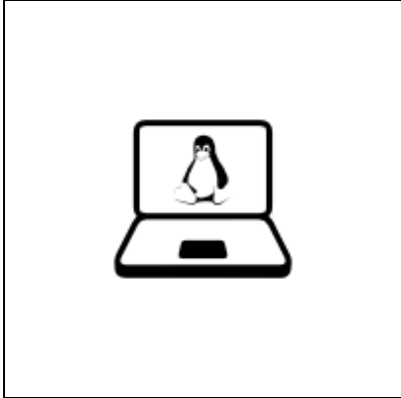


Install from Linux



Start in Linux.

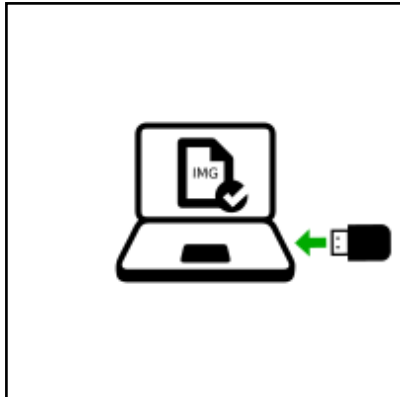
2/5 Install Tails using *GNOME Disks*

1. Install *GNOME Disks*.

- If you are using the GNOME desktop environment, *GNOME Disks* should be installed by default.
- Otherwise, install the `gnome-disk-utility` package using the usual installation method for your distribution.

2. Start *GNOME Disks* (also called *Disks*).

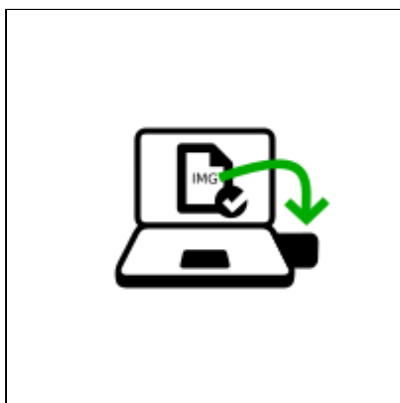
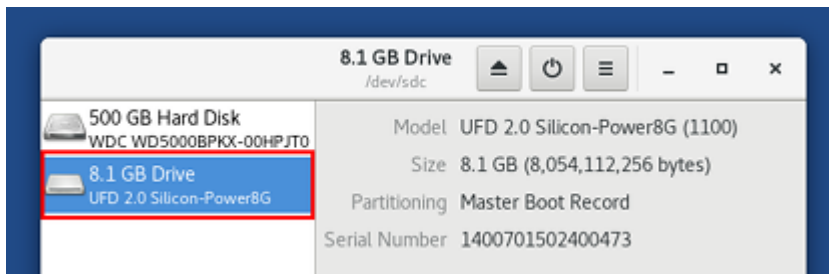
For example, you can press the **Super** key, then type `disks`, then type **Enter**.




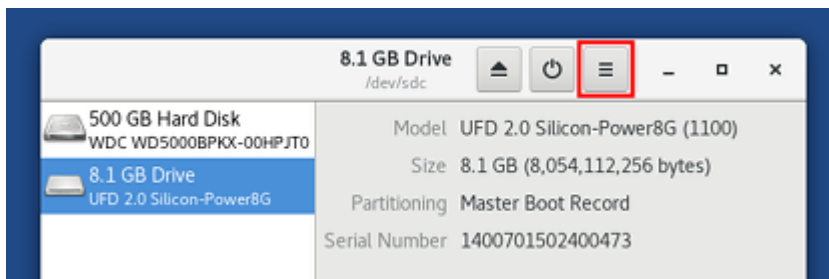
3. Plug in the USB stick on which you want to install Tails.

All the data on this USB stick will be lost.

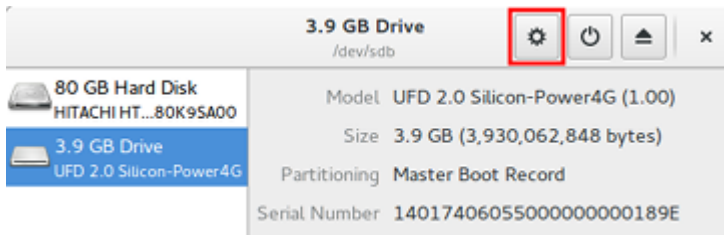
A new drive appears in the left pane. Click on it.



