

Nombre: Jennifer Guerra

1. Parted -l : realiza una lista de particiones y también se muestra la partition table MSDOS que es lo mismo que MBR y GPT

```
Activities Terminal Jun 4 12:03
vboxuser@Debian: ~
Password:
root@Debian:~# sudo parted -l
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 21.5GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number   Start   End     Size    Type     File system  Flags
  1       1049kB  20.5GB  20.4GB  primary  ext4         boot
  2       20.5GB  21.5GB  1022MB  extended
  5       20.5GB  21.5GB  1022MB  logical  linux-swap(v1) swap

Warning: Unable to open /dev/sr0 read-write (Read-only file system). /
has been opened read-only.
Error: /dev/sr0: unrecognized disk label
Model: VBOX CD-ROM (scsi)
Disk /dev/sr0: 786MB
Sector size (logical/physical): 2048B/2048B
Partition Table: unknown
Disk Flags:

root@Debian:~#
```

Para ingresar se debe poner sudo pero para esto tiene que ingresar por root.

2. fdisk -l: sirve para obtener más información

```
root@Debian:~# sudo fdisk -l
Disk /dev/sda: 20 GiB, 21474836480 bytes, 41943040 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: 0x6a156d48

Device Boot      Start         End      Sectors  Size Id Type
/dev/sda1 *        2048     39942143   39940096    19G 83 Linux
/dev/sda2              39944190  41940991   1996802    975M  5 Extended
/dev/sda5              39944192  41940991   1996800    975M 82 Linux swap / Solaris

root@Debian:~#
```

3. Disklabel type :gpt

```
root@Debian:~# sudo parted /dev/sda print
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 21.5GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

Number   Start   End     Size    Type     File system  Flags
  1       1049kB  20.5GB  20.4GB  primary  ext4         boot
  2       20.5GB  21.5GB  1022MB  extended
  5       20.5GB  21.5GB  1022MB  logical  linux-swap(v1) swap

root@Debian:~# sudo gdisk /dev/sda
GPT fdisk (gdisk) version 1.0.9

Partition table scan:
  MBR: MBR only
  BSD: not present
  APM: not present
  GPT: not present
```

Debido a que no se encontró Disklabel se utilizó sudo parted /dev/sdX print para para mostrar la tabla de particiones del disco especificado.

4. Gdisk /dev/sdb: se utiliza para crear, modificar y gestionar tablas de particiones en discos

```
root@Debian:~# gdisk /dev/sdb
GPT fdisk (gdisk) version 1.0.9

Problem opening /dev/sdb for reading! Error is 2.
The specified file does not exist!
root@Debian:~# gdisk /dev/sda
GPT fdisk (gdisk) version 1.0.9

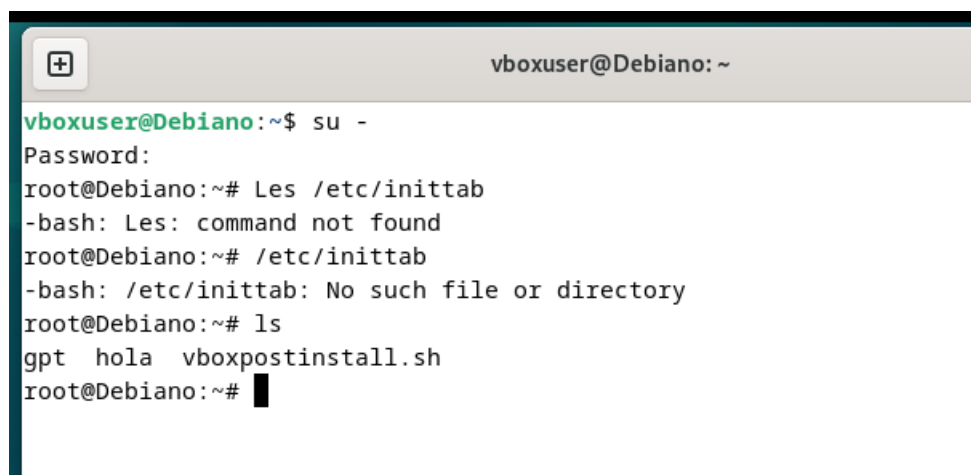
Partition table scan:
  MBR: MBR only
  BSD: not present
  APM: not present
  GPT: not present

*****
Found invalid GPT and valid MBR; converting MBR to GPT format
in memory. THIS OPERATION IS POTENTIALLY DESTRUCTIVE! Exit by
typing 'q' if you don't want to convert your MBR partitions
to GPT format!
*****

Command (? for help):
```

