Installing Linux from a USB Memory Stick

This guide will help you install a basic Linux on any x86 (most Intel and AMD Systems are usable) by using a USB stick (flash drive, thumb drive, USB Mass Storage, …).
Installing with USB stick is more common today, than burning a CD/DVD. It is easy reuseable, so save the environment.

Creating the USB Stick don't take longer as 30 minutes. The Installer is very small (under 1 MB).
As the installation will download the packages from the Internet, the installation itself depends on your bandwidth (For example a German language installation with a 50Mbit fiber: 464 MB in 1min 32s (5072 kB/s))

1. How to get started

To install Linux from a USB Stick you need:

- A memory stick. It will be erased during the process!

- A computer that …

  - can boot from USB. If unsure, check the BIOS settings.

  - have at least 512 MB RAM (System memory)

  - have 5 GB available on hard disk drive (HDD/SSD).

  - have 700 MHz or faster x86 CPU (processor).

- A working Internet connection
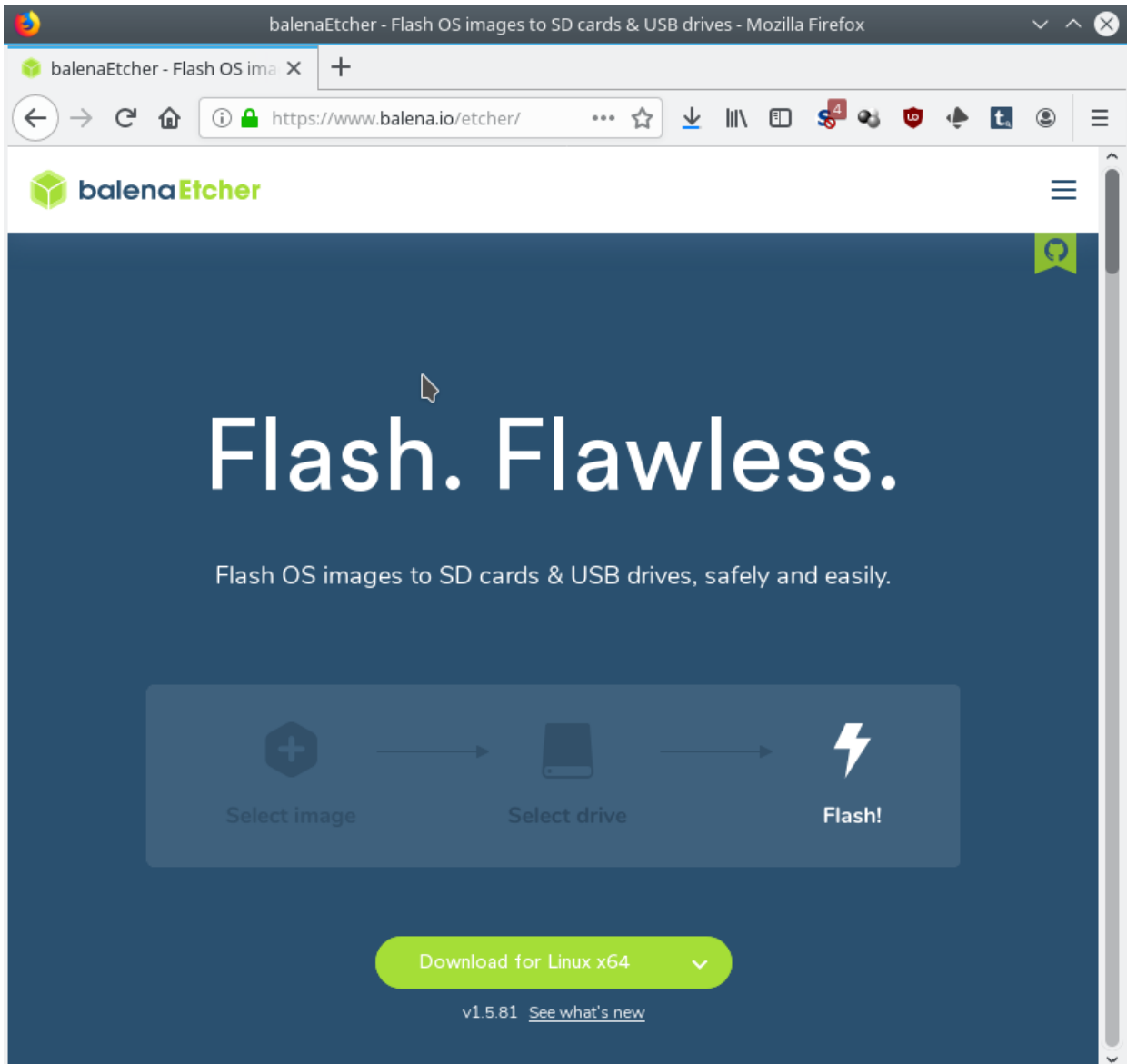
2. Get the installer

