



archlinux install

howto install a basic archlinux

s@mba

before everythig

- * please please please: backup your docs
- * check boot settings [CDROM, USB, HD]
- * check if your system is i386 or x64
- * insert iso, cdrom, usb and reboot
- * select your arch system

After the boot

* Set the keyboard language

```
$ loadkeys LANG
```

LANG: en, es, it, fr, de,

example:

```
$ loadkeys it
```

Setup your disk

1. Partitioning the disk (fdisk)
2. Create a FS (xfs, ext3, ext4, zfs, ...)
3. mount your new partition

1. fdisk - a cli tool used to manage partitions

usage:

\$ fdisk -l # print all the available partitions

\$ fdisk /dev/sda # enter in the /dev/sda setup

commands:

n - new (create a new partition)

p - list available partition

w - save and quit

h - print help

2. Create the Filesystem (format)

Filesystem - software used to organize files

type of fs: xfs, zfs, ntfs, vfat, hfs, ext3, ext4

mkfs - tool used to create filesystem

device - /dev/sda

partition - /dev/sda1

usage:

```
$ mkfs -t ext4 /dev/sda1
```

3. mount the partition

mount [partition] [mount point]

usage:

```
$ mount /dev/sda1 /mnt/arch
```

Networking (how to get a ipaddress)

wifi:

```
$ wifi-menu
```

automatic:

```
$ dhcpcd IFNAME
```

static:

```
$ ifconfig IFNAME IPADDR
```

```
$ route add default gw GATEWAY_ADDR
```

```
$ ping www.google.com
```

ifconfig - manage network interfaces

```
$ ifconfig -a # get all device name
```

```
$ ifconfig IFNAME # get status of IFNAME
```

```
$ ifconfig IFNAME down # stop IFNAME
```

Install the base

pacstrap - archlinux tool used to install the base system

usage:

```
$ pacstrap /mnt/arch base
```

```
$ pacstrap /mnt/arch base base-dev
```

Configure the fstab file

/etc/fstab - contain static info about the FS

usage:

```
$ genfstab -p /mnt/arch > /mnt/arch/etc/fstab
```

chroot - into your new system

chroot - cli tool used to run cmd with special root dir

usage:

```
$ arch-chroot /mnt/arch
```

Set your hostname

the hard choice...

now you are into the chroot, so into your new system.
Choose a name for your new pc.

usage:

```
$ vim /etc/hostname
```

```
<type your name>
```

```
:wq
```

localization - (time to display and where the pc is)

configure the timezone

```
$ ln -s /usr/share/zoneinfo/Europe/Rome /etc/localtime
```

configure your locales (keyboard lang)

files to edit:

```
/etc/locale.gen
```

```
/etc/locale.conf
```

apply config cmd:

```
$ localegen
```

```
en_US.UTF-8
```

```
it_IT.UTF-8
```

RAM disk - mkinitcpio

mkinitcpio - load in RAM initial tools and start OS from disk

edit:

```
vim /etc/mkinitcpio.conf      # uncomment what you need
```

usage:

```
$ mkinitcpio -p linux        # apply the config
```

Bootloader - what to boot: linux or windows?

grub - the first program your pc starts

install:

```
$ pacman -S grub
```

configure:

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

umount and reboot

Let's exit from chroot and save all we've done

chroot exit :

“exit” or [CTL+d]

umount - sync/save all FS change:

\$ umount /mnt/arch

reboot - now you can see if is all ok:

\$ reboot

Copyleft



yes, you can share it!

You are free to:

- **Share** — copy and redistribute the material in any medium or format
- **Adapt** — remix, transform, and build upon the material
- for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

<http://creativecommons.org/licenses/by-sa/3.0/>

Thanks

s@mba

- * samba@netstudent.polito.it
- * [@opensamba](https://www.instagram.com/opensamba)
- * <http://sambismo.wordpress.com>

yes, you can ask me everything :)