

GENTOO INSTALLATION GUIDE

INTRODUCTION

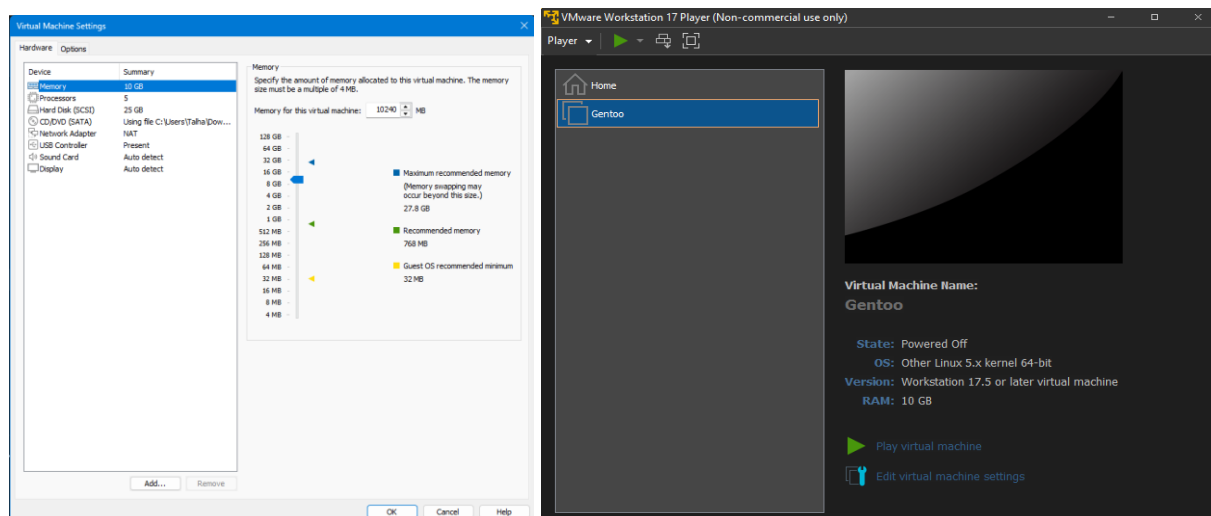
This is an installation guide to install gentoo on VMWare system in UEFI Mode and in OpenRC file system. The Gentoo Handbook is the main source for installing it. And it can change after this is released, so do take that as a primary source of installing gentoo linux for the future

You will need the following

- At least a 4 core CPU. It can work on less but might die before its completed.
- At least 4 GB of RAM, But I will recommend 8 GB for smoother installation.
- Minimum 8GB of Storage. I used 25GB for safe keeping
- Lastly, you'll need a pinch of consistency, a handful of patience, a whole lot of time and some cups of Tea.

1- Now you have all this, first we will configure our VMWare for Gentoo Installation so go grab the Gentoo Installation from the [Official Website](#) under the amd64 minimal installation ISO.

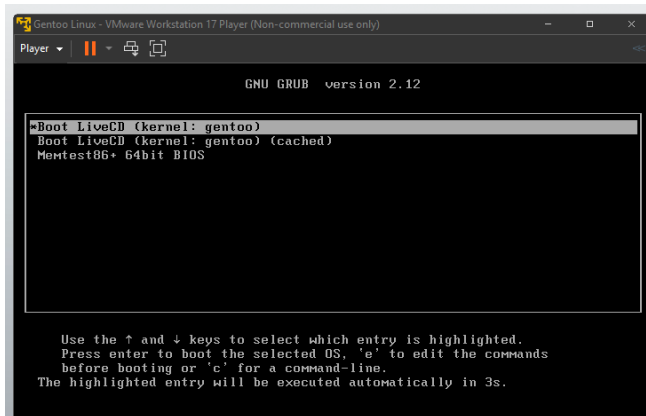
2- After downloading that, setup your VMWare environment. Mine is setup like this



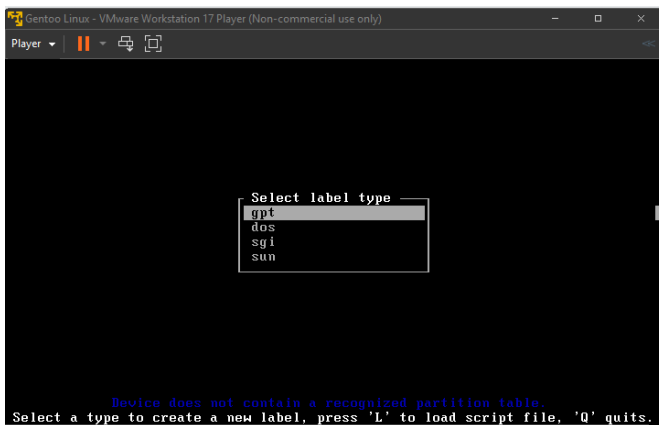
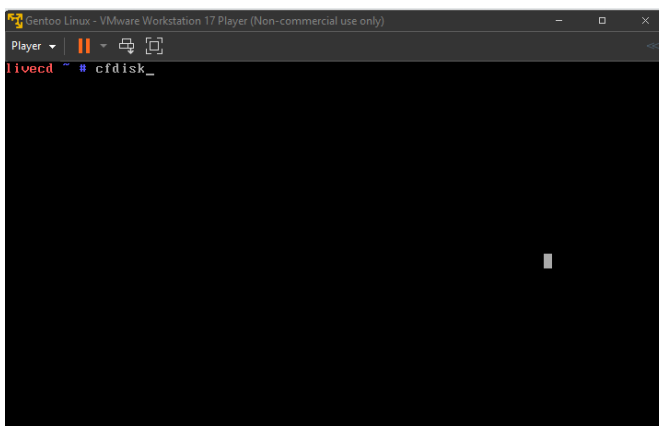
2.1. One thing I did to fix my Gentoo and make sure it runs on the UEFI System with Safe boot disabled is I added these two lines in my Gentoo.vmx (in your case Gentoo will be the name you gave to the Linux on setup). Add these two lines anywhere in that file.

- `firmware = "efi"`
- `efi.secureBoot.enabled = "FALSE"`

3- After this go on and select the first option in the Gentoo ISO options. It can say LiveCD or Simple Gentoo Installation. Doesn't matter.



4- Now we start the process of making our partitions. Start by running cfdisk to start the disk partition process and select the GPT option.



5- After that start the disk creation by creating a 1G root partition, 4G swap partition in case the RAM falls short, and the rest will be your storage for Gentoo Linux.

```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player  [Icons]
Disk: /dev/sda
Size: 25 GiB, 26843545600 bytes, 52428800 sectors
Label: gpt, identifier: 030BFC27-5DCF-439F-8EF6-C30B59D47431

Device      Start      End      Sectors   Size Type
/dev/sda1    2048      2099199  2097152   1G Linux filesystem
/dev/sda2    2099200   10487807  8388608   4G Linux filesystem
>> /dev/sda3  10487808  52426751  41938944  20G Linux filesystem

Partition UUID: 6C12EB54-FBFC-42A9-913C-CC3637676EAD
Partition type: Linux filesystem (0FC63DAF-8483-4772-8E79-3D69D8477DE4)

[ Delete ] [ Resize ] [ Quit ] [ Type ] [ Help ] [ Write ]
[ Dump ]

Write partition table to disk (this might destroy data)
```

```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player  [Icons]
Disk: /dev/sda
Size: 25 GiB, 26843545600 bytes, 52428800 sectors
Label: gpt, identifier: 030BFC27-5DCF-439F-8EF6-C30B59D47431

Device      Start      End      Sectors   Size Type
>> Free space 2048      52426751  52426719  25G

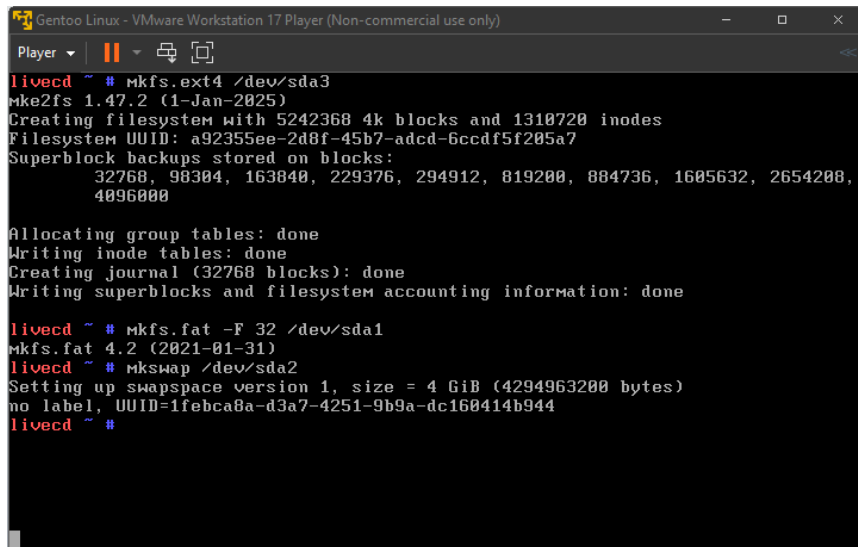
Partition size: 1G

May be followed by M for MiB, G for GiB, T for TiB, or S for sectors.
```

