Nome: Pedro Jullian Medina Torres Graça

Curso: Engenharia Eletrônica e de Computação na UFRJ

DRE: 116015284

Objetivo: Fazer um tutorial de como instala Arch para a TAG do GRIS

Bom, começando do inicio:

O comando *loadkeys* serve para configurar o teclado, passando o argumento br-abnt2 ele configura de acordo com o teclado que está disponível no meu pc.

O comando *timedatectl* é o controle do sistema de data e hora. Colocando o comando *set-timezone* depois, uso o comando de *timedatectl* para configurar o fuso-horario. Colocando então o argumento America/Sao_Paulo o comando busca o fuso do local e aplica ao sistema.

Depois disso precisamos particionar o hd. Acabei esquecendo de tirar print do comando *fdisk /dev/sda*, mas logo depois do comando abrimos a execução do fdisk, em sua linha de comano. (o comando fdisk habilita uma plataforma em terminal para particionar o HD)

```
Command (m for help): n
Partition type
      primary (0 primary, 0 extended, 4 free)
      extended (container for logical partitions)
elect (default p): p
artition number (1-4, default 1): 1
irst sector (2048-62914559, default 2048): 2048
ast sector, +/-sectors or +/-size{K,M,G,T,P} (2048-62914559, default 62914559): +1M
reated a new partition 1 of type 'Linux' and of size 1 MiB.
Command (m for help): n
artition type
      primary (1 primary, 0 extended, 3 free)
      extended (container for logical partitions)
Select (default p): p
Partition number (2-4, default 2): 3
irst sector (4096-62914559, default 4096): 4096
ast sector, +/-sectors or +/-size{K,M,G,T,P} (4096-62914559, default 62914559): +2G
reated a new partition 3 of type 'Linux' and of size 2 GiB.
ommand (m for help): n
artition type
      primary (2 primary, 0 extended, 2 free)
      extended (container for logical partitions)
elect (default p): p
artition number (2,4, default 2): 2
irst sector (4198400-62914559, default 4198400): 4198400
ast sector, +/-sectors or +/-size{K,M,G,T,P} (4198400-62914559, default 62914559): 622914559
<u>ast sector, +/-sectors</u> or +/-size{K,M,G,T,P} (4198400-62914559, default 62914559): 62914559
reated a new partition 2 of type 'Linux' and of size 28 GiB.
```

Aqui eu construí 3 partições. A primeira para boot, a segunda para a pasta raiz do Arch e a terceira para swap.

Depois da partição é preciso colocar as funções de cada partição.

```
Command (m for help): p
Disk /deu/sda: 30 GiB, 32212254720 bytes, 62914560 sectors
Disk model: VBOX HARDDISK
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x4e79f051
Device
           Boot.
                  Start
                             End
                                  Sectors Size Id Type
/dev/sda1
                   2048
                            4095
                                     2048
                                           1M 83 Linux
/deu/sda2
                4198400 62914559 58716160
                                           28G 83 Linux
/dev/sda3
                   4096 4198399
                                 4194304
                                            2G 83 Linux
Partition table entries are not in disk order.
Command (m for help): a
Partition number (1-3, default 3): 1
The bootable flag on partition 1 is enabled now.
Command (m for help): t
Partition number (1-3, default 3): 3
Hex code (type L to list all codes): 82
Changed type of partition 'Linux' to 'Linux swap / Solaris'.
Command (m for help):
```

Aqui estou configurando com "a" a partição /dev/sda1 como boot e a partição 3 como swap.

```
Command (m for help): p
Disk /dev/sda: 30 GiB, 32212254720 bytes, 62914560 sectors
Disk model: VBOX HARDDISK
Units: sectors of 1 * 512 = 512 butes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x4e79f051
           Boot
Device
                  Start
                              End
                                   Sectors Size Id Type
/dev/sda1 *
                    2048
                             4095
                                      2048
                                              1M 83 Linux
                4198400 62914559 58716160
/dev/sda2
                                             28G 83 Linux
/dev/sda3
                    4096
                         4198399
                                   4194304
                                              2G 82 Linux swap / Solaris
Partition table entries are not in disk order.
Command (m for help): w
The partition table has been altered.
Calling ioctl() to re-read partition table.
Syncing disks.
 oot@archiso ~ #
```

Aqui podemos ver a tabela de partição.

