

# basic configuration

- [screen](#)
- [network](#)
- [nameserver](#)
- [wipe hdd](#)
- [time synchronization](#)
- [lvm](#)
- [chrony](#)

# screen

```
vim /etc/screenrc
```

```
hardstatus string "%h%? users: %u%?"  
startup_message off  
hardstatus alwayslastline "hetzner03: %-Lw%{= BW}%50>%n%f*   %t%{-}%+Lw%<"  
bindkey -k k7 prev  
bindkey -k k8 next
```

# network

The following method allows to change the name of interfaces in ubuntu. The network card below some how is not good recognized by default, one interface is named renameX by default. With this method I assign it the name `enp1s0` by configuration.

First I get all mac addresses of my interfaces

```
ip a
```

```
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: rename2: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 00:07:43:0c:32:12 brd ff:ff:ff:ff:ff:ff
3: enp130s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen
1000
    link/ether 00:07:43:0c:32:13 brd ff:ff:ff:ff:ff:ff
    inet 10.7.10.70/24 brd 10.7.10.255 scope global dynamic enp130s0
        valid_lft 5639sec preferred_lft 5639sec
    inet6 fe80::207:43ff:fe0c:3213/64 scope link
        valid_lft forever preferred_lft forever
```

Then I enable the feature in the grub configuration to set my own interface names.

```
vim /etc/default/grub
```

```
GRUB_CMDLINE_LINUX="net.ifnames=0 biosdevname=0"
```

Apply the new configuration

```
grub-mkconfig -o /boot/grub/grub.cfg
```

```
update-grub
update-initramfs -u
```

## Configure the new names per mac address

```
vim /etc/udev/rules.d/70-persistent-net.rules
```

```
SUBSYSTEM=="net", ACTION=="add", DRIVERS=="?*", ATTR{address}=="00:07:43:0c:32:12",  
NAME="enp1s0"
```

```
SUBSYSTEM=="net", ACTION=="add", DRIVERS=="?*", ATTR{address}=="00:07:43:0c:32:13",  
NAME="enp2s0"
```

# nameserver

In my LAN I want to make use of the DNS of my OPNsense router, there for I change the setup of ubuntu to use it via the following configuration.

```
systemctl stop systemd-resolved
```

```
systemctl disable systemd-resolved
```

```
vim /etc/resolv.conf
```

```
search home  
nameserver 10.7.10.254
```

# wipe hdd

```
wipefs -a /dev/sda
```

# time synchronization

```
apt install ntp ntpdate -y
```

```
mv /etc/ntp.conf /etc/ntp.conf.orig  
vim /etc/ntp.conf
```

```
server 10.8.10.254 prefer iburst
```

```
timedatectl set-ntp no
```

```
service ntp restart
```

```
ntpq -p  
ntpdate 10.8.10.254
```

# lvm

Check the physical volumes

```
pvs
```

| PV        | VG        | Fmt  | Attr | PSize  | PFree |
|-----------|-----------|------|------|--------|-------|
| /dev/sda3 | ubuntu-vg | lvm2 | a--  | <2.73t | 0     |

Check the volume groups

```
vgs
```

| VG        | #PV | #LV | #SN | Attr   | VSize  | VFree |
|-----------|-----|-----|-----|--------|--------|-------|
| ubuntu-vg | 1   | 2   | 0   | wz--n- | <2.73t | 0     |

Check the logical volumes

```
lvs
```

| LV        | VG        | Attr       | LSize   | Pool | Origin | Data% | Meta% | Move | Log | Cpy% | Sync | Convert |
|-----------|-----------|------------|---------|------|--------|-------|-------|------|-----|------|------|---------|
| plot01    | ubuntu-vg | -wi-ao---- | 2.53t   |      |        |       |       |      |     |      |      |         |
| ubuntu-lv | ubuntu-vg | -wi-ao---- | 200.00g |      |        |       |       |      |     |      |      |         |

Display volume group details

```
vgdisplay
```

```
--- Volume group ---
VG Name                ubuntu-vg
System ID
Format                 lvm2
Metadata Areas         1
Metadata Sequence No  3
VG Access              read/write
VG Status              resizable
MAX LV                 0
Cur LV                2
```

|                 |  |
|-----------------|--|
| Open LV         | 2                                      |
| Max PV          | 0                                      |
| Cur PV          | 1                                      |
| Act PV          | 1                                      |
| VG Size         | <2.73 TiB                              |
| PE Size         | 4.00 MiB                               |
| Total PE        | 715140                                 |
| Alloc PE / Size | 715140 / <2.73 TiB                     |
| Free PE / Size  | 0 / 0                                  |
| VG UUID         | rY8uzZ-2Xrc-TdNR-l0Wt-Fr40-uAKY-H0UsRs |

### Create the additional logical volume

```
lvcreate -l 663940 -n plot01 ubuntu-vg
```

### Create filesystem

```
mkfs.ext4 /dev/ubuntu-vg/plot01
```

### Get the new UUID

```
blkid
```

```
/dev/mapper/ubuntu--vg-plot01: UUID="3107980c-8ee0-4f63-adeb-2d0f50fe2f5c" TYPE="ext4"
```

### Add it to fstab

```
vim /etc/fstab
```

```
UUID=3107980c-8ee0-4f63-adeb-2d0f50fe2f5c /home/chia/chia/chia-blockchain/plot01 ext4  
errors=remount-ro          0          1
```

# chrony

```
apt install chrony -y
```

```
vim /etc/chrony/chrony.conf
```

```
server 10.8.20.254          iburst prefer
```

```
systemctl restart chronyd
```

```
chronyc sources
```

```
/sbin/hwclock --systohc
```