

TP : Chargeur de démarrage

GRUB 2

2. Lister les entrées de démarrage de la machine (boot devices)

```
amani@amani-virtual-machine:~$ efibootmgr
BootCurrent: 0006
BootOrder: 0006,0000,0001,0002,0003,0004,0005
Boot0000* EFI VMware Virtual SCSI Hard Drive (0.0)
Boot0001* EFI Floppy
Boot0002* EFI VMware Virtual SATA CDROM Drive (0.0)
Boot0003* EFI VMware Virtual SATA CDROM Drive (1.0)
Boot0004* EFI Network
Boot0005* EFI Internal Shell (Unsupported option)
Boot0006* ubuntu
```

3. Lister les entrées de démarrage avec leurs chemins

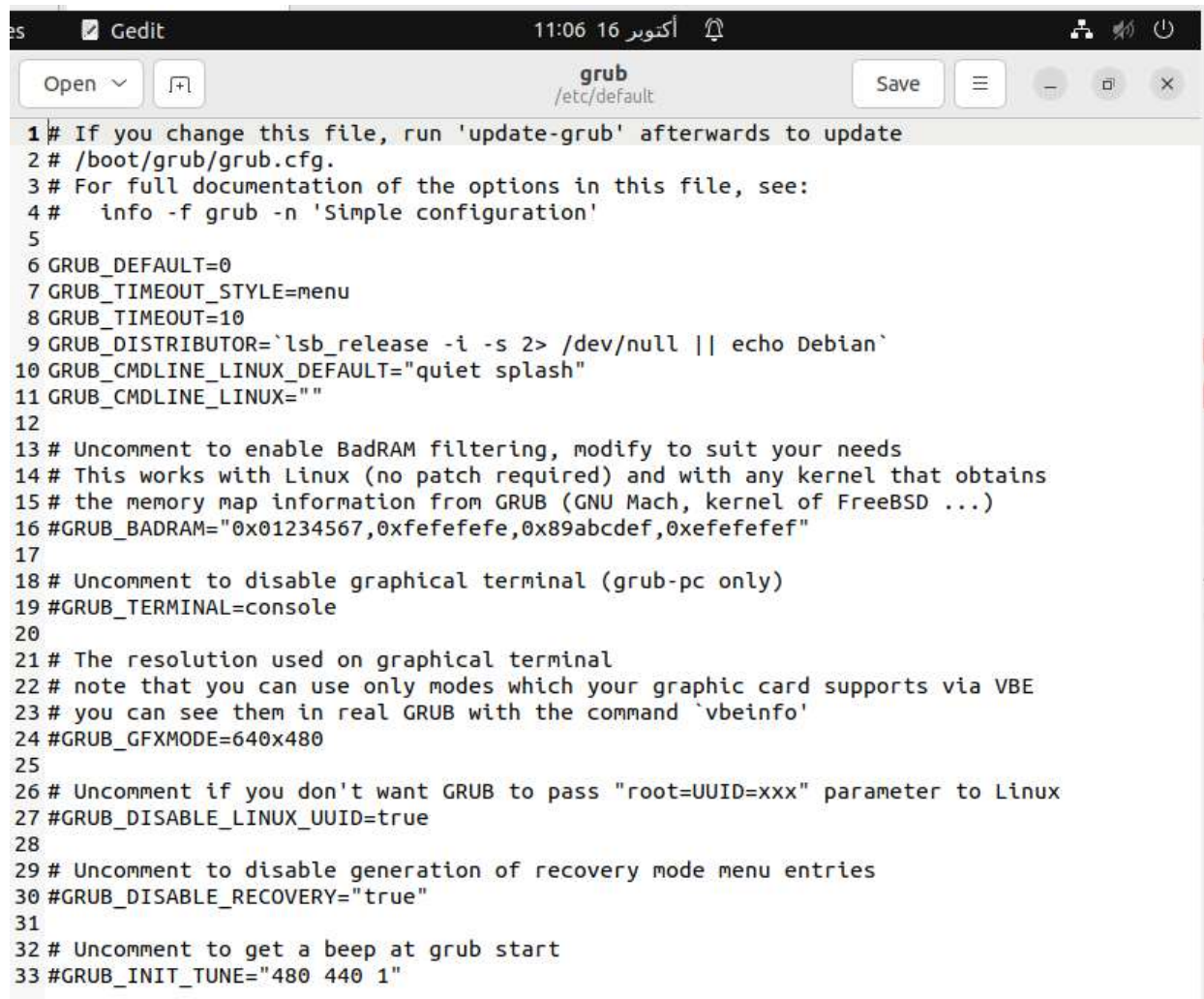
```
amani@amani-virtual-machine:~$ efibootmgr -v
BootCurrent: 0006
BootOrder: 0006,0000,0001,0002,0003,0004,0005
Boot0000* EFI VMware Virtual SCSI Hard Drive (0.0)      PciRoot(0x0)/Pci(0x10,0x0)/SCSI(0,0)
Boot0001* EFI Floppy      PciRoot(0x0)/Pci(0x7,0x0)/Floppy(0x0)
Boot0002* EFI VMware Virtual SATA CDROM Drive (0.0)      PciRoot(0x0)/Pci(0x11,0x0)/Pci(0x4,0x0)/Sata(0,0,0)
Boot0003* EFI VMware Virtual SATA CDROM Drive (1.0)      PciRoot(0x0)/Pci(0x11,0x0)/Pci(0x4,0x0)/Sata(1,0,0)
Boot0004* EFI Network      PciRoot(0x0)/Pci(0x11,0x0)/Pci(0x1,0x0)/MAC(000c29a3ccb9,0)
Boot0005* EFI Internal Shell (Unsupported option)      MemoryMapped(11,0xefe6018,0xf3f5017)/FvFile(c57ad6b7-0515-40a8-9d21-551652854e37)
Boot0006* ubuntu      HD(1,GPT,ff2e93f8-5c5e-4a83-adf9-e81038cc5164,0x800,0x100000)/File(\EFI\ubuntu\shimx64.efi)
```

