Setting up OctoPrint on a Raspberry Pi running Raspbian or Raspberry Pi OS

setup

foosel #1 June 22, 2018, 1:27pm

This is a wiki node that every user of this forum at trust level 1 or higher can edit. Find problems, typos, or incorrect information? Please contribute.

> ☝ **Heads-up**
>
> If you want to get OctoPrint up and running as fast as possible, it is highly recommended to take a look at **OctoPi**, which is an SD card image based on Raspbian already prepared with OctoPrint, Webcamsupport, HAProxy and SSL. Just download it, flash it to an SD card and you are good to go -- you can follow **this excellent video guide** by **Thomas Sanladerer** who explains all needed steps in detail.
>
> If on the other hand you want to run the latest versions of Raspbian, install OctoPrint and all the other packages, and get a sense of how it all fits together, do follow the instructions below (**warning: not for the faint of heart**).

Important: This guide expects you to have a more than basic grasp of the Linux command line. In order to follow it you'll need to know:

- how to issue commands on the shell,
- how to edit a text file from the command line,
- what the difference is between your user account (e.g. `pi`) and the superuser account `root`,
- how to SSH into your Pi (so you don't need to also attach keyboard and monitor),
- how to use Git and
- how to use the Internet to help you if you run into problems.

This is **not** a "Linux for Beginners guide", those can be found for example **here** and **here**. For some Git basics please take a look **here**.

Basic Installation

For the basic package you'll need Python 3.6 or newer (should be installed by default) and pip.
Make sure you are using the correct version - it is probably be installed as `python3`, not `python`. To check:

```
python3 --version
```

Installing OctoPrint should be done within a virtual environment, rather than an OS wide install, to help prevent dependency conflicts. To setup Python, dependencies and the virtual environment, run:

```
cd ~
sudo apt update
sudo apt install python3-pip python3-dev python3-setuptools python3-venv git liby
mkdir OctoPrint && cd OctoPrint
python3 -m venv venv
source venv/bin/activate
```

OctoPrint and it's Python dependencies can then be installed using `pip`:

```
pip install pip --upgrade
pip install octoprint
```

Note

If this installs an old version of OctoPrint, `pip` probably still has something cached. In that case add `--no-cache-dir` to the install command, e.g.

```
pip install --no-cache-dir octoprint
```

To make this permanent, clean `pip`'s cache:

```
rm -r ~/.cache/pip
```

You may need to add the pi user to the dialout group and tty so that the user can access the serial ports, before starting OctoPrint:

```
sudo usermod -a -G tty pi
sudo usermod -a -G dialout pi
```

Note

You may have to log out and back in again for these changes to become effective.

Starting the server for the first time

You should then be able to start the OctoPrint server using the `octoprint serve` command:

```
pi@raspberrypi:~ $ ~/OctoPrint/venv/bin/octoprint serve
2020-11-03 17:39:17,979 - octoprint.startup - INFO - ************************
2020-11-03 17:39:17,980 - octoprint.startup - INFO - Starting OctoPrint 1.4.2
2020-11-03 17:39:17,980 - octoprint.startup - INFO - ************************
```

Try it out! Access the server by heading to `http://<pi's IP>:5000` and you should be greeted with the OctoPrint UI.

Automatic start up

Download the init script files from OctoPrint's repository, move them to their respective folders and make the init script executable:

```
wget https://github.com/OctoPrint/OctoPrint/raw/master/scripts/octoprint.service
```

Adjust the paths to your `octoprint` binary in `/etc/systemd/system/octoprint.service`. If you set it up in a virtualenv as described above make sure your `/etc/systemd/system/octoprint.service` looks like this:

```
ExecStart=/home/pi/OctoPrint/venv/bin/octoprint
```

Then add the script to autostart using `sudo systemctl enable octoprint.service`.

This will also allow you to start/stop/restart the OctoPrint daemon via

```
sudo service octoprint {start|stop|restart}
```

Make everything accessible on port 80

If you want to have nicer URLs or simply need OctoPrint to run on port 80 (http's default port) due to some network restrictions, I recommend using **HAProxy** as a reverse proxy instead of configuring OctoPrint to run on port 80. This has the following advantages:

- OctoPrint does not need to run with root privileges, which it would need to to be able to bind to port 80 thanks to Linux privileged port restrictions
- You can make `mjpg-streamer` accessible on port 80 as well
- You can add authentication to OctoPrint
- Depending on the HAProxy version you can also use SSL to access OctoPrint

Setup on Raspbian is as follows:

```
pi@raspberrypi ~ $ sudo apt install haproxy
```

I'm using the following configuration in `/etc/haproxy/haproxy.cfg`, for further examples take a look at the post **here**:

> ⚠ **This configuration works for HAProxy 1.x. See the post above for an example of a configuration for HAProxy 2.x, which is included in newer Linux distros (such as Debian 11), as there are breaking changes.**

```
global
        maxconn 4096
        user haproxy
        group haproxy
        daemon
        log 127.0.0.1 local0 debug

defaults
        log     global
        mode    http
        option  httplog
        option  dontlognull
        retries 3
        option redispatch
        option http-server-close
        option forwardfor
        maxconn 2000
        timeout connect 5s
        timeout client  15min
        timeout server  15min

frontend public
        bind :::80 v4v6
        use_backend webcam if { path_beg /webcam/ }
```

This will make OctoPrint accessible under `http://<your Raspi's IP>/` and make mjpg-streamer accessible under `http://<your Raspi's IP>/webcam/`. You'll also need to modify `/etc/default/haproxy` and enable HAProxy by setting `ENABLED` to `1`. After that you can start HAProxy by issuing the following command

```
sudo service haproxy start
```

Pointing your browser to `http://<your Raspi's IP>` should greet you with OctoPrint's UI. Now open the settings and switch to the webcam tab or alternatively open `~/.octoprint/config.yaml`. Set the webcam's stream URL from `http://<your Raspi's IP>:8080/?action=stream` to `/webcam/?action=stream` (leave the `snapshotUrl` at `http://127.0.0.1:8080/?action=snapshot`!) and reload the page.

If everything works you can add the following lines to `~/.octoprint/config.yaml` (just create it if it doesn't exist yet) to make the server bind only to the loopback interface:

```
server:
    host: 127.0.0.1
```

Restart the server. OctoPrint should still be available on port 80, including the webcam feed (if enabled).

Updating & changing release channels & rolling back

OctoPrint should offer to update itself automatically and also allow you to switch to other Release Channels out of the box.

If for whatever reason you want or need to perform any of this manually however, perform the following commands to install `<version>` of OctoPrint:

```
source ~/OctoPrint/venv/bin/activate
pip install octoprint==<version>
```

e.g.

```
source ~/OctoPrint/venv/bin/activate
pip install octoprint==1.4.0
```

Support restart/shutdown through OctoPrint's system menu

In the UI, under Settings > Commands, configure the following commands:

- Restart OctoPrint: `sudo service octoprint restart`
- Restart system: `sudo shutdown -r now`
- Shutdown system: `sudo shutdown -h now`

> **Note**
>
> If you disabled Raspbian's default behaviour of allowing the `pi` user passwordless sudo for every command, you'll need to explicitly allow the `pi` user passwordless sudo access to the `/sbin/shutdown` program for the above to work. You'll have to add two sudoers rules:
>
> - Create a file `/etc/sudoers.d/octoprint-shutdown` (as root) with the following contents:
>   `pi ALL=NOPASSWD: /sbin/shutdown`
> - Create another file `/etc/sudoers.d/octoprint-service` (as root) with the following contents:
>   `pi ALL=NOPASSWD: /usr/sbin/service`

Optional: Webcam

If you also want webcam and timelapse support, you'll need to download and compile MJPG-Streamer:

```
cd ~
sudo apt install subversion libjpeg62-turbo-dev imagemagick ffmpeg libv4l-dev cma
git clone https://github.com/jacksonliam/mjpg-streamer.git
cd mjpg-streamer/mjpg-streamer-experimental
export LD_LIBRARY_PATH=.
make
```

☝ **Heads-up**

The required packages depend on the underlying version of Debian! The above is what should work on the current Debian Stretch or Buster based images of Raspbian.

For Jessie use:

```
sudo apt install subversion libjpeg62-turbo-dev imagemagick libav-tools libv4l
```

For Wheezy or older (you should update...) use:

```
sudo apt install subversion libjpeg8-dev imagemagick libav-tools libv4l-dev cm
```

This should hopefully run through without any compilation errors. You should then be able to start the webcam server using:

```
./mjpg_streamer -i "./input_uvc.so" -o "./output_http.so"
```

This should give the following output:

```
 MJPG Streamer Version: svn rev:
  i: Using V4L2 device.: /dev/video0
  i: Desired Resolution: 640 x 480
  i: Frames Per Second.: 5
  i: Format............: MJPEG
 [...]
  o: www-folder-path...: disabled
  o: HTTP TCP port.....: 8080
  o: username:password.: disabled
  o: commands..........: enabled
```

For some webcams (including the PS3 Eye) you'll need to force the YUV mode by using the following start command:

```
./mjpg_streamer -i "./input_uvc.so -y" -o "./output_http.so"
```

Please be aware that YUV mode will put additional strain on your Raspi's CPU which will then lower its performance, possibly up to the point of causing printing issues. If your camera requires the `-y` parameter to function, consider replacing it with one that doesn't.

🗒 **Note**

If your webcam requires switching to YUV mode in order to work at all, it is strongly recommended to instead use a webcam that natively supports MJPG. For YUV cameras mjpg_streamer will need to transcode all data from the camera to MJPG on your Raspberry Pi, which will put a lot of strain on its CPU (YUV mode at around 30-40% vs MJPG mode at around 1-2%). This MIGHT negatively influence print quality, so better get yourself a cheap MJPG compatible webcam. See **this wiki page** for a compatibility list and steer clear of cams that require `-y` to work.

🗒 **Note**

If you want to use the official RaspberryPi Camera Module you need to run

```
./mjpg_streamer -i "./input_raspicam.so -fps 5" -o "./output_http.so"
```

If you now point your browser to `http://<your Raspi's IP>:8080/?action=stream`, you should see a moving picture at 5fps. (If you get an error message about missing files or directories calling the output plugin with -o "./output_http.so -w ./www" should help.)

Open OctoPrint's settings dialog and under Webcam & Timelapse configured the following:

- Stream URL: `/webcam/?action=stream`
- Snapshot URL: `http://127.0.0.1:8080/?action=snapshot`
- Path to FFMPEG: `/usr/bin/ffmpeg`

☝ **Heads-up**

If for whatever reason you are still using a Raspbian image based on Debian Jessie or older, "Path to FFMPEG" should instead be `/usr/bin/avconv`.

Restart the OctoPrint server, *clear the cache on your browser* and reload the OctoPrint page. You should now see the stream from the webcam in the "Control" tab, and a "Timelapse" tab with options.

Optional: Webcam Automatic Startup

If you want mjpg-streamer to automatically startup on boot:

Create a new file at `/home/pi/scripts/webcamDaemon` (ie. run `nano /home/pi/scripts/webcamDaemon`), with the following content:

```
#!/bin/bash

MJPGSTREAMER_HOME=/home/pi/mjpg-streamer/mjpg-streamer-experimental
MJPGSTREAMER_INPUT_USB="input_uvc.so"
MJPGSTREAMER_INPUT_RASPICAM="input_raspicam.so"

# init configuration
camera="auto"
```

```
camera_usb_options="-r 640x480 -f 10"
camera_raspi_options="-fps 10"

if [ -e "/boot/octopi.txt" ]; then
    source "/boot/octopi.txt"
fi

# runs MJPG Streamer, using the provided input plugin + configuration
function runMjpgStreamer {
    input=$1
    pushd $MJPGSTREAMER_HOME
    echo Running ./mjpg_streamer -o "output_http.so -w ./www" -i "$input"
    LD_LIBRARY_PATH=. ./mjpg_streamer -o "output_http.so -w ./www" -i "$input"
    popd
}
```

If you want different camera options put them in `/boot/octopi.txt` or modify the script accordingly.

