



Ubuntu 22.04 LTS Installation on the Framework Laptop 13

How to install Ubuntu 22.04 LTS Linux on a Framework Laptop 13

Written By: Nirav Patel



INTRODUCTION

Once you have your Framework Laptop 13 set up following the [Quick Start Guide](#), you're ready to install your preferred OS. Ubuntu 22.04 LTS works fantastically well right out of the box. WiFi and the **Fingerprint Reader work automatically. With one workaround, you can also get pretty good standby battery life.

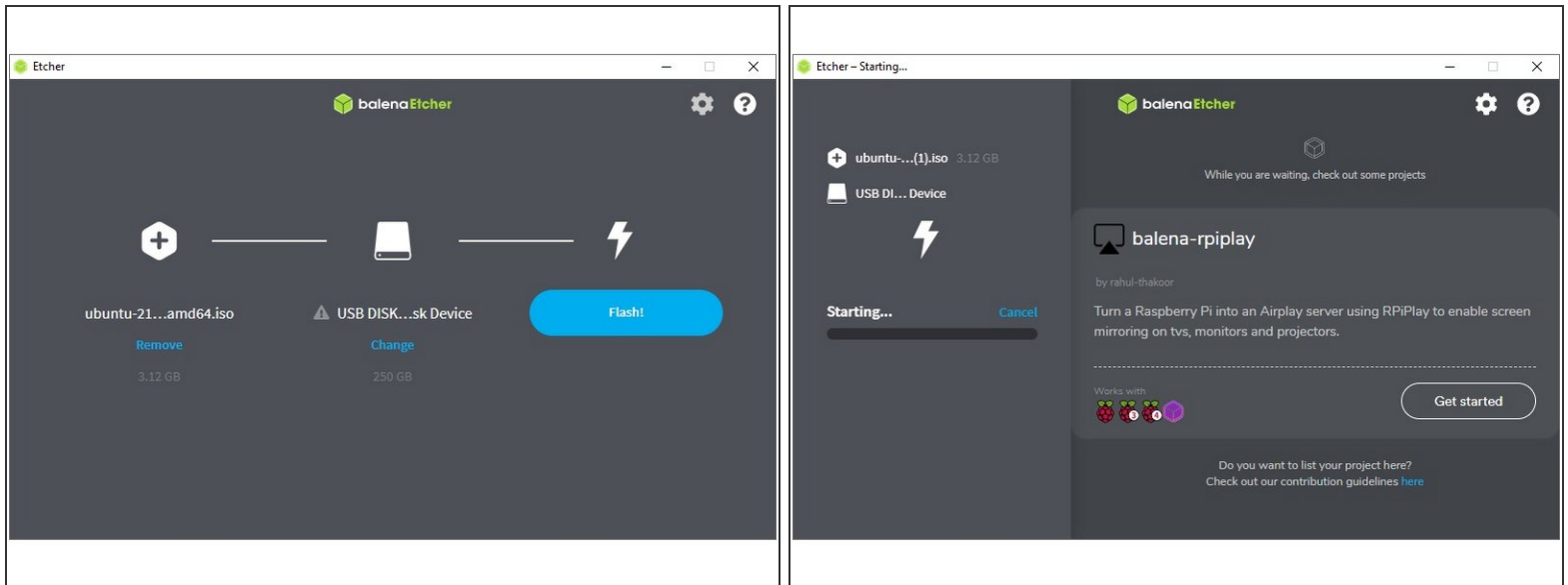
NOTE: This is an [Officially Supported Linux Distribution](#). [Learn more here](#).



