

How to write the customized LulzBot OctoPi OS image to an SD card and setup OctoPrint:

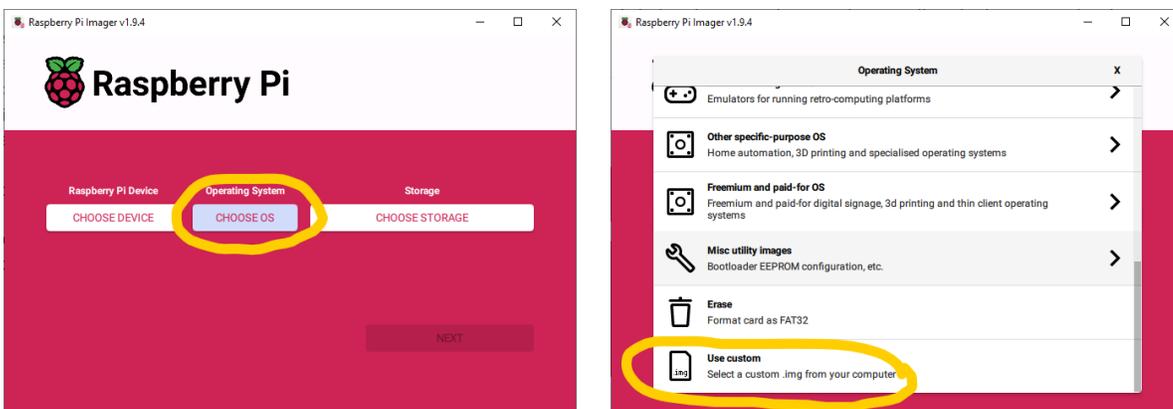
Download and install the Raspberry Pi imager:

- Go to this page at Raspberry Pi: <https://www.raspberrypi.com/software/>
- Download the imager app.
- Locate the downloaded file on your PC and double click it. You will be prompted with several questions that are typical for software installations. Answer them and Imager should install.
- After installation it should launch itself and you will see the main Imager screen.

Download the image file for the customized LulzBot Octoprint OctoPi OS image. This image has been customized to have most LulzBot printers already set up and several useful plugins pre-installed, including a setup of the Firmware Updater customized for LulzBot printers.

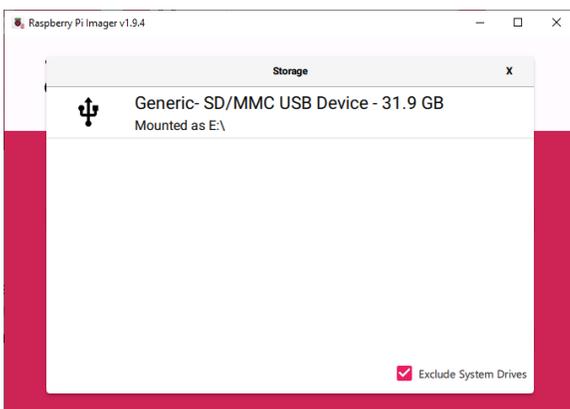
- Download the image file from https://software.lulzbot.com/LulzBot_OctoPi/

Back in the Raspberry Pi imager, click the Choose OS button, then scroll to the bottom and pick Use custom OS.

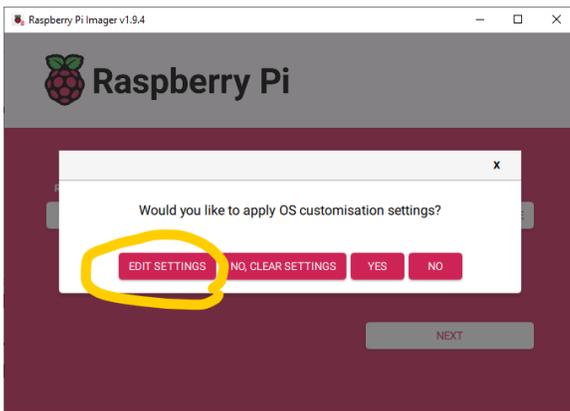


Use the file open box that appears to locate and select the image file that was previously downloaded.