5. Les /etc/inittab: No existe en Linux, sin embargo se puede ingresar a etc con cd/

etc



```
vboxuser@Debian: ~
vboxuser@Debian:~$ su -
Password:
root@Debian:~# Les /etc/inittab
-bash: Les: command not found
root@Debian:~# /etc/inittab
-bash: /etc/inittab: No such file or directory
root@Debian:~# ls
gpt hola vboxpostinstall.sh
root@Debian:~#
```

5. `ls -ld rc*` entrar y mostrar que hacen los directorios

```
root@Debian: /etc# ls -ld rc*
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rc0.d
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rc1.d
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rc2.d
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rc3.d
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rc4.d
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rc5.d
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rc6.d
drwxr-xr-x 2 root root 4096 Jun  3 18:59 rcS.d
root@Debian: /etc#
```

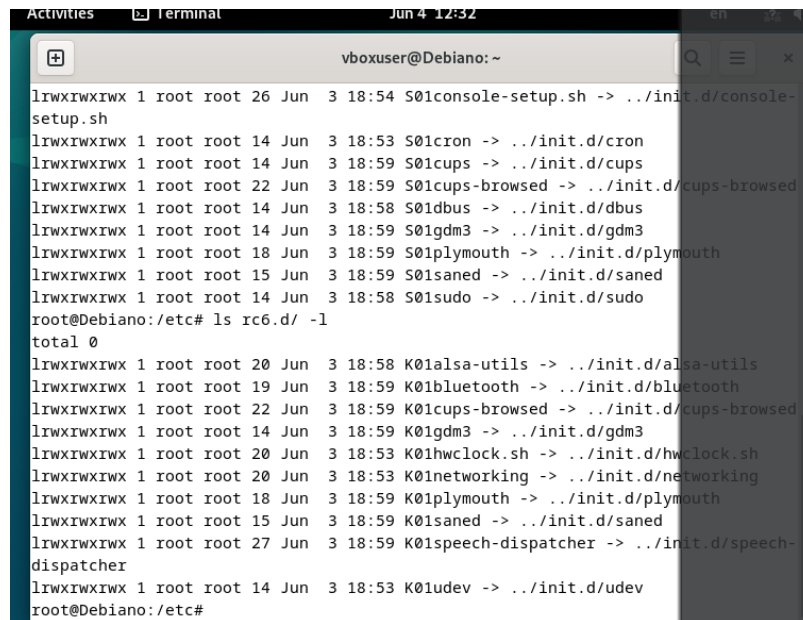
6. `ls rc0.d/ -l`: apaga el sistema

```
root@Debian: /etc# ls rc0.d/ -l
total 0
lrwxrwxrwx 1 root root 20 Jun  3 18:58 K01alsa-utils -> ../init.d/alsa-utils
lrwxrwxrwx 1 root root 19 Jun  3 18:59 K01bluetooth -> ../init.d/bluetooth
lrwxrwxrwx 1 root root 22 Jun  3 18:59 K01cups-browsed -> ../init.d/cups-browsed
lrwxrwxrwx 1 root root 14 Jun  3 18:59 K01gdm3 -> ../init.d/gdm3
lrwxrwxrwx 1 root root 20 Jun  3 18:53 K01hwclock.sh -> ../init.d/hwclock.sh
lrwxrwxrwx 1 root root 20 Jun  3 18:53 K01networking -> ../init.d/networking
lrwxrwxrwx 1 root root 18 Jun  3 18:59 K01plymouth -> ../init.d/plymouth
lrwxrwxrwx 1 root root 15 Jun  3 18:59 K01saned -> ../init.d/saned
lrwxrwxrwx 1 root root 27 Jun  3 18:59 K01speech-dispatcher -> ../init.d/speech-dispatcher
lrwxrwxrwx 1 root root 14 Jun  3 18:53 K01udev -> ../init.d/udev
root@Debian: /etc#
```