PARTS:

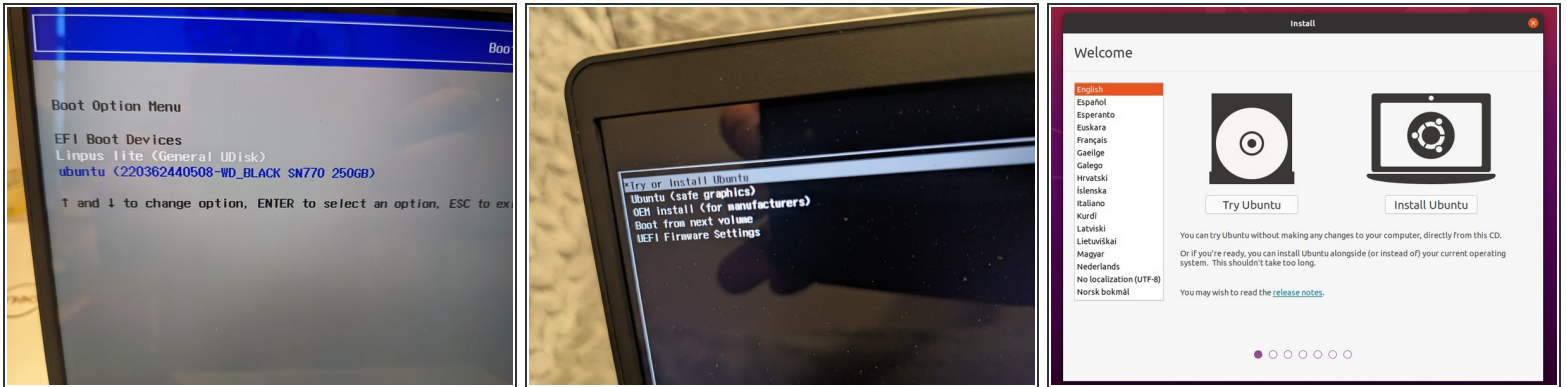
- [Storage Expansion Card](#) (1)
-

Step 1 — Preparing Ubuntu Installation Media



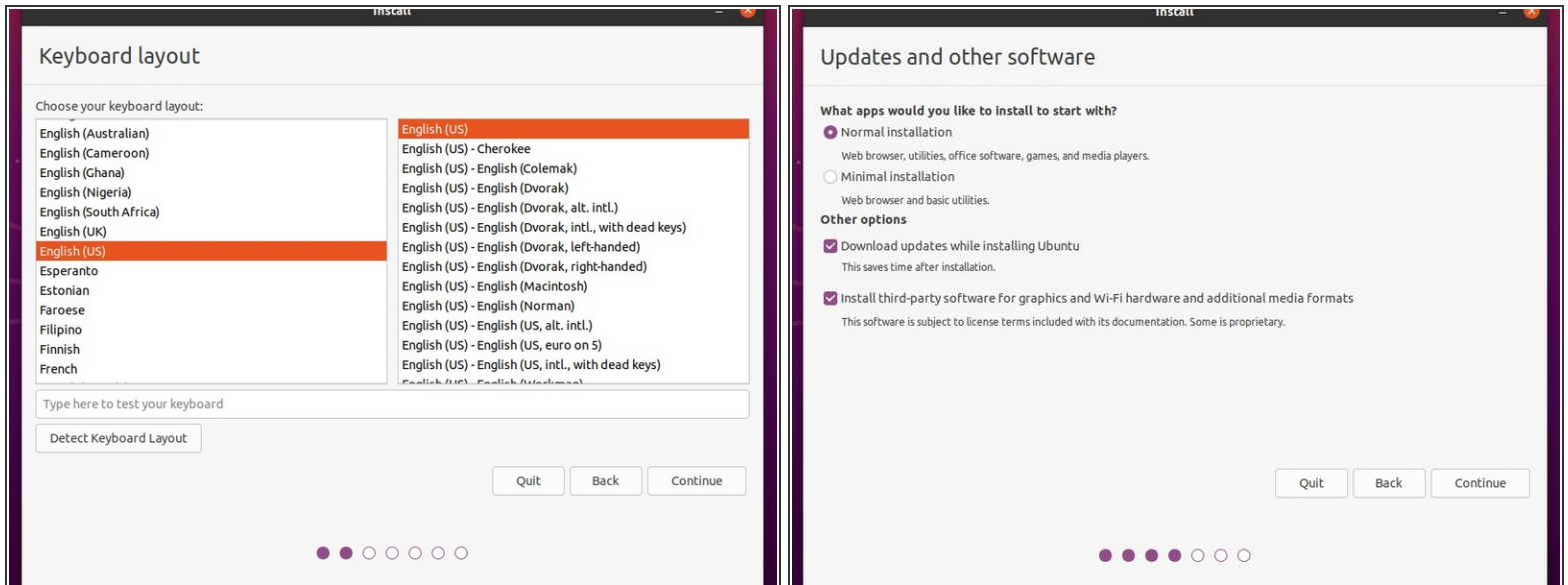
- First, download the latest [Ubuntu 22.04 LTS Desktop image](#) from Ubuntu's website. Ubuntu has a [detailed installation guide](#) that you can follow. We'll go through the steps in this Guide assuming you have a simple installation scenario of a fresh install on a blank drive.
- Download [balenaEtcher](#) as a tool to create the USB installer from the ISO. balenaEtcher is available for Windows, MacOS, and Linux. You can either install it or download the portable version that runs directly from the executable.
- Launch balenaEtcher. Insert your USB drive (8GB or larger). Click on "Flash from file" and select the ubuntu-22.04-desktop-amd64.iso that you downloaded. Click on "Select target" and choose your USB drive. Click "Flash" and wait a minute or two for it to complete.
- Once the USB drive creation is complete, you can close balenaEtcher and eject the USB drive from your OS.

