

# Desarrollo de Entorno Profesional para la Ciberseguridad

Realizado por:

**Álvaro González Sayago en CFGS 2ASIR**

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# Manual de instalación & configuración

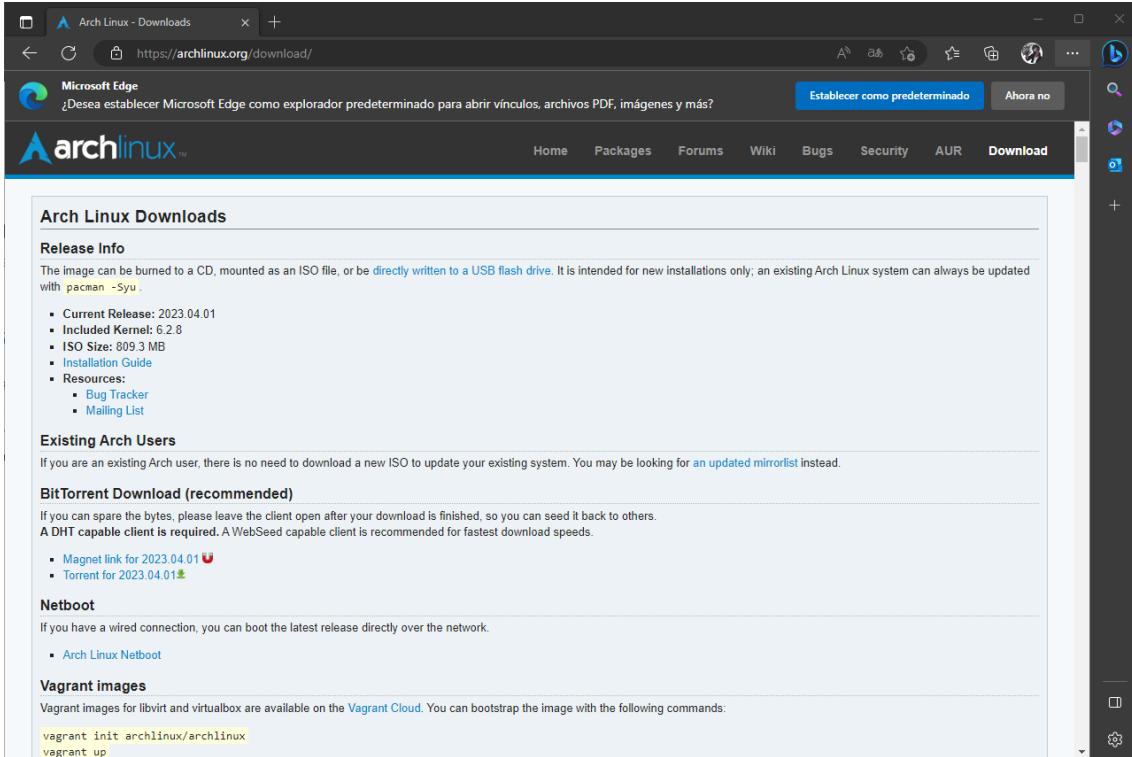
## Introducción

La instalación está dividida en 3 puntos diferentes. Arch, Gnome y BSPWM.

### 1 Instalación inicial de ARCH.

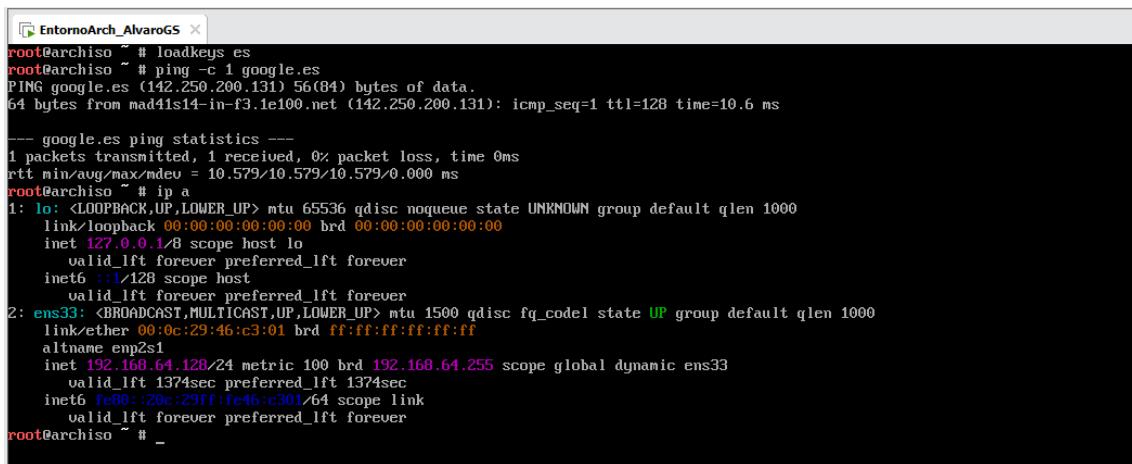
**Paso 1.** Descargamos la ISO oficial de Arch y creamos una MV con la misma.

Link a la ISO de Arch: <https://archlinux.org/download/>



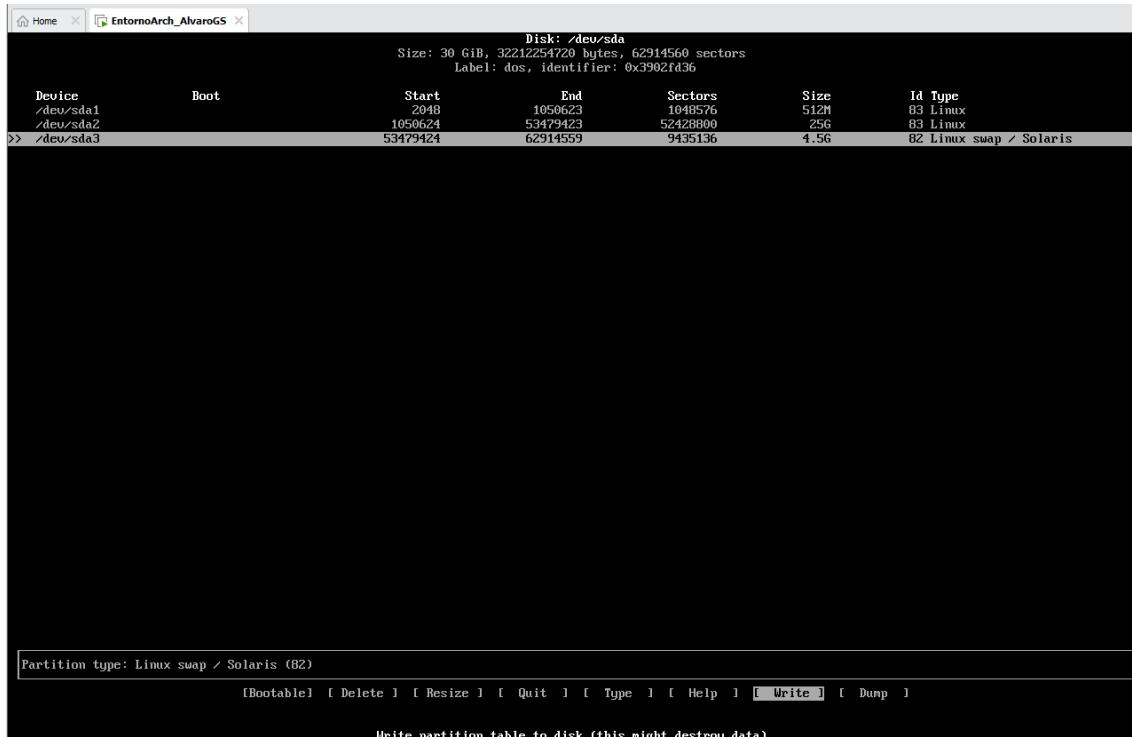
The screenshot shows the Microsoft Edge browser window with the URL <https://archlinux.org/download/>. The page displays the "Arch Linux Downloads" section. It includes a "Release Info" table with details like Current Release (2023.04.01), Included Kernel (6.2.8), ISO Size (809.3 MB), and links to Installation Guide and Resources (Bug Tracker, Mailing List). Below this is the "Existing Arch Users" section, which notes that existing users can update their system via pacman -Syu. It also provides BitTorrent download links for 2023.04.01. Further down are sections for Netboot (using a wired connection) and Vagrant images. At the bottom, there's a terminal window showing the command "vagrant init archlinux/archlinux" followed by "vagrant up".

**Paso 2.** Comprobamos la conectividad de la MV.



The terminal window title is "EntornoArch\_AlvaroGS". The session starts with root privileges on an ArchISO system. The user runs "loadkeys es" to set the keyboard layout to Spanish. Then, they run "ping -c 1 google.es" to check connectivity to Google's IP address. The output shows a successful ping with a round-trip time of 10.6 ms. The user then lists all network interfaces with "ifconfig" and "ip a". The output shows two interfaces: "lo" (loopback) and "ens33" (ethernet). The "ens33" interface has an IP of 192.168.64.128 and is connected to a bridge "brd" with MAC address 00:0c:29:46:c3:01. The terminal ends with a root prompt.

**Paso 3.** Definimos manualmente las particiones con CFDISK.



```
root@archiso ~ # lsblk
NAME   MAJ:MIN RM   SIZE RO TYPE MOUNTPOINTS
loop0    7:0     0 687.9M  1 loop /run/archiso/airootfs
sda      8:0     0   30G  0 disk 
└─sda1   8:1     0   512M  0 part 
└─sda2   8:2     0   25G  0 part 
└─sda3   8:3     0   4.5G  0 part 
sr0     11:0     1 809.3M  0 rom  /run/archiso/bootmnt
root@archiso ~ #
```

**Paso 4.** Formateamos las particiones.

```
root@archiso ~ # mkfs.ufat -F 32 /dev/sda1
mkfs.fat 4.2 (2021-01-31)
root@archiso ~ # mkfs.ext4 /dev/sda2
mke2fs 1.47.0 (5-Feb-2023)
Creating filesystem with 6553600 4k blocks and 1638400 inodes
Filesystem UUID: a3ba2382-ddb9-48ef-8e43-7f85f6e46f27
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
    4096000

Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

root@archiso ~ # mkswap /dev/sda3
Setting up swapspace version 1, size = 4.5 GiB (4830785536 bytes)
no label, UUID=523cc326-2629-4fac-9f89-9fed899d4643
root@archiso ~ # swapon
root@archiso ~ #
```

**Paso 5.** Montamos las particiones e instalamos paquetes esenciales.

```
EntornoArch_AlvaroGS ×
root@archiso ~ # mkdir /mnt/boot
root@archiso ~ # mount /dev/sda1 /mnt/boot
root@archiso ~ # pacstrap /mnt linux linux-firmware networkmanager grub wpa_supplicant base base-devel
=> Creating install root at /mnt
=> Installing packages to /mnt
:: Synchronizing package databases...
core                                         154.0 KiB  1320 KiB/s 00:00 [########################################] 100%
extra                                         1763.2 KiB  8.92 MiB/s 00:00 [########################################] 100%
community                                     7.2 MiB   4.78 MiB/s 00:02 [########################################] 100%
resolving dependencies...
:: There are 3 providers available for initramfs:
:: Repository core
  1) mknitcpio
:: Repository extra
  2) booster  3) dracut
Enter a number (default=1):
looking for conflicting packages...
```

**Paso 6.** Generamos el archivo fstab.

```
EntornoArch_AlvaroGS ×
root@archiso ~ # genfstab -U /mnt > /mnt/etc/fstab
root@archiso ~ # cat $#
cat /mnt/etc/fstab
# /dev/sda2
UUID=444f8a18-d813-47b2-a2e7-ec0a1856c714      /          ext4      rw,relatime  0 1
# /dev/sda1
UUID=f903-a096       /boot        vfat      rw,relatime,fmask=0022,dmask=0022,codepage=437,iocharset=ascii,shortname=mixed,utf8,errors=remount-ro 0
2
root@archiso ~ # _
```

**Paso 7.** Accedemos como root, asignamos contraseña y creamos un nuevo usuario.

```
EntornoArch_AlvaroGS ×
root@archiso ~ # arch-chroot /mnt
[root@archiso ~]# passwd
New password:
Retype new password:
passwd: password updated successfully
[root@archiso ~]# useradd -m alvaro
[root@archiso ~]# passwd alvaro
New password:
Retype new password:
passwd: password updated successfully
[root@archiso ~]# ls /home
alvaro
[root@archiso ~]# _
```

**Paso 8.** Instalamos sudo, vim y nano.

```
EntornoArch_AlvaroGS ×
root@archiso ~ # usermod -aG wheel alvaro
[root@archiso ~]# pacman -S sudo
warning: sudo-1.9.13.p3-1 is up to date -- reinstalling
resolving dependencies...
looking for conflicting packages...

Packages (1) sudo-1.9.13.p3-1

Total Installed Size: 7.21 MiB
Net Upgrade Size: 0.00 MiB

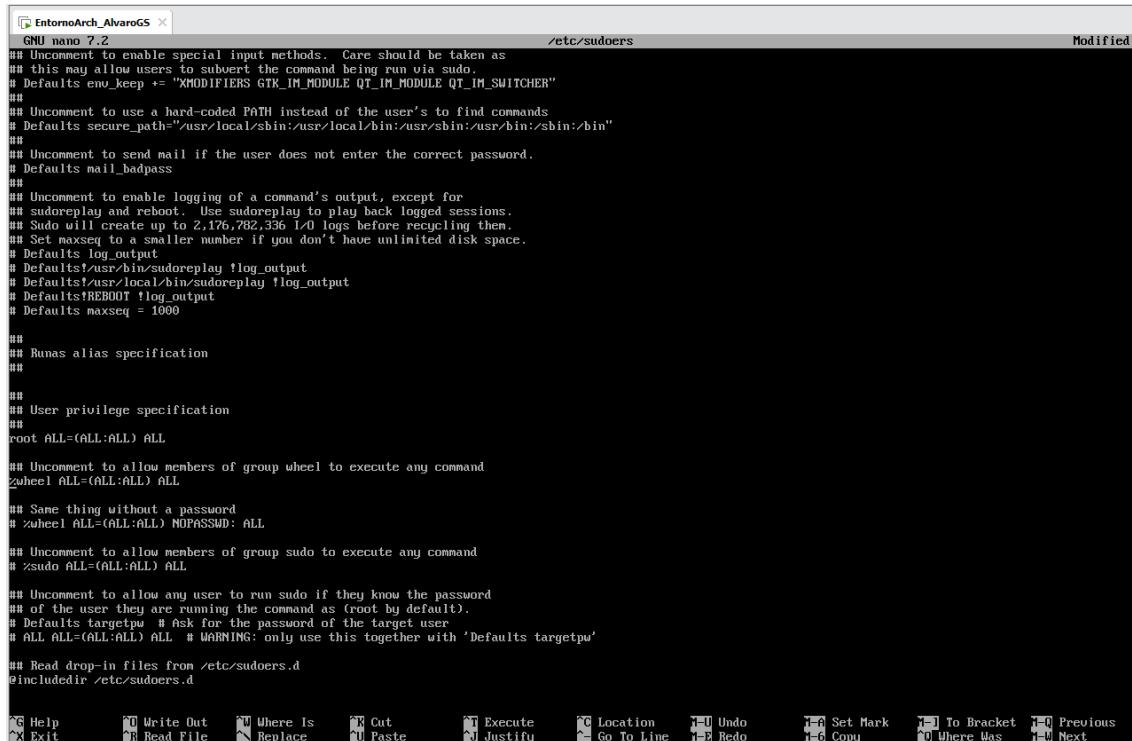
:: Proceed with installation? [Y/n] Y
(1/1) checking keys in keyring
(1/1) checking package integrity
(1/1) loading package files
(1/1) checking for file conflicts
(1/1) checking available disk space
:: Processing package changes...
(1/1) reinstalling sudo
:: Running post-transaction hooks...
(1/3) Reloading system manager configuration...
  Skipped: Running in chroot
(2/3) Creating temporary files...
(3/3) Arming ConditionNeedsUpdate...
[root@archiso ~]# pacman -S vim nano
resolving dependencies...
looking for conflicting packages...

Packages (3) vim-runtime-9.0.1420-1  nano-7.2-1  vim-9.0.1420-1

Total Download Size: 9.76 MiB
Total Installed Size: 41.74 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
  vim-runtime-9.0.1420-1-x86_64
Total (0/3)
```

**Paso 9.** Descomentamos una línea en /etc/sudoers (%wheel)



```
EntornoArch_AlvaroGS x
GNU nano 7.2          /etc/sudoers
Modified

## Uncomment to enable special input methods. Care should be taken as
## this may allow users to subvert the command being run via sudo.
## Defaults env_keep += "XMODIFIERS GTK_IM_MODULE QT_IM_MODULE QT_IM_SWITCHER"
##
## Uncomment to use a hard-coded PATH instead of the user's to find commands
## Defaults secure_path="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
##
## Uncomment to send mail if the user does not enter the correct password.
## Defaults mail_badpass
##
## Uncomment to enable logging of a command's output, except for
## sudoreplay and reboot. Use sudoreplay to play back logged sessions.
## Sudo will create up to 2,176,782,336 I/O logs before recycling them.
## Set maxseq to a smaller number if you don't have unlimited disk space.
## Defaults log_output
## Defaults!/usr/bin/sudoreplay !log_output
## Defaults!/usr/local/bin/sudoreplay !log_output
## Defaults!/sbin/sudoreplay !log_output
## Defaults maxseq = 1000

##
## Runas alias specification
##

##
## User privilege specification
##
root ALL=(ALL:ALL) ALL

## Uncomment to allow members of group wheel to execute any command
#wheel ALL=(ALL:ALL) ALL

## Same thing without a password
# %wheel ALL=(ALL:ALL) NOPASSWD: ALL

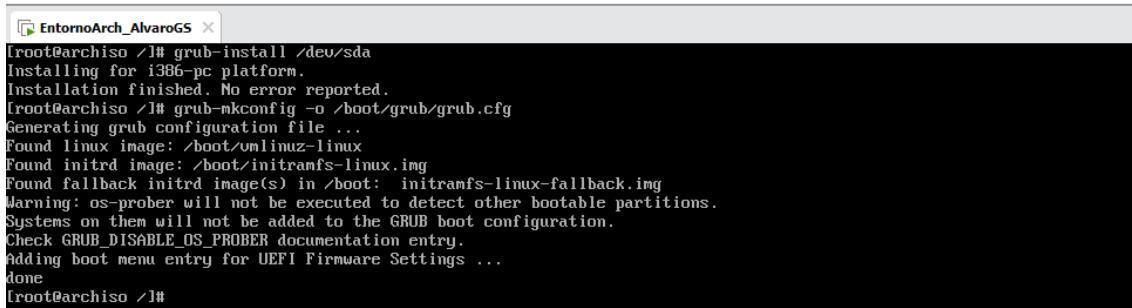
## Uncomment to allow members of group sudo to execute any command
# %sudo ALL=(ALL:ALL) ALL

## Uncomment to allow any user to run sudo if they know the password
## of the user they are running the command as (root by default).
## Defaults targetpw # Ask for the password of the target user
## ALL ALL=(ALL:ALL) ALL # WARNING: only use this together with 'Defaults targetpw'

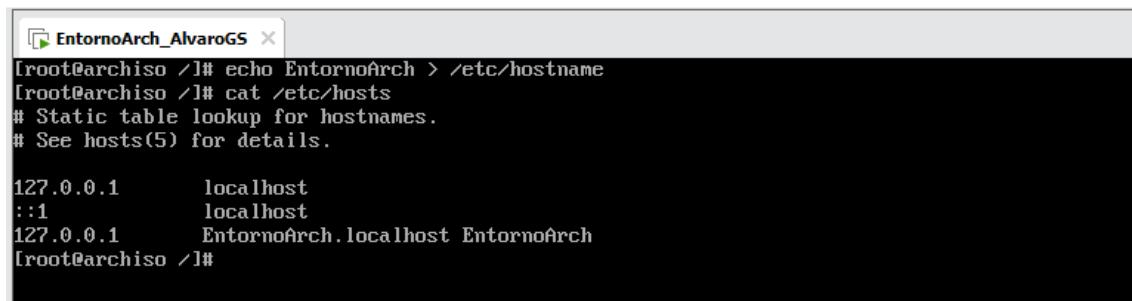
## Read drop-in files from /etc/sudoers.d
@includedir /etc/sudoers.d

File Help Edit View Insert Search Tools Window Help
Exit Write Out Read File Replace Cut Paste Execute Justify Location Go To Line Undo Redo Set Mark To Bracket Copy Where Was Previous Next
```

**Paso 10.** Instalamos el grub, definimos hostname y hosts.



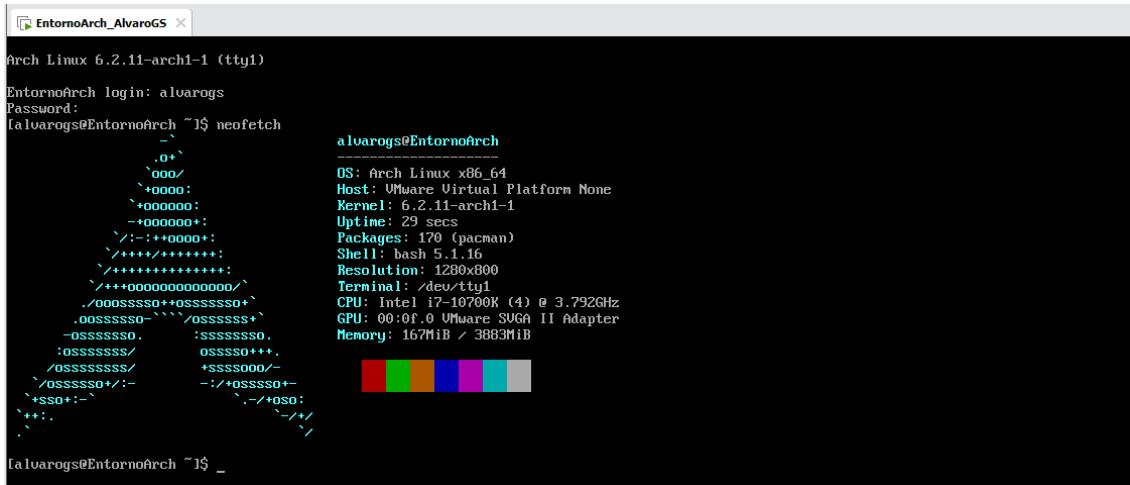
```
EntornoArch_AlvaroGS x
root@archiso /# grub-install /dev/sda
Installing for i386-pc platform.
Installation finished. No error reported.
[root@archiso /]# grub-mkconfig -o /boot/grub/grub.cfg
Generating grub configuration file...
Found linux image: /boot/vmlinuz-linux
Found initrd image: /boot/initramfs-linux.img
Found fallback initrd image(s) in /boot: initramfs-linux-fallback.img
Warning: os-prober will not be executed to detect other bootable partitions.
Systems on them will not be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_PROBER documentation entry.
Adding boot menu entry for UEFI Firmware Settings ...
done
[root@archiso /]#
```



```
EntornoArch_AlvaroGS x
[root@archiso /]# echo EntornoArch > /etc/hostname
[root@archiso /]# cat /etc/hosts
# Static table lookup for hostnames.
# See hosts(5) for details.

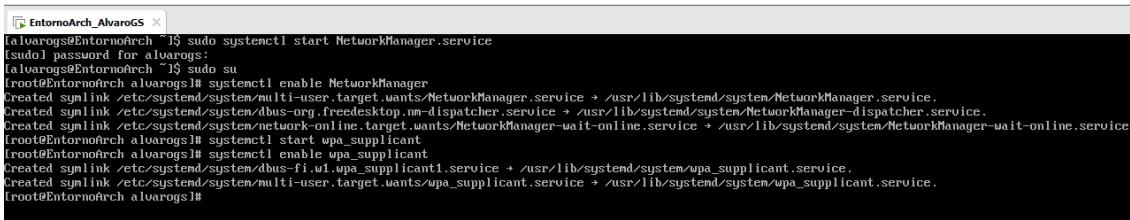
127.0.0.1      localhost
::1            localhost
127.0.0.1      EntornoArch.localhost EntornoArch
[root@archiso /]#
```

**Paso 11.** Instalamos neofetch y reiniciamos el sistema.



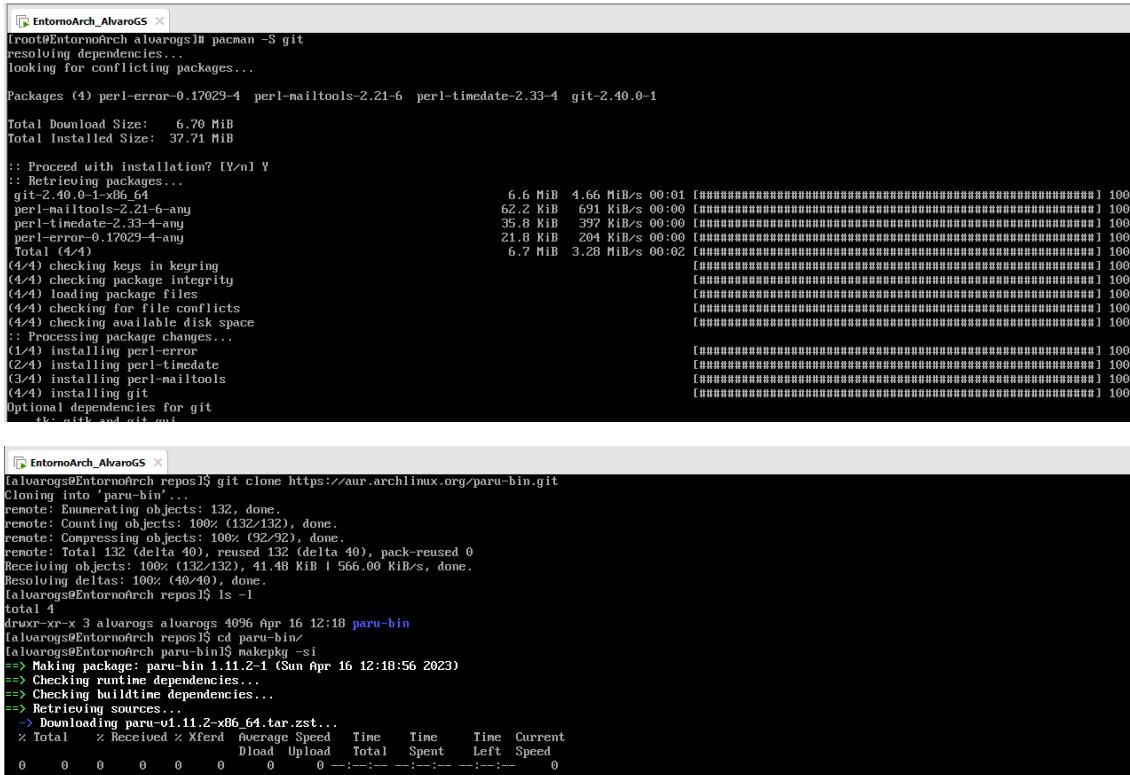
```
EntornoArch_AlvaroGS ~]$ neofetch
Arch Linux 6.2.11-arch1-1 (tty1)
EntornoArch login: alvaroogs
Password:
alvaroogs@EntornoArch ~]$ neofetch
alvaroogs@EntornoArch ~]$
```

