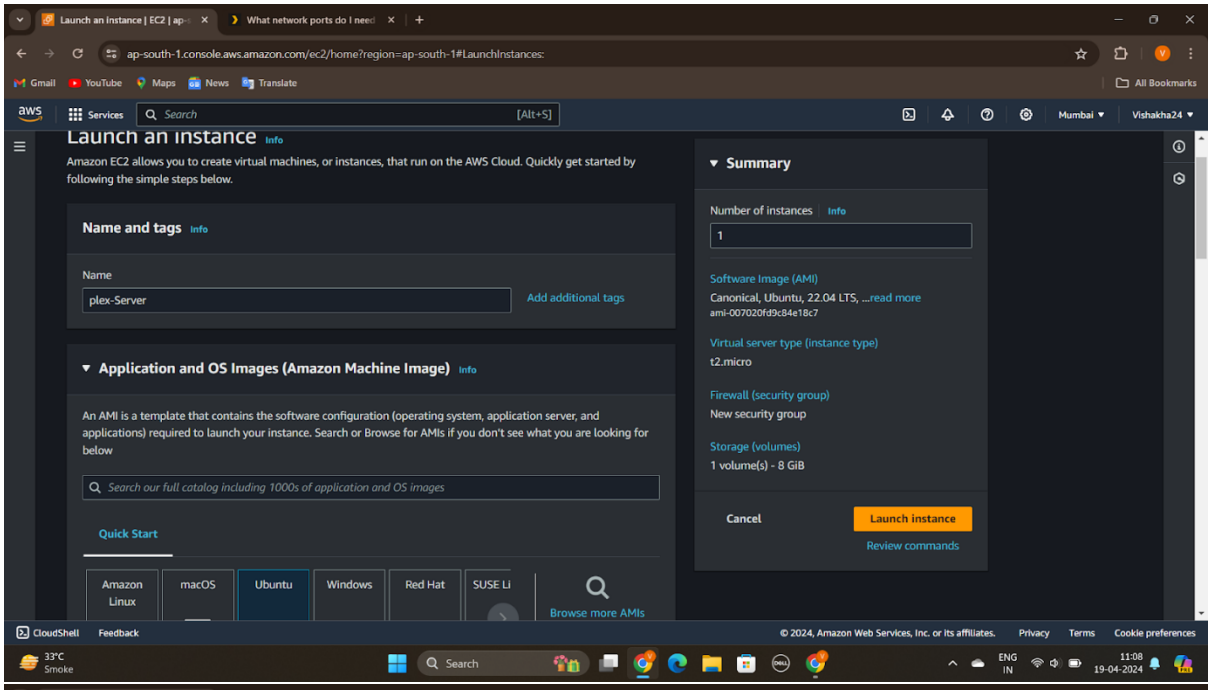
Introduction:

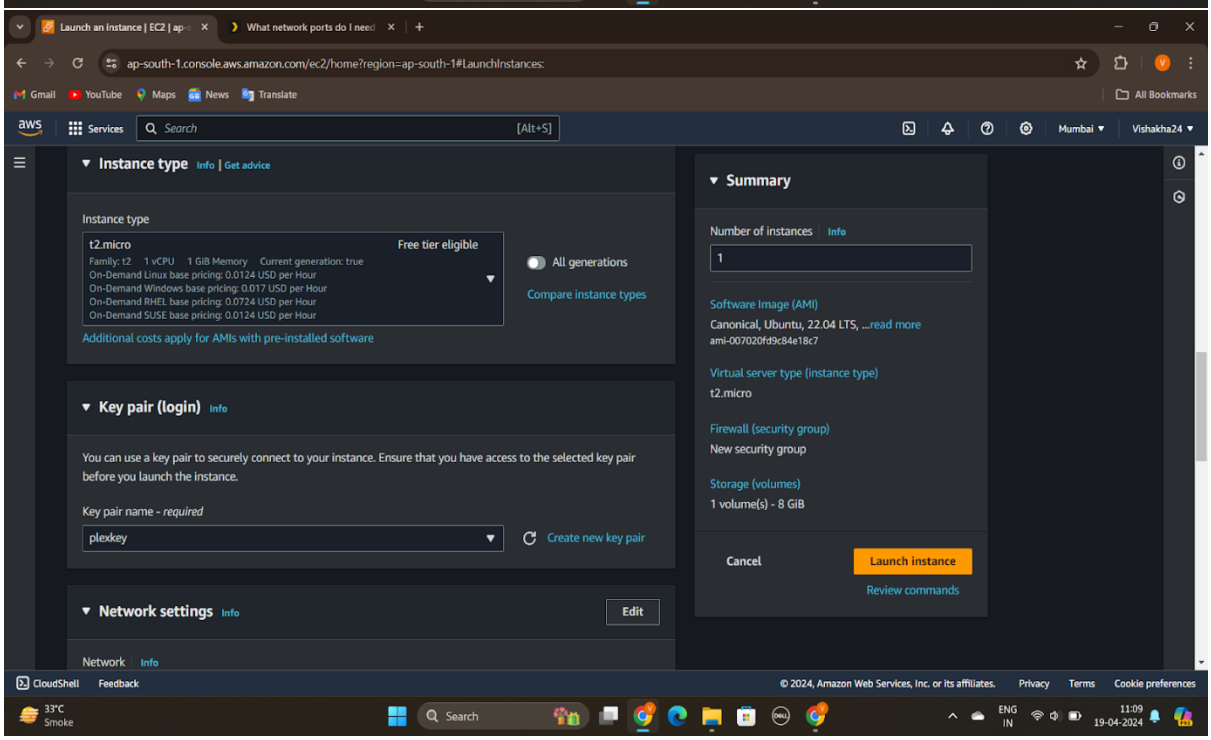
Plex Media Server is a popular media management and streaming platform that allows users to organize and access their digital content from anywhere. It serves as a central hub for storing, organizing, and streaming media files such as movies, TV shows, music, photos, and videos. Users can access their Plex libraries on various devices, including smart TVs, computers, smartphones, and streaming devices like Roku and Amazon Fire TV.
Benefits of Hosting Plex on AWS:
AWS provides a scalable infrastructure that allows you to easily scale your Plex server resources up or down based on demand. Whether you're serving a few users or a large audience, AWS can handle the workload.AWS offers high availability and reliability, ensuring that your Plex server remains accessible and performs optimally at all times. With AWS's global network of data centers, you can minimize downtime and ensure uninterrupted access to your media libraries.
Prerequisites:

- AWS account
- Basic understanding of AWS services (EC2, S3, etc.)
- Familiarity with Plex Media Server and its requirements

Step 1: Creating an EC2 Instance

1. Sign in to the AWS Management Console
2. Launch an EC2 instance with Amazon Linux 2 AMI
3. Configure security groups to allow SSH (port 22) and Plex (port 32400) traffic and mentioned in https://support.plex.tv/articles/201543147-what-network-ports-do-i-need-to-allow-through-my-firewall/
4. Select key pair
5. Launch instance


