



Fedora KDE Plasma Desktop Installation on the Framework Laptop 12 Intel® Core™ Series 3

How to install Fedora KDE Plasma Desktop 44 on a Framework Laptop 12 Intel® Core™ Series 3

Written By: Matt Hartley



INTRODUCTION

Once you have your Framework Laptop 12 Intel® Core™ Series 3 set up following the [Quick Start Guide](#), you're ready to install your preferred OS. The Framework Laptop 12 is running some very recent hardware, and we've worked with the team at Fedora to improve support. Fedora 44 is one of the Linux distributions we recommend, as it has full hardware support with very little setup required, and it offers a great user experience overall.

One note on Fedora is that the distro follows a fairly aggressive update policy on new kernels. This means that if you have the most recent generation of hardware, there is a higher risk that a kernel update could have a driver regression. On older platforms, this is less of a risk. To avoid this risk altogether, you can use a more conservative distro like Ubuntu LTS.

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



PARTS:

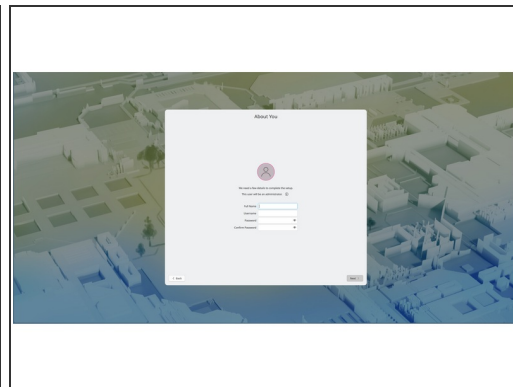
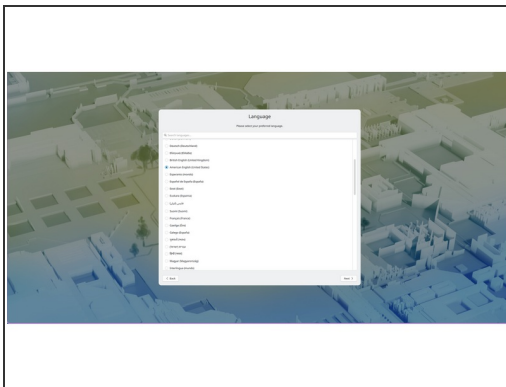
- [Storage Expansion Card](#) (1)
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Step 1 — Fedora KDE Plasma Desktop on both Pre-Built model or DIY model Framework Laptop 12 Intel® Core™ Series 3



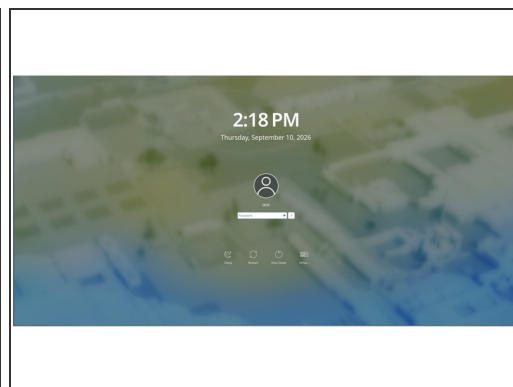
- ⚠ This guide is for the Fedora KDE Plasma Desktop Pre-Built model or DIY model Framework Laptop 12 Intel® Core™ Series 3, we recommend running the provided OEM ISO. This guide provides for that ISO.
- ⚠ There are **redundant steps** when comparing Pre-built vs the DIY installation flow below. **That is by design** to ensure you are not jumping around on the page.
- ✳ This guide is broken up into two parts.
 - **Pre-built owners** ([Steps 2–9](#)): first boot experience and setup of your Framework Laptop 12 with Fedora KDE Plasma Desktop.
 - **DIY, or pre-built reinstalling** ([start at Step 10](#)): OEM ISO install and setup of your Framework Laptop 12 with Fedora KDE Plasma Desktop.
- ℹ Framework Laptop 12 (13th Gen Intel® Core™) customers looking for Fedora KDE Plasma Desktop, [please visit our guide here](#).

Step 2 — Pre-built first boot with Fedora KDE Plasma Desktop



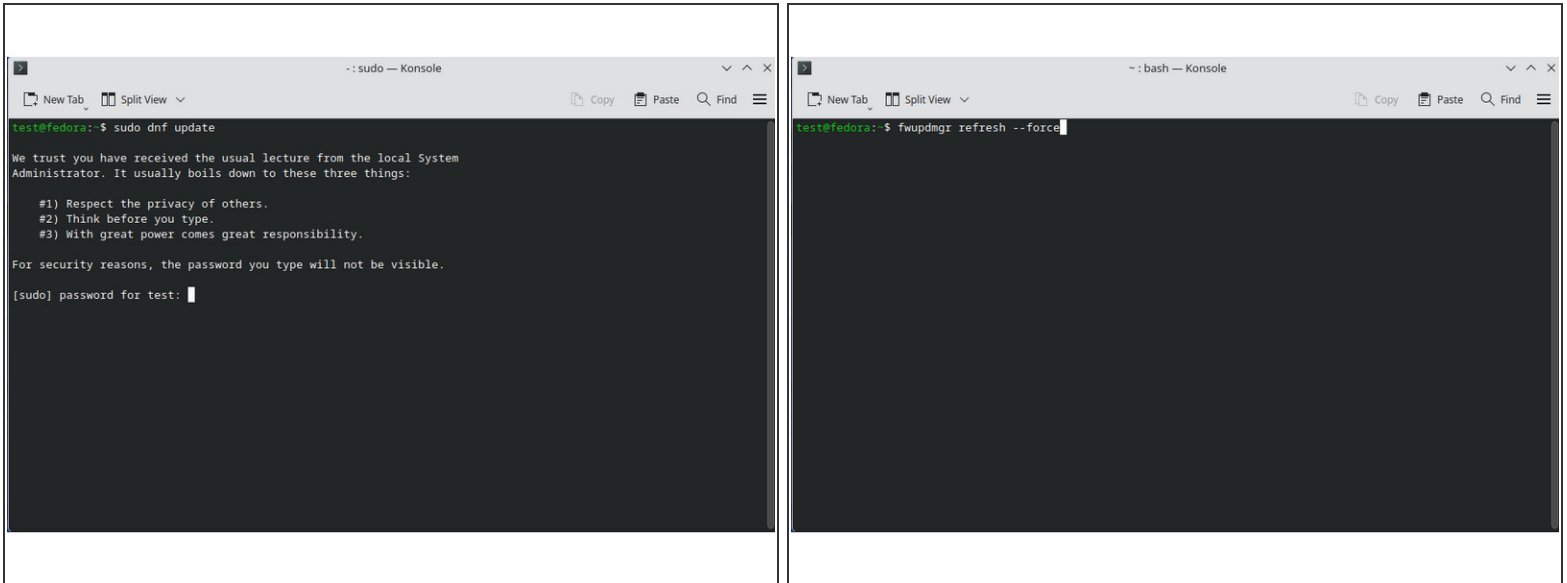
- ❗ **Pre-Built** ships with an OEM image of Fedora KDE Plasma Desktop already installed.
- First boot: power on, once the screen loads, click on Begin Setup.
 - Choose your language, then keyboard layout.
 - When asked, toggle dark theme if you want it. Then set up your user in About You. Then give it a hostname of your own choosing. Anything without spaces is fine.