Click the Choose Storage button. A window showing removable drives will appear. For safety, we recommend unplugging any removable storage devices that show here. Then plug in the SD card that came with the Connectivity Kit. Use a micro-SD to USB adapter if necessary. It should appear as the only available device. This method helps ensure that the image is not written to the wrong storage device. Click on the storage device for the SD card.

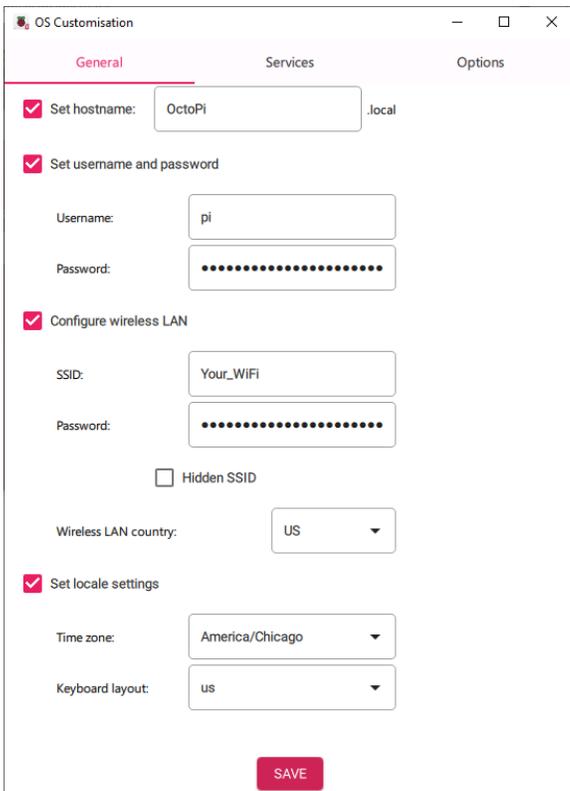


You should return to the main Imager screen. Click the Next button and you should get a screen that says “Would you like to apply OS customization settings.” Do not click Yes, click the “Edit Settings” button.



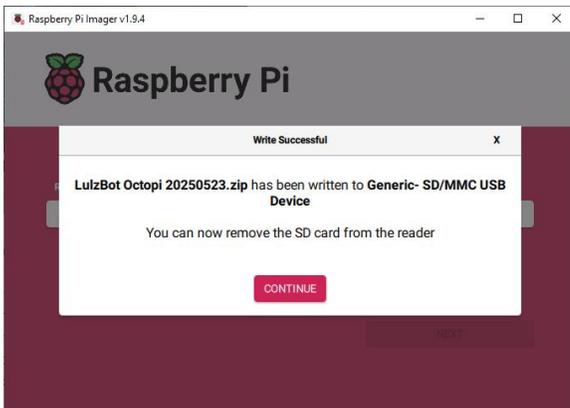
On the OS Customization screen that appears:

- Give your printer a name on your network with the set hostname box.
- Set a username and password for the Linux OS (we recommend changing the default password for security). Note, this is NOT the OctoPrint user and password, that will be created the first time you bring up OctoPrint in your web browser.
- Enter your Wi-Fi name and Password. This is why we have you image your own card, because it's more difficult to set this after the card is written and booted up.
- Pick your country for the Wi-Fi. This ensures proper operation of the WiFi. If you are in the U.S., you can just type "US" into the box instead of searching through the long pop-up list of country codes.
- Pick your time zone and keyboard layout. You can type "us" for keyboard again, instead of using the pop-up list. Note, it's in lower case this time.
- Click the SAVE button at the bottom.



Now that the settings are entered click the YES button. You will get a final warning that all data on the SD card you have selected will be erased. Check again that you have selected the provided SD card, and then click the YES button.

The main Imager screen will reappear and a progress bar will show to indicate that it's writing and verifying the card. This will take several minutes to complete. When it's done you will get a screen indicating that the write was successful and you may remove the card.