Launch an instance | EC2 | ap-
What network ports do I need
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:
Gmail
YouTube
Maps
News
Translate
All Bookmarks
aws
Services
Search
[Alt+S]
Mumbai
Vishakha24
Launch an instance Info
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.
Name and tags Info
Name
plex-Server
Add additional tags
Application and OS Images (Amazon Machine Image) Info
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below
Search our full catalog including 1000s of application and OS images
Quick Start
Amazon Linux
macOS
Ubuntu
Windows
Red Hat
SUSE Li
Browse more AMIs
Summary
Number of instances Info
1
Software Image (AMI)
Canonical, Ubuntu, 22.04 LTS, ...read more
ami-007020fd9c84e18c7
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Cancel
Launch instance
Review commands
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences
33°C
Smoke
Search
ENG
IN
11:08
19-04-2024


Launch an instance | EC2 | ap-
What network ports do I need
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:
Gmail
YouTube
Maps
News
Translate
All Bookmarks
aws
Services
Search
[Alt+S]
Mumbai
Vishakha24
Instance type Info | Get advice
Instance type
t2.micro
Free tier eligible
Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Linux base pricing: 0.0124 USD per Hour
On-Demand Windows base pricing: 0.017 USD per Hour
On-Demand RHEL base pricing: 0.0724 USD per Hour
On-Demand SUSE base pricing: 0.0124 USD per Hour
All generations
Compare instance types
Additional costs apply for AMIs with pre-installed software
Key pair (login) Info
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.
Key pair name - required
plexkey
Create new key pair
Network settings Info
Edit
Network Info
Summary
Number of instances Info
1
Software Image (AMI)
Canonical, Ubuntu, 22.04 LTS, ...read more
ami-007020fd9c84e18c7
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Cancel
Launch instance
Review commands
CloudShell
Feedback
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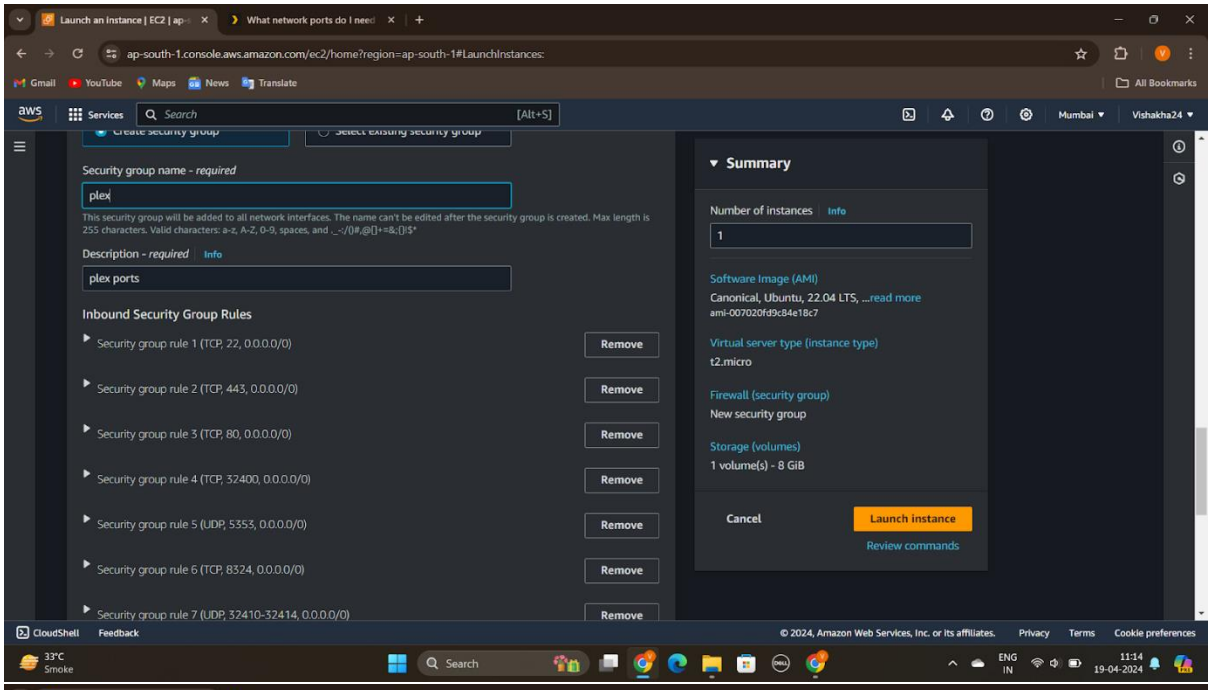
Privacy
Terms
Cookie preferences
33°C
Smoke
Search
ENG
IN
11:09
19-04-2024


Launch an instance | EC2 | ap-
What network ports do I need
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:
Gmail
YouTube
Maps
News
Translate
All Bookmarks
aws
Services
Search
[Alt+S]
Mumbai
Vishakha24
Security group name - required
plex
This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&;{}!$*
Description - required Info
plex ports
Inbound Security Group Rules
Security group rule 1 (TCP, 22, 0.0.0.0/0)
Remove
Security group rule 2 (TCP, 443, 0.0.0.0/0)
Remove
Security group rule 3 (TCP, 80, 0.0.0.0/0)
Remove
Security group rule 4 (TCP, 32400, 0.0.0.0/0)
Remove
Security group rule 5 (UDP, 5353, 0.0.0.0/0)
Remove
Security group rule 6 (TCP, 8324, 0.0.0.0/0)
Remove
Security group rule 7 (UDP, 32410-32414, 0.0.0.0/0)
Remove
Summary
Number of instances Info
1
Software Image (AMI)
Canonical, Ubuntu, 22.04 LTS, ...read more
ami-007020fd9c84e18c7
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Cancel
Launch instance
Review commands
CloudShell
Feedback
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Privacy
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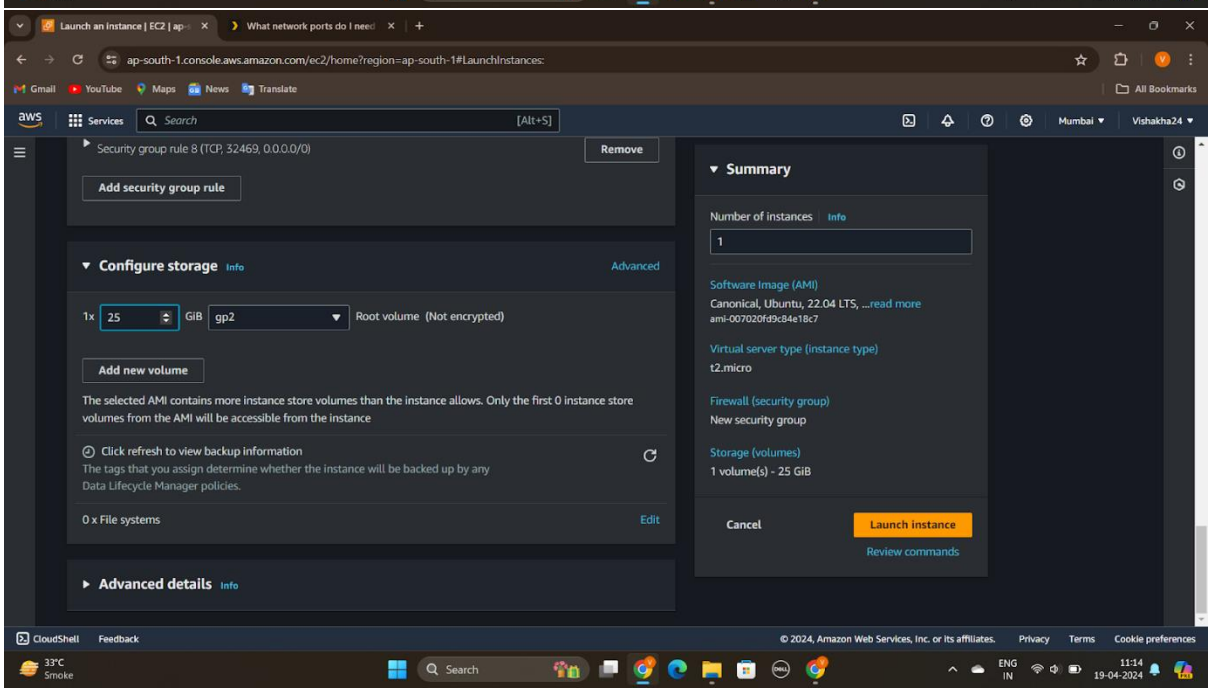
Cookie preferences
33°C
Smoke
Search
ENG
IN
11:14
19-04-2024