6- To confirm your filesystem is created, type lsblk and it should show a tree under sda

```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player  [Icons]
livecd ~ # lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
loop0 7:0 0 679M 1 loop /run/rootfsbase
sda 8:0 0 25G 0 disk
├─sda1 8:1 0 1G 0 part
├─sda2 8:2 0 4G 0 part
└─sda3 8:3 0 20G 0 part
sr0 11:0 1 788.3M 0 rom /run/initramfs/live
livecd ~ # _
```

7- The provide the extension for each partition you just created according to the image below, do remember to follow the Gentoo Handbook here

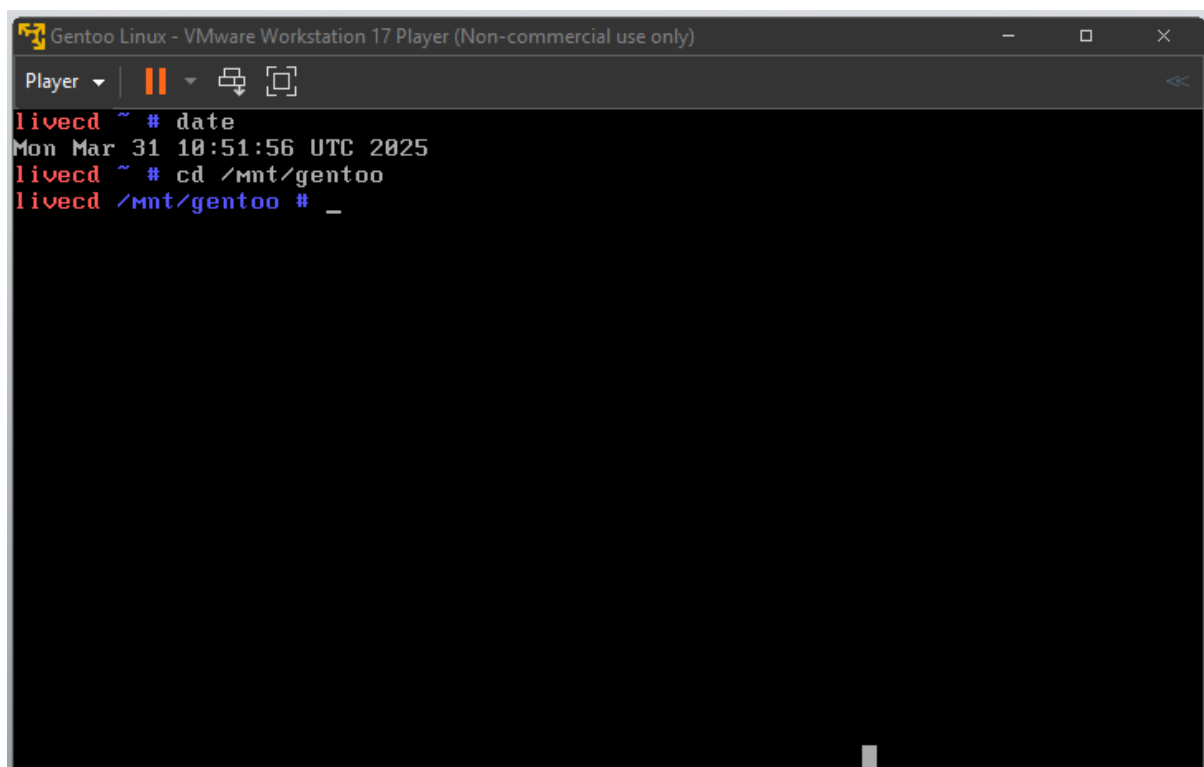


```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
livecd ~ # mkfs.ext4 /dev/sda3
mke2fs 1.47.2 (1-Jan-2025)
Creating filesystem with 5242368 4k blocks and 1310720 inodes
Filesystem UUID: a92355ee-2d8f-45b7-adcd-6ccdf5f205a7
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
    4096000
Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

livecd ~ # mkfs.fat -F 32 /dev/sda1
mkfs.fat 4.2 (2021-01-31)
livecd ~ # mkswap /dev/sda2
Setting up swapspace version 1, size = 4 GiB (4294963200 bytes)
no label, UUID=1febca8a-d3a7-4251-9b9a-dc160414b944
livecd ~ #
```

8- Following that add the following command “mkdir -p /mnt/gentoo” and mount your /dev/sda3 on /mnt/gentoo folder.

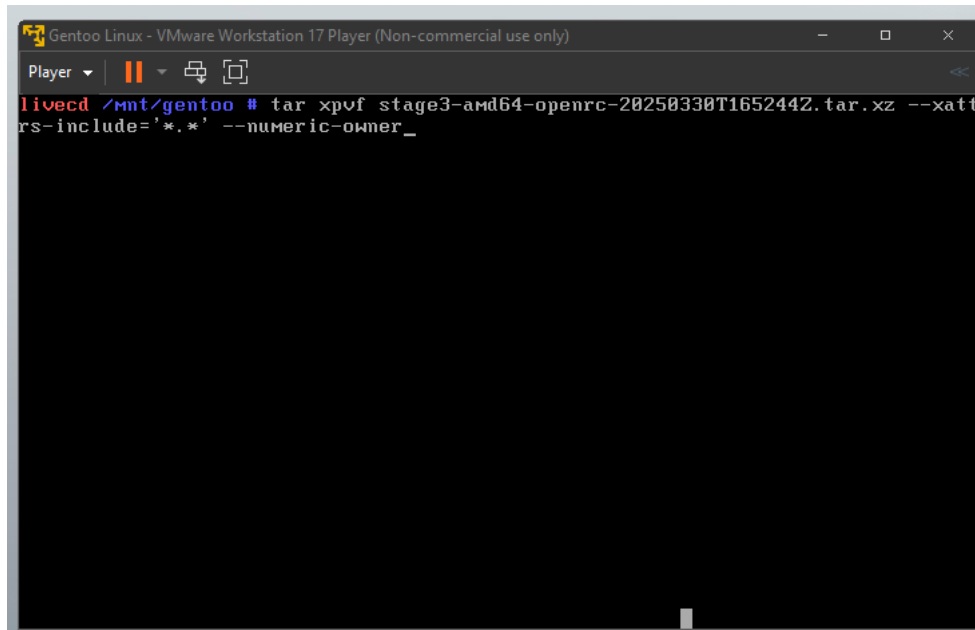
9- Make sure your date is correct by writing “date” in the terminal and the cd into the /mnt/gentoo folder



