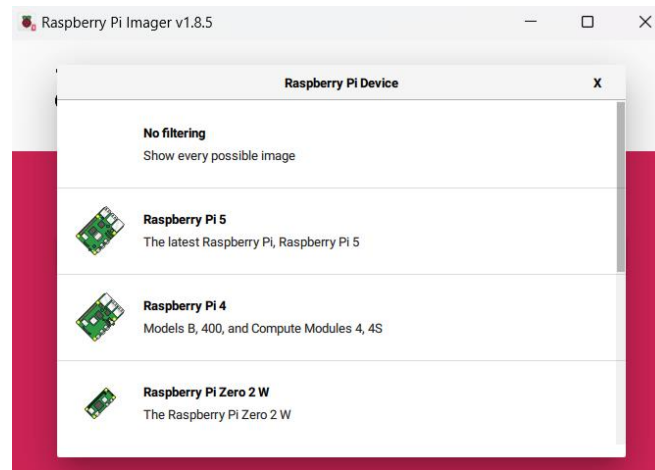
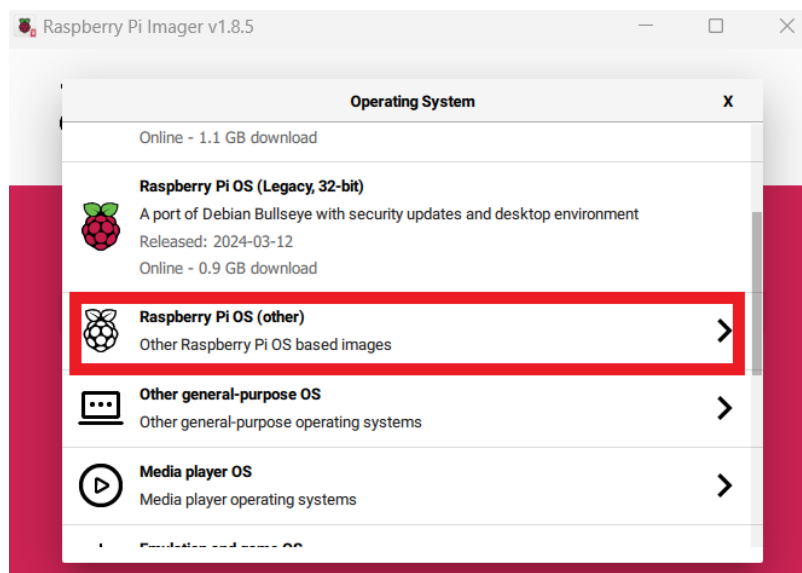


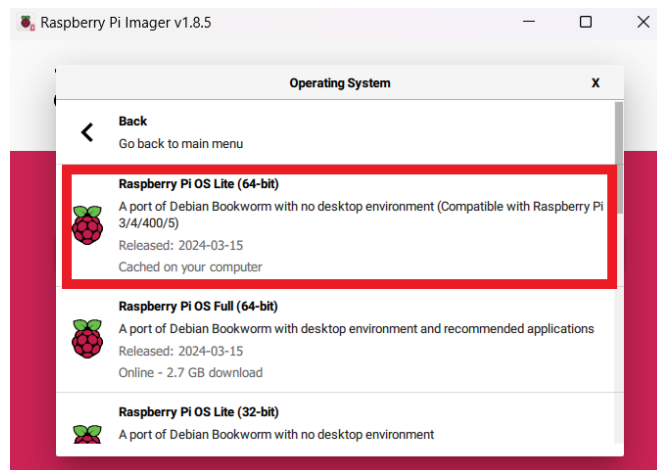
How to install Home Assistant using a Raspberry Pi:

1. Remove the SD card of the Raspberry Pi;
2. Insert the SD card in a computer with access to internet;
3. Download the Raspberry Pi Imager from the Raspberry Pi official website:  
<https://www.raspberrypi.com/software/>;
4. Open Raspberry Pi Imager;
5. Select wich device you wish to use in this tab:

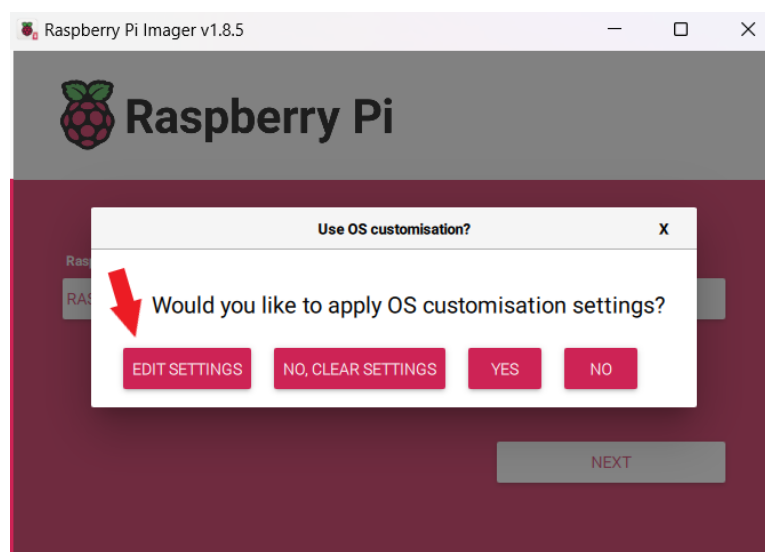


6. The OS used is located in:

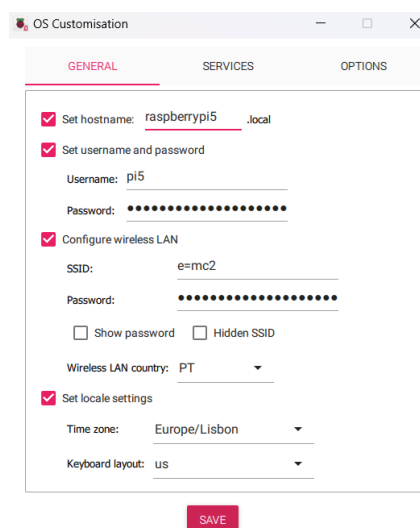




7. Confirm your choices and then select the edit settings button:



8. In this next tab choose the names and passwords that you wish to give to your device and confirm the network that you wish to use to communicate with your Raspberry Pi. After these steps hit the save button and start the image installation.



9. After the image installation is completed remove the SD card from the computer and insert in the Raspberry Pi again and turn it on;

10. Using a computer connected to the network that was previously chosen in the Raspberry Pi Imager, using the command prompt of your computer try to reach the Raspberry using the command: `ping -4 chosen_hostname.local`;

```
Linha de comandos
C:\Users\camis>ping -4 raspberrypi5.local

Pinging raspberrypi5.local [192.168.2.3] with 32 bytes of data:
Reply from 192.168.2.3: bytes=32 time=22ms TTL=64
Reply from 192.168.2.3: bytes=32 time=6ms TTL=64
Reply from 192.168.2.3: bytes=32 time=25ms TTL=64
Reply from 192.168.2.3: bytes=32 time=13ms TTL=64

Ping statistics for 192.168.2.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 6ms, Maximum = 25ms, Average = 16ms
```

11. Now it is possible to see the Raspberry Pi address on the chosen network and now we will access the Raspberry Pi using this command: `ssh chosen_name@Raspberry_address` then hit the enter button and insert the chosen password;

```
C:\Users\camis>ssh pi5@192.168.2.3
pi5@192.168.2.3's password:
Linux raspberrypi5 6.6.20+rpt-rpi-v8 #1 SMP PREEMPT Debian 1:6.6.20-1+rpt1 (
2024-03-07) aarch64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue May  7 15:47:51 2024 from 192.168.2.2
pi5@raspberrypi5:~ $
```

12. Insert the following command and fix the following parameters: `ClientAliveInterval` and `ClientAliveCountMax` mustn't be commented and the first one must have value 1000000 instead of 0. Then save this changes and exit with the controls `ctrl+o` and `ctrl+x` respectively;

```
pi5@raspberrypi5: ~
pi5@raspberrypi5:~ $ sudo nano /etc/ssh/sshd_config
```

```
pi5@raspberrypi5: ~  
GNU nano 7.2 /etc/ssh/sshd_config  
# PAM authentication via KbdInteractiveAuthentication may bypass  
# the setting of "PermitRootLogin prohibit-password".  
# If you just want the PAM account and session checks to run without  
# PAM authentication, then enable this but set PasswordAuthentication  
# and KbdInteractiveAuthentication to 'no'.  
UsePAM yes  
  
#AllowAgentForwarding yes  
#AllowTcpForwarding yes  
#GatewayPorts no  
X11Forwarding yes  
#X11DisplayOffset 10  
#X11UseLocalhost yes  
#PermitTTY yes  
PrintMotd no  
#PrintLastLog yes  
#TCPKeepAlive yes  
#PermitUserEnvironment no  
#Compression delayed  
ClientAliveInterval 1000000  
ClientAliveCountMax 3  
#UseDNS no  
#PidFile /run/sshd.pid  
#MaxStartups 10:30:100  
#PermitTunnel no  
#ChrootDirectory none  
#VersionAddendum none  
  
# no default banner path  
#Banner none  
  
# Allow client to pass locale environment variables  
AcceptEnv LANG LC_*  
  
# override default of no subsystems  
Subsystem sftp /usr/lib/openssh/sftp-server  
  
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify
```