Launch an instance | EC2 | ap-
What network ports do I need
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:
Gmail
YouTube
Maps
News
Translate
All Bookmarks
aws
Services
Search
[Alt+S]
Mumbai
Vishakha24
Security group rule 8 (TCP, 32469, 0.0.0.0/0)
Remove
Add security group rule
Configure storage Info
Advanced
1x
25
GiB
gp2
Root volume (Not encrypted)
Add new volume
The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance
Click refresh to view backup information
The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.
0 x File systems
Edit
Advanced details Info
Summary
Number of instances Info
1
Software Image (AMI)
Canonical, Ubuntu, 22.04 LTS, ...read more
ami-007020fd9c84e18c7
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 25 GiB
Cancel
Launch instance
Review commands
CloudShell
Feedback
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Privacy
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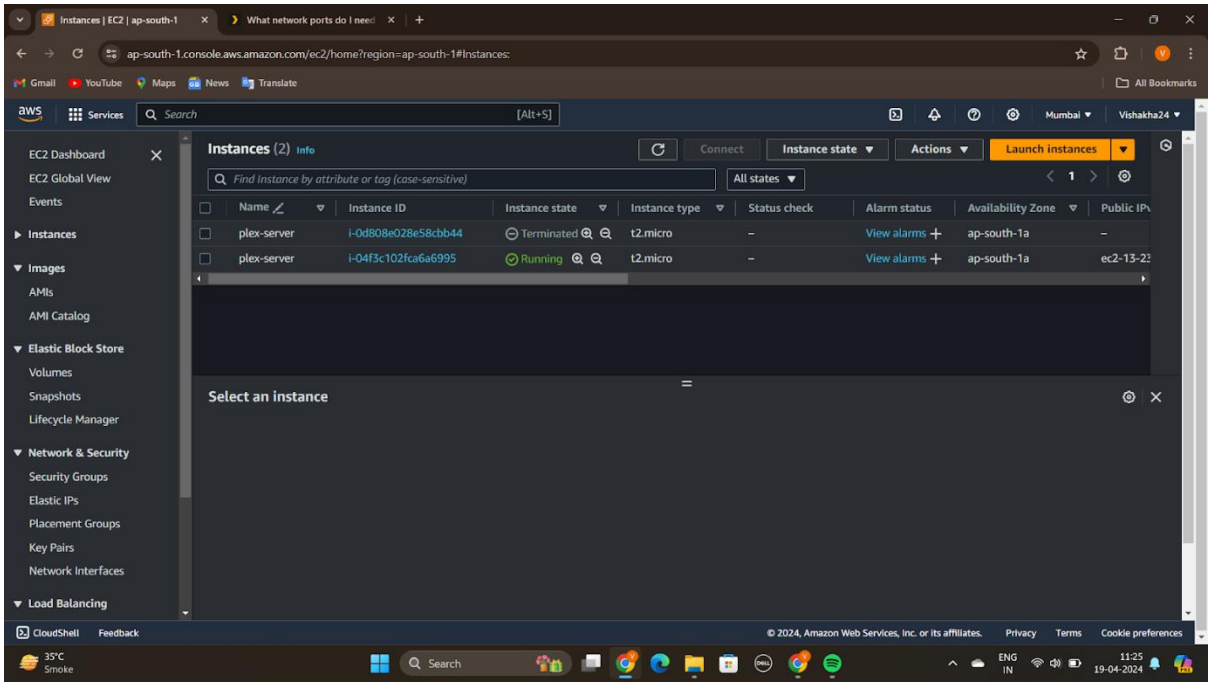
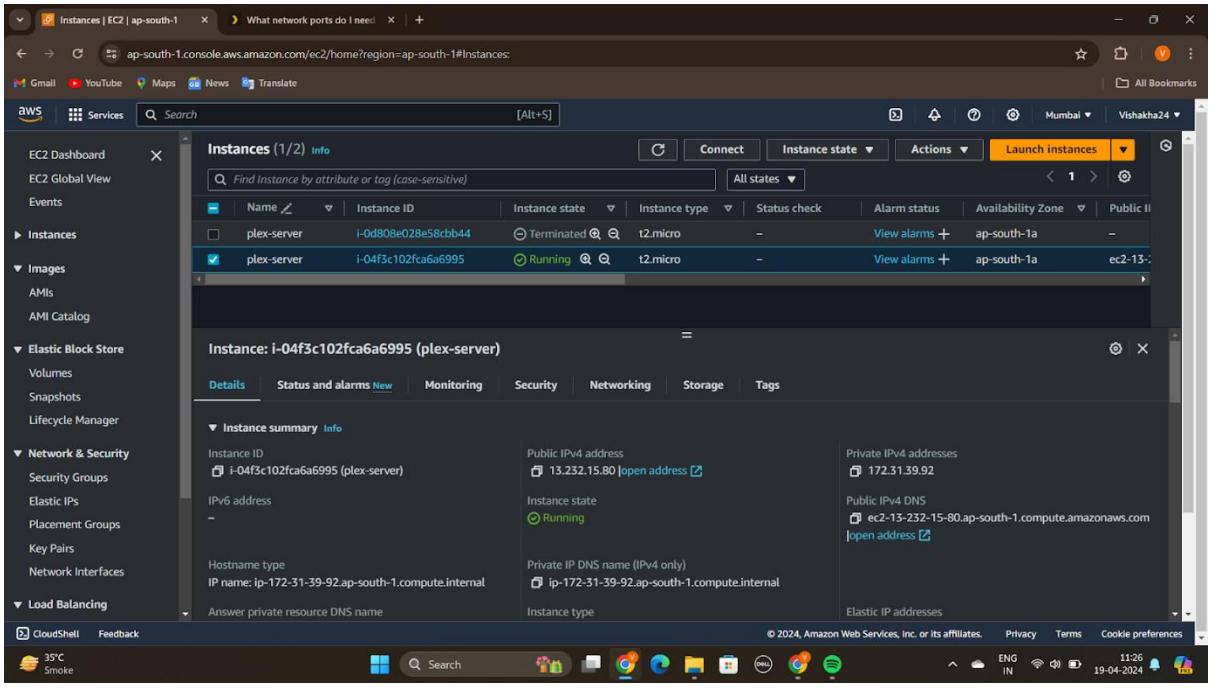
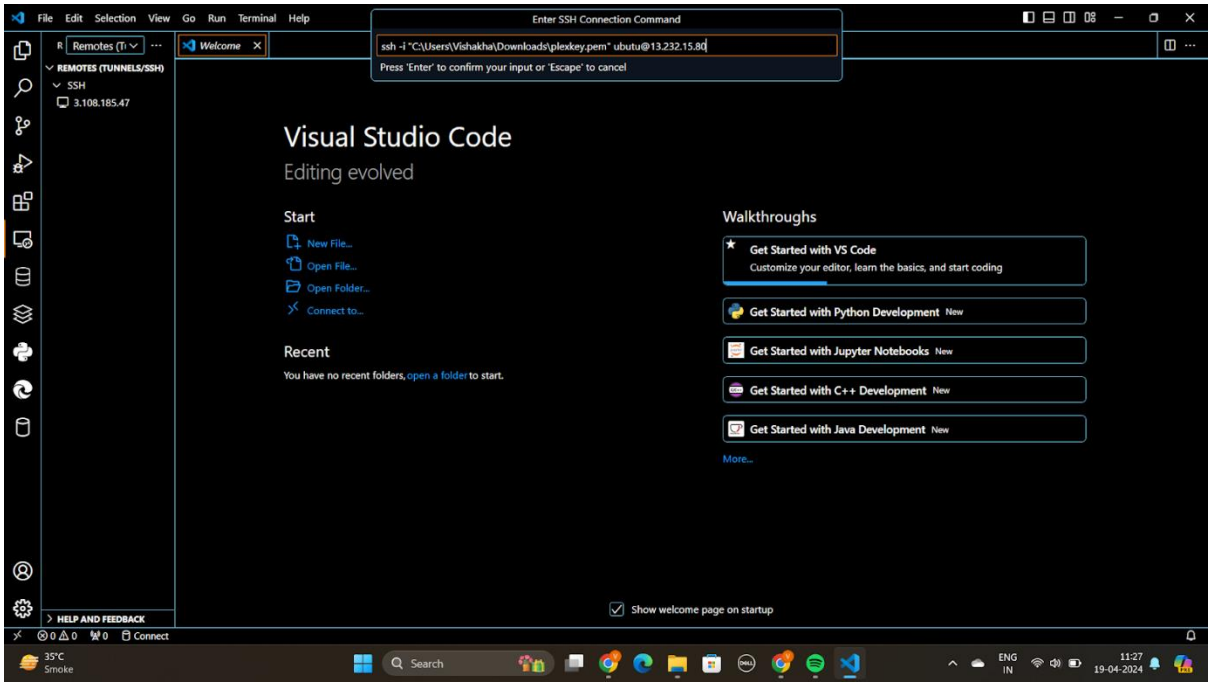
Cookie preferences
33°C
Smoke
Search
ENG
IN
11:14
19-04-2024