Make sure the file is executable:

```
chmod +x /home/pi/scripts/webcamDaemon
```

And then create another new file at `/etc/systemd/system/webcamd.service` (`sudo nano /etc/systemd/system/webcamd.service`), with these lines:

```
[Unit]
Description=Camera streamer for OctoPrint
After=network-online.target OctoPrint.service
Wants=network-online.target

[Service]
Type=simple
User=pi
ExecStart=/home/pi/scripts/webcamDaemon

[Install]
WantedBy=multi-user.target
```

Tell the system to read the new file:

```
sudo systemctl daemon-reload
```

And finally enable the service:

```
sudo systemctl enable webcamd
```

The webcam should automatically start on boot, but it can also be started manually:

```
sudo systemctl start webcamd
```

If you want to be able to start and stop the webcam server through OctoPrint's system menu, add the following to `config.yaml`:

```
system:
  actions:
   - action: streamon
     command: sudo systemctl start webcamd
     confirm: false
     name: Start video stream
   - action: streamoff
     command: sudo systemctl stop webcamd
     confirm: false
     name: Stop video stream
```

Note

If you want to view the stream directly on your Pi, please be aware that Midori will not allow you to see the webcam picture. Chromium works although it is a bit slow, but it still might be useful for testing or aiming the camera:

```
sudo apt install chromium-browser
```

In any case this is only recommended for debugging purposes during setup, running a graphical user interface on the Pi will put a lot of unnecessary load on the CPU which might negatively influence print results.

Note

mjpegstreamer does not allow to bind to a specific interface to limit the accessibility to localhost only. If you want your octoprint instance to be reachable from the internet you need to block access to port 8080 from all sources except localhost if you don't want the whole world to see your webcam image.

To do this simply add iptables rules like this:

```
sudo /sbin/iptables -A INPUT -p tcp -i wlan0 ! -s 127.0.0.1 --dport 8080 -j DR
sudo /sbin/ip6tables -A INPUT -p tcp -i wlan0 ! -s ::1 --dport 8080 -j DROP
```

Replace the interface with eth0, if you happen to use ethernet.

To make them persistent, they need to be saved. In order to be restored at boot time, the easiest way is to install iptables-persist:

```
sudo apt install iptables-persistent
```

The only thing left to do now, is save the rules you have added:

```
sudo /sbin/ip6tables-save > /etc/iptables/rules.v6
sudo /sbin/iptables-save > /etc/iptables/rules.v4
```

Optional: Touch UI

Touch UI is a plugin that provides an interface for touch screens, e.G. mobile phones or the small 3,5 inch LCDs you can connect to the pi's GPIO pins.

Install the plugin using the plugin manager in the OctoPrint settings. If you want to use is for a local LCD, you need to setup epiphany to start automatically. To do so, first install xautomation to send the keypress for fullscreen later and the epiphany browser if it is not already installed:

```
sudo apt install epiphany-browser xautomation
```

Next, create a file `startTouchUI.sh` in ~/ and add:

```
#!/bin/bash

function check_octoprint {
    pgrep -n octoprint > /dev/null
    return $?
}

until check_octoprint
do
    sleep 5
done

sleep 5s
epiphany-browser http://127.0.0.1:5000 --display=:0 &
sleep 10s;
xte "key F11" -x:0
```

Make it executable: `chmod +x startTouchUI.sh` and add the following to ~/.config/lxsession/LXDE-pi/autostart

```
@/home/pi/startTouchUI.sh
```

This will launch the mobile webinterface on startup and put it into fullscreen mode.

Optional: Additional user authentication

In order to protect OctoPrint from unauthorized access, you have two options. For OctoPrint's built-in access control, please see **this guide**.

For additional security through authentication directly on haproxy *before* OctoPrint, **take a look here**.

Optional: Reach your printer by typing its name in address bar of your browser - Avahi/zeroconf/bonjour-based

If you want to reach your printer by typing its name (the hostname of the RasPi running OctoPrint) instead of its IP into your browser's address bar, then you can use the **Raspberry Pi Avahi setup (See only section "The flexible way: set up avahi / zeroconf")**. Note: "Avahi" is called "Zeroconf", "Rendezvous" or "Bonjour", too.

Installation is simple, on your RasPi just type:

```
sudo apt update && sudo apt install avahi-daemon
```

For a network of Linux computers you are done here with the avahi setup. Jump to the paragraph relating the change of the hostname. If you want to enable Avahi support on Windows computers too you'll have to install **Bonjour**, allow traffic on UDP port 5353 within your firewall and grant internet access to the `mDNSresponder.exe` on these machines. Have a look **here (search for "Get Bonjour for Windows")** for a detailed description of the Windows setup.

The next step is to change the hostname of your RasPi into something more printer specific (e.g. `<yourprinter>`) via editing the files etc/hostname and the etc/hosts on your RasPi. Change the default name into `<yourprinter>` in the hostname-file via

```
sudo nano /etc/hostname
```

and do the same (here change the name behind the 127.0.1.1 into `<yourprinter>`) in the hosts-file via

```
sudo nano /etc/hosts
```

Now restart your RasPi via

```
sudo reboot
```.

You can now reach your RasPi running OctoPrint within your network by pointing your browser to

`<yourprinter>.local` .

Note you can use this too, when you want to ssh into your RasPi:

```
ssh <username>@<yourprinter>.local
```.

Additional Resources:

- **Raspberry Pi Avahi Setup instructions on elinux.org**

- **Bonjour Support for Windows from Apple** (Download)

19 Likes

Control Camera settings

Multiple Instances of Octoprint on Linux

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Octoprint on Libre Potato?

Update to Raspberry Pi 4 (from working Pi 3+) [solved]

Raspbian Buster

Octoprint with Logitech C905 webcam problem

Raspi cam + USB Webcam on manually installed Octoprint

Update to Raspberry Pi 4 (from working Pi 3+) [solved]

Moving the OctoPrint installation directory

Moving the OctoPrint installation directory

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Raspberry pi 4 2GB cannot boot OctoPi

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Intermittent startup issues after shutdown

Pi wont boot with Octoprint image

WebCam Manual Install

Clicked on update Prompt Octoprint is broken now

Clicked on update Prompt Octoprint is broken now

Cant install, plugins on Ubuntu with Octoprint plugin manager

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How to install the webcam software?

Cannot install plugging on manual raspbian install

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No Pi User 1234

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Need to be able to create octopi.txt - trying to get camera working with Octoprint

Cannot autostart octoprint on raspberry pi os, linux

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Setting up OctoPrint on a computer running Fedora, CentOS, AlmaLinux or RockyLinux

Octopi and other server on raspi

Can't connect Ender 3 V2 to Ubuntu

The OctoPrint server is currently not running after Name change

[octopi] octopi with real time kernel

Manual install on ubuntu server 20.04

Octoprint on Jetson TX2 or Nano?

Raspberry Pi OS

Octoprint on Jetson TX2 or Nano?

Octoprint on Kubuntu - Permission Denied /dev/ttyUSB0

Atomic Pi - Can it run Octoprint?

Noob question re Pi install

aurror #2 June 22, 2018, 4:52pm

Thanks for posting it here!

I'm having one problem compared to the version where you download octoprint via git,
after running `pip install https://get.octoprint.org/latest` i only have the venv folder inside ~/OctoPrint.

I can manually start the octoprint server, but the Scripts folder is missing and thus i can't configure Octoprint for automatic startup, any ideas on how i can fix this?

John #3 June 24, 2018, 1:30pm

Same problem, I ended up copying the scripts from the octoprint github project and created the files mentioned in this guide using vi, which worked out for me.

foosel/OctoPrint

OctoPrint is the snappy web interface for your 3D printer! - foosel/OctoPrint

foosel #4 June 25, 2018, 8:58am

@aurror **@John** thanks for the heads-up, I've adjusted the guide accordingly.

aurror #5 June 25, 2018, 9:49am

Still having one problem with this version, I can't install any plugins from the repository.
I've included the octoprint.log error message.
I'm not using a raspberry, maybe it's because of that, but the git version works fine.

octoprint.log (10.9 KB)

foosel #6 June 25, 2018, 9:57am

That's this issue:

Issue: PIP Handling error

opened by **Valicek1** on **2018-06-20**
closed by **foosel** on **2018-12-10**

```
What were you doing?
I am trying to install plugin. My octoprint is bare install under it's own
user (octoprint), installed as...
```

status:solved type:confirmed bug

Caused by a backwards incompatible patch upgrade of a third party library. Run `pip install sarge==0.1.4`.

WarHawk #7 June 28, 2018, 2:31pm

Need to add the line

```
sudo /usr/bin/easy_install virtualenv
```

before the virtualenv venv line in the "basic setup" instructions

I am installing on armbian though

3 Likes

gege2b #8 June 29, 2018, 9:22am

> foosel:
>
> Support restart/shutdown through OctoPrint's system menu

To be able to restart octoprint service in case of the pi user asking a password, `/usr/sbin/service` should also be added on the passwordless sudoers (cf. Note)
But this implies a security issue because this user could then start/stop any services on the host...

mNigro #9 July 9, 2018, 1:25am

I'm having problems with the octopi support plugin not passing the initial startup, and as a result, I cant install any plugins. I am running a basic install on a raspberry pi 3 model B.

octoprint.log (15.1 KB)

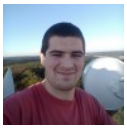
foosel #10 July 9, 2018, 9:20am

> mNigro:
>
> and as a result, I cant install any plugins.

Nope, that's not the cause of the issue. Rather you are running into a compatibility problem with the latest version of the `sarge` dependency which sadly is backwards incompatible. Easily solved though by downgrading that dependency (which 1.3.9 will ensure out of the box):

```
source /home/pi/OctoPrint/venv/bin/activate
pip install sarge==0.1.4
sudo service octoprint restart
```