Logo depois precisamos formatar as partições. Existem muitas possibilidades. Para a partição de Boot e para onde vai ficar a raiz do sistema, julgo que o ideal é a ext4. Para isso usamos o comando *mkfs.ext4*.

```
oot@archiso ~ # mkfs.ext4 /dev/sda1
nke2fs 1.44.5 (15-Dec-2018)
'ilesystem too small for a journal
Creating filesystem with 1024 1k blocks and 128 inodes
Allocating group tables: done
Writing inode tables: done
Writing superblocks and filesystem accounting information: done
oot@archiso ~ # mkfs.ext4 /dev/sda2
nke2fs 1.44.5 (15-Dec-2018)
Creating filesystem with 7339520 4k blocks and 1835008 inodes
Filesystem UUID: 1648b845-0b9f-4f01-8e6e-04626e9153cc
Superblock backups stored on blocks:
       32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
       4096000
Allocating group tables: done
driting inode tables: done
Creating journal (32768 blocks): done
Iriting superblocks and filesystem accounting information: done
oot@archiso ~ # _
```

Logo depois precisamos formatar a partição para swap. Para isso usamos dois comandos. O *mkswap* e o *swapon*.

O primeiro serve para formatar a partição de forma de swap, a segunda para iniciar o uso. Sem isso o swap não funcionará simplesmente por não "estar ativo"

```
root@archiso # mkswap /dev/sda3
mkswap: /dev/sda3: warning: wiping old swap signature.
Setting up swapspace version 1, size = 2 GiB (2147479552 bytes)
no label, UUID=bb8c549b-5eea-4f75-8189-9f61a7a63efe
root@archiso # blkid /dev/sda1
/dev/sda1: UUID="d3d5fbb4-321e-4d20-ba4a-1c7bd82b53a1" TYPE="ext4" PARTUUID="4e79f051-01"
root@archiso # blkid /dev/sda2
/dev/sda2: UUID="1648b845-0b9f-4f01-8e6e-04626e9153cc" TYPE="ext4" PARTUUID="4e79f051-02"
root@archiso # blkid /dev/sda3
/dev/sda3: UUID="bb8c549b-5eea-4f75-8189-9f61a7a63efe" TYPE="swap" PARTUUID="4e79f051-03"
root@archiso # _
```

(eu esqueci de tirar print do comando swapon...)

```
NAME
     MAJ:MIN RM
                 SIZE RO TYPE MOUNTPOINT
loop0
       7:0
             0 487.9M 1 loop /run/archiso/sfs/airootfs
       8:0
             0
sda
                  30G 0 disk
             0
 -sda1
       8:1
                   1M 0 part
 -sda2
       8:2
             0
                  28G
                      0 part /mnt
 -sda3
       8:3
             0
                   2G
                      0 part
             1
sr0
      11:0
                 600M
                      0 rom /run/archiso/bootmnt
root@archiso
```

Então eu montei a partição usando o comando mount (que monta dispositivos em locais do sistema, no caso estou montado a raiz do sistema que estou instalando no /mnt da Live do Arch)

```
root@archiso  # ping 8.8.8.8

PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.

64 bytes from 8.8.8.8: icmp_seq=1 ttl=63 time=17.1 ms

64 bytes from 8.8.8.8: icmp_seq=2 ttl=63 time=84.2 ms

^Z

[11] + 733 suspended ping 8.8.8.8

148 root@archiso  #
```

O comando *pacstrap* acima é para instalar os pacotes base como o pacman. Ele, como está acima, os instala no /mnt

```
root@archiso # genfstab -Up /mnt >> /mnt/etc/fstab
root@archiso # cat /mnt/etc/fstab
# Static information about the filesystems.
# See fstab(5) for details.
# <file system> <dir> <type> <options> <dump> <pass>
# /dev/sda2
UUID=1648b845-0b9f-4f01-8e6e-04626e9153cc / ext4 rw,relatime 0
root@archiso # arch-chroot /mnt
```

Acima está o comando genfstab -Up, ele cria o arquivo fstab. Tal arquivo guarda a tabela de partições. O comando cat abaixo mostra isso.

