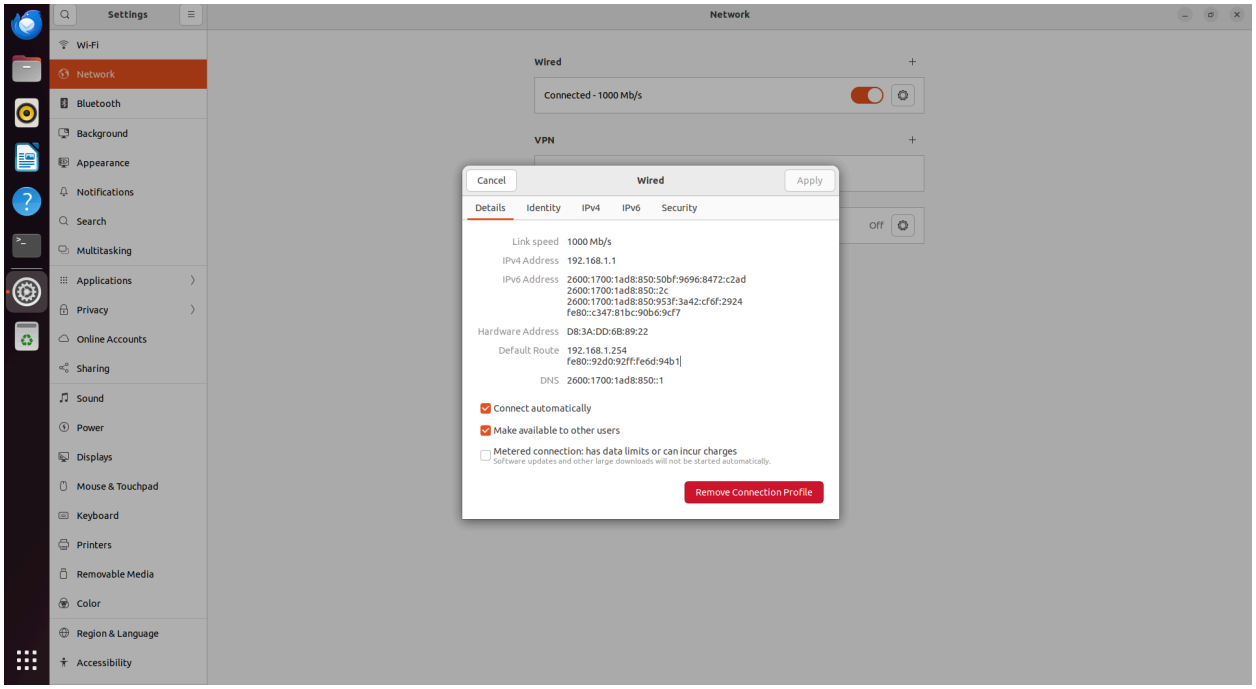
Share-a-Samba

Objective: The goal of this project was to implement a centralized file-sharing solution across all home devices using Samba. By setting up a Samba server on a local Linux-based machine, shared directories were configured to allow secure and seamless access from multiple devices including Windows PCs and macOS laptops. The project aimed to provide a consistent, cross-platform file-sharing environment within the home network, improving accessibility and organization of media, documents, and backups without relying on cloud storage or external services. Access permissions and user authentication were configured to ensure proper security and control over shared resources.