4. Click on the  button in the titlebar and choose **Restore Disk Image....**



If your version of *GNOME Disks* is old it might have a ⚙️ button instead. Click on the ⚙️ button and choose **Restore Disk Image....**



5. In the **Restore Disk Image** dialog, click on the file selector button.

Choose the USB image that you downloaded earlier.

Make sure that the USB image has an *.img* file extension.

If the image has an *.iso* file extension, it is not the correct image. Please go back to the [download step for installing from Linux \(.usb-download.html\)](#).

6. Click on the **Start Restoring...** button.

7. In the confirmation dialog click **Restore**. The installation takes a few minutes.

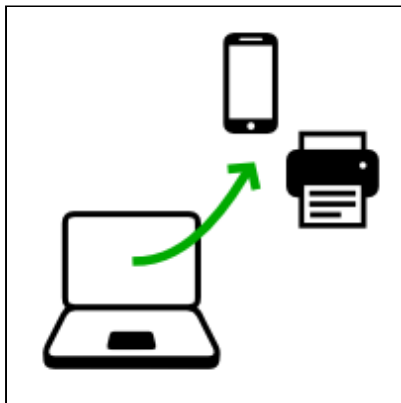
8. After the installation is finished, click on the ⬆️ button.



Congratulations, you have installed Tails on your USB stick!

You will now restart your computer on this USB stick. It can be a bit complicated, so good luck!

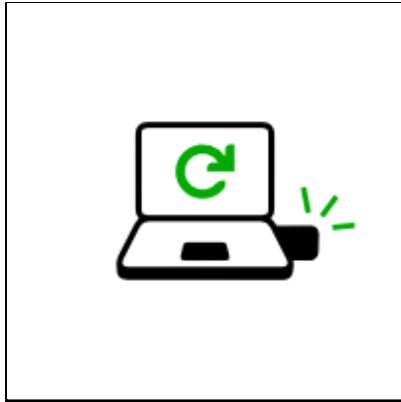
3/5 Open these instructions on another device



In the next step, you will shut down the computer. To be able to follow the rest of the instructions afterwards, we recommend you either:

- Open this page on your smartphone, tablet, or another computer (recommended).
- Print the rest of the instructions on paper.
-

4/5 Restart on Tails



1. Shut down the computer while leaving the USB stick plugged in.
2. Switch on the computer.
3. If the computer starts on Tails, the *Boot Loader Menu* appears and Tails starts automatically after 4 seconds.

Most computers do not start on Tails by default. If it does you are lucky. Otherwise, if the computer starts on Linux, refer to [the troubleshooting section about Tails not starting at all](#).

Troubleshooting: Tails does not start at all

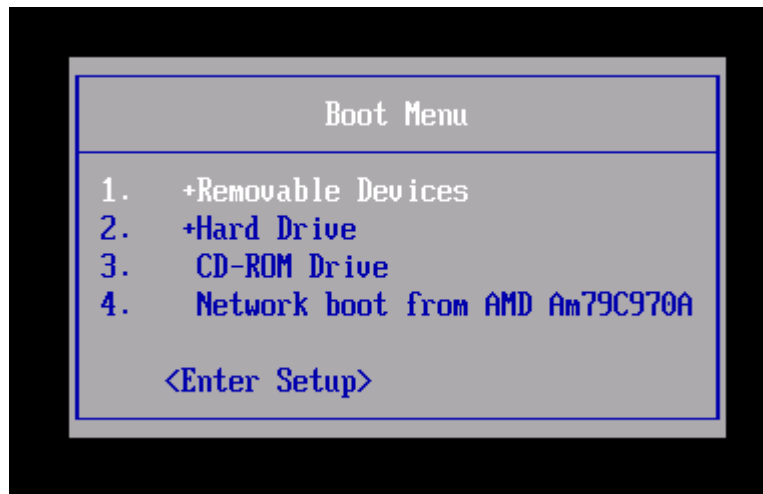
The following section applies if the *Boot Loader Menu* does not appear when starting on a USB stick.