Step 2 — Booting to Live Ubuntu USB



- Insert the USB drive into your powered off Framework Laptop 13, and then power on. If you have an existing OS installed on the Storage drive in your laptop, immediately after the power light comes on begin rapidly tapping (continuously) the F12 key - you must begin tapping well before you see the Framework logo.
- Select Linpus lite (General UDisk) with your arrow keys. Enter key.
- Next select Try or Install Ubuntu. Hit the enter key.
- After a few seconds, you're in! If you just want to try Ubuntu out, you can click on the Try Ubuntu button and browse through the live USB version of it without touching the internal storage drive. If you do want to install Ubuntu to the internal storage drive, go on to the next step.

Step 3 — Installing Ubuntu Part 1



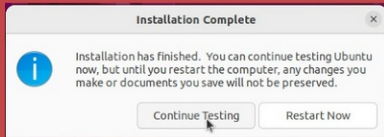
- Select the keyboard language you'd like to use. On the next screen after clicking Continue, connect to your WiFi network if available.
- While connected to your network, select Normal installation, Download updates while installing Ubuntu and Install third party software, then press continue. This process may take a few minutes and appear to idle a bit, then the next screen appears - installation type.

Step 4 — Installing Ubuntu Part 2



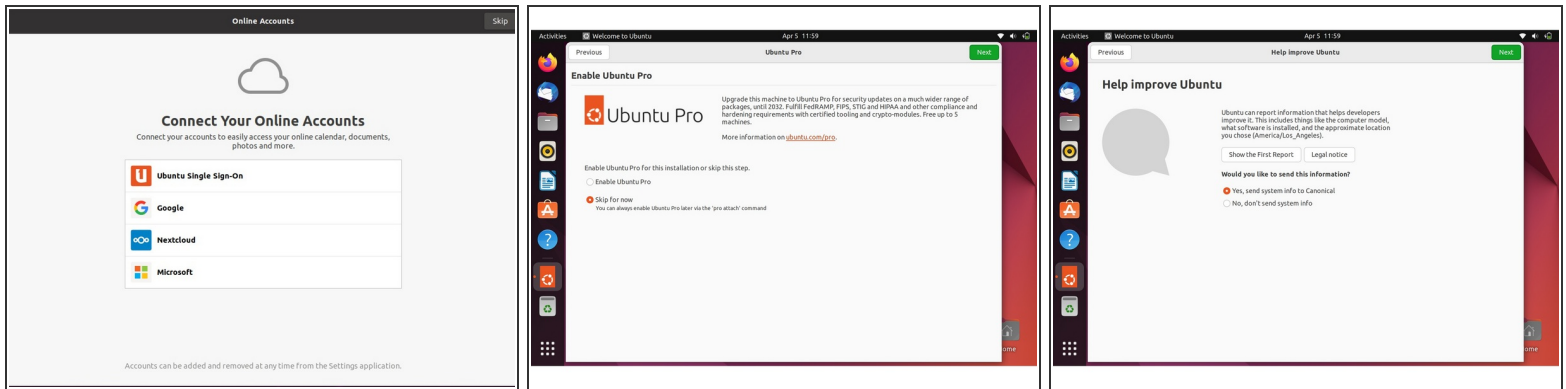
- Next we'll choose the installation type. Erase everything is the correct choice for users with a new DIY Framework 13 looking to use the entire hard drive for Ubuntu.
- Press Install Now, then when prompted, then click on Continue.
- Next you'll be prompted to choose your location on the world map. Select your time zone location, click Continue.
- Create a username, a computer name (anything will do), and a password to login with. Also make sure you select Require a password to log in. Then press Continue.