**Paso 12.** Iniciamos el NetworkManager y wpa\_supplicant para tener internet.



```
alvaroogs@EntornoArch ~]$ sudo systemctl start NetworkManager.service
[sudo] password for alvaroogs:
(alvaroogs@EntornoArch ~]$ sudo su
[root@EntornoArch alvaroogs]# systemctl enable NetworkManager
Created symlink /etc/systemd/system/multi-user.target.wants/NetworkManager.service → /usr/lib/systemd/system/NetworkManager.service.
Created symlink /etc/systemd/system/dhds-org.freedesktop.nm-dispatcher.service → /usr/lib/systemd/system/NetworkManager-dispatcher.service.
Created symlink /etc/systemd/system/network-online.target.wants/NetworkManager-wait-online.service → /usr/lib/systemd/system/NetworkManager-wait-online.service.
[root@EntornoArch alvaroogs]# systemctl start wpa_supplicant
[root@EntornoArch alvaroogs]# systemctl enable wpa_supplicant
Created symlink /etc/systemd/system/dhds-f1.w1.wpa_supplicant1.service → /usr/lib/systemd/system/wpa_supplicant.service.
Created symlink /etc/systemd/system/multi-user.target.wants/wpa_supplicant.service → /usr/lib/systemd/system/wpa_supplicant.service.
[root@EntornoArch alvaroogs]#
```

**Paso 13.** Instalamos git y el siguiente repositorio de AUR.



```
EntornoArch_AlvaroGS ~]$ pacman -S git
(resolving dependencies...
looking for conflicting packages...)

Packages (4) perl-error-0.17029-4 perl-mailtools-2.21-6 perl-timedate-2.33-4 git-2.40.0-1

total Download Size: 6.70 MiB
Total Installed Size: 37.71 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
git-2.40.0-1-x86_64 6.6 MiB 4.66 MiB/s 00:01 [#####
perl-mailtools-2.21-6-any 62.2 Kib 691 Kib/s 00:00 [#####
perl-timedate-2.33-4-any 35.8 Kib 397 Kib/s 00:00 [#####
perl-error-0.17029-4-any 21.8 Kib 204 Kib/s 00:00 [#####
Total (4) 6.7 MiB 3.20 MiB/s 00:02 [#####

(4/4) checking keys in keyring
(4/4) checking package integrity
(4/4) loading package files
(4/4) checking for file conflicts
(4/4) checking available disk space
:: Processing package changes...
(1/4) installing perl-error
(2/4) installing perl-timedate
(3/4) installing perl-mailtools
(4/4) installing git
Optional dependencies for git
  * tk: gitk and git-gui
  * kate: kdiff3 and gitk

EntornoArch_AlvaroGS ~]$ ls -l
total 4
drwxr-xr-x 3 alvaroogs 4096 Apr 16 12:18 paru-bin
alvaroogs@EntornoArch repos]$ git clone https://aur.archlinux.org/paru-bin.git
Cloning into 'paru-bin'...
remote: Enumerating objects: 132, done.
remote: Counting objects: 100% (132/132), done.
remote: Compressing objects: 100% (92/92), done.
remote: Total 132 (delta 40), reused 132 (delta 40), pack-reused 0
Receiving objects: 100% (132/132), 41.48 Kib | 566.00 KiB/s, done.
Resolving deltas: 100% (40/40), done.
(alvaroogs@EntornoArch repos)$ ls -l
total 4
drwxr-xr-x 3 alvaroogs 4096 Apr 16 12:18 paru-bin
alvaroogs@EntornoArch repos]$ cd paru-bin/
alvaroogs@EntornoArch paru-bin]$ makepkg -si
=> Making package: paru-bin 1.11.2-2 (Sun Apr 16 12:18:56 2023)
=> Checking runtime dependencies...
=> Checking builtime dependencies...
=> Retrieving sources...
  > Downloading paru-v1.11.2-x86_64.tar.zst...
  % Total    % Received % Xferd  Average Speed   Time   Time     Time Current
          0      0       0      0      0      0      0 --:--:-- --:--:-- --:--:-- 0
```

**Paso 14.** Descargamos el siguiente archivo BASH y lo ejecutamos como root.

```
[EntornoArch_AlvaroGS] ~
```

```
[alvaro@EntornoArch repos]$ mkdir blackarch
```

```
[alvaro@EntornoArch repos]$ cd blackarch/
```

```
[alvaro@EntornoArch blackarch]$ curl -O https://blackarch.org/strap.sh
```

```
  % Total    % Received   % Xferd  Average Speed   Time   Time  Current  
  0  4264    0  4264    0      0  16483      0 --:--:-- --:--:-- --:--:-- 16527
```

```
[alvaro@EntornoArch blackarch]$ ls
```

```
strap.sh
```

```
[alvaro@EntornoArch blackarch]$ chmod +x strap.sh
```

```
[alvaro@EntornoArch blackarch]$ sudo su
```

```
[sudo] password for alvaro@:
```

```
[root@EntornoArch blackarch]# ./strap.sh
```

```
[e] installing blackarch keyring...
```

```
loading packages...
```

```
resolving dependencies...
```

```
looking for conflicting packages...
```

```
Packages (1) blackarch-keyring-20140118-3
```

```
Total Installed Size: 0.04 MiB
```

```
:: Proceed with installation? [Y/n]
```

```
(1/1) checking keys in keyring
```

```
(1/1) checking package integrity
```

```
(1/1) loading package files
```

```
(1/1) checking for file conflicts
```

```
:: Processing package changes...
```

```
(1/1) installing blackarch-keyring
```

```
--> Appending keys from blackarch.gpg...
```

```
[####] 100%
```

```
[####] 100%
```

```
[####] 100%
```

```
[####] 100%
```

```
[####] 100%
```

```
[####] 100%
```

## Paso 15. Instalamos la suite de Impacket.

```
[EntornoArch_AlvaroGS]# pacman -S impacket
resolving dependencies...
looking for conflicting packages...

Packages (20) libssl-1.0.2o-0  python-3.10.10-1  python-cffi-1.15.1-1  python-click-0.1.3-1  python-cryptography-40.0.1-1  python-flask-2.2.2-1
           python-itsdangerous-2.1.2-2  python-jinja-1:3.1.2-2  python-ldap3-2.9.1-3  python-markupsafe-2.1.2-1  python-pcapy-1.0.5-1  python-ply-3.11-10
           python-puassn-0.4.8-7   python-pycparser-2.21-3   python-pycryptodome-3.17.0-1  python-pycryptodomex-3.12.0-1  python-pyopenssl-23.1.1-1
           python-six-1.16.0-6   python-werkzeug-2.2.3-1   impacket-0.9.24-1

Total Download Size: 19.06 MiB
Total Installed Size: 98.53 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
python-3.10.10-x86_64                                12.0 MiB  4.23 MiB/s 00:03 [=====] 100%
impacket-0.9.24-1-any                                1802.1 KiB  2.71 MiB/s 00:01 [=====] 100%
python-pycryptodome-3.12.0-1-x86_64                  1354.7 KiB  2.65 MiB/s 00:01 [=====] 100%
python-pycryptodome-3.17.0-1-x86_64                  1016.0 KiB  1360 KiB/s 00:01 [=====] 100%
python-cryptography-40.0.1-1-x86_64                 913.2 KiB  3.38 MiB/s 00:00 [=====] 100%
python-idna-3.2-1-3-any                             442.8 KiB  2.03 MiB/s 00:00 [=====] 100%
python-werkzeug-2.2.3-1-any                           338.9 KiB  1661 KiB/s 00:00 [=====] 100%
python-cffi-1.15.1-1-x86_64                           222.3 KiB  649 KiB/s 00:00 [=====] 100%
python-jinja-1:3.1.2-2-any                           218.0 KiB  1425 KiB/s 00:00 [=====] 100%
python-pycparser-2.21-3-any                           18.2 MiB  1157 KiB/s 00:00 [=====] 95%
total ( 9/20)
```

**Paso 16.** Interfaz Gráfica. Instalamos todos los paquetes de xorg y gnome.

```
EntornoArch_AltaroGS
lroot@EntornoArch blackarch]# pacman -S xorg xorg-server
:: There are 48 members in group xorg:
:: Repository extra
  1) xf86-video-vesa 2) xorg-bdtopcf 3) xorg-docs 4) xorg-font-util 5) xorg-fon... 7) xorg-fonts-encodings 8) xorg-iceauth
  9) xorg-mkfontscale 10) xorg-server 11) xorg-server-common 12) xorg-server-devel 13) xorg-server-xephyr 14) xorg-server-xnest 15) xorg-server-xfb
 16) xorg-sessreg 17) xorg-setxkbmap 18) xorg-smproxy 19) xorg-x11perf 20) xorg-xauth 21) xorg-xbacklight 22) xorg-xcnsdb 23) xorg-xcursorogen
 24) xorg-xdinfo 25) xorg-xdrinfo 26) xorg-xev 27) xorg-xgamma 28) xorg-xhost 29) xorg-xinput 30) xorg-xkbcnp 31) xorg-xkbeud 32) xorg-xkbutils
 33) xorg-xkill 34) xorg-xlatsons 35) xorg-xlcclients 36) xorg-xmodmap 37) xorg-xpr 38) xorg-xprop 39) xorg-xrandr 40) xorg-xrdb 41) xorg-xrefresh
 42) xorg-xset 43) xorg-xsetroot 44) xorg-xvinfo 45) xorg-xwayland 46) xorg-xwd 47) xorg-xwininfo 48) xorg-xuid

Enter a selection (default=all):
resolving dependencies...
:: There are 2 providers available for man:
:: Repository core
  1) man-db
:: Repository community
  2) mandoc

Enter a number (default=1):
looking for conflicting packages...
warning: dependency cycle detected:
warning: harfbuzz will be installed before its freetype2 dependency
warning: dependency cycle detected:
warning: mesa will be installed before its libglu dependency

Packages (114) default-cursors-2.1 fontconfig-2:2.14.2-1 freetype2-2.13.0-1 graphite-1:1.3.14-3 harfbuzz-7.1.0-1 libdrm-2.4.115-1 libedit-20221030_3.1-1
libhepgpu-1.5.10-1 libheudec-1.13.0-1 libfontenc-1.1.7-1 libgludec-237-2 libice-1.1.2-1 libinput-1.23.0-1
libinput11-heligao-1.9.3-4 libipcaccess-0.17-1 libpipeline-1.5.7-1 libpng-1.6.39-1 libsm-1.2.4-1 libuwind-1.6.2-1 libuwave-2.6.0-2
libxxau-1.8.4-1 libxxau-1.0.11-2 libxxau-1.0.15-1 libxcb-1.15-2 libxcomposite-0.4.6-1 libxcursor-1.2.1-3 libxcut-0.1.2-1 libxdamage-1.1.6-1
libxdmcp-1.1.4-2 libxext-1.3.5-1 libfixes-6.0-1 libxfont2-2.3-7 libxft-1.3.7-1 libxi-1.8-3 libixerama-1.1.5-1 libxkbfile-1.1.2-1
libxmu-1.4.4-1 libxpm-3.5.15-1 libxxndr-1.5.3-1 libxrender-0.9.11-1 libxshwfwce-1.3.2-1 libxt-1.3.0-1 libxtst-1.2.4-1 libx-1.0.12-1
libxvfb-06wm-1.1.5-1 libxv-libs-15.0.7-2 In_sensors-1:3.6.0.r41.g3d1f125-2 nan-db-2.11.2-1 wesa-23.0.2-2 tudev-1.1.6-2 pixman-0.42.2-1
uwlkan-icd-loader-1.3.245-1 wayland-1.22.0-1 xcb-proto-1.15.2-2 xcb-util-0.4.1-1 xcb-util-image-0.4.1-2 xcb-util-keymaps-0.4.1-4
xcb-util-renderutil-0.3.10-1 xcb-util-unix-0.4.2-1 xf86-input-libinput-1.3.0-1 xkeyboard-config-2.38-1 xorg-fonts-alias-100dpi-1.0.5-1
xorg-font-fantastic-75dpi-1.0.5-1 xorg-util-narcos-1.20.0-2 xorgproto-2022.2-1 xf86-video-vesa-2.6.0-1 xorg-bdtopcf-1.1.1-1 xorg-bdtopcf-1.1.1-1
xorg-font-util-1.4.0-1 xorg-fon...-100dpi-1.0.4-2 xorg-fonts-75dpi-1.0.4-1 xorg-fonts-encodings-1.0.7-1 xorg-iceauth-1.0.9-1 xorg-docs-1.7.2-2
xorg-font-fantastic-75dpi-1.0.5-1 xorg-util-narcos-1.20.0-2 xorgproto-2022.2-1 xf86-video-vesa-2.6.0-1 xorg-bdtopcf-1.1.1-1 xorg-bdtopcf-1.1.1-1
xorg-font-util-1.4.0-1 xorg-fon...-100dpi-1.0.4-2 xorg-fonts-75dpi-1.0.4-1 xorg-fonts-encodings-1.0.7-1 xorg-iceauth-1.0.9-1 xorg-docs-1.7.2-2
xorg-server-xnest-21.1.8-1 xorg-server-xinerama-21.1.8-1 xorg-sessreg-1.1.3-1 xorg-setxkbmap-1.3.3-2 xorg-smproxy-1.0.7-1 xorg-x11perf-1.6.2-1
xorg-xauth-1.1.2-1 xorg-xbacklight-1.2.3-3 xorg-xcnsdb-1.0.6-1 xorg-xcursorogen-1.0.0-8 xorg-xdinfo-1.3.3-4 xorg-xdrinfo-1.0.7-1
xorg-xev-1.2.5-1 xorg-xgamma-1.0.7-1 xorg-xhost-1.0.9-1 xorg-xinput-1.6.3-3 xorg-xkbcnp-1.4.6-1 xorg-xkbeud-1.1.5-1 xorg-xkbutils-1.0.5-1
xorg-xkill-1.0.6-1 xorg-xlatsons-1.1.4-1 xorg-xlcclients-1.1.5-1 xorg-xmodmap-0.11-1 xorg-xrandr-1.1.0-1 xorg-xprop-1.2.6-1
xorg-xrandr-1.5.2-1 xorg-xrdb-1.2.1-1 xorg-xrefresh-1.0.7-1 xorg-xset-1.2.5-1 xorg-xsetroot-1.1.3-1 xorg-xvinfo-1.1.5-1
xorg-xwayland-23.1.1-1 xorg-xwd-1.0.8-1 xorg-xwininfo-1.1.6-1 xorg-xuid-1.0.6-1
```

```
[root@EntornoArch alvaroGS ~]# pacman -S gnome
:: There are 54 packages in group gnome:
:: Repository extra
 1) baobab 2) cheese 3) cog 4) epiphany 5) evince 6) file-roller 7) gdm 8) gnome-backgrounds 9) gnome-calculator 10) gnome-calendar
 11) gnome-characters 12) gnome-clocks 13) gnome-color-manager 14) gnome-console 15) gnome-contacts 16) gnome-control-center 17) gnome-disk-utility
 18) gnome-font-viewer 19) gnome-keyring 20) gnome-logs 21) gnome-maps 22) gnome-menus 23) gnome-music 24) gnome-photos 25) gnome-remote-desktop
 26) gnome-session 27) gnome-settings-daemon 28) gnome-shell 29) gnome-shell-extensions 30) gnome-software 31) gnome-system-monitor
 32) gnome-text-editor 33) gnome-user-docs 34) gnome-user-share 35) gnome-video-effects 36) gnome-weather 37) grilo-plugins 38) gufs-afc
 40) gofs-goa 41) gofs-google 42) gofs-pphotof2 43) gofs-mp3 44) gofs-nfs 45) gofs-smb 46) mailcontent 47) nautilus 48) orca 49) rygel 50) sushi
 51) totem 52) tracker3-miners 53) xdg-user-dirs-gtk 54) gimp

Enter a selection (default=1):
:: resolving dependencies...
:: There are 2 providers available for jack:
:: Repository extra
 1) jack2 2) pipewire-jack

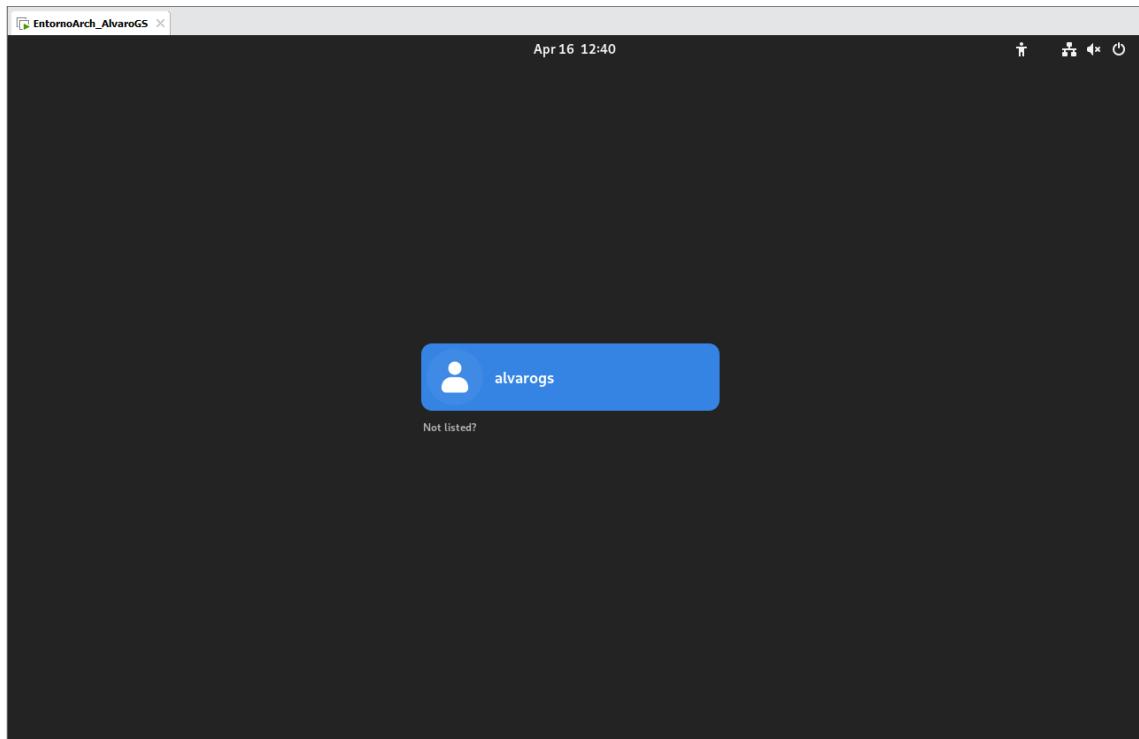
Enter a number (default=1):
:: There are 2 providers available for emoji-font:
:: Repository extra
 1) noto-fonts-emoji
:: Repository community
 2) ttf-jaypixels

Enter a number (default=1):
:: There are 6 providers available for xdg-desktop-portal-impl:
:: Repository extra
 1) xdg-desktop-portal-gnome 2) xdg-desktop-portal-gtk 3) xdg-desktop-portal-kde
:: Repository community
 4) xdg-desktop-portal-hyprland 5) xdg-desktop-portal-lxqt 6) xdg-desktop-portal-wlr

Enter a number (default=1):
```

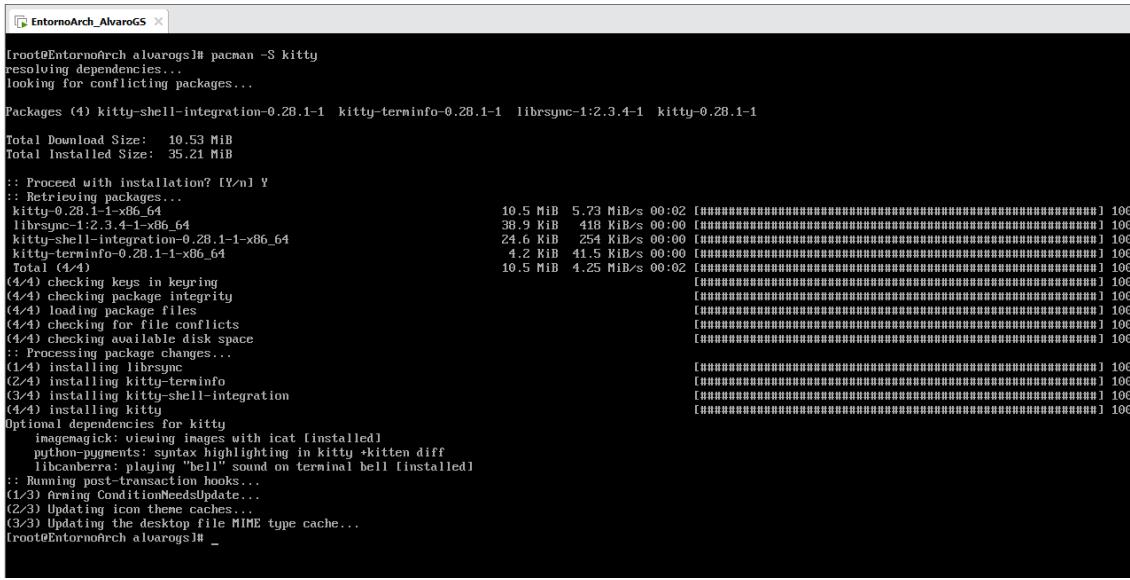
## 2 Configuración desde GNOME

**Paso 17.** Ejecutamos **systemctl start gdm.service** para mostrar la interfaz gráfica. Una vez dentro pulsamos **CTRL+ALT+F3** para volver al terminal y ejecutamos **systemctl enable gdm.service**.



```
[root@EntornoArch alvaroGS ~]# systemctl enable gdm.service
Created symlink /etc/systemd/system/display-manager.service → /usr/lib/systemd/system/gdm.service.
[root@EntornoArch alvaroGS ~]
```

**Paso 18.** Descargamos e instalamos KITTY, y reiniciamos.



```
[root@EntornoArch alvaro]# pacman -S kitty
resolving dependencies...
looking for conflicting packages...

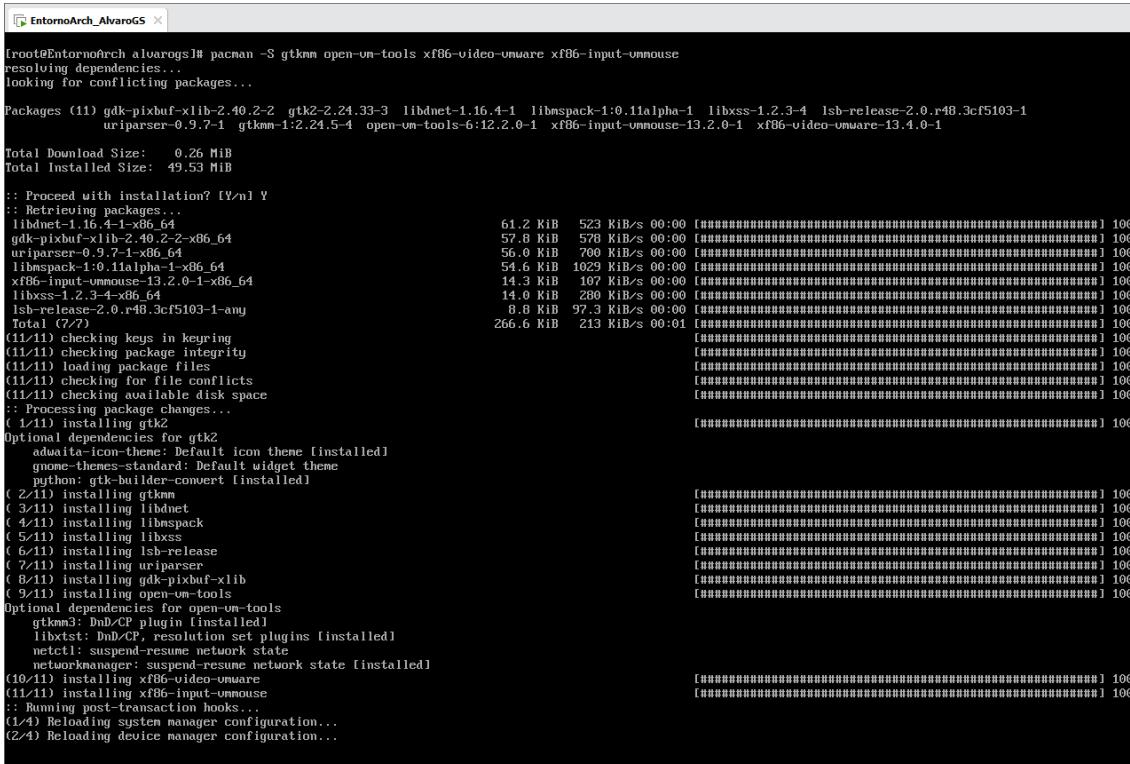
Packages (4) kitty-shell-integration-0.28.1-1 kitty-terminfo-0.28.1-1 librsync-1:2.3.4-1 kitty-0.28.1-1

Total Download Size: 10.53 MiB
Total Installed Size: 35.21 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
kitty-0.28.1-1-x86_64          10.5 MiB  5.73 MiB/s 00:02 [#####
librsync-1:2.3.4-1-x86_64      38.9 KIB  418 Kib/s 00:00 [#####
kitty-shell-integration-0.28.1-1-x86_64  24.6 KIB  254 Kib/s 00:00 [#####
kitty-terminfo-0.28.1-1-x86_64     4.2 KIB  41.5 Kib/s 00:00 [#####
Total (4/4)                   10.5 MiB  4.25 MiB/s 00:02 [#####

(4/4) checking keys in keyring
(4/4) checking package integrity
(4/4) loading package files
(4/4) checking for file conflicts
(4/4) checking available disk space
:: Processing package changes...
(1/4) installing librsync
(2/4) installing kitty-terminfo
(3/4) installing kitty-shell-integration
(4/4) installing kitty
Optional dependencies for kitty
    imagenagick: viewing images with icat [installed]
    python-pygments: syntax highlighting in kitty <kitten diff>
    libcanberra: playing "bell" sound on terminal bell [installed]
:: Running post-transaction hooks...
(1/3) Arming ConditionNeedsUpdate...
(2/3) Updating icon theme caches...
(3/3) Updating the desktop file MIME type cache...
[root@EntornoArch alvaro]# _
```

**Paso 19.** Abrirá la interfaz gráfica, pulsamos de nuevo **CTRL+ALT+F3** para abrir un nuevo terminal, e instalamos los paquetes **gtkmm**, **open-vm-tools**, **xf86-video-vmware** y **xf86-input-vmmouse** (Estos 3 últimos si estamos en VMware). Habilitamos también el servicio de vmware y reiniciamos.