See also



Issue: PIP Handling error

opened by **Valicek1** on **2018-06-20**
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```
What were you doing?
I am trying to install plugin. My octoprint is bare install under it's own
user (octoprint), installed as...
```

status:solved type:confirmed bug

1 Like

mNigro #11 July 11, 2018, 5:26am

> foosel:
>
> sudo service octoprint restart

thank you it fixed the problem immediately

bobsaid #12 July 11, 2018, 6:35am

I can't seem to get the systemd service working properly. I can run the server just fine manually but for some reason the sudo service octoprint start etc doesn't seem to be working to start the service. I've even started it manually and checked the logs but there isn't anything in there for when I try to use the service handler. Any advice?

rog #13 July 19, 2018, 5:58pm

I'm trying to get the official raspberry Pi cam to stream on octoprint.

Im getting stuck here
git clone **https://github.com/jacksonliam/mjpg-streamer.git**

it says that this couldn't be found.

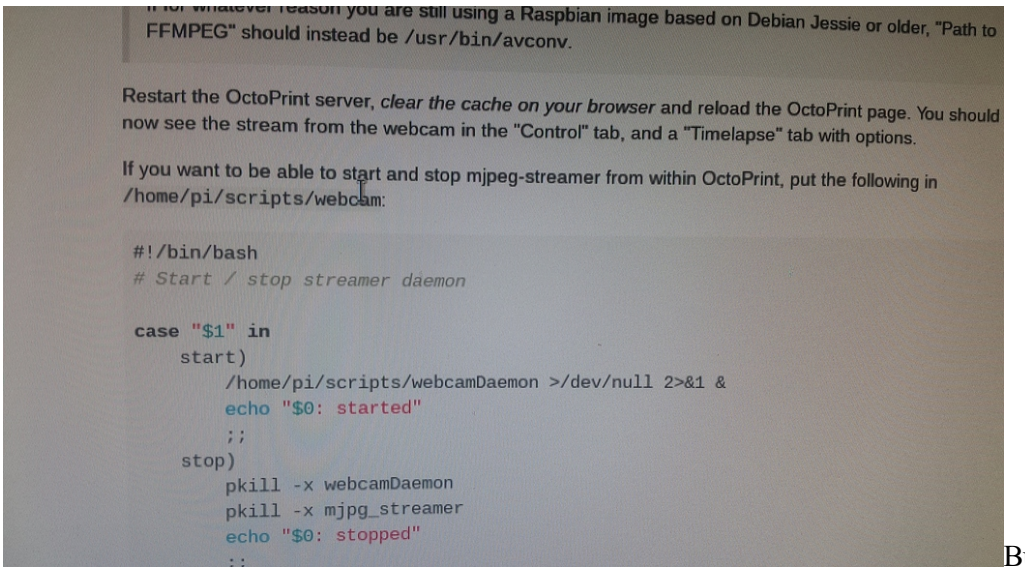
foosel #14 July 19, 2018, 6:04pm

@rog can you copy-paste the full error message please? "This" can mean a lot here 😉

Clara_Kim #15 July 25, 2018, 2:05am

How are you!
Now I am following up this manual one by one. I thought that it has been almost done but I stuck another problem again now.

I would like to put this code into /home/scripts/webcam



But all I know thing is

$sudo vi .
What am I have to do ?
Thanks for your great support and manual!

Regards,
Clara

WarHawk #16 July 28, 2018, 5:52pm

`/home/pi/scripts/webcam start`

Should be `/home/pi/.octoprint/scripts/webcam start`

The hidden directory is not in the path
The DEV team might need to update the main page "howto" otherwise it will cause alot of confusion

foosel #17 August 1, 2018, 12:21pm

> WarHawk:
>
> `/home/pi/scripts/webcam start`
>
> Should be `/home/pi/.octoprint/scripts/webcam start`

No, it shouldn't. The scripts for controlling/firing up the webcam server a) have to be created and b) don't make sense in OctoPrint's settings folder since the webcam is something that is unrelated to OctoPrint and merely used by it.

1 Like

rkul #18 August 10, 2018, 1:14pm

When following the guide and trying to start OctoPrint, I got the: `NameError: name 'unicode' is not defined` error.

Found this Github issue: **https://github.com/foosel/OctoPrint/issues/2349**, figured it's because of a wrong python version.

Forced to create virtualenv using python 2.7 and it worked. Instead of `virtualenv venv`, I used `virtualenv -p /usr/bin/python2.7 venv`.

Maybe others encountered same issue. Possibly update the guide?

Installing on Raspberry Pi 3.

Octoprint on macOS; 'Callable' has no attribute '_abc_registry'

amoose136 #20 August 13, 2018, 9:00pm

Is it possible to in the future have the option to preset the pi hostname in the same manner that we can preset the wifi setting via octopi-wpa-supplicant.txt? When you are setting up multiple Pi(s) it would be nice if you could make sure they don't all try to point to the same address at once from the get go.

OutsourcedGuru #21 August 14, 2018, 12:21am

> amoose136:
>
> When you are setting up multiple Pi(s)

Are you a 3D printer manufacturer? Most people only setup one at a time.

amoose136 #22 August 14, 2018, 12:38am

No but I have had to setup 3 Octoprint installations on one network (only one was my personal one). Every time I setup Octoprint the worst of it is still messing with networking stuff. Octoprint-wpa-supplicant is a huge improvement over what came before it but getting wifi working right is still the most frustrating part of the setup.

OutsourcedGuru #23 August 14, 2018, 2:44pm

> amoose136:
>
> Every time I setup Octoprint the worst of it is still messing with networking stuff.

I'm a long-time I.T. guy so I'm used to that part of the setup, to be honest.

Honestly, I bet I've gone through the OctoPi startup routine 30 to 40 times at least.

ironjoe13 #24 August 21, 2018, 12:23am

So I might just be missing something, but I got as far as starting the OctoPrint server- and the command prompt just looks like it can't finish what it's doing.
Recently wiped this old All-in-one and am in Raspbian right now, I just can't seem to get the server going

OutsourcedGuru #25 August 21, 2018, 1:24am

Sounds like you're going the manual route. Why not just use the OctoPi image? It's pretty easy.

ironjoe13 #26 August 21, 2018, 1:39am

Honestly, I hadn't thought to look at if Octopi was easily do-able on PC install... But I could use the learning experience.
Anything is going to be easier than the 17hrs it took to wipe the drive in the first place....

Currently, the only thing I can find that looks possibly wrong is that it shutdown the intermediary server.
I get a server heartbeat, it says this is the first startup event, and it registered the instance

ironjoe13 #27 August 21, 2018, 3:19pm

Duh.... its octoprint serve....not octoprint. I guess I just needed more coffee

1 Like

ubermick #28 August 23, 2018, 7:24am

Got diverted over here from Adafruit's tutorial on getting Octoprint running with their 3.5" touchscreen. Followed the outlined steps in the original post, but after firing the command

/OctoPrint/venv/bin/octoprint serve

it runs through it's thing, and then hangs. While the octopi image deffo works, since it installs the lite version of Jessie, doesn't help with the touchscreen.

OutsourcedGuru #29 August 23, 2018, 4:56pm

@ubermick

The route I took for two different Adafruit 2.8" screens was:

For the one with the Desktop version:

1. Image with OctoPi and get that going
2. Run the `~/scripts/install-desktop` script
3. Follow the Adafruit instructions for getting the screen running, choosing the option to mirror the Desktop rather than the console

For the one without the Desktop:

1. Image with OctoPi as before
2. Run the instructions from Adafruit, choosing the option to mirror the console

What's interesting is that if I do a `ps -ax|grep octoprint` I get:

```
3033 ?        Sl     2:56 /home/pi/oprint/bin/python2 /home/pi/oprint/bin/octopr
```

So my path collection is completely different than yours. I always use the OctoPi image route for installing.

1 Like

ubermick #30 August 23, 2018, 6:01pm

Derp. I'm a complete idiot and noticed plain as day the option to update to the GUI right there as soon as Octopi finished booting. This is what I get for trying this at midnight.

Thanks for the tips - I've got Octopi up and running, and the TFT module humming along using Adafruit's setup here: **https://learn.adafruit.com/adafruit-pitft-3-dot-5-touch-screen-for-raspberry-pi/easy-install-2**

Guess all that remains is to install the browser on the pi, and that should be it!

OutsourcedGuru #31 August 23, 2018, 6:02pm

Pretty sure there's already a default browser in the Pixel desktop. I usually set the option to auto-hide the Taskbar at the top of the Desktop. I also "full screen" the browser and then it looks pretty good.

Combine this with the TouchUI plugin and you should be all set.

WarHawk #32 August 27, 2018, 10:28pm

I corrected...thanks...created the scripts dir and added those files...thanks!

I also had to add my pi user to video in order to use V4L since I installed octoprint on Xubuntu 18.04

```
usermod -aG video pi
```

1 Like

Thiago_Maranduba #33 September 8, 2018, 4:00pm

Hello good Morning

I'm new to raspberry pi. come on.
I have a raspberry pi 3 and a lcd touch screen 5 " and would like to know how to install the octoprint on it, to stay the same as this post.

I will be grateful to all who help me

DrMacabre #34 September 18, 2018, 3:42pm

Hello, i'm getting into some trouble with the install of octoprint. At first, everything was ok, i was able to get the web interface, setup everything until CURAEngine but at some point, i had to move my pi to another room and since then, i can't run octoprint anymore. I tried uninstalling but since, i can't even pass the "virtualenv venv" command, i get an importerror with the module 'importlib' normally i get my way around linux but here i'm clueless. If anyone have any idea ?

Thanks

OutsourcedGuru #35 September 18, 2018, 3:56pm

> DrMacabre:
>
> i had to move my pi to another room and since then, i can't run octoprint anymore. I tried uninstalling but since, i can't even pass the "virtualenv venv" command

From this it sounds like you have 1) a Raspberry Pi and 2) you didn't use the OctoPi image. Start over from scratch, use **these instructions** and drive on. You're making this harder than it needs to be.

1 Like

DrMacabre #36 September 19, 2018, 2:46pm

Hi, thanks for your reply but i can't use the image, i have other stuffs running on my pi.

farthinder #37 October 3, 2018, 7:25pm

I've tried to the best of my abilities but I can not get my Logitech C270 working using these instructions.

Once I start mjpeg_streamer and go to its webpage, I get a page that never finish loading, nothing is displayed. The camera activates (light turns on) but nothing else.

rmoreno #39 October 17, 2018, 1:53pm

> foosel:
>
> This will make OctoPrint accessible under `http://<your Raspi's IP>/` and make mjpg-streamer accessible under `http://<your Raspi's IP>/webcam/` . You'll also need to modify `/etc/default/haproxy` and enable HAProxy by setting `ENABLED` to `1` . After that you can start HAProxy by issuing the following command

Hi!

I'm having problem at here. I can't access the OctoPrint's UI from my Raspi's IP. I accessed the OctoPrint's UI by the default configuration, which is "localhost/5000" in the browser. I checked line per line in the file haproxy.cfg and all are ok. I have access to start the haproxy and the octoprint. How can I resolve this?

Regards,

rmoreno #40 October 17, 2018, 4:41pm

> rmoreno:
>
> I can't access the OctoPrint's UI from my Raspi's IP.

Resolved!

I uncomment, removing "#", at the line of configuration file `sudo nano /etc/default/haproxy`. Like this:

```
CONFIG="/etc/haproxy/haproxy.cfg"
ENABLED=1
```

It's working now with my Raspi's IP!

1 Like

humility #41 October 30, 2018, 5:59pm

Hello,
is it possible, to install and start a second instance of octoprint.

i'm using Octoprint in an VM on a Linux Machine and the first instance of Octoprint is working fine.

I tryed it to install a second venv this way, but it does not work.

I also used the search function but i didn't fiind any solution.

OutsourcedGuru #42 October 30, 2018, 8:23pm

Trying searching again with the word "**multiple**".

KjellVerb #43 November 24, 2018, 10:47pm

Don't forget to set your locale before starting a virtualenv, it's not set by default on some distributions... (I'm using a NanoPi Neo with FriendlyCore (base on UbuntuCore) Image File, Kernel: Linux-4.14)

```
export LC_ALL="en_US.UTF-8"
export LC_CTYPE="en_US.UTF-8"
```

1 Like

Bence_Voros #44 January 2, 2019, 9:14pm

So I tried this on a xubuntu host and I managed to follow the instructions without too much hiccups. But I couldn't get the autostart scripts to work for the life of me (nor the octoprint, nor the mjpg-streamer worked). I tried poking around in them, adjusting them to my folder structure and username but they didn't work none the less. I type in "sudo service octoprint start" and it just echoes back to me something like "octoprint started" and then stops and doesn't do anything. Can somebody give me some recommendations where to look? Sorry if I didn't provide sufficient information I really don't know what else I could do to this to make it work.

tedder42 #45 January 2, 2019, 10:26pm

> Bence_Voros:
>
> type in "sudo service octoprint start" and it just echoes back to me something like "octoprint started" and then stops and doesn't do anything.

What does 'stops' mean? It returns you to the shell? Or hangs? Generally that is the correct behavior, Octoprint is running in the background.

Bence_Voros #46 January 2, 2019, 10:51pm

Sorry for not being clear, what I mean about "stops" is that it returns to the command prompt waiting for an input (I can see how that can be misunderstood). My first thought was also that it must run in the background but I tried loading the website and it either returned back with connection lost (if the page have been loaded before the server restarted) or just loaded for a long time. I might just have been a little impatient, will keep testing tomorow. Thanks a bunch for the help, it has cleared something up. If you have any other suggestions, please do share

tedder42 #47 January 2, 2019, 11:06pm

Look for the logs. Also run this:

```
ps waxu | grep octoprint
```

and post the output.

Bence_Voros #48 January 3, 2019, 7:04am

at startup

