

For arch linux 5.11.16-arch1-1

1. Check networking

- a. ping google.com

2. Make sure system clock is accurate

- a. timedatectl set-ntp true
- b. timedatectl status

3. Partition drives

- a. fdisk /dev/DRIVE

b. EFI part

- i. g for gpt disk
- ii. n for new partition
- iii. 1 for partition number
- iv. Enter start at first possible sector of partition
- v. +550M to end after 550Mb
- vi. t change the type of the partition
- vii. 1 for EFI System

c. Swap part

- i. n for new partition
- ii. 2 for partition number
- iii. Enter start at first possible sector of partition
- iv. +XG where X is the size of swap partition in Gb
- v. t to change type
- vi. 2 to select the 2nd partition that we just made
- vii. 19 to select type swap

d. System Root part

- i. n for new partition
- ii. 3
- iii. Enter start at first possible sector of partition
- iv. Enter again to just extend to the end of the drive
 - 1. Or +XG where X is the size of partition in Gb
- v. w to write to the partitions

4. Make file systems

a. EFI FS

- i. mkfs.fat -F32 /dev/partition#1

b. Swap FS

- i. mkswap /dev/partition#2
- ii. swapon /dev/partition#2

c. Root FS

- i. mkfs.ext4 /dev/partition#3

5. Mount root partition

- a. mount /dev/partition#3 /mnt

6. Install base system for arch

- a. pacstrap /mnt base linux linux-firmware

7. Generate fstab

- a. `genfstab -U /mnt >> /mnt/etc/fstab`

8. Chroot in

- a. `arch-chroot /mnt`

9. Set region and city

- a. `ln -sf /usr/share/zoneinfo/America/New_York /etc/localtime`

10. Set hw clock

- a. `hwclock --systohc`

11. Set locale info

a. Install text editor

- i. `pacman -S nano`
- ii. `nano /etc/locale.gen`
 1. Uncomment `en_US.UTF-8`
- iii. `locale-gen` to generate locale stuff

12. Set hostname

- a. `nano /etc/hostname`
 - i. Enter the host name

13. Configure hosts

- a. `nano /etc/hosts`
 - i. Enter this info:
 1. `127.0.0.1 localhost`
 2. `::1 localhost`
 3. `127.0.1.1 yourHostName.localdomain yourHostName`

14. Set user info

a. Set root password

- i. `passwd`

b. Add user

- i. `useradd -m userName`

c. Set user password

- i. `passwd userName`

d. Give user access to certain groups

- i. `usermod -aG wheel,audio,video,optical,storage userName`

15. Get sudo

- a. `pacman -S sudo`

16. Edit sudoers file

- a. `EDITOR=nano visudo`
- b. Uncomment `wheel all = (all) nopasswd`

17. Get other needed packages

- a. `pacman -S efibootmgr dosfstools os-prober mtools`

18. Mount EFI partition

- a. `mkdir /boot/EFI`
- b. `Mount /dev/EFIpart /boot/EFI`

19. Install grub

- a. `pacman -S grub`

- b. `grub-install --target=x86_64-efi --bootloader-id=grub_ufi --recheck`
- c. `grub-mkconfig -o /boot/grub/grub.cfg`

20. Install networking manager

- a. `pacman -S networkmanager`
- b. `systemctl enable NetworkManager`

21. Unmount

- a. `exit`
- b. `umount -l /mnt`

22. Install kde plasma

- a. `sudo pacman -Syu`
- b. `sudo pacman -S plasma`
- c. `sudo pacman -S sddm`
- d. `sudo systemctl disable gdm`
- e. `sudo systemctl enable sddm`
- f. `reboot`

23. Install nvidia drivers

- a. `pacman -S nvidia`