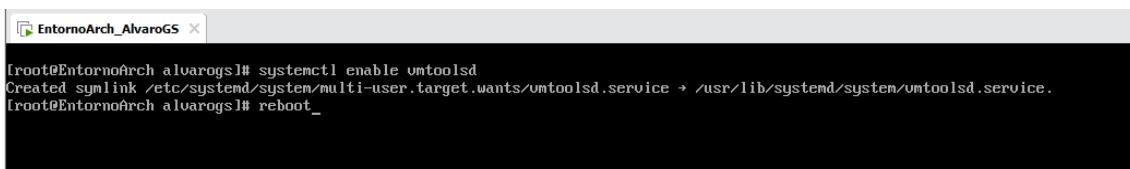


```
[root@EntornoArch alvaro]# pacman -S gtkmm open-vm-tools xf86-video-vmware xf86-input-vmmouse
resolving dependencies...
looking for conflicting packages...

Packages (11) gdk-pixbuf-xlib-2.40.2-2 gtk2-2.24.33-3 libdnet-1.16.4-1 libmspack-1:0.11alpha-1 libxss-1.2.3-4 lsb-release-2.0.r48.3cf5103-1
               uriparser-0.9.7-1 gtkmm-1:2.24.5-4 open-vm-tools-6:12.2.0-1 xf86-input-vmmouse-13.2.0-1 xf86-video-vmware-13.4.0-1

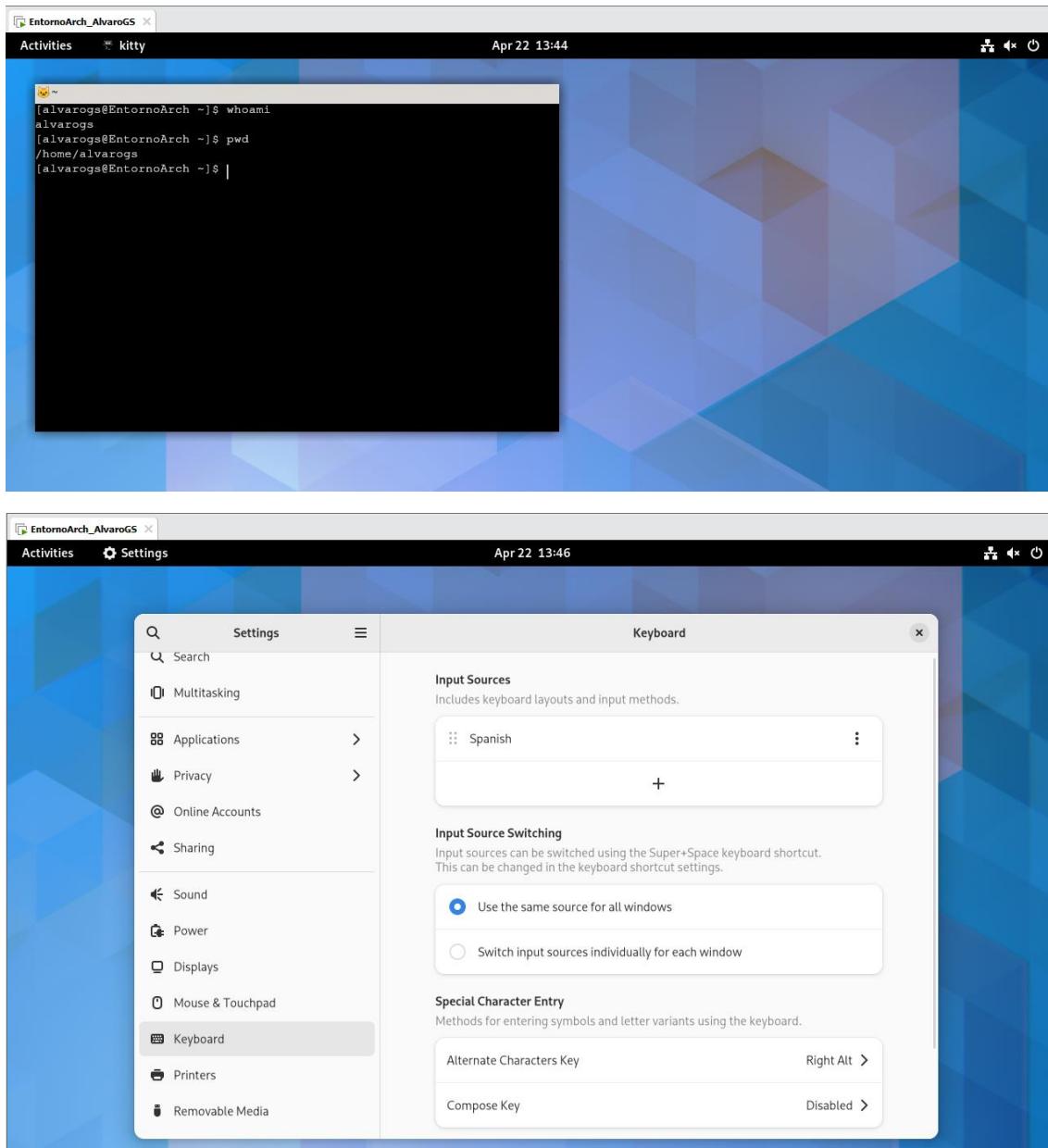
Total Download Size: 0.26 MiB
Total Installed Size: 49.53 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
libdnet-1.16.4-1-x86_64          61.2 KIB  523 Kib/s 00:00 [#####
gdk-pixbuf-xlib-2.40.2-2-x86_64  57.8 KIB  578 Kib/s 00:00 [#####
uriparser-0.9.7-1-x86_64        56.0 KIB  700 Kib/s 00:00 [#####
libmspack-1:0.11alpha-1-x86_64  54.6 KIB  1029 Kib/s 00:00 [#####
xf86-input-vmmouse-13.2.0-1-x86_64 14.3 KIB  107 Kib/s 00:00 [#####
libxss-1.2.3-4-x86_64           14.0 KIB  280 Kib/s 00:00 [#####
lsb-release-2.0.r48.3cf5103-1-any 8.8 KIB  97.3 Kib/s 00:00 [#####
Total (7/7)
(11/11) checking keys in keyring
(11/11) checking package integrity
(11/11) loading package files
(11/11) checking for file conflicts
(11/11) checking available disk space
:: Processing package changes...
(1/11) installing gtk2
Optional dependencies for gtk2
    adwaita-icon-theme: Default icon theme [installed]
    gnome-themes-standard: Default widget theme
    python: gtk-builder-converter [installed]
(2/11) installing gtkmm
(3/11) installing libdnet
(4/11) installing libmspack
(5/11) installing libxss
(6/11) installing lsb-release
(7/11) installing uriparser
(8/11) installing gdk-pixbuf-xlib
(9/11) installing open-vm-tools
Optional dependencies for open-vm-tools
    gtkmm3: DnD-CP plugin [installed]
    libxtst: DnD-CP, resolution set plugin [installed]
    netctl: suspend-resume network state
    networkmanager: suspend-resume network state [installed]
(10/11) installing xf86-video-vmware
(11/11) installing xf86-input-vmmouse
:: Running post-transaction hooks...
(1/4) Reloading system manager configuration...
(2/4) Reloading device manager configuration...
```

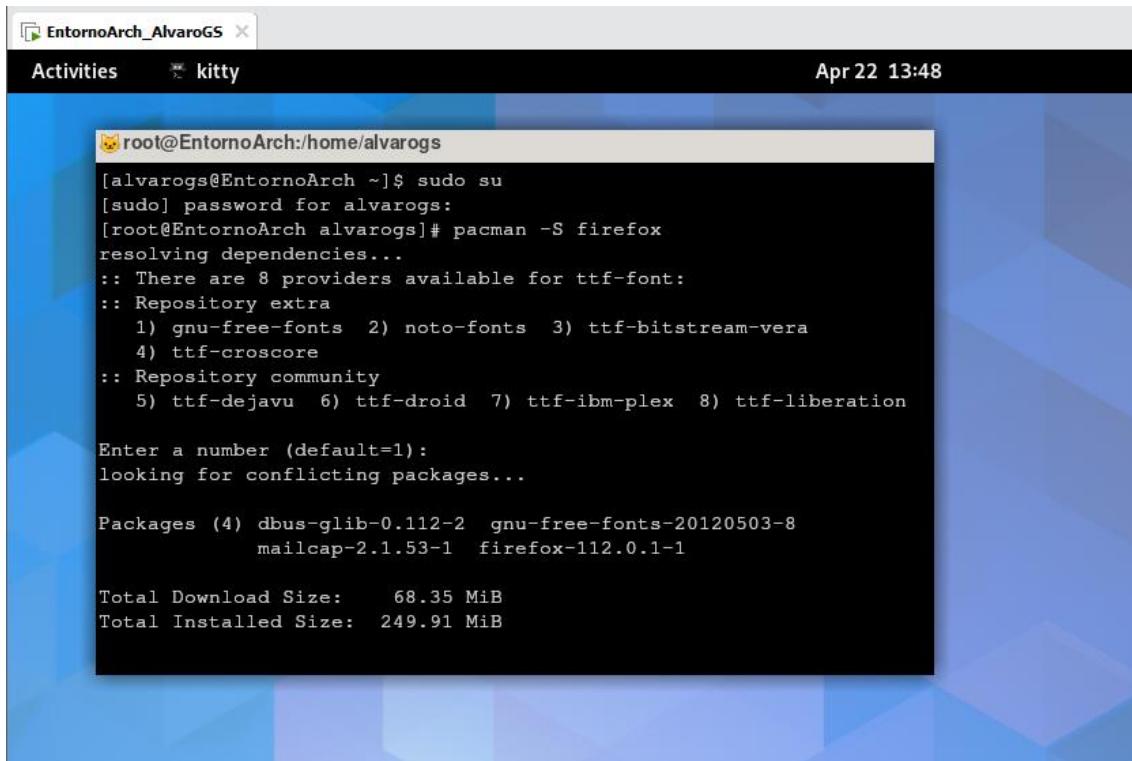


```
[root@EntornoArch alvaro]# systemctl enable vmtoolsd
Created symlink /etc/systemd/system/multi-user.target.wants/vmtoolsd.service → /usr/lib/systemd/system/vmtoolsd.service.
[root@EntornoArch alvaro]# reboot_
```

**Paso 20.** Abrimos el nuevo entorno, probamos la kitty y asignamos de nuevo el teclado de forma manual.



**Paso 21.** Instalamos firefox desde kitty.



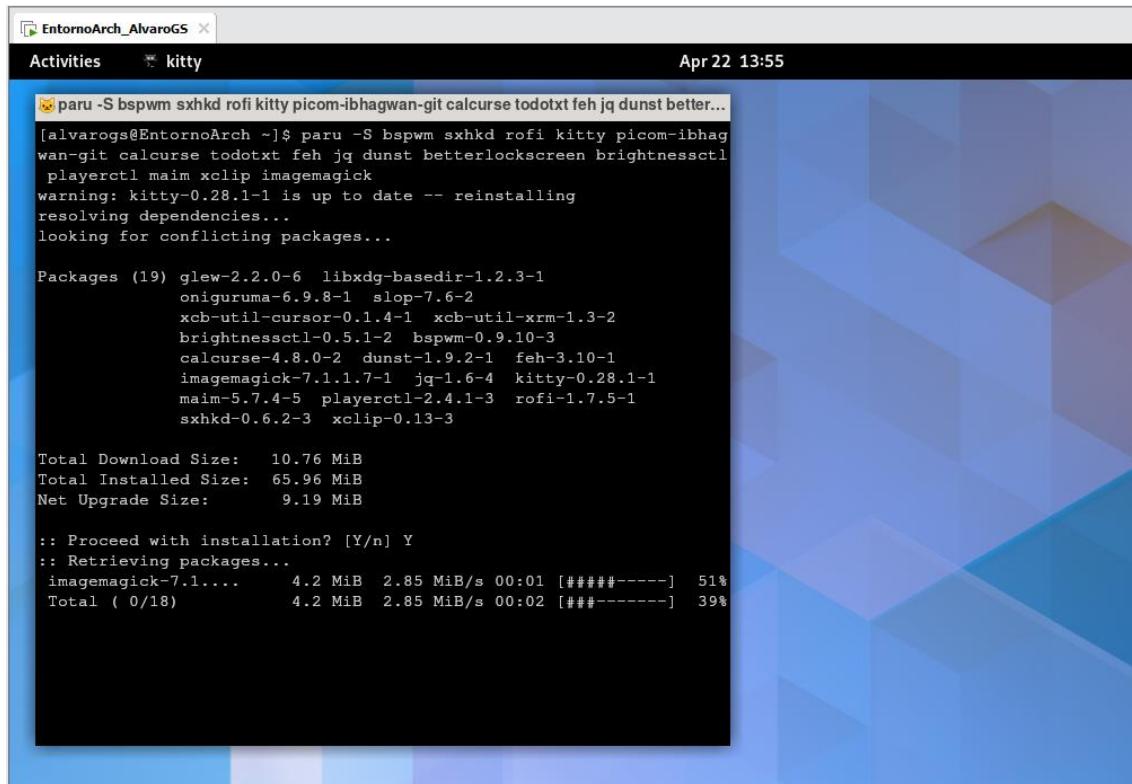
```
[root@EntornoArch ~]$ sudo su
[sudo] password for alvarogs:
[root@EntornoArch alvarogs]# pacman -S firefox
resolving dependencies...
:: There are 8 providers available for ttf-font:
:: Repository extra
  1) gnu-free-fonts  2) noto-fonts   3) ttf-bitstream-vera
  4) ttf-croscore
:: Repository community
  5) ttf-dejavu    6) ttf-droid    7) ttf-ibm-plex  8) ttf-liberation

Enter a number (default=1):
looking for conflicting packages...

Packages (4) dbus-glib-0.112-2  gnu-free-fonts-20120503-8
               mailcap-2.1.53-1  firefox-112.0.1-1

Total Download Size:  68.35 MiB
Total Installed Size: 249.91 MiB
```

**Paso 22.** Instalamos los siguientes paquetes (Siempre que pregunte, todo por defecto). Es una instalación larga, hay que esperar.



```
[alvarogs@EntornoArch ~]$ paru -S bspwm sxhkd rofi kitty picom-ibhagwan-git calcuse todotxt feh jq dunst better...
[alvarogs@EntornoArch ~]$ paru -S bspwm sxhkd rofi kitty picom-ibhagwan-git calcuse todotxt feh jq dunst betterlockscreen brightnessctl
playerctl main xclip imagemagick
warning: kitty-0.28.1-1 is up to date -- reinstalling
resolving dependencies...
looking for conflicting packages...

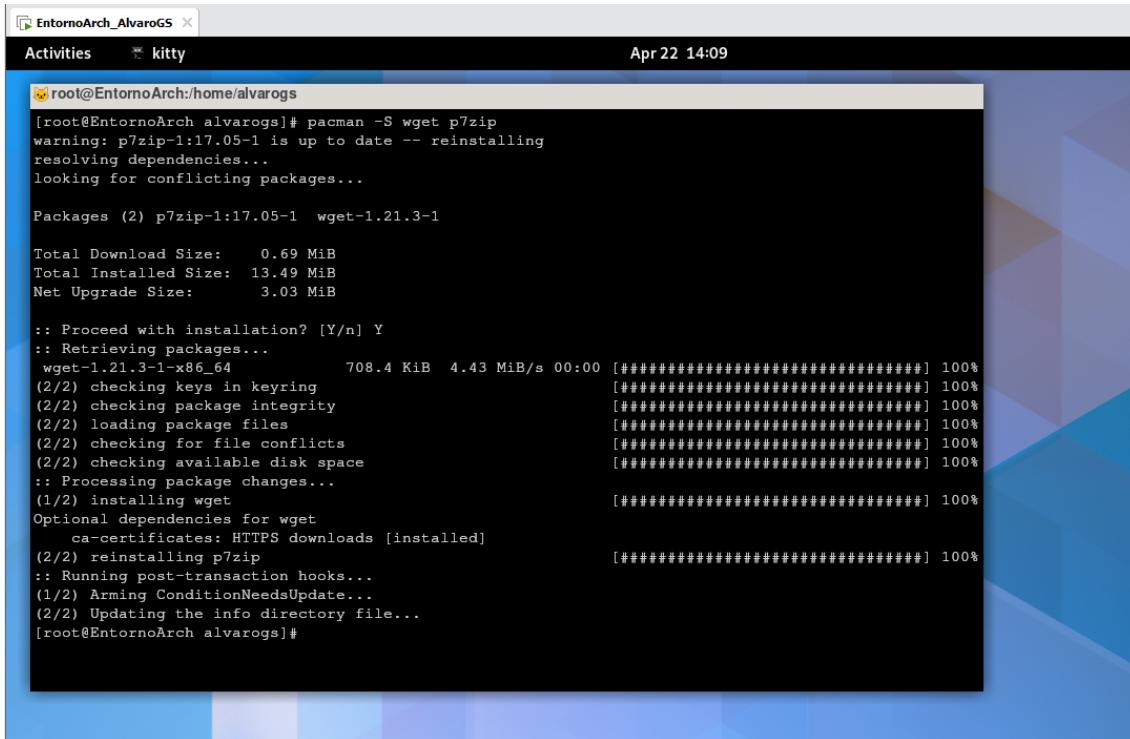
Packages (19) glew-2.2.0-6  libxdg-basedir-1.2.3-1
               oniguruma-6.9.8-1  sloop-7.6-2
               xcb-util-cursor-0.1.4-1  xcb-util-xrm-1.3-2
               brightnessctl-0.5.1-2  bspwm-0.9.10-3
               calcuse-4.8.0-2  dunst-1.9.2-1  feh-3.10-1
               imagemagick-7.1.1.7-1  jq-1.6-4  kitty-0.28.1-1
               maim-5.7.4-5  playerctl-2.4.1-3  rofi-1.7.5-1
               sxhkd-0.6.2-3  xclip-0.13-3

Total Download Size:  10.76 MiB
Total Installed Size: 65.96 MiB
Net Upgrade Size:      9.19 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
imagemagick-7.1....      4.2 MiB  2.85 MiB/s 00:01 [#####----]  51%
Total ( 0/18)      4.2 MiB  2.85 MiB/s 00:02 [##-----]  39%
```

Repositorio del tema de AWESOME que usaremos, creado por **RXYHN**.  
<https://github.com/rxyhn/tokyo>

**Paso 23.** Instalamos wget y 7zip.



```
[root@EntornoArch alvarogs]# pacman -S wget p7zip
warning: p7zip-1:17.05-1 is up to date -- reinstalling
resolving dependencies...
looking for conflicting packages...

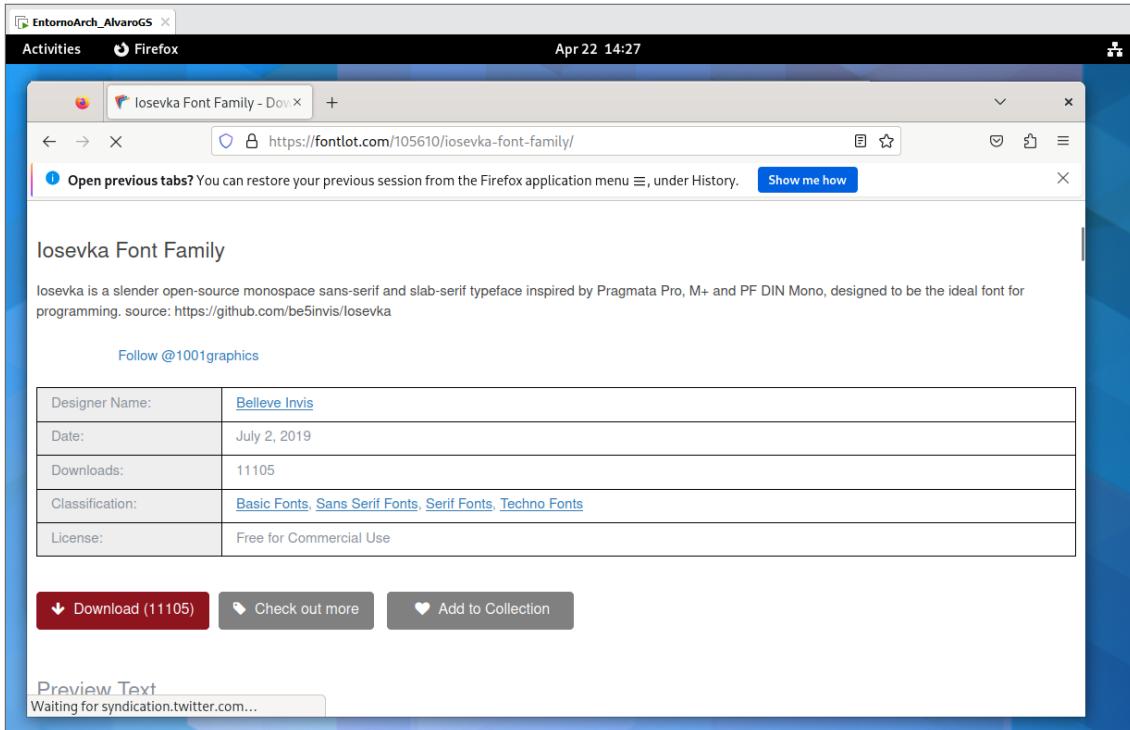
Packages (2) p7zip-1:17.05-1   wget-1.21.3-1

Total Download Size:    0.69 MiB
Total Installed Size:  13.49 MiB
Net Upgrade Size:      3.03 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
wget-1.21.3-1-x86_64          708.4 KiB  4.43 MiB/s 00:00  [########################################] 100%
(2/2) checking keys in keyring           [########################################] 100%
(2/2) checking package integrity        [########################################] 100%
(2/2) loading package files            [########################################] 100%
(2/2) checking for file conflicts       [########################################] 100%
(2/2) checking available disk space    [########################################] 100%
:: Processing package changes...
(1/2) installing wget                [########################################] 100%
Optional dependencies for wget
    ca-certificates: HTTPS downloads [installed]
(2/2) reinstalling p7zip             [########################################] 100%
:: Running post-transaction hooks...
(1/2) Arming ConditionNeedsUpdate...
(2/2) Updating the info directory file...
[root@EntornoArch alvarogs]#
```

**Paso 24.** Accedemos a fontlot y descargamos la familia IOSEVKA.

<https://fontlot.com/105610/ioservka-font-family/>



The screenshot shows a Firefox browser window with the URL <https://fontlot.com/105610/ioservka-font-family/> in the address bar. The page content is as follows:

**Iosevka Font Family**

Iosevka is a slender open-source monospace sans-serif and slab-serif typeface inspired by Pragmata Pro, M+ and PF DIN Mono, designed to be the ideal font for programming. source: <https://github.com/be5invis/losevka>

Follow @1001graphics

Designer Name:	Believe Invis
Date:	July 2, 2019
Downloads:	11105
Classification:	<a href="#">Basic Fonts</a> , <a href="#">Sans Serif Fonts</a> , <a href="#">Serif Fonts</a> , <a href="#">Techno Fonts</a>
License:	Free for Commercial Use

[Download \(11105\)](#) [Check out more](#) [Add to Collection](#)

**Preview Text**  
Waiting for syndication.twitter.com...

**Paso 25.** Movemos el comprimido a nuestra carpeta de fuentes y descomprimimos. Luego borramos los archivos residuales.