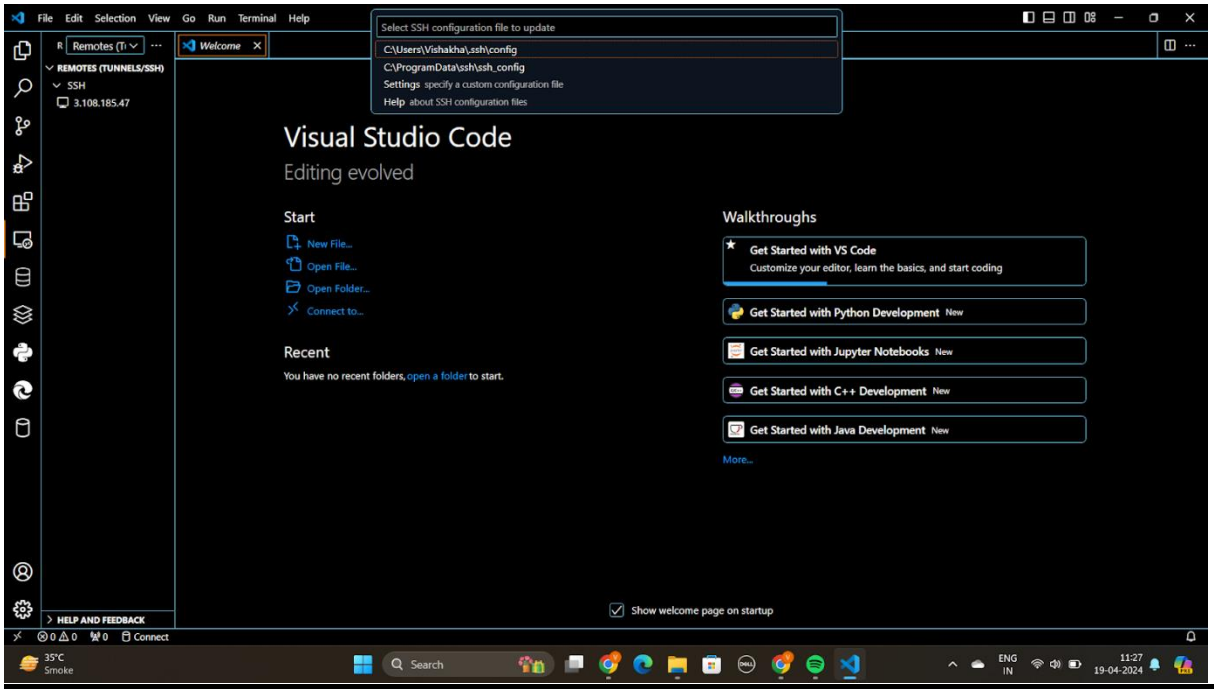


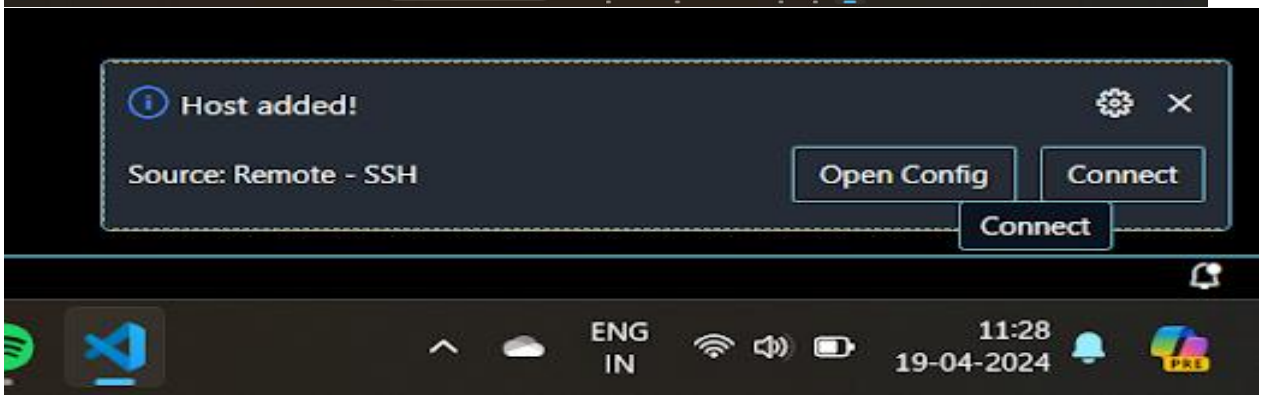


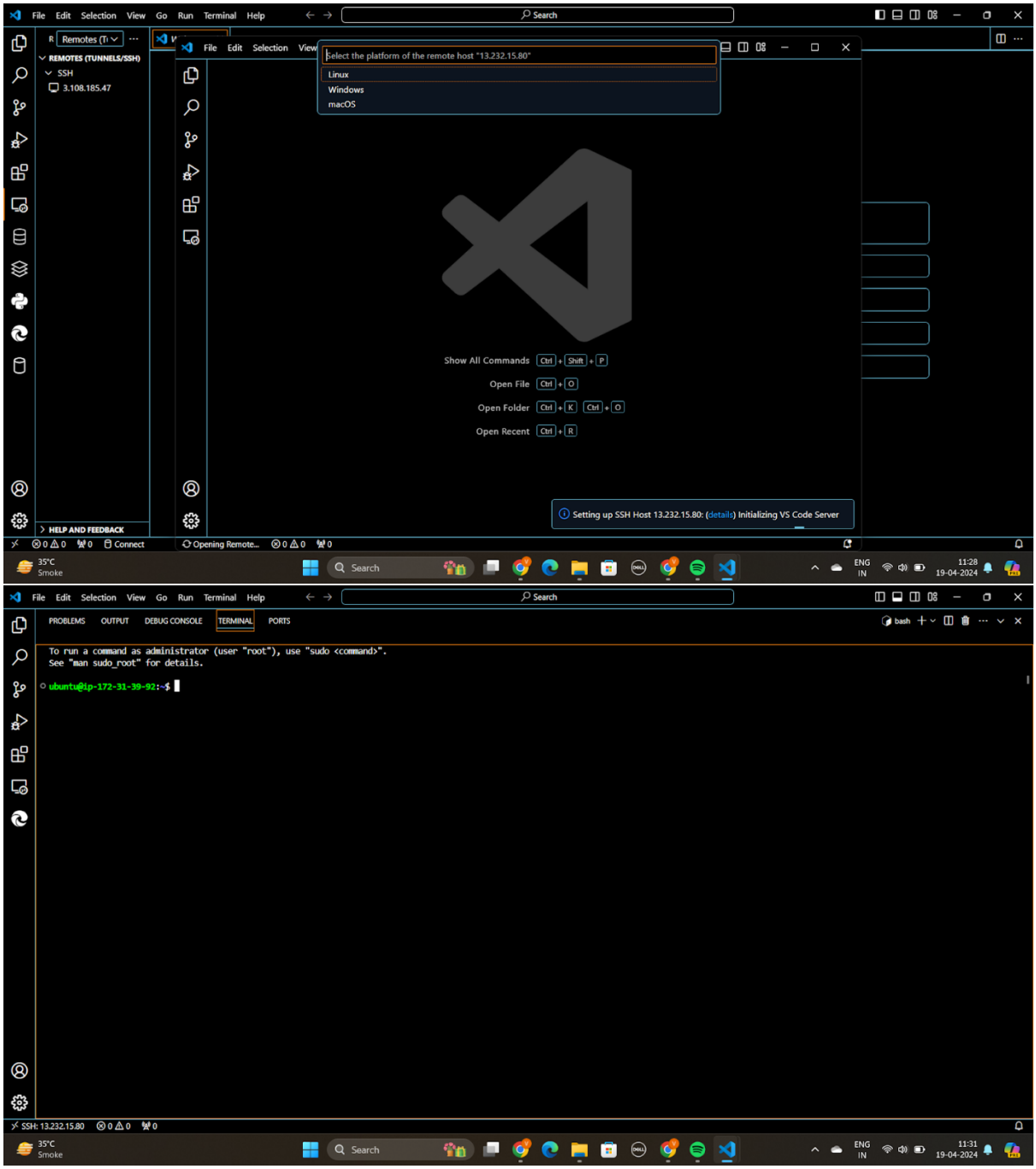
Step 2: Setting Up SSH Connection in Visual Studio Code

- Install the "Remote - SSH" extension in Visual Studio Code
- Connect to the EC2 instance using Visual Studio Code's SSH extension
- Code ssh -I path to the key ubuntu@ip address


File Edit Selection View Go Run Terminal Help
Enter SSH Connection Command
ssh -i "C:\Users\Vishakha\Downloads\plexkey.pem" ubutu@13.232.15.80
Press 'Enter' to confirm your input or 'Escape' to cancel
Remotes (Tu
REMOTES (TUNNELS/SSH)
SSH
3.108.185.47
Welcome
Visual Studio Code
Editing evolved
Start
New File...
Open File...
Open Folder...
Connect to...
Recent
You have no recent folders, open a folder to start.
Walkthroughs
Get Started with VS Code
Customize your editor, learn the basics, and start coding
Get Started with Python Development New
Get Started with Jupyter Notebooks New
Get Started with C++ Development New
Get Started with Java Development New
More...
Show welcome page on startup
HELP AND FEEDBACK
Connect
35°C
Smoke
Search
ENG
IN
11:27
19-04-2024

