Raspberry Pi Setup, Ad Blocker and Website Hosting on DarkNet

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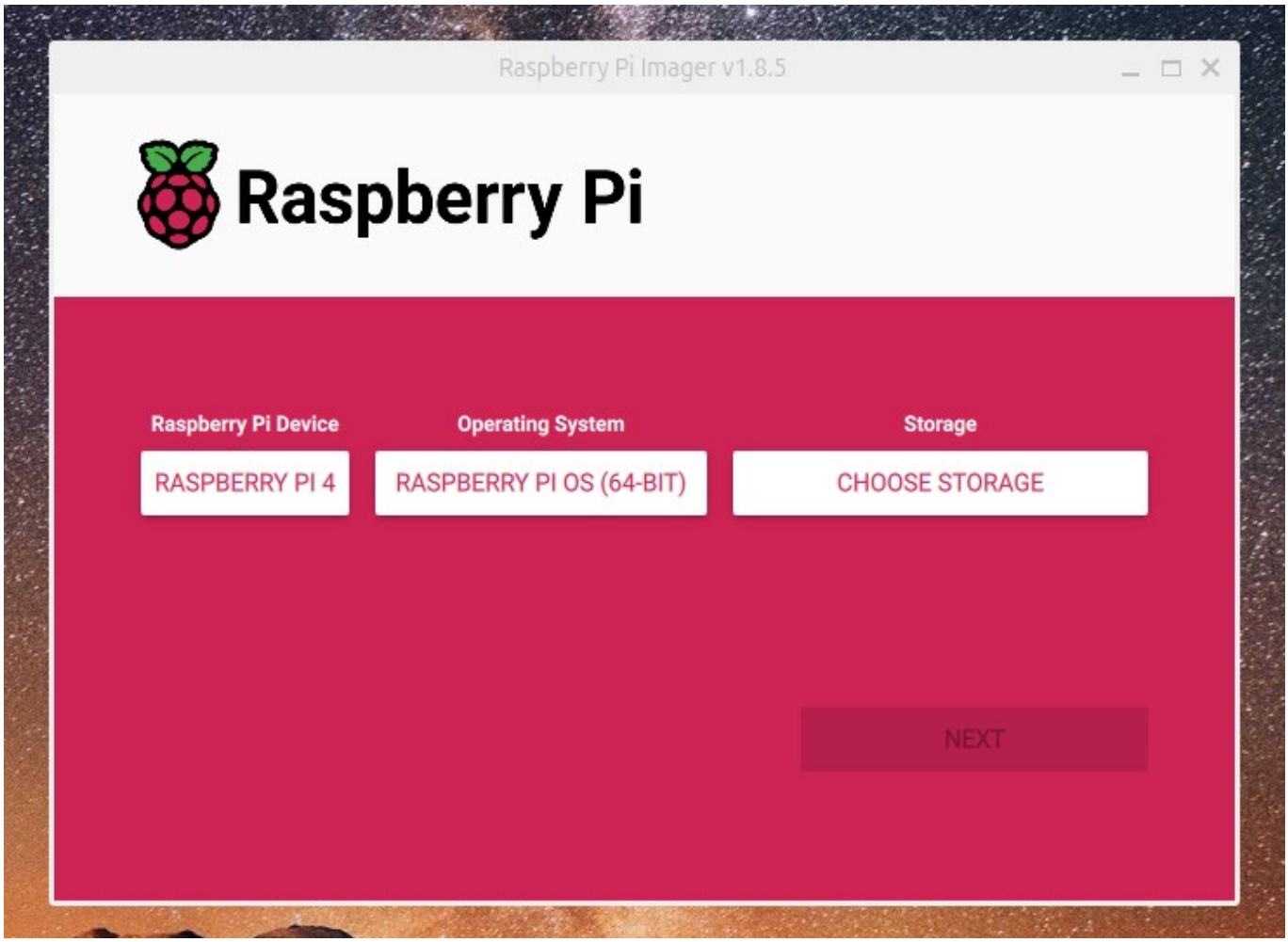
Raspberry Pi Setup

First, download the Raspberry Pi imager from the official website:

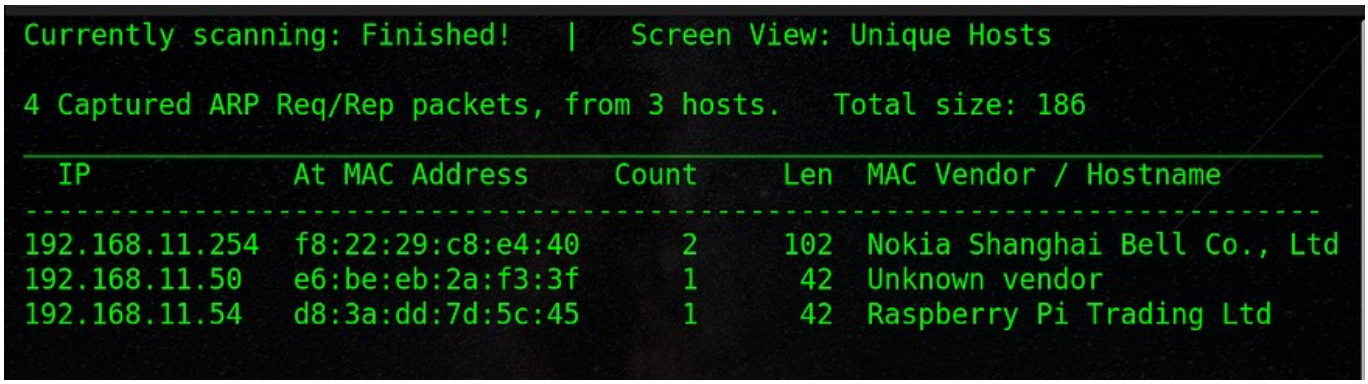
https://www.raspberrypi.com/software/

Install the Raspbery Pi OS onto your MicrSD card, don’t forget to enable SSH and enter the SSID and your wifi’s password in custom settings!