4. Changer l'ordre de démarrage

```
amani@amani-virtual-machine:~$ sudo efibootmgr -o 0004,0006,0000,0001,0002,0003,0005
[sudo] password for amani:
BootCurrent: 0006
BootOrder: 0004,0006,0000,0001,0002,0003,0005
Boot0000* EFI VMware Virtual SCSI Hard Drive (0.0)
Boot0001* EFI Floppy
Boot0002* EFI VMware Virtual SATA CDROM Drive (0.0)
Boot0003* EFI VMware Virtual SATA CDROM Drive (1.0)
Boot0004* EFI Network
Boot0005* EFI Internal Shell (Unsupported option)
Boot0006* ubuntu
```

```
amani@amani-virtual-machine:~$ sudo efibootmgr -o 0006,0000,0001,0002,0003,0004,0005
BootCurrent: 0006
BootOrder: 0006,0000,0001,0002,0003,0004,0005
Boot0000* EFI VMware Virtual SCSI Hard Drive (0.0)
Boot0001* EFI Floppy
Boot0002* EFI VMware Virtual SATA CDROM Drive (0.0)
Boot0003* EFI VMware Virtual SATA CDROM Drive (1.0)
Boot0004* EFI Network
Boot0005* EFI Internal Shell (Unsupported option)
Boot0006* ubuntu
amani@amani-virtual-machine:~$
```

1. Lors du démarrage du système, appuyer sur ESC pour afficher le menu de Grub2.
2. La figure ci-dessous présente le contenu du fichier de configuration



```
1 # If you change this file, run 'update-grub' afterwards to update
2 # /boot/grub/grub.cfg.
3 # For full documentation of the options in this file, see:
4 #   info -f grub -n 'Simple configuration'
5
6 GRUB_DEFAULT=0
7 GRUB_TIMEOUT_STYLE=menu
8 GRUB_TIMEOUT=10
9 GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
10 GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
11 GRUB_CMDLINE_LINUX=""
12
13 # Uncomment to enable BadRAM filtering, modify to suit your needs
14 # This works with Linux (no patch required) and with any kernel that obtains
15 # the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
16 #GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"
17
18 # Uncomment to disable graphical terminal (grub-pc only)
19 #GRUB_TERMINAL=console
20
21 # The resolution used on graphical terminal
22 # note that you can use only modes which your graphic card supports via VBE
23 # you can see them in real GRUB with the command `vbeinfo'
24 #GRUB_GFXMODE=640x480
25
26 # Uncomment if you don't want GRUB to pass "root=UUID=xxx" parameter to Linux
27 #GRUB_DISABLE_LINUX_UUID=true
28
29 # Uncomment to disable generation of recovery mode menu entries
30 #GRUB_DISABLE_RECOVERY="true"
31
32 # Uncomment to get a beep at grub start
33 #GRUB_INIT_TUNE="480 440 1"
```



