

Arch Linux Installation

Vincevrp

Abstract

Reference guide for my Arch Linux installation. The goal of this document is to have a quick reference for when reinstalling or troubleshooting my installation.

Contents

1 Dell XPS 9550 Installation	1
1.1 Initial	1
1.2 Partitioning	1
1.3 Mounting	1
1.4 Genfstab and chroot	2
1.5 System configuration	2
1.6 Initramfs	2
1.7 Bootloader	2
1.8 Post-installation	2

1 Dell XPS 9550 Installation

1.1 Initial

```
loadkeys be-latin1
```

```
# Check if you're booted in UEFI mode
ls /sys/firmware/efi/efivars
```

```
# Connect to wifi and test connection
wifimenu
ping archlinux.org
```

```
# Set the time
timedatectl set-ntp true
timedatectl set-timezone "Europe/Brussels"
```

1.2 Partitioning

```
cfdisk /dev/nvme0n1
mkfs.fat /dev/nvme0n1p1
cryptsetup luksFormat /dev/nvme0n1p2
cryptsetup open --type luks /dev/nvme0n1p2 rootpart
ls /dev/mapper
mkfs.ext4 /dev/mapper/rootpart
```

1.3 Mounting

```
mount /dev/mapper/rootpart /mnt
mkdir /mnt/boot
mount /dev/nvme0n1p1 /mnt/boot
pacstrap /mnt base base-devel linux linux-firmware vim git zsh dialog wpa_supplicant
```

1.4 Genfstab and chroot

```
genfstab -Up /mnt >> /mnt/etc/fstab
arch-chroot /mnt
```

1.5 System configuration

```
ln -sf /usr/share/zoneinfo/Europe/Brussels /etc/localtime
hwclock --systohc --utc
vim /etc/locale.gen # Uncomment locale in this file
locale-gen
echo "KEYMAP=be-latin1" >> /etc/vconsole.conf
echo "LANG=en_GB.UTF-8" >> /etc/locale.conf
echo "xps" > /etc/hostname
```

1.6 Initramfs

Edit hooks in /etc/mkinitcpio.conf to:

```
MODULES(ahci sd_mod ext4)
BINARIES=(fsck fsck.ext4)
HOOKS=(base systemd keyboard sd-vconsole sd-encrypt)
mkinitcpio -p linux
```

1.7 Bootloader

```
bootctl --path=/boot/ install
```

In /boot/loader/loader.conf:

```
default arch
timeout 3
```

In /boot/loader/entries/arch.conf:

```
title Arch Linux
linux /vmlinuz-linux
initrd /initramfs-linux.img
options luks.name=__UUID_HERE__=cryptroot root=/dev/mapper/cryptroot nvme_core.
        default_ps_max_latency_us=5500 quiet rw
```

The nvme parameter is related to the following issue: https://wiki.archlinux.org/index.php/Solid_State_Drive/NVMe#Samsung_drive_errors_on_Linux_4.10

1.8 Post-installation

```
useradd -m -G wheel vince
passwd vince
```

Add the following to /etc/sudoers:

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

Install yay

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

Enable colors in Pacman

```
sed 's/#Color/Color/g' /etc/pacman.conf > /etc/pacman.conf
```

Dotfiles

```
yay -S vim-plug
git clone --bare <git-repo-url> $HOME/.dotfiles
alias dotfiles='git --git-dir=$HOME/.dotfiles --work-tree=$HOME'
dotfiles checkout
dotfiles config --local status.showUntrackedFiles no
```