Step 5 — Installing Ubuntu Part 3



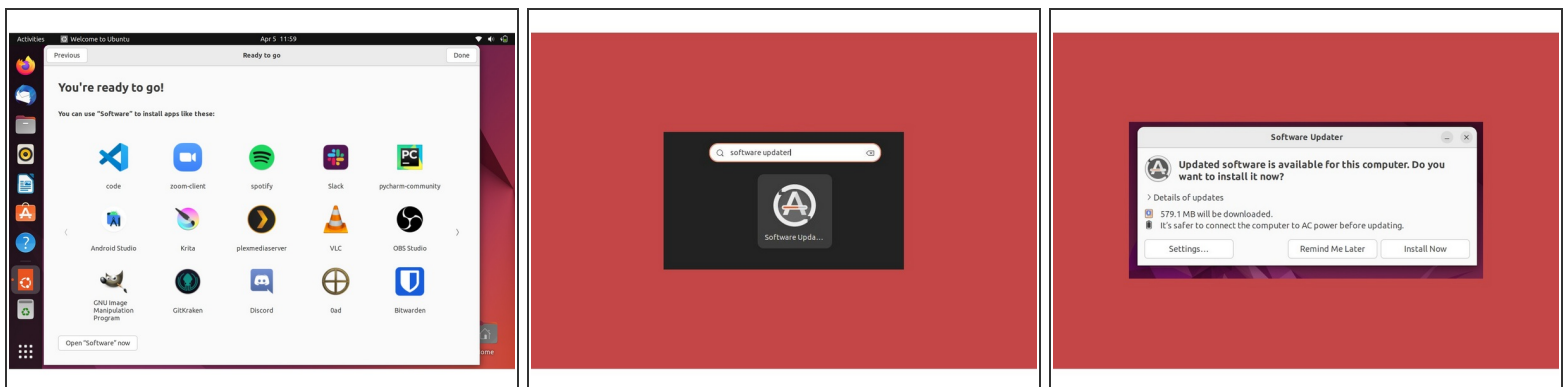
- Once the Ubuntu installer is completely done, you will see a box indicating that it's complete and time to reboot. Click Continue testing if you prefer or if you're comfortable and done testing, click the Reboot Now button.
- After pressing the Restart Now button, it will sit at a black screen for a bit, then you will be prompted to "Remove the installation Medium, then press Enter."