13. Do the commands separately as it is shown in the figure below and as it is possible to see in the last line of the command response if there are packages to upgrade do the following command: `sudo apt upgrade`;

```
pi5@raspberrypi5: ~  
pi5@raspberrypi5:~$ sudo systemctl reload ssh  
pi5@raspberrypi5:~$ sudo apt update  
Hit:1 http://deb.debian.org/debian bookworm InRelease  
Get:2 http://deb.debian.org/debian-security bookworm-security InRelease [48.  
0 kB]  
Get:3 http://deb.debian.org/debian bookworm-updates InRelease [55.4 kB]  
Get:4 http://archive.raspberrypi.com/debian bookworm InRelease [23.6 kB]  
Get:5 http://deb.debian.org/debian-security bookworm-security/main armhf Pac  
kages [150 kB]  
Get:6 http://deb.debian.org/debian-security bookworm-security/main arm64 Pac  
kages [153 kB]  
Get:7 http://deb.debian.org/debian-security bookworm-security/main Translati  
on-en [95.1 kB]  
Get:8 http://deb.debian.org/debian bookworm-updates/main armhf Packages [13.  
2 kB]  
Get:9 http://deb.debian.org/debian bookworm-updates/main arm64 Packages [13.  
7 kB]  
Get:10 http://deb.debian.org/debian bookworm-updates/main Translation-en [16  
.0 kB]  
Get:11 http://archive.raspberrypi.com/debian bookworm/main armhf Packages [3  
97 kB]  
Get:12 http://archive.raspberrypi.com/debian bookworm/main arm64 Packages [3  
87 kB]  
Fetched 1,352 kB in 2s (803 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
37 packages can be upgraded. Run 'apt list --upgradable' to see them.  
pi5@raspberrypi5:~$  
  
pi5@raspberrypi5:~$ sudo apt upgrade
```

14. After the upgrade finish copy the following URL that will install Casa.os in your Raspberry Pi that is the image where the application of Home Assistant will be installed on;

```
pi5@raspberrypi5:~$ curl -fsSL https://get.casaos.io | sudo bash
```