Step 3 — Pre-built first boot with Fedora KDE Plasma Desktop Part 2



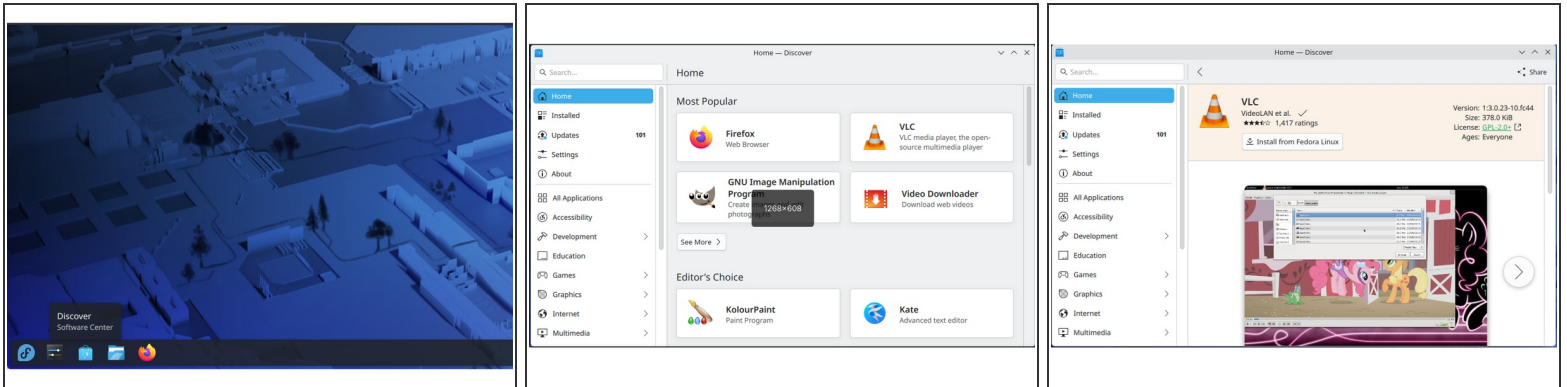
- ❗ **Pre-Built** ships with an OEM image of Fedora KDE Plasma Desktop already installed.
- Select your time zone.
 - Click next, then click finish.
 - You will then be asked to log in. Do so at the prompt.

Step 4 — Pre-built updating the Fedora KDE Plasma Desktop Part 3



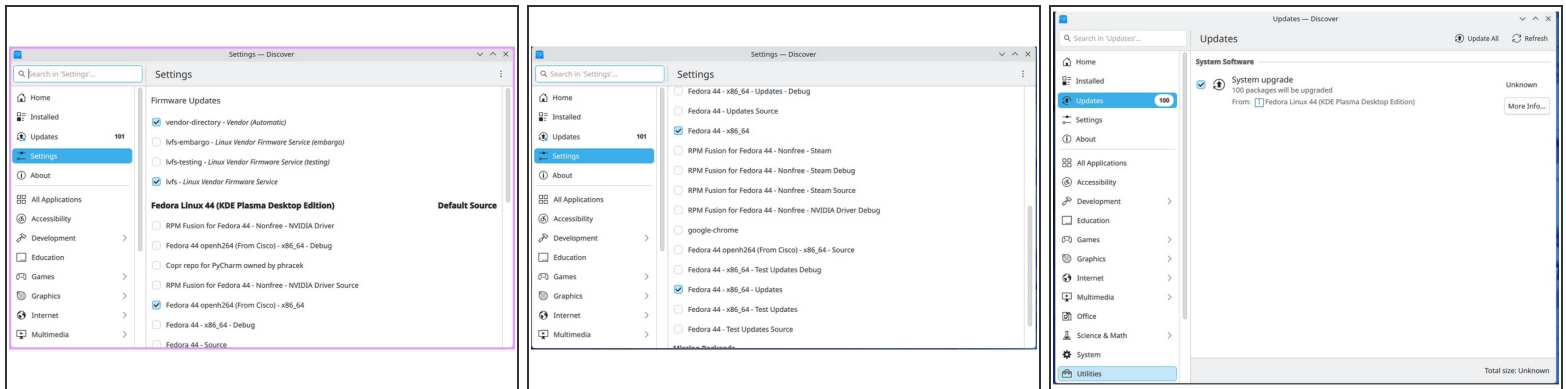
- ☒ In this step, we will be updating software and checking for firmware updates. Open a terminal, run the following command:
 - `sudo dnf update`
 - Enter your password when prompted. When updates are complete, reboot.
- ☒ Update your BIOS/Firmware. Open the terminal, run the following command and follow the directions. If there are no updates available, that is completely fine. This just ensures you are current.
 - ⚠ LVFS may not update if the battery is at 100%. If you experience issues, discharge to 95%, plug AC back in, then re-run `fwupdmgrr update`.
 - `fwupdmgrr refresh --force`
 - `fwupdmgrr get-updates`
 - `fwupdmgrr update`

Step 5 — Installing your first software applications - Discover Software Center



- You can install new applications using the Discover Software Center. It is the blue shopping bag icon seen in the first image.
- From here, you can search for applications by name or task. If you prefer, you may simply browse for an application instead.
- Once you have selected an application to install, simply click on Install from Fedora Linux as seen in the final image.

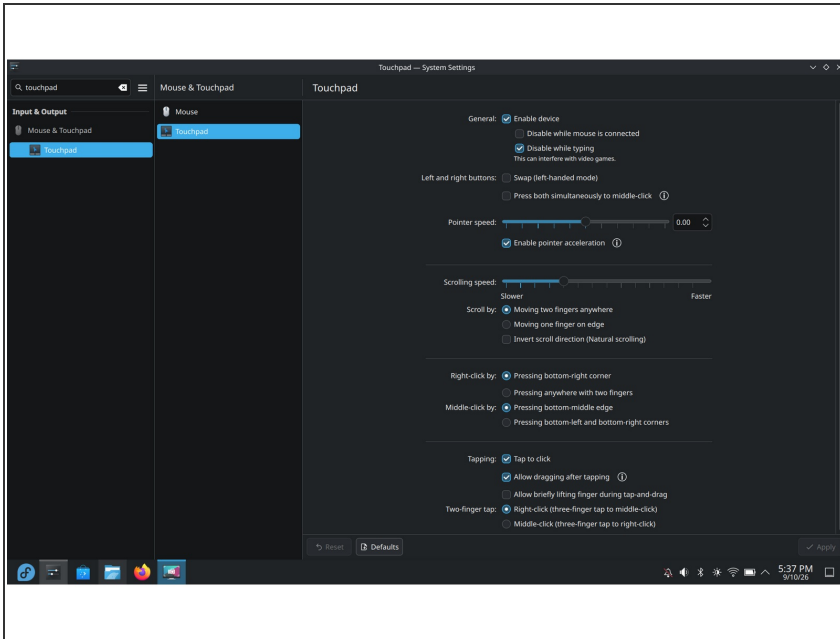
Step 6 — Settings - Discover Software Center



✎ The Discover Software Center has some important settings to be aware of.