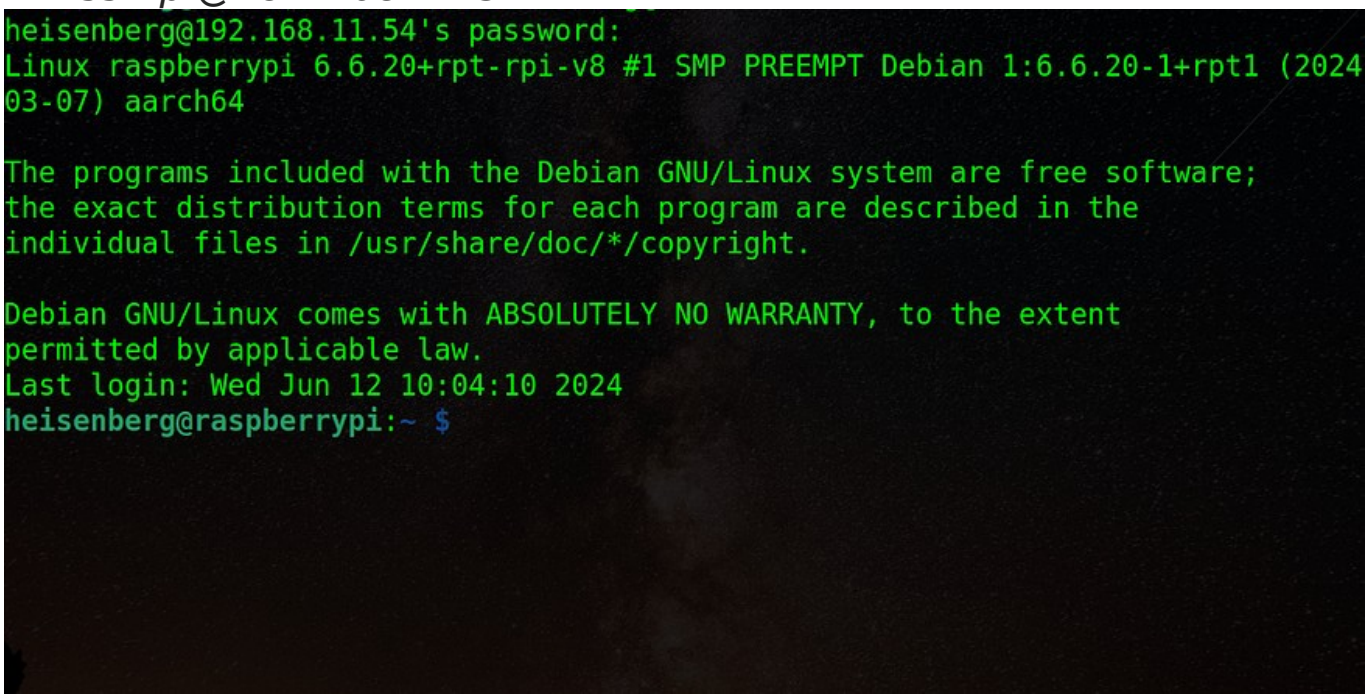
Insert the MicroSD card into your Raspberry Pi and power it on(5W/3A).

sudo netdiscover -r [your ip range]



Now when we have it’s IP address, let’s log in via SSH.

ssh pi@192.168.11.54



sudo apt update

sudo apt install realvnc-vnc-server

sudo systemctl enable vncserver-x11-serviced

sudo systemctl start vncserver-x11-serviced

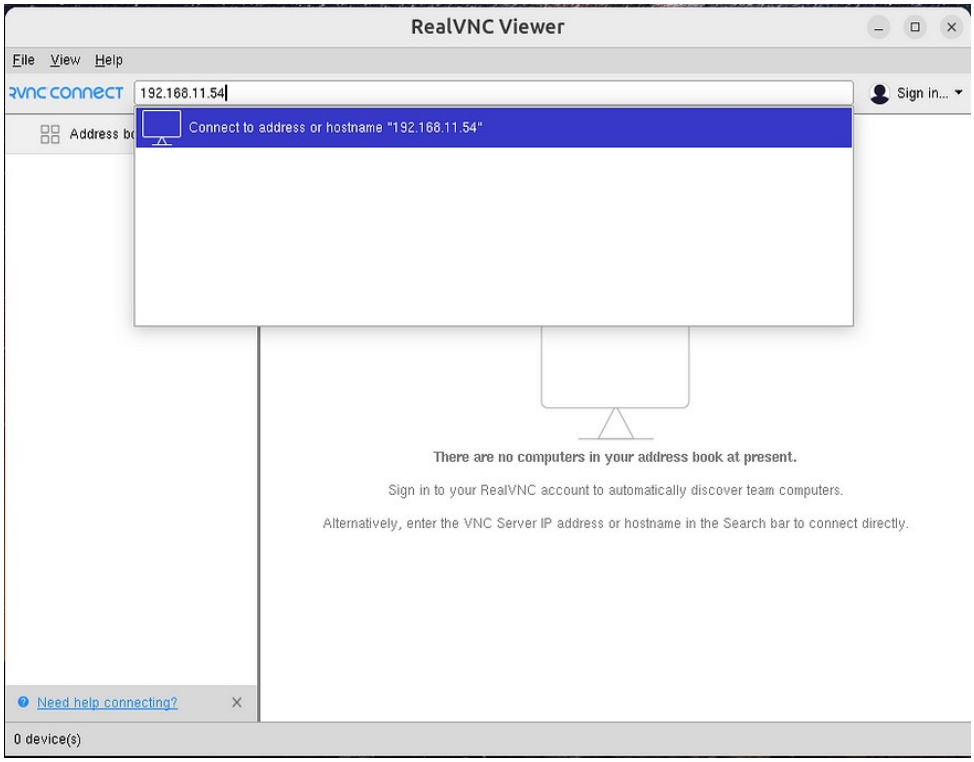
After this:

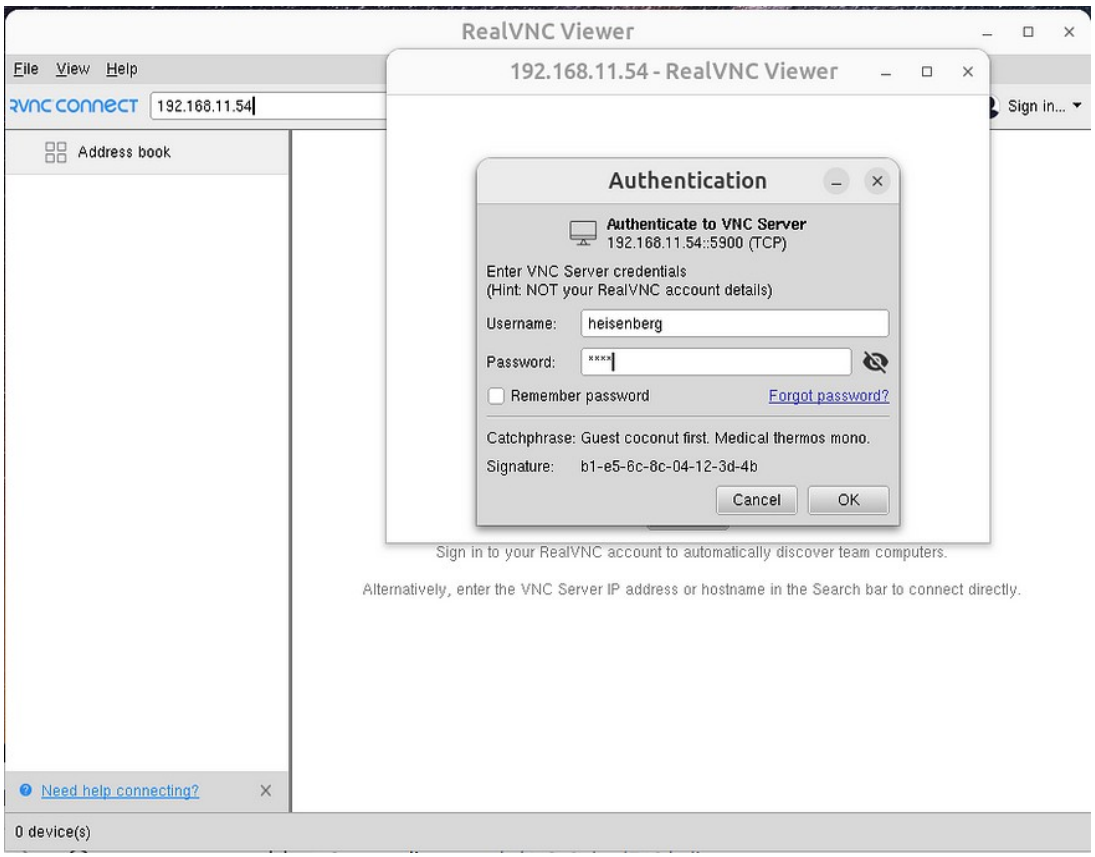
sudo raspi-config

Go to **Interface Options → VNC → Yes**

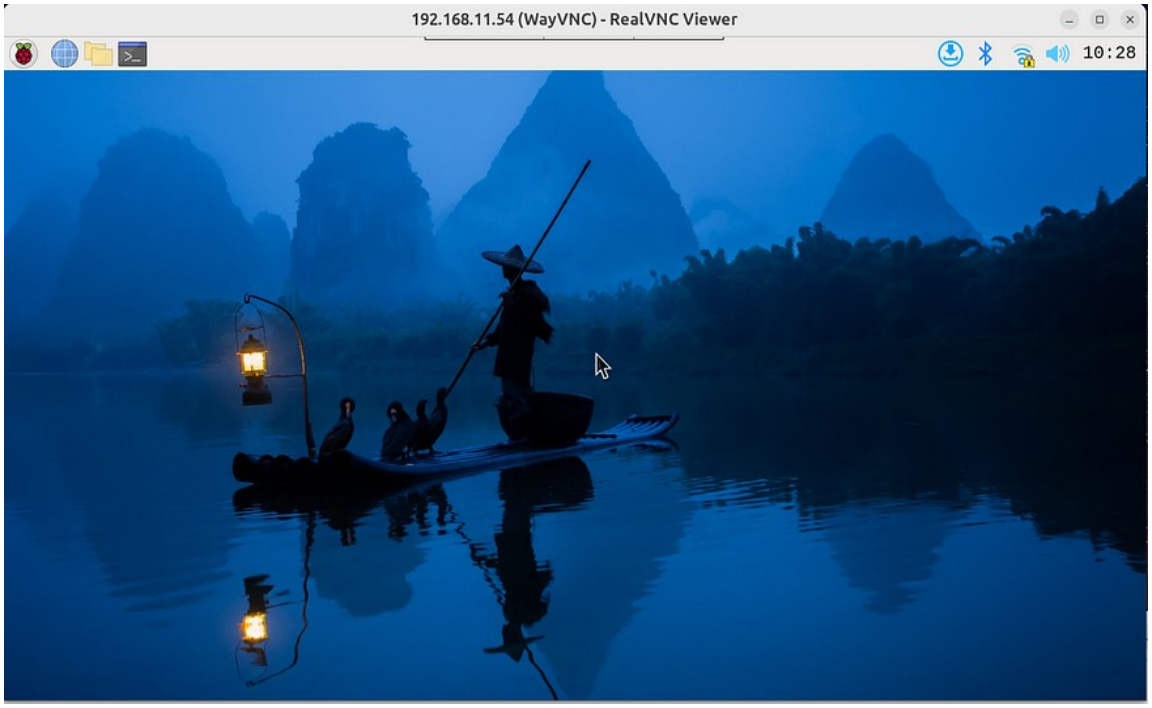
Exit and Reboot.