```
avahi      368  0.0  0.2   6160  2956 ?        Ss   07:47   0:00 avahi-daemon: ru
root       887  0.0  0.3   8920  3568 ?        S    07:47   0:00 /bin/bash /home/
octopri+  1407  0.0  0.0   8084   788 pts/0    S+   07:49   0:00 grep --color=aut
```

after manualy running the script

```
avahi      368  0.0  0.2   6160  2956 ?        Ss   07:47   0:00 avahi-daemon: ru
root       887  0.0  0.3   8920  3568 ?        S    07:47   0:00 /bin/bash /home/
octopri+  1429  2.6  3.1 119984 31712 ?        Sl   07:50   0:01 mousepad /home/o
octopri+  1472  0.0  0.0   8084   796 pts/0    S+   07:51   0:00 grep --color=aut
```

after manualy running the server

```
avahi      368  0.0  0.2   6160  2956 ?        Ss   07:47   0:00 avahi-daemon: ru
root       887  0.0  0.3   8920  3568 ?        S    07:47   0:00 /bin/bash /home/
octopri+  1429  1.1  3.1 119984 31712 ?        Sl   07:50   0:01 mousepad /home/o
octopri+  1520 14.8  4.3 208168 44348 pts/0    Sl+  07:52   0:05 /home/octoprint/
octopri+  1698  0.0  0.0   8084   820 pts/1    S+   07:52   0:00 grep --color=aut
```

tedder42 #49 January 3, 2019, 11:36am

It appears to be running in the third case.

Bence_Voros #50 January 3, 2019, 1:02pm

It is. And that's because I started it myself and posted it for comparison's sake. Still the problem remains. After running `sudo service octoprint status` it get's back with a warning for fake startup-deamon could that be the problem?

EDIT: running `mv /sbin/start-stop-daemon.REAL /sbin/start-stop-daemon` a solution found online for the above mentioned warning message, looks like it fixed the problem. Posted the solution here for people having the same problem

Bence_Voros #51 January 3, 2019, 11:48am

It is. And that's because I started it myself and posted it for comparison's sake. Still the problem remains

DongerZone #52 February 19, 2019, 11:14pm

I seem to have the same problem. I see you found a solution online, but any reasons as to why it works?

UPDATE: I think I figured out the issue (I'm assuming **@Bence_Voros** was also setting up octo on a non raspberry pi computer). If you're not using a pi you need to change the username `pi` to whatever your username is in the `/etc/default/octoprint` (there should be two places you need to change it)

hashworks #54 July 14, 2019, 12:08pm

The nginx webcam location configuration requires proxy_buffering set to off, otherwise it will load forever.

```
location /webcam/ {
        proxy_pass http://192.168.0.11:8080/;
        proxy_buffering off;
}
```

1 Like

salsaman #55 August 15, 2019, 6:32pm

The steps worked flawlessly setting up a Pi 4 (1GB). I replaced my Zero W which worked despite discouragement everywhere and... wow, the Pi 4 is so much faster.
I used the backup/restore plugin which also worked great.
Many thanks for such great software!

3 Likes

Key0nee #56 August 27, 2019, 9:30pm

Thanks for posting this guide.... I know just enough to be dangerous and a little surprised I got it all to work....
Thanks again

1 Like

th-in-gs #57 September 1, 2019, 6:20am

> foosel:
>
> source venv/bin/activate

Note that if you're using another shell (I'm using `fish`), this line will not work - you'll need to switch to `bash` or source a different file. Luckily, an `activate.fish` is also included, so I could just source that instead.

andylittle #58 September 14, 2019, 12:00am

This install guide worked well on a **Pine 64** and the Armbian Buster server **image**.

Andy

2 Likes

Newandy #59 September 14, 2019, 11:01am

I installed this on a RPi4 with no issues starting from "2019-07-10-raspbian-buster-full.img" as I have an 7" LCD attached. My question is I installed TouchUI and boot directly into the epiphany browser as per the instruction but when I exit the browser I just get a black screen. Is there anyway to get it to go back to the default GUI?

OutsourcedGuru #60 September 14, 2019, 7:26pm

It may be necessary to change what the display sees:

Ctrl-Shift-F1 through F7 or F8 to the best of my knowledge will select the different ones. The X11 screens start at F7 and all before that are tty.

1 Like

jbubriski #61 September 16, 2019, 3:32pm

Just ran through these steps on a shiny new Raspberry Pi 4 (4Gb) and everything seems to be up and running. I think the only trouble I had was when I accidentally skipped over steps, or things didn't save correctly because I didn't `sudo` first.

Rat_Patrol #62 September 26, 2019, 8:29pm

Hello. Completely new to the Raspberry Pi platform, but have been doing Arduino for years. I want to run OctoPrint on a 3B+ running regular Raspian so I can also run Pi-Hole and who knows what else simultaneously. I print a lot and have no qualms about leaving it on. Of course, I do want the webcam to keep an eye on things remotely. Would this guide be appropriate for me?

OutsourcedGuru #63 September 26, 2019, 10:24pm

Note that **PiHole** is known to block the software update process within OctoPrint. Personally, I wouldn't put non-related things also on this Pi since the quality of print jobs is what you're after, IMHO.

For me, I'd rather just buy more Pi computers and dedicate those to these other tasks.

2 Likes

bagong #64 October 30, 2019, 9:22am

Excellent guide. Just the right balance between too brief and too detailed!

2 Likes

dmcmili #65 November 3, 2019, 1:36am

> foosel:
>
> If you want to be able to start and stop mjpeg-streamer from within OctoPrint, put the following in `/home/pi/scripts/webcam` :

To make the webcam work I had to add the script (with file name 'webcam') in directory /etc/init.d and not home/pi/scripts/webcam. Next, I did follow what was required for the webcamDaemon file (Make sure you create the file 'scripts'). Finally I executed the following two commands to make it work.

sudo chmod 755 /etc/init.d/webcam
sudo update-rc.d webcam defaults

Another note is you won't have to add the "/home/pi/scripts/webcam start" in the rc.local file.

tusing #66 November 9, 2019, 1:15am

Phenomenal post. Made an account just to <3 this!

1 Like

Oscar_Fokker #67 November 10, 2019, 8:02pm

<If you want to be able to start and stop mjpeg-streamer from within OctoPrint, put the following in `/home/pi/scripts/webcam` *:*

```
#!/bin/bash
# Start / stop streamer daemon

case "$1" in

start)*
    /home/pi/scripts/webcamDaemon >/dev/null 2>&1 &*
    echo "$0: started"*
    ;;*
stop)*
    pkill -x webcamDaemon*
    pkill -x mjpg_streamer*
    echo "$0: stopped"*
    ;;*
)
    echo "Usage: $0 {start|stop}" >&2*
    ;;*
esac
```

Put this in `/home/pi/scripts/webcamDaemon` :>

i Just want it to start when i startup the pi but it doesn't do shit

PrintedWeezl #68 November 11, 2019, 11:12pm

> Oscar_Fokker:
>
> i Just want it to start when i startup the pi but it doesn't do shit
>
> foosel:
>
> If you want autostart of the webcam you need to add the following line to `/etc/rc.local` (Just make sure to put it above the line that reads `exit 0`).
>
> ```
> /home/pi/scripts/webcam start
> ```

I guess you missed that part 😉

irek #69 November 29, 2019, 10:35am

@foosel thanks for a great tutorial. Please consider adding another Heads-up section somewhere next to camera optional section saying:
Don't forget to enable connection to the Raspberry Pi Camera in RPI config:

```
- sudo raspi-config
- choose '5 Interfacing Options/P1 Camera -> Enable'
- reboot
```

I configured lots of OctoPrints, but last time I spent quite some time looking for a reason why the camera didn't want to work 🙂

2 Likes

tusing #70 December 13, 2019, 12:07pm

@foosel ,

You may want to consider adding the following optionals to your guide:

1.Reduce priority of TouchUI/Webkit for the printer display: add

```
renice -n 19 -p $(pgrep WebKit)
```

to the end of `startTouchUI.sh` - once I did this my camera framerate became MUCH smoother
2. Set a static focal point for your webcam, if it can focus (like the C920):

```
v4l2-ctl --set-ctrl=focus_auto=0
v4l2-ctl --set-ctrl=focus_absolute=40 # your number here
```

1 Like

OutsourcedGuru #71 December 13, 2019, 8:50pm

> tusing:
>
> You may want to consider adding the following optionals to your guide:

Honestly, the author of that plugin needs to own that suggestion, in my humble opinion. Why not create an issue on their repository and let them know what you experienced and suggest the workaround?

tusing #72 December 13, 2019, 9:57pm

I don’t think it’s an issue with the plugin. It’s an issue with WebKit.

adamoutler #73 January 3, 2020, 11:04pm

I just downloaded 0.17.0 from **OctoPrint.org - Download & Setup OctoPrint**. I installed on a Rapsberry Pi 4. Plugins did not work. I ssh'd into my pi and followed the guide from top to "pip install octoprint" and all works fine.

Ewald_Ikemann #74 January 4, 2020, 1:16pm

Hello **@adamoutler** !

So 0.17.0 is **OctoPi** - the complete solution for a Raspberry Pi. There is no need to install OctoPrint when this is installed.

This thread is about installing OctoPrint on an existing Raspian installation.
You may open a new thread with your issue.

adamoutler #75 January 4, 2020, 1:54pm

Just letting people know that this helped with a reinstall on a stock octopi image. If you'd like to create such a thread, go ahead! I'm not really invested in this forum.

1 Like

nilok #76 February 28, 2020, 5:12pm

Thanks for this guide! I scripted the major portions and made a few updates (current 2-2020). I also added some default profiles for Prusa printer models. I tried to be as thorough in the notes as possible, and anyone can add in their own printer profiles or modify the installer. The repo is here is anyone is interested:
https://github.com/itcarsales/prusaPi

1 Like

jel111 #77 February 29, 2020, 12:07am

Am I missing something here? I have no /home/pi/scripts/webcam directory.
If I make one with

```
#!/bin/bash
# Start / stop streamer daemon

case "$1" in
    start)
        /home/pi/scripts/webcamDaemon >/dev/null 2>&1 &
        echo "$0: started"
        ;;
    stop)
        pkill -x webcamDaemon
        pkill -x mjpg_streamer
        echo "$0: stopped"
        ;;
    *)
        echo "Usage: $0 {start|stop}" >&2
        ;;
esac
```

and Put this in `/home/pi/scripts/webcamDaemon` :

```
#!/bin/bash

MJPGSTREAMER_HOME=/home/pi/mjpg-streamer/mjpg-streamer-experimental
MJPGSTREAMER_INPUT_USB="input_uvc.so"
MJPGSTREAMER_INPUT_RASPICAM="input_raspicam.so"

# init configuration
camera="auto"
camera_usb_options="-r 640x480 -f 10"
camera_raspi_options="-fps 10"

if [ -e "/boot/octopi.txt" ]; then
    source "/boot/octopi.txt"
fi

# runs MJPG Streamer, using the provided input plugin + configuration
function runMjpgStreamer {
    input=$1
    pushd $MJPGSTREAMER_HOME
    echo Running ./mjpg_streamer -o "output_http.so -w ./www" -i "$input"
    LD_LIBRARY_PATH=. ./mjpg_streamer -o "output_http.so -w ./www" -i "$input"
    popd
}
```

what type do I save those as? A .txt file?

For that matter, I have no scripts directory in the pi directory either. I feel like I am totally missing something here. All went well until that part. I am having a helluva time getting the Pi cam to work.
I flashed Octopi to a card and tried that way but just like this way I can only get the Pi Cam to work once. Soon as I reboot it never works again.
Great in-depth guide and I appreciate your work. Starting to think Pi Cam isn't the best way to do this. Thanks!

OutsourcedGuru #78 February 29, 2020, 12:22am

```
mkdir /home/pi/scripts
touch /home/pi/scripts/webcam
nano /home/pi/scripts/webcam
# -- Script contents begin, don't include this line
#!/bin/bash
# Start / stop streamer daemon
```