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
livecd ~ # date
Mon Mar 31 10:51:56 UTC 2025
livecd ~ # cd /mnt/gentoo
livecd /mnt/gentoo # _
```

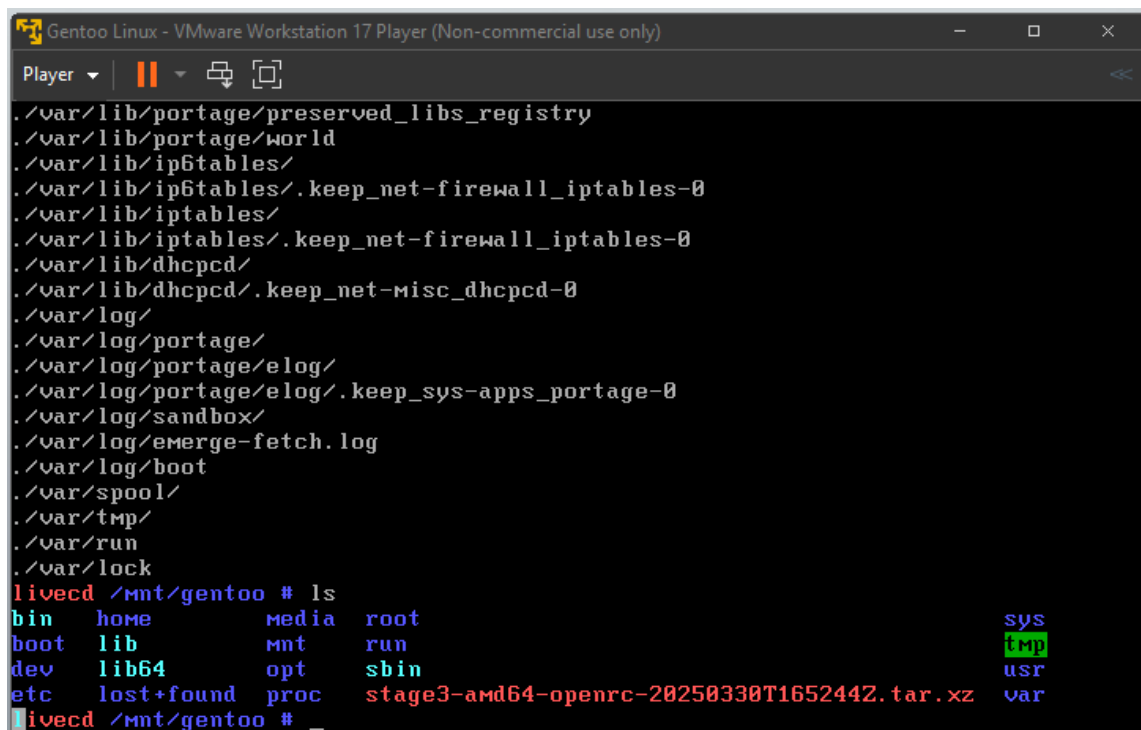
10- After that we will install the gentoo OpenRC stage file by using the Links command. Go to the download section there and then to the Stage3-OpenRC file and save that file. Commands for the links command is in the Gentoo Handbook

11- After installing write the command and wait for some time.



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
livecd /mnt/gentoo # tar xpvf stage3-amd64-openrc-20250330T165244Z.tar.xz --xattr
rs-include='*.*' --numeric-owner_
```

After installing the Stage 3 file your filesystem should look like this

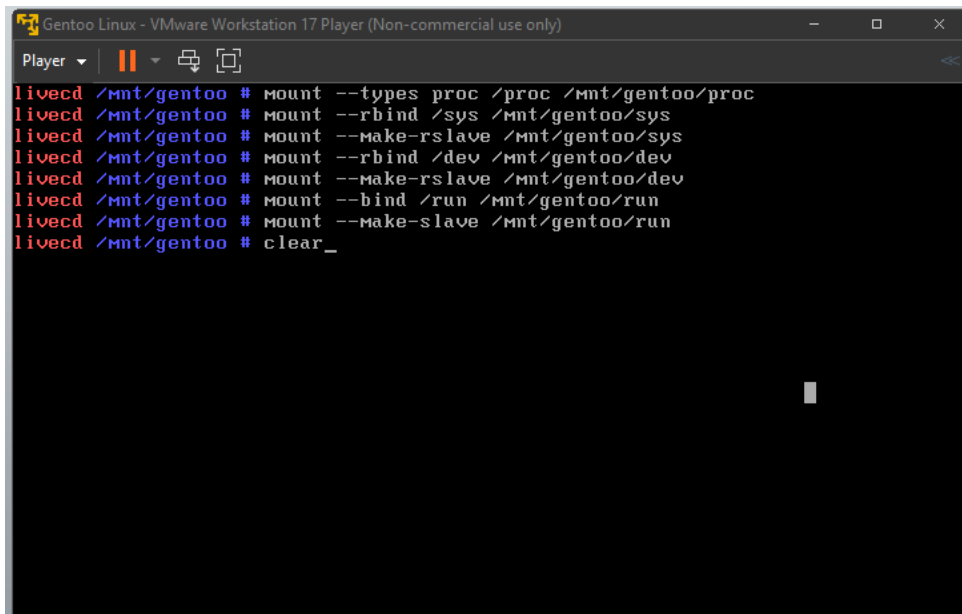


```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
./var/lib/portage/preserved_libs_registry
./var/lib/portage/world
./var/lib/ip6tables/
./var/lib/ip6tables/.keep_net-firewall_iptables-0
./var/lib/ip6tables/
./var/lib/ip6tables/.keep_net-firewall_iptables-0
./var/lib/dhcpd/
./var/lib/dhcpd/.keep_net-misc_dhcpd-0
./var/log/
./var/log/portage/
./var/log/portage/elog/
./var/log/portage/elog/.keep_sys-apps_portage-0
./var/log/sandbox/
./var/log/emerget-fetch.log
./var/log/boot
./var/spool/
./var/tmp/
./var/run
./var/lock
livecd /mnt/gentoo # ls
bin      home      media    root      sys
boot     lib       mnt      run       tmp
dev       lib64     opt      sbin      usr
etc       lost+found proc      stage3-amd64-openrc-20250330T165244Z.tar.xz var
livecd /mnt/gentoo # _
```

12- Now change your Use and MAKEOPTS flags in the make.conf file. Follow the Gentoo Handbook on how to choose the optimal number of MAKEOPTS. Usually its min(Ram Amount || CPU Cores Allocated). And in the use flags write USE = "-systemd -kde -gnome -bluetooth".

13- Now copy your DNS info from `etc/resolv.conf` to `/mnt/gentoo/etc`. Check the Gentoo Handbook for changes here if any error occurs.

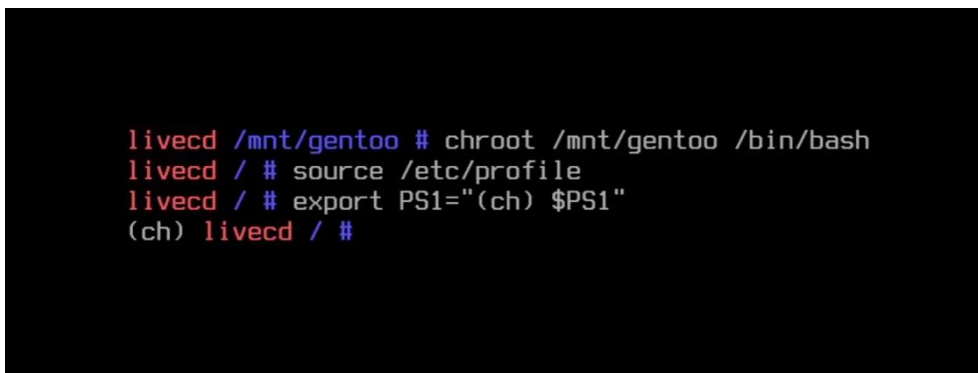
14- Now mount your filesystems so that they are available later on using these commands.