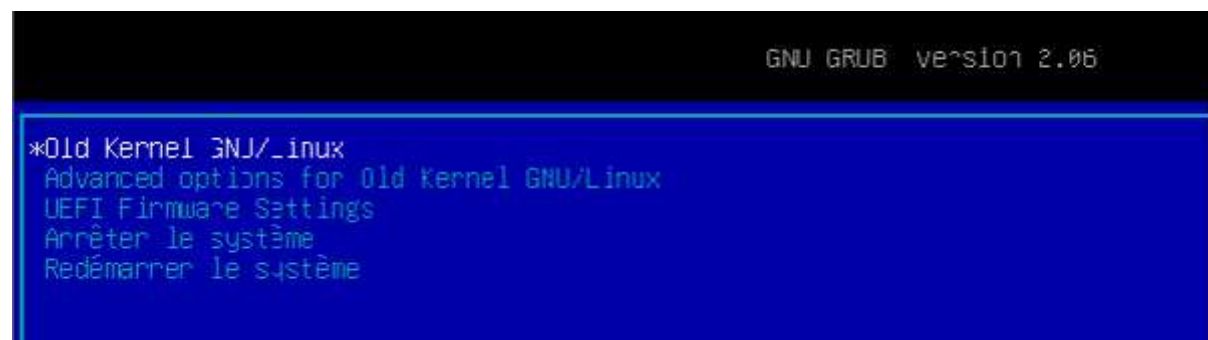
```
es Gedit 11:06 16 أكتوبر 11
grub /etc/default
Open Save
1 # If you change this file, run 'update-grub' afterwards to update
2 # /boot/grub/grub.cfg.
3 # For full documentation of the options in this file, see:
4 #   info -f grub -n 'Simple configuration'
5
6 GRUB_DEFAULT=0
7 GRUB_TIMEOUT_STYLE=menu
8 GRUB_TIMEOUT=10
9 GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
10 GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
11 GRUB_CMDLINE_LINUX=""
12
13 # Uncomment to enable BadRAM filtering, modify to suit your needs
14 # This works with Linux (no patch required) and with any kernel that obtains
15 # the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
16 #GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"
17
18 # Uncomment to disable graphical terminal (grub-pc only)
19 #GRUB_TERMINAL=console
20
21 # The resolution used on graphical terminal
22 # note that you can use only modes which your graphic card supports via VBE
23 # you can see them in real GRUB with the command `vbeinfo'
24 #GRUB_GFXMODE=640x480
25
26 # Uncomment if you don't want GRUB to pass "root=UUID=xxx" parameter to Linux
27 #GRUB_DISABLE_LINUX_UUID=true
28
29 # Uncomment to disable generation of recovery mode menu entries
30 #GRUB_DISABLE_RECOVERY="true"
31
32 # Uncomment to get a beep at grub start
33 #GRUB_INIT_TUNE="480 440 1"
```

```
done
amani@amani-virtual-machine:~$ lsb_release -s -i
Ubuntu
amani@amani-virtual-machine:~$
```

```

1 # If you change this file, run 'update-grub' afterwards to update
2 # /boot/grub/grub.cfg.
3 # For full documentation of the options in this file, see:
4 #   info -f grub -n 'Simple configuration'
5
6 GRUB_DEFAULT=0
7 GRUB_TIMEOUT_STYLE=menu
8 GRUB_TIMEOUT=10
9 #GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
0 GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
1 GRUB_CMDLINE_LINUX=""
2
3 # Uncomment to enable BadRAM filtering, modify to suit your needs
4 # This works with Linux (no patch required) and with any kernel that obtains
5 # the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
6 #GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"
7
8 # Uncomment to disable graphical terminal (grub-pc only)
9 #GRUB_TERMINAL=console
0
1 # The resolution used on graphical terminal
2 # note that you can use only modes which your graphic card supports via VBE
3 # you can see them in real GRUB with the command `vbeinfo'
4 #GRUB_GFXMODE=640x480
5
6 # Uncomment if you don't want GRUB to pass "root=UUID=xxx" parameter to Linux
7 #GRUB_DISABLE_LINUX_UUID=true
8
9 # Uncomment to disable generation of recovery mode menu entries
0 #GRUB_DISABLE_RECOVERY="true"
1
2 # Uncomment to get a beep at grub start
3 #GRUB_INIT_TUNE="480 440 1"