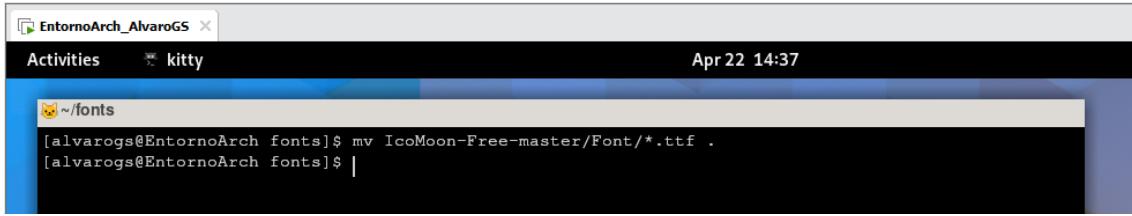
The image shows two terminal windows side-by-side. The top window, titled 'EntornoArch\_AlvaroGS', has a timestamp of 'Apr 22 14:29'. It shows the command: [alvarogs@EntornoArch fonts]\$ mv ..Downloads/iosevka-font-family-1682148521-0.zip fuentes.zip followed by [alvarogs@EntornoArch fonts]\$ unzip fuentes.zip. The bottom window, also titled 'EntornoArch\_AlvaroGS' with the same timestamp, shows the command: [alvarogs@EntornoArch fonts]\$ rm -rf fuentes.zip info.txt [alvarogs@EntornoArch fonts]\$

**Paso 26.** Accedemos a IcoMoon y descargamos la fuente gratuita. Hacemos lo mismo que con la anterior.

<https://icomoon.io/icons-icomoon.html>

A screenshot of a Firefox browser window displaying the IcoMoon website at https://icomoon.io/icons-icomoon.html. The page features three main sections: 'Free Version', 'Essential Pack', and 'Ultimate Pack'. Each section includes a small preview image, a title, a list of features with checkmarks, and download/purchase buttons. The 'Free Version' section includes icons for 490 icons, handcrafted on a 16x16 grid, installable ligature font (TTF), optimized for icon font use, vector formats (SVG, PDF, EPS, AI, PSD), Photoshop Shapes (CSH), and PNGs in 16px, 32px, 48px and 64px. It also mentions dual tone icons, free updates, and a friendly license. The 'Essential Pack' and 'Ultimate Pack' sections list similar features with higher counts (950 and 1600 icons respectively) and additional options like dual tone icons and friendly licenses.

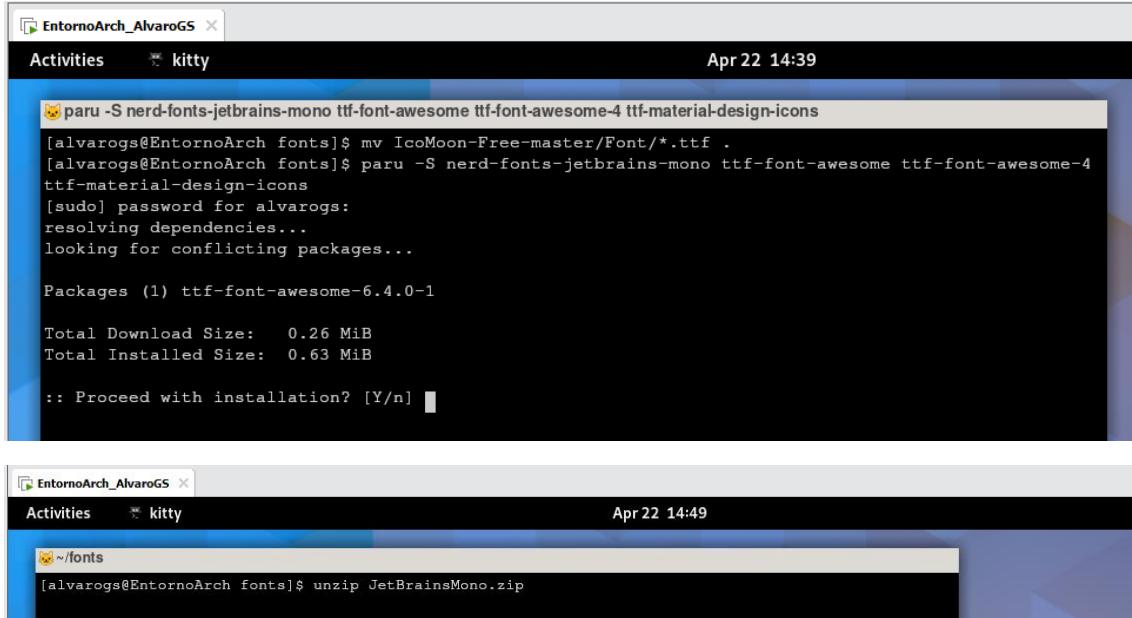
The image shows a terminal window titled 'EntornoArch\_AlvaroGS' with a timestamp of 'Apr 22 14:35'. It displays the command: [alvarogs@EntornoArch fonts]\$ mv ..Downloads/IcoMoon-Free-master.zip icomoon.zip followed by [alvarogs@EntornoArch fonts]\$ unzip icomoon.zip



```
Activities kitty Apr 22 14:37
[alvarogs@EntornoArch fonts]$ mv IcoMoon-Free-master/Font/*.ttf .
[alvarogs@EntornoArch fonts]$ |
```

**Paso 27.** Instalamos los siguientes paquetes de fuentes. JetBrainsMono podemos descargarlo desde el siguiente repo de GitHub.

<https://github.com/ryanoasis/nerd-fonts/releases/download/v2.3.3/JetBrainsMono.zip>



```
Activities kitty Apr 22 14:39
[alvarogs@EntornoArch fonts]$ paru -S nerd-fonts-jetbrains-mono ttf-font-awesome ttf-font-awesome-4 ttf-material-design-icons
[alvarogs@EntornoArch fonts]$ mv IcoMoon-Free-master/Font/*.ttf .
[alvarogs@EntornoArch fonts]$ paru -S nerd-fonts-jetbrains-mono ttf-font-awesome ttf-font-awesome-4 ttf-material-design-icons
[sudo] password for alvarogs:
resolving dependencies...
looking for conflicting packages...

Packages (1) ttf-font-awesome-6.4.0-1

Total Download Size: 0.26 MiB
Total Installed Size: 0.63 MiB

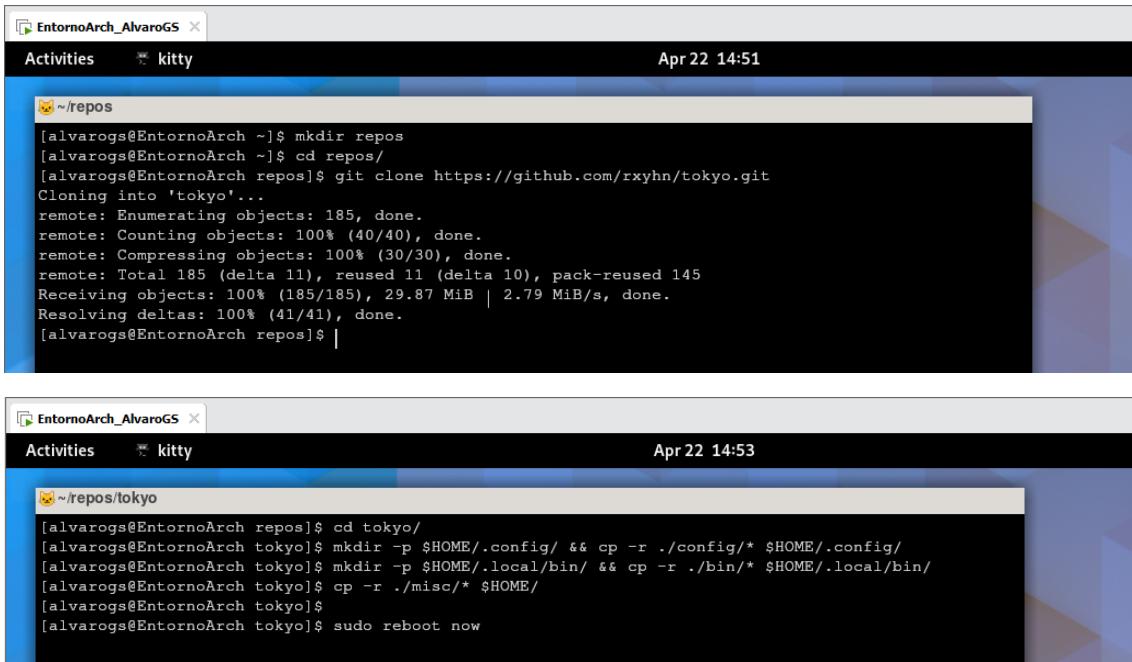
:: Proceed with installation? [Y/n] |
```

```
Activities kitty Apr 22 14:49
[alvarogs@EntornoArch fonts]$ ~/.fonts
[alvarogs@EntornoArch fonts]$ unzip JetBrainsMono.zip
```

**Paso 28.** Creamos un repositorio de repos, entreamos y clonamos el siguiente tema para BSPWM:

<https://github.com/rxhynn/tokyo.git>



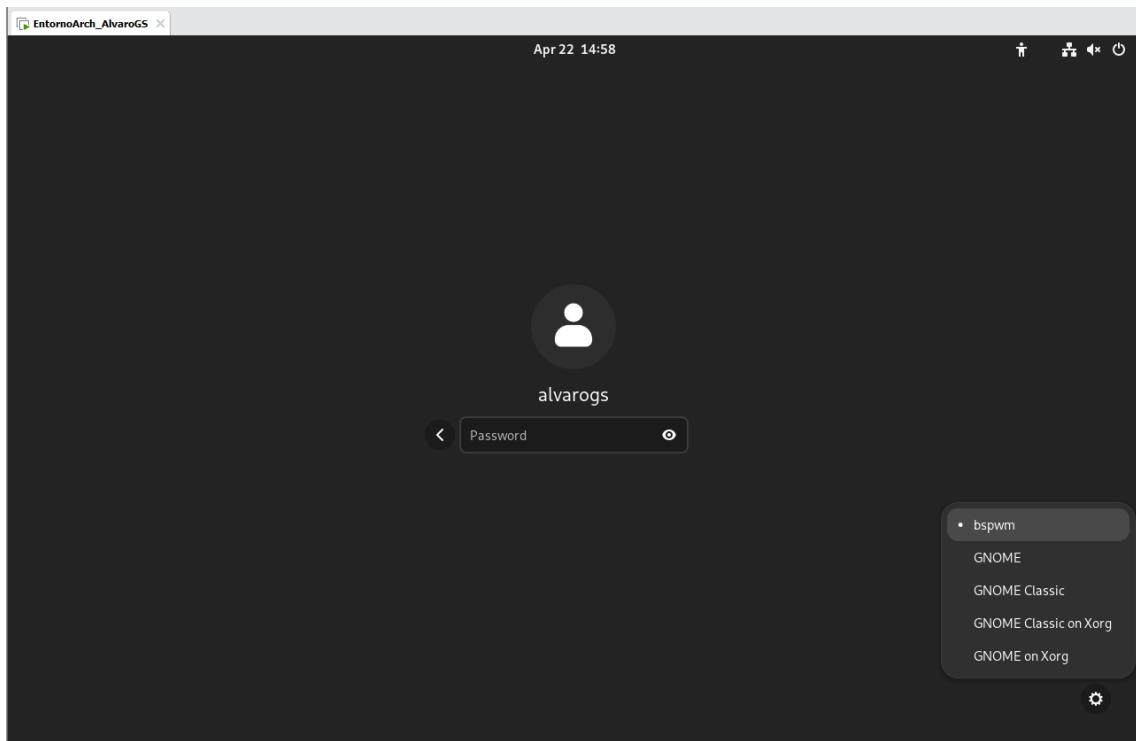
```
Activities kitty Apr 22 14:51
[alvarogs@EntornoArch ~]$ mkdir repos
[alvarogs@EntornoArch ~]$ cd repos/
[alvarogs@EntornoArch repos]$ git clone https://github.com/rxhynn/tokyo.git
Cloning into 'tokyo'...
remote: Enumerating objects: 185, done.
remote: Counting objects: 100% (40/40), done.
remote: Compressing objects: 100% (30/30), done.
remote: Total 185 (delta 11), reused 11 (delta 10), pack-reused 145
Receiving objects: 100% (185/185), 29.87 MiB | 2.79 MiB/s, done.
Resolving deltas: 100% (41/41), done.
[alvarogs@EntornoArch repos]$ |
```

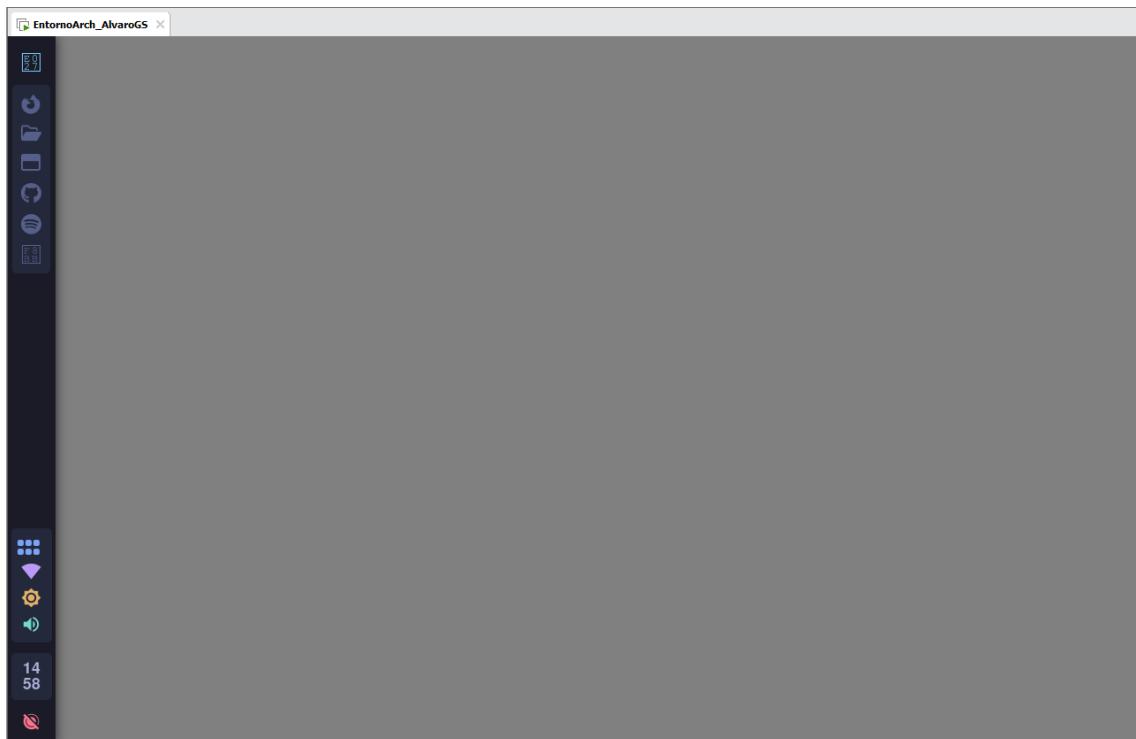
```
Activities kitty Apr 22 14:53
[alvarogs@EntornoArch repos]$ cd tokyo
[alvarogs@EntornoArch tokyo]$ mkdir -p $HOME/.config/ && cp -r ./config/* $HOME/.config/
[alvarogs@EntornoArch tokyo]$ mkdir -p $HOME/.local/bin/ && cp -r ./bin/* $HOME/.local/bin/
[alvarogs@EntornoArch tokyo]$ cp -r ./misc/* $HOME/
[alvarogs@EntornoArch tokyo]$ sudo reboot now
```

### 3 Configuración desde BSPWM

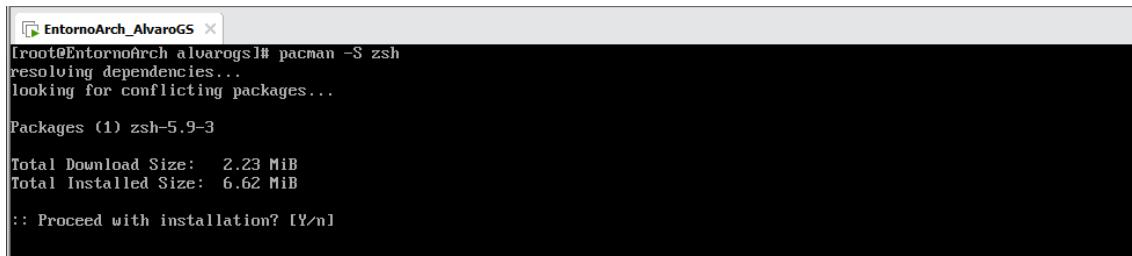
Paso 29. Elegimos la interfaz BSPWM.



Paso 30. Abrimos una TTY secundaria (CTRL+ALT+F4)



**Paso 31.** Instalamos la ZSH y reiniciamos.



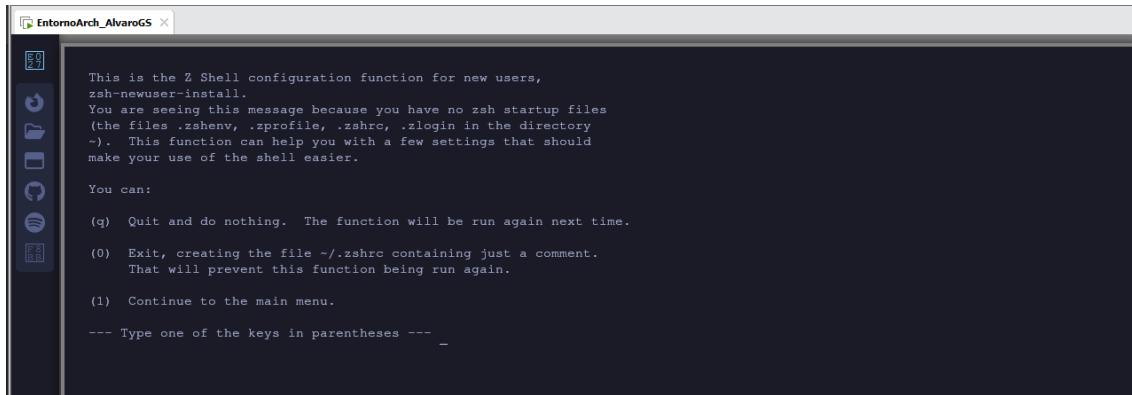
```
[root@EntornoArch alvaro]# pacman -S zsh
resolving dependencies...
looking for conflicting packages...

Packages (1) zsh-5.9-3

Total Download Size: 2.23 MiB
Total Installed Size: 6.62 MiB

:: Proceed with installation? [Y/n]
```

**Paso 32.** Al abrir la terminal (SUPER+ENTER) pulsamos Q y ejecutamos el siguiente comando para cambiar el idioma del teclado temporalmente.

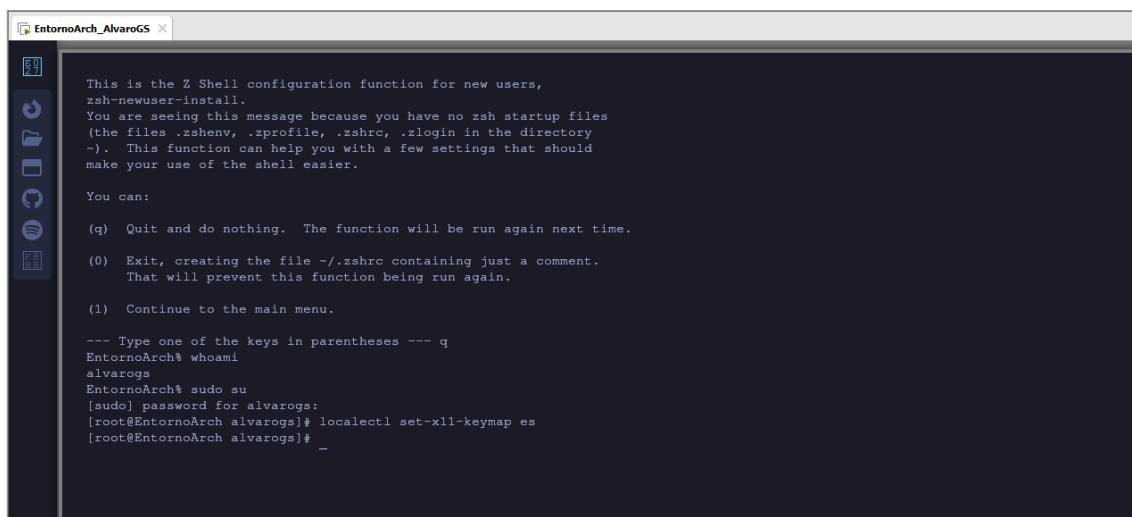


```
This is the Z Shell configuration function for new users,
zsh-newuser-install.
You are seeing this message because you have no zsh startup files
(the files .zshenv, .zprofile, .zshrc, .zlogin in the directory
~). This function can help you with a few settings that should
make your use of the shell easier.

You can:

(q) Quit and do nothing. The function will be run again next time.
(0) Exit, creating the file ~/.zshrc containing just a comment.
    That will prevent this function being run again.
(1) Continue to the main menu.

--- Type one of the keys in parentheses --- _
```



```
This is the Z Shell configuration function for new users,
zsh-newuser-install.
You are seeing this message because you have no zsh startup files
(the files .zshenv, .zprofile, .zshrc, .zlogin in the directory
~). This function can help you with a few settings that should
make your use of the shell easier.

You can:

(q) Quit and do nothing. The function will be run again next time.
(0) Exit, creating the file ~/.zshrc containing just a comment.
    That will prevent this function being run again.
(1) Continue to the main menu.

--- Type one of the keys in parentheses --- q
EntornoArch% whoami
alvaro
EntornoArch% sudo su
[sudo] password for alvaro:
[root@EntornoArch alvaro]# localectl set-x11-keymap es
[root@EntornoArch alvaro]# _
```

**Paso 33.** Abrimos Firefox desde el Menú de aplicaciones (SUPER+M), le instalamos un par de extensiones útiles y aprovechamos para configurarlo.

The screenshot shows the Firefox Add-ons page for the "Dark Reader" extension. The extension is marked as "Recommended". It has 1,000,927 users, 4,961 reviews, and a rating of 4.6 Stars. The description states: "Dark mode for every website. Take care of your eyes, use dark theme for night and daily browsing." A large "Add to Firefox" button is visible. Below the main card, there are sections for "Rate your experience" (with a "Log in to rate this extension" link) and "Screenshots" showing the extension in action on various websites.

The screenshot shows the Firefox Add-ons page for the "Cookie-Editor" extension. It has 50.315 users, 121 comments, and a rating of 4.3 estrellas. A warning message states: "⚠ This add-on is not actively monitored for security by Mozilla. Make sure you trust it before installing." A "Saber más" button is present. The description says: "Cookie-Editor lets you efficiently create, edit and delete a cookie for the current tab. Perfect for developing, quickly testing or even manually managing your cookies for your privacy." A large "Agregar a Firefox" button is at the bottom right. Below the main card, there are sections for "Califica tu experiencia" and "Capturas de pantalla".

EntornoArch\_AlvaroGS

Dark Reader – Get this Ext. × Cookie-Editor – Consigue × Wappalyzer – Consigue × +

https://addons.mozilla.org/es/firefox/addon/wappalyzer/

Firefox Add-ons Blog Taller de extensiones Central del desarrollador Log in

Firefox Browser ADD-ONS Extensiones Temas Más... ▾

Buscar complementos

**Wappalyzer**

108.940 Usuarios 439 Comentarios 4,4 estrellas

5 ★ 321  
4 ★ 46  
3 ★ 25  
2 ★ 15  
1 ★ 32

This add-on is not actively monitored for security by Mozilla. Make sure you trust it before installing.

Saber más

Identify technologies on websites Agregar a Firefox

Califica tu experiencia

¿Cuál es tu experiencia con Wappalyzer?

Capturas de pantalla

15 20

EntornoArch\_AlvaroGS

Dark Reader – Get this Ext. × HackTools – Get this Ext. × +

https://addons.mozilla.org/en-US/firefox/addon/hacktools/?utm\_source=addons.mozilla.org&utm

Firefox Add-ons Blog Extension Workshop Developer Hub Log in

Firefox Browser ADD-ONS Extensions Themes More... ▾

Find add-ons

**HackTools**

4,250 Users 32 Reviews 4.9 Stars

5 ★ 30  
4 ★ 0  
3 ★ 2  
2 ★ 0  
1 ★ 0

This add-on is not actively monitored for security by Mozilla. Make sure you trust it before installing.

