Arch Installation Summary

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Disclaimer

This is a personal guide to an arch install, made by me, which is being constantly update and fixed as I learn new and better ways of setting up the system, so do not blame me if something goes wrong with your installation.

Also, this guide is suited to my system and preferences, like language settings, locale, preferred disk partition, windows manager, programs used, etc

By the way, there are 2 scripts in this repo that do all that is written here. The **install.sh** one is used to set up and install arch, the the **setup.sh** is used to install all the programs and configurations after the reboot.

Before chroot

Verify Boot Mode

Keyboard Layout

```
ls /usr/share/kbd/keymaps/**/*.map.gz
loadkeys br-abnt2
```

Network Configuration

```
wifi-menu
ping google.com
ip address show
systemctl stop dhcpdc@interface
```

Date and Clock

```
timedatectl set-ntp true
```

Disk Partition

1. efi - 512 MB

2. root - 20 or 30 GB
3. swap - Half of RAM
4. home - Rest of the space

Create the partitions:

```
ldisk -l
gdisk /dev/sdX

EFI Partition:
n (New Partition)
1 (First Partition)
Enter (Beginning of space)
+512M (300 Megas)
ef00 (Code for EFI System)

Root Partition:
n
2
Enter
+30G (30 Gigas)
Enter (Default Code, 8300)

Swap Partition:
n
3
Enter
+8G
8200 (Linux Swap)

Home Partition:
n
4
Enter
Enter (Rest of the space)
8302 (Linux /home)

p (Check if everything is correct)
```

Format the partitions:

```
mkfs.fat -F32 /dev/sdX1
mfks.ext4 /dev/sdX2
mkswap /dev/sdX3}, \textbf{swapon /dev/sdX3
```

Encrypt Filesystem

TODO

Filesystem Mounting

```
mount /dev/sdX2 /mnt
mkdir /mnt/home
mount /dev/sdX4 /mnt/home
mkdir /mnt/boot
mkdir /mnt/boot/efi
mount /dev/sdX1 /mnt/boot/efi
```

Package Installation

```
pacstrap -i /mnt base base-devel
genfstab -U -p /mnt >> /mnt/etc/fstab
arch-chroot /mnt
```

Into chroot

Set the root password, and install bootloader and headers:

```
passwd
pacman -S grub efibootmgr dosfstools os-prober mtools linux-headers vim
```

Timezone, location and keeb layout

```
ln -sf /usr/share/zoneinfo/America/Fortaleza /etc/localtime
vim /etc/locale.gen # Uncomment pt_BR.UTF-8
locale-gen
hwclock --systoch
echo "LANG=pt_BR.UTF-8" >> /etc/localge.conf
echo "KEYMAP=" >> /etc/vconsole.conf
```

Hostname

```
echo "hyperion" >> /etc/hostname
```

Add the following to **/etc/hosts**:

```
127.0.0.1 localhost
::1       localhost
127.0.1.1 hyperion.localdomain hyperion
```

Grub

```
grub-install --target=x86_64-efi --bootloader-id=grub_uefi --recheck
cp /usr/share/locale/en\@quot/LC_MESSAGES/grub.mo /boot/grub/locale/en.mo
grub-mkconfig -o /boot/grub/grub.cfg
```

Network Configuration

```
pacman -S NetworkManager
```

User Configuration

```
visudo # edit and uncomment the WHEEL line
useradd -m USERNAME -G wheel
```

Exiting chroot

```
exit
umount -a
reboot
```

After reboot

Network

```
systemctl start NetworkManager.service
systemctl enable NetworkManager.service
nmcli device wifi connect network password password
```

Display and Graphic

```
pacman -Ss xf86-video # check all the video drivers
sudo pacman -S xf86-video-intel xf86-input-mouse xf86-input-keyboard
sudo pacman -S xorg-server xorg-xinit xterm
Xorg -configure
```

Windows Manager

```
sudo pacman -S i3 dmenu
echo "exec i3" >> $HOME/.xinitrc
```

Login Manager

```
sudo pacman -S lightdm lightdm-gtk-greeter xorg-xerver-xephyr accountsservice
systemctl enable lightdm.service
systemctl start lightdm.service
```

Sound

Rest of the instalattion

I use my script on my dotfiles to set up the res of the system to my liking