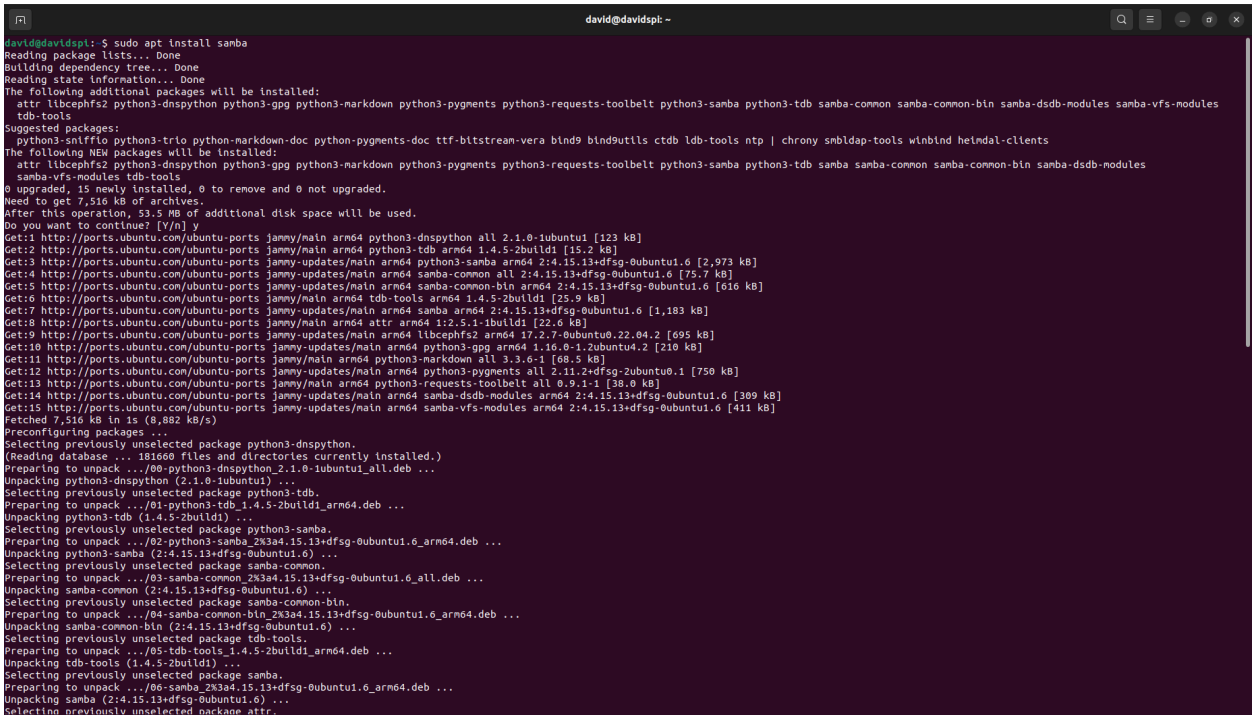
Equipment: Raspberry Pi 4 and CAT 6 Ethernet

Steps:

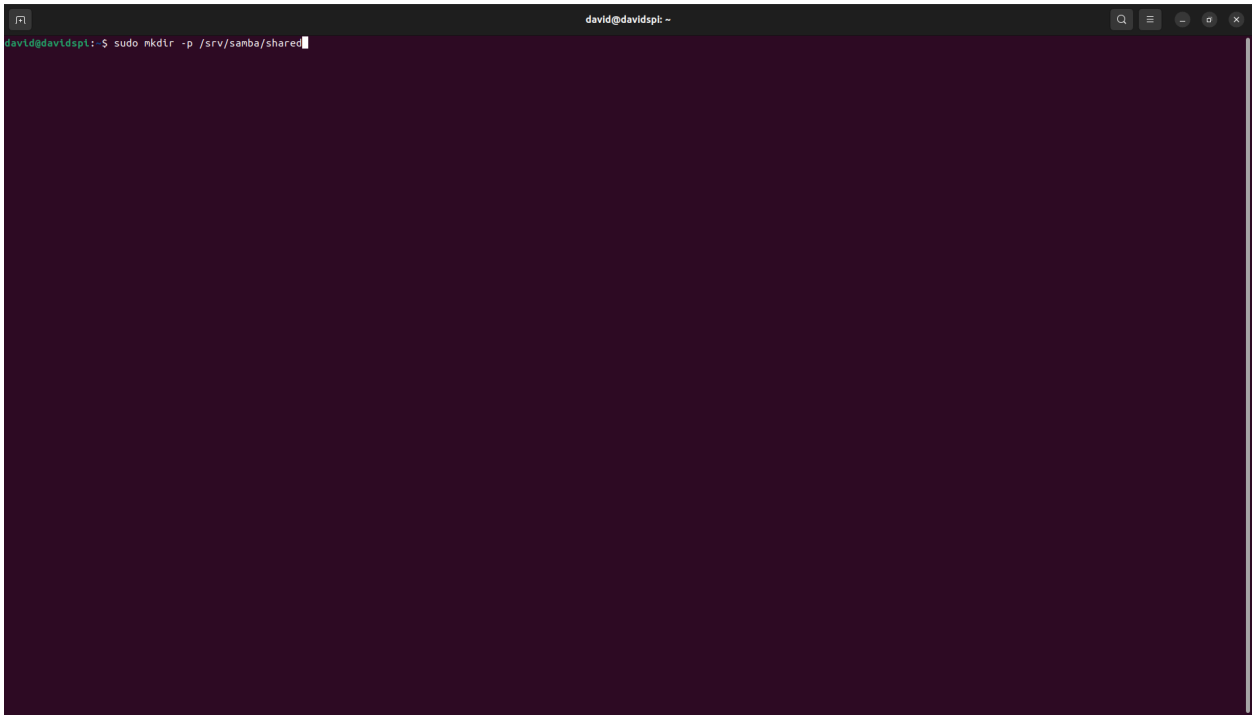
1. I used the command **sudo apt update && sudo apt upgrade -y** to make sure my Raspberry Pi is up to date
2. I **configured a static IP for the raspberry