It is quite common for computers not to start automatically on a USB stick with Tails installed. Here are some troubleshooting techniques. You should try them one after the other.

GETTING TO THE BOOT MENU

On most computers, you can press a *boot menu key* to display a list of possible devices to start from. The following instructions explain how

to display the boot menu and start on the USB stick. The following screenshot is an example of such boot menu:



1. Shut down the computer.
2. Make sure that the first USB stick is plugged in the computer.
3. Identify the potential boot menu keys for the computer depending on the computer manufacturer in the following list:

Manufacturer	Key
Acer	Esc, F12, F9
Asus	Esc, F8
Dell	F12
Fujitsu	F12, Esc
HP	Esc, F9
Lenovo	F12, Novo, F8, F10
Samsung	Esc, F12, F2
Sony	F11, Esc, F10
Toshiba	F12
others...	F12, Esc

4. Switch on the computer.

Immediately press several times the first potential boot menu key identified in step 3.

a. If a boot menu with a list of devices appears, select your USB stick and press **Enter**.

a. If the computer starts on another operating system, then:

1. Shut down the computer.
2. Press-and-hold the potential boot menu key identified in step 3.
3. Switch on the computer again while holding the potential boot menu key pressed.
 - a. If a boot menu with a list of devices appears, select your USB stick and press **Enter**.
 - a. If the computer starts on another operating system or returns an error message, then shut down the computer again and repeat step 4 for all the potential boot menu keys identified in step 3.

If none of the potential boot menu keys identified in step 3 work or if the USB stick does not appear in the list, then try the second troubleshooting technique described below.

CHECK OUR LIST OF KNOWN ISSUES

Similar problems might have been reported already for your model of computer in our [list of known issues \(.../support/known_issues.html\)](#).

EDIT THE BIOS SETTINGS

You might need to edit the BIOS settings of the computer.

Search for the user manual of the computer on the website of its manufacturer to learn how to edit the BIOS settings:

- o [Acer \(http://us.acer.com/ac/en/US/content/drivers\)](http://us.acer.com/ac/en/US/content/drivers)
- o [Asus \(https://www.asus.com/us/support/\)](https://www.asus.com/us/support/)
- o [Dell \(https://www.dell.com/support/home/us/en/19/Products/\)](https://www.dell.com/support/home/us/en/19/Products/)
- o [Fujitsu \(https://www.fujitsu.com/global/support/products/software/manual/\)](https://www.fujitsu.com/global/support/products/software/manual/)
- o [HP \(https://support.hp.com/us-en/products/\)](https://support.hp.com/us-en/products/)
- o [Lenovo \(http://support.lenovo.com/us/en/\)](http://support.lenovo.com/us/en/)
- o [Samsung \(http://www.samsung.com/us/support/downloads\)](http://www.samsung.com/us/support/downloads)
- o [Sony \(http://esupport.sony.com/US\)](http://esupport.sony.com/US)
- o [Toshiba \(http://support.toshiba.com/support/products?cat=Computers\)](http://support.toshiba.com/support/products?cat=Computers)

In the BIOS settings, try to apply the following changes one by one and restart the computer after each change. Some changes might not apply to certain computer models.

Take note of the changes that you apply to the BIOS settings, to be able to revert them if they prevent the computer to start on its usual operating system.

1. Edit the **Boot Order**. Depending on the computer model you might see an entry for **removable devices** or **USB media**. Move this entry to the top of the list to force the computer to try to start from the first USB stick before starting from the internal hard disk.
2. Disable **Fast boot**.
3. If the computer is configured to start with **legacy BIOS**, try to configure it to start with **UEFI**. Else, if the computer is configured to start with **UEFI**, try to configure it to start with **legacy BIOS**. To do so, try any of the following options if available:
 - Enable **Legacy mode**
 - Disable **Secure boot** (see the [Microsoft documentation \(https://docs.microsoft.com/en-us/windows-hardware/manufacture/desktop/disabling-secure-boot\)](https://docs.microsoft.com/en-us/windows-hardware/manufacture/desktop/disabling-secure-boot))
 - Enable **CSM boot**
 - Disable **UEFI**
4. Try to upgrade the BIOS to the latest version provided by the manufacturer.