```



```
amani@amani-virtual-machine:~$ cd Downloads/
amani@amani-virtual-machine:~/Downloads$ ls
linux-headers-5.19.0-051900_5.19.0-051900.202207312230_all.deb
linux-headers-5.19.0-051900-generic_5.19.0-051900.202207312230_amd64.deb
linux-headers-5.19.0-051900-generic_5.19.0-051900.202207312230_armhf.deb
linux-image-unsigned-5.19.0-051900-generic_5.19.0-051900.202207312230_amd64.deb
linux-modules-5.19.0-051900-generic_5.19.0-051900.202207312230_amd64.deb
amani@amani-virtual-machine:~/Downloads$ sudo dpkg -i ./*.deb
Selecting previously unselected package linux-headers-5.19.0-051900.
(Reading database ... 202243 files and directories currently installed.)
Preparing to unpack .../linux-headers-5.19.0-051900_5.19.0-051900.202207312230_a
ll.deb ...
Unpacking linux-headers-5.19.0-051900 (5.19.0-051900.202207312230) ...
Selecting previously unselected package linux-headers-5.19.0-051900-generic.
Preparing to unpack .../linux-headers-5.19.0-051900-generic_5.19.0-051900.202207
312230_amd64.deb ...
Unpacking linux-headers-5.19.0-051900-generic (5.19.0-051900.202207312230) ...
```

```
Setting up linux-modules-5.19.0-051900-generic (5.19.0-051900.202207312230) ...
Processing triggers for linux-image-unsigned-5.19.0-051900-generic (5.19.0-05190
0.202207312230) ...
/etc/kernel/postinst.d/initramfs-tools:
update-initramfs: Generating /boot/initrd.img-5.19.0-051900-generic
/etc/kernel/postinst.d/zz-update-grub:
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-6.8.0-45-generic
Found initrd image: /boot/initrd.img-6.8.0-45-generic
Found linux image: /boot/vmlinuz-6.8.0-40-generic
Found initrd image: /boot/initrd.img-6.8.0-40-generic
Found linux image: /boot/vmlinuz-5.19.0-051900-generic
Found initrd image: /boot/initrd.img-5.19.0-051900-generic
Memtest86+ needs a 16-bit boot, that is not available on EFI, exiting
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
Errors were encountered while processing:
./linux-headers-5.19.0-051900-generic_5.19.0-051900.202207312230_armhf.deb
amani@amani-virtual-machine:~/Downloads$
```



```
amani@amani-virtual-machine:~/Downloads$ ls /boot
config-5.19.0-051900-generic      memtest86+.elf
config-6.8.0-40-generic          memtest86+_multiboot.bin
config-6.8.0-45-generic          System.map-5.19.0-051900-generic
efi                               System.map-6.8.0-40-generic
grub                             System.map-6.8.0-45-generic
initrd.img                      vmlinuz
initrd.img-5.19.0-051900-generic vmlinuz-5.19.0-051900-generic
initrd.img-6.8.0-40-generic      vmlinuz-6.8.0-40-generic
initrd.img-6.8.0-45-generic      vmlinuz-6.8.0-45-generic
initrd.img.old                  vmlinuz.old
memtest86+.bin
amani@amani-virtual-machine:~/Downloads$
```

Open 40_custom /etc/grub.d Save

```
1#!/bin/sh
2exec tail -n +3 $0
3# This file provides an easy way to add custom menu entries.  Simply type the
4# menu entries you want to add after this comment.  Be careful not to change
5# the 'exec tail' line above.
6menuentry "new kernel"
7menuentry "fermer le systeme" {
8halt
9}
10menuentry "redémarrer le systeme " {
11reboot
12}
13menuentry 'New Kernel' --class oldkernel --class gnu-linux --class gnu --class os
14$menuentry_id_option 'gnulinux-simple-b700871e-10f8-4192-bbba-f5a3af85bc3d' {
15    recordfail
16    load_video
17    gfxmode $linux_gfx_mode
18    insmod gzio
19    if [ x$grub_platform = xxen ]; then insmod xzio; insmod lzopio; fi
20    insmod part_gpt
21    insmod ext2
22    set root='hd0,gpt2'
23    if [ x$feature_platform_search_hint = xy ]; then
24        search --no-floppy --fs-uuid --set=root --hint-bios=hd0,gpt2 --hint-efi=hd0,gpt2 --
25        hint-baremetal=ahci0,gpt2  b700871e-10f8-4192-bbba-f5a3af85bc3d
26    else
27        search --no-floppy --fs-uuid --set=root b700871e-10f8-4192-bbba-f5a3af85bc3d
28    fi
29    linux /boot/vmlinuz-5.19.0-45-generic root=UUID=b700871e-10f8-4192-bbba-f5a3af85bc3d
30    ro quiet splash $vt_handoff
31    initrd /boot/initrd.img-5.19.0-45-generic
32}
33}
```

sh Tab Width: 8 Ln 22, Col 57 INS

GNU GRUB version 2.06

*Oldkernel GNU/Linux
Advanced options for Oldkernel GNU/Linux
UEFI Firmware Settings
fermer le system
redémarrer le systeme
New kernel