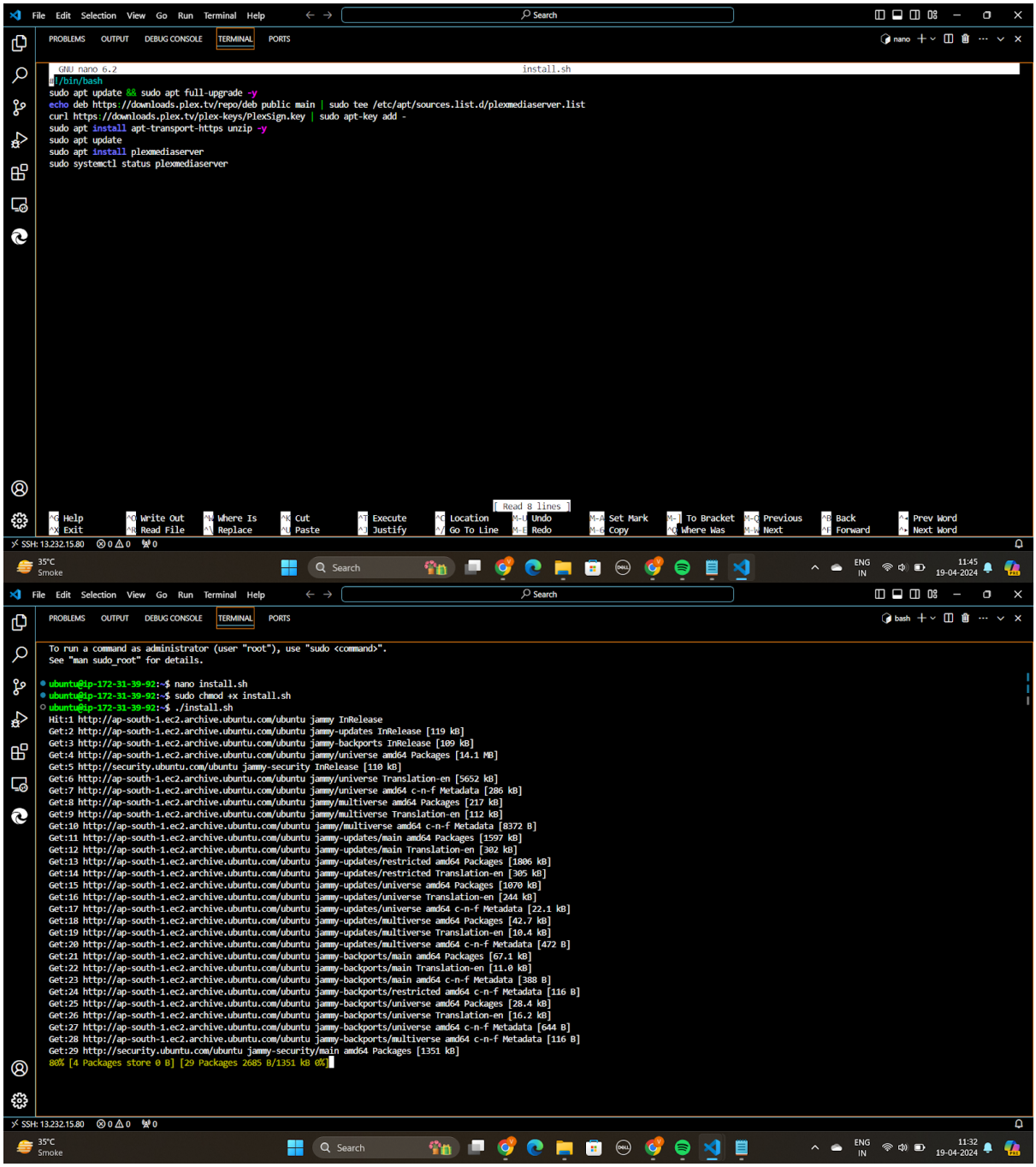

File Edit Selection View Go Run Terminal Help
Select SSH configuration file to update
C:\Users\Vishakha\.ssh\config
C:\ProgramData\ssh\ssh_config
Settings specify a custom configuration file
Help about SSH configuration files
Remotes (Tu
REMOTES (TUNNELS/SSH)
SSH
3.108.185.47
Welcome
Visual Studio Code
Editing evolved
Start
New File...
Open File...
Open Folder...
Connect to...
Recent
You have no recent folders, open a folder to start.
Walkthroughs
Get Started with VS Code
Customize your editor, learn the basics, and start coding
Get Started with Python Development New
Get Started with Jupyter Notebooks New
Get Started with C++ Development New
Get Started with Java Development New
More...
Show welcome page on startup
HELP AND FEEDBACK
Connect
35°C
Smoke
Search
ENG
IN
11:27
19-04-2024


Host added!
Source: Remote - SSH
Open Config
Connect
Connect
ENG
IN
11:28
19-04-2024

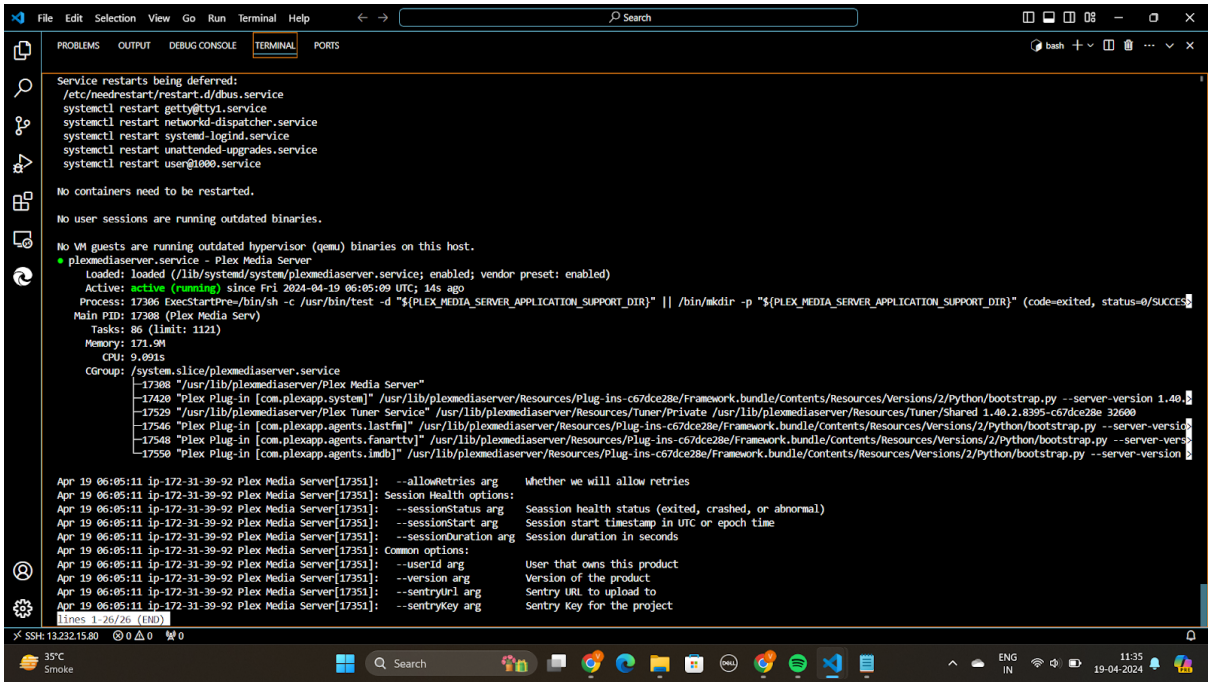


Step 3: Creating the install.sh Script

- Open a terminal in Visual Studio Code connected to the EC2 instance
- Create a new file named install.sh
- Write the installation script for Plex Media Server
- Run the shell

