

Frigate

Frigate is an open-source NVR built on real-time AI object detection. All processing is performed locally on your own hardware, and your camera video streams never leave your home.

1. [Manually download the program](#) and upload it to raspberrypi5, or pull the model repository via the following command.

Tip

If **git lfs** is not installed, first refer to [git lfs installation guide](#) for installation.

```
git clone -b rpi-axcl https://huggingface.co/AXERA-TECH/frigate-resource
```

File description:

```
m5stack@raspberrypi:~/rsp/frigate-resource $ ls -lh
total 2.8G
-rw-rw-r-- 1 m5stack m5stack 48M Oct 9 16:46 axcl_host_aarch64_V3.6.5_20250908154509_N04973.deb
-rw-rw-r-- 1 m5stack m5stack 648 Oct 9 16:41 docker-compose.yml
-rw-rw-r-- 1 m5stack m5stack 2.8G Oct 9 16:46 frigate-rpi-axcl-f8f387a.tar
-rw-rw-r-- 1 m5stack m5stack 3.7K Oct 9 16:41 README.md
```

2. Import docker image

Tip

If **docker** is not installed, first refer to [RaspberryPi docker installation guide](#) for installation.

```
docker load -i frigate-resource/frigate-rpi-axcl-f8f387a.tar # The image file may be updated, use the actual
```

3. Prepare the working directory

```
mkdir -p ~/frigate-runtime/{config,storage}
cp frigate-resource/docker-compose.yml ~/frigate-runtime/
```

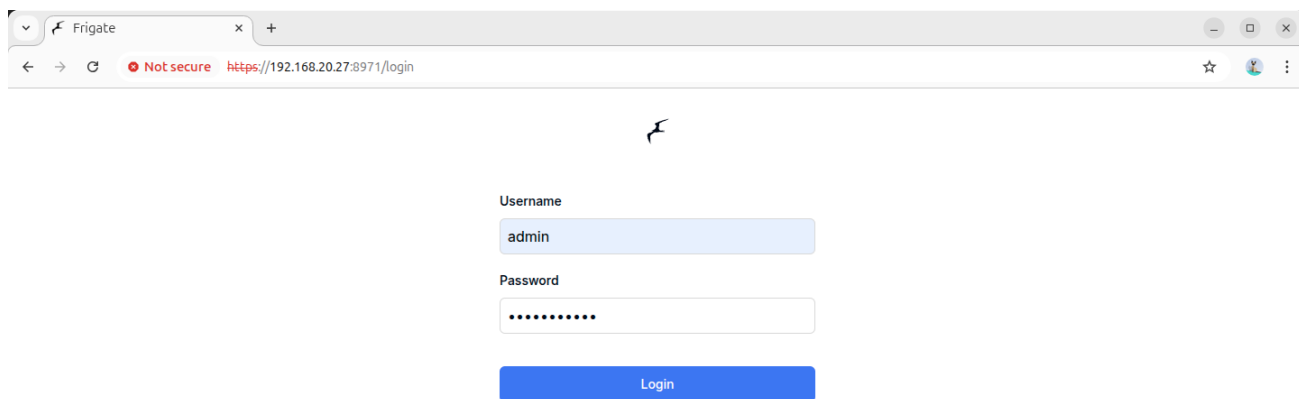
4. Start the container

```
cd ~/frigate-runtime/
docker compose up -d
```