```
case "$1" in
    start)
        /home/pi/scripts/webcamDaemon >/dev/null 2>&1 &
        echo "$0: started"
        ;;
    stop)
        pkill -x webcamDaemon
        pkill -x mjpg_streamer
        echo "$0: stopped"
        ;;
    *)
        echo "Usage: $0 {start|stop}" >&2
        ;;
esac
# -- end script contents, don't include this line
```

1 Like

jel111 #79 February 29, 2020, 5:46pm

Thanks so much! I appreciate you breaking it down for me. I'm a total noob and for some reason was getting lost. It makes much more sense to me reading it this way. Not to say the original post is lacking but I think I should have taken a break. At certain points my brain doesn't have any room left.

Edit: So far all is great! I shut down/rebooted multiple times and it's working great!
Just so someone else like me who may see this understands what I was doing wrong. I was not creating the file properly in the right directory and thus the editor, Nano, was asking for the file extension to save it correctly but couldn't since I started out wrong.

OutsourcedGuru #80 March 1, 2020, 7:08pm

I was a software development instructor at some point and I know that the student doesn't necessarily know to "prepend sudo *here*" and such. (Many of the tutorials within this space assume that you are perhaps 50% proficient with Linux.)

opy01 #81 March 2, 2020, 2:45pm

I have Repetier Pi on mine and needed Octoprint running parallel. I am almost a total noob when it comes to Linux but know how to use Putty. Using this guide I was able to set up my Octoprint in no time with no issues,

other than just looking up how to use nano to edit a file (also very simple). Thanks for the easy and clear instructions! 🙂

dshokouhi #82 March 5, 2020, 1:48am

For those of us who followed this guide...whats the official upgrade path to using python3.6+ for Octoprint 1.4.0 do we just reinstall it as pip3 (pip3.6 or pip3.7)

OutsourcedGuru #83 March 5, 2020, 3:24am

For now, it looks like **this** is the documentation for that. I'm sure there will be a blog post or similar soon enough here on the forum.

But you may want to wait (unless you're a plugin developer). Once you've changed over to Python 3 as the virtual environment, it will currently prevent about 80% of the plugins from running since they haven't yet been upgraded.

1 Like

dshokouhi #84 March 5, 2020, 6:12pm

Thank you for this! I actually forgot how venv's worked until I read that documentation. Totally went over my head that we can keep both versions running and switch as needed 😃

smehks #85 March 11, 2020, 5:35pm

I have a Raspberry 3 and Octopi Rom with a pi cam, im not getting any image and from what it looks like the server isnt running right, it shows:

```
connect to 127.0.0.1 port 8080 failed: Connection refused
Failed to connect to localhost port 8080: Connection refused
```

when i type `curl -v http://localhost:8080/`

And when i follow the guide here i get stuck on `./mjpg_streamer -i "./input_raspicam.so -fps 5" -o "./output_http.so"` where i get the return: `-bash: ./mjpg_streamer: No such file or directory`

What am i doing wrong?

aktivomat #86 March 11, 2020, 6:19pm

Hello! After updating to the latest version (did it with the SD card image) I ran into the "purple haze problem" (**https://www.raspberrypi.org/forums/viewtopic.php?t=245994**) with my NoIR camera. The only solution should be to change the "AWB mode". But this is only possible if no other process is running which uses the camera. So I need to stop MJPG-streamer and tried to do it with this webcam scripts (webcam, webcamDaemon). I created those two files in the right location but... where I can now stop this process?? There is no further option now anywhere (or I can't find it). Or is there just a command to stop those process temporally via SSH? Tried it with "sudo killall mjpg_streamer" but this doesn't seem to stop the process. So would be so thankful for any help!

OutsourcedGuru #87 March 11, 2020, 7:54pm

```
systemctl status webcamd.service

● webcamd.service - the OctoPi webcam daemon with the user specified config
   Loaded: loaded (/etc/systemd/system/webcamd.service; enabled; vendor preset
   Active: active (running) since Wed 2020-03-11 10:07:52 PDT; 2h 45min ago
  Process: 344 ExecStart=/root/bin/webcamd (code=exited, status=0/SUCCESS)
 Main PID: 474 (mjpg_streamer)
    Tasks: 10 (limit: 4915)
   Memory: 4.4M
   CGroup: /system.slice/webcamd.service
           └─474 ./mjpg_streamer -o output_http.so -w ./www-octopi -n -i input

Mar 11 10:07:21 octopi mjpg_streamer[474]: MJPG-streamer [474]: username:passw
Mar 11 10:07:21 octopi mjpg_streamer[474]: MJPG-streamer [474]: commands.....
Mar 11 10:07:21 octopi mjpg_streamer[474]: MJPG-streamer [474]: starting input
Mar 11 10:07:21 octopi mjpg_streamer[474]: MJPG-streamer [474]: starting outpu
Mar 11 10:07:21 octopi webcamd[344]:  i: Starting Camera
Mar 11 10:07:21 octopi mjpg_streamer[474]: MJPG-streamer [474]: Starting Camer
Mar 11 10:07:22 octopi webcamd[344]: Encoder Buffer Size 81920
Mar 11 10:07:52 octopi webcamd[344]: Done bring up all configured video device
Mar 11 10:07:52 octopi webcamd[344]: Goodbye...
Mar 11 10:07:52 octopi systemd[1]: Started the OctoPi webcam daemon with the u
```

aktivomat #88 March 11, 2020, 8:53pm

OutsourcedGuru:

> sudo systemctl stop webcamd.service

WOW!!! You're the master! Thank you so much!!! This stopped the service indeed! Unfortunately it didn't solve my problem (purple haze) but this seems to be another story. Thank you anyway so much for your fast help!

1 Like

OutsourcedGuru #90 April 2, 2020, 6:45pm

Here is a **list of releases**.

Evilteddy000 #92 April 28, 2020, 6:06am

An update for how to run mjpg_streamer. Please bare in mind that I'm an amateur when it comes to Raspberry pi and linux/raspbian so this is going to be layman's terms at best.

New Raspbian stretches rely on shell scripts and to create the 2 scripts needed to run mjpg_streamer, you must simply create both the webcam and webcamDaemon scripts as webcam.sh and webcamDaemon.sh.

When creating webcam.sh, change the destination for the webcamDaemon from `/home/pi/scripts/webcamDaemon` to `/home/pi/webcamDaemon.sh`

The webcamDaemon code works as is (I'm using Logitech c270), you can adjust resolution etc. to your liking but remember to create it as `webcamDaemon.sh`

Make sure you chmod both scripts. To do so, simpy run `chmod +x webcam.sh` and `chmod +x webcamDaemon.sh`

Once the scripts are setup and executable, edit `.octoprint/config.yaml` system commands for streamon to `/home/pi/webcam.sh start` and streamoff to `/home/pi/webcam.sh stop`

I hope this helps because I spent hours going back and forth trying to figure out why my scripts weren't running.

Step by step:

```
sudo nano webcam.sh
```

Copy and paste below code

```
#!/bin/bash
# Start / stop streamer daemon
```

```
case "$1" in
    start)
        /home/pi/webcamDaemon.sh >/dev/null 2>&1 &
        echo "$0: started"
        ;;
    stop)
        pkill -x webcamDaemon
        pkill -x mjpg_streamer
        echo "$0: stopped"
        ;;
    *)
        echo "Usage: $0 {start|stop}" >&2
        ;;
esac
```

ctrl x to exit, y to save.

```
sudo nano webcamDaemon.sh
```

copy and paste bellow code

```
#!/bin/bash

MJPGSTREAMER_HOME=/home/pi/mjpg-streamer/mjpg-streamer-experimental
MJPGSTREAMER_INPUT_USB="input_uvc.so"
MJPGSTREAMER_INPUT_RASPICAM="input_raspicam.so"

# init configuration
camera="auto"
camera_usb_options="-r 640x480 -f 10"
camera_raspi_options="-fps 10"

if [ -e "/boot/octopi.txt" ]; then
    source "/boot/octopi.txt"
fi

# runs MJPG Streamer, using the provided input plugin + configuration
function runMjpgStreamer {
    input=$1
    pushd $MJPGSTREAMER_HOME
    echo Running ./mjpg_streamer -o "output_http.so -w ./www" -i "$input"
    LD_LIBRARY_PATH=. ./mjpg_streamer -o "output_http.so -w ./www" -i "$input"
    popd
}
```

ctrl x to exit, y to save

then run bellow commands to make each script executable

```
chmod +x webcam.sh
chmod +x webcamDaemon.sh
```

then open up your octoprint yaml file