7. Inicia el sistema por default, con procesos que empiezan con S y según el orden

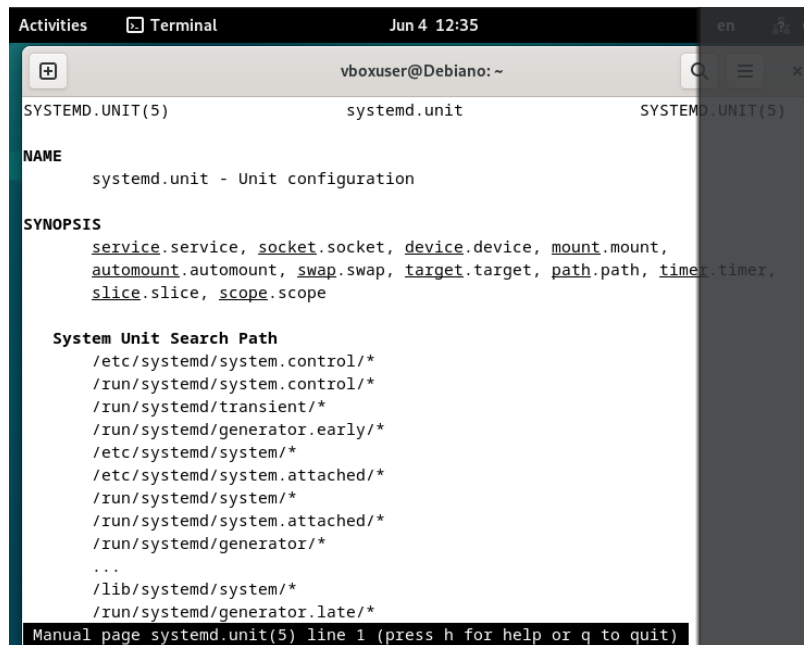
```
root@Debian: /etc# ls rc2.d/ -l
total 0
lrwxrwxrwx 1 root root 27 Jun  3 18:59 K01speech-dispatcher -> ../init.d/speech-dispatcher
lrwxrwxrwx 1 root root 17 Jun  3 18:58 S01anacron -> ../init.d/anacron
lrwxrwxrwx 1 root root 19 Jun  3 18:59 S01bluetooth -> ../init.d/bluetooth
lrwxrwxrwx 1 root root 26 Jun  3 18:54 S01console-setup.sh -> ../init.d/console-setup.sh
lrwxrwxrwx 1 root root 14 Jun  3 18:53 S01cron -> ../init.d/cron
lrwxrwxrwx 1 root root 14 Jun  3 18:59 S01cups -> ../init.d/cups
lrwxrwxrwx 1 root root 22 Jun  3 18:59 S01cups-browsed -> ../init.d/cups-browsed
lrwxrwxrwx 1 root root 14 Jun  3 18:58 S01dbus -> ../init.d/dbus
lrwxrwxrwx 1 root root 14 Jun  3 18:59 S01gdm3 -> ../init.d/gdm3
lrwxrwxrwx 1 root root 18 Jun  3 18:59 S01plymouth -> ../init.d/plymouth
lrwxrwxrwx 1 root root 15 Jun  3 18:59 S01saned -> ../init.d/saned
lrwxrwxrwx 1 root root 14 Jun  3 18:58 S01sudo -> ../init.d/sudo
root@Debian: /etc#
```