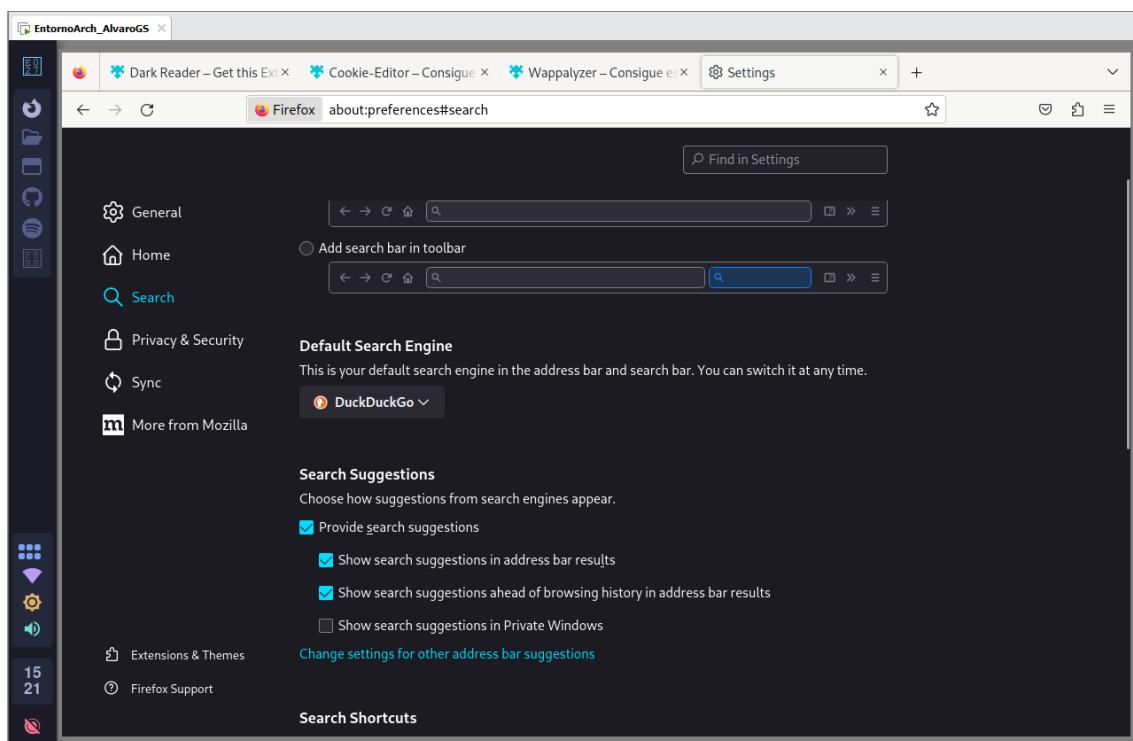
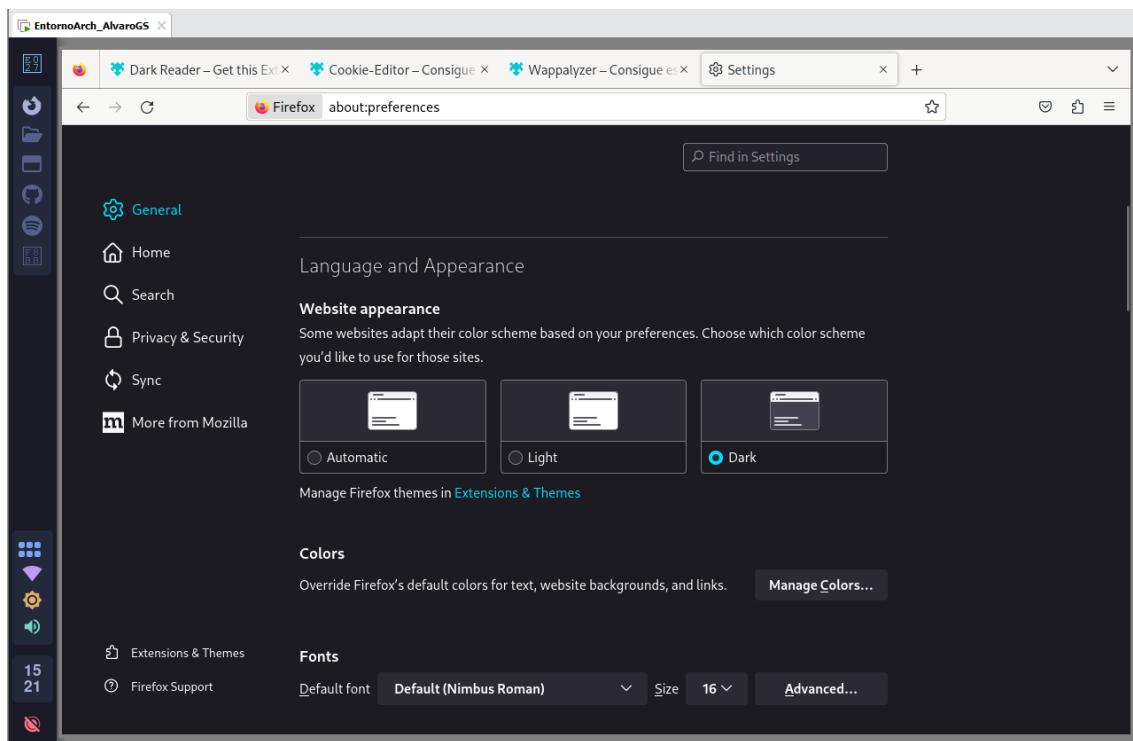
Learn more

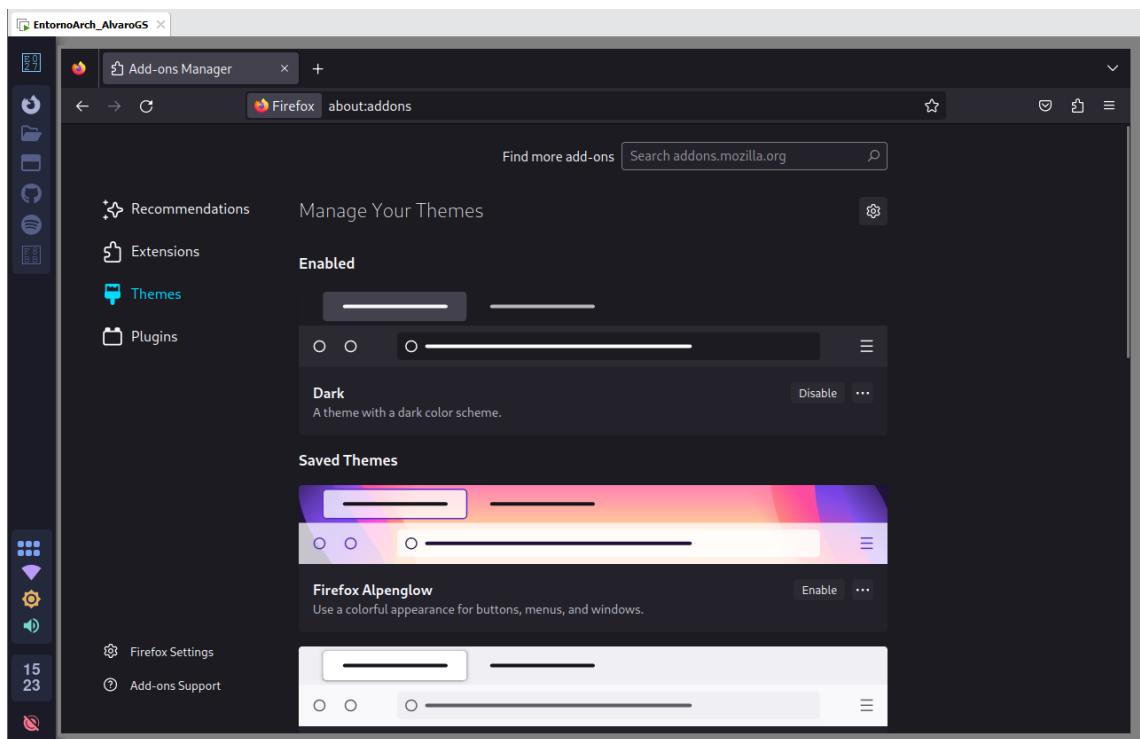
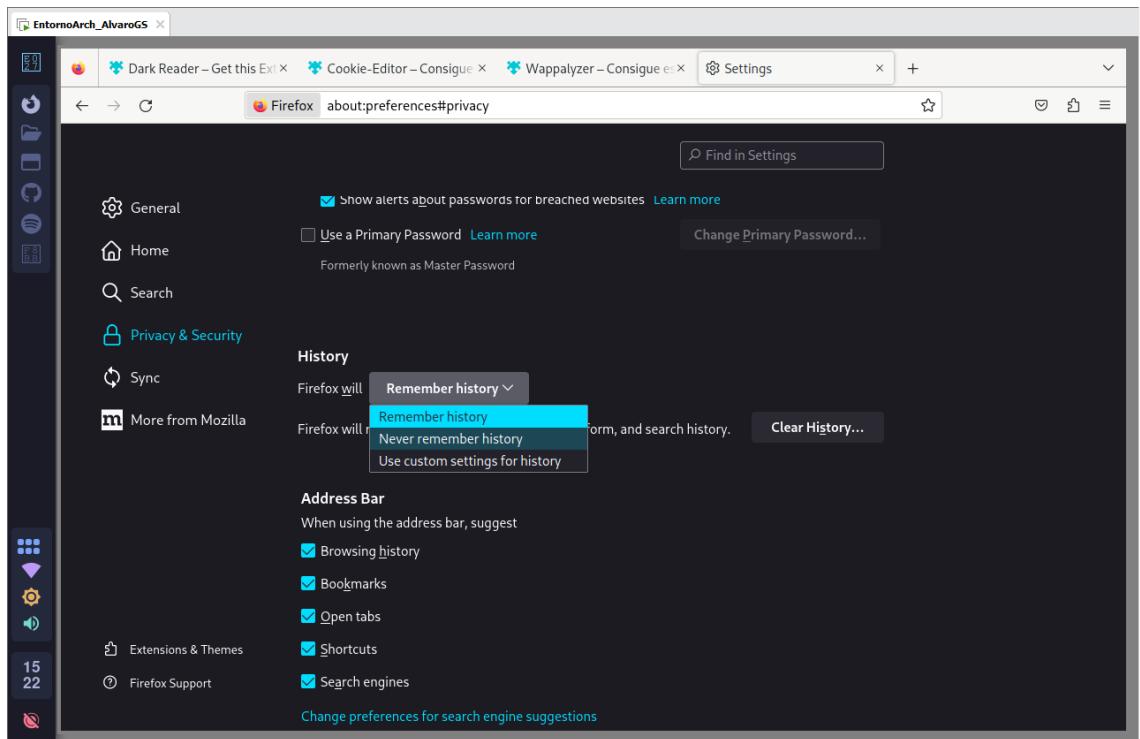
Add to Firefox

Hacktools, is a web extension facilitating your web application penetration tests, it includes cheat sheets as well as all the tools used during a test such as XSS payloads, Reverse shells to test your web application.

Rate your experience Screenshots

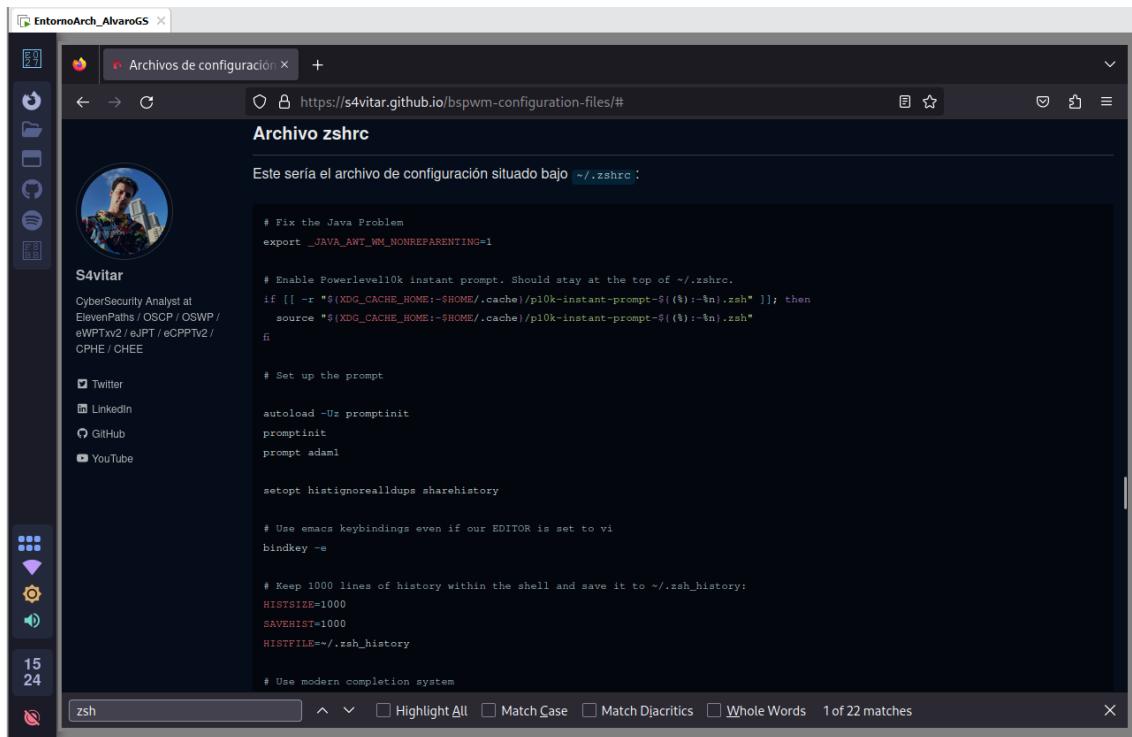
15 23





**Paso 34.** Hacemos uso del fichero ZSHRC de S4vitar. Lo copiaremos en el .zshrc de nuestro home.

<https://s4vitar.github.io/bspwm-configuration-files/#>



The screenshot shows a terminal window titled "EntornoArch\_AlvaroGS" with the command "zsh" in the search bar. The main area displays the zshrc configuration file content:

```
GNU nano 7.2
/home/alvarogs/.zshrc
# Fix the Java Problem
export _JAVA_AWT_WM_NONREPARENTING=1

# Enable Powerlevel10k instant prompt. Should stay at the top of ~/.zshrc.
if [[ -r "$XDG_CACHE_HOME:$HOME/.cache)/p10k-instant-prompt-$({%:-n}.zsh" ]]; then
    source "$XDG_CACHE_HOME:$HOME/.cache)/p10k-instant-prompt-$({%:-n}.zsh"
fi

# Set up the prompt

autoload -Uz promptinit
promptinit
prompt adam1

setopt histignorealldups sharehistory

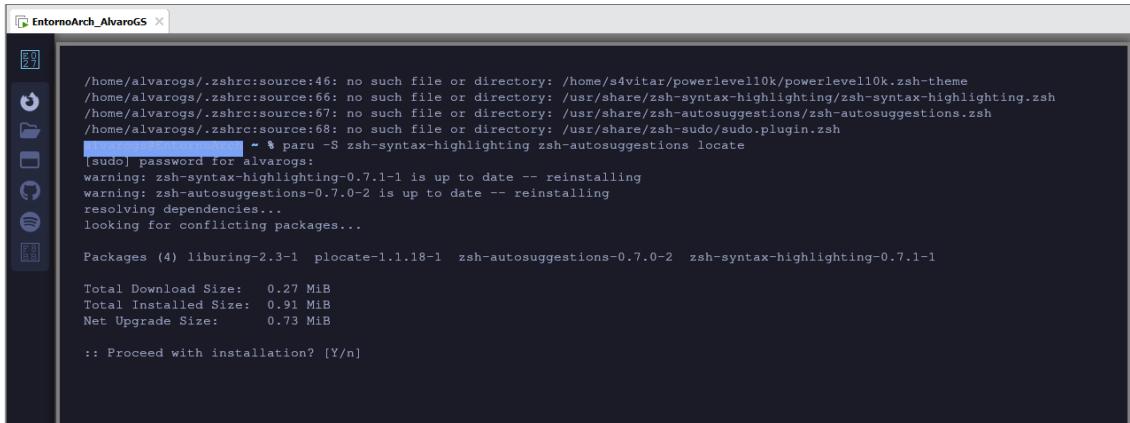
# Use emacs keybindings even if our EDITOR is set to vi
bindkey -e

# Keep 1000 lines of history within the shell and save it to ~/.zsh_history:
HISTSIZE=1000
SAVEHIST=1000
HISTFILE=~/.zsh_history

# Use modern completion system
autoload -Uz compinit
compinit

zstyle ':completion:*' auto-description 'specify: %d'
zstyle ':completion:' completer _expand _complete _correct _approximate
zstyle ':completion:' format 'Completing %d'
zstyle ':completion:' group-name ''
zstyle ':completion:' menu select=2
eval "$(dircolors -b)"
zstyle ':completion::default' list-colors ${(%..)LS_COLORS}
```

**Paso 35.** Instalamos los siguientes 3 paquetes.



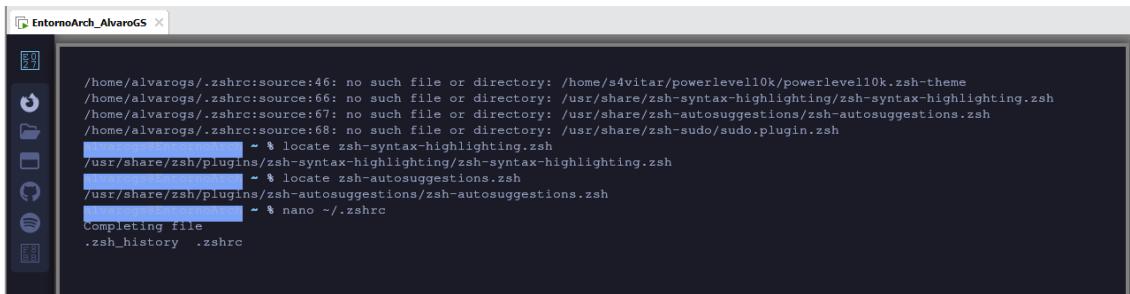
```
/home/alvarogs/.zshrc:source:46: no such file or directory: /home/s4vitar/powerlevel10k/powerlevel10k.zsh-theme
/home/alvarogs/.zshrc:source:66: no such file or directory: /usr/share/zsh-syntax-highlighting/zsh-syntax-highlighting.zsh
/home/alvarogs/.zshrc:source:67: no such file or directory: /usr/share/zsh-autosuggestions/zsh-autosuggestions.zsh
/home/alvarogs/.zshrc:source:68: no such file or directory: /usr/share/zsh-sudo/sudo.plugin.zsh
[sudo] password for alvarogs:
warning: zsh-syntax-highlighting-0.7.1-1 is up to date -- reinstalling
warning: zsh-autosuggestions-0.7.0-2 is up to date -- reinstalling
resolving dependencies...
looking for conflicting packages...

Packages (4) liburing-2.3-1  plocate-1.1.18-1  zsh-autosuggestions-0.7.0-2  zsh-syntax-highlighting-0.7.1-1

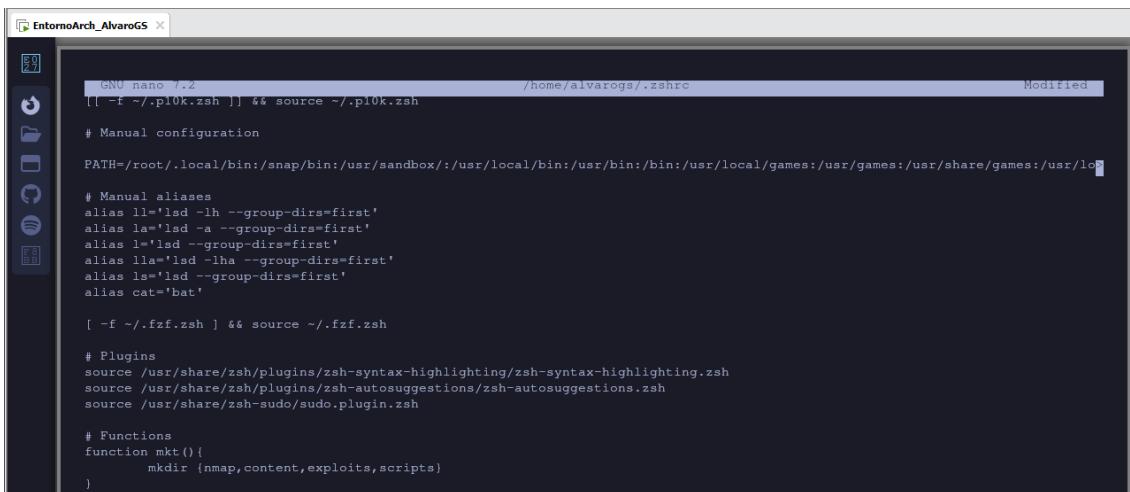
Total Download Size: 0.27 MiB
Total Installed Size: 0.91 MiB
Net Upgrade Size: 0.73 MiB

:: Proceed with installation? [Y/n]
```

**Paso 36.** Usamos locate para localizar los ficheros zsh recién descargados y los configuraremos en la zshrc.



```
/home/alvarogs/.zshrc:source:46: no such file or directory: /home/s4vitar/powerlevel10k/powerlevel10k.zsh-theme
/home/alvarogs/.zshrc:source:66: no such file or directory: /usr/share/zsh-syntax-highlighting/zsh-syntax-highlighting.zsh
/home/alvarogs/.zshrc:source:67: no such file or directory: /usr/share/zsh-autosuggestions/zsh-autosuggestions.zsh
[home/alvarogs/.zshrc:source:68: no such file or directory: /usr/share/zsh-sudo/sudo.plugin.zsh
[locate zsh-syntax-highlighting.zsh
[locate zsh-autosuggestions.zsh
[locate zshrc
Completing file
.zsh_history .zshrc
```



```
GNU nano 7.2
[ -f ~/.p10k.zsh ] ] && source ~/.p10k.zsh
Modified

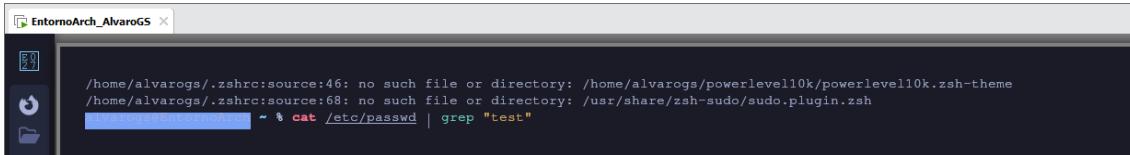
# Manual configuration
PATH=/root/.local/bin:/snap/bin:/usr/sandbox:/usr/local/bin:/usr/bin:/bin:/usr/local/games:/usr/games:/usr/share/games:/usr/local/games

# Manual aliases
alias ll='lsd -lh --group-dirs=first'
alias la='lsd -a --group-dirs=first'
alias l='lad --group-dirs=first'
alias lla='lsd -lha --group-dirs=first'
alias ls='lsd --group-dirs=first'
alias cat='bat'

[ -f ~/.fzf.zsh ] && source ~/.fzf.zsh

# Plugins
source /usr/share/zsh/plugins/zsh-syntax-highlighting/zsh-syntax-highlighting.zsh
source /usr/share/zsh/plugins/zsh-autosuggestions/zsh-autosuggestions.zsh
source /usr/share/zsh-sudo/sudo.plugin.zsh

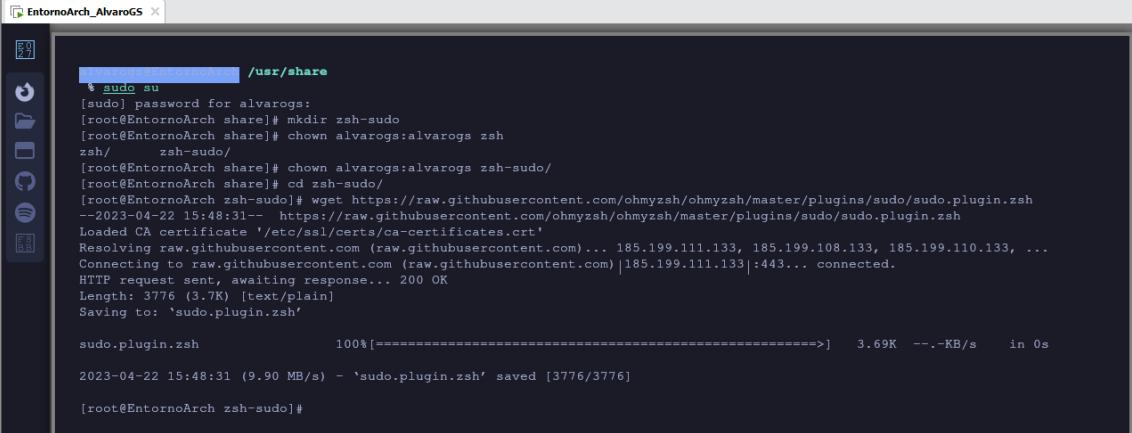
# Functions
function mkt() {
    mkdir {mmap,content,exploits,scripts}
}
```



```
/home/alvarogs/.zshrc:source:46: no such file or directory: /home/alvarogs/powerlevel10k/powerlevel10k.zsh-theme
/home/alvarogs/.zshrc:source:68: no such file or directory: /usr/share/zsh-sudo/sudo.plugin.zsh
[cat /etc/passwd | grep "test"
```

**Paso 37.** Descargamos el plugin sudo para la ZSH. Esto nos permitirá poner “sudo” en las líneas de una manera mucho más rápida.