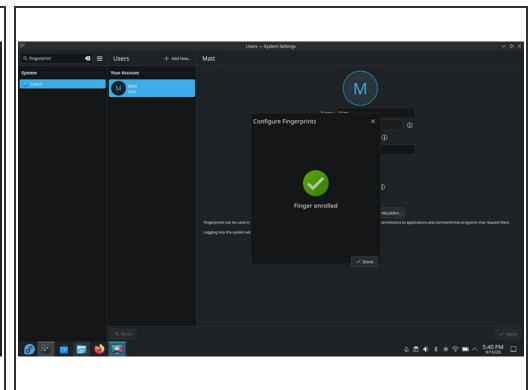
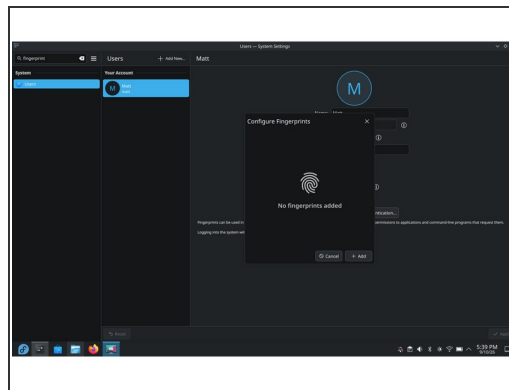
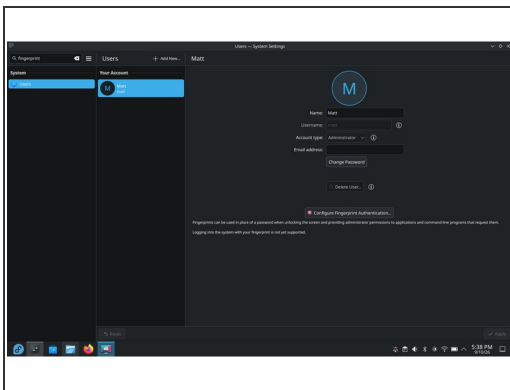
- ⚠ **Uncheck Vendor directory and lvfs. Your first uncheck will prompt for your user password, this is expected. Enter that password. Proceed to second checkbox to uncheck.**
- Everything under **firmware** should now be **unchecked**. We ask you to do this as it allows us to ensure you are using [our specific guidance](#) for firmware updates. Graphical layers are not always as verbose in errors if you need support later.
- ① And the second section shown in the second image is for enabling the software sources for Steam or Google Chrome. Same flow, check the box, enter your user password as prompted.
- ① Software updates. Now that you have the settings configured, you can use Discover to update your software as shown in the final image.
- Select Updates in the side panel, click refresh then click update all. Follow the prompts and user password request.

Step 7 — Touchpad settings



- Go to Settings, second icon on the left on your panel.
- In the settings search box, type touchpad. Then click on Touchpad on the left panel.
- From here, you are able to make any tweaks you may need with regard to touchpad behavior. Everything is clearly listed on the same window.

Step 8 — Fingerprint Reader



⚠ IMPORTANT: KDE Plasma does not provide for fingerprint login. It does provide for screen unlock from a locked screen or software requiring sudo permissions.

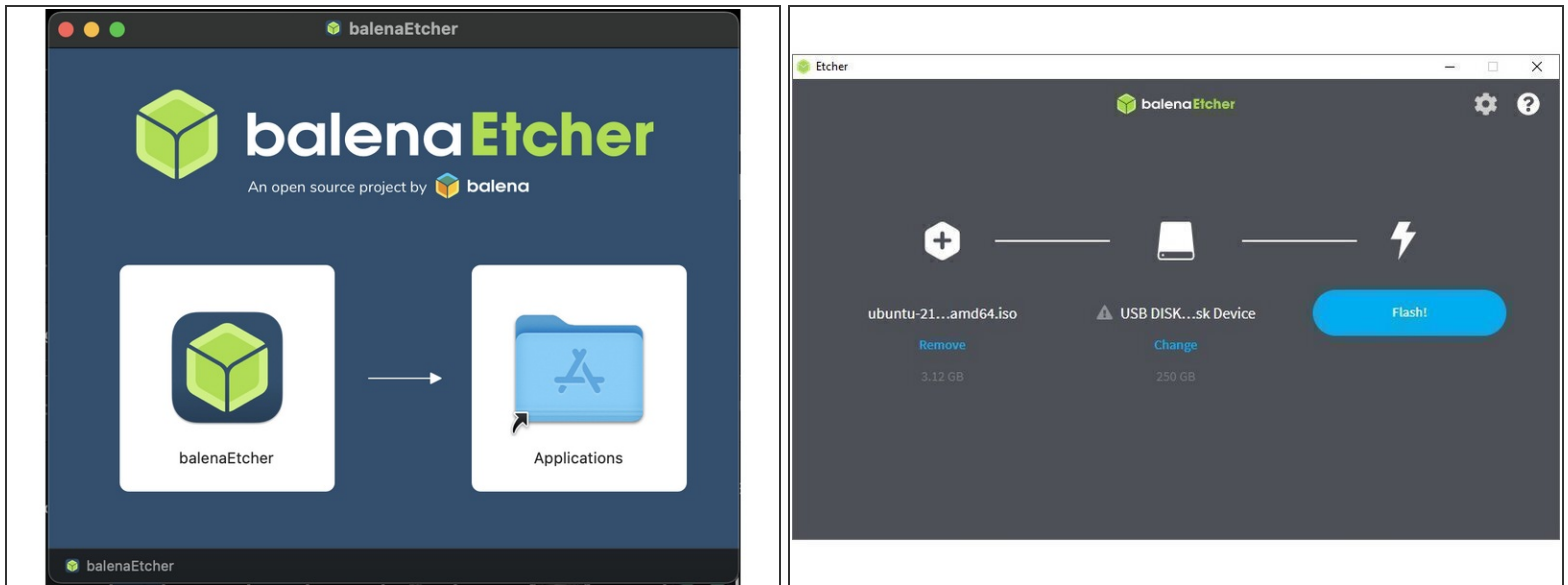
- Go to settings, search for fingerprint. Click on the Configure Fingerprint Authorization button.
- Click Add, then select which finger you wish to use.
- On the right side of your laptop, locate the power button and place your finger against it horizontally. Follow the prompts to register your fingerprint.

