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Documentation Streaming Interface

Introduction and security warnings

The streaming interface is a website that allows a user to stream his own and other remote cameras. He can also monitor his own environment with the camera.

As a warning: The project is more a prototype than a productiv version. It has several security issues:

- The www-data user needs a passwordless sudo access. Running an apache user with this configuration is dangerous.
- The website starts services as root user
- The website kills services as root user
- This installation guide uses the highest chmod for the /var/www directory

A few information about the project and the author:

- Author: Simon Wächter (waechter.simon@gmail.com)
- License: GNU GPL 3 or higher
- Website: https://github.com/swaechter/web-raspberrypi-streaming-en

Feel free to contact the author if problem or bugs occur.

Installation

1. Install apache, PHP, MySQL and motion
    - sudo apt-get install apache2 libapache2-mod-php5 motion mysql-client mysql-server
    - sudo apt-get –purge remove motion (We only need the dependencies)
2. Prepare the www-data user
    - Add the www-user as a passwordless user to the sudoers file
        - sudo nano /etc/suoers
        - Add www-data ALL=(ALL) NOPASSWD: ALL
        - Save and close
    - Restart the system
3. Prepare /var/www
    - sudo chown -R www-data:www-data /var/www/
    - sudo chmod -R 777 /var/www

4. Download the project from git

   ○ cd /var/www

   ○ git clone https://github.com/swaechter/web-raspberrypi-streaming-en.git

   ○ cd web-raspberrypi-streaming-en

   ○ git submodule init

   ○ git submodule update

5. Prepare the SQL database

   ○ Import the SQL dump from the sql directory

6. Prepare /var/www/web-raspberrypi-streaming-en

   ○ sudo chmod -R 777 /var/www/web-raspberrypi-streaming-en

7. Read the introduction section again and be sure about the security issues

Interface introduction

Now the streaming interface is ready. Enter the IP in your browser and you will see it. The interface has three main components:

Home

This is the start page. From here you can switch to the locale and remote cameras page. You can also use the navigation bar.

Locale camera

This is the page for your own camera. Here you can change the camera state, view the stream or some monitored videos.

Remote cameras

This is the page for remote cameras. You can add and remove cameras or see their stream.

Feature introduction

Locale camera → Status of the local camera

Here you can change the status of your own camera. The change can take some time.

Local camera → See stream

Here you can see the stream of your own camera – as long the stream is active. If you change the status in another browser/tab, the stream in the video player will stop.

Local camera → *See video*

If the camera monitored some movements you are able to select them by date and time and see them. As long there are more than one video, you can watch them independently from the state of your camera.

Remote cameras → *Add remote camera*

Here you can add a remote camera. Please insert the IP of the remote camera, followed by a ':' and the port of the camera, for example 192.168.1.100:8554.

Remote cameras → *Remove remote camera*

Here you can remove an existing camera.

Remote cameras → *See streaming*

If you have one or more remote cameras you are able to watch their stream.