Speechtimer on Raspberry Pi

(Start with a finished image created using Raspberry Pi Imager - 64 bit/light.

In this example, the user is not named 'pi' but 'admin'.)

Update Raspberry Pi and install Python

In the terminal window (via PuTTY):

sudo apt update

sudo apt upgrade

sudo apt install python3-pip -y

pip3 install --break-system-packages flask flask-socketio flask-httpauth eventlet

Copy Speechtimer data to the Raspberry Pi

The easiest way is to use WinSCP to copy your Python folder into the admin directory.

Path: /home/admin/speechtimer

Switch to the speechtimer directory

Run the timer:

python app.py

Set up Autostart

In the terminal window (via PuTTY):

sudo nano /etc/systemd/system/speechtimer.service

Paste and save the following text (without the lines):

[Unit]

Description=speechtimer Webserver

After=network.target

[Service]

User=admin

WorkingDirectory=/home/admin/speechtimer

ExecStart=/usr/bin/python3 /home/admin/speechtimer/app.py

Restart=always

[Install]

WantedBy=multi-user.target

Then execute these commands:

(Optional, for new users)

sudo systemctl daemon-reload

sudo systemctl enable speechtimer.service

sudo systemctl start speechtimer.service

Speechtimer on PC

In the terminal window (via PuTTY):

sudo apt update

sudo apt upgrade

sudo apt install python3-pip -y

pip3 install --break-system-packages flask flask-socketio flask-httpauth eventlet

User: admin Password: speech123

The installation creates a user named admin in the home directory.

Check if it's running:

sudo systemctl status speechtimer.service

You should see "active (running)".

Web Access:

- http://<raspi-ip>:5050/ -> Speech Timer

- http://<raspi-ip>:5050/admin -> Admin Panel

Set Static LAN and WLAN IP Addresses

In the terminal window (via PuTTY):

sudo nano /etc/dhcpcd.conf

Example configuration (editable as needed):

interface eth0

static ip_address=192.168.1.210/24

static routers=192.168.1.1

static domain_name_servers=192.168.1.1

interface wlan0

static ip_address=192.168.1.211/24

static routers=192.168.1.1

static domain_name_servers=192.168.1.1

Change SSID and WiFi Password

In the terminal window (via PuTTY):

sudo nano /etc/wpa_supplicant/wpa_supplicant.conf

Example configuration (editable as needed):

ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev

```
update_config=1
country=DE

network={
    ssid="YourWiFiName"
    psk="YourWiFiPassword"
}
```