

# Install

We follow the **UEFI** part of the official Installation Guide:  
[NixOS Installation Guide](#).

## Prepare Disk

### Partitioning

Partition the storage using `sudo fdisk /dev/sdb`. In the interactive prompt partition the storage those settings:

- `g` (gpt disk label)
- `n`
- `1` (partition number [1/128])
- `2048` first sector
- `+500M` last sector (boot sector size)
- `t`
- `1` (EFI System)
- `n`
- `2`
- default (fill up partition)
- default (fill up partition)
- `w` (write)

Delete all Files on partitions with:

```
dd if=/dev/zero of=/dev/sdb1 bs=4096 status=progress
dd if=/dev/zero of=/dev/sdb2 bs=4096 status=progress
```

## Label partitions

Label the partitions using those commands:

```
sudo mkfs.fat -F 32 /dev/sda1
sudo fatlabel /dev/sda1 NIXBOOT
sudo mkfs.ext4 /dev/sda2 -L NIXROOT
```

# Mount partitions

Mount the boot and root drives so we can access them and install NixOS:

```
sudo mount /dev/disk/by-label/NIXROOT /mnt
sudo mkdir -p /mnt/boot
sudo mount /dev/disk/by-label/NIXBOOT /mnt/boot
```

# Create swap file

```
sudo dd if=/dev/zero of=/mnt/.swapfile bs=1024 count=2097152 # 2GB size
sudo chmod 600 /mnt/.swapfile
sudo mkswap /mnt/.swapfile
sudo swapon /mnt/.swapfile
```

# Install Nixos

## Create NixOS config

Generate the config using `sudo nixos-generate-config --root /mnt`.

Then, edit the config using `sudo vim /mnt/etc/nixos/configuration.nix`.

Here are some sections of the configuration you should add:

```
# Keyboard layout
services.xserver.xkb.layout = "de";

# Add a user!
```

```
users.users.elias = {
  isNormalUser = true;
  extraGroups = [ "wheel" ]; # Sudo access
};

# Install an editor to edit the configuration
environment.systemPackages = with pkgs; [ vim ]; # or vim!
```

To edit the hardware config, use `sudo vim /mnt/etc/nixos/hardware-configuration.nix`.

You can then update the file systems to use labels and add the swapfile.

```
fileSystems."/ =
{ device = "/dev/disk/by-label/NIXROOT";
  # ...
};

fileSystems."/boot" =
{ device = "/dev/disk/by-label/NIXBOOT";
  # ...
};

swapDevices = [{{
  device = "./swapfile";
  size = 2048; # 2GB
}}];
```

# Install

```
cd /mnt
sudo nixos-install
```

Change password with `passwd` to a password that works on `de` and `en` keyboard layout.

Reboot into the installed NixOs.

Add those lines to the `configuration.nix` file:

```
nix.settings.experimental-features = ["nix-command" "flakes"];
```

```
networking.hostName = "eliasDesktop"; #or eliasLaptop for other configs
```

```
environment.systemPackages = with pkgs; [  
    vim  
    git  
];
```

Rebuild the system with `sudo nixos-rebuild switch` and reboot to update the Hostname.

Copy the config repo with `git clone https://github.com/4Lost/nixos-config` and move it to `/etc/nixos` and rebuild with `sudo nixos-rebuild switch`.

Make the directory usable for push and pull:

```
sudo chown -R elias /etc/nixos
```

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