Step 9 — Completing Setup



- ✦ You are all done. Everything is ready to go.
- ⓘ **Using Tablet Mode.** Simply fold back the screen into tablet mode. The on-screen keyboard appears when you enter any text field like application search, text editing, etc.
- ⓘ Important note on [expansion card behavior](#).

Step 10 — (From macOS) Preparing USB Fedora Installation Media



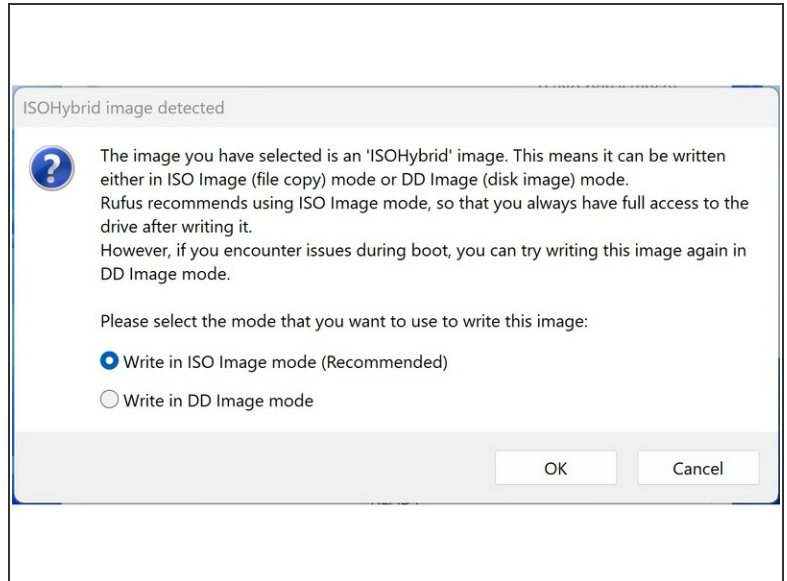
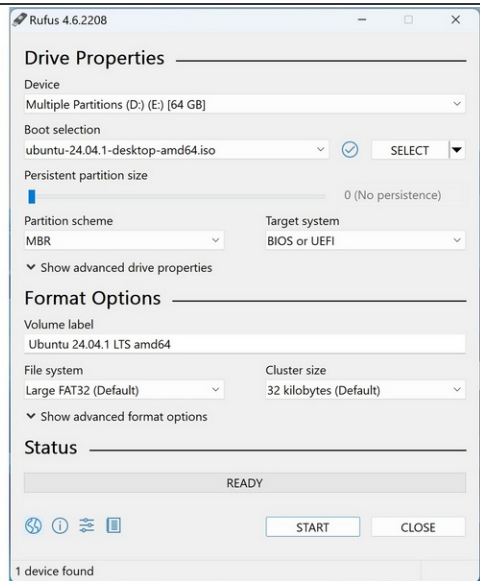
⚠ This applies to DIY or Pre-built seeking to create installation media for the Fedora KDE Plasma Desktop.

- [Download Fedora KDE Plasma Desktop from this link](#). This Guide assumes a simple installation scenario. You will also want to [download the checksum](#) to the same directory, as well.
- ① **Verify before installing:** | 1. Save the .iso and .sha256sum files in the same folder | 2. Open a terminal there and run: `sha256sum --ignore-missing -c *.sha256` | 3. Confirm it prints "**OK**" next to the filename | If it says **FAILED** or "No such file," re-download the ISO before installing.

⚠ **Please use the above linked OEM Fedora KDE Plasma ISO.**

- Download [balenaEtcher](#) as a tool to create the USB installer from the ISO. balenaEtcher is available for MacOS. Install it.
- Launch balenaEtcher. Insert your USB drive (8GB or larger). Click on "Flash from file" and select the Fedora 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 11 — (From Windows) Preparing USB Fedora Installation Media



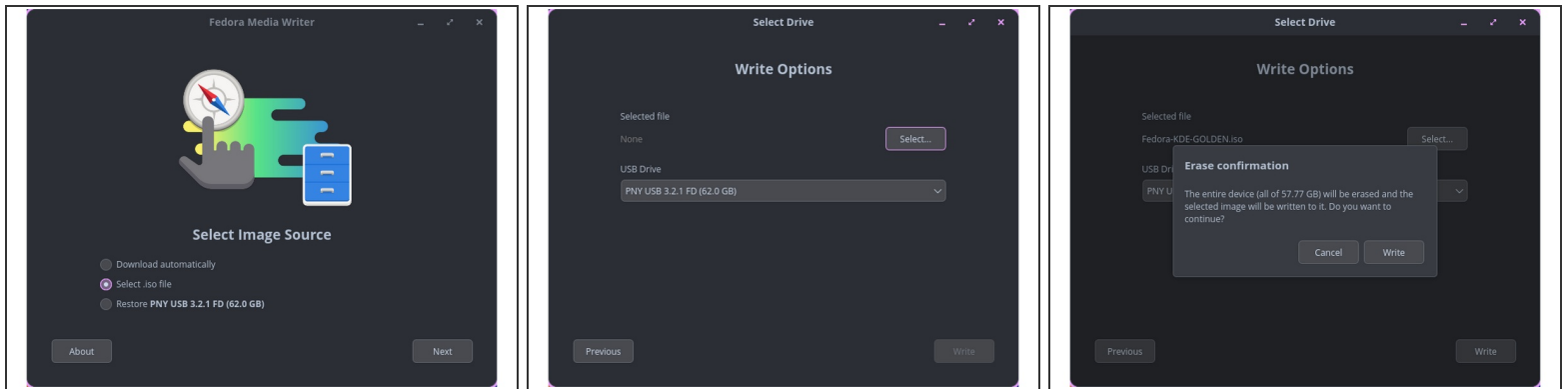
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⚠ **Please use the above linked OEM Fedora KDE Plasma ISO.**