Step 6 — Installing Ubuntu Part 4



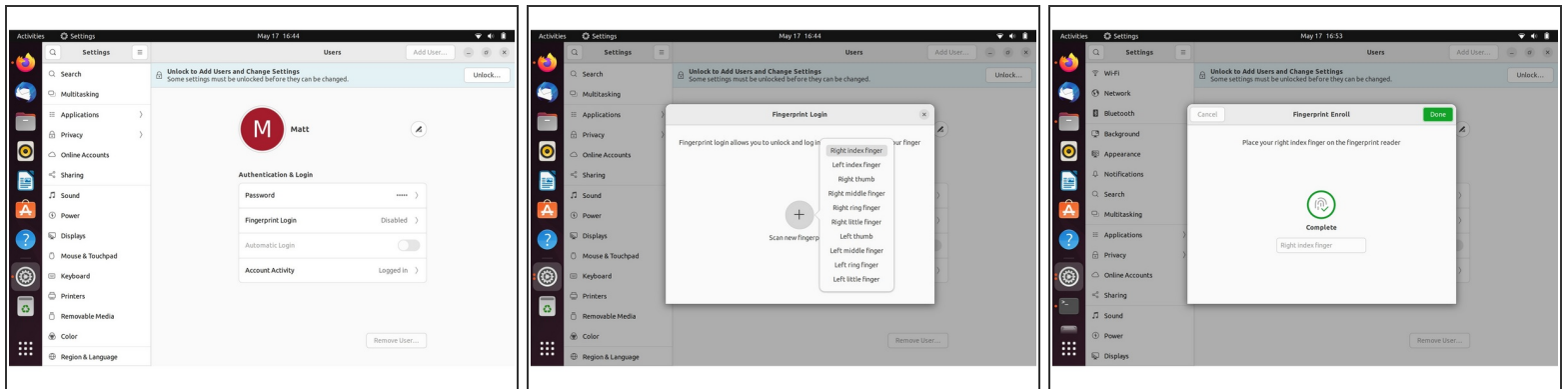
- Once rebooted, you'll be prompted to login, do so with your username and password. You'll then be prompted to login with your cloud accounts. I recommend skipping this as it's completely unnecessary. Press the skip button.
- Repeat this process with the other screens as seen in the provided images, while making selections and choices that best match your needs.

Step 7 — Installing Ubuntu Part 5



- Continue making your preferred selections through the Privacy page until you arrive at the "You're ready to go" screen. I recommend not installing software at this stage, instead clicking the Done button on the window.
- After clicking on the Done button, browse to Activities in the upper left, search Software Updater. Open the application.
- You may already have a window like the third image shown on the left appear before opening the updater - this happens and is totally fine. If this happens, go ahead and select Install now.

Step 8 — Installing Ubuntu Part 6 (Fingerprint Login)



- Let's setup fingerprint login. Click on Activities, search for user.
- Choose Fingerprint Login. Then select Scan new fingerprint. Select your desired fingerprint. Carefully tap your finger tip on the sensor (power button). You may need to try a few attempts as everyone's prints are different.
- Once it's successful, you will see the word Complete.

⚠ If you're finding that it cannot enroll your fingerprint or you would like to allow sudo to also use your fingerprint, please click through to this [knowledge base article](#).

Step 9 — Completing Setup

This is for 13th Gen ONLY.

This will:

- Update your Ubuntu install's packages.
- Install the recommended OEM kernel. Now recommending a new OEM kernel.
- Workaround needed to get the best suspend battery life for SSD power drain.
- Disable the ALS sensor so that your brightness keys work.
- Enable improved fractional scaling support for Ubuntu's GNOME environment using Wayland.
- Enable headset mic input.

COPY AND PASTE THIS CODE BELOW INTO A TERMINAL

- Browse to Activities in the upper left corner, click to open it.
- Type out the word terminal, click to open it.
- Left click and drag to highlight and copy the code below in the gray box, right click/paste to copy it into the terminal window.
- Then press the enter key, password, reboot.

```
sudo apt update && sudo apt upgrade -y && sudo apt-get install linux-owm-22.04c && echo "options snd-hda-intel model=hdmi;
headset-mic1" | sudo tee -a /etc/modprobe.d/alsa-base.conf && gettinigs set org.gnome.mutter experimental-Features "
["scale-monitor-framebuffer"]" && sudo sed -i -e "/@HDMI_ONLINE_LINK_DEFAULT"/@HDMI_ONLINE_LINK_DEFAULT"/@quiet option
module_blacklist=sensor_hub_hsw.noacpi"/g" /etc/default/grub && sudo update-grub && echo "[connection]" | sudo tee
/etc/NetworkManager/conf.d/default-wifi-powersave-on.conf && echo "wifi.powersave = 2" | sudo tee -a
/etc/NetworkManager/conf.d/default-wifi-powersave-on.conf
```

This is for 12th Gen ONLY.