Depois arch-chroot faz entrar no chroot na /mnt que é onde tá a raiz.

O chroot é para, a partir da livre, instalar pacotes além dos basicos (que fiz com o pacstrap e configura-los, como se eu fosse root do sistema sendo instalado)

```
configura-los, como se eu fosse root do sistema sendo instalado)
[root@archiso /|# pacman -5 base-devel]
:: There are 26 members in group base-devel:
:: Repository core
1) autoconf 2) automake 3) binutils 4) bison 5) fakeroot 6) file 7) findutils 8) flex
9) gawk 10) gcc 11) gettext 12) grep 13) groff 14) gzip 15) libtool 16) m4 17) make
18) pacman 19) patch 20) pkgconf 21) sed 22) sudo 23) systemd 24) texinfo 25) util-linux
26) which
```

Acima estou usando o pacman, um gerenciador de pacotes, onde, sob o parâmetro -S, instala os pacotes pedidos (no caso os com referência no base-dev)

```
(19/10) Arming ConditionNeedsUpdate...
(19/10) Updating the info directory file...

Iroot@archiso /l# date
Thu Feb 28 00:14:59 UTC 2019

Iroot@archiso /l# ln -sf /usr/share/zoneinfo/America/Sao_Paulo /etc/localtime

Iroot@archiso /l# hwclock --systohc

Iroot@archiso /l# date

Wed Feb 27 21:16:11 -03 2019
```

o comando date acima, usado antes, é util para verificar a hora. Como podemos ver, no primeiro está UTC, dando a hora errada. O ln é um criador de links, sob o parametro -sf ele cria um link simbolico e remove o arquivo de destino atual. Um link simbólico é um que funciona como um link e se eu o apagar, nada acontecerá com o arquivo padrão. Se apagou o link anterior para criar um novo, no caso, /*America*/Sao_Paulo. Por ultimo temos o hwclock –systohc. Este é um adminstrador dos relogios do sistema, com a flag nós mudamos o relogio do hardware. Como podemos ver no novo date, o -03 mostra a hora certa.

```
froot@archiso /l# locale-gen
Generating locales...
Generation complete.
```

O comando acima é um que busca dentro do arquivo /etc/locale-gen e executa a nova liguagem em várias aplicações.

```
Iroot@archiso /l# pacman -S vim
resolving dependencies...
looking for conflicting packages...

Packages (3) gpm-1.20.7.r27.g1fd1941-1 vim-runtime-8.1.0877-1 vim-8.1.0877-1

Total Download Size: 7.04 MiB
Total Installed Size: 32.28 MiB

The Proceed with installation? [Y/n] II

Acima estou instalando o VIM, um dos melhores, se não o melhor, editor de texto que existe. Estou
```

Acima estou instalando o VIM, um dos melhores, se não o melhor, editor de texto que existe. Estou usando-o para modificar os arquivos locale.con e vconsole.conf, como está abaixo. Isso para referenciar o teclado e a língua do sistema operacional no português.

Abaixo estou instalando o grub, um gerenciador de boot. Sem isso não tenho como bootar o pc.

```
Iroot@archiso /l# cat /etc/locale.conf
lANG=pt_BR.UTF-8
Iroot@archiso /l# cat /etc/vconsole.conf
KEYMAP=br-abnt2
Iroot@archiso /l#
```

[root@archiso /l# pacman -S grub

:: Running post-transaction hooks... (1/2) Arming ConditionNeedsUpdate...

