

Explanation:

Plex is a software that constructs a media server that is directed to a folder inside the user's computer. This folder, which consists of the user's own video content, can be displayed on the Plex server, which can be streamed from any device via the Plex app. One of Plex's most useful features is the ability to stream one's media anywhere. One can also share their libraries with others, which makes discovering new, exciting movies even easier. Once the Plex server is established, the user can also access pre-downloaded movies and media that are available to all Plex users.

Explanation Links:

- <https://www.tomsguide.com/reference/what-is-plex>
- <https://www.pcmag.com/news/what-is-plex>

Installation:

- 1) Create a new **EC2 instance** at AWS meeting the following requirements:
 - AMI: **Latest Amazon-provided Ubuntu 20.04 image** - x86_64
 - Instance type: t2.micro (1 vCPU, 1 GiB memory)
 - Network: "Tiger-VPC"
 - Subnet: "Tiger-VPC-Public"
 - Auto-assign Public IP: Use Subnet setting (Enable)
 - Storage: 8GiB with "Delete on Termination" enabled
 - Tag: Name = "Plex Media Server"
 - Create New Security Group:
 - 1) Name: "PlexSecurity"
 - 2) VPC: Tiger-VPC
 - 3) Description: Plex Media
 - 4) Inbound Rule: Ipv4-Anywhere, Type: Custom TCP, port 32400, Source: Custom 10.101.0.0/16
 - 5) Inbound Rule: Ipv4-Anywhere, Type: SSH, Source: Custom 10.101.0.0/16
 - 6) Don't change the Outbound Rules
 - Keypair: Existing keypair / "COMP-175-Lab-1"

2) First, ensure that your VPN instance is running along with the activation of the Wireguard VPN. This will ensure security and privacy from the public. Now, SSH to your Plex Media Server instance via Private IP.

3) Run the command : `sudo apt install curl`

4) Run the command : `echo deb https://downloads.plex.tv/repo/deb public main | sudo tee /etc/apt/sources.list.d/plexmediaserver.list`

5) Run the command : `sudo apt install apt-transport-https`

6) Run the command : `sudo apt update`

7) Run the command : `sudo apt install plexmediaserver` (When prompted, Press 'Y' and 'Enter' to install the package maintainer's version)

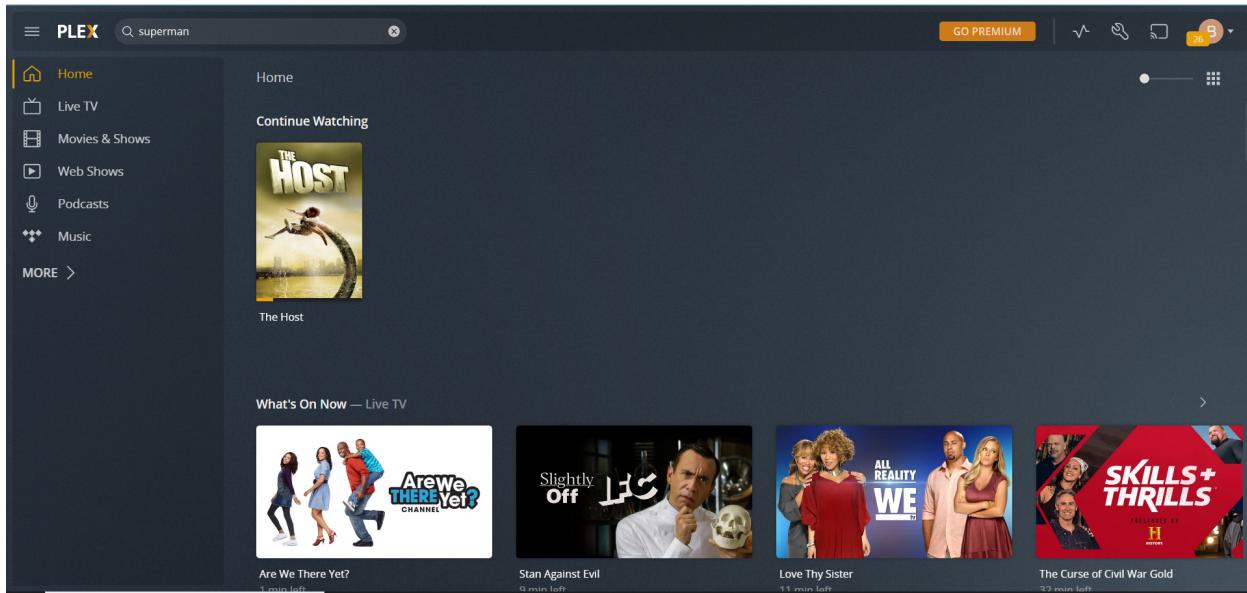
8) Run the command : `sudo systemctl status plexmediaserver` (look for the 'active (running)' in green)

```
ubuntu@ip-10-101-0-181:~$ sudo systemctl status plexmediaserver
● plexmediaserver.service - Plex Media Server
   Loaded: loaded (/lib/systemd/system/plexmediaserver.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2021-10-19 20:21:34 UTC; 1h 40min ago
     Process: 436 ExecStartPre=/bin/sh -c /usr/bin/test -d "${PLEX_MEDIA_SERVER_APPLICATION_SUPPORT_DIR}" || /bin/mkdir -p "${PLEX_MEDIA_SERVER_APPLICATION_SUPPORT_DIR}"
    Main PID: 461 (Plex Media Serv)
      Tasks: 41 (limit: 1154)
     Memory: 113.1M
        CPU: 0.000 CPU(s) (idle)
       CGroup: /system.slice/plexmediaserver.service
               └─461 /usr/lib/plexmediaserver/Plex Media Server
                 ├─617 Plex Plug-in [com.plexapp.system] /usr/lib/plexmediaserver/Resources/Plug-ins-e362dc1ee/Framework.bundle/Contents/Resources/Versions/2/Pyt...
                 ├─784 /usr/lib/plexmediaserver/Plex Tuner Service /usr/lib/plexmediaserver/Resources/Tuner/Private /usr/lib/plexmediaserver/Resources/Tuner/Shar...
Oct 19 20:21:34 ip-10-101-0-181 systemd[1]: Starting Plex Media Server...
Oct 19 20:21:34 ip-10-101-0-181 systemd[1]: Started Plex Media Server.
Oct 19 20:21:48 ip-10-101-0-181 [784]: Critical: libusb_init failed
Oct 19 20:21:48 ip-10-101-0-181 Plex Media Server[784]: Critical: libusb init failed
```