15. After installing Casa.os in your Raspberry Pi do the following commands in your computer prompt to see if the image is running by checking the Active parameter after the command: `sudo systemctl status casaos`;

```
pi5@raspberrypi5:~$ sudo reboot now

Broadcast message from root@raspberrypi5 on pts/1 (Tue 2024-05-07 16:46:11 W
EST):

The system will reboot now!

pi5@raspberrypi5:~$ Connection to 192.168.2.3 closed by remote host.
Connection to 192.168.2.3 closed.

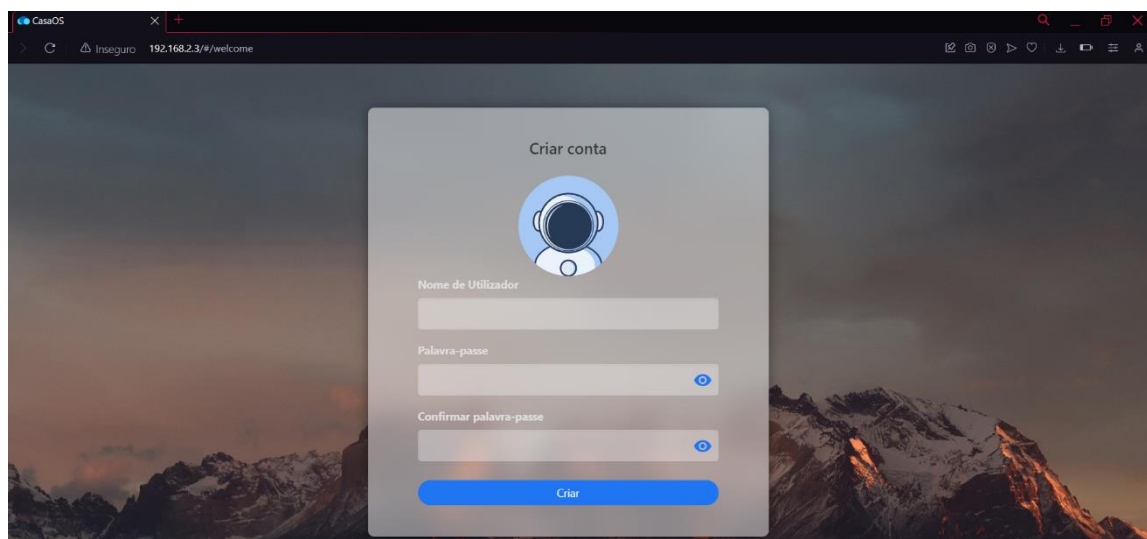
C:\Users\camis>ssh pi5@192.168.2.3
pi5@192.168.2.3's password:
Linux raspberrypi5 6.6.28+rpt-rpi-v8 #1 SMP PREEMPT Debian 1:6.6.28-1+rpt1 (
2024-04-22) aarch64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

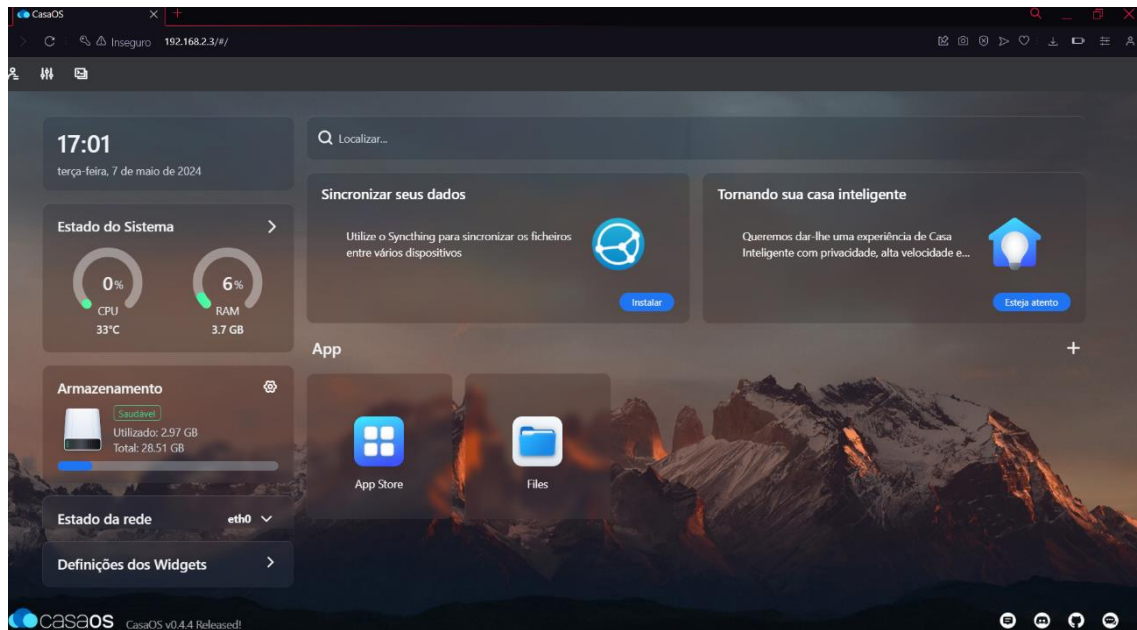
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue May  7 16:21:43 2024 from 192.168.2.2
pi5@raspberrypi5:~$ sudo systemctl status casaos
● casaos.service - CasaOS Main Service
   Loaded: loaded (/lib/systemd/system/casaos.service; enabled; preset: ena
   Active: active (running) since Tue 2024-05-07 16:46:21 WEST; 3min 58s
   Main PID: 777 (casaos)
     Tasks: 7 (limit: 3917)
        CPU: 3.359s
   CGroup: /system.slice/casaos.service
           └─777 /usr/bin/casaos -c /etc/casaos/casaos.conf

May 07 16:49:58 raspberrypi5 casaos[777]: /bin/bash -c source /usr/share/ca
May 07 16:50:00 raspberrypi5 casaos[777]: 消息来了。 message: {"type":"ping"}
May 07 16:50:03 raspberrypi5 casaos[777]: /bin/bash -c source /usr/share/ca
May 07 16:50:03 raspberrypi5 casaos[777]: /bin/bash -c source /usr/share/ca
May 07 16:50:08 raspberrypi5 casaos[777]: /bin/bash -c source /usr/share/ca
May 07 16:50:08 raspberrypi5 casaos[777]: /bin/bash -c source /usr/share/ca
May 07 16:50:08 raspberrypi5 casaos[777]: /bin/bash -c source /usr/share/ca
May 07 16:50:13 raspberrypi5 casaos[777]: /bin/bash -c source /usr/share/ca
```

16. Insert the IP address of the Raspberry Pi in a new searching tab in your computer and if this is the response that you obtain then the image was successfully installed;



17. After creating your account you will reach the menu that is shown bellow and then in the App Store tab search for the Home Assistant application and install it.



18. After the installation of the Home Assistant, open it's application and create your account. After having a similar menu as the shown bellow your Home Assistant is officially operative.