pi** so all other devices can connect seamlessly



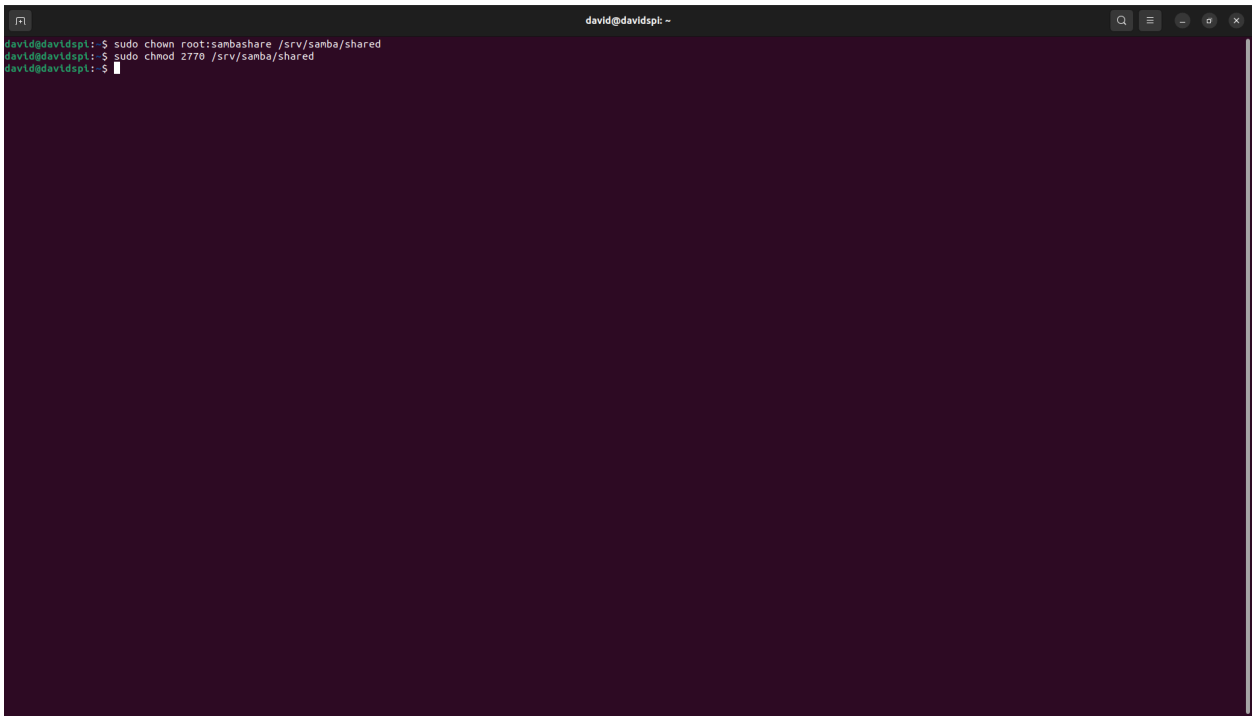
3. I installed **Samba** with the command **sudo apt install samba**



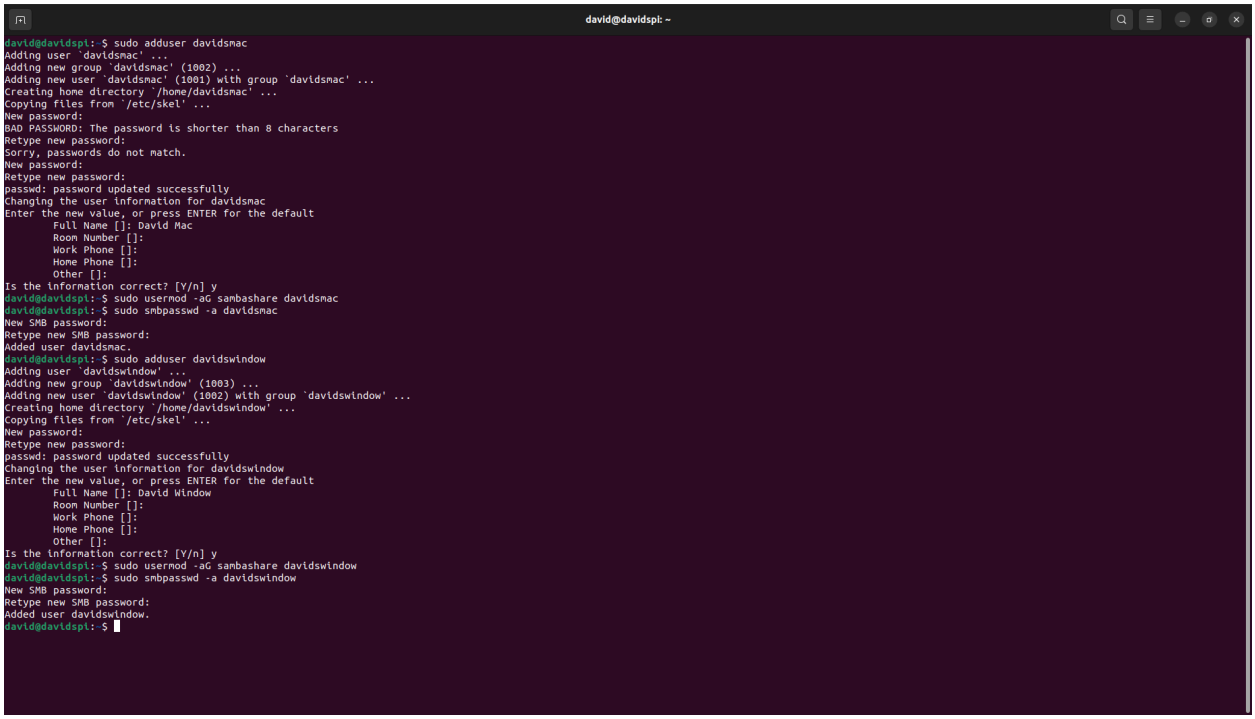
4. I used the command **sudo mkdir -p /srv/samba/shared to make a directory** on my