8. Ls rc.d/ -l



```
Activities Terminal Jun 4 12:32
vboxuser@Debian: ~
lrwxrwxrwx 1 root root 26 Jun 3 18:54 S01console-setup.sh -> ../init.d/console-setup.sh
lrwxrwxrwx 1 root root 14 Jun 3 18:53 S01cron -> ../init.d/cron
lrwxrwxrwx 1 root root 14 Jun 3 18:59 S01cups -> ../init.d/cups
lrwxrwxrwx 1 root root 22 Jun 3 18:59 S01cups-browsed -> ../init.d/cups-browsed
lrwxrwxrwx 1 root root 14 Jun 3 18:58 S01dbus -> ../init.d/dbus
lrwxrwxrwx 1 root root 14 Jun 3 18:59 S01gdm3 -> ../init.d/gdm3
lrwxrwxrwx 1 root root 18 Jun 3 18:59 S01plymouth -> ../init.d/plymouth
lrwxrwxrwx 1 root root 15 Jun 3 18:59 S01saned -> ../init.d/saned
lrwxrwxrwx 1 root root 14 Jun 3 18:58 S01sudo -> ../init.d/sudo
root@Debian: /etc# ls rc6.d/ -l
total 0
lrwxrwxrwx 1 root root 20 Jun 3 18:58 K01alsa-utils -> ../init.d/alsa-utils
lrwxrwxrwx 1 root root 19 Jun 3 18:59 K01bluetooth -> ../init.d/bluetooth
lrwxrwxrwx 1 root root 22 Jun 3 18:59 K01cups-browsed -> ../init.d/cups-browsed
lrwxrwxrwx 1 root root 14 Jun 3 18:59 K01gdm3 -> ../init.d/gdm3
lrwxrwxrwx 1 root root 20 Jun 3 18:53 K01hwclock.sh -> ../init.d/hwclock.sh
lrwxrwxrwx 1 root root 20 Jun 3 18:53 K01networking -> ../init.d/networking
lrwxrwxrwx 1 root root 18 Jun 3 18:59 K01plymouth -> ../init.d/plymouth
lrwxrwxrwx 1 root root 15 Jun 3 18:59 K01saned -> ../init.d/saned
lrwxrwxrwx 1 root root 27 Jun 3 18:59 K01speech-dispatcher -> ../init.d/speech-dispatcher
lrwxrwxrwx 1 root root 14 Jun 3 18:53 K01udev -> ../init.d/udev
root@Debian: /etc#
```

9. man systemd.unit : para tener información de las unidades



```
Activities Terminal Jun 4 12:35
vboxuser@Debian: ~
SYSTEMD.UNIT(5)          systemd.unit          SYSTEMD.UNIT(5)

NAME
    systemd.unit - Unit configuration

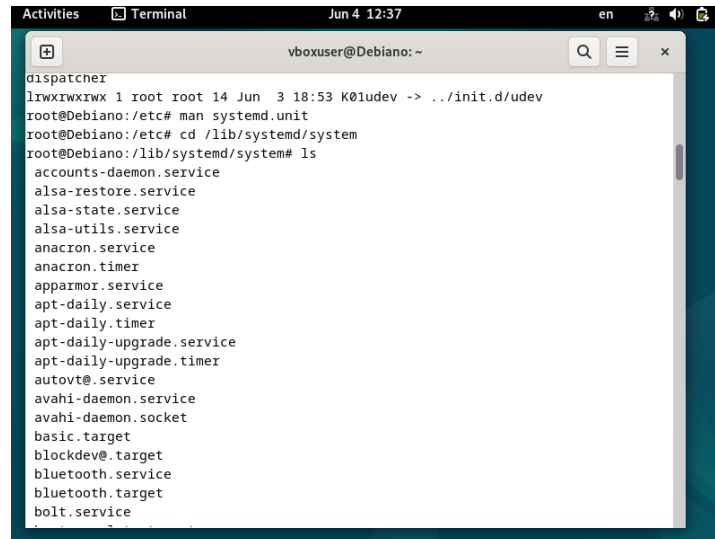
SYNOPSIS
    service.service, socket.socket, device.device, mount.mount,
    automount.automount, swap.swap, target.target, path.path, timer.timer,
    slice.slice, scope.scope

System Unit Search Path
    /etc/systemd/system.control/*
    /run/systemd/system.control/*
    /run/systemd/transient/*
    /run/systemd/generator.early/*
    /etc/systemd/system/*
    /etc/systemd/system.attached/*
    /run/systemd/system/*
    /run/systemd/system.attached/*
    /run/systemd/generator/*
    ...
    /lib/systemd/system/*
    /run/systemd/generator.late/*

Manual page systemd.unit(5) line 1 (press h for help or q to quit)
```

