

# Archlinux installieren (EFISTUB, Luks, Gnome, Hibernate)

## Partitionieren

- 512MB EF00 efi
- 100%FREE - crypt
  - pv
    - vg main
      - lv 50GB root
      - lv RAM+2GB swap
      - lv 100%FREE home

```
mkfs.fat -F 32 -n EFI /dev/nvme0n1p1
```

```
cryptsetup luksFormat -c aes-xts-plain64 -hash sha256 -s 256 /dev/nvme0n1p2
```

```
cryptsetup luksOpen /dev/nvme0n1p2 lvm
```

```
pvcreate /dev/mapper/lvm
```

```
vgcreate main /dev/mapper/lvm
```

```
lvcreate -L 50GB -n root main
```

```
lvcreate -L 34GB -n swap main
```

```
lvcreate -l 100%FREE -n home main
```

```
mkfs.ext4 -L root /dev/mapper/main-root
```

```
mkswap -L swap /dev/mapper/main-swap
```

```
swapon -L swap
```

```
mkfs.ext4 -L home /dev/mapper/main-home
```

## Partitionen mounten

```
mount /dev/mapper/main-root /mnt
```

```
mkdir /mnt/boot
```

```
mount /dev/nvme0n1p1 /mnt/boot
```

```
mkdir /mnt/home
```

```
mount /dev/mapper/main-home
```

# Grundinstallation

## Pacman konfigurieren

Spiegelserver auswählen

```
reflector -c Germany > /etc/pacman.d/mirrorlist
```

## Bootstrapping

```
pacstrap /mnt base base-devel dosfstools gptfdisk lvm2 linux linux-firmware nano tmux
```

```
pacman -root /mnt dhcpd bash-completion intel-ucode wpa_supplicant efibootmgr sudo openssh
```

## fstab bauen

```
genfstag -Up /mnt > /mnt/etc/fstab
```

## chrooten

```
arch-chroot /mnt
```

## Hostname

```
echo krypton > /etc/hostname
```

## Locale

```
nano /etc/locale.gen
```

```
echo LANG=en_GB.UTF-8 > /etc/locale.conf
```

```
locale-gen
```

```
echo KEYMAP=de-latin1 > /etc/vconsole.conf
```

```
ln -sf /usr/share/zoneinfo/Europe/Berlin /etc/localtime
```

## Network

[/etc/hosts](#)

```
127.0.0.1 localhost.net.clerie.de localhost
::1 localhost.net.clerie.de localhost
```

## Kernel konfigurieren

### Initramfs

[/etc/mkinitcpio.conf](#)

```
...
MODULES=(ext4)
...
HOOKS=(base udev autodetect modconf block keyboard keymap encrypt lvm2
resume filesystems fsck shutdown)
...
```

mkinitcpio -p linux

### EFI Boot

```
efibootmgr -c -d /dev/nvme0n1 -p 1 -l \vmlinuz-linux -L „Arch Linux efistub“ -u „initrd=\initramfs-
linux.img quiet cryptdevice=/dev/nvme0n1p2:main root=/dev/mapper/main-root rw
resume=/dev/mapper/main-swap“
```

```
efibootmgr -c -d /dev/nvme0n1 -p 1 -l \vmlinuz-linux -L „Arch Linux efistub Fallback“ -u
„initrd=\initramfs-linux-fallback.img cryptdevice=/dev/nvme0n1p2:main root=/dev/mapper/main-root
rw“
```

### Psst! Kleines Skript

[install-efistub.sh](#)

```
#!/bin/bash

drive="/dev/nvme0n1"
part="1"
p_cryptdevice="/dev/nvme0n1p2:main"
p_root="/dev/mapper/main-root"
p_swap="/dev/mapper/main-swap"

crypt="cryptdevice=${p_cryptdevice} root=${p_root} rw"
resume="resume=${p_swap}"
silent="quiet"
```

```
efibootmgr -c -d ${drive} -p ${part} -l \vmlinuz-linux -L "Arch Linux
efistub Fallback" -u "initrd=\initramfs-linux-fallback.img ${crypt}"
efibootmgr -c -d ${drive} -p ${part} -l \vmlinuz-linux -L "Arch Linux
efistub" -u "initrd=\initramfs-linux.img ${silent} ${crypt} ${resume}"
```

## (optional) Grub

```
pacman -S grub
```

```
grub-install --target=x86_64-efi --efi-directory=/boot --bootloader-id="Arch Linux GRUB"
```

[/etc/default/grub](#)

```
...
GRUB_CMDLINE_LINUX_DEFAULT="quiet cryptdevice=/dev/nvme0n1p2
resume=/dev/mapper/main-swap"
....
```

```
grub-mkconfig -o /boot/grub/grub.cfg
```

## Abschließen

```
passwd
```

```
exit
```

```
umount -R /mnt
```

```
reboot
```

## Einrichten

### Temporäres Netzwerk

```
dhcpcd enp0s31f6
```

### Benutzer

```
useradd -m -s /bin/bash clerie
```

```
passwd clerie
```

EDITOR=nano visudo

visudo

```
...
%wheel ALL=(ALL) ALL
...
```

usermod -a -G wheel clerie

## SSD Trim

systemctl enable --now fstrim.timer

## Gnome installieren

pacman -S gnome gnome-tweaks

systemctl enable gdm

systemctl enable NetworkManager.service

## Bluetooth

pacman -S bluez bluez-utils

systemctl enable bluetooth.service

## Rebooten

reboot

## Siehe auch

- [https://wiki.archlinux.de/title/Anleitung\\_für\\_Einsteiger](https://wiki.archlinux.de/title/Anleitung_für_Einsteiger)
- [https://wiki.archlinux.de/title/Moderne\\_Installation\\_mit\\_UEFI\\_und\\_Verschl%C3%BCsselung](https://wiki.archlinux.de/title/Moderne_Installation_mit_UEFI_und_Verschl%C3%BCsselung)

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Last update: **2020/07/26 19:53**

