

gdisk /dev/sda

/dev/sda1 ef00 1G /boot

/dev/sda2 8200 2G /swap

/dev/sda3 8300 6G /

/dev/sda4 8e00 11G

/dev/VolGroup00/lvolvar 4G /var

/dev/VolGroup00/lvolhome 4G /home

lvmdiskscan

pvccreate /dev/sda4

vgcreate VolGroup00 /dev/sda4

vgdisplay

lvcreate -L 4G VolGroup00 -n lvolvar

lvcreate -L 4G VolGroup00 -n lvolhome

lvdisplay

mkfs.ext4 /dev/VolGroup00/lvolvar

mkfs.ext4 /dev/VolGroup00/lvolhome

tune2fs -m 10 /dev/VolGroup00/lvolvar

mkfs.fat -F32 /dev/sda1

mkswap /dev/sda2

mkfs.ext4 /dev/sda3

mount /dev/sda3 /mnt

swapon /dev/sda2

mkdir /mnt/boot

mount /dev/sda1 /mnt/boot

mkdir /mnt/var

mount /dev/VolGroup00/lvolvar /mnt/var

mkdir /mnt/home

mount /dev/VolGroup00/lvolhome /mnt/home

lsblk -f

pacstrap /mnt base

~~~~~init~~~~~

genfstab -U /mnt >> /mnt/etc/fstab

arch-chroot /mnt

ln -sf /usr/share/zoneinfo/Asia/Taipei /etc/localtime

hwclock --systohc

```
vi /etc/locale.gen #uncommit en_US.UTF-8 UTF-8
locale-gen
echo "LANG=en_US.UTF-8" > /etc/locale.conf
echo "joe59491_arch" > /etc/hostname
echo "127.0.0.1 joe59491_arch.localdomain joe59491_arch" >> /etc/hosts
mkinitcpio -p linux
passwd
```

~~~~~before install grub~~~~~

```
pacman -Syu
pacman -S grub
```

~~~~~after pacman grub~~~~~

```
pacman -S parted
parted /dev/sda print
pacman -S efibootmgr
grub-install --target=x86_64-efi --efi-directory=/boot --bootloader-id=grub # grub-install 把 grub 的程式寫入/boot 裡面
# --target=x86_64-efi 將目標設定為 32/64 位元的 EFI 機器
# --efi-directory=/boot 設定 efi directory 的位置
# --bootloader-id=grub 設定 bootloader 的 id 為 grub
# 首先需要先把磁碟的分割區弄成 GPT 格式
# 首先需要先把磁碟的分割區弄成 GPT 格式
# 用 EFI 開機的話需要先把開機磁區的 label 設定成 ef00(EFI system partition)並且格式化成 Fat32
# 然後 UEFI 開機的時候就會去找磁碟中符合上面規定的磁區，然後從裡面開機
```

~~~~~after grub-install~~~~~

```
grub-mkconfig -o /boot/grub/grub.cfg # grub-mkconfig 把啟動的過城中需要 config 建立好放在 /boot/grub/grub.cfg
```

~~~~~after grub-mkconfig~~~~~

```
reboot
#login~
ip link
cp /etc/netctl/examples/ethernet-dhcp /etc/netctl/
vi /etc/netctl/ethernet-dhcp #change eth0 to ens33
netctl list
netctl start ethernet-dhcp
```

pacman -S vim

~~~~~after connecting to network~~~~~

df

lvresize -l +256 /dev/VolGroup00/lvolhome #increase 1GB

resize2fs /dev/VolGroup00/lvolhome

df

~~~~~after extend /home~~~~~

vmware image:

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