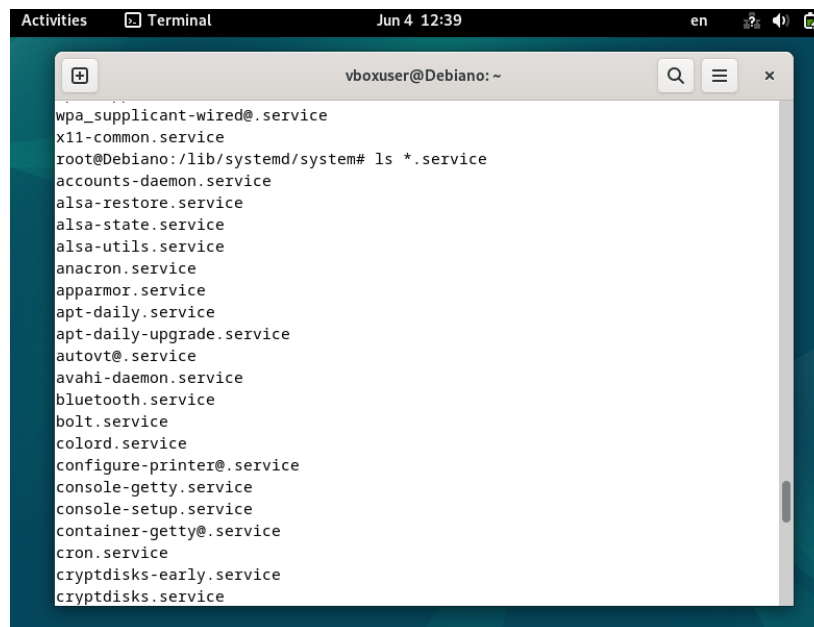
10. `cd /lib/systemd/system`

`ls` : Para mostrar unidades y directorios



```
dispatcher
lrwxrwxrwx 1 root root 14 Jun  3 18:53 K01udev -> ../init.d/udev
root@Debian: /etc# man systemd.unit
root@Debian: /etc# cd /lib/systemd/system
root@Debian: /lib/systemd/system# ls
accounts-daemon.service
alsa-restore.service
alsa-state.service
alsa-utils.service
anacron.service
anacron.timer
apparmor.service
apt-daily.service
apt-daily.timer
apt-daily-upgrade.service
apt-daily-upgrade.timer
autovt@.service
avahi-daemon.service
avahi-daemon.socket
basic.target
blockdev@.target
bluetooth.service
bluetooth.target
bolt.service
```

11. `-ls *.service`: para mostrar los servicios



```
wpa_supplicant-wired@.service
x11-common.service
root@Debian: /lib/systemd/system# ls *.service
accounts-daemon.service
alsa-restore.service
alsa-state.service
alsa-utils.service
anacron.service
apparmor.service
apt-daily.service
apt-daily-upgrade.service
autovt@.service
avahi-daemon.service
bluetooth.service
bolt.service
colord.service
configure-printer@.service
console-getty.service
console-setup.service
container-getty@.service
cron.service
cryptdisks-early.service
cryptdisks.service
```

12. `Cat nfs-server.service` no se encontró, a pesar de tratar de localizarlo, además no se pudo empezar.

```
Activities Terminal Jun 4 12:44
vboxuser@Debian: ~
udev.service
udisks2.service
upower.service
usb_modeswitch@.service
usbmuxd.service
user-runtime-dir@.service
user@.service
wacom-inputattach@.service
wpa_supplicant-nl80211@.service
wpa_supplicant.service
wpa_supplicant@.service
wpa_supplicant-wired@.service
x11-common.service
root@Debian:/lib/systemd/system# cat nfs-server.service
cat: nfs-server.service: No such file or directory
root@Debian:/lib/systemd/system# sudo find/ -name "nfs-server.service"
sudo: find/: command not found
root@Debian:/lib/systemd/system# locate nfs-server.service
-bash: locate: command not found
root@Debian:/lib/systemd/system# sudo systemctl start nfs-kernel-server
Failed to start nfs-kernel-server.service: Unit nfs-kernel-server.service not found.
```

13. Cat multi-user.target ver que procesos a esa la unida multi-user.target

```
root@Debian:/lib/systemd/system# cat multi-user.target
# SPDX-License-Identifier: LGPL-2.1-or-later
#
# This file is part of systemd.
#
# systemd is free software; you can redistribute it and/or modify it
# under the terms of the GNU Lesser General Public License as published by
# the Free Software Foundation; either version 2.1 of the License, or
# (at your option) any later version.
[Unit]
Description=Multi-User System
Documentation=man:systemd.special(7)
Requires=basic.target
Conflicts=rescue.service rescue.target
After=basic.target rescue.service rescue.target
AllowIsolate=yes
root@Debian:/lib/systemd/system#
```