(2/2) Updating the info directory file... [root@archiso /]# _

resolving dependencies... looking for conflicting packages... Packages (1) grub-2:2.02-8 Total Download Size: 5.96 MiB Total Installed Size: 30.04 MiB :: Proceed with installation? [Y/n] :: Retrieving packages... grub-2:2.02-8-x86_64 6.0 MiB 176K/s 00:35 [#########################] 100% (1/1) checking keys in keyring [##########] 100> (1/1) checking package integrity (1/1) loading package files [##########] 100; [##########] 100% (1/1) checking for file conflicts [#########] 100% (1/1) checking available disk space [##########] 100% :: Processing package changes... (1/1) installing grub [##########] 100% Generate your bootloader configuration with: grub-mkconfig -o /boot/grub/grub.cfg Optional dependencies for grub freetype2: For grub-mkfont usage fuse2: For grub-mount usage dosfstools: For grub-mkrescue FAT FS and EFI support efibootmgr: For grub-install EFI support libisoburn: Provides xorriso for generating grub rescue iso using grub-mkrescue

```
(2/2) Updating the info directory file...

Iroot@archiso /l# grub-install --target=i386-pc --recheck /dev/sda

Installing for i386-pc platform.

Installation finished. No error reported.

Iroot@archiso /l# cp /usr/share/locale/en\@quot/LC_MESSAGESgrub.mo /boot/grub/locale/en.mo

p: cannot stat '/usr/share/locale/en@quot/LC_MESSAGESgrub.mo': No such file or directory

Iroot@archiso /l# cp /usr/share/locale/en\@quot/LC_MESSAGES/grub.mo /boot/grub/locale/en.mo

Iroot@archiso /l# _
```

os-prober: To detect other OSes when generating grub.cfg in BIOS systems mtools: For grub-mkrescue FAT FS support

Aqui mandei o comando reboot. Esqueci de tirar print.

Abaixo estou logando, sem querer tentei por gracinha, meu usuário ainda não configurado. Depois foi root e funcionou.

```
Arch Linux 4.20.12-arch1-1-ARCH (tty1)
gracinha login: gracinha
Password:
Login incorrect
gracinha login: root
Password:
[root@gracinha ~]#
```

O comando abaixo ativa o dhcp, fazendo a internet funcionar. Como mostra o ping.

```
[root@gracinha /]# dhcpcd
dev: loaded udev
no interfaces have a carrier
forked to background, child pid 930
[root@gracinha /]# ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=63 time=82.0 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=63 time=54.4 ms
```

Eu criei o meu usuario, porêm esquuci de triar print do comando, acredito que tenha usado algo como esse aqui:

useradd -m -g users -G wheel -s /bin/bash gracinha

O comando useradd adiciona um usuario. No caso, gracinha.

```
Comunido diserdad dalciona din disdario. No caso, gracimia.

Iroot@gracinha /|# passwd gracinha

New password:

Retype new password:

passwd: password updated successfully
```

O comando passwd cria uma nova senha, no caso, usuario gracinha.

```
Defaults log_output
# Defaults!/usr/bin/sudoreplay !log_output
# Defaults!/usr/local/bin/sudoreplay !log output
# Defaults!REBOOT !log_output
## Runas alias specification
##
## User privilege specification
root ALL=(ALL) ALL
## Uncomment to allow members of group wheel to execute any command
wheel ALL=(ALL) ALL
## Same thing without a password
# :/wheel ALL=(ALL) NOPASSWD: ALL
## Uncomment to allow members of group sudo to execute any command
# %sudo 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 # WARNING: only use this together with 'Defaults targetpw'
## Read drop-in files from /etc/sudoers.d
## (the '#' here does not indicate a comment)
#includedir /etc/sudoers.d
"/etc/sudoers" 97L, 3172C written
[root@gracinha /]# sudo -|U gracinha
User gracinha may run the following commands on gracinha:
    (ALL) ALL
[root@gracinha /]#
```

Acima estou modificando o arquivo /etc/sudoers.d, tirando o '#' do %wheel ALL=(ALL) ALL, adicionando os membros do grupo wheel (no caso só o gracinha) no sudowes. O comando sudo -lU acima mosntra se o usuario pedido é sudo.