Open VNC Viewer on your laptop and enter the IP address of your Raspberry Pi:





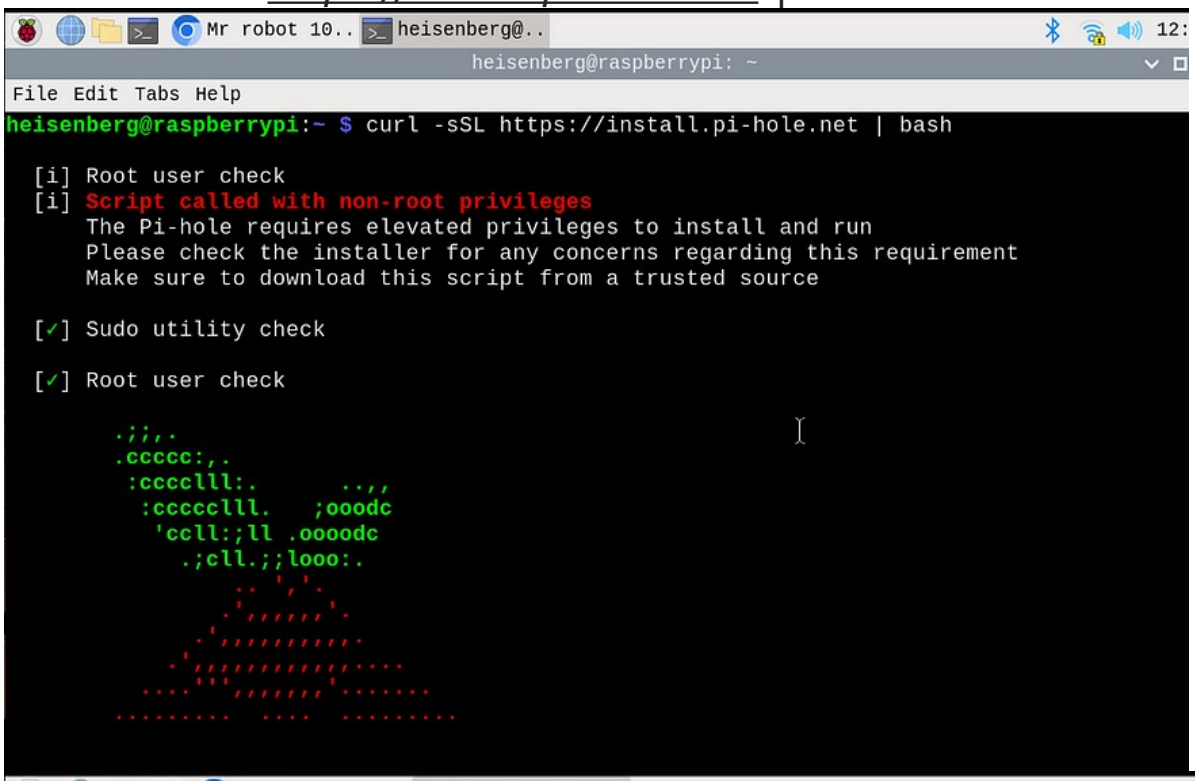
Enter your Username and Password:

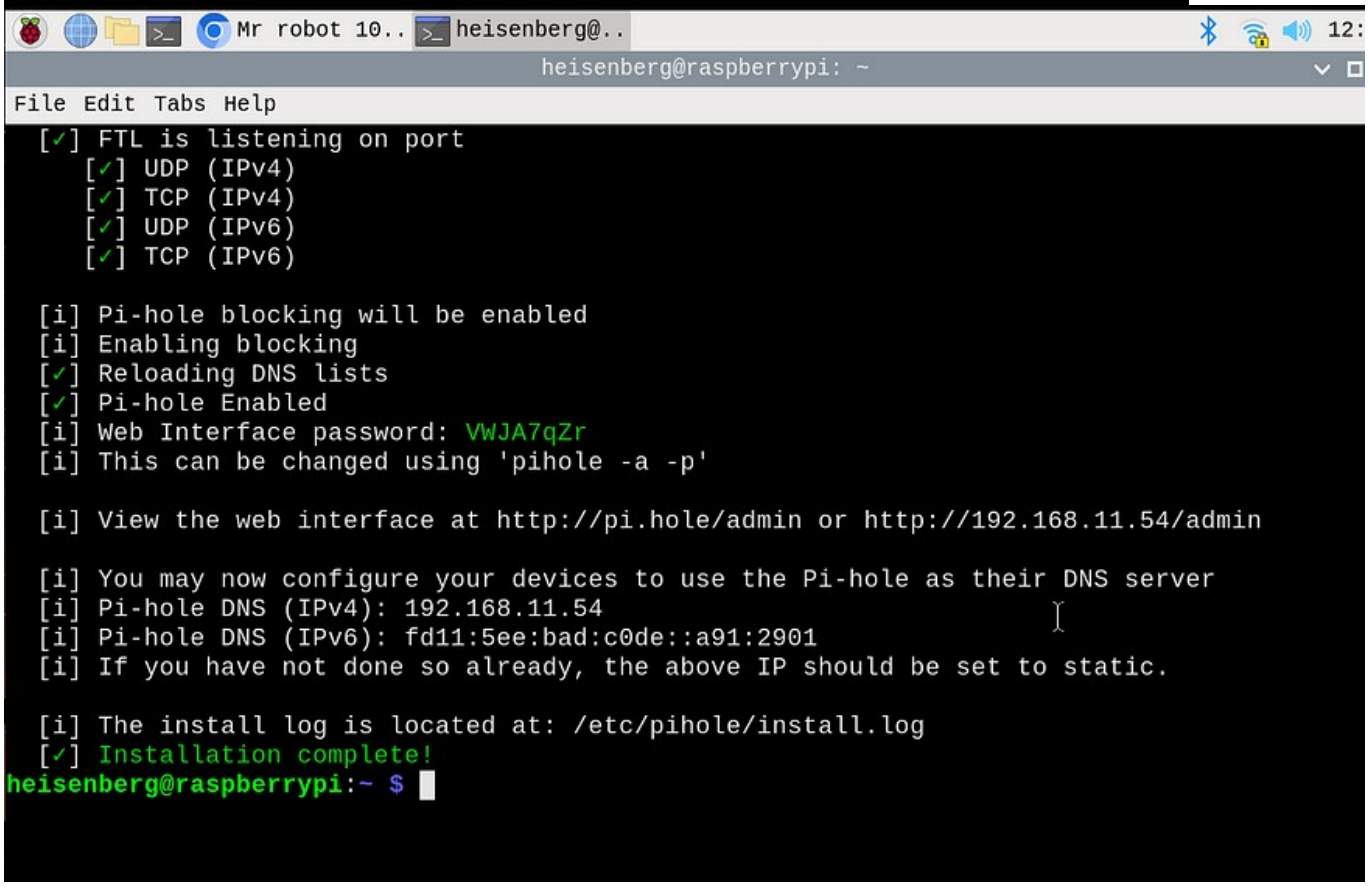


Ad Blocker

This command will start the automatic installer:

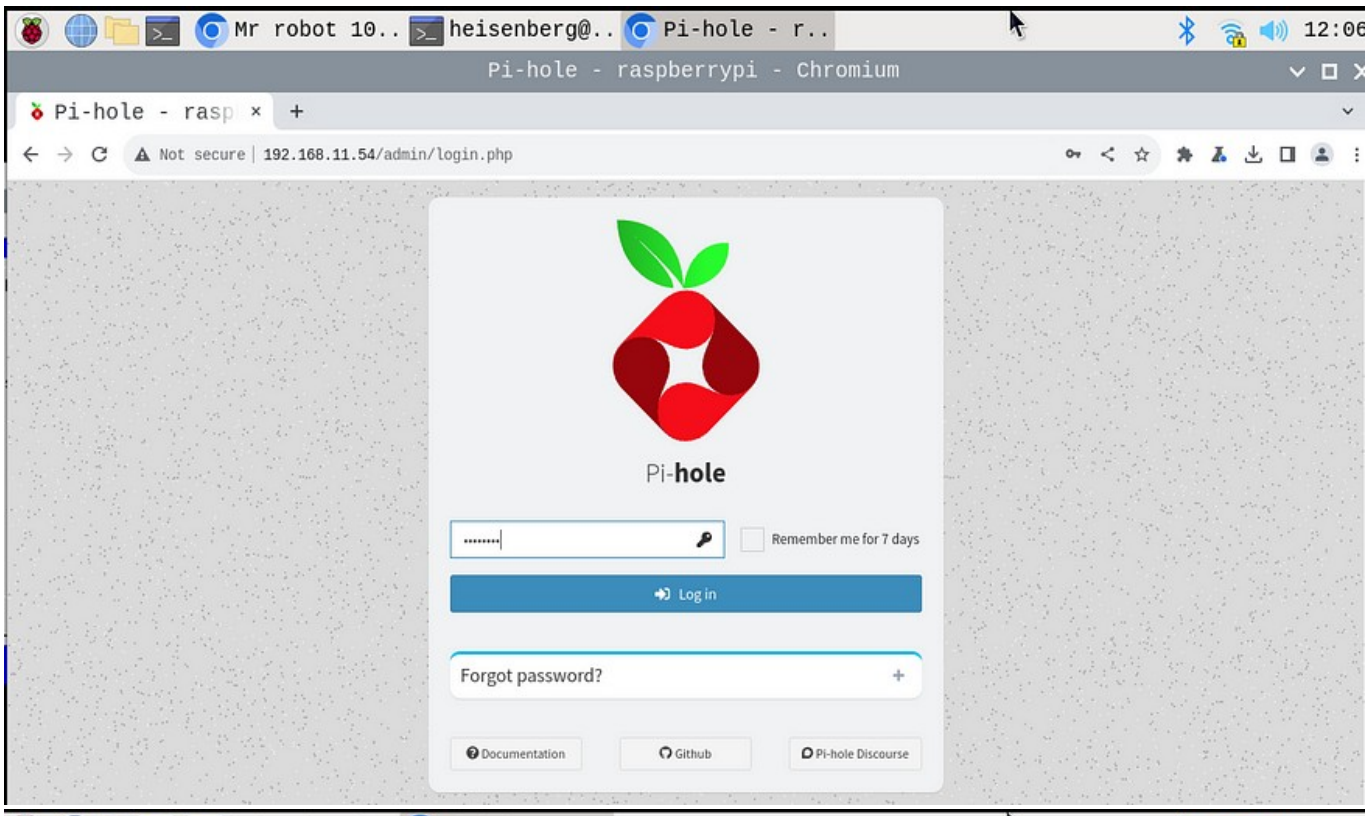
curl -sSL https://install.pi-hole.net | bash