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
livecd /mnt/gentoo # mount --types proc /proc /mnt/gentoo/proc
livecd /mnt/gentoo # mount --rbind /sys /mnt/gentoo/sys
livecd /mnt/gentoo # mount --make-rslave /mnt/gentoo/sys
livecd /mnt/gentoo # mount --rbind /dev /mnt/gentoo/dev
livecd /mnt/gentoo # mount --make-rslave /mnt/gentoo/dev
livecd /mnt/gentoo # mount --bind /run /mnt/gentoo/run
livecd /mnt/gentoo # mount --make-slave /mnt/gentoo/run
livecd /mnt/gentoo # clear_
```

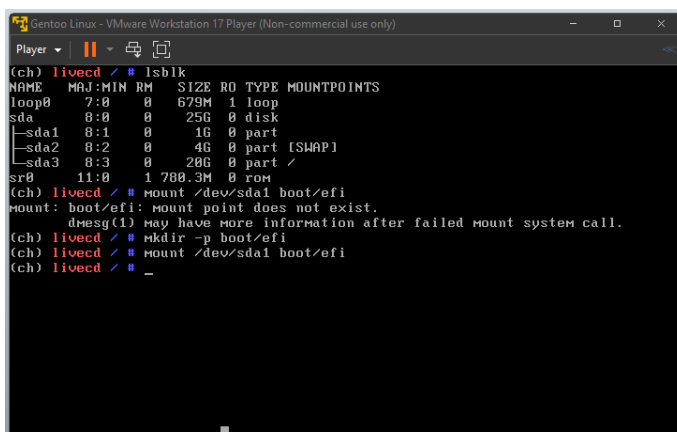
15- Now CHROOT into your gentoo file and then write

- `source /etc/profile`
- `export PS1 = "(ch) $PS1"`



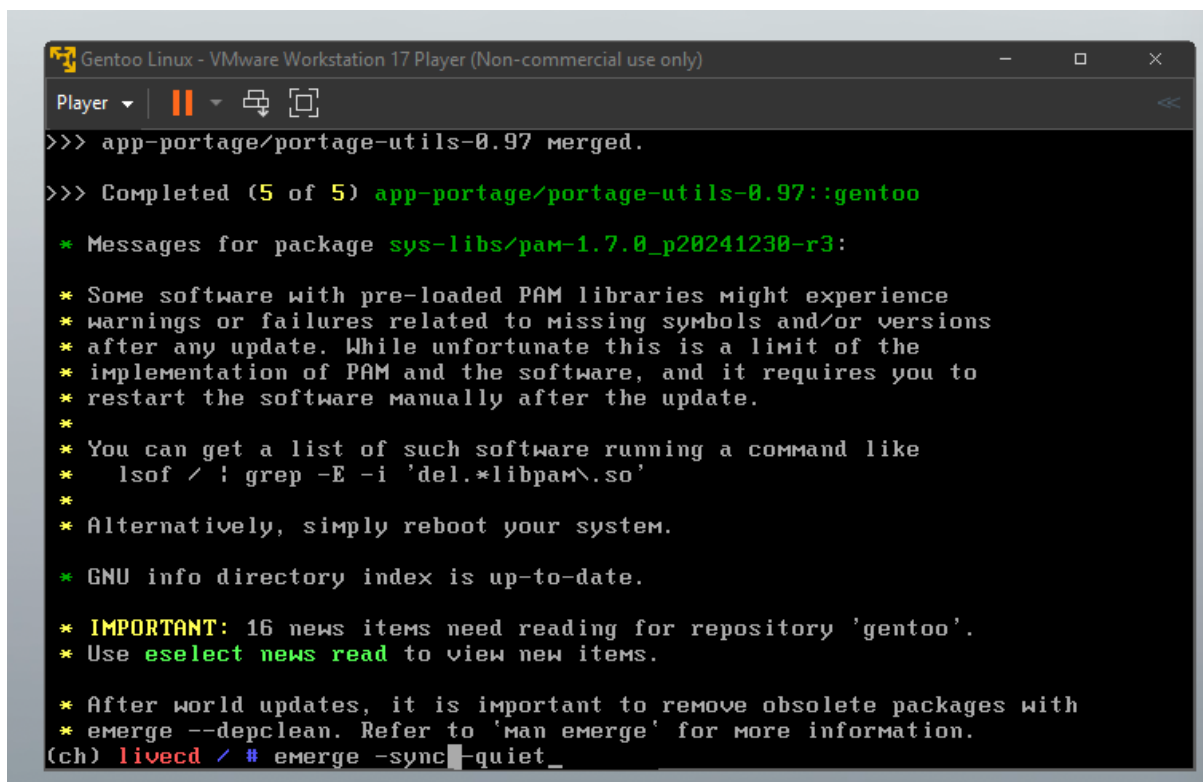
```
livecd /mnt/gentoo # chroot /mnt/gentoo /bin/bash
livecd / # source /etc/profile
livecd / # export PS1="(ch) $PS1"
(ch) livecd / #
```

16- Then after installing the base kernel, we add our EFI partition in the sda1



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
(ch) livecd / # lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
loop0 7:0 0 679M 1 loop
sda 8:0 0 25G 0 disk
├─sda1 8:1 0 1G 0 part
├─sda2 8:2 0 4G 0 part [SWAP]
└─sda3 8:3 0 20G 0 part /
sr0 11:0 1 700.3M 0 rom
(ch) livecd / # mount /dev/sda1 boot/efi
mount: boot/efi: mount point does not exist.
dmesg(1) may have more information after failed mount system call.
(ch) livecd / # mkdir -p boot/efi
(ch) livecd / # mount /dev/sda1 boot/efi
(ch) livecd / #
```

17- Then sync your emerge services by writing emerge-webrsync, then sync your emerge.



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player | [Icons]
>>> app-portage/portage-utils-0.97 merged.
>>> Completed (5 of 5) app-portage/portage-utils-0.97::gentoo

* Messages for package sys-libs/pam-1.7.0_p20241230-r3:

* Some software with pre-loaded PAM libraries might experience
* warnings or failures related to missing symbols and/or versions
* after any update. While unfortunate this is a limit of the
* implementation of PAM and the software, and it requires you to
* restart the software manually after the update.
*
* You can get a list of such software running a command like
* lsof / | grep -E -i 'del.*libpam\'.so'
*
* Alternatively, simply reboot your system.

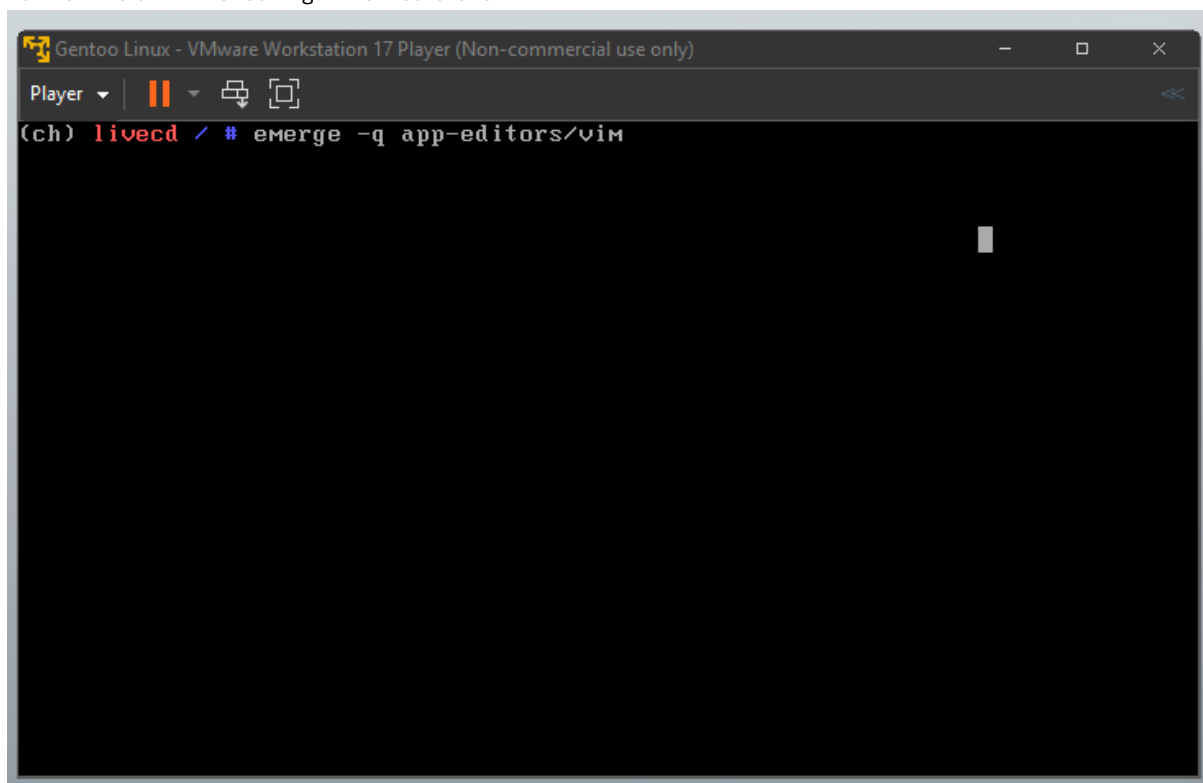
* GNU info directory index is up-to-date.