Aqui eu fiz reboot para entrar na conta de usuario, afim de ver se existia algum problema.

```
Arch Linux 4.20.12-arch1-1-ARCH (tty1)

gracinha login: gracinha

Password:

[gracinha@gracinha ~ 1$ pacman - S lynx

error: you cannot perform this operation unless you are root.

[gracinha@gracinha ~ 1$ sudo pacman - S lynx

[sudo] password for gracinha:

error: failed to init transaction (unable to lock database)

error: could not lock database: File exists

if you're sure a package manager is not already

running, you can remove /var/lib/pacman/db.lck

[gracinha@gracinha ~ 1$ sudo su

[root@gracinha gracinha]#
```

Acima podemos ver que o usuario gracinha é sudo.

```
[root@gracinha gracinha]# gpasswd -a gracinha sys
Adding user gracinha to group sys
[root@gracinha gracinha]# gpasswd -a gracinha lp network
Usage: gpasswd [option] GROUP
Options:
 -a, --add USER
-d, --delete USER
                                add USER to GROUP
                                remove USER from GROUP
 −h, --help
                                display this help message and exit
 -Q, --root CHROOT DIR
                                directory to chroot into
 -r, --remove-password
                                remove the GROUP's password
 -R, --restrict
                                restrict access to GROUP to its members
 -M, --members USER,...
                                set the list of members of GROUP
 -A, --administrators ADMIN,...
                                set the list of administrators for GROUP
Except for the -A and -M options, the options cannot be combined.
[root@gracinha gracinha]# gpasswd -a gracinha lp,network
gpasswd: group 'lp,network' does not exist in /etc/group
[root@gracinha gracinha]# gpasswd -a gracinha lp
Adding user gracinha to group lp
[root@gracinha gracinha]# gpasswd -a gracinha network
Adding user gracinha to group network
[root@gracinha gracinha]# gpasswd -a gracinha video
Adding user gracinha to group video
[root@gracinha gracinha]# gpasswd -a gracinha opitical
gpasswd: group 'opitical' does not exist in /etc/group
[root@gracinha gracinha]# gpasswd -a gracinha optical
Adding user gracinha to group optical
[root@gracinha gracinha]# gpasswd -a gracinha storage
Adding user gracinha to group storage
[root@gracinha gracinha]# gpasswd -a gracinha scanner
Adding user gracinha to group scanner
[root@gracinha gracinha]# gpasswd -a gracinha power
Adding user gracinha to group power
[root@gracinha gracinha]#
```

Acima estou adicionando o usuário "gracinha" para vários grupos, afim de ter controle sobre vários apectos uteis na interface grafica.

```
root@gracinha gracinhal# pacman -S xf86-input-synaptics
esolving dependencies...
ooking for conflicting packages...
ackages (1) xf86-input-symaptics-1.9.1-1
                       0.05 MiB
otal Download Size:
otal Installed Size: 0.19 MiB
: Proceed with installation? [Y/n] Y
: Retrieving packages...
xf86-input-synaptics-1.9.1-1-...
                                      53.4 KiB 29.0K/s 00:02 [########################## 1002
1/1) checking keys in keyring
                                                                [########## 1002
(1/1) checking package integrity
                                                                [########## ] 100;
1/1) loading package files
1/1) checking for file conflicts
1/1) checking available disk space
                                                                [########## ] 100;
                                                                [################################]
                                                                                                     100>
                                                                [########## 100%
: Processing package changes...
1/1) installing xf86-input-synaptics
>> xf86-input-synaptics driver is on maintenance mode and
                                                                [########## 100%
   xf86-input-libinput driver must be prefered over.
: Running post-transaction hooks...
1/1) Arming ConditionNeedsUpdate...
root@gracinha gracinhal# pacman -S xorg-xinit xorg-twn xterm xorg-xclock
error: target not found: xorg-twn
root@gracinha gracinhal# pacman -S xorg-xinit xorg-twm xterm xorg-xclock
esolving dependencies...
ooking for conflicting packages...
ackages (6) libutempter-1.1.6-3 xbitmaps-1.1.2-1 xorg-twm-1.0.10-1 xorg-xclock-1.0.8-1 xorg-xinit-1.4.0-3 xterm-344-1
otal Download Size:
                       0.52 MiB
otal Installed Size: 1.67 MiB
: Proceed with installation? [Y/n] _
```