14. cd /etc/systemd/system

ls

muestra que es lo que quieren (.wants) los service

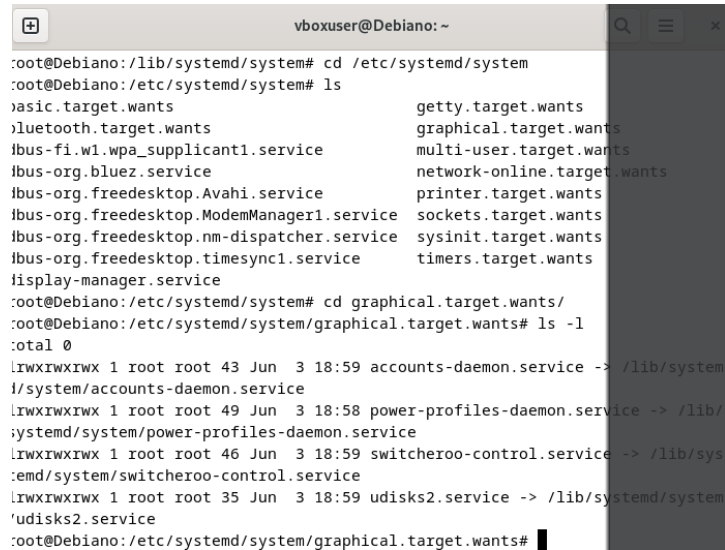
```
64 NETINST with firmware 20240210-11:27] bookworm Release' does not have a Release file.
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
root@Debian:/lib/systemd/system# sudo apt install nfs-kernel-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package nfs-kernel-server
root@Debian:/lib/systemd/system# cd /etc/systemd/system
root@Debian:/etc/systemd/system# ls
basic.target.wants          getty.target.wants
bluetooth.target.wants     graphical.target.wants
dbus-fi.wl.wpa_supplicant1.service  multi-user.target.wants
dbus-org.bluez.service     network-online.target.wants
dbus-org.freedesktop.Avahi.service  printer.target.wants
dbus-org.freedesktop.ModemManager1.service  sockets.target.wants
dbus-org.freedesktop.nm-dispatcher.service  sysinit.target.wants
dbus-org.freedesktop.timesync1.service  timers.target.wants
display-manager.service
root@Debian:/etc/systemd/system#
```

Para poder ingresar se debe tener instalado `sudo apt install nfs-kernel-server`.

15. `cd graphical.target.wants/`

`ls -l`

Para ver cómo se van creando enlaces a las service que cada uno quiere



```
vboxuser@Debian: ~  
root@Debian: /lib/systemd/system# cd /etc/systemd/system  
root@Debian: /etc/systemd/system# ls  
basic.target.wants          getty.target.wants  
bluetooth.target.wants     graphical.target.wants  
ibus-fi.wi.wpa_supplicant1.service  multi-user.target.wants  
ibus-org.bluez.service     network-online.target.wants  
ibus-org.freedesktop.Avahi.service  printer.target.wants  
ibus-org.freedesktop.ModemManager1.service  sockets.target.wants  
ibus-org.freedesktop.nm-dispatcher.service  sysinit.target.wants  
ibus-org.freedesktop.timesync1.service  timers.target.wants  
display-manager.service  
root@Debian: /etc/systemd/system# cd graphical.target.wants/  
root@Debian: /etc/systemd/system/graphical.target.wants# ls -l  
total 0  
lrwxrwxrwx 1 root root 43 Jun  3 18:59 accounts-daemon.service -> /lib/systemd/system/accounts-daemon.service  
lrwxrwxrwx 1 root root 49 Jun  3 18:58 power-profiles-daemon.service -> /lib/systemd/system/power-profiles-daemon.service  
lrwxrwxrwx 1 root root 46 Jun  3 18:59 switcheroo-control.service -> /lib/systemd/system/switcheroo-control.service  
lrwxrwxrwx 1 root root 35 Jun  3 18:59 udisks2.service -> /lib/systemd/system/udisks2.service  
root@Debian: /etc/systemd/system/graphical.target.wants#
```

16. `systemctl get-default`: indica el target por defecto

```
root@Debian: ~# systemctl get-default  
graphical.target
```

17.