* IMPORTANT: 16 news items need reading for repository 'gentoo'.
* Use eselect news read to view new items.

* After world updates, it is important to remove obsolete packages with
* emerge --depclean. Refer to 'man emerge' for more information.
(ch) livecd / # emerge -sync quiet_
```

18- Then update your emerge base by writing emerge --ask --verbose --update --deep --changed-use @world.

19- Now install VIM for editing in the files later on.



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player | [Icons]
(ch) livecd / # emerge -q app-editors/vim
```

20- Then set your time and local by following the Gentoo Handbook, Use America as Country and Los_Angeles as state. Follow the handbook because this part change with time.

```
(ch) livecd / # ln -sf ../usr/share/zoneinfo/America/Los_Angeles /etc/localtime
```

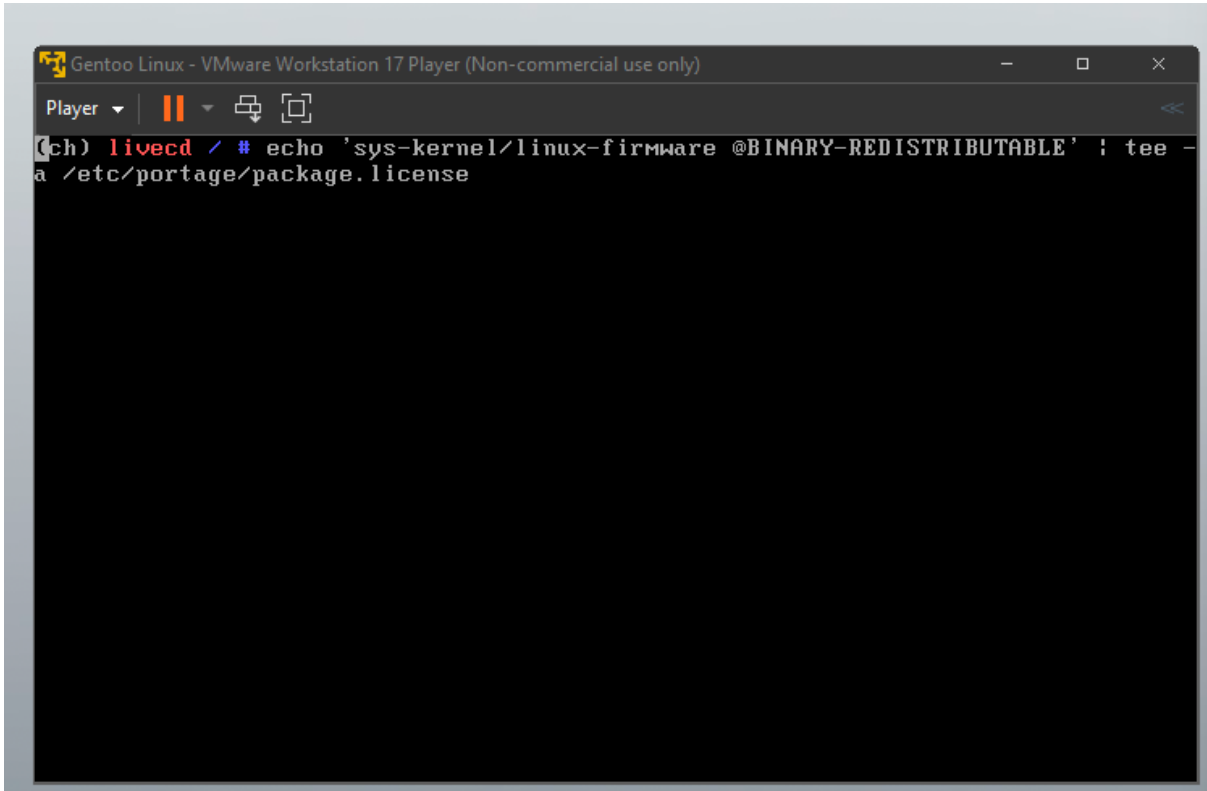
21- Then enter the locale.gen file and uncomment the UTF8 line on the second number at the options in the end.

```
(ch) livecd / # vim /etc/locale.gen
```

22- Then select the system-wide locale and update the environment

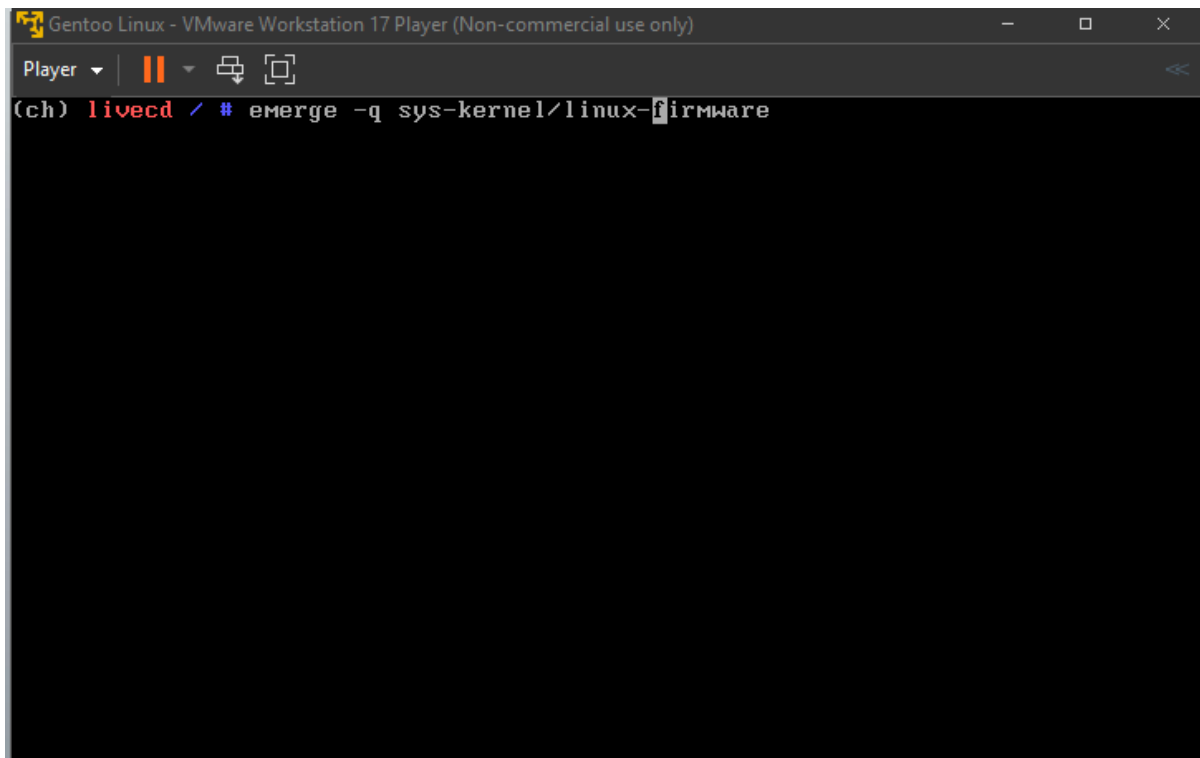
```
(ch) livecd / # eselect locale list
Available targets for the LANG variable:
[1]  C
[2]  C.utf8
[3]  POSIX
[4]  en_US.utf8
[5]  C.UTF8 *
[ ]  (free form)
(ch) livecd / # eselect locale set 4
Setting LANG to en_US.utf8 ...
Run ". /etc/profile" to update the variable in your shell.
(ch) livecd / # env-update && source /etc/profile && export PS1="(ch) $PS1"
>>> Regenerating /etc/ld.so.cache...
(ch) livecd / #
```

23- Now we are ready to install the Kernel. Write the following command first.