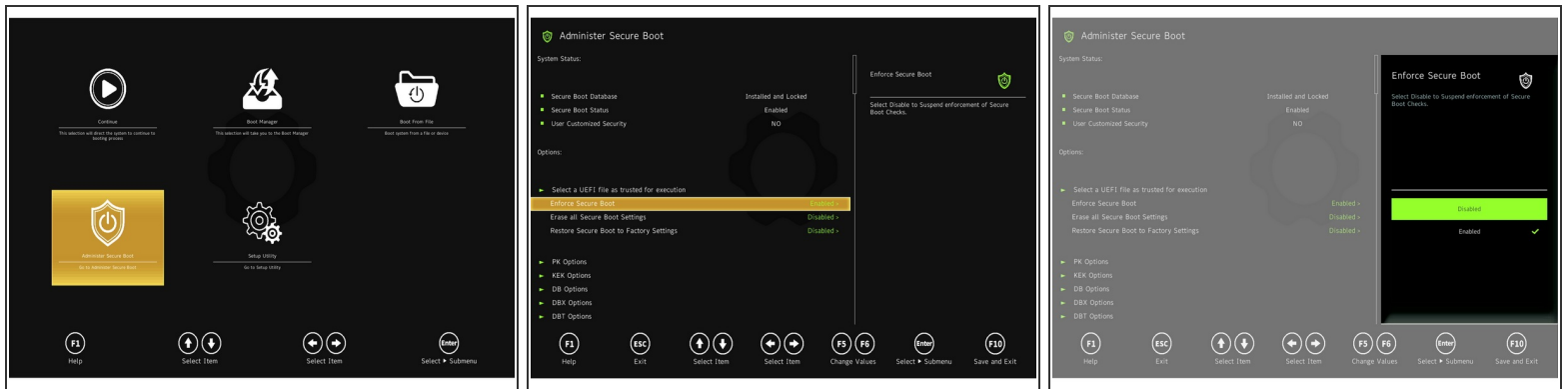
- Download [Rufus](#) as a tool to create the USB installer from the ISO - select the top download option from the link provided. Rufus is available for Windows. Install it.
- ⚠ If you are removing Windows to install Linux, you may run into the "Device is Active" error. [This will provide you with guidance](#) to overcome this error.
- Launch Rufus. Insert your USB drive (8GB or larger). Rufus will detect it automatically under the "Device" dropdown at the top — confirm your USB drive is selected there. Click "SELECT" and choose the Fedora ISO that you downloaded. Click "START" and wait a minute or two for it to complete.

Step 12 — (From Linux) Preparing USB Fedora Installation Media



- [Download Fedora KDE Plasma Desktop from this link](#). This Guide assumes a simple installation scenario. You will also want to [download the checksum](#) to the same directory, as well. **Please use the linked OEM Fedora KDE Plasma ISO.**
 - ❗ **Verify before installing:** | 1. Save the .iso and .sha256sum files in the same folder | 2. Open a terminal there and run: `sha256sum --ignore-missing -c *.sha256` | 3. Confirm it prints "OK" next to the filename | If it says **FAILED** or "No such file," re-download the ISO before installing.
- **Fedora:** Media Writer is already installed on Workstation, so just launch it from the app menu.
- **Other distro, Flatpak installed:** Run `flatpak install flathub org.fedoraproject.MediaWriter`, then launch it from the app menu or with `flatpak run org.fedoraproject.MediaWriter`.
- **Other distro, no Flatpak:** Install Flatpak and add Flathub per <https://flathub.org/setup>
- Insert an 8 GB+ USB key. Back up its contents first, since this erases the entire drive.
- Open Fedora Media Writer, choose **Select .iso file**, and pick the Fedora KDE Plasma Desktop ISO you downloaded. Select your USB drive from the device list, double-checking the name and size so you don't wipe the wrong disk.
- **Click Write**, enter your password if prompted, wait for it to finish, then **click Finish** and safely eject the USB.

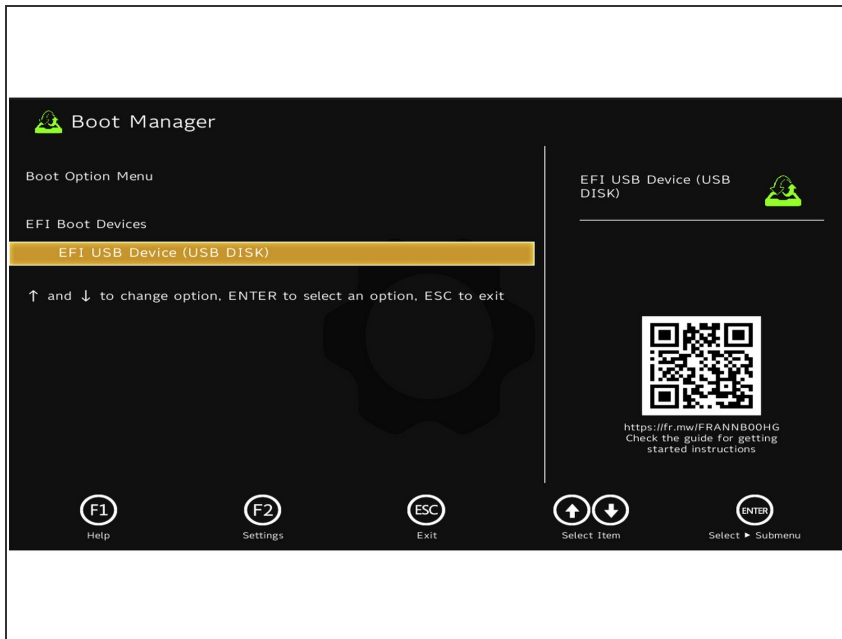
Step 13 — Secure Boot



⚠️ Fedora works with Secure Boot out of the box. Fedora Live USBs will boot regardless of whether or not it is disabled. Users who intend to dual-boot with Windows should not disable Secure Boot!

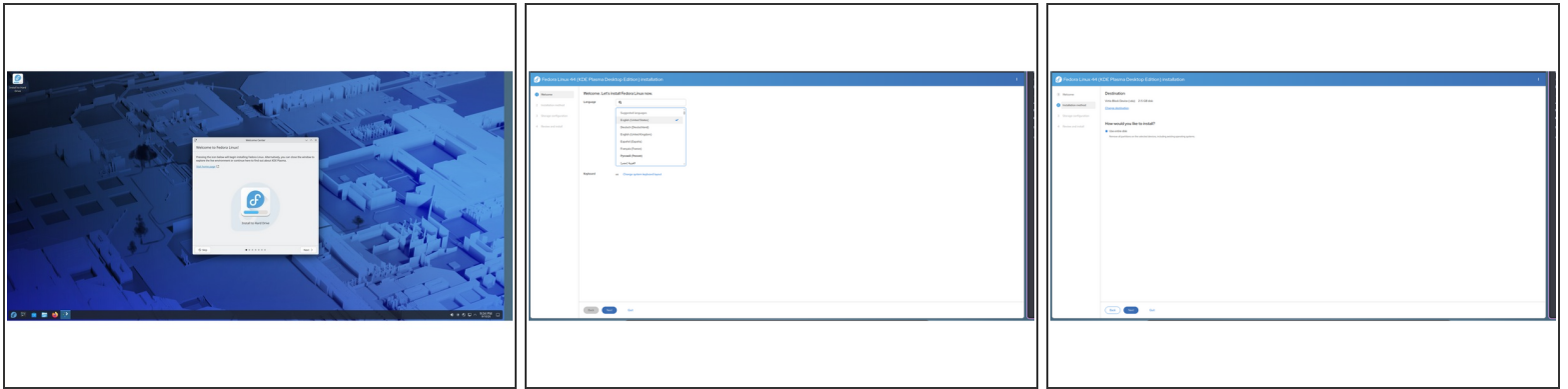
- ❗ If a user has a reason to disable Secure Boot, such as specialized third party devices that require unsigned drivers:
 - Boot into BIOS by tapping F2 just before the Framework splash screen.
 - Arrow down to Administer Secure Boot. Press enter.
 - Arrow down to Enforce Secure Boot. Press enter, select Disabled, and press enter.
 - Press F10 to save and reboot. With Yes selected, press Enter.
- 🔖 To enable Secure Boot again, repeat the above steps but select Enable this time.

