



Installation of mjpeg-streamer



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0.1 Installation of packages (Octoprint, mjpegstreamer, ...)

If you use python3 change the specific packages ...

Package installation

```
sudo apt install python-pip python2.7 virtualenv git subversion libjpeg8-dev imagemagick ffmpeg  
→ libavcodec-extra libav-tools mjpegstreamer gphoto2 cmake pkg-config curl
```

0.2 Get the software

change to your home folder

```
cd ~
```

Clone the repo

```
# mjpg-streamer  
git clone https://github.com/jacksonliam/mjpg-streamer.git
```

0.3 Installation of mjpg-streamer

Installation of mjpg-streamer

```
cd ~  
cd mjpg-streamer/mjpg-streamer-experimental  
make clean  
make  
make install
```



0.4 Creation of UDEV rules for the webcams

0.4.1 Get the values

To assign the right camera to the right octoprint instance it is important to make the device path consistent, even after a reboot. You need UDEV rules to achieve this.

You need the product and device id's of your camera which are written in this format XXXX:XXXX. (product:device)

In this example 2 Logitech USB cameras (C270 und C310).

The example values are:

- 046d:081b \Rightarrow C310
- 046d:0825 \Rightarrow C270



You can get your values with lsusb by checking the vendor and device id's.

output of lsusb (only the important sections)

```
lsusb
```

```
...
```

```
Bus 001 Device 007: ID 046d:0825 Logitech, Inc. Webcam C270
```

```
Device Descriptor:
```

```
  bLength                18
  bDescriptorType         1
  bcdUSB                  2.00
  bDeviceClass            239 Miscellaneous Device
  bDeviceSubClass         2 ?
  bDeviceProtocol         1 Interface Association
  bMaxPacketSize0         64
  idVendor                0x046d Logitech, Inc.
  idProduct               0x0825 Webcam C270
  bcdDevice               0.10
  iManufacturer           0
  iProduct                0
  iSerial                 2 AF1943F0
  bNumConfigurations      1
```

```
Configuration Descriptor:
```

```
Bus 001 Device 002: ID 046d:081b Logitech, Inc. Webcam C310
```

```
Device Descriptor:
```

```
  bLength                18
  bDescriptorType         1
  bcdUSB                  2.00
  bDeviceClass            239 Miscellaneous Device
  bDeviceSubClass         2 ?
  bDeviceProtocol         1 Interface Association
  bMaxPacketSize0         64
  idVendor                0x046d Logitech, Inc.
  idProduct               0x081b Webcam C310
  bcdDevice               0.10
  iManufacturer           0
  iProduct                0
  iSerial                 2 4B8254A0
  bNumConfigurations      1
```

```
Configuration Descriptor:
```

```
...
```



0.4.2 Create a UDEV rule

create a new udev rule file

```
sudo nano /etc/udev/rules.d/01-webcam-usb.rules
```

The text inside should look like this ...

```
/etc/udev/rules.d/01-webcam-usb.rules
```

```
SUBSYSTEMS=="usb", ATTR{idVendor}=="046d", ATTR{idProduct}=="081b", ATTRS{serial}=="4B8254A0",  
  ↳ SYMLINK+="logitechC310dollyMK3"  
SUBSYSTEMS=="usb", ATTR{idVendor}=="046d", ATTR{idProduct}=="0825", ATTRS{serial}=="AF1943F0",  
  ↳ SYMLINK+="logitechC270dollyMK2"
```

- SUBSYSTEMS=="usb",
 - Subsystem USB - because it is a usb camera
- ATTRidVendor=="046d",
 - both are identical because both are Logitech cameras
- ATTRidProduct=="081b" / ATTRidProduct=="0825",
 - 081b + 0825 for C310 and C270
- ATTRSserial=="4B8254A0" and ATTRSserial=="AF1943F0",
 - The serial number is only important if you use 2 exact cameras.
In this case not necessary.
- SYMLINK+="logitechC270dollyMK2" and SYMLINK+="logitechC310dollyMK3"
 - You can name your camera as you want.
I use the scheme: vendor + model + printer name
In this case 2 Prusa clones.

0.4.3 Apply the new UDEV rules without a restart

execute

refresh UDEV Regeln and apply them

```
sudo udevadm trigger
```



0.4.4 Check the UDEV rules

Check if UDEV rules work

```
ls /dev/ | grep -i logit  
# Ausgabe / output  
logitechC270dollyMK2  
logitechC310dollyMK3
```

"logit" is a part of the symlink name.
then follow to setup mjpeg streamer:

<https://github.com/jacksonliam/mjpg-streamer>

now you can use the symlinks for the device path.

as an example

start mjpeg streamer

```
./mjpg_streamer -i "./input_uvc.so -d /dev/logitechC310dollyMK3" -o "./output_http.so -w ./www"  
or  
./mjpg_streamer -i "./input_uvc.so -d /dev/logitechC310dollyMK3 -r 960x720" -o "./output_http.so -w  
→ ./www"
```

ok and you have to write a start script. My server runs 24/7 and never have a power outage so i often don't use a start script.