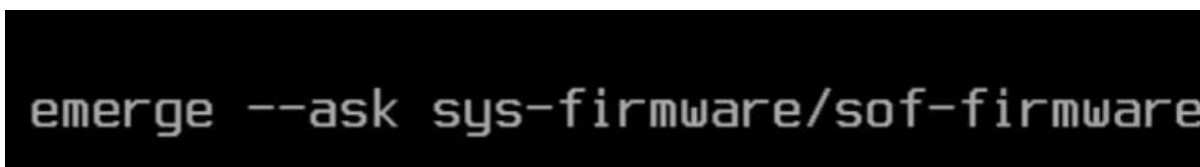
```
(ch) livecd / # echo 'sys-kernel/linux-firmware @BINARY-REDISTRIBUTABLE' ; tee -a /etc/portage/package.license
```


24- Now install the linux firmware and the system kernel



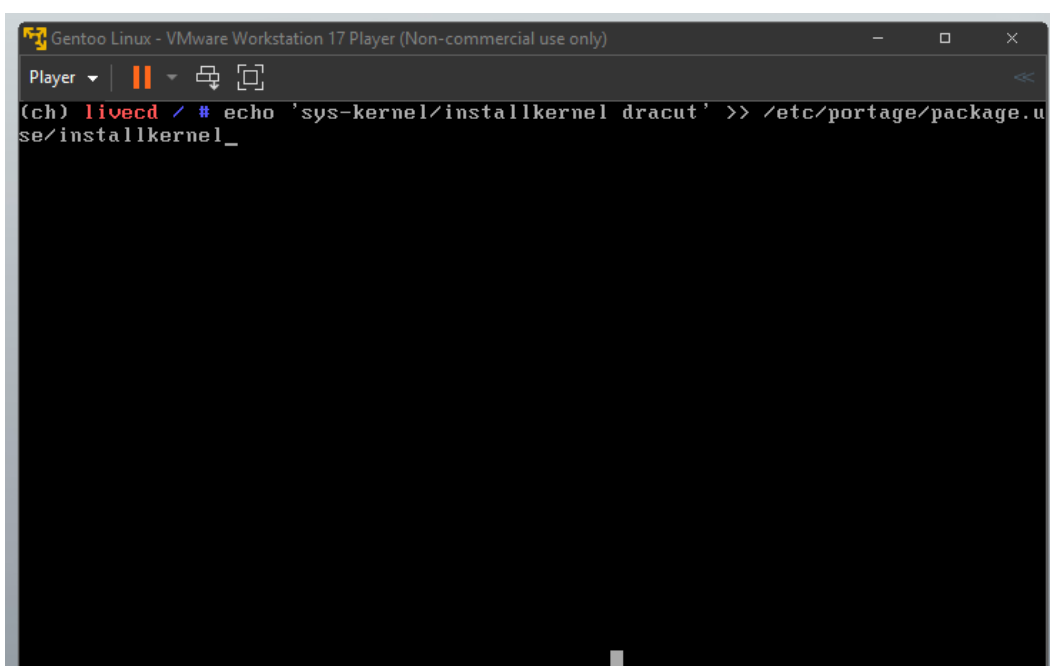
```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
(ch) livecd / # emerge -q sys-kernel/linux-firmware
```

25- Install SOF for sound drivers by this command.



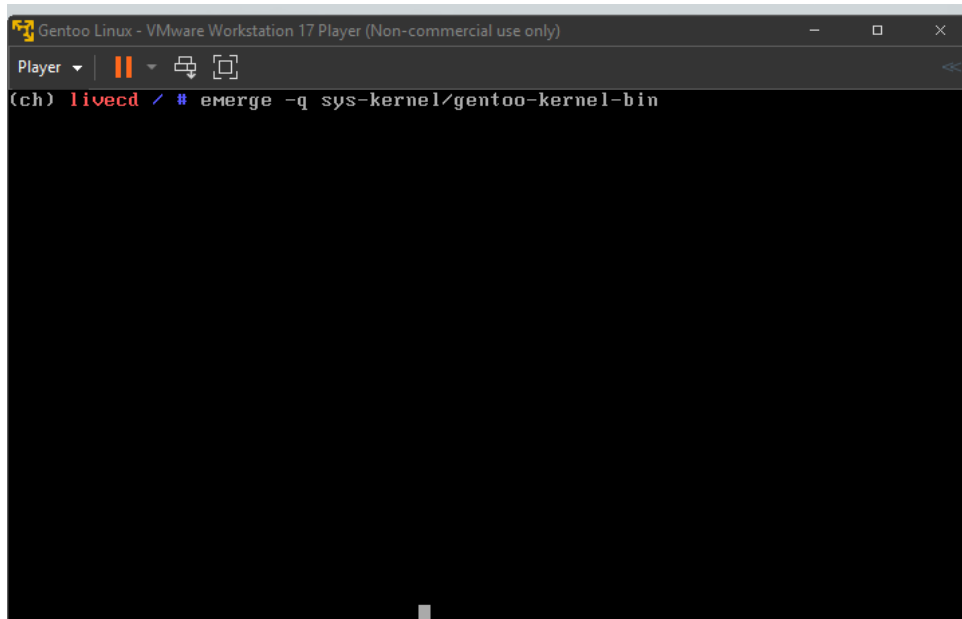
```
emerge --ask sys-firmware/sof-firmware
```

26- Then we install Dracut by putting Dracut in the package.use file



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
Player
(ch) livecd / # echo 'sys-kernel/installkernel dracut' >> /etc/portage/package.use/installkernel_
```

27- After that install the kernel by writing “emerge sys-kernel/installkernel” following with emerge -q sys-kernel/gentoo-kernel-bin



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
(ch) livecd / # emerge -q sys-kernel/gentoo-kernel-bin
```

28- Now you need to set your fstab file. I’ve done it using vim by calling vim /etc/fstab and writing the following at the end of the file

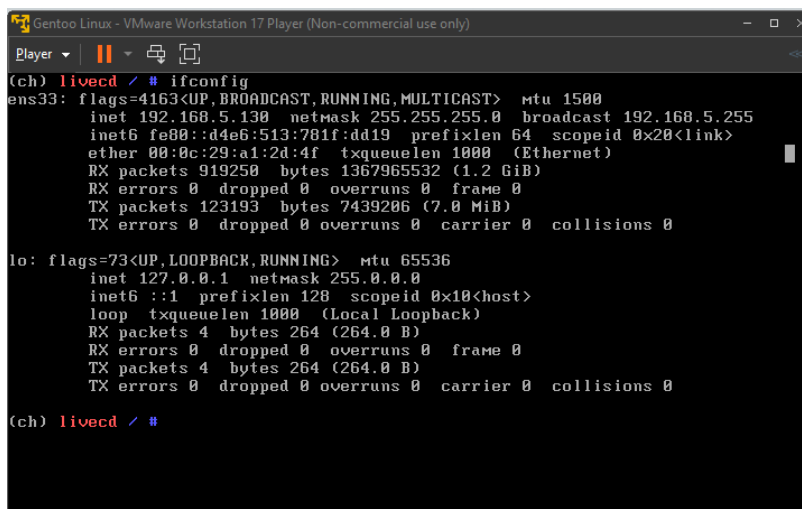
```
/dev/sda1      /boot/efi     vfat          defaults      0 2
/dev/sda2      none          swap          sw            0 0
/dev/sda3      /             ext4          noatime       0 1
```

29- Now set your hostname and change /etc/hosts according to the Gentoo Handbook. If you don’t change it, by default it is set to “localhost”. But I would recommend that you change it.

30- Now install dhcp and netifrc via the command

```
root # emerge --ask net-misc/dhcpd
root # emerge --ask net-misc/netifrc
```

31- Now write ifconfig and remember your config name. For my case it was ens33 and it can be changed for your case.