```
sudo nano .octoprint/config.yaml
```

and add to the bottom of the code

```
system:
  actions:
   - action: streamon
     command: /home/pi/webcam.sh start
     confirm: false
     name: Start video stream
   - action: streamoff
     command: /home/pi/webcam.sh stop
     confirm: false
     name: Stop video stream
```

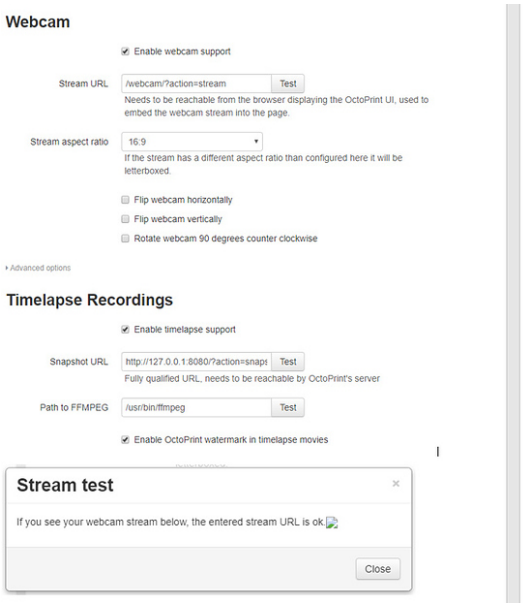
ctrl x to exit, y to save.

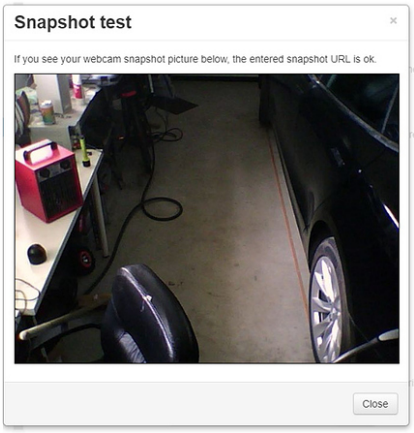
then restart OctoPrint `sudo service octoprint restart` and you should be able to start and stop your webcam via the UI.

oleost #93 May 22, 2020, 8:25am

Hi. Having issues with the webcam.
Im running this on an laptop running Debian.

The Snapshot is working, but the stream URL is not working. Any ideas?

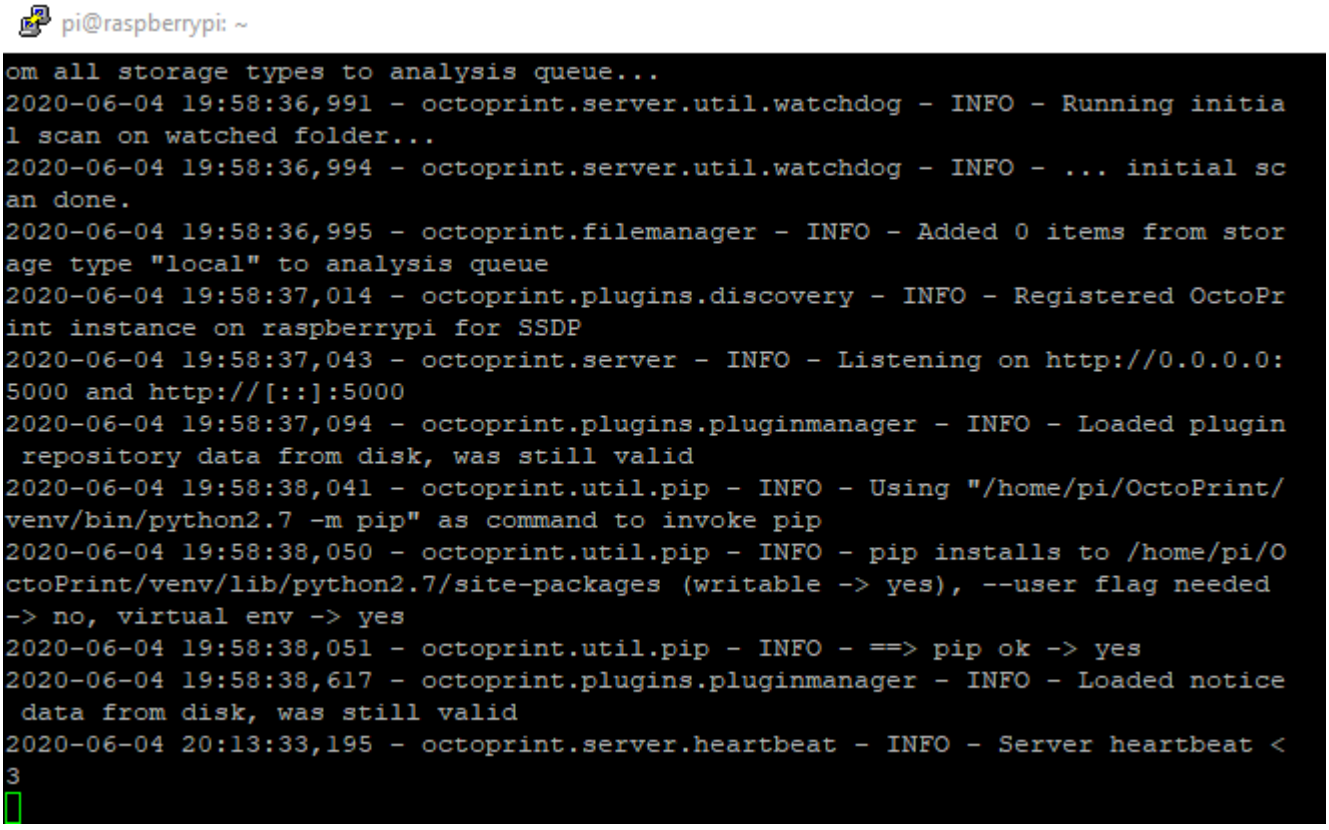




Justalostguy #95 June 4, 2020, 7:21pm

Hey, I'm new here and followed that instruction, to install OctoPrint on my RaspberryPi. But now I have some problems starting the server... When I try to start the server this is what happens and I can't connect. Can someone explain whats wrong?

Thanks for your answers.



PrintedWeezl #96 June 4, 2020, 8:52pm

looks ok for me
did you connect to **http://raspberrypi:5000** ?

1 Like

Justalostguy #97 June 5, 2020, 9:57am

Noo I connected to **http://0.0.0.0:5000/** but now it's working. Thank you sooooo much. 😃

1 Like

ZeeMunkee #98 June 19, 2020, 11:05pm

I had the same problem. the /webcam/?action=stream is the path only if you setup using the instructions to get access via port80 (look at the sections under "Make everything accessible on port 80" in the original post). If you don't want to do that, then just put in: `http://<your Raspi's IP>:8080/?action=stream`

jandar #99 June 20, 2020, 12:12am

> gege2b:
>
> To be able to restart octoprint service in case of the pi user asking a password, `/usr/sbin/service` should also be added on the passwordless sudoers (cf. Note)
> But this implies a security issue because this user could then start/stop any services on the host...

You can restrict parameter in sudoers like

> pi ALL=NOPASSWD: /usr/sbin/service octoprint *

xamindar #100 July 5, 2020, 4:07pm

I'm working through this install but I have a question.

Under " Automatic start up", why is it having us use the init script instead of the systemd service file? Raspbian uses systemd now.

Or is it broken in some way?

PrintedWeezl #101 July 5, 2020, 5:42pm

Well they still work but yeah you're right - it might be time for a new startup file.
Any suggestions how it could look like?

foosel #102 July 5, 2020, 5:43pm

It's actually just the **wiki** note that this guide is that needs some updating 😉

xamindar #103 July 5, 2020, 7:26pm

> PrintedWeezl:
>
> Any suggestions how it could look like?

Sure:

```
 wget https://raw.githubusercontent.com/OctoPrint/OctoPrint/master/scripts/octopr
 wget https://github.com/foosel/OctoPrint/raw/master/scripts/octoprint.default &&
sudo systemctl enable octoprint.service --now
```

That's what I did on mine.

1 Like

xamindar #104 July 6, 2020, 2:32pm

> foosel:
>
> Optional: Webcam

I'm having an issue with this section. I want to use a picam but this does not build the input_raspicam.so file that is needed. Any ideas what the problem is? I also opened an issue on the github page for this project.

EDIT: It was a problem with 64bit pi OS. The pi camera is not completely working yet on it.

xamindar #105 July 8, 2020, 11:48pm

Just a note, the webcamDaemon script will never use the "input_raspicam.so" for a pi camera with the default camera setting of "auto" (so auto really just means to use input_uvc.so for everything.). Because the if statement at the bottom looks for /dev/video0 first which the pi camera also uses.

I'm not sure if it is better or worse to use input_raspicam.so for a pi camera over input_uvc.so so maybe it doesn't matter.

EDIT: mjpeg_streamer uses a lot less CPU when using input_uvc.so vs more CPU when using input_raspicam.so so I guess it is fine how it is.

Here is a very simple systemd service file to use instead of adding the webcam stuff to the rc.local, which is messy. It uses the scripts above as well, because why not:

/etc/systemd/system/mjpg-streamer.service

```
[Unit]
Description=mjgp-streamer webcam streaming daemon
After=network-online.target
Wants=network-online.target

[Service]
Type=forking
User=pi
ExecStart=/home/pi/scripts/webcam start
ExecStop=/home/pi/scripts/webcam stop

[Install]
WantedBy=multi-user.target
```

11113 #106 July 25, 2020, 12:39pm

Hello everyone
I do not know English,These texts are all translated by Google,Hope you can understand
The problem I have is Raspberry 4B Webcam Do not show and After a while ssh connection error

OctoPi no problem

大家好
我不会英文，这些文字都是谷歌翻译得到的
我遇到的问题是Raspberry4B 摄像头不显示 一段时间后ssh连接中断显示Access denied（不确定是什么的问题）
OctoPi没有问题，显示连接都是可以的

MJPG Streamer Version: git rev: 85f89a8c321e799fabb1693c5d133f3fb48ee748
i: Using V4L2 device.: /dev/video0
i: Desired Resolution: 640 x 480
i: Frames Per Second.: -1
i: Format.....: JPEG
i: TV-Norm.....: DEFAULT
i: Could not obtain the requested pixelformat: MJPG , driver gave us: YUYV
[...]
o: www-folder-path.....: disabled
o: HTTP TCP port.....: 8080
o: HTTP Listen Address..: (null)
o: username:password....: disabled
o: commands.....: enabled

Alero #107 July 28, 2020, 6:42am

Hi,
i have a problem with the webcam.i use the guide from here, but my camera will not start. I also read all posts here. no result.
User pi, Bananapi A20, Image Armbian (debian10), Video device ist /dev/video1
i have a webcam and a WebcamDaemon (green) in ./scripts
/boot/octoprint.txt.
if i enter the mjpg_streamer by hand it will work. I think i have a problem with the autostart of mjpg_streamer.
Can anybody help?
And what do you want me to show you?
Regards
Alero

PrintedWeezl #108 July 28, 2020, 2:01pm

Did you change the pi related stuff to your username / directories ?
Are the scripts executable (chmod +x)?
Did you put them into `/etc/rc.local` as the guide said?

Alero #109 July 28, 2020, 2:43pm

Hi,
Yes both. and my user is pi
Regards
Alero

Alero #110 July 28, 2020, 6:19pm

Hi, i think my problem is that mjpg_streamer should start at boot.

Regards
Alero

Alero #111 July 29, 2020, 10:15am

hi,
when i start me a20 i see that webcam ist started.
if i enter
./mjpg_streamer -i "./input_uvc.so -d /dev/video1 -r 1920x1080 -f 15" -o "./output_http.so"
my camera works fine. but it dosn´t start after reboot.

no idea what i can do?
Regards
Alero

PrintedWeezl #112 July 30, 2020, 8:03pm

Sry I was quite busy today. I'll try to look at it tomorrow.

PrintedWeezl #113 August 1, 2020, 5:01pm

Hey it's going to be another day or two.. It's too hot for me right now. Can't think straight 😓

Alero #114 August 3, 2020, 3:59am

Hi,
No problem.
Thanks 4 your help.
Regards
Alero

Alero #115 August 5, 2020, 2:31pm

hi,
do you need some Files or other details?
regards
Alero

Alero #116 August 11, 2020, 7:29am

hi, nobody here who can help?

Regards

Alero63

11113 #117 August 14, 2020, 1:14am

I made it
thank

Alero #118 August 17, 2020, 5:18am


No Ideas?
Need Help.

Regards Alero

jhonny81 #119 September 10, 2020, 9:03am

good evening ... excellent guide, perfect even for beginners
I have a problem, I can't find the octopi.txt file, it looks like it hasn't been installed and if I download one from github, it doesn't let me save it in the root folder

foosel #120 September 10, 2020, 9:04am

As its name implies, the `octopi.txt` file is OctoPi specific. If you don't use OctoPi (and if you are using this guide you probably aren't or you wouldn't be using the guide) you won't have it.

AFisher #121 September 14, 2020, 7:53pm

I need some help/direction pointing...
OctoPrint 1.4.2 on Raspberry Pi 4, fully updated\upgraded
fresh install of Octo everything Octo-wise works fine, but when attempting to get the Raspberry Pi Cam to auto start, I get notta!
I can manually start the cam, and it works as expected, just not as a daemon
followed the instructions here to a TEE..

I created a directory </home/pi/scripts> as it didn't exist, I then created to blank files, an cut\paste the corresponding contents from this page in to the files "webcam" & " webcamDaemon", I also applied executable permissions. and Finely edited the rc.local file as instructed as well!
I get no love!

this is the working manual command I can use...
<./mjpg_streamer -i "./input_raspicam.so -vs -x 1280 -y 720 -fps 32" -o "./output_http.so" >

as a side note, I have looked all over attempting to use all kinds of different configurations

user8374585 #122 September 18, 2020, 12:29am

IMHO, the "Optional: Webcam" section is more complicated than it needs to be especially for the latest Raspberry Pi OS based off Debian using `systemd`.

Build mjpg-streamer

```
cd ~
git clone https://github.com/jacksonliam/mjpg-streamer.git
cd mjpg-streamer-experimental
make
```

Start it automatically

Create the systemd service by `sudo nano /etc/systemd/system/mjpg-streamer.service` and add this inside the file

```
[Unit]
Description=mjpg streamer for octoprint webcam
After=network.target

[Service]
Restart=always
# Adjust the CLI params (see https://community.octoprint.org/t/available-mjpg-str
# Replace `pi` with your raspberry pi username if different
# For camera plugged via USB cable (i.e. webcam)
ExecStart=/home/pi/mjpg-streamer/mjpg-streamer-experimental/mjpg_streamer -o "/ho
# For camera connected via the dedicated camera port using the ribbon cable
# ExecStart=/home/pi/mjpg-streamer/mjpg-streamer-experimental/mjpg_streamer -o "/


[Install]
WantedBy=multi-user.target
```

Then enable, start with the following commands