<https://raw.githubusercontent.com/ohmyzsh/ohmyzsh/master/plugins/sudo/sudo.plugin.zsh>



```
EntornoArch_AlvaroGS ×

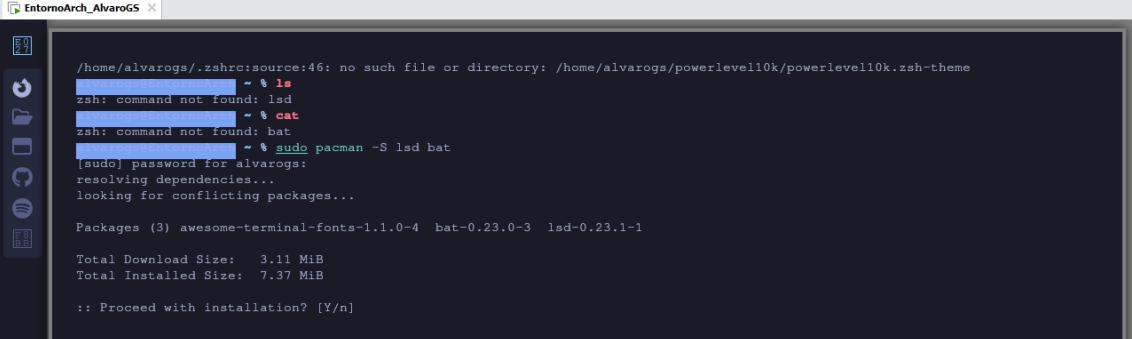
[sudo] password for alvarogs:
[root@EntornoArch share]# mkdir zsh-sudo
[root@EntornoArch share]# chown alvarogs:alvarogs zsh
zsh/
zsh-sudo/
[root@EntornoArch share]# chown alvarogs:alvarogs zsh-sudo/
[root@EntornoArch share]# cd zsh-sudo/
[root@EntornoArch zsh-sudo]# wget https://raw.githubusercontent.com/ohmyzsh/ohmyzsh/master/plugins/sudo/sudo.plugin.zsh
--2023-04-22 15:48:31-- https://raw.githubusercontent.com/ohmyzsh/ohmyzsh/master/plugins/sudo/sudo.plugin.zsh
Loaded CA certificate '/etc/ssl/certs/ca-certificates.crt'
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.111.133, 185.199.108.133, 185.199.110.133, ...
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.111.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3776 (3.7K) [text/plain]
Saving to: 'sudo.plugin.zsh'

sudo.plugin.zsh          100%[=====] 3.69K --.-KB/s   in 0s

2023-04-22 15:48:31 (9.90 MB/s) - 'sudo.plugin.zsh' saved [3776/3776]

[root@EntornoArch zsh-sudo]#
```

**Paso 38.** Instalamos LSD y BAT para una interfaz más visual.



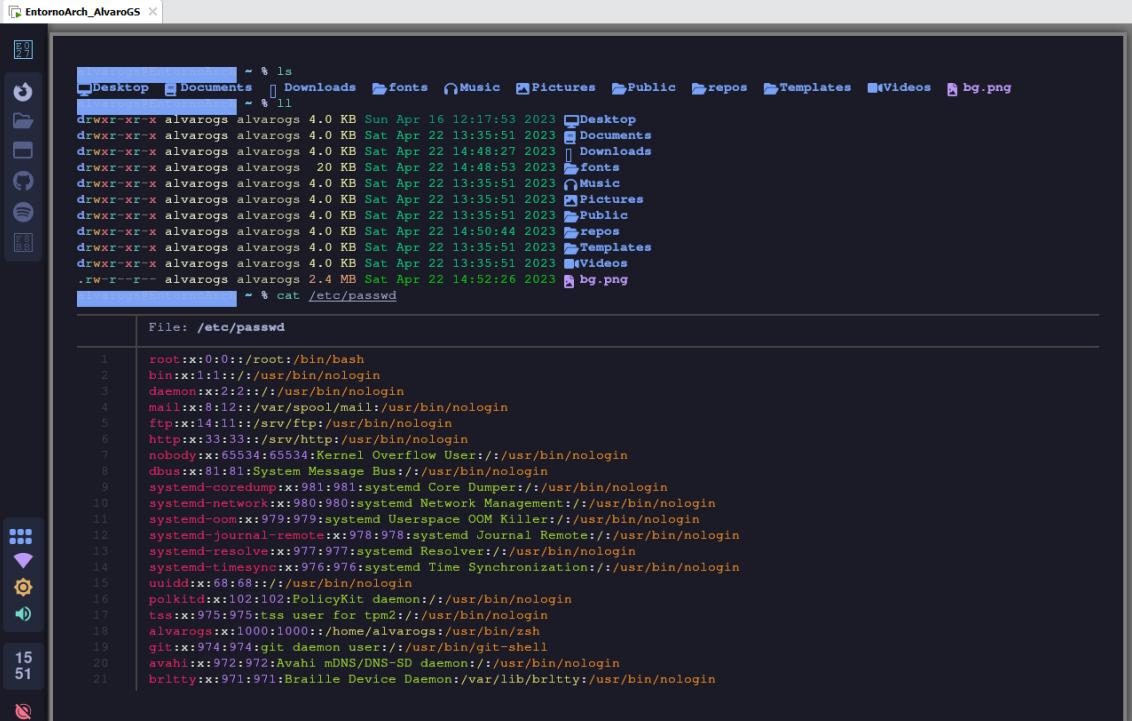
```
EntornoArch_AlvaroGS ×

/home/alvarogs/.zshrc:source:46: no such file or directory: /home/alvarogs/powerlevel10k/powerlevel10k.zsh-theme
[~] % ls
zsh: command not found: lsd
[~] % cat
zsh: command not found: bat
[~] % sudo pacman -S lsd bat
[sudo] password for alvarogs:
resolving dependencies...
looking for conflicting packages...

Packages (3) awesome-terminal-fonts-1.1.0-4  bat-0.23.0-3  lsd-0.23.1-1

Total Download Size: 3.11 MiB
Total Installed Size: 7.37 MiB

:: Proceed with installation? [Y/n]
```



```
EntornoArch_AlvaroGS ×

[~] % ls
Desktop Documents Downloads fonts Music Pictures Public repos Templates Videos bg.png
[~] % ll
drwxr-xr-x alvarogs alvarogs 4.0 KB Sun Apr 16 12:17:53 2023 Desktop
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 13:35:51 2023 Documents
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 14:48:27 2023 Downloads
drwxr-xr-x alvarogs alvarogs 20 KB Sat Apr 22 14:48:53 2023 fonts
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 13:35:51 2023 Music
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 13:35:51 2023 Pictures
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 13:35:51 2023 Public
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 14:50:44 2023 repos
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 13:35:51 2023 Templates
drwxr-xr-x alvarogs alvarogs 4.0 KB Sat Apr 22 13:35:51 2023 Videos
.rw-r--r-- alvarogs alvarogs 2.4 MB Sat Apr 22 14:52:26 2023 bg.png

[~] % cat /etc/passwd
File: /etc/passwd

1 root:x:0::/root:/bin/bash
2 bin:x:1:::/usr/bin/nologin
3 daemon:x:2:::/usr/bin/nologin
4 mail:x:8:12::/var/spool/mail:/usr/bin/nologin
5 ftp:x:14:11::/srv/ftp:/usr/bin/nologin
6 http:x:33:33::/rv/http:/usr/bin/nologin
7 nobody:x:65534:65534:Kernel Overflow User:/usr/bin/nologin
8 dbus:x:81:81:System Message Bus:/usr/bin/nologin
9 systemd-coresdump:x:981:981:systemd Core Dumper:/usr/bin/nologin
10 systemd-network:x:980:980:systemd Network Management:/usr/bin/nologin
11 systemd-ooom:x:979:979:systemd Userspace OOM Killer:/usr/bin/nologin
12 systemd-journal-remote:x:978:978:systemd Journal Remote:/usr/bin/nologin
13 systemd-resolve:x:977:977:systemd Resolver:/usr/bin/nologin
14 systemd-timesync:x:976:976:systemd Time Synchronization:/usr/bin/nologin
15 uiddid:x:68:68::/usr/bin/nologin
16 polkitd:x:102:102:PolicyKit daemon:/usr/bin/nologin
17 tss:x:975:975:tss user for tpm2:/usr/bin/nologin
18 alvarogs:x:1000:1000:/home/alvarogs:/usr/bin/zsh
19 git:x:974:974:git daemon user:/usr/bin/git-shell
20 avahi:x:972:972:Avahi mDNS/DNS-SD daemon:/usr/bin/nologin
21 brltty:x:971:971:Braille Device Daemon:/var/lib/brltty:/usr/bin/nologin
```

**Paso 39.** Instalamos Scrub.

```
[root@alvaro ~] ~ % paru -S scrub
:: Resolving dependencies...
:: Calculating conflicts...
:: Calculating inner conflicts...

Aur (1) scrub-2.6.1-1

:: Proceed to review? [Y/n]: _
```

**Paso 40.** Comprobamos nuestras funciones base. MKT para crear una estructura de directorios preparada para pentesting, y RMK para el borrado seguro de archivos.

```
[root@alvaro ~] ~ % which mkt
mkt () {
    mkdir {nmap,content,exploits,scripts}
}
[root@alvaro ~] ~ % which rmk
rmk () {
    scrub -p dod $1
    shred -zun 10 -v $1
}
[root@alvaro ~] ~ %
```

**Paso 41.** Descargamos HackNerdFont desde la página oficial.

<https://www.nerdfonts.com/font-downloads>

The terminal window shows:

```
~/Fonts % mv ./Downloads/Hack.zip .
~/Fonts %
```

The browser window shows the Nerd Fonts website at <https://www.nerdfonts.com/font-downloads>. The 'Hack Nerd Font' section is highlighted, showing its preview and download links.

**Hack Nerd Font**

abcdefghijklmnopqrstuvwxyz  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
o008 iilll1 {} [] g9qCQ ~++>  
· Info: Created specifically for the Go project. Looks particularly clear for use with the Go language

**Download**

**Preview on ProgrammingFonts.org**

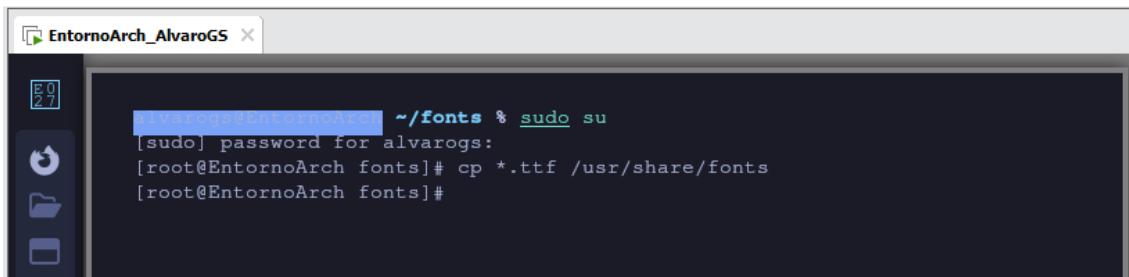
**Hasklug Nerd Font**

abcdefghijklmnopqrstuvwxyz  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
o008 iilll1 {} [] g9qCQ ~++>  
· Info: Dotted zero, short descenders, expands upon work done for Bitstream Vera & DejaVu, legible at common sizes

**Download**

**Preview on ProgrammingFonts.org**

**Paso 42.** Descomprimimos el zip en nuestra carpeta de fuentes, y copiamos todos los .ttf de nuestra carpeta a las fuentes del sistema.

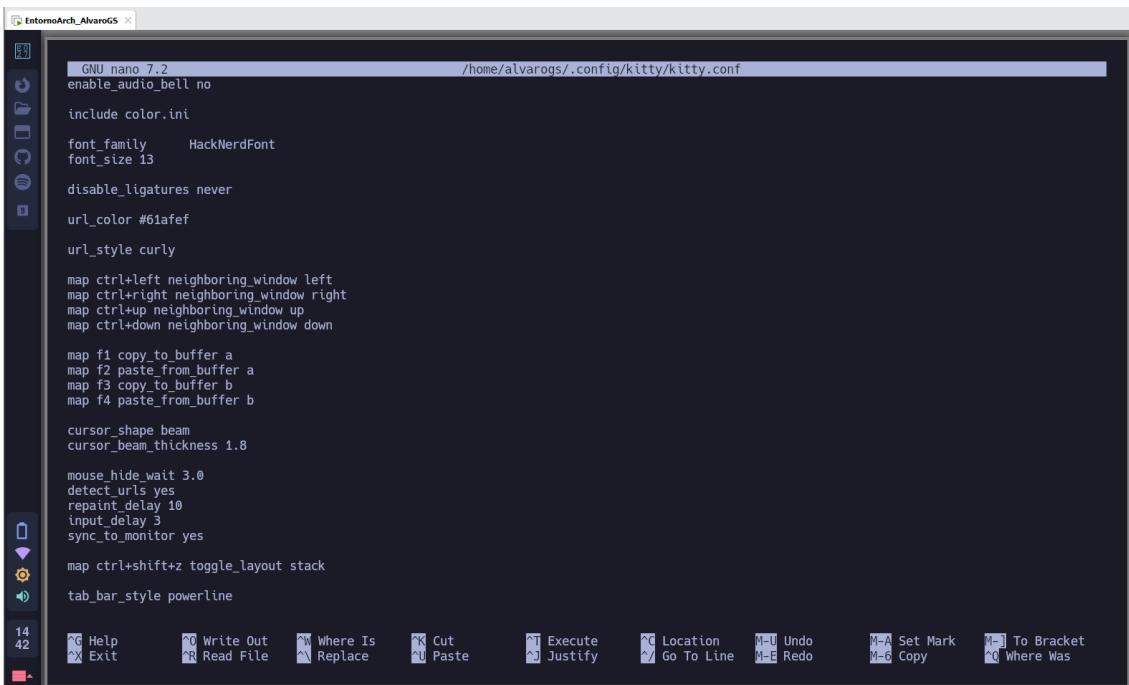


```
alvaro@entornoarch: ~/fonts % sudo su
[sudo] password for alvaro:
[root@EntornoArch fonts]# cp *.ttf /usr/share/fonts
[root@EntornoArch fonts]#
```

**Paso 43.** Hacemos uso de estos dos ficheros en el repositorio del tema BSPWM y los editamos de la siguiente forma:

<https://github.com/rxyhn/tokyo/blob/main/config/kitty.conf>

<https://github.com/rxyhn/tokyo/blob/main/config/kitty/color.ini>



```
GNU nano 7.2                               /home/alvaro/.config/kitty/kitty.conf
enable_audio_bell no
include color.ini
font_family      HackNerdFont
font_size 13
disable_ligatures never
url_color #61aef
url_style curly
map ctrl+left neighboring_window left
map ctrl+right neighboring_window right
map ctrl+up neighboring_window up
map ctrl+down neighboring_window down
map f1 copy_to_buffer a
map f2 paste_from_buffer a
map f3 copy_to_buffer b
map f4 paste_from_buffer b
cursor_shape beam
cursor_beam_thickness 1.8
mouse_hide_wait 3.0
detect_uris yes
repaint_delay 10
input_delay 3
sync_to_monitor yes
map ctrl+shift+z toggle_layout stack
tab_bar_style powerline
```

EntornoArch\_AlvaroGS

GNU nano 7.2 /home/alvaroogs/.config/kitty/kitty.conf

```
map ctrl+left neighboring_window left
map ctrl+right neighboring_window right
map ctrl+up neighboring_window up
map ctrl+down neighboring_window down

map f1 copy_to_buffer a
map f2 paste_from_buffer a
map f3 copy_to_buffer b
map f4 paste_from_buffer b

cursor_shape beam
cursor_beam_thickness 1.8

mouse_hide_wait 3.0
detect_urls yes
repaint_delay 10
input_delay 3
sync_to_monitor yes

map ctrl+shift+z toggle_layout stack

tab_bar_style powerline

inactive_tab_background #b8ffff
active_tab_background #3bc4d4
inactive_tab_foreground #000000
tab_bar_margin_color white

map ctrl+shift+enter new_window_with_cwd
map ctrl+shift+t new_tab_with_cwd

background_opacity 0.90

shell zsh
```

14 45

FG Help ^X Exit ^Q Write Out ^R Read File ^W Where Is ^K Cut ^U Paste ^T Execute ^G Location ^Y Go To Line M-U Undo M-E Redo M-A Set Mark M-B Copy M-Q To Bracket M-Q Where Was

EntornoArch\_AlvaroGS

```
/home/alvaroogs/.zshrc:source:46: no such file or directory: /home/alvaroogs/powerlevel10k/powerlevel10k.zsh-theme ~ %
```

```
/home/alvaroogs/.zshrc:source:46: no such file or directory: /home/alvaroogs/powerlevel10k/powerlevel10k.zsh-theme ~ %
```

```
/home/alvaroogs/.zshrc:source:46: no such file or directory: /home/alvaroogs/powerlevel10k/powerlevel10k.zsh-theme ~ %
```

```
/home/alvaroogs/.zshrc:source:46: no such file or directory: /home/alvaroogs/powerlevel10k/powerlevel10k.zsh-theme ~ %
```

```
/home/alvaroogs/.zshrc:source:46: no such file or directory: /home/alvaroogs/powerlevel10k/powerlevel10k.zsh-theme ~ %
```

```
/home/alvaroogs/.zshrc:source:46: no such file or directory: /home/alvaroogs/powerlevel10k/powerlevel10k.zsh-theme ~ %
```

14 40

~CTRL+SHIFT... > Testing > ~ > ~ > ~ > ~ > ~ > ~

```

GNU nano 7.2                               /home/alvarogs/.config/kitty/color.ini
cursor_shape Underline
cursor_underline_thickness 1
window_padding_width 20

# Special
foreground #a9b1d6
background #13131c

# Black
color0 #414868
color8 #414868

# Red
color1 #f7768e
color9 #f7768e

# Green
color2 #73daca
color10 #73daca

# Yellow
color3 #e0af68
color11 #e0af68

# Blue
color4 #7aa2f7
color12 #7aa2f7

# Magenta
color5 #bb9af7
color13 #bb9af7

# Cyan
color6 #7dcfff
color14 #7dcfff


```

GNOME Terminal menu icons are visible on the left. The bottom bar shows keyboard shortcuts for various functions.

#### Paso 44. Lo mismo con el fichero de picom.conf

<https://github.com/rxyhn/tokyo/blob/main/config/picom/picom.conf>

```

GNU nano 7.2                               picom.conf                               Modified
"window_type = 'dock'",                      "# _GTK_FRAME_EXTENTS@:c"
"window_type = 'desktop'",                     "];
#####
# GENERAL
#####
# Daemonize process. Fork to background after initialization. Causes issues with certain (badly-written) drivers.
# daemon = false
#
# Specify the backend to use: `xrender`, `glx`, or `xr_glx_hybrid`.
# `xrender` is the default one.
#
# backend = 'glx';
backend = "glx";
#
# Enable/disable VSync.
# vsync = false
vsync = false
#
# Enable remote control via D-Bus. See the *D-BUS API* section below for more details.


```

```

GNU nano 7.2                               picom.conf                               Modified
# Do not fade on window open/close.
# no-fading-openclose = false
#
# Do not fade destroyed ARGB windows with WM frame. Workaround of bugs in Openbox, Fluxbox, etc.
# no-fading-destroyed-argb = false
#####
# OPACITY
#####
# Opacity of inactive windows. (0.1 - 1.0, defaults to 1.0)
inactive-opacity = 1.0
#
# Opacity of window titlebars and borders. (0.1 - 1.0, disabled by default)
frame-opacity = 1.0
#
# Default opacity for dropdown menus and popup menus. (0.0 - 1.0, defaults to 1.0)
popup-opacity = 1.0
#
# Let inactive opacity set by -i override the '_NET_WM_OPACITY' values of windows.
# inactive-opacity-override = true
inactive-opacity-override = false;


```

```
GNU nano 7.2                                     picom.conf                                         Modified
#
# mark-overdir-focused = false
mark-overdir-focused = true;

# Try to detect windows with rounded corners and don't consider them
# shaped windows. The accuracy is not very high, unfortunately.
#
# detect-rounded-corners = false
detect-rounded-corners = true;

# Detect '_NET_WM_OPACITY' on client windows, useful for window managers
# not passing '_NET_WM_OPACITY' of client windows to frame windows.
#
# detect-client-opacity = false
detect-client-opacity = true;

# Specify refresh rate of the screen. If not specified or 0, picom will
# try detecting this with X RandR extension.
#
# refresh-rate = 60
# refresh-rate = 0

# Limit picom to repaint at most once every 1 / 'refresh rate' second to
```

```
GNU nano 7.2                                     picom.conf                                         Modified
#####
# BLUR
#####

# Parameters for background blurring, see the *BLUR* section for more information.
# blur-method = "gaussian"
# blur-size = 14
# blur-strength = 10

# Blur background of semi-transparent / ARGB windows.
# Bad in performance, with driver-dependent behavior.
# The name of the switch may change without prior notifications.
#
# blur-background = false

# Blur background of windows when the window frame is not opaque.
# Implies:
#   blur-background
# Bad in performance, with driver-dependent behavior. The name may change.
#
# blur-background-frame = false

# Use fixed blur strength rather than adjusting according to window opacity.
# blur-background-fixed = false
```

```
GNU nano 7.2                                     picom.conf                                         Modified
#
# GLX backend: Avoid using stencil buffer, useful if you don't have a stencil buffer.
# Might cause incorrect opacity when rendering transparent content (but never
# practically happened) and may not work with blur-background.
# My tests show a 15% performance boost. Recommended.
#
# glx-no-stencil = false

# GLX backend: Avoid rebinding pixmap on window damage.
# Probably could improve performance on rapid window content changes,
# but is known to break things on some drivers (LLVMpipe, xf86-video-intel, etc.).
# Recommended if it works.
#
# glx-no-rebind-pixmap = false

# Disable the use of damage information.
# This cause the whole screen to be redrawn everytime, instead of the part of the screen
# has actually changed. Potentially degrades the performance, but might fix some artifacts.
# The opposing option is use-damage
#
# no-use-damage = false
use-damage = false

# Use X Sync fence to sync clients' draw calls, to make sure all draw
# calls are finished before picom starts drawing. Needed on nvidia-drivers
# with GLX backend for some users.
```

```
GNU nano 7.2                                     picom.conf                                         Modified
#####
# CORNERS
#####

# requires: https://github.com/sdhand/compton
corner-radius = 5;
rounded-corners-exclude = [
    "#window_type = 'normal'",
    "#class_g = 'firefox'",
];
round-borders = 20;
round-borders-exclude = [
    "#class_g = 'TelegramDesktop'",
];

# Specify a list of border width rules, in the format 'PIXELS:PATTERN',
# Note we don't make any guarantee about possible conflicts with the
# border_width set by the window manager.
#
```

```
EntornoArch_AlvaroGS x
GNU nano 7.2                               picom.conf                                Modified
# Exclude conditions for background blur.
# blur-background-exclude = []
# blur-background-exclude =
#   "! name=~'*',
#   "name *= 'slop',
#   "window_type = 'dock',
#   "window_type = 'desktop',
#   "_GTK_FRAME_EXTENTS@c"
# ];

#####
# GENERAL
#####

# Daemonize process. Fork to background after initialization. Causes issues with certain (badly-written) drivers.
# daemon = false

# Specify the backend to use: `xrender`, `glx`, or `xr_glx_hybrid`.
# `xrender` is the default one.
#
# backend = "glx";
backend = "xrender";

# Enable/disable VSync.
# vsync = false
vsync = false
```

Paso 45. Instalamos FEH para configurar nuestro fondo.

```
EntornoArch_AlvaroGS x
[alvaro@EntornoArch ~]# ls
one_piece_wp.jpg
[alvaro@EntornoArch ~]# ~images % sudo su
[sudo] password for alvaro:
[root@EntornoArch images]# pacman -S feh
warning: feh-3.10-1 is up to date -- reinstalling
resolving dependencies...
looking for conflicting packages...

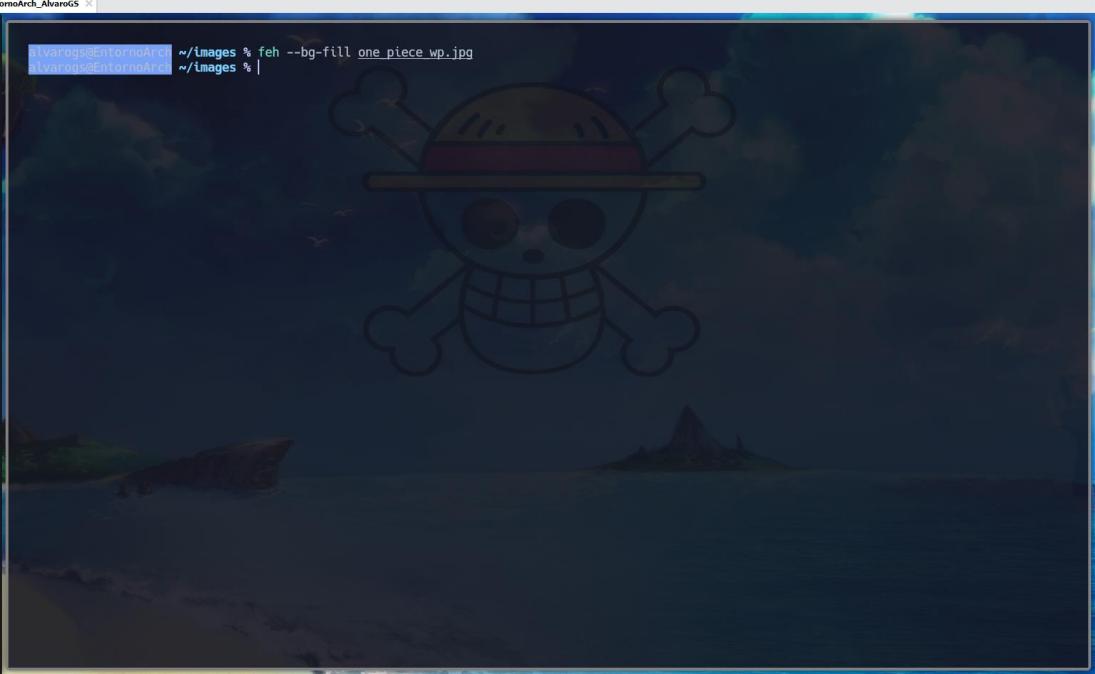
Packages (1) feh-3.10-1

Total Installed Size: 0.43 MiB
Net Upgrade Size: 0.00 MiB

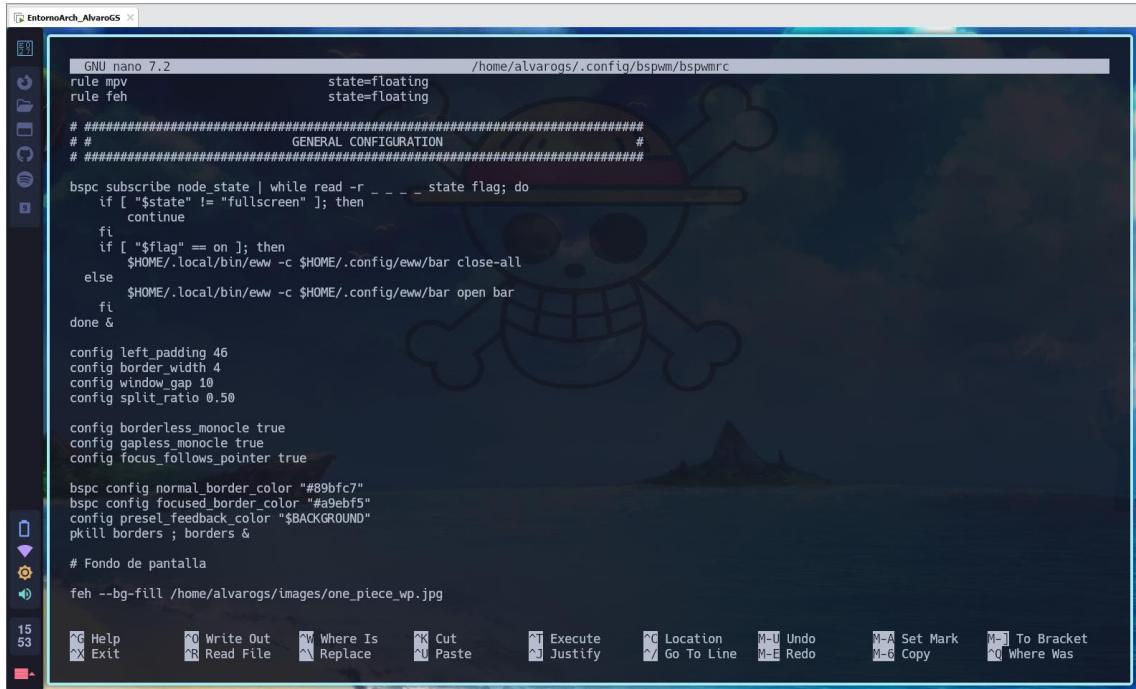
:: Proceed with installation? [Y/n] Y
(1/1) checking keys in keyring
(1/1) checking package integrity
[########################################] 100%
[########################################] 100%
```

```
EntornoArch_AlvaroGS x
alvaro@EntornoArch ~]# feh --bg-fill one_piece_wp.jpg
alvaro@EntornoArch ~]#
```