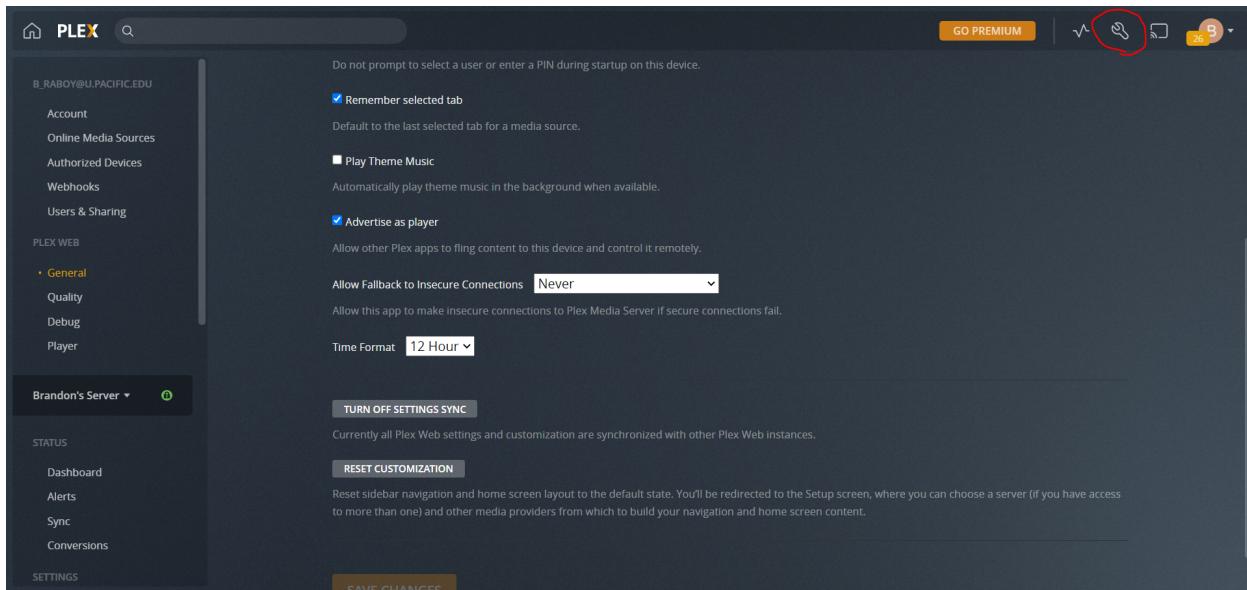
9) Now, go to a web browser and type this in the web address bar:

<http://PRIVATE-IP-OF-PLEX-SERVER:32400/web/>

10) Your Plex Media Server should be running:



11) For further protection, let's disable the "Fallback to Insecure Connection" feature. Click the 'wrench' icon in the top right corner (circled in red).



12) There should be a setting called "Allow Fallback to Insecure Connections". Make sure that it is set to 'Never'. If this setting isn't shown, click the 'Show Advanced' button at the top.

The screenshot shows the Plex Web General settings page. On the left is a sidebar with options: Account, Online Media Sources, Authorized Devices, Webhooks, Users & Sharing, PLEX WEB (with General selected), Quality, Player, and a dropdown for Brandon's Server. The main area has a title "Plex Web — General" and a message "Version 4.63.0". It includes a Language dropdown set to English, a note about translating the app, and several checkboxes: "Automatically Sign In" (unchecked), "Remember selected tab" (checked), "Play Theme Music" (unchecked), and "Advertise as player" (unchecked). Below these are sections for STATUS (Dashboard, Alerts, Sync, Conversions) and SETTINGS (General, Quality, Debug, Player). A "SAVE CHANGES" button is at the bottom.

This screenshot shows the same General settings page as above, but with a different configuration. The "Allow Fallback to Insecure Connections" dropdown is set to "Never" and is highlighted with a red circle. The other settings remain the same as in the first screenshot.

12) Sign in with your email address and you're ready to watch and import media!

Installation Links:

- <https://support.plex.tv/articles/200288586-installation/>
- <https://www.youtube.com/watch?v=Ee8benTAL0c>

- <https://support.plex.tv/articles/235974187-enable-repository-updating-for-supported-linux-server-distributions/>