

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 addesses 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 if 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
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-lowt-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
```