5. Access Frigate management Web via https://server_ip:8971

Tip

Default username **admin** Default password **axera123456**



Username

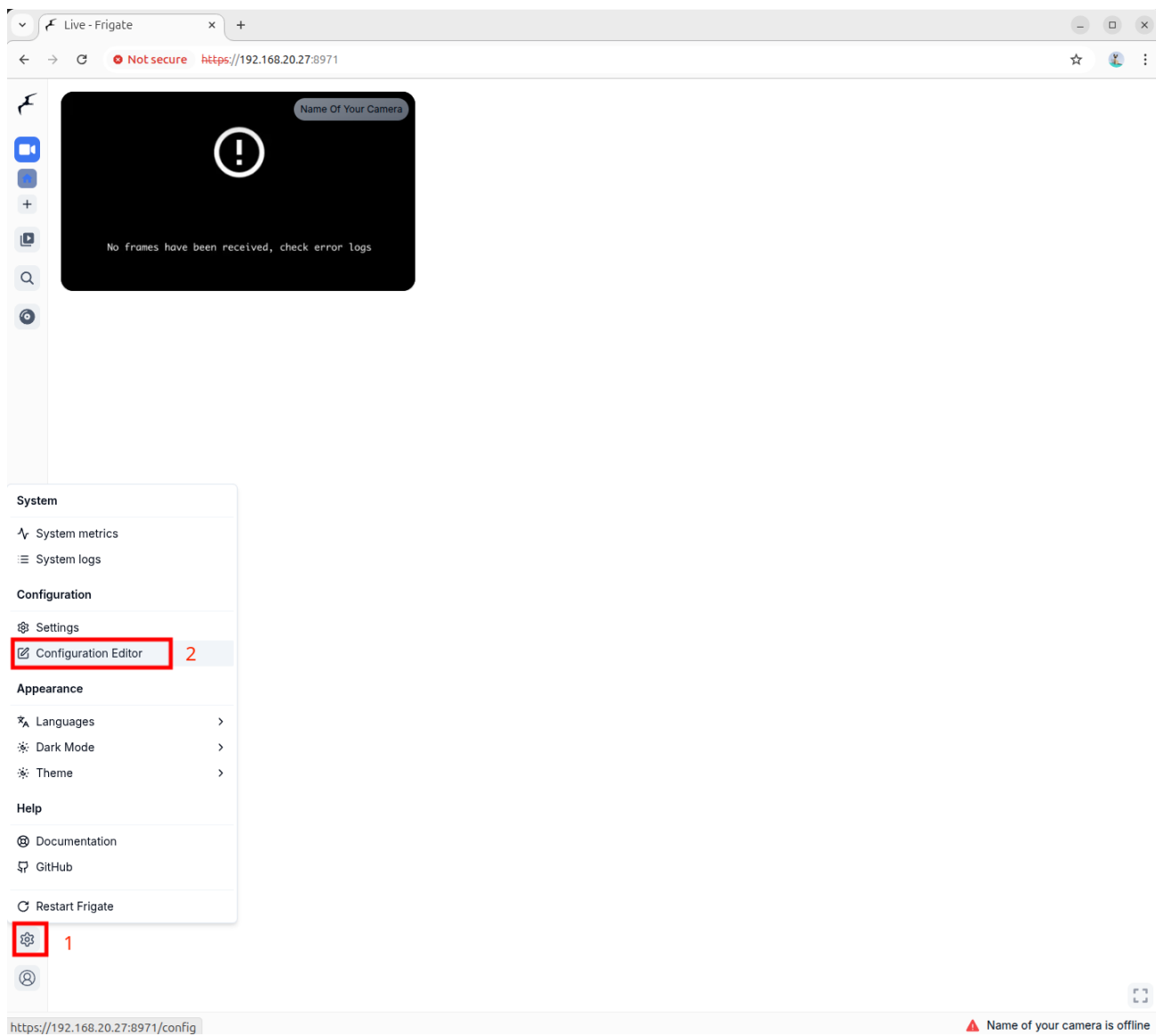
admin

Password

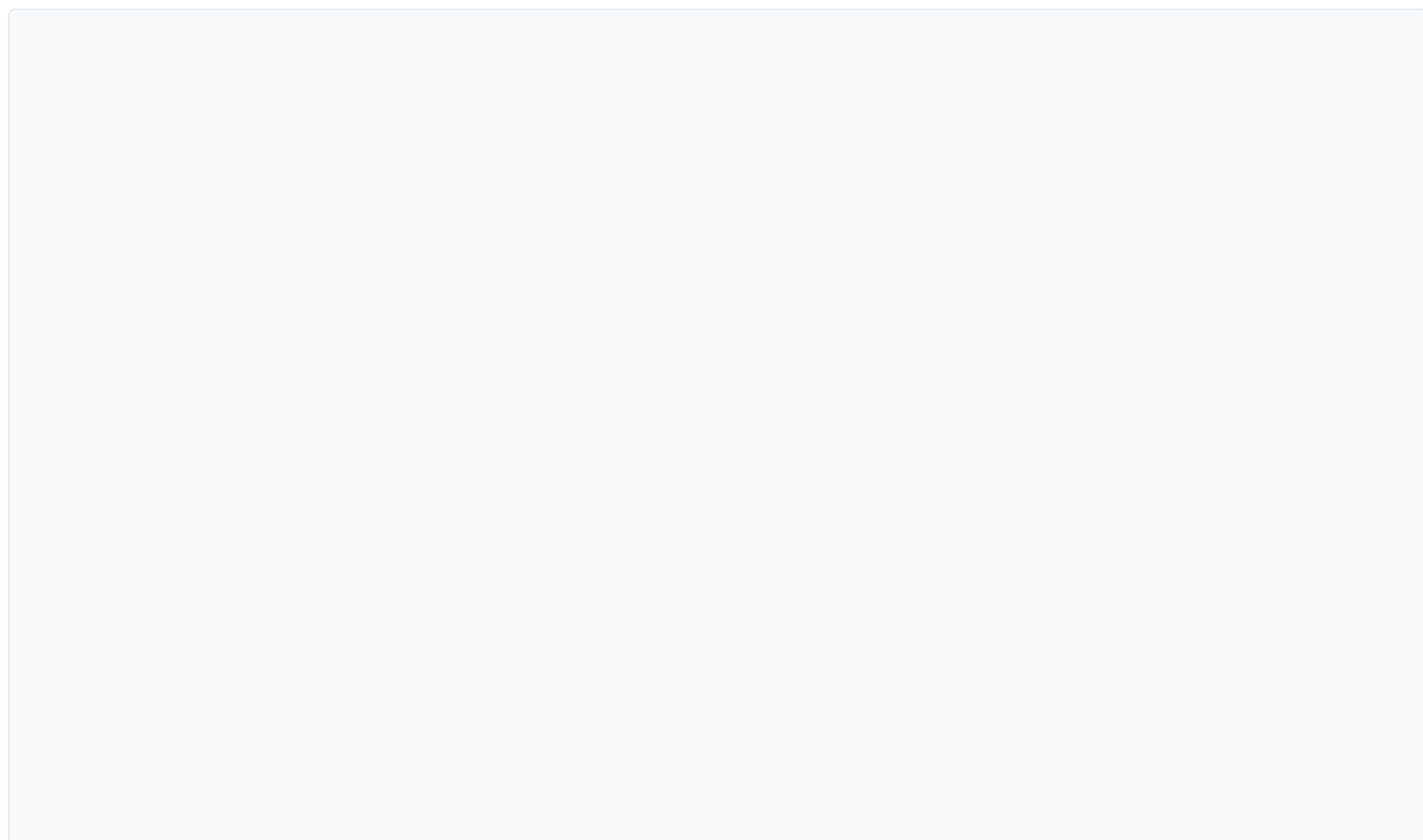
.....

Login

6. Click settings, configure parameters, enter the following content. Modify the go2rtc part to your own IP Camera address, save and restart.



Configuration example:



```

#ffmpeg global variables, required
ffmpeg:
  global_args: ["-hide_banner", "-loglevel", "warning", "-threads", "1"]
  output_args:
    detect: ["-threads", "1", "-f", "rawvideo", "-pix_fmt", "yuv420p"]
mqtt:
  enabled: false
go2rtc:
  streams:
    #main stream
    road1:
      - rtsp://192.168.20.57:8554/road1.264
    #sub stream
    road1_sub:
      - rtsp://192.168.20.57:8554/road1_sub.264
cameras:
  road1:
    enabled: true
    ffmpeg:
      inputs:
        #path to the recording stream, here using the main stream set in go2rtc
        #during debugging, you can use local stream files here
        - path: rtsp://127.0.0.1:8554/road1
          roles:
            - record
        #path to the detection stream, here using the sub stream set in go2rtc
        #during debugging, you can use local stream files here
        - path: rtsp://127.0.0.1:8554/road1_sub
          roles:
            - detect
        #preset-rpi-64-h264 for decoding h264 stream
        #preset-rpi-64-h265 for decoding h265 stream
        hwaccel_args: preset-rpi-64-h264
record:
  enabled: true

#Enable detection function
#If detection width/height is not set, it will default to the native resolution of the detection stream
detect:
  enabled: true
  width: 1280
  height: 720
  fps: 5

#Configure detection engine to use axengine
detectors:
  axengine:
    type: axengine

#Configure object detection model for axengine
model:
  path: yolov5s_320
  width: 320
  height: 320
  input_pixel_format: bgr