Raspberry Pi where every device can upload and access it easily



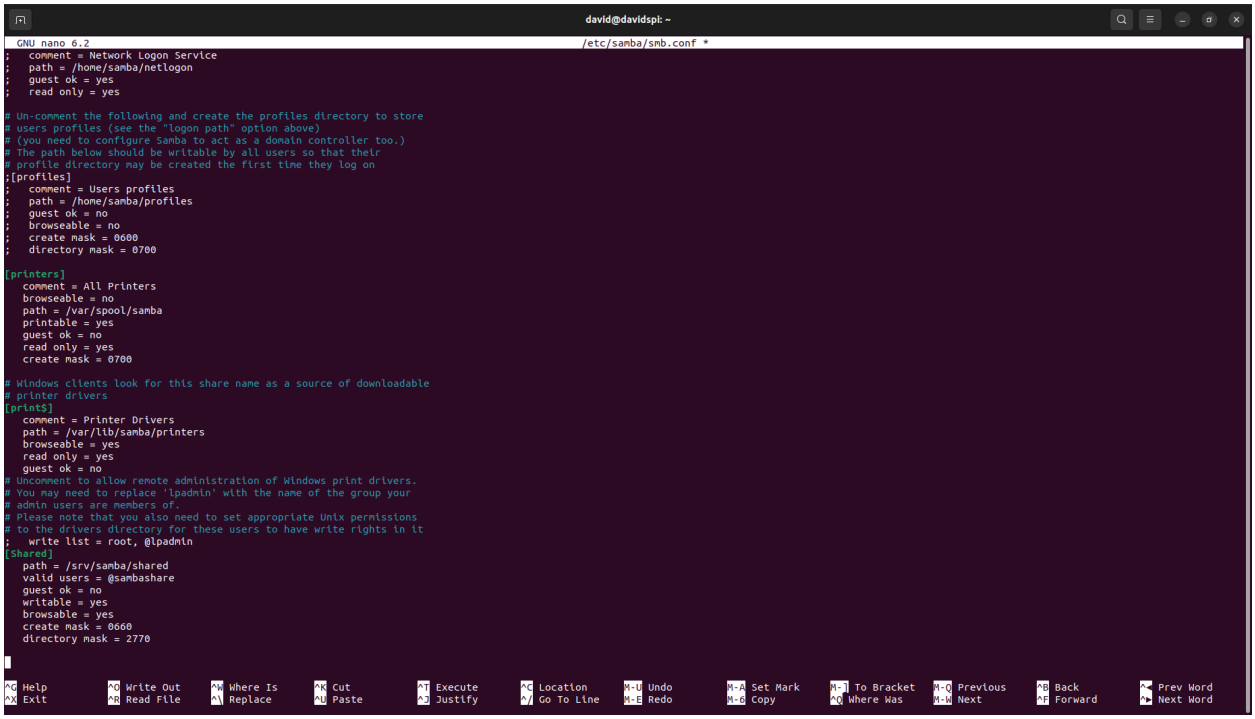
5. In order for the root of my Raspberry Pi to be the owner and sambashare is the group I used the command **sudo chown root:sambashare /srv/samba/shared**, I also changed the permission