```
sudo systemctl daemon-reload
sudo systemctl enable mjpg-streamer
sudo systemctl start mjpg-streamer
sudo systemctl status mjpg-streamer
```

This is WAY more direct than all the unnecessary bash scripts that make it more fragile.

I request the instructions be updated to reflect this simplicity.

5 Likes

Christophe_Leprince #123 September 20, 2020, 2:08pm

hello I am trying to install octopring manually, on the other hand the above described manipulation uses phyton 2.7 which is obsolete so I can not do the installation.

AFisher #124 September 26, 2020, 12:39am

> user8374585:
>
> ```
> sudo systemctl daemon-reload
> sudo systemctl enable mjpg-streamer
> sudo systemctl start mjpg-streamer
> sudo systemctl status mjpg-streamer
> ```

OMG that was so MUCH easier!!! I had to change the path to MJPG-streamer dude to the git I had pulled previously but FFS those directions were clear and understandably

thanks!!!!!!

foosel #125 September 28, 2020, 7:53am

> user8374585:
>
> This is WAY more direct than all the unnecessary bash scripts that make it more fragile.

At the cost of easy configurability through a simple text file similar to how it is done on OctoPi. Which people then get confused about ("I created `/boot/octopi.txt` but nothing happens!!1!").

But considering that this part of the guide is years old by now I agree that it's time for an overhaul. The post up there is a wiki node. Anyone who's been on this forum long enough to be in trust level 1 (read: a couple of hours with some minor participation, so pretty much everyone who actually stays a while and doesn't just play hit and run here) can edit it. Be my guest in improving the docs 🙂

lemonszh #126 September 29, 2020, 10:26am

If you want to be able to start and stop the webcam server through OctoPrint's system menu, add the following to `config.yaml` :

Where can I find `config.yaml` ?

foosel #127 September 29, 2020, 10:36am

https://docs.octoprint.org/en/master/configuration/config_yaml.html

Coolie1101 #130 October 20, 2020, 2:22am

@user8374585 Works great, thanks for that.

DanielSnd #131 October 29, 2020, 3:31am

I've followed the tutorial and when I run the serve command this is the last I see:

> 2020-10-29 00:22:59,937 - octoprint.server - INFO - Reset webasset folder /home/pi/.octoprint/generated/webassets...
>
> 2020-10-29 00:22:59,938 - octoprint.server - INFO - Reset webasset folder /home/pi/.octoprint/generated/.webassets-cache...
>
> 2020-10-29 00:23:00,636 - octoprint.server - INFO - Shutting down intermediary server...
>
> 2020-10-29 00:23:00,773 - octoprint.server - INFO - Intermediary server shut down
>
> 2020-10-29 00:23:00,775 - octoprint.events - INFO - Processing startup event, this is our first event
>
> 2020-10-29 00:23:00,776 - octoprint.events - INFO - Adding 0 events to queue that were held back before startup event
>
> 2020-10-29 00:23:00,779 - octoprint.filemanager - INFO - Adding backlog items from all storage types to analysis queue...
>
> 2020-10-29 00:23:00,783 - octoprint.server.util.watchdog - INFO - Running initial scan on watched folder...
>
> 2020-10-29 00:23:00,798 - octoprint.filemanager - INFO - Added 0 items from storage type "local" to analysis queue
>
> 2020-10-29 00:23:00,809 - octoprint.server.util.watchdog - INFO - ... initial scan done.
>
> 2020-10-29 00:23:00,839 - octoprint.plugins.discovery - INFO - Registered OctoPrint instance on raspberrypi for SSDP

I'm assuming it's supposed to be running, but when I go to 127.0.0.1:5000 or **http://raspberrypi:5000/** the browser just keeps loading forever and nothing happens.

Charlie_Powell #132 November 3, 2020, 6:00pm

Updated 2020-11-03 to use Python 3 instead of 2 for installation.

3 Likes

kbshadep #133 November 5, 2020, 1:45am

> foosel:
>
> ```
> python3 -m virtualenv venv
> ```

shouldn't this be
python3 -m venv venv
to properly use python 3 instead of defaulting back to python 2?

Charlie_Powell #134 November 5, 2020, 7:18am

You are right, I thought I'd added the `--python=python3` to it, but yes by default that will create the venv using Py2. Will have to test it later today, to make sure there are no extra dependency steps etc.

Post has been updated to address this issue, now uses `venv`

1 Like

Eewec #135 November 15, 2020, 10:00pm

Having done an absolute **** tonne of research and work on this, I finally got the correct info to get RPi_Cam_Web_Interface working with Octoprint 😃

Install settings for RPi_Cam_Web_Interface:

Cam subfolder: html
Autostart: yes
Server: nginx
Webport: 8080
User: `Your username here`
Password: `your password here`
jpglink: yes
php: 7.3

Webcam settings for Octoprint:

Stream url: http://`your ip here`/html/cam_pic_new.php
Snapshot url: http://`your ip here`/html/cam.jpg
Path to FFMPEG: /usr/bin/ffmpeg

The main benefit of this is being able to have security on the camera feed.

I've not actually done a build yet to test these (still building my printer) but if someone could test? Everything looks fine from Octoprint settings but the proof is in the pudding so to speak.

1 Like

HTSauce #136 February 15, 2021, 7:34pm

So stumbled across this in a forum.
Alot cooler than i thought.

Wondering if anyones used it in ubuntu or on android os?

I have an older UDOO board i would like to apply to my workspace. Has lvds and camera support.

Charlie_Powell #137 February 15, 2021, 8:24pm

Ubuntu is easy, pretty much just substitute the user `pi` for whatever you setup on ubuntu. Can't commend on android OS.

LorneMalvo #138 February 19, 2021, 4:23pm

Hi.
I've installed OctoPrint on Raspbian OS Desktop and all seems to work fine, but when I go to Pluguin manager says:

The `pip` command could not be found or does not work correctly for this installation of OctoPrint - please consult the log file for details and if necessary configure it manually. No installation and uninstallation of plugin packages is possible while `pip` is unavailable.

I've checked python2 and python3 and both have pip installed. Any idea?

PS: I want to say thanks who updated this installation guide.

1 Like

Charlie_Powell #139 February 19, 2021, 4:25pm

> LorneMalvo:
>
> please consult the log file for details

Are there any details to be found here? Please upload the octoprint.log.

LorneMalvo #140 February 19, 2021, 4:39pm

Here you have..

▶ octoprint.log

LorneMalvo #141 February 19, 2021, 4:42pm

I fixed the problem as I seen the log.

> chwon -R pi OctoPrint

Thanks!

1 Like

greg #142 February 21, 2021, 2:49pm

I'm setting this up on a debian linux laptop, so I'm not using a Pi. I'm providing this info for others if they run into this issue.

I had issues with the haproxy configuration since things apparently change after a certain version. I'm running version 2.2.9-1

While this probably doesn't affect the Pi, it might eventually.

I got these warnings and errors:

```
[WARNING] 051/085546 (3107) : unexpected character 'i' after the timer value '15m
[WARNING] 051/085546 (3107) : unexpected character 'i' after the timer value '15m
[NOTICE] 051/085546 (3107) : haproxy version is 2.2.9-1
[NOTICE] 051/085546 (3107) : path to executable is /usr/sbin/haproxy
[ALERT] 051/085546 (3107) : parsing [/etc/haproxy/haproxy.cfg:28] : The 'reqrep'
[ALERT] 051/085546 (3107) : parsing [/etc/haproxy/haproxy.cfg:33] : The 'reqrep'
[ALERT] 051/085546 (3107) : Error(s) found in configuration file : /etc/haproxy/h
[ALERT] 051/085546 (3107) : Fatal errors found in configuration.
```

I fixed it by changing the haproxy.cfg to:

```
global
        maxconn 4096
        user haproxy
        group haproxy
        daemon
        log 127.0.0.1 local0 debug

defaults
        log     global
        mode    http
        option  httplog
        option  dontlognull
        retries 3
        option redispatch
        option http-server-close
        option forwardfor
        maxconn 2000
        timeout connect 5s
        timeout client  15m
        timeout server  15m

frontend public
        bind :::80 v4v6
        use_backend webcam if { path_beg /webcam/ }
```

I found these changes at **Making OctoPi build on Ubuntu 64bit so we have 64bit builds · Issue #711 · guysoft/OctoPi · GitHub**

borker #143 February 26, 2021, 10:36pm

I have installed OctoPrint according to the guide at the top of this page and everything appeared to go without any errors or warnings. I setup autostart according to the guide and the service starts on bootup and can be restarted, stopped and started by the appropriate commands. The only problem is when opening the web interface I get nothing. No feedback no nothing. It just times out. I have been using OctoPrint for 4 or 5 years and always installed from the octopi image. This time I did not want to erase my pi. The browser I am using is running another instance of OctoPrint on a seperate rPi. I am using winSCP and Putty to investigate as these are headless

The command "ps -ef | grep -i octoprint | grep -i python" returns:
pi 1966 101 4.3 144592 38796 ? Ssl 15:56 0:04 /home/pi/OctoPrint/venv/bin/python3 /home/pi/OctoPrint/venv/bin/octoprint
pi 1981 0.0 1.7 22644 15344 ? R 15:56 0:00 /home/pi/OctoPrint/venv/bin/python3 -m pip --version
The command "curl -D - localhost:5000" puts out more than 100 pages of HTML.

Hopefully someone may take a look at this info and be able to help an old man out. Thanks for any insight provided.

octoprint.log (117.4 KB)

bassamanator #144 March 22, 2021, 7:07am

I'm at the point where when I click **Test** for the Snapshot URL, I get a snapshot of what the webcam is seeing.

When I click **Test** for the Stream URL, however, I don't see what the webcam sees.

How would I go about fixing this 😕

Thanks!

Charlie_Powell #145 March 22, 2021, 8:38am

What URLs have you entered?

bassamanator #146 March 22, 2021, 4:30pm

Stream URL: `/webcam/?action=stream`

Snapshot URL: `http://127.0.0.1:8080/?action=snapshot`

I'm running Octoprint, manual installation, on a Thinkpad running kubuntu. The camera is generic.

Thanks for the reply.

Charlie_Powell #147 March 22, 2021, 4:32pm

You probably need to check the haproxy section then, since the webcam URL is using that.

If you try `http://your-ip:8080/?action=stream`, it should work because this is not using haproxy. However, to avoid the port and make it relative you need that proxy section complete.

1 Like

bassamanator #148 March 22, 2021, 7:10pm

So I put in the full link that you posted and now it's working.

```
http://192.168.1.3:8080/?action=stream
```

Thanks!

The009 #149 March 26, 2021, 2:11pm

I just did a setup on a clean install to a Pi 4.

These are the steps I used to get it up and running as it is slightly different to what is listed above.