REPORT THE PROBLEM TO OUR SUPPORT TEAM

If none of these options work, we are sorry but you might not be able to use Tails on this computer.

Please, [send an email to our support team \(../support/talk.html\)](mailto:../support/talk.html), including the following information:

1. Which version of Tails are you trying to start?
2. How did you verify the ISO image?
3. Which is the brand and model of the computer?

4. What exactly happens when trying to start? Report the complete error message that appears on the screen, if any.
5. Are you trying to start Tails on a USB stick or a DVD?
6. If you are trying to start on a USB stick, which program did you use to install it:
 - *Etcher*,
 - *GNOME Disks*,
 - *Tails Installer*, or
 - `dd` on the command line?

Note that these are the only supported installation methods.

7. Have you been able to start Tails successfully on this computer before, from another USB stick or DVD, or with another version of Tails? If so, which ones?
8. Does the same USB stick or DVD start successfully on other computers?



4. After 30–60 seconds, another screen called *Tails Greeter* appears.

If the computer display the error message **Error starting GDM with your graphics card**, refer to our [list of known issues with graphics cards \(.../support/know_n_issues/graphics.html\)](https://tails.burtonworks.com/support/knowledgebase/known_issues/graphics.html).

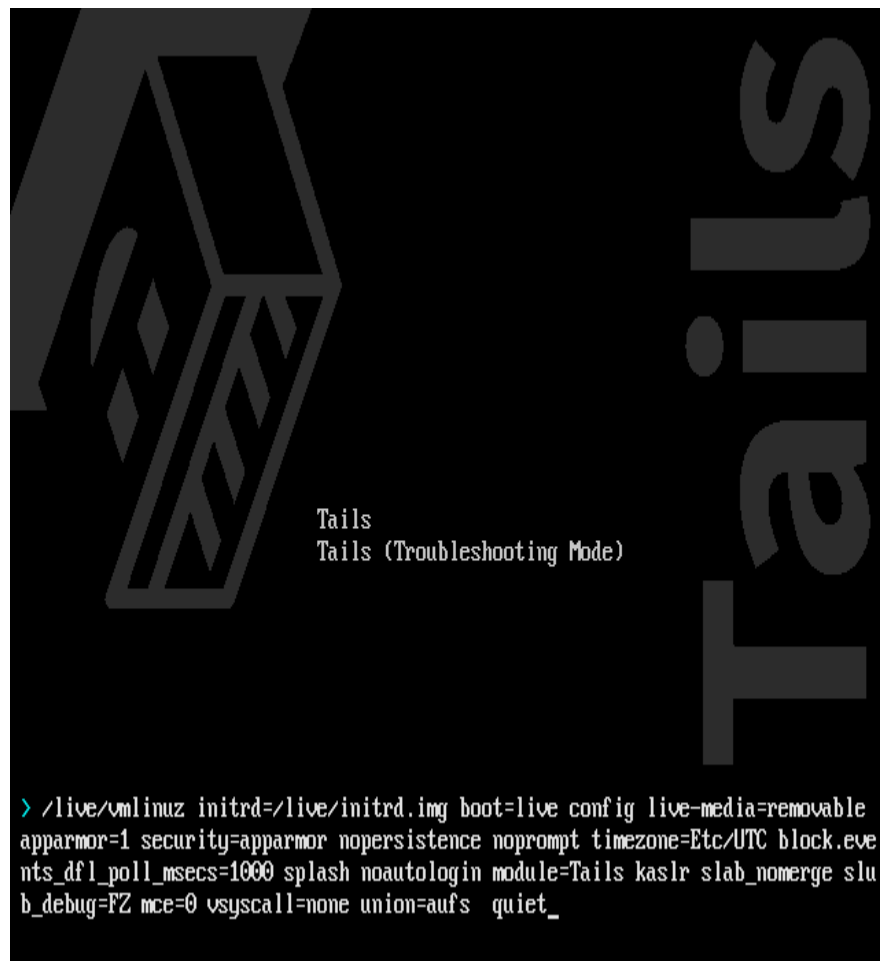
If the computer stops responding or displays other error messages before getting to *Tails Greeter*, refer to [the troubleshooting section about Tails not starting entirely](#).