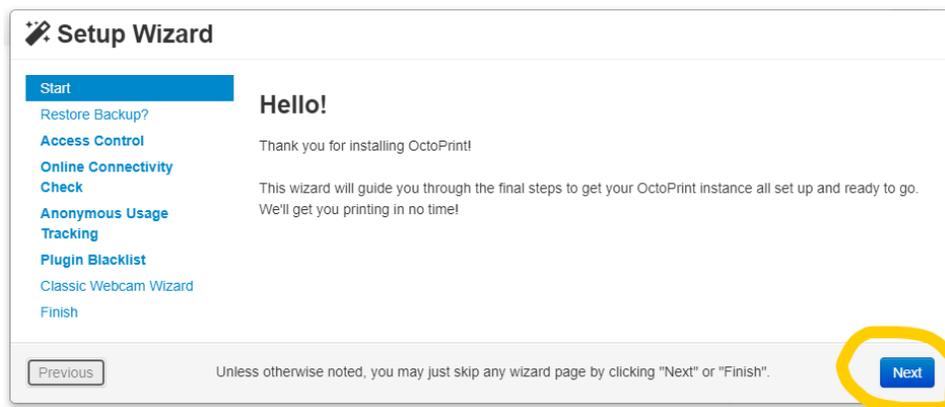


Close Raspberry Pi Imager. Install the SD card in the Raspberry Pi, replace the Pi into the housing, plug the USB cable between the Pi and the printer, and plug in the power lead from the printer to the Pi. Power on the printer. The Pi should boot up into OctoPrint. NOTE: On the first boot it can take several minutes to boot up and for the OctoPrint web page to start working. This is because it does a bunch of initial setup. Following boot times should be much faster.

Once the Pi is successfully connected to your network, an IP address should be displayed on the printer's status line on the LCD. If this does not appear, you may have to use other means to figure out if the Pi is connected and what its IP address is, such as looking in your router's admin page.

Once you have the IP address, enter it in your web browser and the OctoPrint web page should begin to load. You may also try using the name you gave the printer in the Raspberry Pi Imager setup steps earlier. For example, if you called it "OctoPrint" you would try going to OctoPrint.local in your web browser.

On your first use of OctoPrint, you have to go through several setup steps. After completing each step, you will have to click the Next button at the bottom. Click it now to proceed to the next step.



Click next again on the Restore Backup page.

On the Access Control page, chose a username and password for OctoPrint access, click the create account button, wait for it to say that an account has been created, then click the next button again.

Setup Wizard

Start
Restore Backup?
Access Control
Online Connectivity Check
Anonymous Usage Tracking
Plugin Blacklist
Classic Webcam Wizard
Finish

Access Control

Mandatory Step! You need to fill this out now.

It looks like you haven't configured access control yet, which is now mandatory. Please **set up a username and password** for the initial administrator account who will have full access to both the printer and OctoPrint's settings:

Username

Password

Confirm Password

Create Account

Previous Unless otherwise noted, you may just skip any wizard page by clicking "Next" or "Finish". **Next**

Next, you will choose if you want to enable the Online Connectivity Check. This is a longer page, you have to scroll to the bottom and chose to Disable or Enable, then wait for it to apply the setting, before you can click the Next button to proceed.

Setup Wizard

Start
Restore Backup?
Access Control
Online Connectivity Check
Anonymous Usage Tracking
Plugin Blacklist
Classic Webcam Wizard
Finish

If you also want to check if name resolution works (strongly recommended), define a host name to check name resolution against. If you don't know what to set here, the default value (OctoPrint's domain) should work. If you don't want to perform regular resolution checks along side with the general connectivity check, leave the field empty.

Hostname

Finally, please decide on whether to enable or disable the connectivity check. You may change the configuration at any time through Settings > Server right from within OctoPrint.

Previous Unless otherwise noted, you may just skip any wizard page by clicking "Next" or "Finish". **Next**

Next, choose if you want to enable anonymous usage tracking. This helps the OctoPrint developers decide where to apply their development efforts.