```
sudo apt update -y
sudo apt full-upgrade -y
sudo apt install python3-pip python3-dev python3-setuptools python3-venv git libyaml-dev build-essential
-y
pip3 install virtualenv
sudo reboot
```

```
mkdir OctoPrint && cd OctoPrint
virtualenv --python=python3 venv
source venv/bin/activate
pip install octoprint
```

//Test

```
~/OctoPrint/venv/bin/octoprint serve
```

//Setup Octoprint Via GUI you should be able to see some info in the console.
//Once setup is complete.
//End Octoprint

```
CTRL+C
```

The rest of the guide works well 🙂

1 Like

Jave_Templouevo #150 March 30, 2021, 9:24pm

Hi, I'm stuck on the haproxy.cfg sample. I can't edit it, showing an error "Failed to save document. Permission denied." How can I edit and save the haproxy.cfg file?

Rukbat #151 April 18, 2021, 9:54pm

A little late, but run the edit command as

sudo <whatever editor you're using> haproxy.cfg

That gives the editor root permission, and root can save any file anywhere.

gabe_torberg #152 May 26, 2021, 3:58pm

me too bro so yeah

gabe_torberg #153 May 27, 2021, 1:14pm

I am having a lot of trouble

Charlie_Powell #154 May 27, 2021, 2:47pm

It might help to say what you're having trouble with 😉

Michael_Madell #155 June 1, 2021, 3:38pm

Im having issues with plugins, they install okay, but after restarting the server, they are no longer installed

Charlie_Powell #156 June 1, 2021, 4:02pm

Please open a new topic under 'Get Help', providing as much information as possible and we will try to help you.

sliverbaer #157 June 29, 2021, 3:45pm

> foosel:
>
> Installing OctoPrint should be done within a virtual environment, rather than an OS wide install, to help prevent dependency conflicts

Why? If this is the only thing it is used for, why does it matter? Seems like running this virtually just makes it inherently use more resources?

I just got a 3D printer and I'm interested in Octoprint. Less for the video, because I have some great 2k pan and tilt cameras that give me a good view, but more so for stats.

foosel #158 June 29, 2021, 3:49pm

A virtual environment is NOT a virtual machine. Think of it as a dedicated folder for the software itself and the dependencies. There's no resource overhead there, apart from a tiny amount of additional storage for some copies of the Python binaries that are miniscule.

And why? We've had too many issues with people who went "this is the only software that will run there" and then it turned out it wasn't.

2 Likes

sliverbaer #159 June 29, 2021, 3:56pm

Thanks for the quick reply. Yes, I realize it isn't a VM. Just seems like it makes it more difficult to access.

Ok, fair enough. Thanks!

salsaman #160 July 16, 2021, 2:43pm

Great instructions, but I'm trying to futz with my camera and /boot/octoprint.txt just isn't there.
Did I miss something? I've been running this for almost two years now, everything works and updates but the file's just not there! Is there a default somewhere I can start with? THanks!

TTalkington #161 July 16, 2021, 3:04pm

`/boot/octoprint.txt` is a part of OctoPi and this guide doesn't create it or set it up. To change the mjpg-streamer settings you'd have to edit the scripts you created originally. It's possible this guide changed since you did it or that you decided to do something different, so saying exactly what/where is impossible, but starting with what the guide has for setting up mjpg-streamer to start up automatically is a good place to start.

salsaman #162 July 16, 2021, 6:13pm

Yep, I understand. I followed the guide starting with Raspbian on a Pi 4.Streaming with mjpg_streamer works a treat, but it looks for /boot/octoprint.txt and of course doesn't find it.

I'm just looking for an octoprint.txt to start with 🙂

TTalkington #163 July 16, 2021, 7:11pm

> salsaman:
>
> I'm just looking for an octoprint.txt to start with

I guess what I'm trying to say is that won't help you. If you are trying to alter the resolution or framerate or something to that effect you just need to edit your mjpg-streamer script.

OctoPi has some 'background' scripts and utilities setup to read the octoprint.txt and do different things based on it...but you won't have that if you followed this guide. Even if you got a copy of the default octoprint.txt, putting it in `/boot` and editing won't do anything for you.

Charlie_Powell #164 July 16, 2021, 8:59pm

Going to quickly jump in an point out the first section of the script:

> foosel:

```
# init configuration
camera="auto"
camera_usb_options="-r 640x480 -f 10"
camera_raspi_options="-fps 10"

if [ -e "/boot/octopi.txt" ]; then
    source "/boot/octopi.txt"
fi
```

As confusing as this is, it does actually have a section in there for sourcing the config from `/boot/octopi.txt`. Quite confusing, but these scripts were initially copied out of OctoPi.

@salsaman - it would probably be easier to adjust the config at the top of this file, or you can add the exact same lines to the `octopi.txt` file.

1 Like

TTalkington #165 July 16, 2021, 10:39pm

Ah, I had missed that part, so I stand corrected then. Sorry!

salsaman #166 July 17, 2021, 2:50pm

Thanks, done!

ThePreenter #167 July 21, 2021, 6:56pm

Installed this on my Pi4 running Hoobs on Rasbian: PRETTY_NAME="Raspbian GNU/Linux 10 (buster)"

I got everything installed just fine but when I try to run

```
~/OctoPrint/venv/bin/octoprint serve
```

But it doesn't complete the process, it ends on this line every time

```
2021-07-21 11:50:00,239 - octoprint.plugins.pluginmanager - INFO - Loaded notice
data from disk, was still valid
```

I also attached the full output.
octoprint startup output.log (10.7 KB)

Any ideas what I need to do here? When I installed I made sure to installed with the

```
--no-cache-dir
```

option and then I restarted the Pi after adding the hoobs user to the dial out group

foosel #168 July 21, 2021, 7:51pm

That looks like it's actually running just fine, have you gone to `http://<yourPi>:5000`? If you start it like this it starts interactively, meaning it takes over your console until you stop it again via Ctrl+C. If you don't want it to run like that you'll need to install some startup scripts.

1 Like

ThePreenter #169 July 21, 2021, 9:03pm

Oh well would you look at that! I guess it just needed some time - it was not loading before at all. Thanks!

I will be adding the auto start scripts for sure, just wanted to make sure it was running correctly first!

Salmon_Petchvorakul #170 July 26, 2021, 12:57pm

Help! I am trying to install OctoPrint on Linux I have gotten far but then I hit a road block. It says the command failed to execute because It's permission got denied. Here's the error message.
root@raspberry:/home/pi# journalctl -xe
Jul 26 19:50:57 raspberry systemd[4008]: octoprint.service: Failed to execute command: Permission denied
Jul 26 19:50:57 raspberry systemd[4008]: octoprint.service: Failed at step EXEC spawning /home/pi/OctoPrint/venv/bin/
-- Subject: Process /home/pi/OctoPrint/venv/bin/octoprint could not be executed

Salmon_Petchvorakul #171 July 26, 2021, 12:58pm

I wrote in "sudo service octoprint start" as I was following this guide

Charlie_Powell #172 July 26, 2021, 3:44pm

Everything in this guide should be done as a standard user, *not* as root. Your terminal paste is showing you are doing it as root.

Salmon_Petchvorakul #173 August 3, 2021, 11:04am

I have tried as a standard user but still no success, I am trying to get octoprint to auto start as I want my macbook which is running raspbian to be a headless control hub for my 3D printers.

Charlie_Powell #174 August 3, 2021, 2:42pm

You may find it easier to open a new post, where you will be able to provide as many details as possible, including the `octoprint.log` or output from running `/home/pi/OctoPrint/venv/bin/octoprint serve` manually.

ThePreenter #175 August 11, 2021, 4:05pm

Hello! I installed this on a Raspberry Pi but have since purchased a separate Pi to handle this task alone, how do I now uninstall this completely from the first Pi? I tried using pip to uninstall but I have learned that due to being inside a virtual environment there is more that needs to be done and I am unsure of how to remove that! Can you provide any tips for me to uninstall?

Charlie_Powell #176 August 11, 2021, 5:07pm

You can just delete the virtual environment/whole `OctoPrint` folder. Then you would have to go backwards and remove all the services setup, and remove the haproxy configuration.

addohm #177 August 17, 2021, 11:37pm

When going over this, keep in mind it's age and do yourself a favor by flashing OctoPi OS. Doing it manually, using this guide, the performance is far slower.

PrintedWeezl #178 August 18, 2021, 2:20am

I agree - using the OctoPi image makes life easier but I don't see any reason why the performance should be worse?

Kevin_Flynn #179 August 27, 2021, 11:49pm

I have Octoprint installed and I can reach the server via the web BUT what is the username and password? How do you set the username and password?

I see my issue I used the browser to **http://octopi.local** I needed to go to **http://IP** ADDRESS:5000

PrintedWeezl #180 August 28, 2021, 12:37am

So I guess you're running two Octoprint instances and one of them is running on an Octopi image 🙂

Kevin_Flynn #181 August 28, 2021, 7:54pm

I did the install based on the instructions for Raspbian. I think it just wasn't going to serve the startup page by using port 80. With the correct port it worked. I don't see how I would have created two instances. I wouldn't think that would work otherwise there would be no need for the proxy and so forth. That said I am not sure what was going on in the background. I could check next time I boot it to see if there are multiples. But to me this is waaaay overly complex just to have a gui. I wanted to use a 3.5 tft just so i had access at the machine without carrying my laptop with me. 32 bit octopi still works from what I read but I think I will just gve up on it. I could not even get chromium to work on the 64 bit.

Charlie_Powell #182 August 29, 2021, 6:58pm

It's not entirely clear what issues you're having on your setup. If you install OctoPi, then the install process is quite straightforward. From there, you could install a desktop & use chromium, but with a 3.5 inch TFT you won't be able to do much. Instead of desktop install + chromium, you could try something like OctoDash which is optimized for touchscreens.

Stay away from the 64 bit versions of any Raspberry Pi OS if you don't want to debug issues, they are out of date and not fully working.

printeruser #183 September 19, 2021, 2:32pm

Thank you so much for these detailed, accurate and thoughtful instructions, and for this great software! I appreciate the mentions of various security concerns and how to address them. Everything worked 100% as described for me, including webcam, with a fresh installation of Raspberry Pi OS on a Pi 4. I'm waiting for my printer to arrive today but as far as these instructions, these are spot on.

To me using a full installation of the OS is much preferable to OctoPi (not that I have tried it that way), especially with a Pi that has some performance left over for other tasks like a 4. Great to be able to ssh or VNC in and use it as a computer.

1 Like

NeWFie-KaNaTa #184 October 2, 2021, 3:53pm

this solved all my problems... thank you!!! That webcamDaemon script broke my stream everytime.

vkb008 #185 October 11, 2021, 1:00am

Hello everyone!

I somehow missed a step and I do not have webcamd.service setup in my /etc/systemd/system folder. Attempting to run a mkdir and creating this file resulted in a "mkdir: cannot create directory '/etc/systemd/system/webcamd.service': Permission denied"

Any suggestions? When manually turning on the webcam server, and inputting the http://:8080/?action=stream command, I am able to view the webcam. Hopefully this enough info to get some more experienced folk of what my current setup state is. but if more info is needed, happy to share wtv is needed. Thanks in advance!

Charlie_Powell #186 October 11, 2021, 6:34am

`webcamd.service` is not a directory, so you shouldn't be creating it with `mkdir`. It probably needs `sudo` to create & edit that file, so to edit it you would use something like nano. For example:

```
sudo nano /etc/systemd/system/webcamd.service
```

1 Like

RalfJahns #187 October 20, 2021, 5:33pm

Hello,

I installed Debian 11 on an old ASUS Eee PC 105D and then Octoprint on top of this, following this instructions. In Debian 11, there is already haproxy 2.x and it is mentioned in ths article, that there should be an example for a config file that fits this version (**Reverse proxy configuration examples**). But I can't find it. Can someone show it to me?

Best regards
Ralf

Charlie_Powell #188 October 20, 2021, 7:51pm

If you scroll right to the bottom of the comments on that thread, there should be one detailing the changes:

> **Reverse proxy configuration examples**
>
> PSA: haproxy 2.2.x (included in Debian 11 "Bullseye") no longer supports the reqrep configuration keyword. Instead, it uses http-request replace-path. The above haproxy.cfg needs to have the reqrep ^([^\ :]*)\ /webcam/(.*) \1\ /\2 line in the backend webcam section replaced with http-request replace-path /webcam/(.*) /\1 If you're upgrading a 0.18 or earlier version of OctoPi to Bullseye (or just upgrading haproxy to 2.2.x) then as well as the change above you also need to remove the r…

It should probably be merged into the top post as a separate config.

vkb008 #189 October 21, 2021, 5:15am

Thank you! The sudo nano command worked 🙂

gonzalingui #190 December 1, 2021, 3:30pm

> foosel:
>
> ```
> cd ~
> sudo apt install subversion libjpeg62-turbo-dev imagemagick ffmpeg libv4l-dev
> git clone https://github.com/jacksonliam/mjpg-streamer.git
> cd mjpg-streamer/mjpg-streamer-experimental
> export LD_LIBRARY_PATH=.
> make
> ```

I tried this code on a Raspbian (bullseye) fresh install and it won't work because the `git` command doesn't exist.

The `sudo apt install` part of the code installs `subversion`, is that really necessary? I think there is a mistake, it should be `git` instead of `subversion`.

Charlie_Powell #191 December 1, 2021, 4:26pm

Entirely possible, seems logical to me to change it. Probably no one has noticed because the OctoPrint install instructions have it on the list to install, though it's not actually required there anymore since OctoPrint is on PyPi.