Troubleshooting

Tails does not start entirely

The following section applies if the *Boot Loader Menu* appears but not *Tails Greeter* when starting Tails.

1. Restart the computer on the first USB stick.
2. In the *Boot Loader Menu*, choose the **Troubleshooting Mode** which might work better on some computers.
3. If the **Troubleshooting Mode** does not work better, restart the computer again on the first USB stick.
4. In the *Boot Loader Menu*, press **TAB**. A command line with a list of boot options appears at the bottom of the screen.

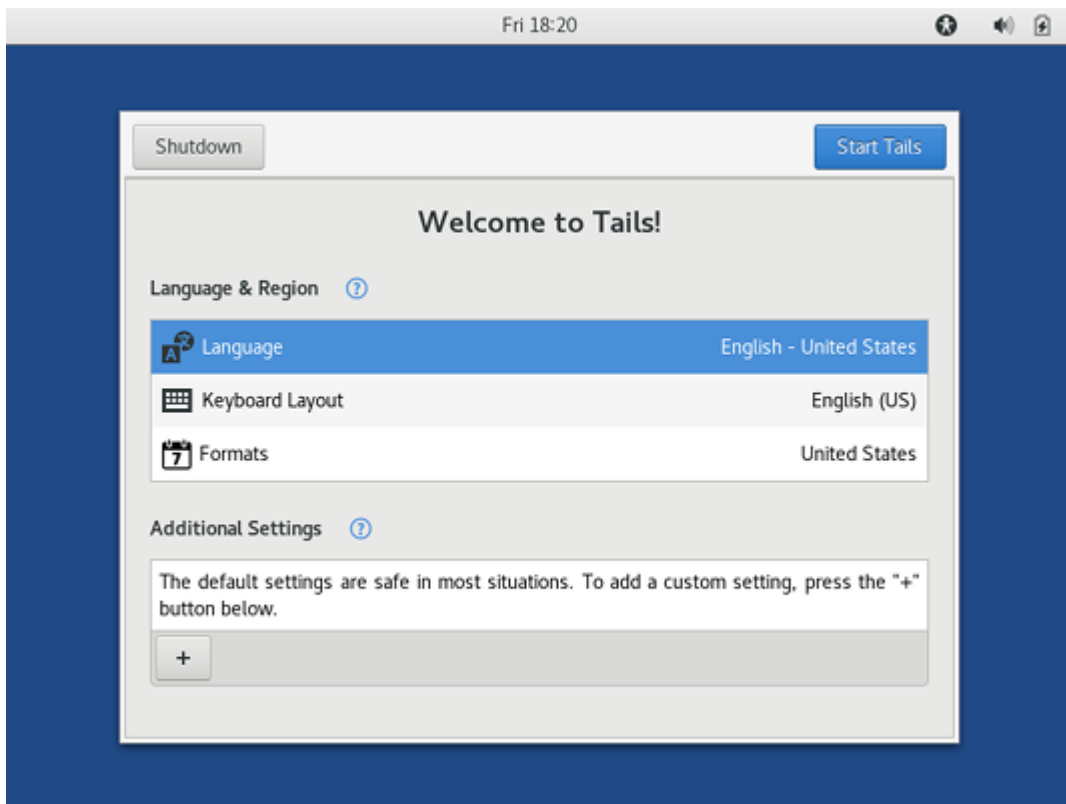


5. Press the **Backspace** key several times to remove the `quiet` option from the command line.
6. If Tails previously failed to start and displayed the `Probing EDD (edd=off to disable)...` error, then type `edd=off` to add this option to the command line.

