ARCH LINUX INSTALLATION AND CONFIGURATION

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December 9, 2018

Contents

1   BASIC SYSTEM INSTALL

1.1   Load keyboard

```
loadkeys de_CH-latin1
```

1.2   Disk partitioning and mounting

(gpt -> gdisk, mbr -> fdisk)

```
gdisk /dev/sdx
# code root: 8300
# code home: 8300
# code swap: 8200

(mkfs.fat -F 32 -n EFIBOOT /dev/sdx#)
mkfs.ext4 -L ARCH_ROOT /dev/sdx#
mkfs.ext4 -L ARCH_HOME /dev/sdx#
mkswap -L ARCH_SWAP /dev/sdx#

mount -L ARCH_ROOT /mnt
mkdir /mnt/boot
mkdir /mnt/home
mount -L ARCH_HOME /mnt/home
mount -L ARCH_BOOT /mnt/boot
swapon -L ARCH_SWAP
```

1.3   setup network connection (wifi-menu)

```
wifi-menu
```

1.4   install base system

```
# get scripts
pacman -S git
git clone https://github.com/Veit96/dotfiles.git dotfiles

# launch first script
# choose mirror
./script_install1.sh

# configure fstab, the options should be like this (for SSD):
root: rw,defaults,noatime,discard   0 1
home: rw,defaults,noatime,discard   0 2
boot: rw,noatime,fmask=0022,dmask=0022,codepage=437,iocharset=iso8859-1,shortname=mixed,utf8,error
swap: defaults,noatime,discard,pri=-2   0 0

# change root to new system
arch-chroot /mnt/

# launch second script
```

```
# choose hostname, default "arch"
# in /etc/locale.gen uncomment all en_US, de_CH, de_DE
./script_install2.sh
```

1.5   exit chroot and boot into new system

```
exit
umount -R /mnt
reboot
# login as root
```

2   add user and choose group

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

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

gpasswd -a user_name wheel
gpasswd -a user_name audio
# add to audio,video,games,power too?

systemctl enable NetworkManager.service

pacman -S acpid dbus avahi cups cronie
systemctl enable acpid
systemctl enable avahi-daemon
systemctl enable cronie
systemctl enable org.cups.cupsd.service
systemctl enable systemd-timesyncd.service
systemctl start systemd-timesyncd.service
hwclock -w
```

3   CUSTOMIZE SYSTEM

3.1   install packages

```
pacman -S $(< my_packages.txt)
pacman -S xorg-drivers
zsh
chsh -l
chsh -s /bin/zsh
```

3.2   install yay (aur helper)

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

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

3.3 aur packages

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

3.4 install configs

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

3.5 install lightdm greeter (login/display manager)

```
systemctl enable lightdm.service
```

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

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

4 LAPTOP/NOTEBOOK SPECIFIC

```
pacman -S xf86-input-synaptics
```

5 DUAL BOOTING WITH WINDOWS

5.1 setting windows to UTC instead of localtime:

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

5.2 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

5.3 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`

6 ADDITIONAL SETTINGS

6.1 pacman stuff:

uncomment "#Color" for color pacman add aur

6.2 vim stuff:

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

6.3 have a look at tlp

6.4 pywal:

`wal -i image.png`

6.5 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`

7 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/audo player -> smplayer, mpv

- system monitoring -> deepin-system-monitor
- offline docs browser -> zeal
- firewall -> ufw
- BitTorrent client -> transmission
- Screenshot -> deepin-screenshot

8   USEFULL COMMANDS

- connect to ethernet:

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

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

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

- this app handles monitor setup

```
mons
```

- stuff

i3lock-blur replaced i3lock as a screenlocker

wicd connman wpa_supplicant_gui

- search disk an list memory usage

```
ncdu -x
```

- 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
```

- remove orphant packages

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

- check for errors

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

- wifi settings with nmcli

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