**Paso 46.** Configuramos una línea en nuestro bspwmrc para que configure el fondo automáticamente.



```
GNU nano 7.2          /home/alvarogs/.config/bspwm/bspmrc
rule mpv           state=floating
rule feh           state=floating

# ##### GENERAL CONFIGURATION #####
# bspc subscribe node_state | while read -r -- - state flag; do
#   if [ "$state" != "fullscreen" ]; then
#     continue
#   fi
#   if [ "$flag" == on ]; then
#     $HOME/.local/bin/eww -c $HOME/.config/eww/bar close-all
#   else
#     $HOME/.local/bin/eww -c $HOME/.config/eww/bar open bar
#   fi
# done &

config left_padding 46
config border_width 4
config window gap 10
config split_ratio 0.50

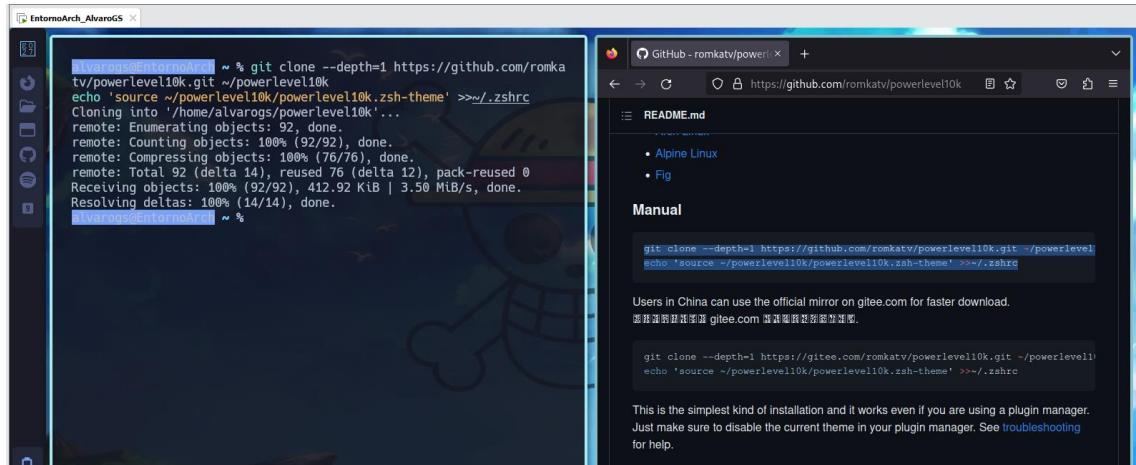
config borderless_monocle true
config gapless_monocle true
config focus_follows_pointer true

bspc config normal_border_color "#00bfc7"
bspc config focused_border_color "#9ebf5"
config presel_feedback_color "$BACKGROUND"
pkill borders ; borders &

# Fondo de pantalla
feh --bg-fill /home/alvarogs/images/one_piece_wp.jpg
```

**Paso 47.** Instalamos la Powerlevel10k.

<https://github.com/romkatv/powerlevel10k>



```
alvarogs@arch: ~ % git clone --depth=1 https://github.com/romkatv/powerlevel10k.git ~/powerlevel10k
echo 'source ~/powerlevel10k/powerlevel10k.zsh-theme' >> ~/.zshrc
Cloning into '/home/alvarogs/powerlevel10k'...
remote: Enumerating objects: 92, done.
remote: Counting objects: 100% (92/92), done.
remote: Compressing objects: 100% (76/76), done.
remote: Total 92 (delta 14), reused 76 (delta 12), pack-reused 0
Receiving objects: 100% (92/92), 412.92 KiB | 3.50 MiB/s, done.
Resolving deltas: 100% (14/14), done.
```

GitHub - romkatv/powerlevel10k

README.md

- Alpine Linux
- Fig

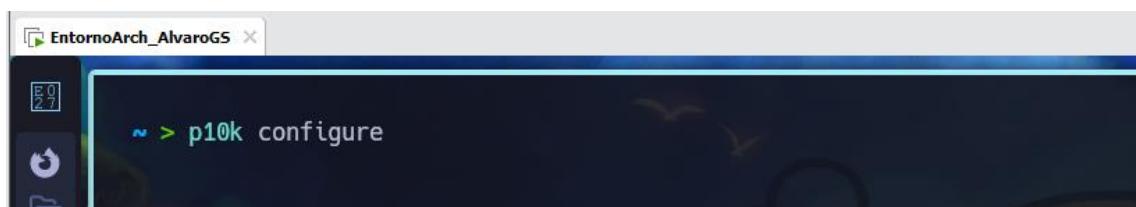
Manual

```
git clone --depth=1 https://github.com/romkatv/powerlevel10k.git ~/powerlevel10k
echo 'source ~/powerlevel10k/powerlevel10k.zsh-theme' >> ~/.zshrc
```

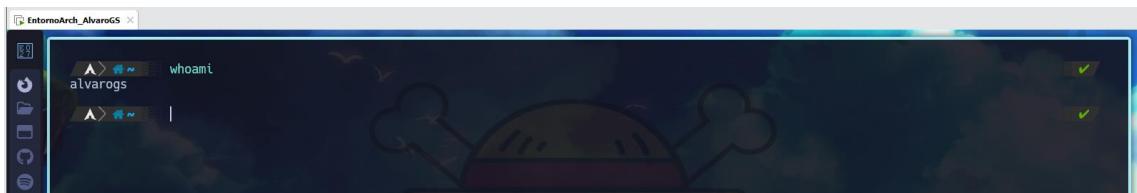
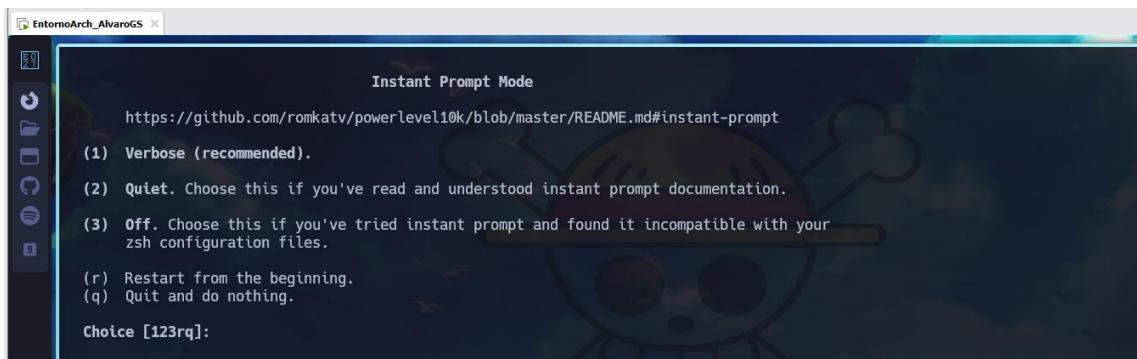
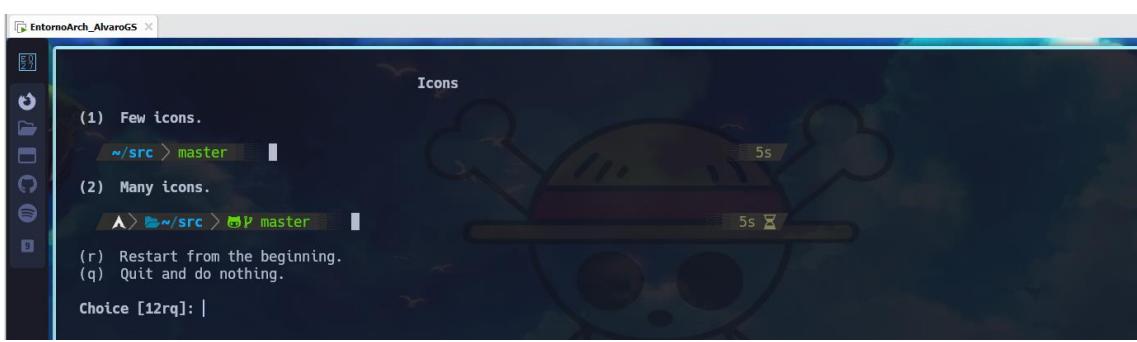
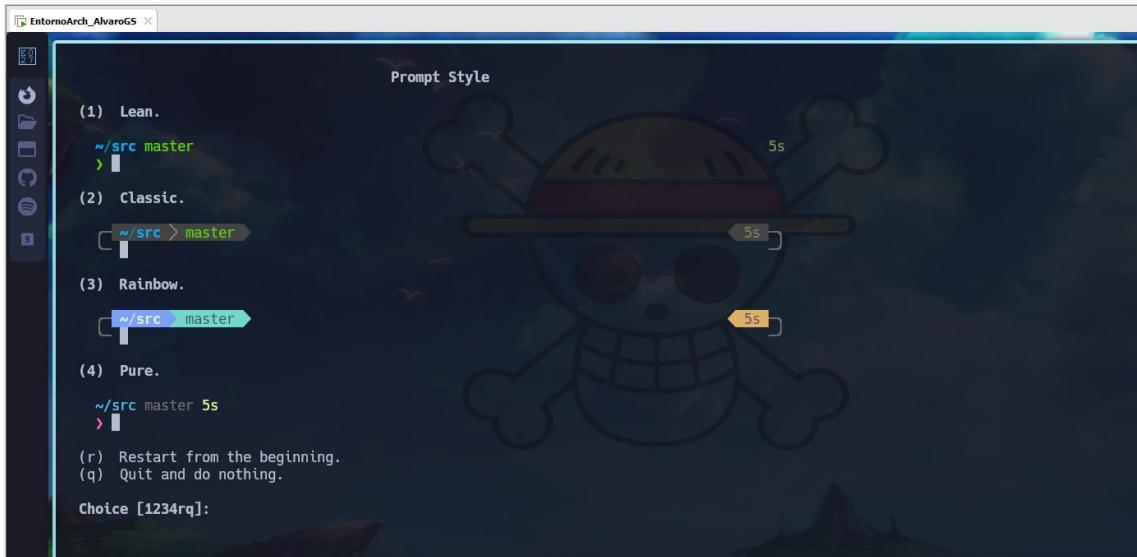
Users in China can use the official mirror on gitee.com for faster download.

```
git clone --depth=1 https://gitee.com/romkatv/powerlevel10k.git ~/powerlevel10k
echo 'source ~/powerlevel10k/powerlevel10k.zsh-theme' >> ~/.zshrc
```

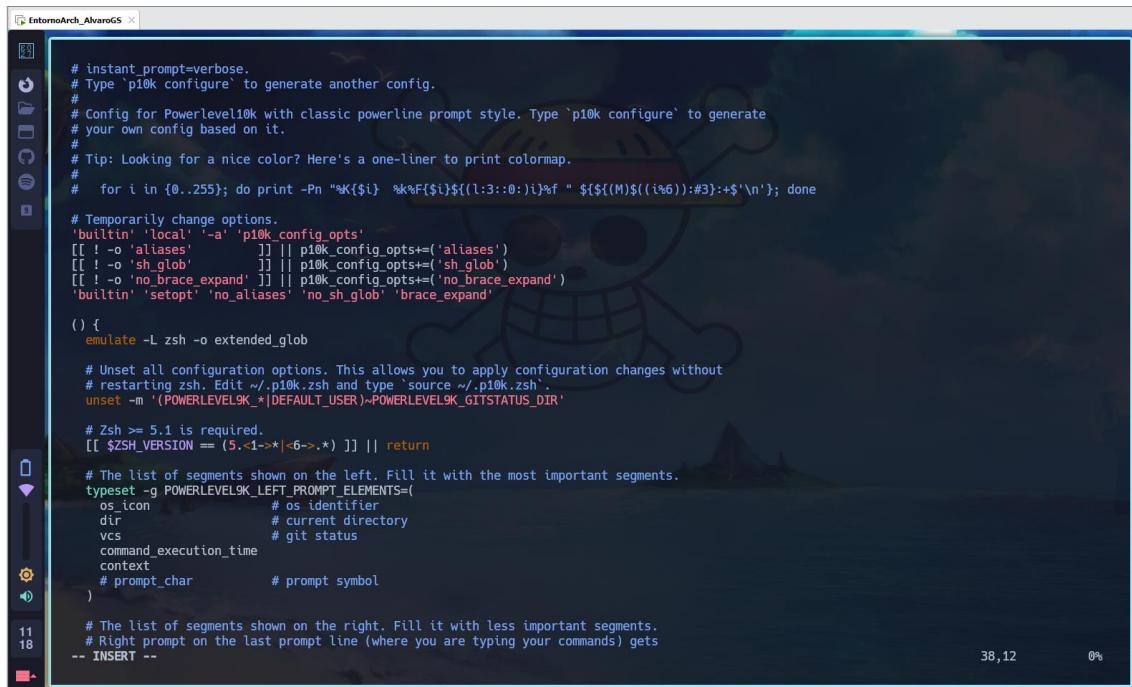
This is the simplest kind of installation and it works even if you are using a plugin manager. Just make sure to disable the current theme in your plugin manager. See [troubleshooting](#) for help.



```
~ > p10k configure
```



**Paso 48.** Accedemos al archivo .p10k.zsh que está en nuestro home.



```
# instant_prompt=verbose.
# Type `p10k configure` to generate another config.
#
# Config for Powerlevel10k with classic powerline prompt style. Type `p10k configure` to generate
# your own config based on it.
#
# Tip: Looking for a nice color? Here's a one-liner to print colormap.
#
# for i in {0..255}; do print -Pn "%K{$i} %k%F{$i}$((l:3::0))f \" ${${(M)${((i%6)):#3)}:+$'\n'}"; done
#
# Temporarily change options.
'builtin' 'local' '-a' 'p10k_config_opts'
[[ ! -o 'aliases' ]] || p10k_config_opts+=('aliases')
[[ ! -o 'sh_glob' ]] || p10k_config_opts+=('sh_glob')
[[ ! -o 'no_brace_expand' ]] || p10k_config_opts+=('no_brace_expand')
'builtin' 'setopt' 'no_aliases' 'no_sh_glob' 'brace_expand'

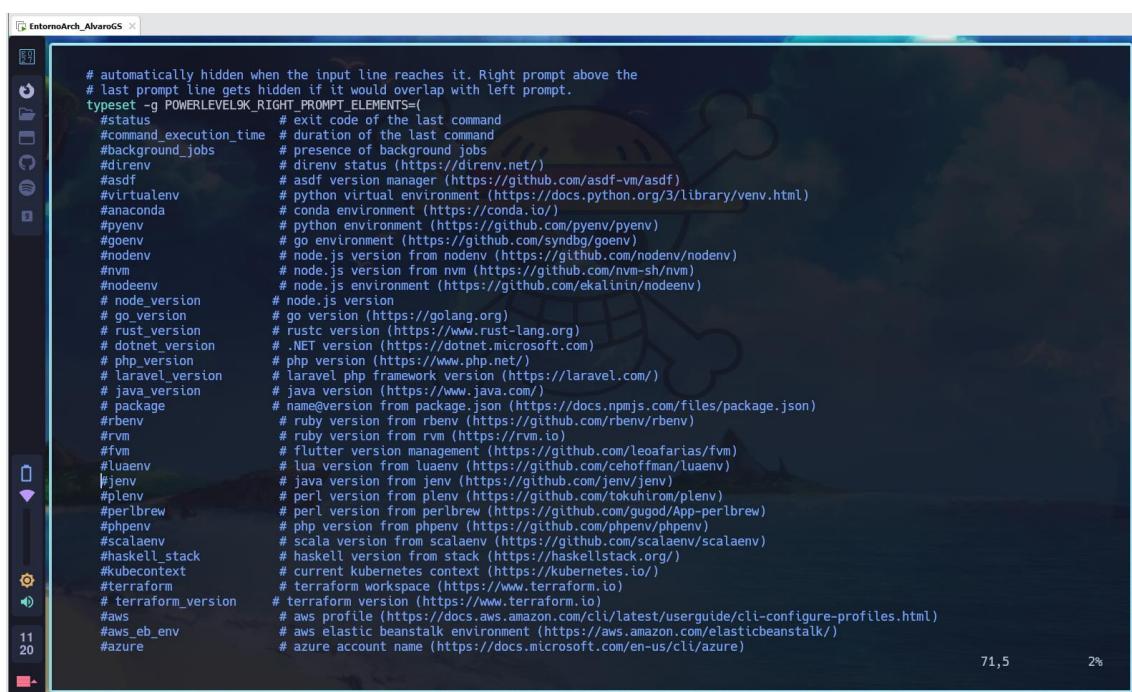
() {
    emulate -L zsh -o extended_glob

    # Unset all configuration options. This allows you to apply configuration changes without
    # restarting zsh. Edit ~/.p10k.zsh and type `source ~/.p10k.zsh`.
    unset -m 'POWERLEVEL9K_*' DEFAULT_USER POWERLEVEL9K_GITSTATUS_DIR

    # Zsh >= 5.1 is required.
    [[ $ZSH_VERSION == (5.<1>*|<6>.* ) ]] || return

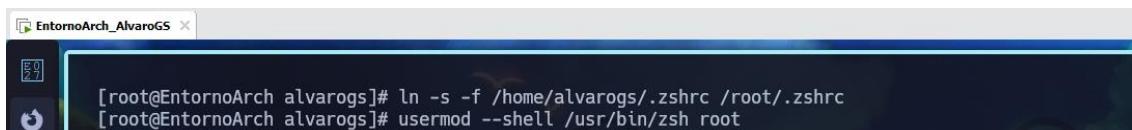
    # The list of segments shown on the left. Fill it with the most important segments.
    typeset -g POWERLEVEL9K_LEFT_PROMPT_ELEMENTS=(
        os_icon           # os identifier
        dir               # current directory
        vcs               # git status
        command_execution_time
        context
        # prompt_char      # prompt symbol
    )

    # The list of segments shown on the right. Fill it with less important segments.
    # Right prompt on the last prompt line (where you are typing your commands) gets
-- INSERT --
```



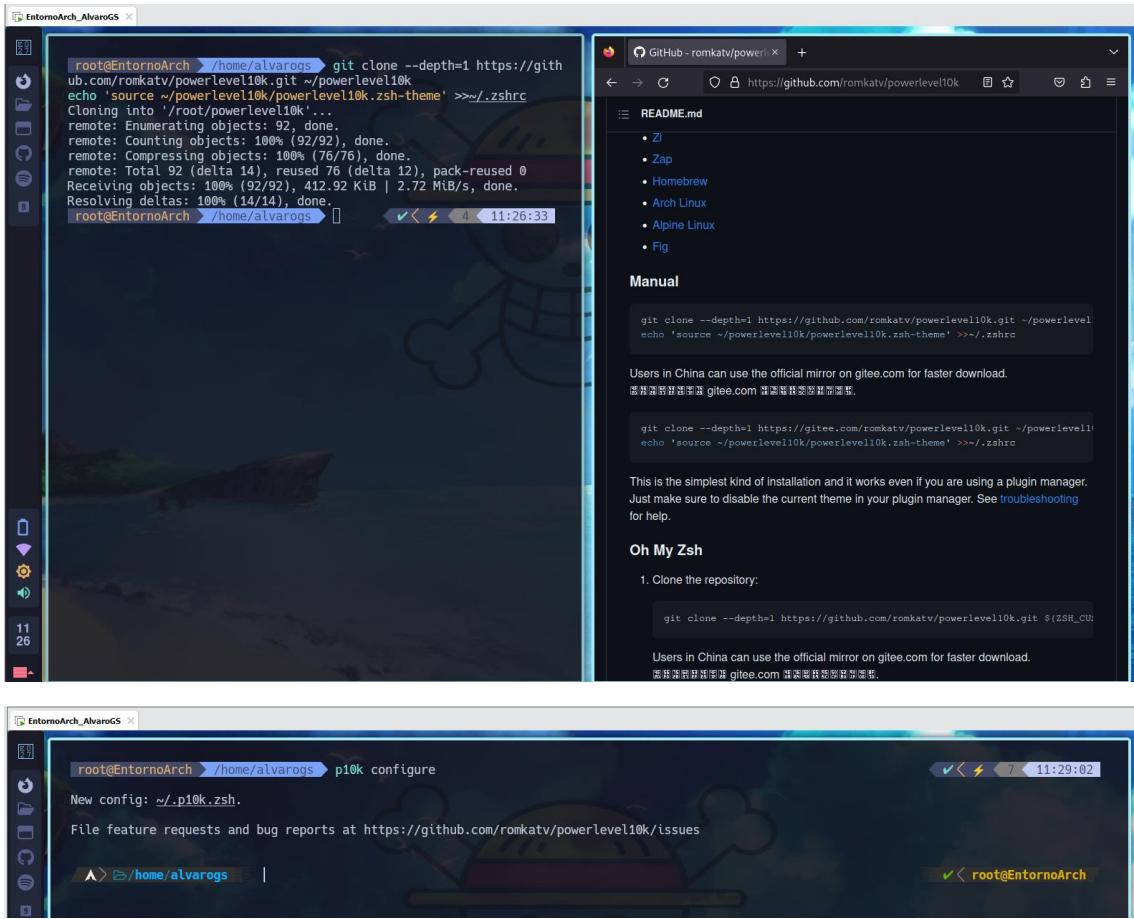
```
# automatically hidden when the input line reaches it. Right prompt above the
# last prompt line gets hidden if it would overlap with left prompt.
typeset -g POWERLEVEL9K_RIGHT_PROMPT_ELEMENTS=(
    #status          # exit code of the last command
    #command_execution_time # duration of the last command
    #background_jobs   # presence of background jobs
    #direnv          # direnv status (https://direnv.net/)
    #asdf            # asdf version manager (https://github.com/asdf-vm/asdf)
    #virtualenv      # python virtual environment (https://docs.python.org/3/library/venv.html)
    #anaconda         # conda environment (https://conda.io/)
    #pyenv            # python environment (https://github.com/pyenv/pyenv)
    #goenv            # go environment (https://github.com/syndbg/goenv)
    #nodeenv          # node.js version from nodenv (https://github.com/nodenodenv)
    #nvm              # node.js version from nvm (https://github.com/nvm-sh/nvm)
    #nodeenv          # node.js environment (https://github.com/ekalinin/nodeenv)
    #node_version     # node.js version
    #go_version       # go version (https://golang.org)
    #rust_version     # rustc version (https://www.rust-lang.org)
    #dotnet_version   # .NET version (https://dotnet.microsoft.com)
    #php_version      # php version (https://www.php.net/)
    #laravel_version  # laravel php framework version (https://laravel.com/)
    #java_version     # java version (https://www.java.com/)
    #package          # name@version from package.json (https://docs.npmjs.com/files/package.json)
    #rbenv            # ruby version from rbenv (https://github.com/rbenv/rbenv)
    #rvm              # ruby version from rvm (https://rvm.io)
    #fvm              # flutter version management (https://github.com/leofarias/fvm)
    #luauenv          # lua version from luauenv (https://github.com/cehoffman/luauenv)
    #jenv              # java version from jenv (https://github.com/jenv/jenv)
    #plenv            # perl version from plenv (https://github.com/tokuhiro/plenv)
    #perlbrew          # perl version from perlbrew (https://github.com/gugod/App-perlbrew)
    #phpenv            # php version from phpenv (https://github.com/phpenv/phpenv)
    #scalaenv          # scala version from scalaenv (https://github.com/scalaenv/scalaenv)
    #haskell_stack    # haskell version from stack (https://haskellstack.org/)
    #kubecontext      # current kubernetes context (https://kubernetes.io/)
    #terraform         # terraform workspace (https://www.terraform.io)
    #terraform_version # terraform version (https://www.terraform.io)
    #aws              # aws profile (https://docs.aws.amazon.com/cli/latest/userguide/cli-configure-profiles.html)
    #aws_elastic_beanstalk # aws elastic beanstalk environment (https://aws.amazon.com/elasticbeanstalk/)
    #azure             # azure account name (https://docs.microsoft.com/en-us/cli/azure)
```

**Paso 49.** Creamos un enlace simbólico del .zshrc de nuestro usuario al de root.



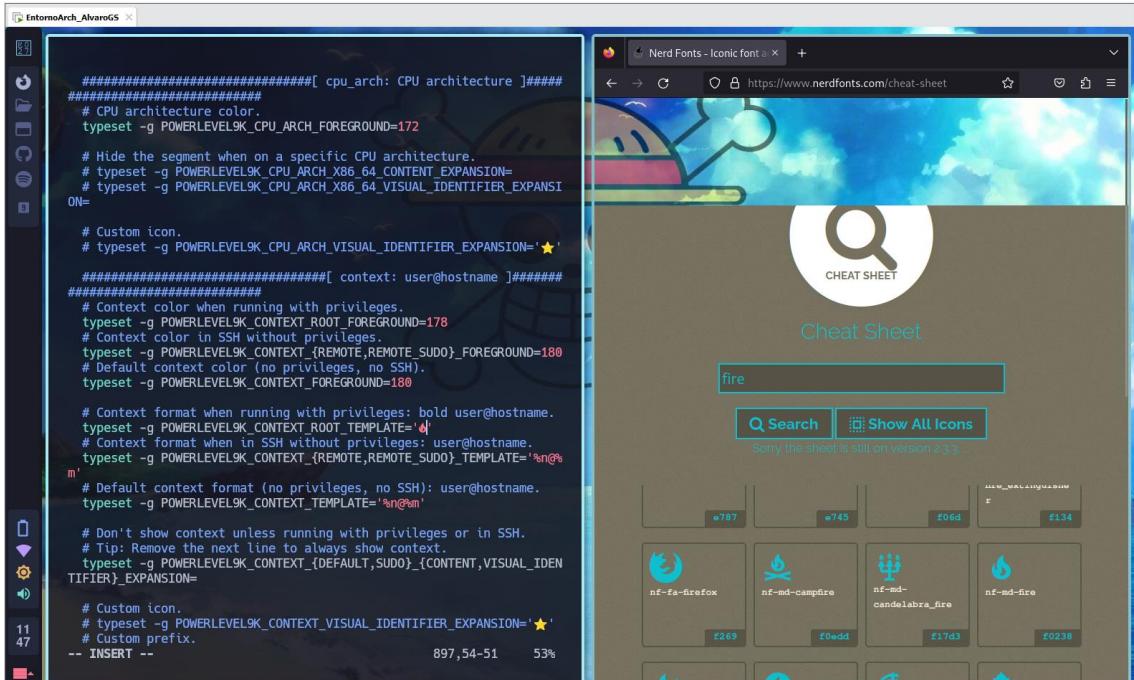
```
[root@EntornoArch alvarogs]# ln -s -f /home/alvarogs/.zshrc /root/.zshrc
[root@EntornoArch alvarogs]# usermod --shell /usr/bin/zsh root
```