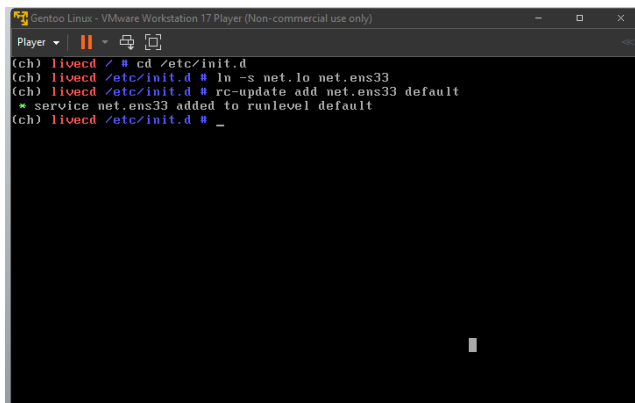
```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
(ch) livecd / # ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.5.130 netmask 255.255.255.0 broadcast 192.168.5.255
    inet6 fe80::d4e6:513:701f:dd19 prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:a1:2d:4f txqueuelen 1000 (Ethernet)
    RX packets 919250 bytes 1367965532 (1.2 GiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 123193 bytes 7439206 (7.0 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 4 bytes 264 (264.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4 bytes 264 (264.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

(ch) livecd / #
```

32- Now change your /etc/conf.d/net file and write config_ens33="dhcp"

33- Then add the networking at boot. Cd into /etc/init.d



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
(ch) livecd / # cd /etc/init.d
(ch) livecd /etc/init.d # ln -s net.lo net.ens33
(ch) livecd /etc/init.d # rc-update add net.ens33 default
* service net.ens33 added to runlevel default
(ch) livecd /etc/init.d # _
```

34- then write passwd and add a password for the root user.

35- Create a user for yourself using the command "useradd -m -G users,wheel,audio,video -s /bin/bash YOURPROFILENAME"

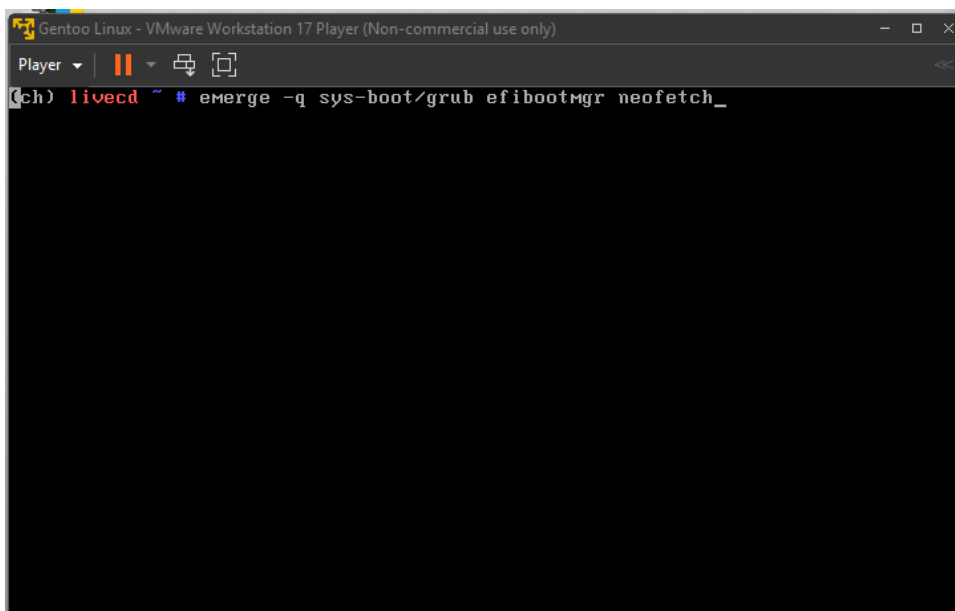
36- Then add passwd command again for your profile password which you will use.

37- Now install sudo by the command "emerge -q sudo". Add the command EDITOR=vim visudo and comment the line where it says "%wheel ALL = (ALL:ALL) ALL"

38- Then go to home directory by using cd and add the command below

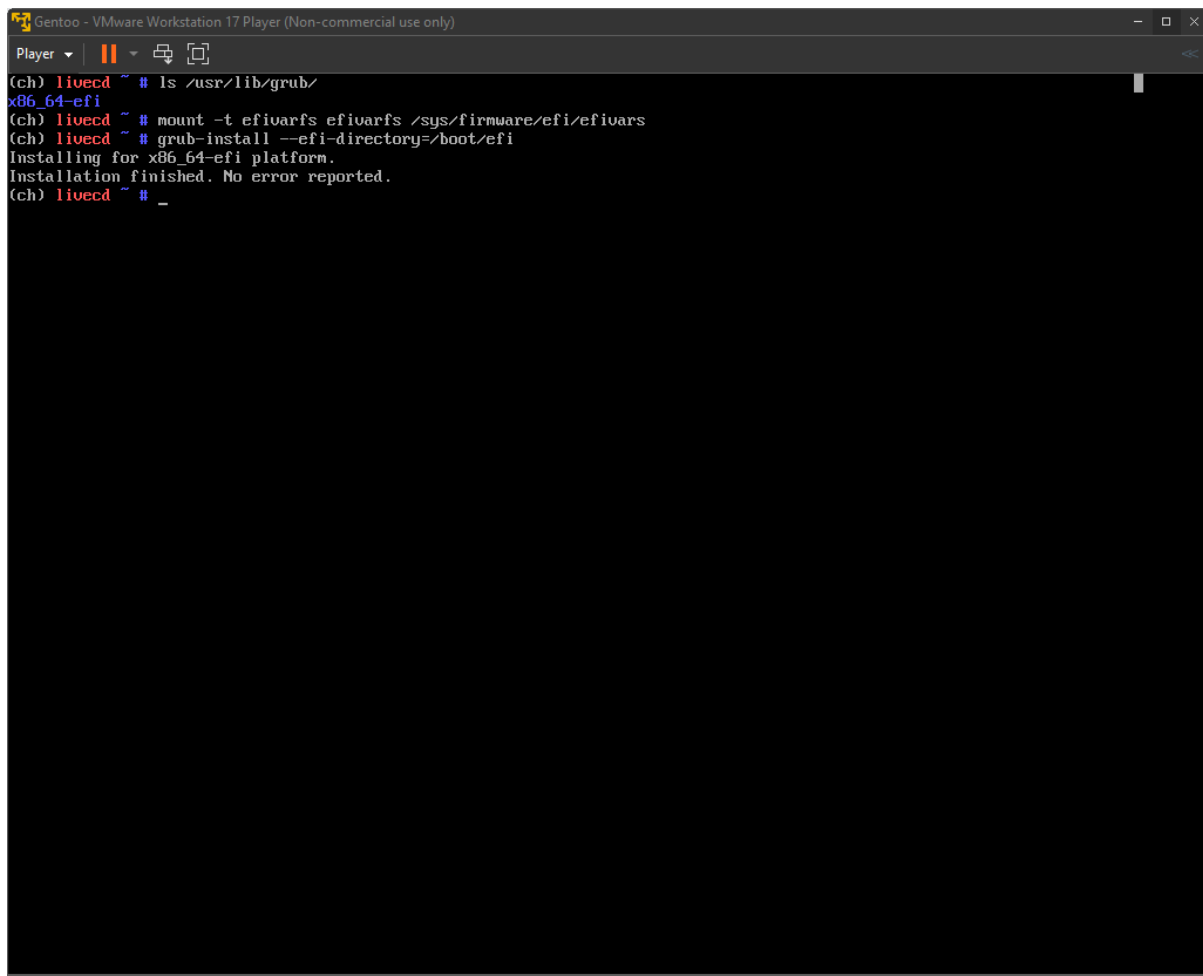
```
echo 'GRUB_PLATFORMS="efi-64"' >> /etc/portage/make.conf
```

39- Finally set up GRUB for installation



```
Gentoo Linux - VMware Workstation 17 Player (Non-commercial use only)
(ch) livecd ~ # emerge -q sys-boot/grub efibootmgr neofetch_
```

40- Now install GRUB



The screenshot shows a terminal window titled "Gentoo - VMware Workstation 17 Player (Non-commercial use only)". The terminal is running a livecd environment. The user has entered the following commands and received the following output:

```
(ch) livecd ~ # ls /usr/lib/grub/  
x86_64-efi  
(ch) livecd ~ # mount -t efivarfs efivarfs /sys/firmware/efi/efivars  
(ch) livecd ~ # grub-install --efi-directory=/boot/efi  
Installing for x86_64-efi platform.  
Installation finished. No error reported.  
(ch) livecd ~ # _
```

41- Then write the command `grub-mkconfig -o /boot/grub/grub.cfg`.

42- Now you are mostly there after we reboot the system all other options are optional.

43- Type "exit" to exit from chroot and cd to get to home directory and unmount your directories by writing `umount -R /mnt/gentoo`

44- Then type reboot and your Gentoo Linux is installed. Type in your username and password and you are logged in to Gentoo Linux.

