

# Arch Install EFI

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## Using Disk Destroyer to create a live USB

- Download ISO from [here](#)
- Plug in usb and check with `lsblk`. Should be `sdx`.
- Enter superuser by

```
# sudo su
```
- Create live using

```
# dd if=$iso_location of=/dev/sdx status="progress"
```

## Boot into the USB

- Select boot menu on start and select the USB.
- Select the option to boot into live ISO

## Live ISO

### Setting up network

- Check your internet connection using `ifconfig` and `ping`. Example:

```
# ping -c 3 google.com
```
- If you don't find connection, use

```
# wifi-config
```

## Disk Partitioning

### Check partitions

Check your partitions using any of these:

```
# cat /proc/partitions
# ls /dev/[s|x|v]d*
# lsblk
# fdisk -l
```

### Partitions Sizes and Formats

- EFI System partition (`/dev/sda1`): 300 M | FAT32.
- Swap partition (`/dev/sda2`): 2xRAM | RAM/2.
- Root partition (`/dev/sda3`): At least 20 G | ext4.

## Partitioning

Run

```
# cfdisk /dev/sda

• EFI: New > 300M > Type > EFI System
• Swap: New > 20G > Type > Linux swap
• Root: New > 900G > Type > Linux filesystem
```

Then do: Write > yes > Quit

Check your partitions using `fdisk -l` or `lsblk`.

## Formatting partitions

Run these to format newly created partitions

```
# mkfs.fat -F32 /dev/sda1
# mkswap /dev/sda2
# mkfs.ext4 /dev/sda3
```

Check your partitions using `fdisk -l` or `lsblk`.

## Installing Arch Linux

### Mounting root and EFI; Swap

```
# mount /dev/sda3 /mnt
# swapon /dev/sda2

# mkdir /mnt/boot/EFI
# mount /dev/sda1 /boot/EFI
```

### fstab file

Check fstab using:

```
# genfstab -U /mnt
```

See that all the drives are where they're supposed to be, and then do

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

### Pacman Config

- For more speed, change your mirrors in `/etc/pacman.d/mirrorlist`
- Enable multilib by uncommenting parts in `/etc/pacman.conf`

```
[multilib]
Include = /etc/pacman.d/mirrorlist
```

### Install Arch Linux

Use `# pacstrap /mnt base base-devel vim dialog` to install Arch Linux on root. I put vim because i like it. You don't have to. `dialog` is for wifi-menu, but that's for later.

## Arch Linux System Configuration

To change root and add hostname, use

```
# arch-chroot /mnt
# echo "$hostname" > /etc/hostname
```

### Locale settings

#### System Language

Uncomment in `/etc/locale.gen`:

```
en_US.UTF-8 UTF-8
en_US ISO-8859-1
```

Generate system language layout:

```
# locale-gen
# echo LANG=en_US.UTF-8 > /etc/locale.conf
# export LANG=en_US.UTF-8
```

## System Time

Check timezone using `# ls /usr/share/zoneinfo`

And use `# ln -s /usr/share/zoneinfo/US/Central /etc/localtime`

Set hardware clock using `# hwclock --systohc --cdt`

## Repositories

Enable multilib like before in `/etc/pacman.conf`

Put `ILoveCandy` in the same file under options if you want the pacman thing for package manger.

Synchronize and update database mirrors and packages using

```
# pacman -Syu
```

## Root Privileges

Set root password, create group `wheel` user and force user to change password on first login by

```
# passwd
# useradd -mg users -G wheel,storage,power -s /bin/bash $user
# passwd $user
# chage -d 0 $user
```

## Add user to sudoers

```
# pacman -S sudo
# visudo
```

Uncomment the appropriate line to look like this:

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

## Bootloader

We will use `grub` as our bootloader. Use this:

```
# pacman -S grub efibootmgr dosfstools os-prober mtools
# grub-install --target=x86_64-efi --bootloader-id=grub_ufi --recheck --efi-directory=/mnt/efi
```

Create grub config using

```
# grub-mkconfig -o /boot/grub/grub.cfg
```

## Done!!!

Your installation is complete. Use these commands to unmount partitions and reboot:

```
# exit
# umount -a
# telinit 6
```

Select Arch Linux in grub menu and Ta Da! You're done.

Check out my i3gaps [config](#) if you choose to go with i3 as your wm.