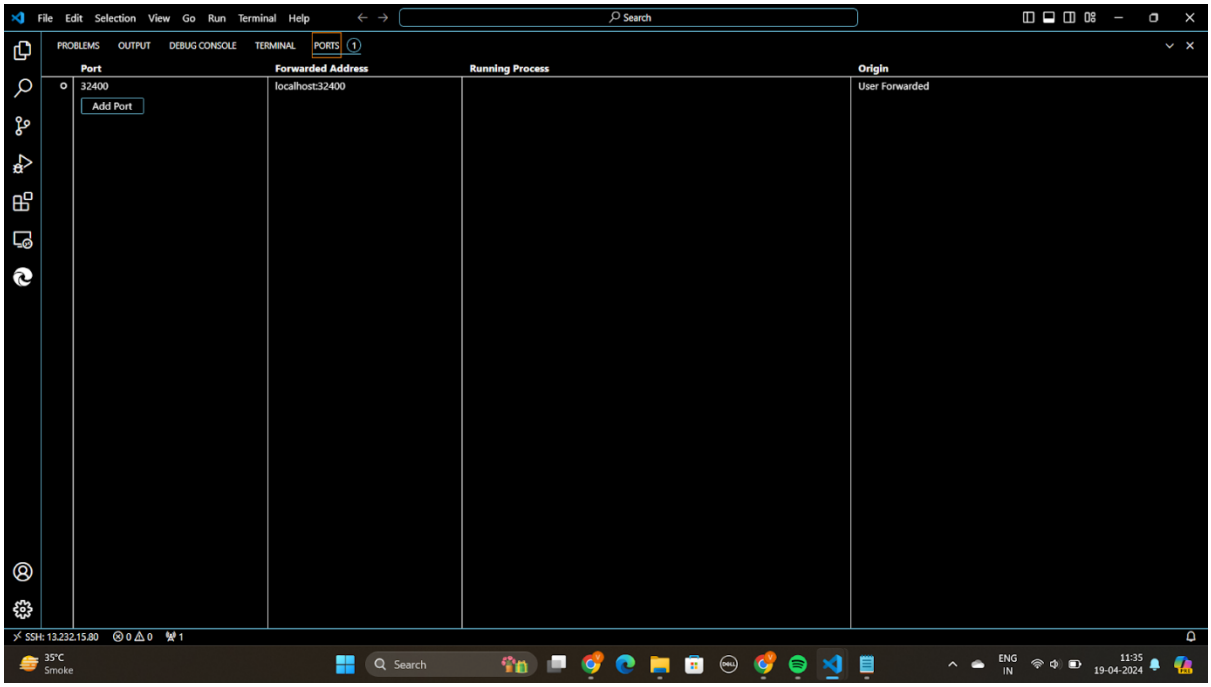

File Edit Selection View Go Run Terminal Help
Search
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
nano
GNU nano 6.2 install.sh
#!/bin/bash
sudo apt update && sudo apt full-upgrade -y
echo deb https://downloads.plex.tv/repo/deb public main | sudo tee /etc/apt/sources.list.d/plexmediaserver.list
curl https://downloads.plex.tv/plex-keys/PlexSign.key | sudo apt-key add -
sudo apt install apt-transport-https unzip -y
sudo apt update
sudo apt install plexmediaserver
sudo systemctl status plexmediaserver
[Read 8 lines]
^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-] To Bracket M-Q Previous ^B Back ^← Prev Word
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy ^Q Where Was M-W Next ^F Forward ^→ Next Word
SSH: 13.232.15.80
35°C Smoke
Search
ENG IN
11:45 19-04-2024

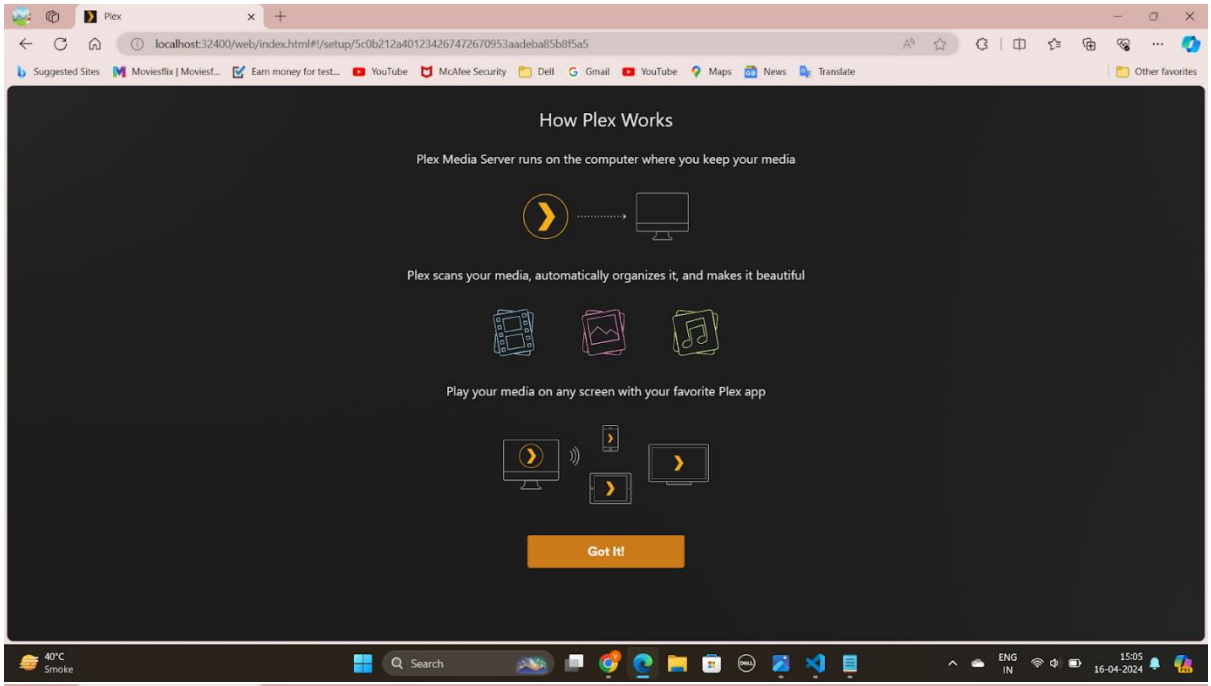
File Edit Selection View Go Run Terminal Help
Search
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
bash
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
ubuntu@ip-172-31-39-92:~$ nano install.sh
ubuntu@ip-172-31-39-92:~$ sudo chmod +x install.sh
ubuntu@ip-172-31-39-92:~$ ./install.sh
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1597 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [302 kB]
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [1806 kB]
Get:14 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [305 kB]
Get:15 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1070 kB]
Get:16 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [244 kB]
Get:17 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [22.1 kB]
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [42.7 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [10.4 kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [472 B]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [67.1 kB]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [11.0 kB]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [28.4 kB]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.2 kB]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:29 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1351 kB]
86% [4 Packages store 0 B] [29 Packages 2685 B/1351 kB 0%]
SSH: 13.232.15.80
35°C Smoke
Search
ENG IN
11:32 19-04-2024