## Paso 50. Configuramos también la p10k en el usuario root.



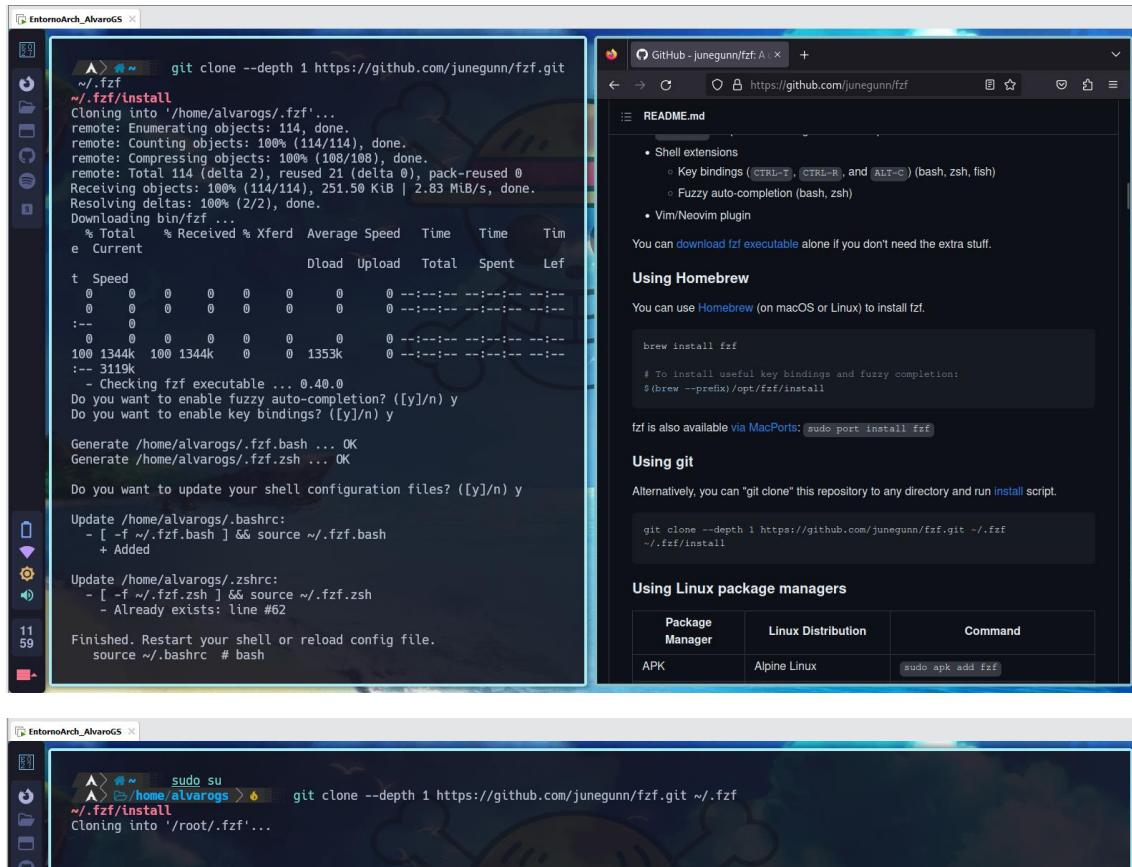
**Paso 51.** Accedemos a la siguiente página para buscar un ícono que nos guste para diferenciar nuestro usuario ROOT del normal, lo copiamos y lo pegamos en la siguiente línea:

<https://www.nerdfonts.com/cheat-sheet>

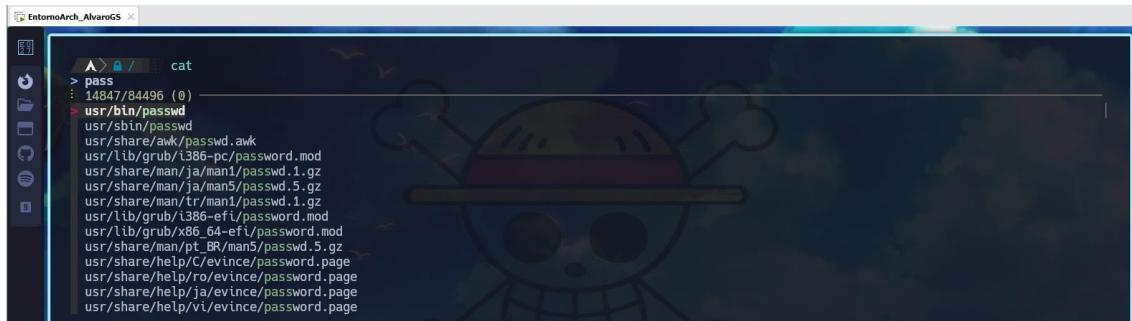


**Paso 52.** Instalamos FZF para agilizar nuestros comandos.

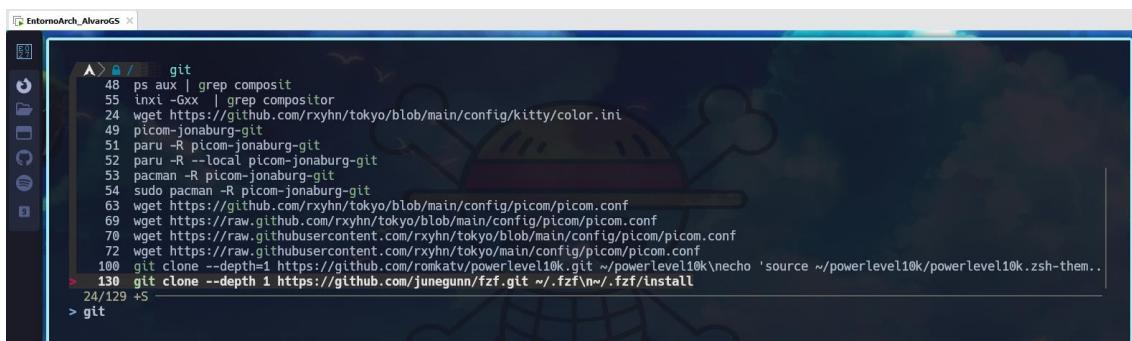
<https://github.com/junegunn/fzf>



CTRL T para la búsqueda inteligente en tiempo real.



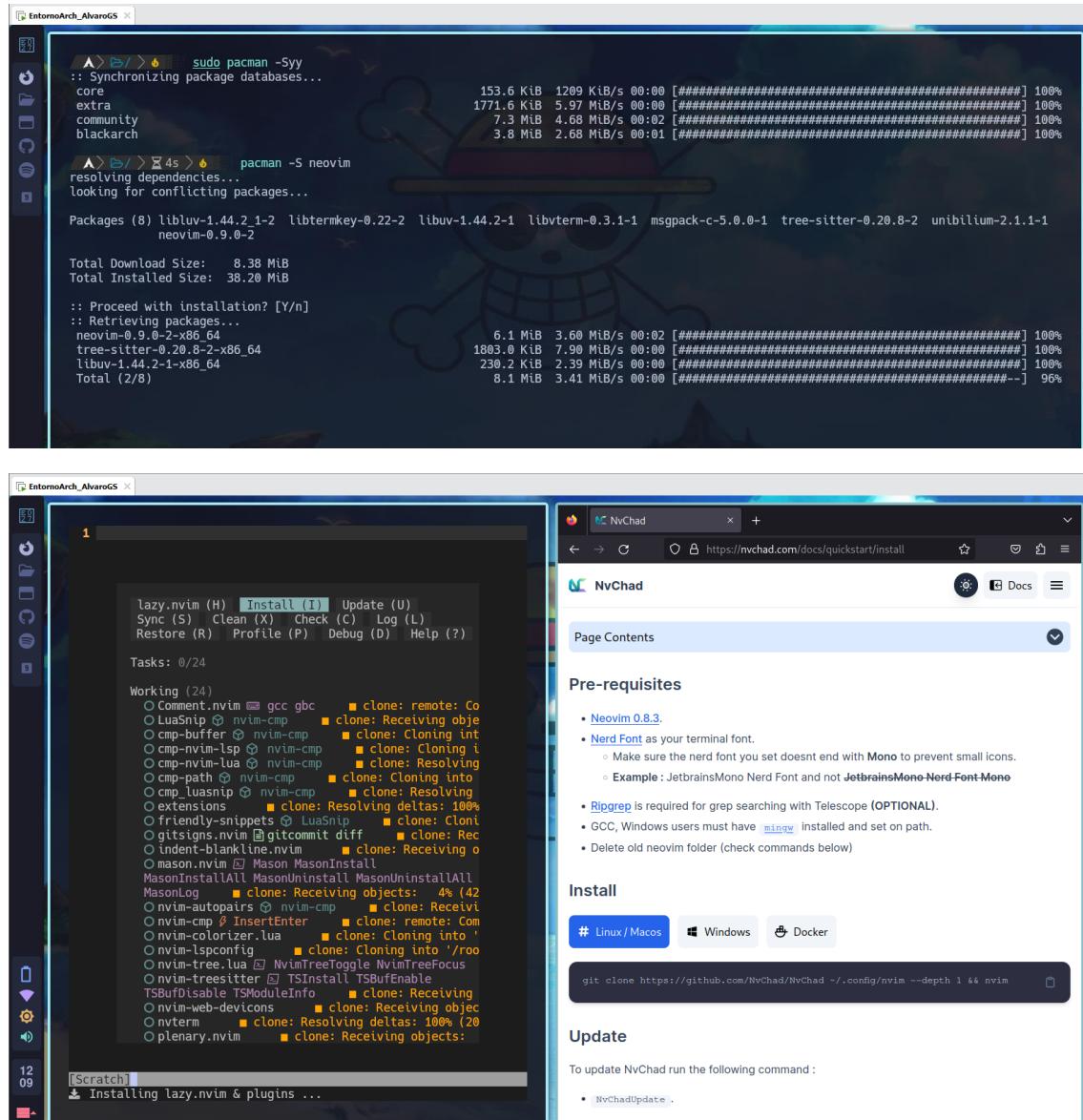
CTRL R para el historial inteligente.

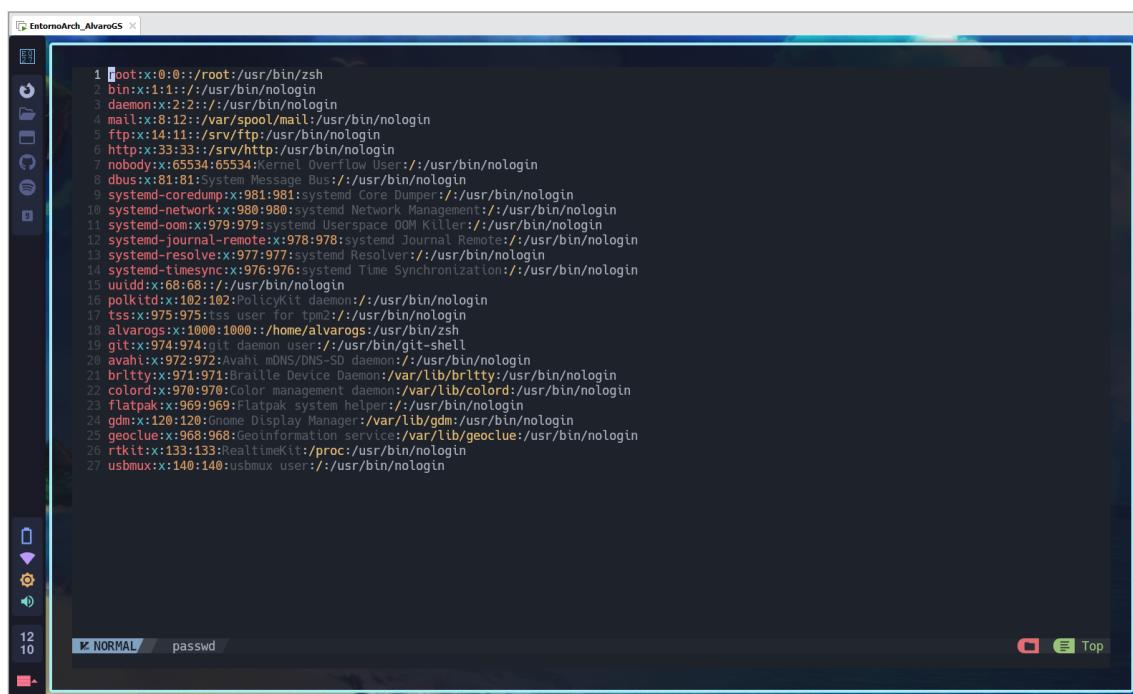
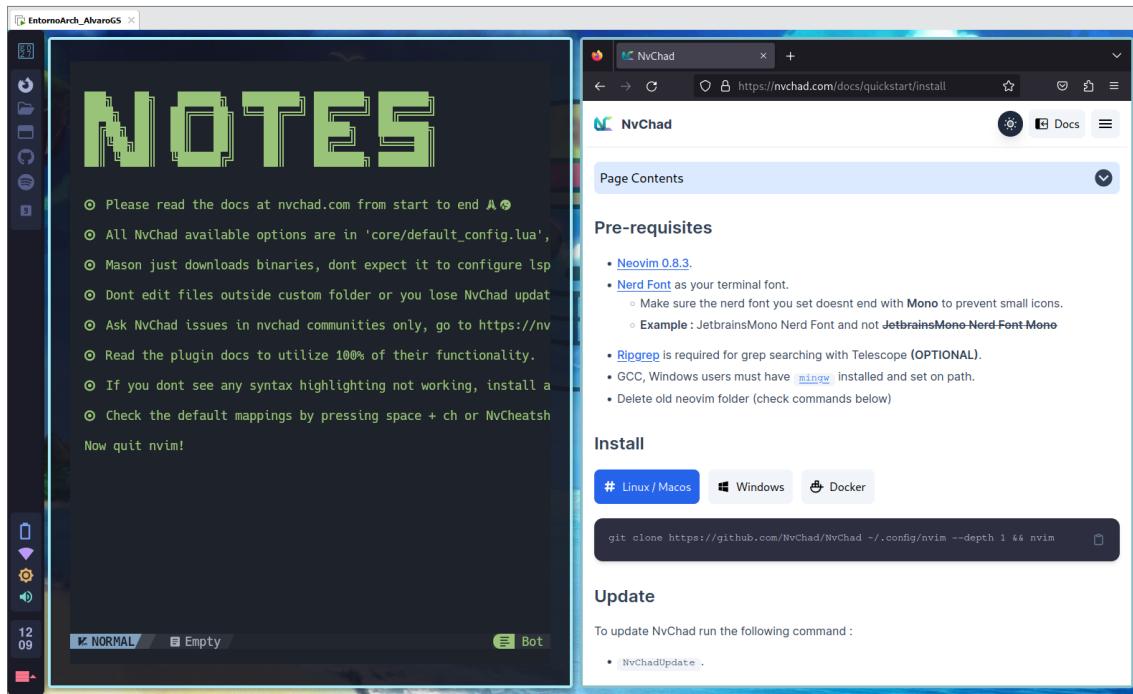


**Paso 53.** Actualizamos nuestra base de datos e instalamos neovim para luego instalar NvChad. Una vez instalado haremos lo mismo en el usuario root.

<https://github.com/NvChad/NvChad>

<https://nvchad.com/docs/quickstart/install>





```

mailcap
makepkg.conf
man_db.conf
mdadm.conf
mime_types
mke2fs.conf
mkinitcpio.conf
mtab - proc/304595/mou
nanorc
netconfig
nscd.conf
nsswitch.conf
os-release -> /usr/lib/os-release
ostree-mkinitcpio.conf
pacman.conf
papersize
paperspecs
paru.conf
passwd
passwd-
profile
protocols
rc_maps.cfg
request-key.conf
resolv.conf
resolv.conf
rpc
rygel.conf
security
sensors3.conf
services
shadow
shadow-
shells
slsh.rc
subgid
subgid-
subuid
subuid-
NORMAL / NvimTree_1
:NvimTreeToggle

```

**Paso 54.** Instalamos el BurpSuite para analizar, modificar y captar paquetes.

```

A > /home/alvaregs/.config > 6 pacman -S burpsuite
resolving dependencies...
:: There are 3 providers available for java-runtime>=9:
:: Repository extra
  1) jre-openjdk 2) jre11-openjdk 3) jre17-openjdk

Enter a number (default=1):
looking for conflicting packages...

Packages (5) java-runtime-common-3-5 jre-openjdk-20.0.1.u9-3 jre-openjdk-headless-20.0.1.u9-3 libnet-1:1.1.6-1 burpsuite-1:2023.2.3-1

Total Download Size: 590.78 MiB
Total Installed Size: 748.40 MiB

:: Proceed with installation? [Y/n]
:: Retrieving packages...
burpsuite-1:2023.2.3-any
Total (0/5)

```

**Paso 55.** Definimos los atajos que queramos en el fichero SXHKDRC, en mi caso uno para BurpSuite y otro para Firefox.

```

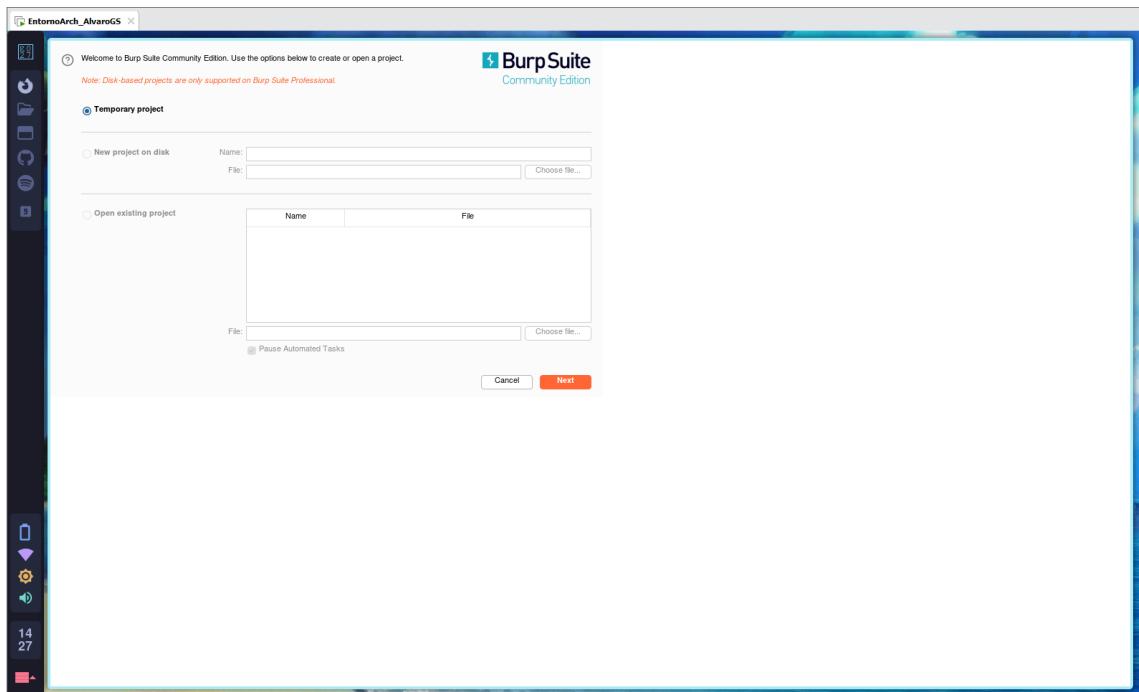
GNU nano 7.2 .config/sxhkrc
# Lockscreen
ctrl + alt + l betterlockscreen -l

##----- Applications -----##
# Launch Apps
super + shift + {f,w,e} {thunar,firefox,code}

super + shift + b burpsuite

##----- System Keys -----##
# Take a screenshot

```



### Paso 56. Descargamos unos cuantos paquetes más para pentesting.

The following four screenshots show a terminal window with a cartoon character background, illustrating the process of installing various penetration testing tools:

- Screenshot 1:** The user runs `pacman -Syu`. The output shows the synchronization of package databases for core, extra, and community repositories. Progress bars indicate the download of 153.9 KiB and 1785.5 KiB at 1006 KiB/s and 3.96 MiB/s respectively, with a total progress of 52%.
- Screenshot 2:** The user runs `pacman -S evil-winrm python-pip responder nmap rustscan whatweb wfuzz gobuster`. The output shows dependency resolution, including warnings about dependency cycles and rubygem dependencies.
- Screenshot 3:** The user runs `sudo pacman -S mdcat`. The output shows the resolution of dependencies for mdcat-2.0.3-1, with a total download size of 3.45 MiB and an installed size of 10.04 MiB. A prompt asks if the user wants to proceed with the installation.
- Screenshot 4:** The user runs `pacman -S metasploit`. The output shows the resolution of dependencies for metasploit-6.3.15-1, inetutils-2.4-1, and postgresql-libs-15.2-2. The total download size is 86.73 MiB and the total installed size is 403.11 MiB. A prompt asks if the user wants to proceed with the installation.

```
EntornoArch_AlvaroGS > A > /home/alvarogs > msfconsole

[3KOM SuperHack II Logon]

User Name:      [ security ]
Password:       [ ]
[ OK ]

https://metasploit.com

=[ metasploit v6.3.15-dev
+ --=[ 2312 exploits - 1208 auxiliary - 412 post      ]
+ --=[ 975 payloads - 46 encoders - 11 nops      ]
+ --=[ 9 evasion      ]

Metasploit tip: Save the current environment with the
save command, future console restarts will use this
environment again
Metasploit Documentation: https://docs.metasploit.com/
msf6 > |
```

```
EntornoArch_AlvaroGS >
msf6 > search jenkins

Matching Modules
=====
#  Name
-  ---
0  exploit/windows/misc/ibm_websphere_java_deserialize  2015-11-06  excellent  No  IBM WebSphere RCE Java Deserialization Vulnerability
1  exploit/multi/http/[REDACTED]_metaprogramming        2019-01-08  excellent  Yes  ACL Bypass and Metaprogramming RCE
2  exploit/linux/http/[REDACTED]_cli_deserialization    2017-04-26  excellent  Yes  CLI Deserialization
3  exploit/linux/misc/[REDACTED]_ldap_deserialize       2016-11-16  excellent  Yes  CLI HTTP Java Deserialization Vulnerability
4  exploit/linux/misc/[REDACTED]_java_deserialize        2015-11-18  excellent  Yes  CLI RMI Java Deserialization Vulnerability
5  post/multi/gather/[REDACTED]_gather                  normal    No   Credential Collector
6  auxiliary/gather/[REDACTED]_cred_recovery            normal    Yes  Domain Credential Recovery
7  auxiliary/scanner/[REDACTED]_udp_broadcast_enum     normal    No   Server Broadcast Enumeration
8  exploit/multi/http/[REDACTED]_xstream_deserialize    2016-02-24  excellent  Yes  XStream Groovy classpath Deserialization Vulnerability
9  auxiliary/scanner/http/[REDACTED]_enum               normal    No   -CI Enumeration
10 auxiliary/scanner/http/[REDACTED]_login              normal    No   -CI Login Utility
11 exploit/multi/http/[REDACTED]_script_console         2013-01-18  good    Yes  -CI Script-Console Java Execution
12 auxiliary/scanner/http/[REDACTED]_command            normal    No   -CI Unauthenticated Script-Console Scanner
13 exploit/linux/misc/opennms_java_serialize           2015-11-06  normal   No  OpenNMS Java Object Unserialization Remote Code Execution

Interact with a module by name or index. For example info 13, use 13 or use exploit/linux/misc/opennms_java_serialize
msf6 >
```

**Paso 57.** Configuramos en el fichero .zshrc algunas líneas para habilitar teclas especiales.

The screenshot shows a terminal window titled "EntornoArch\_AlvaroGS" running the command "GNU nano 7.2". The file being edited is "/home/alvarogs/.zshrc". The terminal has a dark background with a cartoon character of a skeleton wearing a hat and holding a sword. The status bar at the top right says "Modified". The bottom of the screen shows a menu bar with various keyboard shortcuts for nano editor commands like Help, Exit, Read File, Replace, Cut, Paste, Execute, Justify, Location, Go To Line, Undo, Redo, Set Mark, Copy, and Where Was. The current line number is 14, and the total number of lines is 00. The code in the file includes functions for disk cleaning, powerlevel10k theme, and keybinding configurations for navigating words and lines.

```
coderay {} ||  
rougify {} ||  
cat {} 2>/dev/null | head -500'  
}  
}  
function rmk(){  
    scrub -p dod $1  
    shred -zun 10 -v $1  
}  
  
# Finalize Powerlevel10k instant prompt. Should stay at the bottom of ~/.zshrc.  
(! ${functions[p10k-instant-prompt-finalize]} )|| p10k-instant-prompt-finalize  
source ~/powerlevel10k/powerlevel10k.zsh-theme  
  
# Lineas para habilitar FIN INICIO y DELETE  
bindkey "^[H" beginning-of-line  
bindkey "^[F" end-of-line  
bindkey "^[3~" delete-char  
  
# Moverse entre palabras  
bindkey "^[1;3C" forward-word  
bindkey "^[1;3D" backward-word
```

**Fin de la Instalación :)**