You need to download the installer so you can put it on a USB stick

1. Go to our releases page here: https://github.com/sokoow/globalhack-laptop-installer/releases

2. From the latest release, section Assets, download a file called `boot.zip`

3. Unzip this file, you will get a `boot.iso` file as a result of this step

4. Your `boot.iso` file is ready to be booted from CD, if you're into it

3. Put the Installer on a USB stick

On Windows:

1. Plug your USB stick to any USB Port on your computer

2. Go to https://www.balena.io/etcher/ and download the latest release

3. Execute the installer and follow the process.

4. Start ‚Etcher‘ from your Windows Startmenu, Select your downloaded `boot.iso` image, select your pluged-in USB stick and flash (write) the image to the stick.
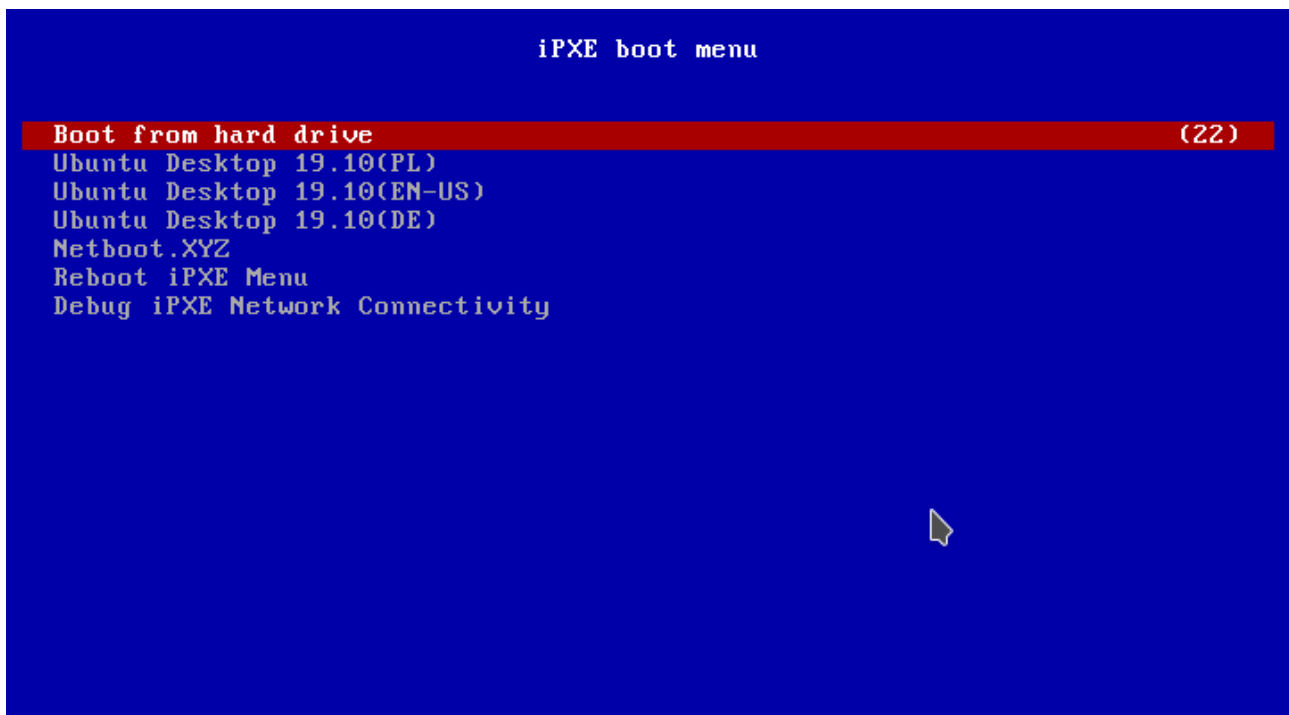
4. Start the Installer

To start your computer from a USB stick, you might need to change the order of boot devices. Different systems with different BIOS need different keys to be pressed during the boot.

1. Shutdown the system

2. Plug-in the USB stick

3. Start the system

4. If you'll see the iPXE installer, skip the rest of this chapter

5. If you'll don't see the iPXE installer, restart the system again.

6. Try to press every two seconds one of the following keys [F1], [F2], [F8], [F10], [F12], [Del] or [Esc]. Sometimes the right key is shown at the boot screen. On Lenovo Laptops it is the purple 'ThinkVantage' button.

    1. Maybe you're going direct to the 'select a boot device' part. Search for something like 'USB-HDD', 'USB Mass Storage' or 'USB' and the vendor name of your USB Stick.

    2. Sometimes you come to the 'BIOS Setup' part. Here you're able to change the Bootorder in the Tab 'Boot'. After you have changed the bootorder, save the changes and restart the system.

7. Now you should see the iPXE installer. If not, try another key from point 6.

Hint: If your system is not able to boot from USB, but have got a CD ROM drive, you can burn the boot.img with any CD burn application to a Compact Disc and also boot it. Maybe here you'll also need to change the boot order (see point 6).