Step 14 — Booting to Live Fedora USB



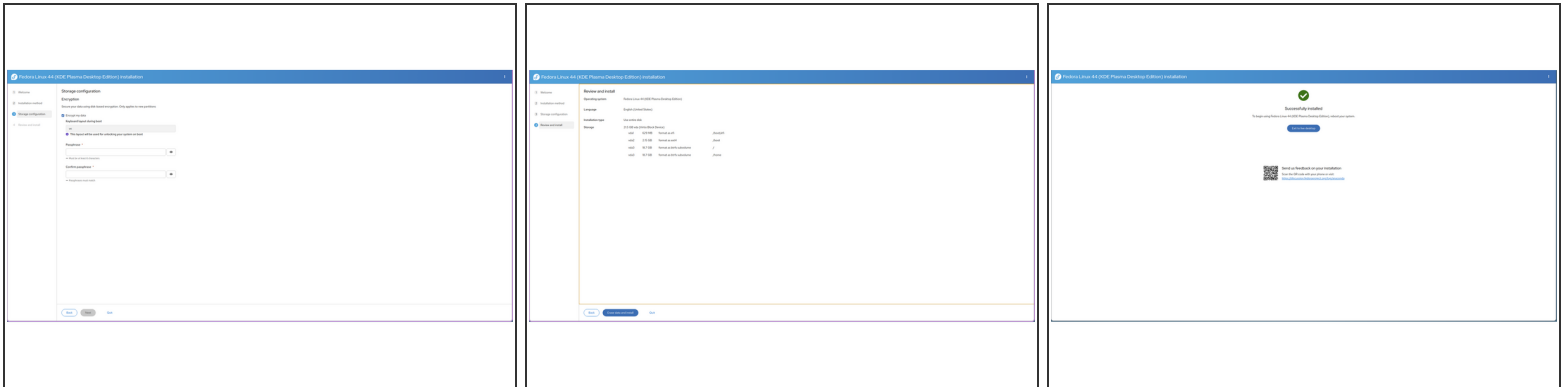
- Boot to Fedora Live USB: Insert the USB drive into the powered-off machine, then power it on.
- ❗ If an OS is already installed, immediately begin tapping F12 as soon as the power light comes on. Start tapping before the Framework logo appears.
- At the Boot Option Menu, use arrow keys to select your USB drive (shown as "EFI USB Device (USB Disk)" or similar) and press Enter.
 - ⚠ If Windows is currently installed, trying to boot a Linux Live USB can result in the "Device is Active" error. [This will provide guidance to overcome this error.](https://fr.mw/FRANNB00HG)
- Next select Start Fedora Workstation-Live 44. Hit the enter key.
- The installer will start automatically after some time. How long depends on the speed of the USB drive.

Step 15 — Installing Fedora KDE Plasma Desktop to a drive



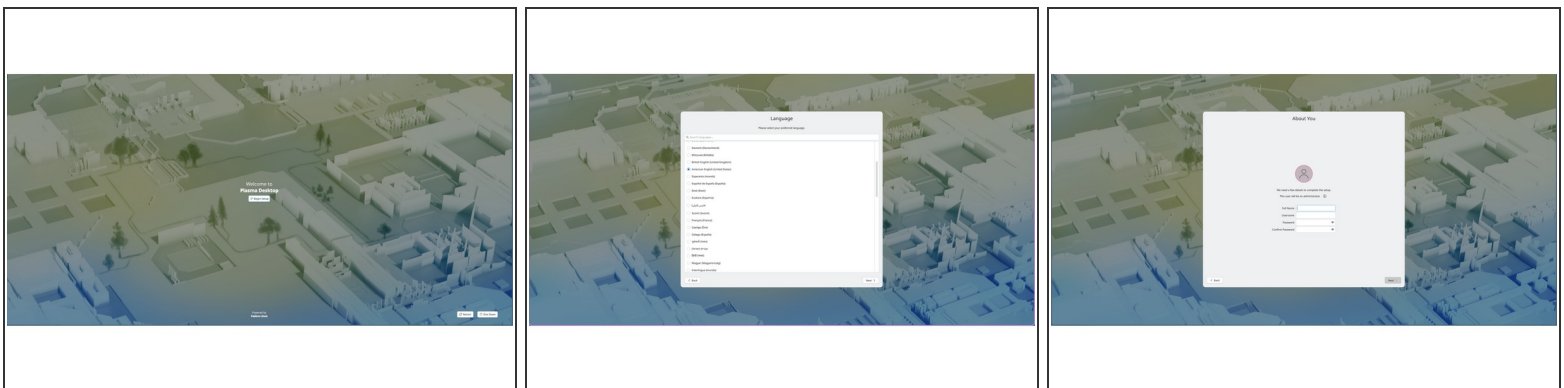
- ✦ Once it boots to the Live media, you will notice a box. Buttons presented are *Skip* and *Next*; ignore those two options entirely. The **large button with the Fedora logo** is the one we want to pay close attention to. Click that, the screen will flash and the installer process will appear.
- ⚠ These installation instructions are for the **Fedora KDE Plasma Desktop Pre-Built model or DIY model Framework Laptop 12 Intel® Core™ Series 3**.
- ℹ Whether you are installing to a **DIY** model or if you are looking to "factory reset" your **Pre-built** model, please follow these instructions to install from your created media for the OEM ISO created earlier.
- Select your language, click next. Next, click Install to hard drive. A screen will pop up and disappear. Then you will be presented with how you would like to install. We recommend entire disk for most users. This will erase all other data on that drive.

Step 16 — Installing Fedora KDE Plasma Desktop to a drive part 2



- If you would like to use LUKS disk encryption, you may enable it here.
- Next, you are ready to erase the data on your disk and install the operating system.
- Once you are ready to erase your disk and install, click the blue button marked Erase and Install.
- Once the installation is completed, you may Exit to Desktop, then reboot from the Fedora launcher in the lower left corner of the desktop itself.