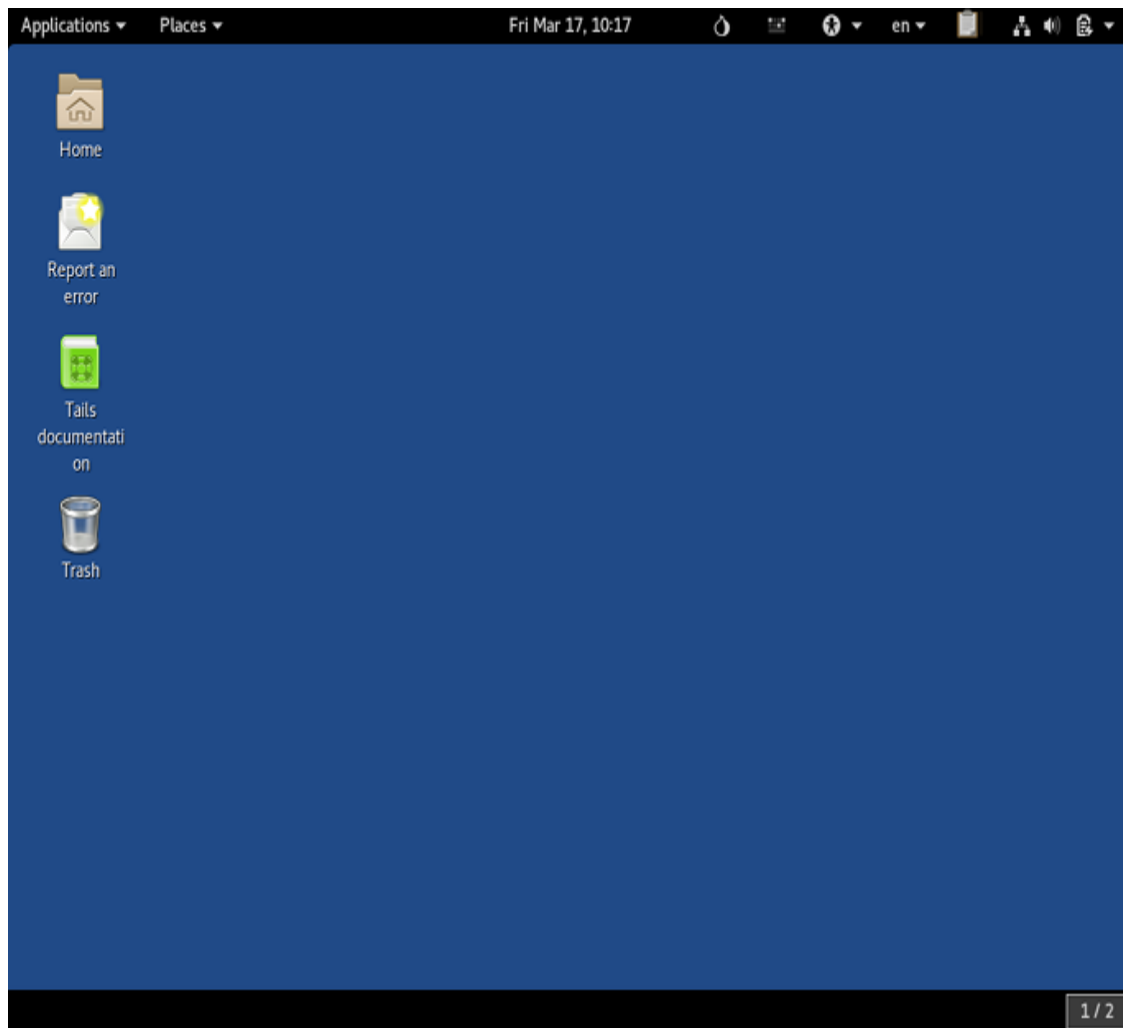
7. Type `debug nosplash` to add these options to the command line.
8. To start Tails, press **Enter**.
9. Hopefully, error messages now appear when starting Tails. You can [send them to our support team by email \(../support/talk.html\)](mailto:../support/talk.html), for example by taking a picture of the last screen and error messages.
10. If the error message is `/bin/sh: can't access tty; job control turned off` followed by `(initramfs)`, then try removing the `live-media=removable` option from the boot command line.

If removing `live-media=removable` allows you to start Tails, please report the problem to our [support team \(../support/talk.html\)](mailto:../support/talk.html). This contributes to improving the [list of problematic USB sticks \(../support/known_issues.html#problematic-usb-sticks\)](mailto:../support/known_issues.html#problematic-usb-sticks). Then try installing Tails on another USB stick.