Aqui estou simplesmente instalando pacotes interessantes para a interface grafica, assim como drivers mínimos

agui também

```
[root@gracinha gracinha]# pacman -S xfce4 xfce4-goodies
:: There are 16 members in group xfce4:
:: Repository extra
   1) exo 2) garcon 3) gtk-xfce-engine 4) thunar 5) thunar-volman 6) tumbler
   7) xfce4-appfinder 8) xfce4-panel 9) xfce4-power-manager 10) xfce4-session
   11) xfce4-settings 12) xfce4-terminal 13) xfconf 14) xfdesktop 15) xfwm4 16)
Enter a selection (default=all):
:: There are 37 members in group xfce4-goodies:
:: Repository extra
   1) mousepad 2) orage 3) thunar-archive-plugin 4) thunar-media-tags-plugin 5)
  6) xfce4-artwork 7) xfce4-battery-plugin 8) xfce4-clipman-plugin 9) xfce4-cpufr
  10) xfce4-cpugraph-plugin 11) xfce4-datetime-plugin 12) xfce4-dict 13) xfce4-di
   14) xfce4-eyes-plugin 15) xfce4-fsguard-plugin 16) xfce4-genmon-plugin
   17) xfce4-mailwatch-plugin 18) xfce4-mount-plugin 19) xfce4-mpc-plugin
  20) xfce4-netload-plugin 21) xfce4-notes-plugin 22) xfce4-notifyd 23) xfce4-pul
24) xfce4-screenshooter 25) xfce4-sensors-plugin 26) xfce4-smartbookmark-plugin
  27) xfce4-systemload-plugin 28) xfce4-taskmanager 29) xfce4-time-out-plugin
  30) xfce4-timer-plugin 31) xfce4-verve-plugin 32) xfce4-wavelan-plugin
   33) xfce4-weather-plugin 34) xfce4-xkb-plugin
:: Repository community
   35) parole 36) ristretto 37) xfce4-whiskermenu-plugin
Enter a selection (default=all):
```

finalmente instalei a interface do xfce, como está acima

```
[root@gracinha gracinha]# pacman -S lxdm
resolving dependencies..
looking for conflicting packages...
Packages (1) lxdm-0.5.3-6
Total Download Size: 0.10 MiB
Total Installed Size: 0.33 MiB
:: Proceed with installation? [Y/n] y
: Retrieving packages...
1xdm-0.5.3-6-x86_64
                                   99.0 KiB 94.9K/s 00:01 [######################### ] 100%
(1/1) checking keys in keyring
                                                          [########## 100%
(1/1) checking package integrity
(1/1) loading package files
                                                          [########## ] 100;
                                                          [########## 1 1002
(1/1) checking for file conflicts
                                                          [########## ] 100%
(1/1) checking available disk space
                                                          [########## 100>
:: Processing package changes...
(1/1) installing lxdm
                                                          [########## ] 100%
Optional dependencies for lxdm
   iso-codes: show language names in language chooser [installed]
   gnome-themes-standard: default GTK+ theme [installed]
:: Running post-transaction hooks...
(1/4) Reloading system manager configuration...
(2/4) Creating system user accounts...
(3/4) Creating temporary files...
(4/4) Arming ConditionNeedsUpdate...
[root@gracinha gracinha]#
```

