

# Installing Debian Linux

## Instructions

### Things you will need:

1. A second-hand laptop/computer (that you want to install Debian on)
2. Another computer/phone (to look things up if you get stuck)
3. One USB
4. Internet connection

### Procedure

1. Look for "cheap" laptops on second-hand marketplaces
2. Check that your chosen laptop is compatible (DebianOn, Google, other distros)
3. Check what processor you have (default, amd64, is most likely the correct one)
4. If you have amd64 processor, download an .iso image from [debian.org](http://debian.org) by clicking the "Download" button. Otherwise click "Other downloads". From this second option, you can also choose to either install via the internet (netinst, the default and fast) or download the full Debian image so you don't need internet (slower). *Here you can also choose to just "trial" Linux by installing and running it off a USB stick (this can help to confirm compatibility with your laptop)*
5. Flash this .iso image onto a USB (use `cp` command on Linux, use balenaEtcher for Windows and Mac)
6. Plug in USB and start up new computer. Mash F1/F2/F12/Enter/Esc to enter BIOS set up. Alternatively you can do it from within Windows (Settings -> System -> Recovery -> Advanced startup)
7. Change startup order in BIOS (know the name of the USB stick). Make the USB stick have top priority
8. Debian installer menu should appear!
9. Choose `Graphical Install`
10. ... wait
11. Choose Language, Location and Keyboard (can be changed later)
12. ... wait
13. Choose internet (default is wireless, this is probably what you want)
14. Choose type of internet security (default is WPA/WPA2, you probably have this) + password of your internet connection
15. Set hostname (name of computer) and domain (leave blank)
16. Set root password (this is your admin password - make it strong)
17. Set user account name, username, and user password
18. Set timezone
19. Partitioning. Choose "Guided - Use Entire Disk"  
(WARNING: this will wipe everything on your computer, be sure you have backed up what you need before proceeding)
20. Select partition (default is fine but worth double checking)

21. Different partition schemes (default is fine)
22. Overview + changes made -> select Yes (after double checking)
23. ... wait (at this point, your previous data is being erased)
24. Package manager + mirror to choose (default is probably fastest)
25. Choose proxy (leave blank)
26. ... wait
27. Sending stats (default is no, you probably want to leave this as no)
28. Choose desktop environment (default is fine. Make sure you have only ticked one of the options starting with "...". - I personally prefer the Xfce option)
29. ... wait 20min - 1hr  
(screen may go blank - just move your cursor)
30. Continue to reboot when it finishes (remove USB)
31. Change BIOS set up if it hasn't already been changed (see step 7)

## Resources:

### Basics (usually all you need):

<https://www.debian.org/releases/stable/amd64>

*(for installing Debian)*

<https://wiki.debian.org/InstallingDebianOn>

*(to check laptop compatibility before buying)*

### Advanced:

<https://wiki.archlinux.org/title/Laptop>

*(to check laptop compatibility before buying - this is more extensive and technical and these guides are for a different "flavour" of Linux so end results may be slightly different for Debian - check here only if your laptop isn't covered by the previous link above)*

[https://wiki.debian.org/MacBook#Install\\_Debian](https://wiki.debian.org/MacBook#Install_Debian)

*(the official Debian guide for installing on a MacBook)*

### Once you have set up:

Here are some things you might want to do that I may not have time to cover.

<https://www.anarsec.guide/posts/linux/>

Short guide on the command line and other linux essentials

[https://www.debian.org/doc/manuals/debian-reference/ch01.en.html#\\_sudo\\_configuration](https://www.debian.org/doc/manuals/debian-reference/ch01.en.html#_sudo_configuration)

Give yourself admin privileges so you can install applications - execute the first line as the super user / root, replacing "penguin" with your username - also search for "How to add user to sudo group" if you require more help

[https://www.debian.org/doc/manuals/debian-reference/ch02.en.html#\\_package\\_configuration](https://www.debian.org/doc/manuals/debian-reference/ch02.en.html#_package_configuration)

If certain packages/applications you want to install aren't able to be found, it may be because they are not compliant with the guidelines of Free and Open Source Software. To allow these packages to install you need to append the word "non-free" (without quotations) to the end of lines 3, 4, 6, and 7 of the /etc/apt/sources.list text file.