

Arch Installation:

Initial Setup

```
? iwctl *for wifi connection if not using a cable
timedatectl set-ntp true
pacman -Sy reflector openssh    *openssh only for using ssh to install
reflector --verbose --latest 100 --sort rate --save /etc/pacman.d/mirrorlist
&& pacman -Sy
passwd <root password>
systemctl start sshd && ip address    #use ip address to log in with ssh
```

Partitioning:

```
lsblk
cfdisk /dev/sda                (? denotes UEFI specific commands)
* ? create boot partition [sda1]    (UEFI Only)
Primary partition [sda2]
linux-swaps [sda3]
? mkfs.fat -F 32 /dev/sda1    (UEFI)
mkfs.btrfs -f /dev/sda2      (root)
mkswap /dev/sda3            (swap)
swapon /dev/sda3
```

BTRFS Subvolumes:

```
mount /dev/sda2 /mnt
btrfs su cr /mnt/@
btrfs su cr /mnt/@home
btrfs su cr /mnt/@var
btrfs su cr /mnt/@srv
btrfs su cr /mnt/@opt
btrfs su cr /mnt/@tmp
umount /mnt
```

```
mount -o noatime,compress=lzo,space_cache,subvol=@ /dev/sda2 /mnt
mkdir /mnt/{boot,home,var,srv,opt,tmp}
```

```
mount -o noatime,compress=lzo,space_cache,subvol=@home /dev/sda2 /mnt/home
mount -o noatime,compress=lzo,space_cache,subvol=@var /dev/sda2 /mnt/var
mount -o noatime,compress=lzo,space_cache,subvol=@srv /dev/sda2 /mnt/srv
mount -o noatime,compress=lzo,space_cache,subvol=@opt /dev/sda2 /mnt/opt
mount -o noatime,compress=lzo,space_cache,subvol=@tmp /dev/sda2 /mnt/tmp
? mount /dev/sda1 /mnt/boot    (UEFI)
lsblk
```

Base Install:

```
pacstrap /mnt base base-devel linux-firmware linux-zen nano intel-ucode
(or amd-ucode) btrfs-progs reflector
genfstab -U /mnt >> /mnt/etc/fstab && cat /mnt/etc/fstab
arch-chroot /mnt
```

Inside System:

```
chattr +C /var
ln -sf /usr/share/zoneinfo/Africa/Johannesburg /etc/localtime
hwclock --systohc
nano /etc/locale.gen    *uncomment en_ZA.UTF-8 (or your language)
locale-gen
echo LANG=en_ZA.UTF-8 *(your language)>> /etc/locale.conf
echo KEYMAP=en_US *(your keymap) >> /etc/vconsole.conf
echo <pc-name> > /etc/hostname
nano /etc/hosts
* add the following
127.0.0.1 localhost
::1      localhost
127.0.1.1 <pc-name>.localdomain <pc-name>
* ctrl+x --> y --> ENTER
```

Installation:

```
sudo nano /etc/pacman.conf * add 'Color' and 'ILoveCandy' @ Options
reflector --verbose --latest 100 --sort rate --save /etc/pacman.d/mirrorlist
pacman -Syy grub grub-btrfs networkmanager network-manager-applet
wpa_supplicant dialog os-prober mtools dosfstools linux-zen-headers git
bluez bluezutils cups xdg-utils xdg-user-dirs zsh xorg plasma sddm dolphin
konsole yakuake chromium xf86-video-intel (xf86-video-amdgpu or nvidia
nvidia-utils) ? efibootmgr
```

Bootloader:

```
nano /etc/mkinitcpio.conf    * change MODULES=(btrfs)
mkinitcpio -p linux-zen
grub-install --target=i386-pc /dev/sda    *drive only (MBR)
? grub-install --target=x86_64-efi --efi-directory=/dev/sda1 --bootloader-id=GRUB
grub-mkconfig -o /boot/grub/grub.cfg
```

Enable Services & Create User:

```
systemctl enable NetworkManager
systemctl enable bluetooth
systemctl enable org.cups.cupsd
systemctl enable sddm.service
```

```
useradd -mG wheel <user-name> && passwd <user-name>
EDITOR=nano visudo *uncomment %wheel...ALL
chsh -s bin/zsh
sudo !!
exit
umount -a
reboot    *remove flash disk
```

In The Installed System:

```
git clone https://github.com/baz8ka2th/Arch-Dotfiles
```

*move the contents of Arch-Dotfiles to the home folder, and add . to the beginning of each file (.zshrc ; .p10k.zsh ; /.aliases/.alias_main ;
/.aliases/.alias_config ; /.aliases/.alias_pacman ;
/.aliases/.alias_youtube)

run command **setup** to see options for installing software
run **help** to get a list of all the alias commands available
ensure you use **install-yay** at least for install aliases to work correctly and allow installing from AUR

go to settings app to customize the Desktop Environment to your preference