

# ARCH LINUX INSTALLATION AND CONFIGURATION

Veit Karpf

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# 1 BASIC SYSTEM INSTALL

## 1.1 Load keyboard

```
loadkeys de_CH-latin1
```

## 1.2 partitioning and mounting

```
gdisk /dev/sdx
```

```
(mkfs.fat -F 32 -n EFIBOOT /dev/sdx#)
mkfs.ext4 -L arch /dev/sdx#
mkswap -L swap /dev/sdx#
mount -L arch /mnt
mkdir & mount
swapon -L swap
```

## 1.3 setup network connection (wifi-menu)

```
loadkeys de_CH-latin1
wifi-menu
```

## 1.4 choose mirror

```
cp /etc/pacman.d/mirrorlist /etc/pacman.d/mirrorlist.bak
vim /etc/pacman.d/mirrorlist
```

## 1.5 set time

```
timedatectl status
timedatectl set-ntp true
```

## 1.6 install base system

```
pacstrap /mnt base base-devel intel-ucode networkmanager vim
`genfstab -U /mnt >> /mnt/etc/fstab
arch-chroot /mnt
ln -sf /usr/share/zoneinfo/Europe/Zurich /etc/localtime
echo myhost > /etc/hostname
vim /etc/locale.gen # uncomment all en_US, de_CH, de_DE
locale-gen
echo LANG=en_US.UTF-8 > /etc/locale.conf # (or: de_CH.UTF-8)

add the following to /etc/vconsole.conf
KEYMAP=sg-latin1
FONT=Lat2-Terminus16
Lang=en_US

vim /etc/hosts
#
# /etc/hosts: static lookup table for host names
#
```

```
#<ip-address> <hostname.domain.org> <hostname>
127.0.0.1 localhost.localdomain localhost arch
::1 localhost.localdomain localhost arch
```

```
mkinitcpio -p linux
passwd
```

## 1.7 Install grub (boot loader)

```
pacman -S grub os-prober efibootmgr dosfstools gptfdisk
```

```
grub-install --target=x86_64-efi --efi-directory=/boot --bootloader-id=grub --recheck --debug
grub-mkconfig -o /boot/grub/grub.cfg
```

## 1.8 exit chroot and boot into new system

```
exit
umount -R /mnt
reboot
```

```
useradd -m -g users -s /bin/bash user_name
passwd user_name
```

```
vim /etc/sudoers
%wheel ALL=(ALL) ALL
```

```
gpasswd -a user_name wheel
```

```
pacman -S acpid dbus avahi cronie
```

# 2 CUSTOMIZE SYSTEM

## 2.1 install configs

```
pacman -S git
mkdir .dotfiles
git clone https://github.com/Veit96/dotfiles.git .dotfiles
cd .dotfiles
./install
```

## 2.2 install packages

```
pacman -S $(cat my_packages.txt)
```

## 2.3 install yay (aur helper)

```
git clone https://aur.archlinux.org/yay.git
cd yay
makepkg -si
```

```
cd ..
rm -rf yay
```

## 2.4 aur packages

- urxvt-resize-font-git
- polybar
- mons
- spotify
- popcornime
- arch-silence-grub-theme

## 2.5 switch capslock and escape:

```
add "XkbOptions" "terminate:ctrl_alt_bksp,caps:swapescape" in /etc/X11/xorg.conf.d/00-keyboard.conf
```

## 2.6 install lightdm greeter

```
/etc/lightdm/lightdm.conf
[Seat:*]
...
greeter-session=lightdm-webkit2-greeter
...

/etc/lightdm/lightdm-webkit2-greeter.conf
...
webkit-theme = litarvan
...
```

# 3 DUAL BOOTING WITH WINDOWS

## 3.1 setting windows to UTC instead of localtime:

```
reg add "HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\TimeZoneInformation"
/v RealTimeIsUniversal /d 1 /t REG_DWORD /f
```

## 3.2 disable fast startup

1. go to windows power settings
2. go to additional settings
3. go to what power buttons do
4. uncheck fast startup

## 3.3 Mount Windows partition on boot

Add the following to your `/etc/fstab`, where `/dev/sdxy` is the ntfs windows partition to be mounted: `# /dev/sdxy UUID=... LABEL=share /home/veit/share ntfs-3g utf8,uid=1000,gid=1000,dmask=027,fmask=137 0 2`

## 4 ADDITIONAL SETTINGS

### 4.0.1 pacman stuff:

uncomment “#Color” for color pacman add aur

### 4.0.2 vim stuff:

- install vundle
- vim-jedi
- vim-jellybeans
- vim-latexsuite
- vim-spell-de
- vim-supertab

### 4.0.3 have a look at tlp

### 4.0.4 pywal:

wal -i image.png

### 4.0.5 Fixing Invalid MIT-MAGIC-COOKIE-1:

This was needed to launch the graphical matlab installer from terminal with sudo privileges  
uncomment Defaults env\_keep += "HOME" in /etc/sudoers

## 5 PROGRAMMS FOR CERTAIN TASKS

- display manager / login manager -> lightdm
- window manager -> i3
- shell -> zsh
- terminal -> rxvt-unicode
- app launcher -> rofi, dmenu
- aur helper -> yay
- file manager -> ranger
- browser -> qutebrowser
- wallpaper setter -> nitrogen, wal
- image viewer -> sxiv
- pdf viewer -> zathura, okular
- office ->
- video/audio player -> smplayer, mpv
- system monitoring -> deepin-system-monitor
- offline docs browser -> zeal
- firewall -> ufw
- BitTorrent client -> transmission

## 6 USEFULL COMMANDS

### 6.1 connect to ethernet:

```
sudo systemctl enable dhcpcd@enp3s0.service
```

```
sudo systemctl enable netctl-auto@wlo1.service
```

```
sudo systemctl stop/disable netctl/NetworkManager/...
```

### 6.2 this app handles monitor setup

mons

i3lock-blur replaced i3lock as a screenlocker

wicd connman wpa\_supplicant\_gui

### 6.3 search disk an list memory usage

```
ncdu -x
```

### 6.4 list packages sorted by size

```
expac -H M "%011m\t%-20n\t%10d" $(comm -23 <(pacman -Qqen | sort) <(pacman -Qqg  
base base-devel | sort)) | sort -n
```

### 6.5 remove orphant packages

```
sudo pacman -Rns $(pacman -Qtdq)
```

### 6.6 check for errors

```
sudo systemctl --failed sudo journalctl -p 3 -xb
```

### 6.7 wifi settings with nmcli

```
nmcli radio wifi on/off nmcli con nmcli dev
```