AutoSentry: Edge Setup Guide -Raspberry Pi

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| i≣ Tags | Raspberry Pi Setup |

Hardware Requirements:

- 1. Raspberry Pi 4 Model B with 1.5GHz 64-bit quad-core ARMv8 CPU (2GB, 4GB or 8GB RAM)
- 2. MicroSD card and MicroSD card reader for your computer
- 3. Edge TPU from Coral.ai
- 4. A USB Camera (Model TBD)
- 5. Optional: Warning Light (Model TBD)

Before Beginning:

This setup guide assumes you have a "clean" out-of-the-box Raspberry Pi with the appropriate amount of storage provided by your choice of a microSD card. A stable internet connection will be required throughout this entire process as well.

- 1. Install the <u>Raspberry Pi Imager</u>. This software will help aid in flashing your microSD card with the proper operating system.
- 2. Plug in your microSD card to the computer.

- 3. Download the <u>image</u> and extract it from <u>here</u>: <u>https://github.com/google-coral/aiy-</u> maker-kit-tools/releases/download/v20220518/aiy-maker-kit-2022-05-18.img.xz
- 4. Open the Raspberry Pi Imager. Click 'CHOOSE OS' → Scroll down to the bottom → Click 'Use custom' → Select the image downloaded from the previous step.
- If the storage has not already been automatically selected: Click 'Choose STORAGE' → Select your microSD card.
- 6. Open the advanced settings by clicking the cog or settings icon located on the bottom right.



8.

9.

7. Set a unique hostname for the Raspberry Pi.

| | Set hostname: | edge-demo | .local |
|------------------------|-------------------------|---------------------|----------|
| Enable SSH. | | | |
| | Enable SSH | | |
| | 🧿 Use pass | word authentication | |
| | - | | |
| Set the username to be | e edge and the p | assword can be | anything |
| | Set username and | nassword | |

| | Password: | ••••• | |
|--------------|---------------------------|-------|--|
| | Username: | edge | |
| \checkmark | Set username and password | | |

10. Configure the wireless LAN with your desired Wi-Fi and accurately set the locale settings.

| Configure wireless LAN | | |
|------------------------|-----------------------|--|
| SSID: | YOUR_WIFI_NAME | |
| Hidden SSID | | |
| Password: | ••••• | |
| Show passwor | rd | |
| | | |
| Set locale settings | | |
| Time zone: | America/Los_Angeles 🔹 | |
| Keyboard layout: | us 🔻 | |

- 11. Save and click 'WRITE'
- 12. Eject the microSD card and insert into the Raspberry Pi. Connect the Raspberry Pi to computer peripherals: Monitor, Power source, Mouse, Keyboard, Edge TPU, Camera, Warning Light.
- 13. After connecting to peripherals, a popup will appear asking to complete some information including timezone, language, Wi-Fi, username, and password. Skip filling this information out if possible.
- 14. Download the AutoSentry Edge software onto the Raspberry Pi:

Request the .tar file from Will and after downloading, extract the executable. It does not matter where you extract the executable to.

15. Double click and 'Execute in Terminal' the file.