Step 17 — Installing Fedora KDE Plasma Desktop to a drive part 3 - First boot



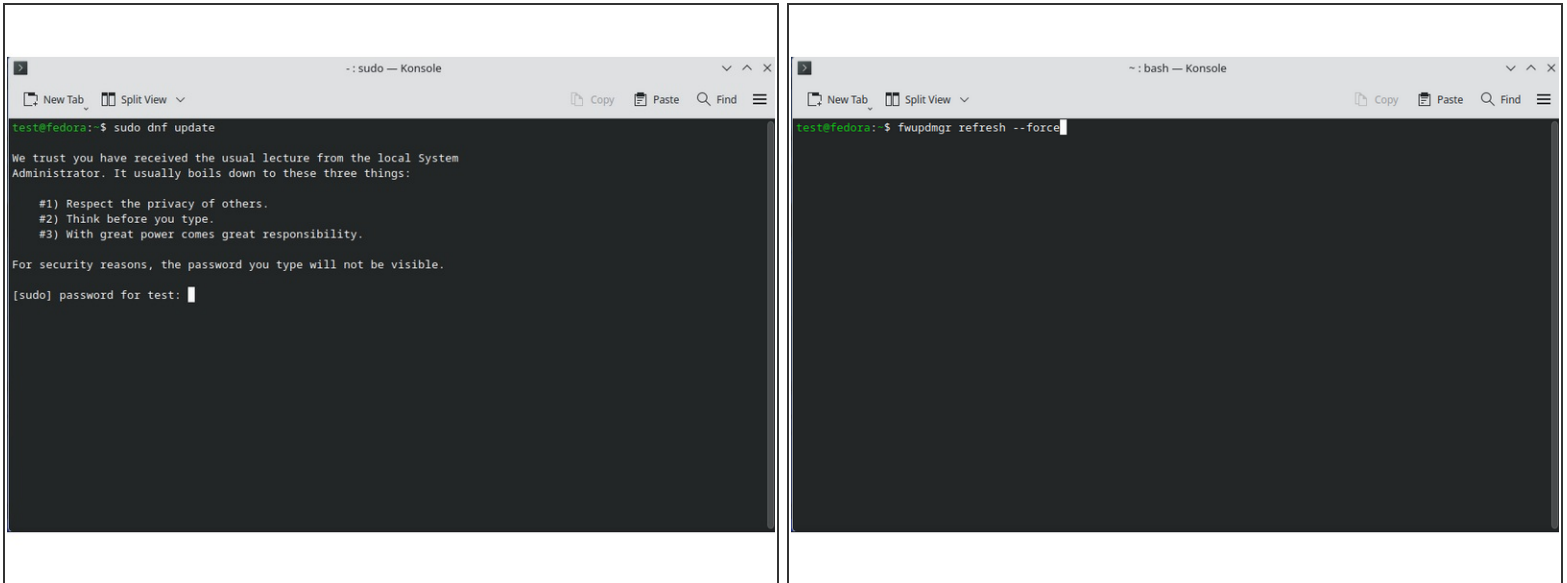
- Once rebooted, you will see a screen appear and disappear, then you will see the button to Begin Setup. Click this.
- Select your language and keyboard layout, you will click next each time as prompted.
- After making your selections and clicking next each time, you will then set up your user account.
- Now you are asked to create or accept the default hostname.

Step 18 — Installing Fedora KDE Plasma Desktop to a drive part 4 - Almost done



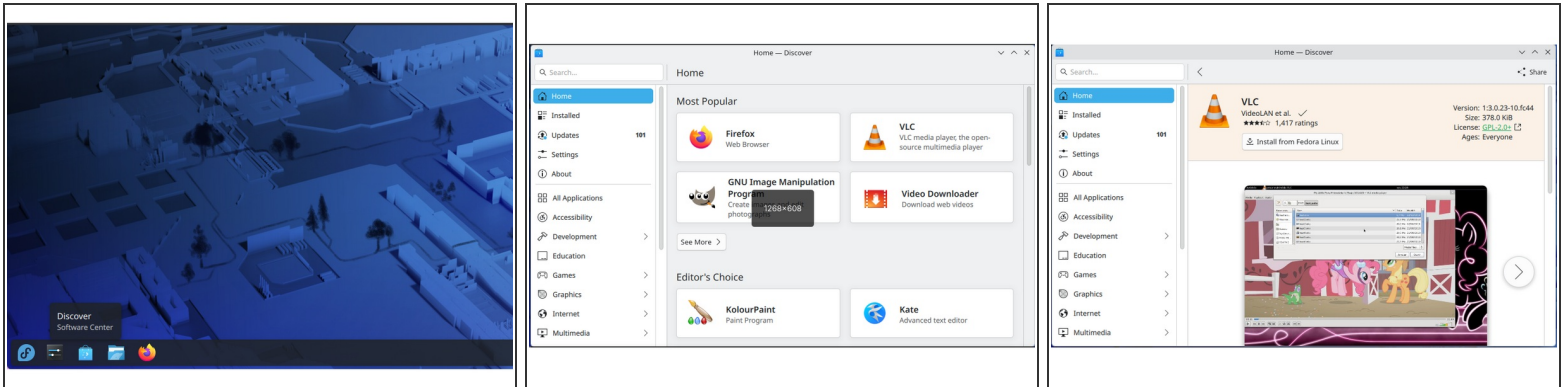
- Select your time zone. Click next.
- And we are done with the installation. Click Finish.
- Shortly after this, you will then be presented with your log in screen. From every reboot onward, this will be how you log in to your computer.
- Go ahead and log in and we will get the final configuration done next.

Step 19 — New install - updating the Fedora KDE Plasma Desktop



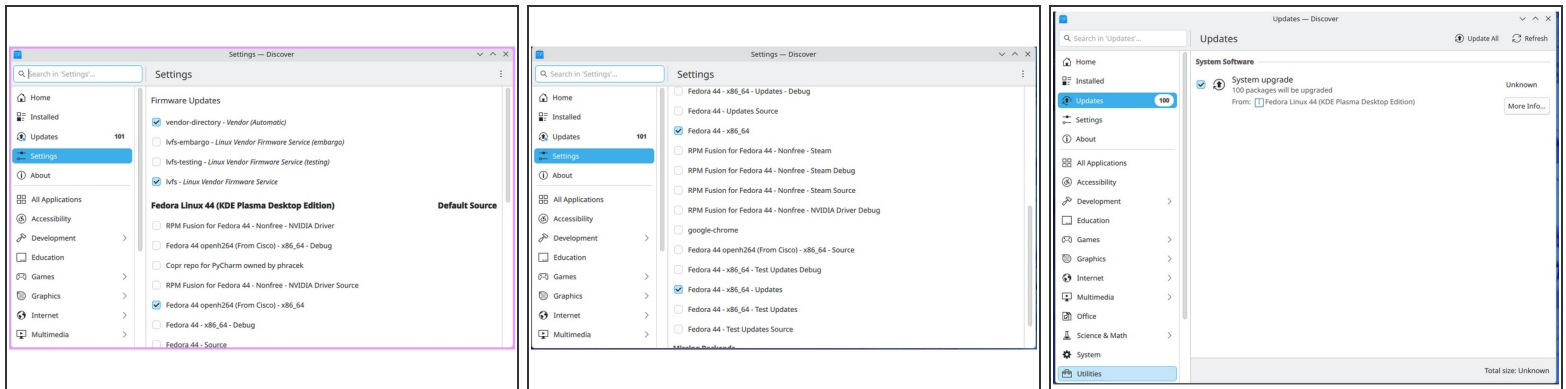
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 - `fwupdmgrr refresh --force`
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Step 20 — New Install - Installing your first software applications - Discover Software Center