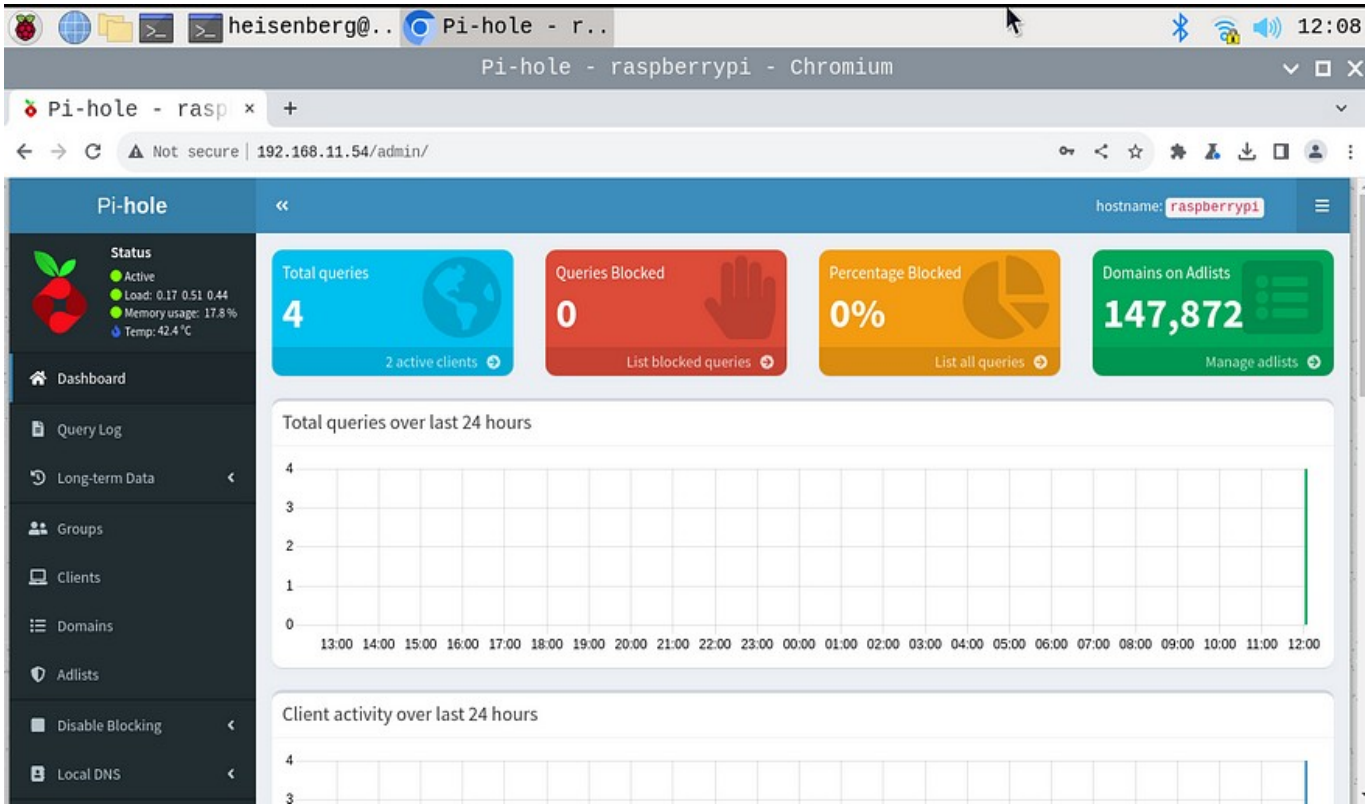




Now we can go to admin web interface.

<ip>/admin





And here is the admin web interface!

Now let’s configure our laptop to use PiHole.

Set the DNS Server to your Raspberry Pi's IP- replace the "YOUR_CONNECTION_NAME" with your wifi's SSID and "YOUR_PIHOLE_IP" to your Pi's IP address:

nmcli con mod "YOUR_CONNECTION_NAME" ipv4.dns "YOUR_PIHOLE_IP"
nmcli con mod "YOUR_CONNECTION_NAME" ipv4.ignore-auto-dns yes
nmcli con up "YOUR_CONNECTION_NAME"

Enter this command and you should see the IP of your Raspberry:

nmcli dev show | grep DNS

Now let's test the Ad Bloacker:

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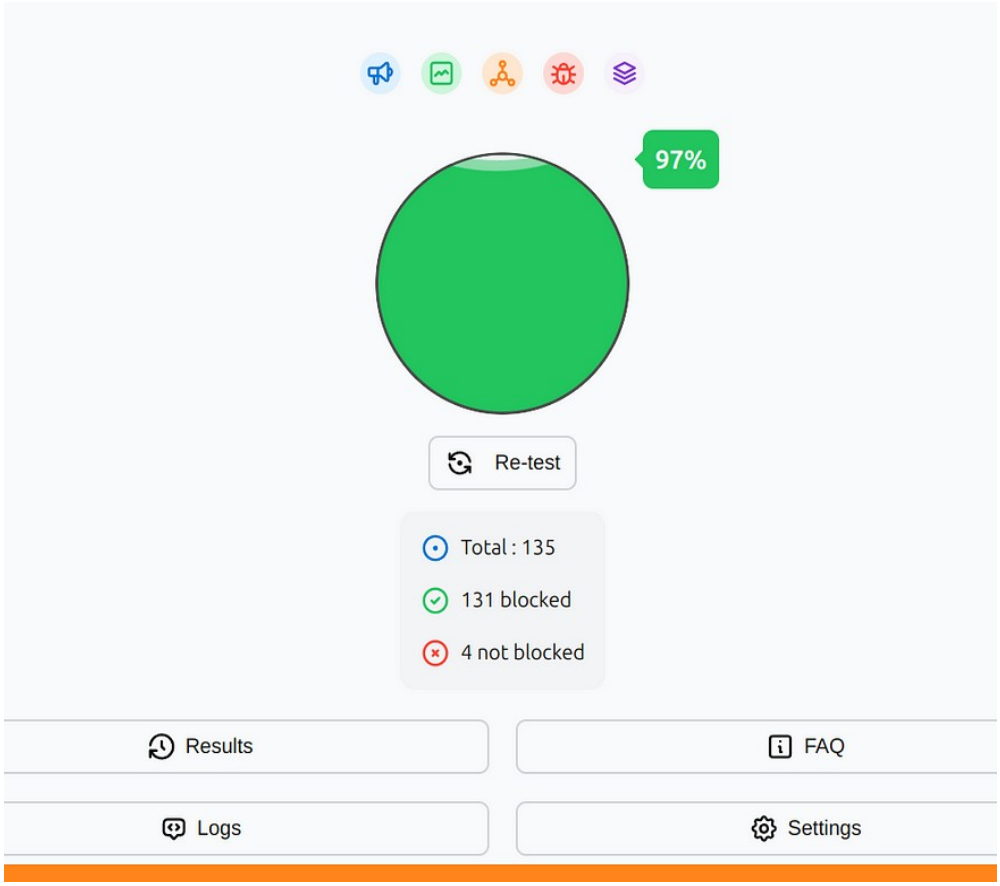


Raspberry Pi Website Hosting on DarkNet

First, we need to install Apache and Tor.

