Installation

Mounting the drive

You've now formatted your drives successfully, you now need to install Linux itself. That is the longest part of the installation, so get ready!

Mount all your partitions with the following commands:

> **Note:**
> - Replace the `/dev/vda` device with your own.
> - The following commands are for UEFI systems only.

```
# Mount the root partition
root@archiso ~ # mount /dev/vda3 /mnt
# Create boot partition mountpoint, and mount the boot partition
root@archiso ~ # mkdir -p /mnt/boot/efi
root@archiso ~ # mount /dev/vda1 /mnt/boot/efi
```

You've now successfully mounted your root and boot partitions in the correct place. Mounting the swap partition is a little different, though it is very simple:

```
root@archiso ~ # swapon /dev/vda2
```

Now, check if you've mounted everything properly. Run `lsblk` to do so.

```
root@archiso ~ # lsblk
```

Basic Installation

Installing the system is quite easy, just run the following command for the basic packages we need to boot. You can add your own packages at the end of the command (like `git`, `wget`, or `curl`), though we'll focus on the desktop environment and other optional packages later on. For now, you need a base system to work with.

```
root@archiso ~ # pacstrap /mnt base linux linux-firmware sof-firmware base-devel grub efibootmgr vim nano
networkmanager
```

With `pacstrap` we basically tell `pacman` (Arch's default package manager) to install packages into
`/mnt`.
`base`, `linux`, `linux-firmware`, `grub` and `efibootmgr` are packages we cannot boot without. The first 3
are self-explanatory, `grub` is our bootloader and `efibootmgr` provides UEFI support for GRUB.

In the command above, you'd also be installing `vim`, `nano` and `networkmanager`. The first two are
text editors, that we need to edit our configurations, and `networkmanager` manages our network
connection.

> **Note:** If you need to connect to WiFi later on in the system, add `iwd` to the pacstrap
> command.

This command may take some time, depending on your internet speeds, to install everything onto
your drive.

> **Tip:** Try clearing your screen with `Ctrl-L`!

Once the command is done, we can look at `fstab`. The `fstab` command helps us generate a special
file, that the system uses to automatically mount partitions (such as boot and swap) on system
startup. It is crucial for us to generate this file. That is luckily very simple.

```
root@archiso ~ # genfstab /mnt
```

`genfstab` outputs the available partitions on your drive. We do not want that outputted to our
terminal, though, so we just redirect this command's output to the proper file.

```
root@archiso ~ # genfstab /mnt > /mnt/etc/fstab
```

> **Note:** You are not yet ready to reboot, please configure your system first.

Your system's now ready to be configured! You can now head on to the next step.

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