This will:

- Update your Ubuntu install's packages.
- Install the recommended OEM kernel. Now recommending a new OEM kernel.
- Workaround needed to get the best suspend battery life for SSD power drain.
- Disable the ALS sensor so that your brightness keys work.
- Enable improved fractional scaling support for Ubuntu's GNOME environment using Wayland.
- Enable headset mic input.

COPY AND PASTE THIS CODE BELOW INTO A TERMINAL

- Browse to Activities in the upper left corner, click to open it.
- Type out the word terminal, click to open it.
- Left click and drag to highlight and copy the code below in the gray box, right click/paste to copy it into the terminal window.
- Then press the enter key, password, reboot.

```
sudo apt update && sudo apt upgrade -y && sudo apt-get install linux-owm-22.04c && echo "options snd-hda-intel model=hdmi;
headset-mic1" | sudo tee -a /etc/modprobe.d/alsa-base.conf && gettinigs set org.gnome.mutter experimental-Features "
["scale-monitor-framebuffer"]" && sudo sed -i -e "/@HDMI_ONLINE_LINK_DEFAULT"/@HDMI_ONLINE_LINK_DEFAULT"/@quiet option
module_blacklist=sensor_hub_hsw.noacpi"/g" /etc/default/grub && sudo update-grub && echo "[connection]" | sudo tee
/etc/NetworkManager/conf.d/default-wifi-powersave-on.conf && echo "wifi.powersave = 2" | sudo tee -a
/etc/NetworkManager/conf.d/default-wifi-powersave-on.conf
```

This is for 11th Gen ONLY.

This will:

- Update your Ubuntu install's packages.
- Install the recommended OEM kernel. Now recommending a new OEM kernel.
- Workaround needed to get the best suspend battery life for SSD power drain.
- Enable improved fractional scaling support for Ubuntu's GNOME environment using Wayland.
- Enable headset mic input.

COPY AND PASTE THIS CODE BELOW INTO A TERMINAL

- Browse to Activities in the upper left corner, click to open it.
- Type out the word terminal, click to open it.
- Left click and drag to highlight and copy the code below in the gray box, right click/paste to copy it into the terminal window.
- Then press the enter key, password, reboot.

```
sudo apt update && sudo apt upgrade -y && sudo apt-get install linux-owm-22.04c && echo "options snd-hda-intel model=hdmi;
headset-mic1" | sudo tee -a /etc/modprobe.d/alsa-base.conf && gettinigs set org.gnome.mutter experimental-Features "
["scale-monitor-framebuffer"]" && sudo sed -i -e "/@HDMI_ONLINE_LINK_DEFAULT"/@HDMI_ONLINE_LINK_DEFAULT"/@quiet option
module_blacklist=sensor_hub_hsw.noacpi"/g" /etc/default/grub && sudo update-grub && echo "[connection]" | sudo tee
/etc/NetworkManager/conf.d/default-wifi-powersave-on.conf && echo "wifi.powersave = 2" | sudo tee -a
/etc/NetworkManager/conf.d/default-wifi-powersave-on.conf
```

● We're almost done. Please follow the links to your individual Framework 13 laptop model (11th, 12th or 13th Gen)

