

Cheat Sheet

Administration Systeme

Commandes essentielles des 4 modules — version unifiée pour révision d'examen.

Legend: **check** • **config** • **system** • **danger**

Module 01 — GRUB2 & UEFI

Check rapide

```
# mode boot
[ -d /sys/firmware/efi ] && echo "UEFI" || echo "BIOS legacy"
# entrees UEFI
sudo efibootmgr -v
```

Config minimale

```
# editer /etc/default/grub
sudo nano /etc/default/grub
# appliquer
sudo update-grub
```

Rappel: Ne jamais editer /boot/grub/grub.cfg directement.

Reparer (chroot)

```
lsblk -f
sudo mount /dev/sda2 /mnt
sudo mount /dev/sda1 /mnt/boot/efi
for i in /dev /dev/pts /proc /sys /run; do \
    sudo mount --bind $i /mnt$i; done
sudo chroot /mnt
grub-install --target=x86_64-efi --efi-directory=/boot/efi --bootloader-id=ubuntu
update-grub
```

grub rescue>

```
grub rescue> ls
grub rescue> set root=(hd0,gpt2)
```

```
grub rescue> set prefix=(hd0,gpt2)/boot/grub
grub rescue> insmod normal
grub rescue> normal
```

Module 02 — Disques, Partitions, LVM

Decouverte

```
lsblk -f
df -h
sudo blkid
```

Partition + format

```
sudo fdisk /dev/sdb
sudo partprobe /dev/sdb
sudo mkfs.ext4 /dev/sdb1
```

Montage & fstab

```
sudo mount /dev/sdb1 /mnt/data
sudo umount /mnt/data
sudo mount -a
```

```
Format: UUID=... /mnt/data ext4 defaults 0 2
```

LVM essentiel

```
sudo pvcreate /dev/sdb1
sudo vgcreate vg0 /dev/sdb1
sudo lvcreate -L 10G -n lv-data vg0
sudo lvextend -l +100%FREE /dev/vg0/lv-data
sudo resize2fs /dev/vg0/lv-data
```

Module 03 — Utilisateurs & Groupes

Verifier

```
id
getent passwd robert
getent group sudo
```

Comptes

```
sudo useradd -m -s /bin/bash -G sudo robert
sudo passwd robert
```

```
sudo usermod -aG sudo robert
sudo userdel -r robert
```

Piege: Toujours -aG pour ajouter un groupe a un user.

Groupes

```
sudo groupadd devteam
sudo gpasswd -a robert devteam
sudo gpasswd -d robert devteam
```

Expiration / PAM

```
sudo chage -l robert
sudo chage -M 90 -W 14 robert
sudo nano /etc/security/pwquality.conf
```

Module 04 — Network Manager & Diagnostics

Etat & profils

```
nmcli device status
nmcli connection show
sudo nmcli connection up "Wired connection 1"
sudo nmcli connection down "Wired connection 1"
```

Note: nmcli = persistant. ip = temporaire.

WiFi

```
nmcli device wifi list
sudo nmcli device wifi connect "SSID" password "mdp"
```

IP & routes

```
ip addr show
ip route show
ip route add default via 192.168.1.1
```

DNS & diag

```
nslookup google.com
ping -c 3 8.8.8.8
sudo journalctl -u NetworkManager -n 50
```