e aqui estou instalando o lxdm como gerenciador de login do sistema

```
root@gracinha gracinhal# pacman -S lxdm
varning: lxdm-0.5.3-6 is up to date -- reinstalling
esolving dependencies...
looking for conflicting packages...
Packages (1) lxdm-0.5.3-6
otal Installed Size: 0.33 MiB
let Upgrade Size:
                  0.00 MiB
: Proceed with installation? [Y/n]
[######### 100%
                                                   [########## ] 100%
                                                    [########## 100%
                                                   [########## ] 100>
                                                   [########## ] 100%
: Processing package changes...
1/1) reinstalling lxdm
                                                   [########## ] 100%
: Running post-transaction hooks...
1/4) Reloading system manager configuration...
2/4) Creating system user accounts...
3/4) Creating temporary files...
4/4) Arming ConditionNeedsUpdate...
root@gracinha gracinhal# systemctl enable lxdm
reated symlink /etc/systemd/system/display-manager.service -> /usr/lib/systemd/system/lxdm.service.
root@gracinha gracinhal# _
```



Aqui mostra o login, tudo funcionando perfeitamente



Aqui instalei o git

```
git clone https://aur.archlinux.org/yay.git

Cloning into 'yay'...

remote: Enumerating objects: 240, done.

remote: Counting objects: 100% (240/240), done.

remote: Compressing objects: 100% (171/171), done.

remote: Total 240 (delta 67), reused 240 (delta 67)

Receiving objects: 100% (240/240), 49.50 KiB | 212.00 KiB/s, done.
```

Aqui usei o git clone para baixar o yay

```
[gracinha@gracinha ~]$ ls

Desktop internet.sh var yay

[gracinha@gracinha ~]$ cd yay

[gracinha@gracinha yay]$ makepkg -si
```

aqui useu o comando makepkg que é um instalador configurado pelo yay.

```
:: Processing package changes...

(1/1) installing yay [######] 100%

:: Running post-transaction hooks...

(1/1) Arming ConditionNeedsUpdate...

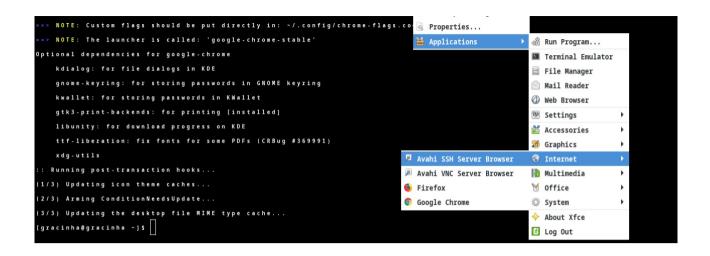
[gracinha@gracinha yay]$
```

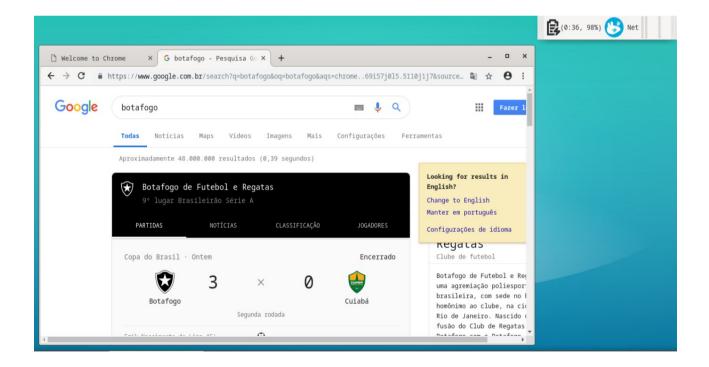
Como podemos ver. O yay foi instalado

```
[gracinha@gracinha yay]$ yay -Syu
:: Synchronizing package databases...
                         132.9 KiB 103K/s 00:01 [#######] 100
core
                        1705.1 KiB 428K/s 00:04 [#######] 100
extra
 community is up to date
:: Starting full system upgrade...
resolving dependencies...
looking for conflicting packages...
Packages (4) man-db-2.8.5-2 sqlite-3.27.2-1
            xorg-server-1.20.4-1 xorg-server-common-1.20.4-1
Total Download Size: 3.56 MiB
Total Installed Size: 14.92 MiB
Net Upgrade Size:
                      0.01 MiB
: Proceed with installation? [Y/n]
```

Aqui atualizei o yay

Aqui o usei para intalar o google-chrome





como podemos ver acima, o google chrome foi instalado.