- You can install new applications using the Discover Software Center. It is the blue shopping bag icon seen in the first image.
- From here, you can search for applications by name or task. If you prefer, you may simply browse for an application instead.
- Once you have selected an application to install, simply click on Install from Fedora Linux as seen in the final image.

Step 21 — New Install - Settings - Discover Software Center

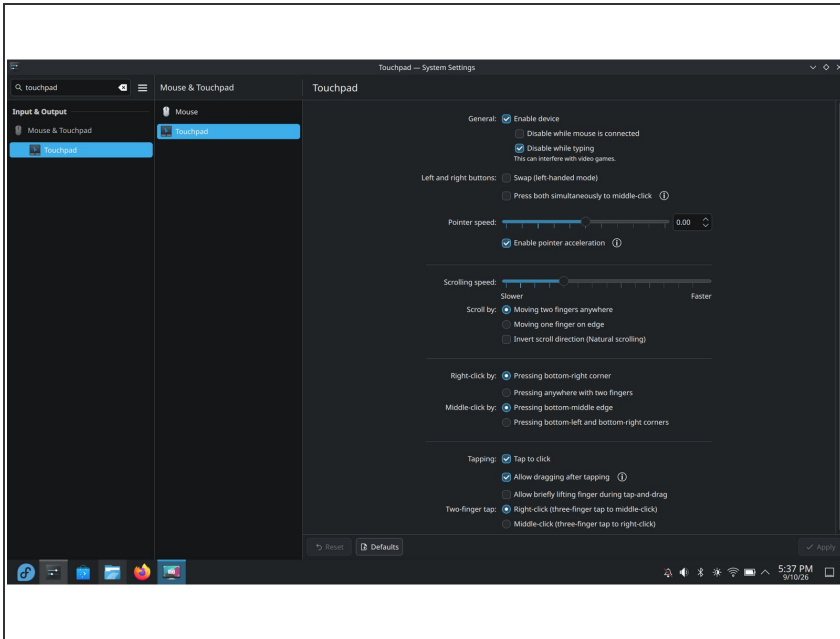


✎ The Discover Software Center has some important settings to be aware of.

⚠ **Uncheck Vendor directory and lvfs. Your first uncheck will prompt for your user password, this is expected. Enter that password. Proceed to second checkbox to uncheck.**

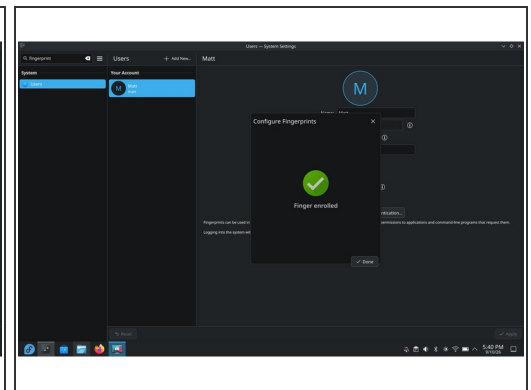
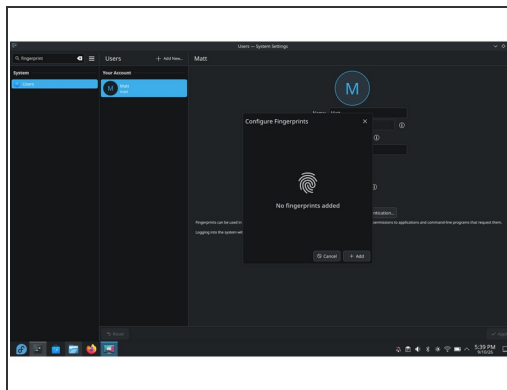
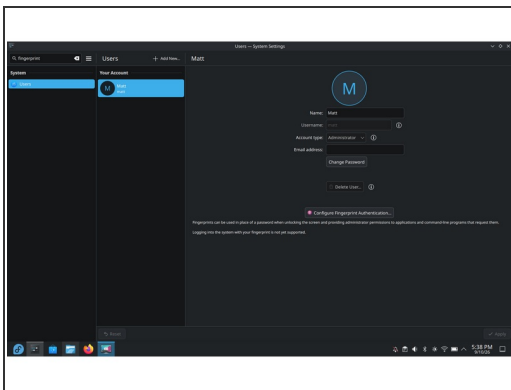
- Everything under **firmware** should now be **unchecked**. We ask you to do this as it allows us to ensure you are using [our specific guidance](#) for firmware updates. Graphical layers are not always as verbose in errors if you need support later.
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- ❗ Software updates. Now that you have the settings configured, you can use Discover to update your software as shown in the final image.
 - Select Updates in the side panel, click refresh then click update all. Follow the prompts and user password request.

Step 22 — New Install - Touchpad settings



- Go to Settings, second icon on the left on your panel.
- In the settings search box, type touchpad. Then click on Touchpad on the left panel.
- From here, you are able to make any tweaks you may need with regard to touchpad behavior. Everything is clearly listed on the same window.

Step 23 — New Install - Fingerprint Reader



⚠ IMPORTANT: KDE Plasma does not provide for fingerprint login. It does provide for screen unlock from a locked screen or software requiring sudo permissions.

- Go to settings, search for fingerprint. Click on the Configure Fingerprint Authorization button.
- Click Add, then select which finger you wish to use.
- On the right side of your laptop, locate the power button and place your finger against it horizontally. Follow the prompts to register your fingerprint.

Step 24 — New Install - Completing Setup



- ✦ If you installed Fedora KDE Plasma Desktop using the provided link in this guide, you are done.
- ❗ **Using Tablet Mode.** Simply fold back the screen into tablet mode. The on-screen keyboard appears when you enter any text field like application search, text editing, etc.
- ❗ Important note on [expansion card behavior](#).

Enjoy using Fedora KDE Plasma Desktop on your Framework Laptop 12!