Removing the `live-media=removable` option might be dangerous. If an adversary had access to the computer and installed a malicious Tails on an internal hard disk, the computer might start on the malicious Tails instead of on the USB stick.



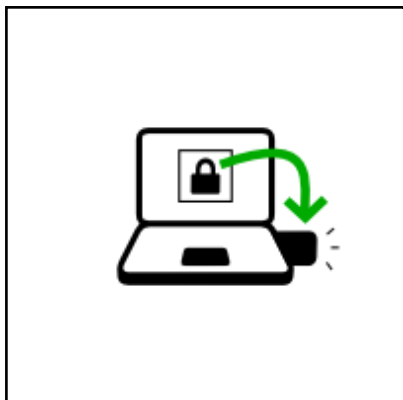
5. In *Tails Greeter*, select your language and keyboard layout in the **Language & Region** section. Click **Start Tails**.
6. After 15–30 seconds, the Tails desktop appears.



Yay, you managed to start Tails on your computer!

If you want to save some of your documents and configuration in an encrypted storage on your Tails USB stick, follow our instructions until the end. Otherwise, have a look at our [final recommendations](#) ([./usb.html#recommendations](#)).

5/5 Create an encrypted persistent storage (optional)



You can optionally create an *encrypted persistent storage* in the remaining free space on your Tails USB stick to store any of the following:

- Personal files
- Some settings
- Additional software
- Encryption keys

The data in the encrypted persistent storage:

- Remains available across separate working sessions.
- Is encrypted using a passphrase of your choice.

The encrypted persistent storage is not hidden. An attacker in possession of the USB stick can know whether it has an encrypted persistent storage. Take into consideration that you can be forced or tricked to give out its passphrase.

It is possible to open the encrypted persistent storage from other operating systems. But, doing so might compromise the security provided by Tails.

For example, image thumbnails might be created and saved by the other operating system. Or, the contents of files might be indexed by the other operating system.

Other operating systems should probably not be trusted to handle

sensitive information or leave no trace.

Create the persistent storage

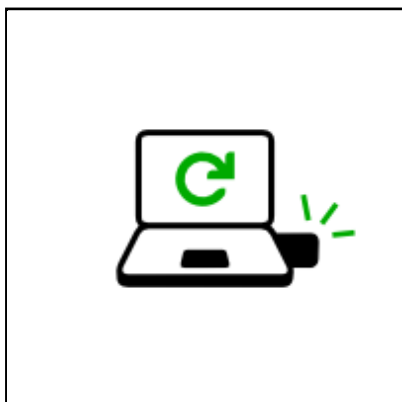
1. Choose **Applications** ► **Tails** ► **Configure persistent volume**.
2. Specify a passphrase of your choice in both the **Passphrase** and **Verify Passphrase** text boxes.

We recommend choosing a long passphrase made of five to seven random words. [Learn more. \(https://theintercept.com/2015/03/26/passphrases-can-memorize-attackers-cant-guess/\)](https://theintercept.com/2015/03/26/passphrases-can-memorize-attackers-cant-guess/)

3. Click on the **Create** button.
4. Wait for the creation to finish.
5. The assistant shows a list of the possible persistence features. Each feature corresponds to a set of files or settings to be saved in the encrypted persistent storage.