Apache is a web server software that we will use to host are website, and we employ Tor to make our website accessible on the DarkNet.

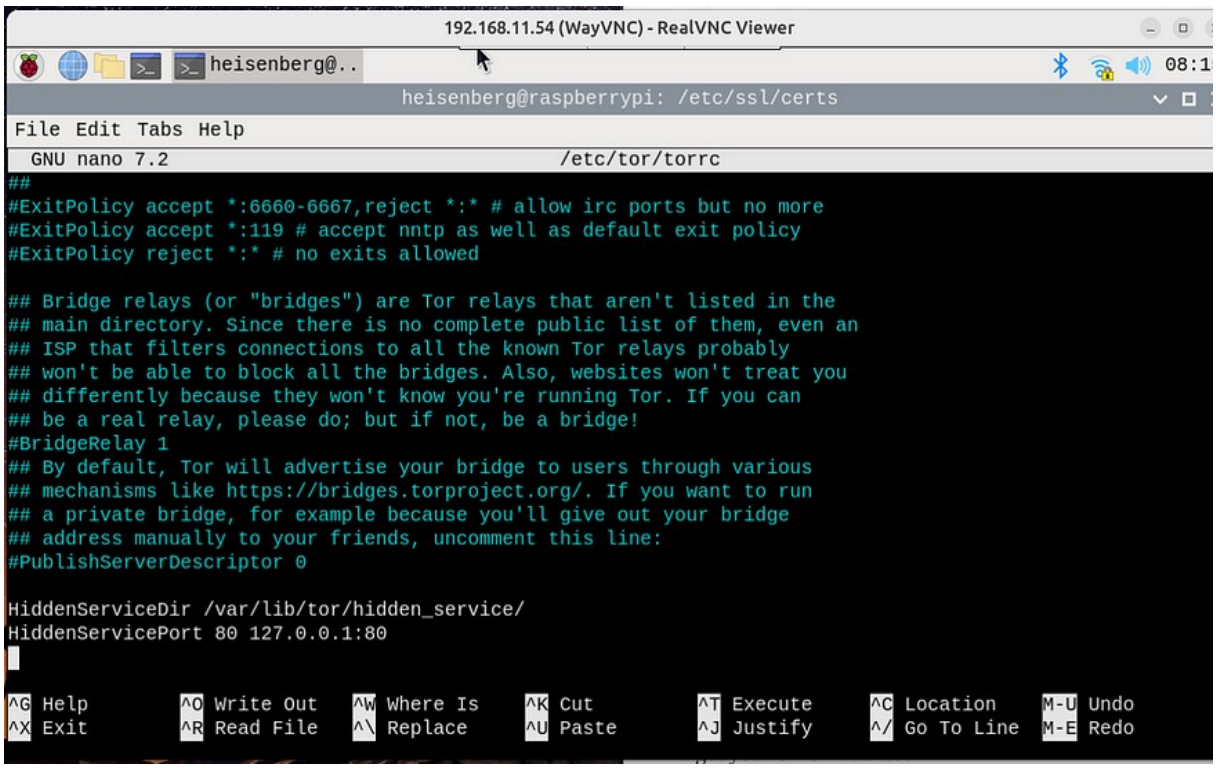
sudo apt install apache2
sudo apt install tor

Open the Tor configuration file:

sudo nano /etc/tor/torrc

Add the following lines:

HiddenServiceDir /var/lib/tor/hidden_service/
HiddenServicePort 80 127.0.0.1:80

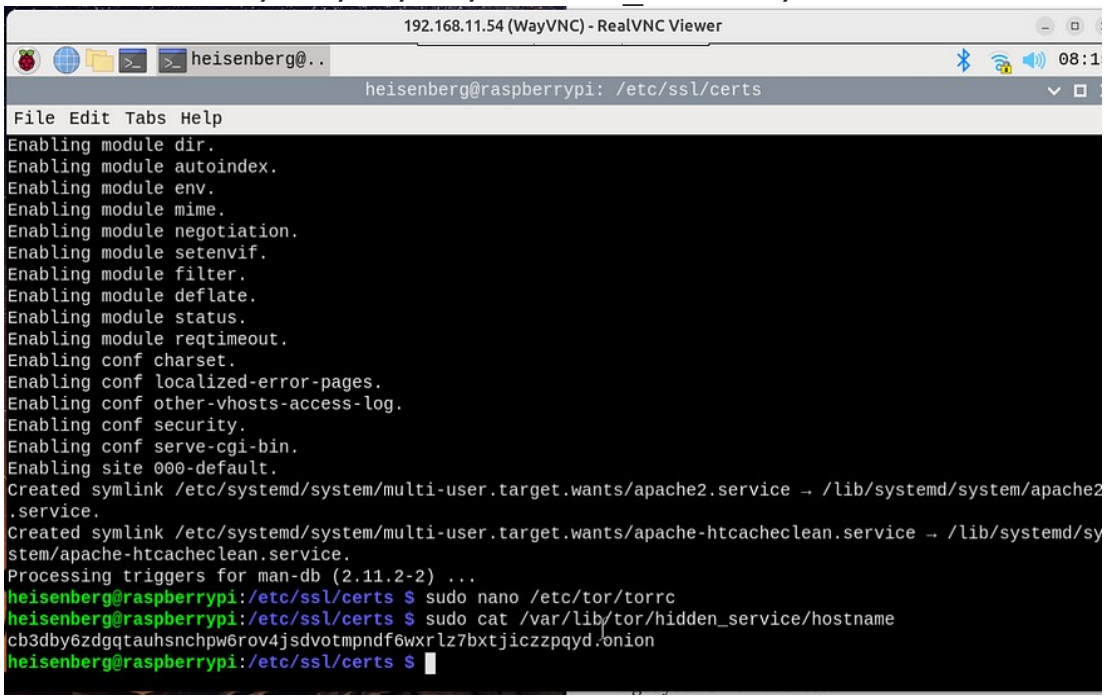


Restart Tor:

sudo systemctl restart tor

And get your onion address:

sudo cat /var/lib/tor/hidden_service/hostname



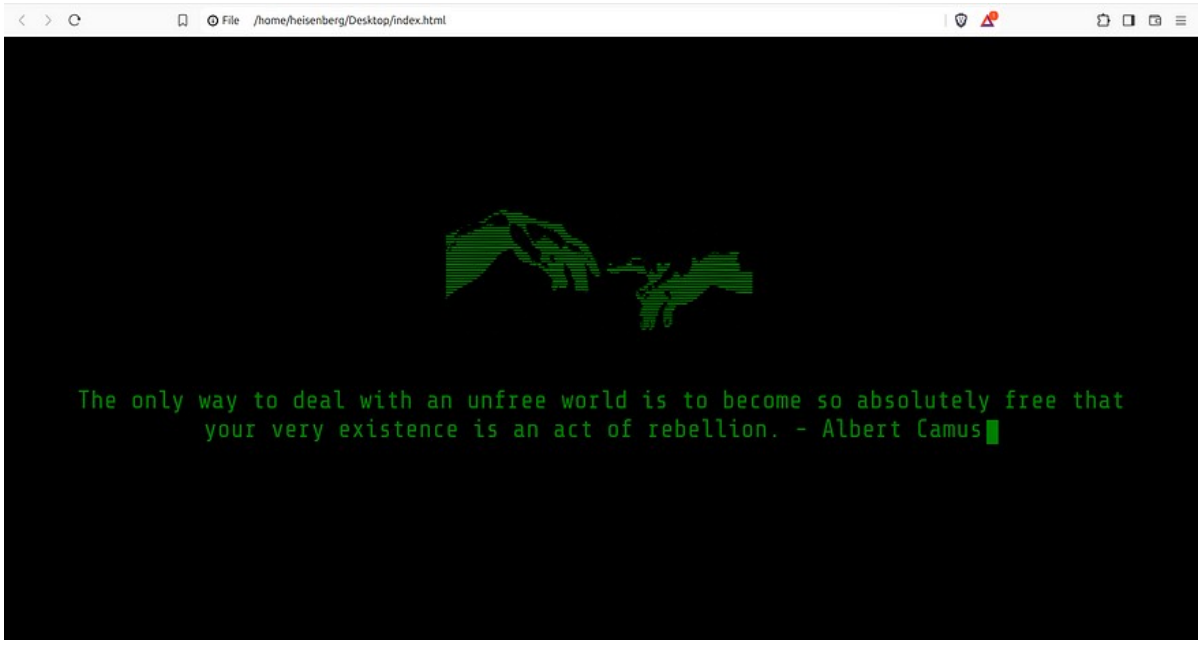
Now let’s enable and start our Apache:

sudo systemctl enable apache2

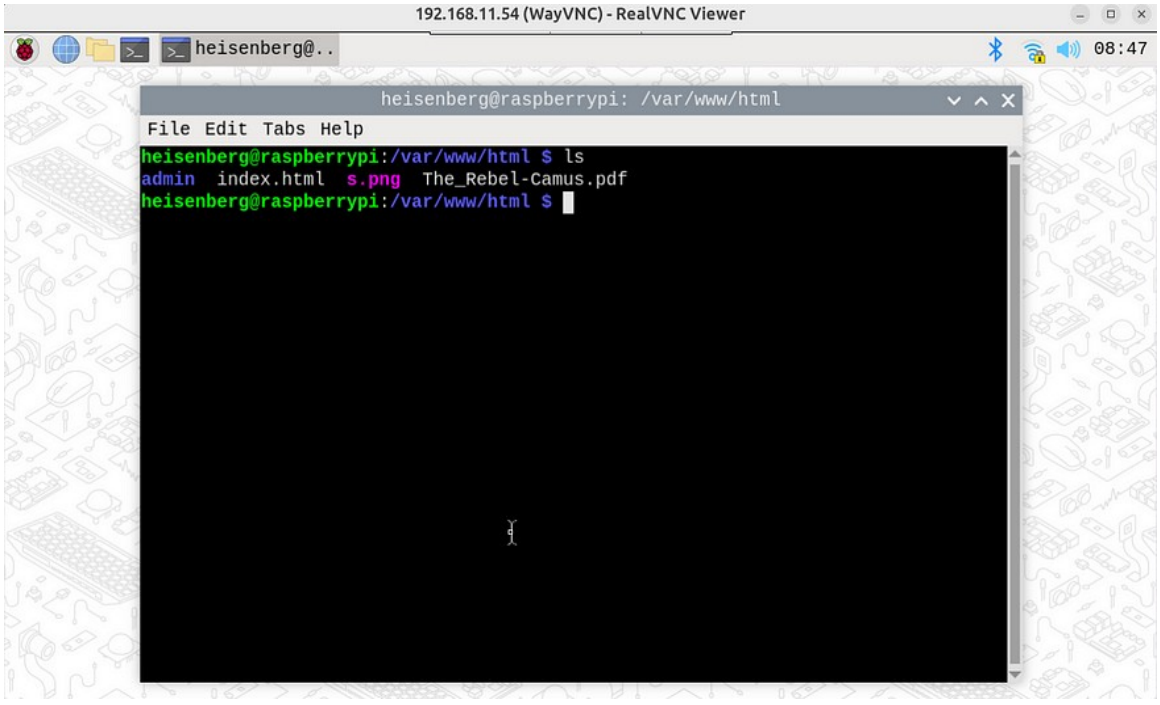
sudo systemctl start apache2

C00L!

Okay, now it’s time for you to make your website you wanna host.



After that we need to get the necessary files in the **/var/www/html** directory of the Raspberry Pi (or your other hosting machine).



Now hit the .onion link into your Tor browser and you should see your website!