Setup Wizard

Start
Restore Backup?
Access Control
Online Connectivity Check
Anonymous Usage Tracking
Plugin Blacklist
Classic Webcam Wizard
Finish

Configure Anonymous Usage Tracking

Anonymous usage tracking provides valuable insights into how many instances running what versions of OctoPrint are out there, whether they are successfully completing print jobs and various other metrics. By enabling it you help to identify problems with new releases and release candidates early on, and to better tailor OctoPrint's future development to actual use. For details on what gets tracked, please refer to tracking.octoprint.org and also the [Privacy Policy at tracking.octoprint.org](#). Note: You can always change your decision and also access more granular controls via Settings > Anonymous Usage Tracking.

Previous Unless otherwise noted, you may just skip any wizard page by clicking "Next" or "Finish". **Next**

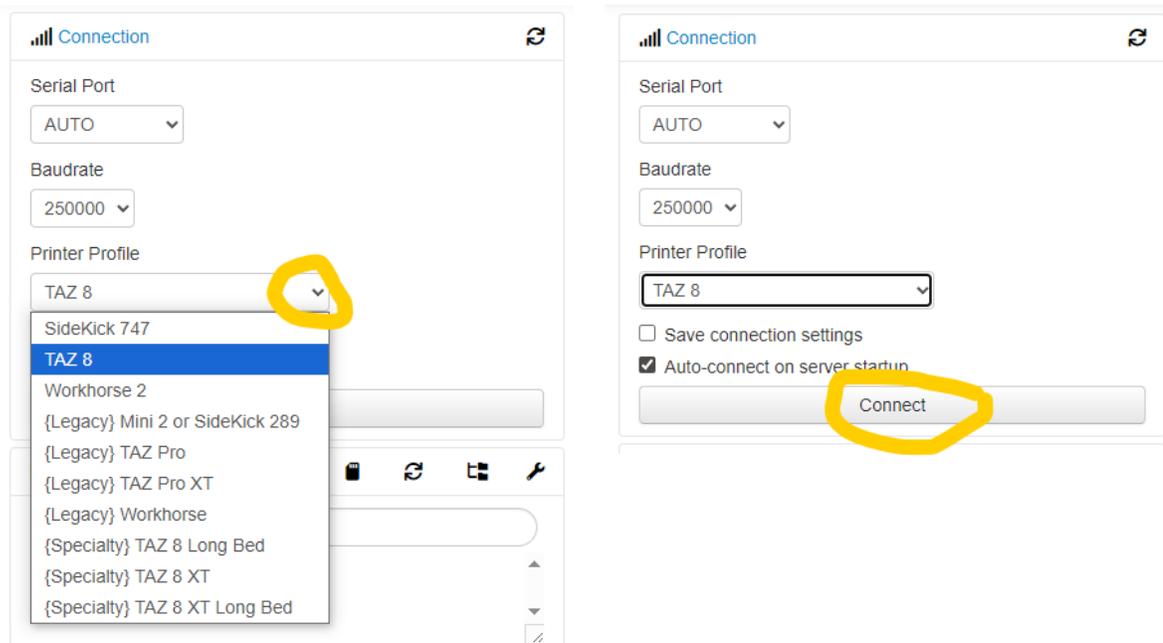
Next, decide if you wish to enable plugin blacklist processing. This allows OctoPrint developers to disable plugins that cause severe issues with the operation of OctoPrint.

Click Next on the Classic Webcam Wizard page. The settings that are there should be good.

Last setup step is to read the warnings page and check each box.

You will get a screen that says Please reload. Because of the setup changes, OctoPrint needs to restart and the page needs to be reloaded in the browser. Give it a few seconds to restart, then press the Reload now button, and it should load the OctoPrint web page.

We are almost there. You just need to select the type of printer you have in the Connection box at the left side of the OctoPrint page. Click the drop-down arrow on the box below Printer Profile and select your printer model.



Octoprint should connect to the printer. The connection box will collapse down to a single line if successful, and the dashboard in the center should show gauges that indicate nozzle and bed temperatures.

If you are not already familiar with the features of OctoPrint, click through the tabs at the top to review the available features. Go to the control tab, and click the the home buttons and watch if the printer reacts. If it does, you should be ready to print.

You can upload a gcode file just by drag-and-drop from the Windows File Explorer to anywhere on the OctoPrint web page. Then to print the file, just click the tiny printer icon below the filename on the files list on the left side.

Happy Octo-Printing!