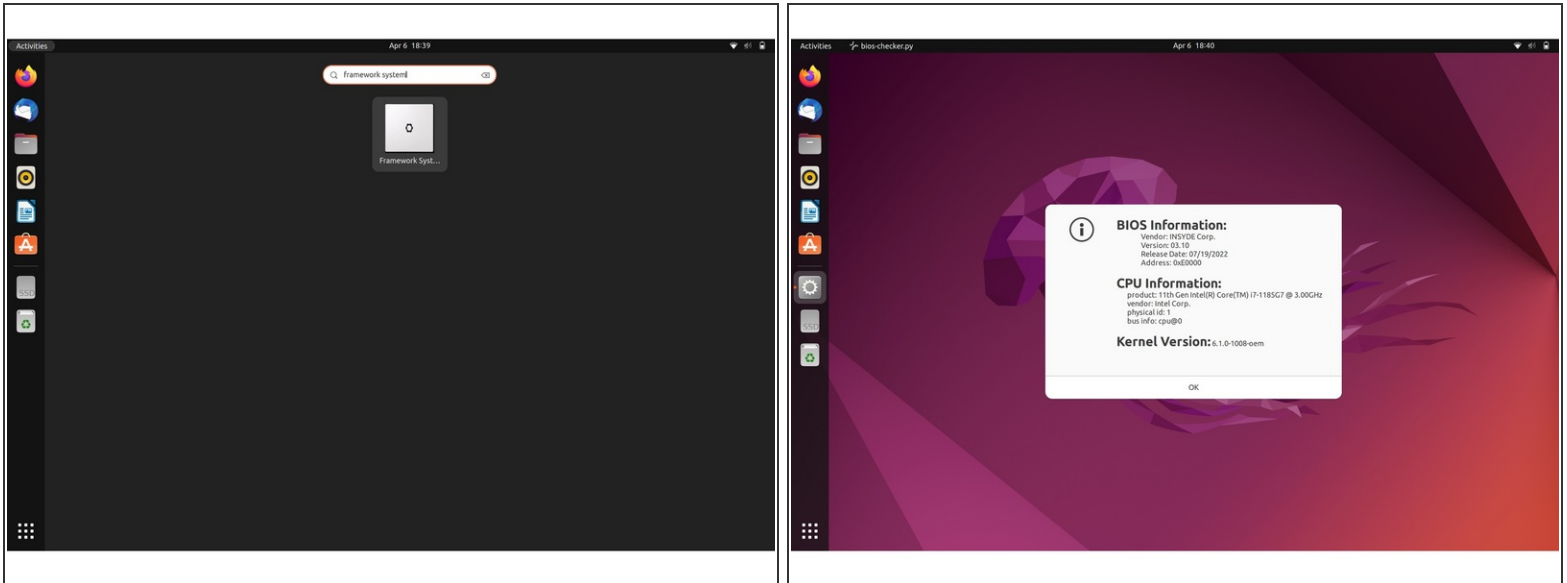
 [Click here](#) for the completion guide for **13th Gen**.

 [Click here](#) for the completion guide for **12th Gen**.

 [Click here](#) for the completion guide for **11th Gen**.

 Our recommendations for [Optimizing Ubuntu Battery Life](#).

Step 10 — Recommended: Updating to the latest firmware



- Before updating to the latest firmware, let's make sure we verify which BIOS were running. Simply download and [install this package](#). And [here is the repository](#) with the license, etc.
- Go to Activities, search for Framework System Details, launch the application. This will tell you the BIOS version your using, your CPU version (11th or 12th Gen), and of course your kernel version on Ubuntu 22.04.

⚠ If you have Intel 11th gen, you can check [here for the latest firmware](#).

⚠ If you have Intel 12th gen, you can check [here for the latest firmware](#).

Step 11 — Troubleshooting Ubuntu 22.04

Help Center > Products > Operating Systems

Search the knowledgebase...

Ubuntu General Troubleshooting

January 20 2023 3:05pm • Est. Read Time: 5 MIN

Framework has done a lot of work to ensure Ubuntu works upon installation with 11th and 12th-generation Framework laptops. Some things can be done to make the day-to-day usage experience smoother. We have guides for [Ubuntu 22.04](#) and [Ubuntu 22.10](#). It's also highly recommended you [read our Linux user's expectations guide](#). Tips like using TimeShift and locking down updates to Security updates can prevent or at least allow you to sidestep common Ubuntu challenges that can happen with Ubuntu updates introducing potential regressions.

This article will present you with proven techniques for troubleshooting some of the most common Ubuntu issues. And for anything that does not appear in this article, you will be ready to ask for help by providing all the needed details our community members would need to provide assistance.

- Expecting two-finger right clicking and need help? [The touchpad help guide](#) is here.
- Please visit our [troubleshooting guide](#) first.
- If you need additional help, feel free to visit our [active support community](#).

Enjoy using Ubuntu on your Framework Laptop 13! If you have any questions or run into any issues, we recommend bringing them to the Community in the [Ubuntu 22.04 topic](#). Members of the Framework team participate in discussions there.