5. Install Linux

If you have successfully booted from your memory stick (or maybe CD ROM), you should now see a blue dialog.

'**Boot from hard drive**' will start the previous installed OS without any change on the system. It will automatic be executed after the timer on the right counted to 0 (30 seconds).
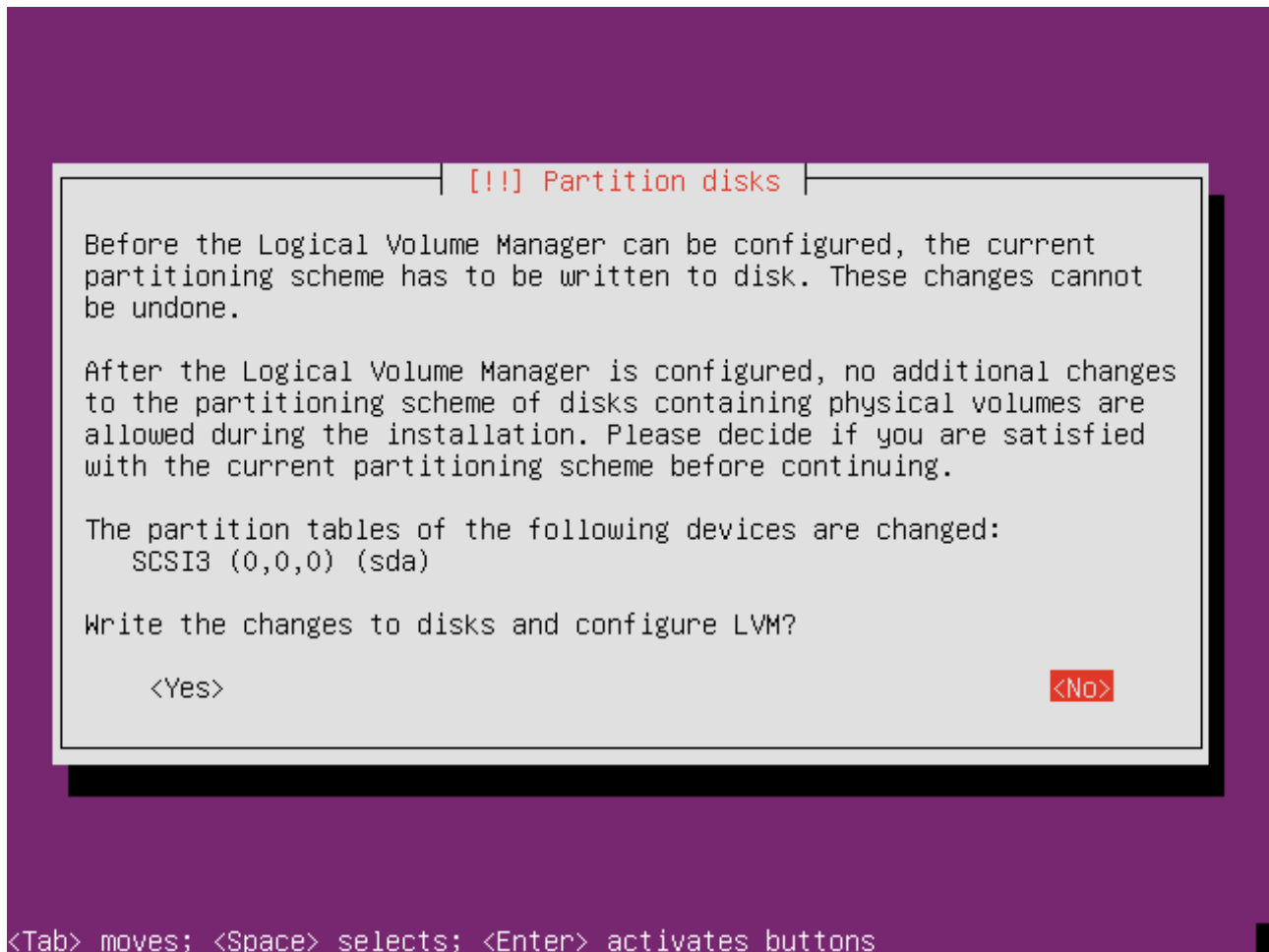
'**Ubuntu Desktop 19.10(PL)**' will install Ubuntu in Polish language

'**Ubuntu Desktop 19.10(EN-US)**' will install Ubuntu in English language

'**Ubuntu Desktop 19.10(DE)**' will install Ubuntu in German language

The other options are for advanced tasks.

Most parts of the installation are fully automatic. During the setup, the system will ask if LVM should be written on the disk. If you answer with 'yes' ALL data from your hard drive will be deleted!

It is the last chance to save your old system.

6. What is next?

You have a full functional Linux installed. Just start to play around.