```

Gentoo - VMware Workstation 17 Player (Non-commercial use only)
Player
* Setting system clock using the hardware clock [UTC] ... [ ok ]
* The binfmt-misc module needs to be loaded by the modules service or built in. [ ok ]
* Mounting misc binary format filesystem ... [ ok ]
* Loading custom binary format handlers ... [ ok ]
* Checking local filesystems ... [ ok ]
/dev/sda3: clean, 297523/1310720 files, 1504227/5242368 blocks [ ok ]
* Remounting root filesystem read/write ... [ ok ]
* Remounting filesystems ... [ ok ]
* Updating /etc/mtab ... [ ok ]
* Creating mtab symbolic link [ ok ]
* Activating swap devices ... [ ok ]
* Mounting local filesystems ... [ ok ]
* Configuring kernel parameters ... [ ok ]
* Creating user login records ... [ ok ]
* Wiping /tmp directory ... [ ok ]
* Setting hostname to gentoo-btu from /etc/conf.d/hostname ... [ ok ]
* Setting terminal encoding [UTF-8] ... [ ok ]
* Setting keyboard mode [UTF-8] ... [ ok ]
* Loading key mappings [us] ... [ ok ]
* Bringing up network interface lo ... [ ok ]
* Saving key mapping ... [ ok ]
* Saving terminal encoding ... [ ok ]
* Seeding random number generator ... [ ok ]
* Saving 256 bits of creditable seed for next boot [ ok ]
* Create Volatile Files and Directories ... [ ok ]
INIT: Entering runlevel: 3
* Bringing up interface ens33
* Caching network module dependencies
* dhcpd ...
* Running dhcpd ...
dhcpd-10.1.0 starting
DUID 00:01:00:01:2f:00:bf:8a:00:0c:29:85:54:fe
ens33: IADP 29:85:54:fe
ens33: soliciting a DHCP lease
ens33: offered 192.168.5.131 from 192.168.5.254
ens33: probing address 192.168.5.131/24
ens33: leased 192.168.5.131 for 1800 seconds
ens33: adding route to 192.168.5.0/24
ens33: adding default route via 192.168.5.2
* received address 192.168.5.131/24 [ ok ]
* Mounting network filesystems ... [ ok ]
* Starting local ... [ ok ]

This is gentoo-btu (Linux x86_64 6.12.16-gentoo-dist) 20:40:02

gentoo-btu login: Talha
Password:
Talha@gentoo-btu ~ $

```

45- All steps now are optional. Now you can add XORG

```

Talha@gentoo-btu ~ $ touch /etc/portage/package.use/xorg
touch: cannot touch '/etc/portage/package.use/xorg': Permission denied
Talha@gentoo-btu ~ $ sudo touch /etc/portage/package.use/xorg
As trust you have received the usual lecture from the local System
Administrator, it usually boils down to these three things:

#1) Respect the privacy of others.
#2) Think before you type.
#3) With great power comes great responsibility.

For security reasons, the password you type will not be visible.
Password:
Talha@gentoo-btu ~ $ sudo echo 'app-auth/passbase elogind' | sudo tee -a /etc/portage/package.use/xorg

```

46- Add optional dependencies for future package installation like git, Firefox, llvm, Video-ves

```

sudo echo 'media-libs/libglvnd X' | sudo tee -a /etc/portage/package.use/xorg
sudo echo 'net-wireless/wpa_supplicant dbus' | sudo tee -a /etc/portage/package.use/xorg

```

47- Add the optional packages from this command

```

sudo emerge --ask -q xorg-server x11-apps/xinit x11-apps/xrandr x11-drivers/xf86-video-vesa elogind dev-ucs/git

```

48- Now I've also added a Window Manager and Simple Terminal

```

Gentoo - VMware Workstation 17 Player (Non-commercial use only)
Player ▾  || 🔍 🔄
*
* Use `eselect fontconfig` to enable/disable then.
*
* Messages for package x11-terms/st-terminfo-0.9.2:
*
* Please run env-update and then source /etc/profile in any open shells
* to update terminfo settings. Relogin to update it for any new shells.
*
* Messages for package media-libs/fontconfig-2.15.0-r1:
*
* Please make fontconfig configuration changes using `eselect
* fontconfig`. Any changes made to /etc/fonts/fonts.conf will be
* overwritten. If you need to reset your configuration to upstream
* defaults, delete the directory /etc/fonts/conf.d/ and re-emerge
* fontconfig.
*
* (Note: Above message is only printed the first time package is
* installed. Please look at /usr/share/doc/fontconfig-2.15.0-r1/README.gentoo*
* for future reference)
*
* Messages for package x11-wm/dwm-6.5:
*
* Your configuration for x11-wm/dwm-6.5 has been saved in
* "/etc/portage/savedconfig/x11-wm/dwm-6.5" for your editing pleasure.
* You can edit these files by hand and remerge this package with
* USE=savedconfig to customise the configuration.
* You can rename this file/directory to one of the following for
* its configuration to apply to multiple versions:
* ${PORTAGE_CONFIGROOT}/etc/portage/savedconfig/
* ${CTARGET}${CHOST}${""}1/${CATEGORY}/${PF}${P}${PN}
*
* Messages for package x11-terms/st-0.9.2:
*
* Your configuration for x11-terms/st-0.9.2 has been saved in
* "/etc/portage/savedconfig/x11-terms/st-0.9.2" for your editing pleasure.
* You can edit these files by hand and remerge this package with
* USE=savedconfig to customise the configuration.
* You can rename this file/directory to one of the following for
* its configuration to apply to multiple versions:
* ${PORTAGE_CONFIGROOT}/etc/portage/savedconfig/
* ${CTARGET}${CHOST}${""}1/${CATEGORY}/${PF}${P}${PN}
* Please ensure a usable font is installed, like
*   media-fonts/corefonts
*   media-fonts/dejavu
*   media-fonts/uru-fonts
*
* IMPORTANT: 22 news items need reading for repository 'gentoo'.
* Use eselect news read to view new items.

Talha@gentoo-btu ~ $ sudo emerge -q dwm st

```

49- Finally when all is done add the obligatory most needed and most awaited NEOFETCH

[illegible]

50- Here you go, your Gentoo Linux is now installed. Now you can tweak all your things and add new things if needed. Like I added a Network Manager for my Gentoo Linux.

CHALLENGES

- 1- Firstly, the main challenge is to check if Gentoo is installing in BIOS mode or UEFI mode. One trick to check that is to write `ls /sys/firmware` at start. If it returns a folder structure you are in UEFI mode. If not, then you are in BIOS mode.
- 2- The second challenge is all the File editing and making Gentoo customized for your environment. Gentoo has a guide for each set of hardware. I've skipped this part in my guide but its optional. Following the above guide will do most of your work. Make sure to check online for each File edits if you are unsure on what to do. Gentoo forums is a great place for that. Core file edits that are required should be done carefully.
- 3- Gentoo installation is a single go process, so you cannot break it in half. Do it properly and do it in a single go.
- 4- During the optional part of installing the packages LLVM takes very long to install, you can install the binary packages for that to reduce the time drastically just add `-bin` at the end of the package. LLVM is used in Media players and Firefox.
- 5- Make sure to change the localhost in the networking section and add a user and password, because without it root access and virtual machine issues can be very annoying.
- 6- Make sure secure boot is off in the VMWare. Description given above.
- 7- For file editing, its highly recommended to learn VIM a little.

ADVANTAGES

- 1- Gentoo Linux is highly customizable and can work on the weakest of the devices using different approaches.
- 2- You can add Package binaries and customize them to your own need. Like I didn't install LLVM at start because it was a large package, but it didn't stop me from using Firefox.
- 3- Look and feel of Gentoo can be changed via codes and GitHub Designs which is extremely fun to play with.
- 4- You can install packages directly from source. You only understand it when you have worked on installing Gentoo Packages. Its a feature worthy of its own praise.