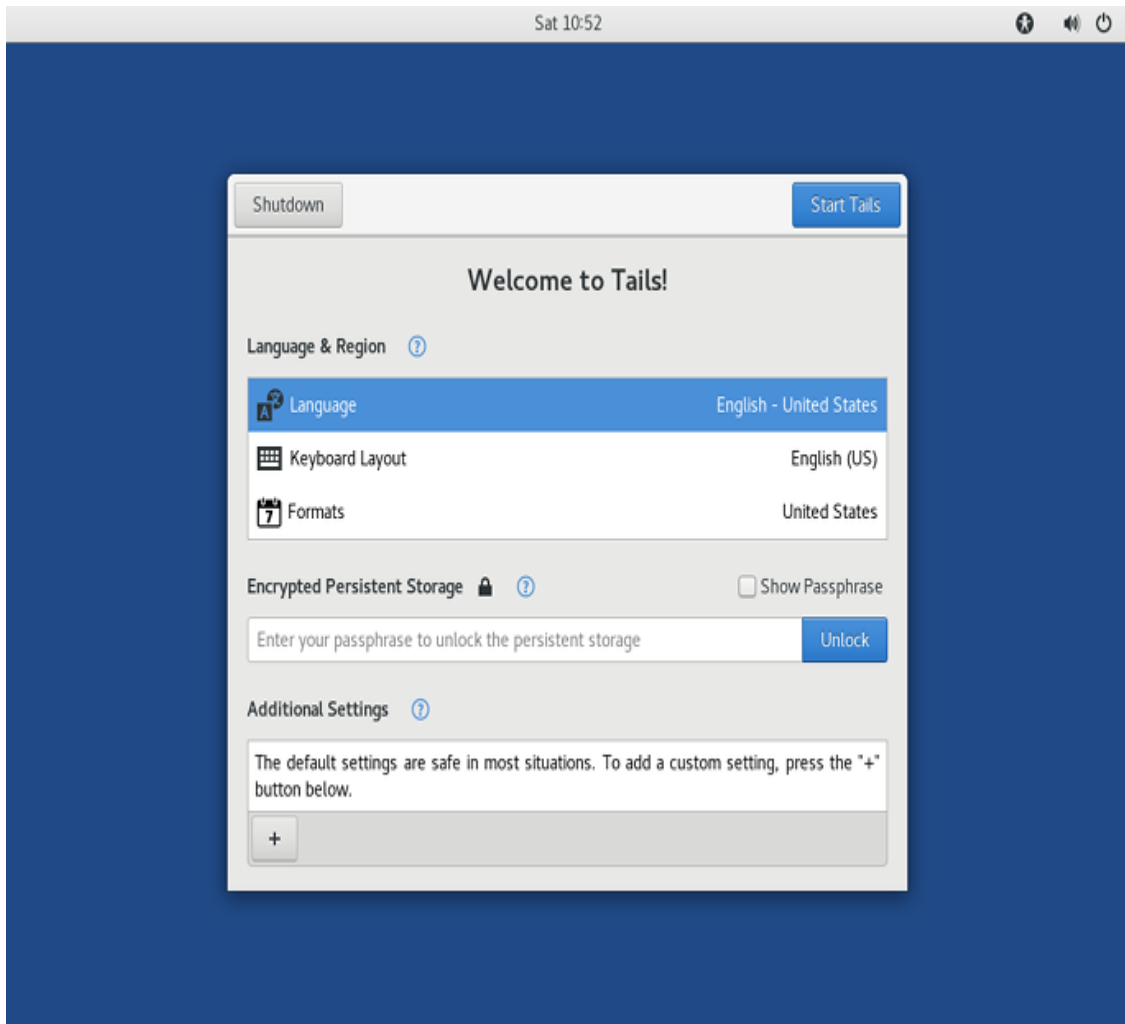
We recommend you to only activate the **Personal Data** persistence feature for the time being. You can activate more features later on according to your needs.

6. Click **Save**.



Restart and activate the persistent storage

1. Shut down the computer and restart on your Tails USB stick.
2. In *Tails Greeter*:



- Select your language and keyboard layout in the **Language & Region** section.
 - In the **Encrypted Persistent Storage** section, enter your passphrase and click **Unlock** to activate the encrypted persistent storage for the current working session.
 - Click **Start Tails**.
3. After 15–30 seconds, the Tails desktop appears.
 4. You can now save your personal files and working documents in the **Persistent** folder. To open the **Persistent** folder choose **Places ► Persistent**.



You now have a complete Tails, congrats!

FINAL RECOMMENDATIONS



Tails does not protect you from everything! Have a look at our [warnings \(../../doc/about/warning.html\)](../../doc/about/warning.html).



If you face any problem, use the Report an error launcher on the Tails desktop or visit our [support pages \(../../support.html\)](../../support.html).

We hope you enjoy using Tails :)