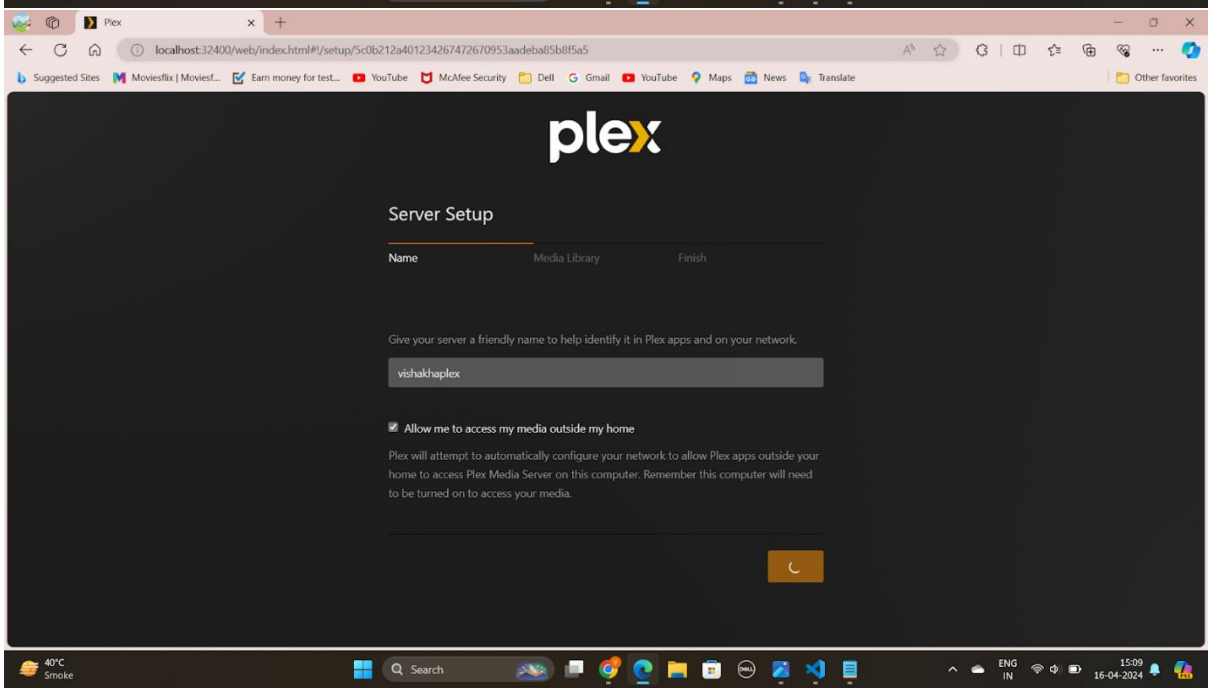


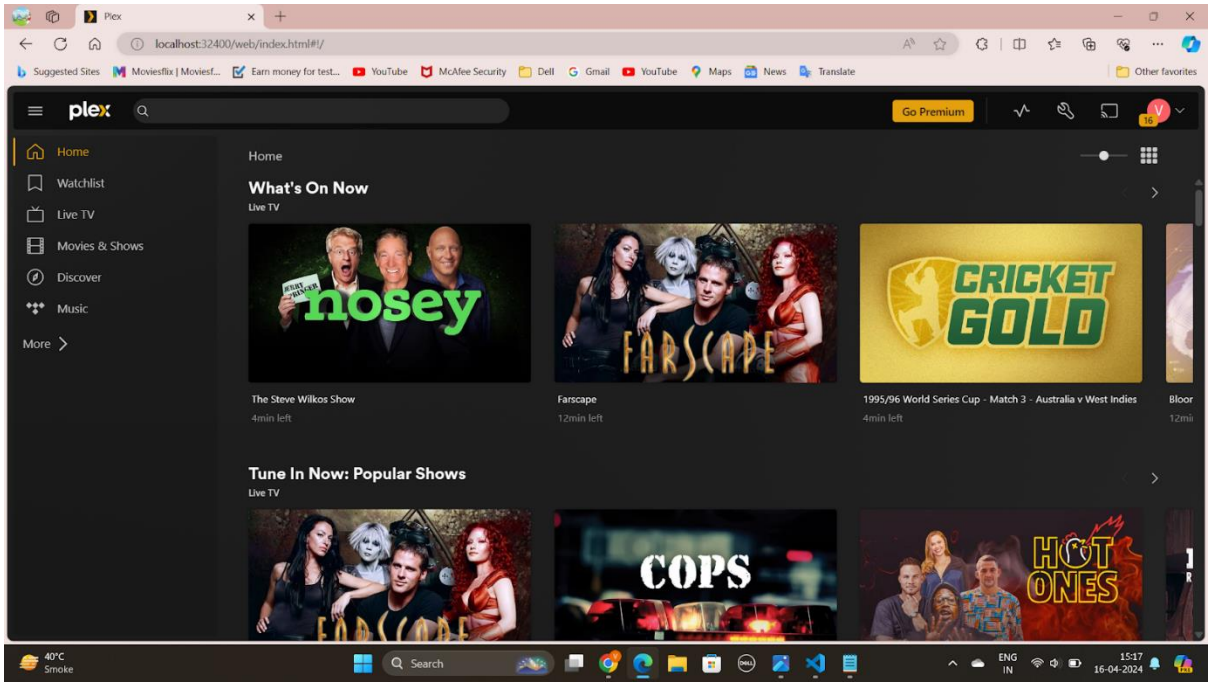
Step 4 : Port Forwarding

- Go to the port section of vs code
- Forward the port number 32400
- Go to the web
- Your plex is setuped successfully




Plex
localhost:32400/web/index.html#!/setup/5c0b212a4012342674726709 53aadeba85b8f5a5
Suggested Sites
Moviesflix | Moviesf...
Earn money for test...
YouTube
McAfee Security
Dell
Gmail
YouTube
Maps
News
Translate
Other favorites
How Plex Works
Plex Media Server runs on the computer where you keep your media
Plex scans your media, automatically organizes it, and makes it beautiful
Play your media on any screen with your favorite Plex app
Got It!
40°C
Smoke
Search
ENG
IN
15:05
16-04-2024


Plex
localhost:32400/web/index.html#!/setup/5c0b212a4012342674726709 53aadeba85b8f5a5
Suggested Sites
Moviesflix | Moviesf...
Earn money for test...
YouTube
McAfee Security
Dell
Gmail
YouTube
Maps
News
Translate
Other favorites
plex
Server Setup
Name
Media Library
Finish
Give your server a friendly name to help identify it in Plex apps and on your network.
vishakhaplex
Allow me to access my media outside my home
Plex will attempt to automatically configure your network to allow Plex apps outside your home to access Plex Media Server on this computer. Remember this computer will need to be turned on to access your media.
40°C
Smoke
Search
ENG
IN
15:09
16-04-2024



Setting up your Plex Media Server on AWS is just the beginning of an enjoyable movie streaming experience. Now that your server is up and running, you can start organizing your media library, adding your favorite movies, TV shows