to allow owner and sambashare group full permission for everything



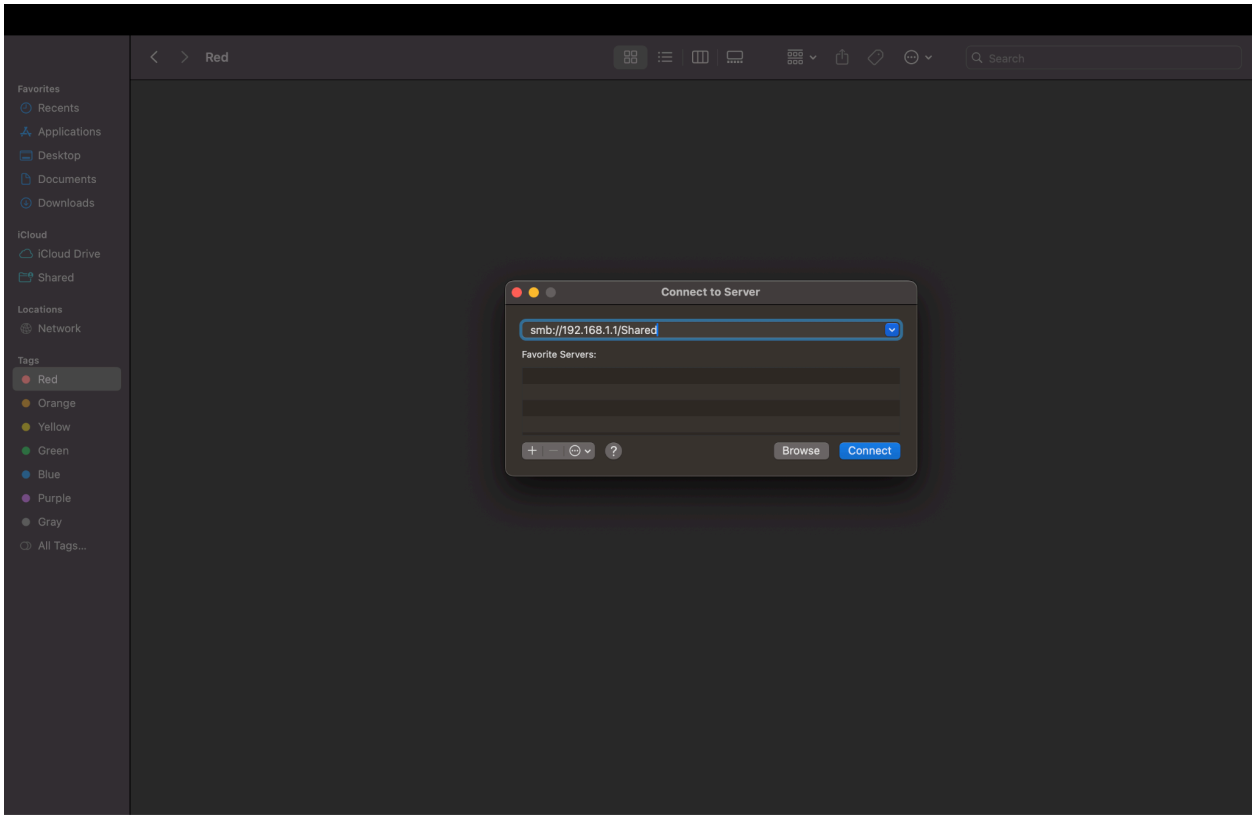
6. **I created separate users for my Mac and Windows** machine that can access the samba shared folder

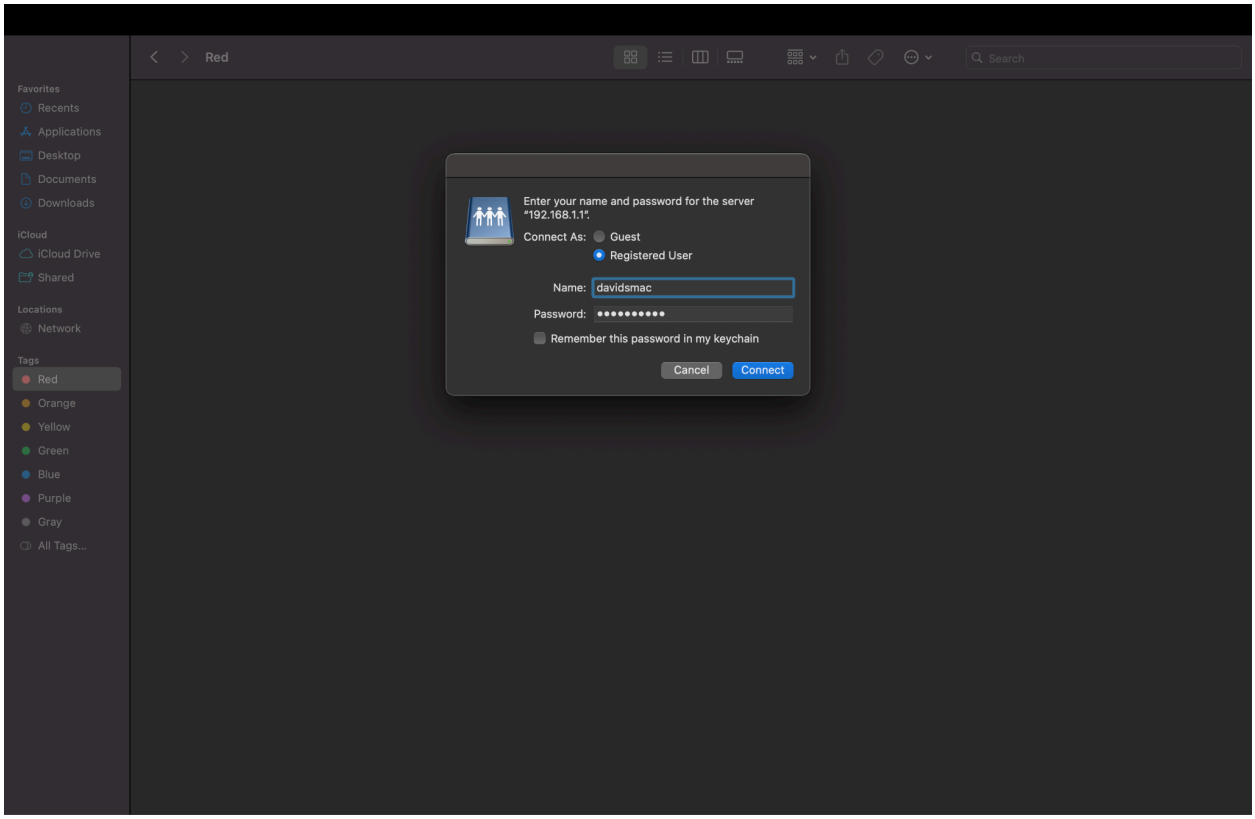


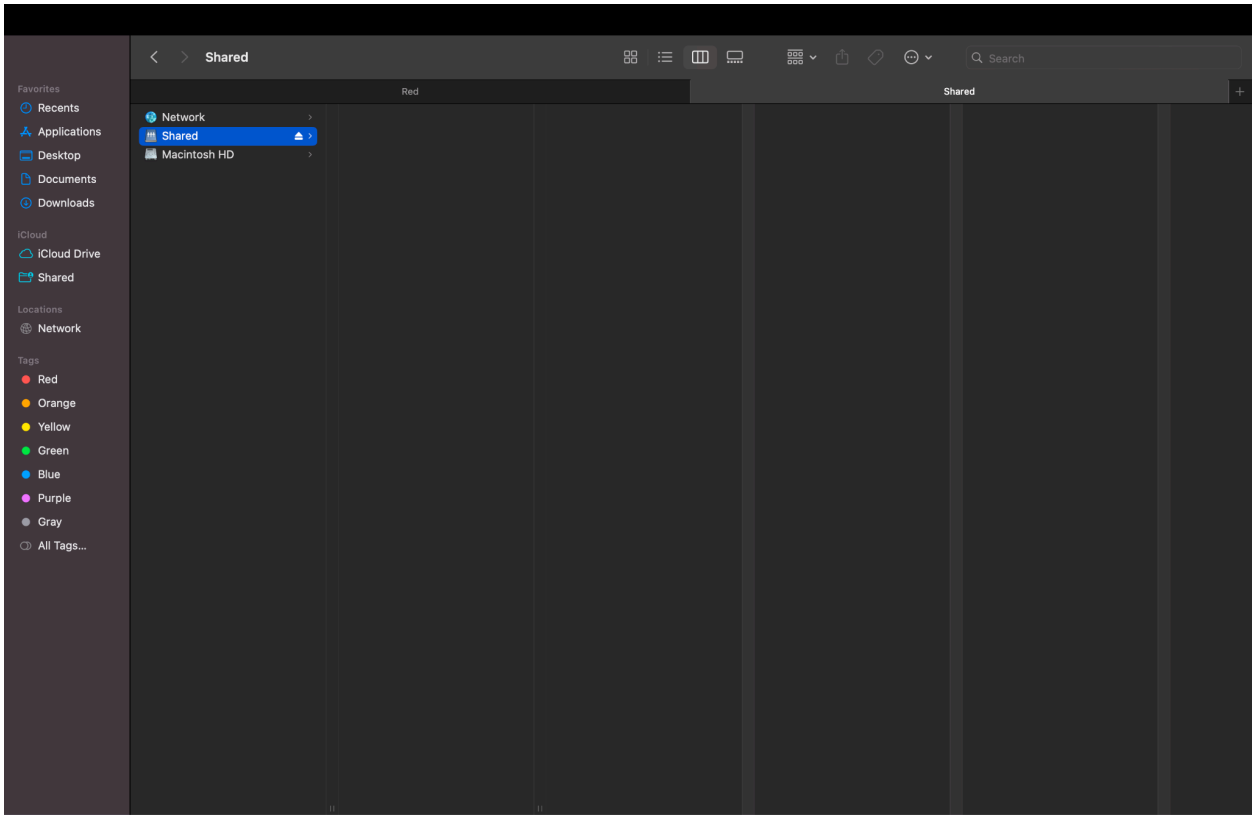
7. To add the final touches for the samba setup I had to edit a .conf file with the command **sudo nano /etc/samba/smb.conf** to allow all the configuration I had done previously to be enforced



8. Now I verified that I can access the samba shared folder with my Mac



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Purple
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9. After verifying that my Mac connection works I uploaded some screenshots that I'm using for this documentation and also used the **mv** command on my raspberry pi to move my screenshots I took