```

```
labelmap_path: /labelmap/coco-80.txt
```

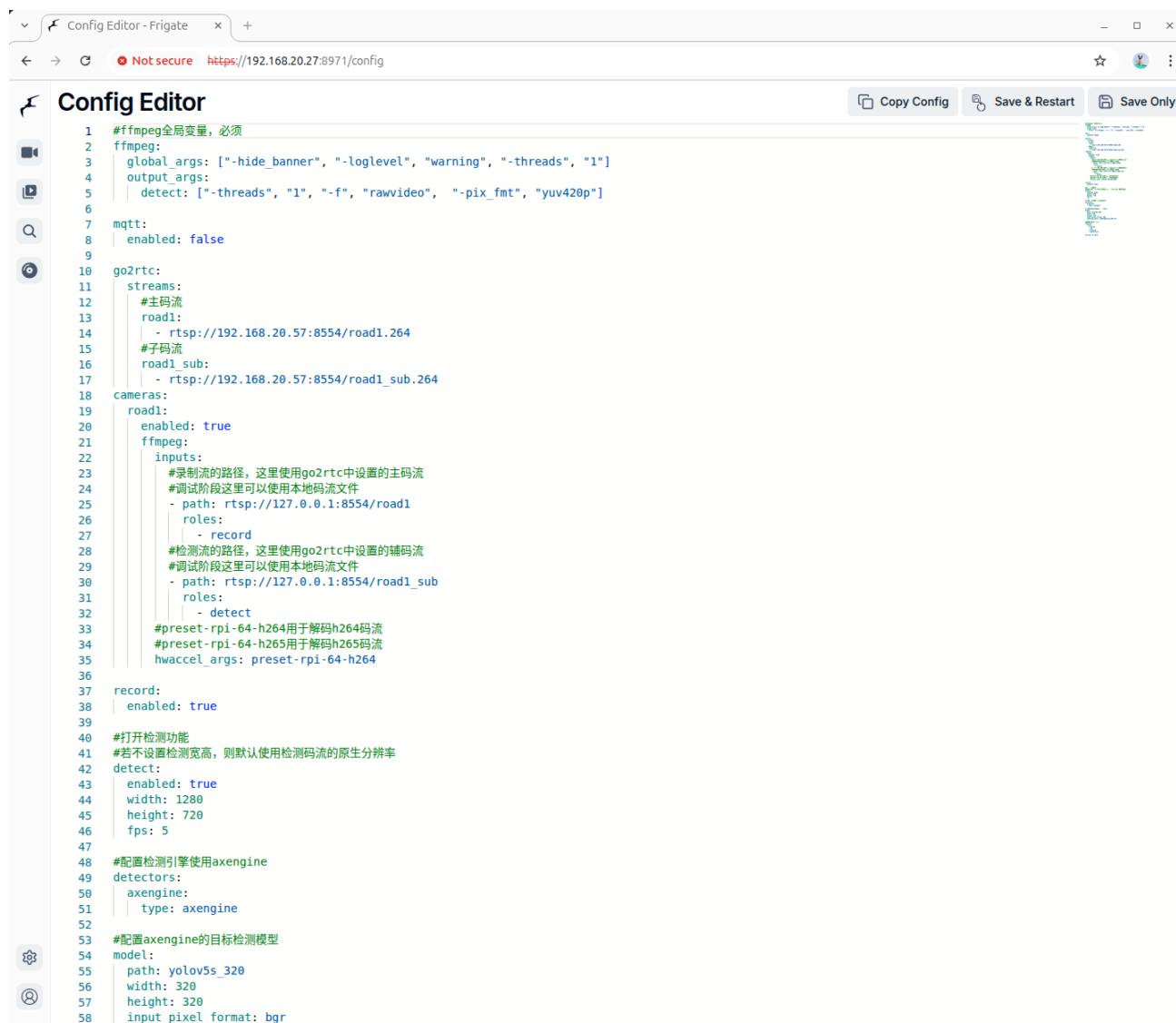
```
#Object types to track
```

```
objects:
```

```
track:
```

- person
- car
- bicycle
- motorcycle

```
version: 0.16-0
```



You can preview the configuration in settings

Debug - Frigate

127.0.0.1:8971/settings

UI Enrichments Camera Settings Masks / Zones Motion Tuner Debug Users Notifications Frigate+

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Debug

Frigate uses your detectors (Axengine) to detect objects in your camera's video stream.

Debugging view shows a real-time view of tracked objects and their statistics. The object list shows a time-delayed summary of detected objects.

Debugging

Object List

Bounding Boxes

Show bounding boxes around tracked objects

Timestamp

Overlay a timestamp on the image

Zones

Show an outline of any defined zones

Motion Masks

Show motion mask polygons

Motion Boxes

Show boxes around areas where motion is detected

Regions

Show a box of the region of interest sent to the object detector

Object Shape Filter Drawing

Draw a rectangle on the image to view area and ratio details

10/09/2026 18:23:59

11:09:22

CPU 61%

System is healthy

6/6 | Update Time: 2026-09-21