

The Installation :

Download image and burn it to usbkey :

First goto to the [Download](#) page, the link is below under Important links. The page you see should look alike this.

GentooPlayer PC X86-64bit

Immagini senza grafica (headless):

[GentooPlayer64](#) <--- Sistemi BIOS e UEFI/BIOS COMPATIBILI <--- Agg. 06.01.19 **OpenRc**

[GentooPlayer64](#) <--- Sistemi UEFI <--- Agg. 06.01.19 **OpenRc**

[GentooPlayer64](#) <--- Sistemi BIOS e UEFI/BIOS COMPATIBILI <--- Agg. 06.01.19 **Systemd**

[GentooPlayer64](#) <--- Sistemi UEFI <--- Agg. 06.01.19 **Systemd**

Software installati: **logitechmediaserver** | **networkaudiod** | **squeezelite** | **squeezelite-R2** | **mpd** | **roon-bridge** | **roon-server** | **rtirq** | **HQPlayer Embedded** | **pf-kernel** | **rt-kernel**

Vari script di ottimizzazione/configurazione di sistema

Immagini con Xfce:

[GentooPlayer64](#) <--- Sistemi BIOS e UEFI/BIOS COMPATIBILI <--- Agg. 06.01.19 **OpenRc**

[GentooPlayer64](#) <--- Sistemi UEFI <--- Agg. 06.01.19 **OpenRc**

[GentooPlayer64](#) <--- Sistemi BIOS e UEFI/BIOS COMPATIBILI <--- Agg. 26.12.18 **Systemd** (test)

[GentooPlayer64](#) <--- Sistemi UEFI <--- Agg. 26.12.18 **Systemd** (test)

Software installati: **Stessi di sopra più HQplayer**

Select the image you want to install. This guide is for **systemd** but the installation should work for the different X86_64bit images.

Download the image. When this manual was created these were the two to choose from

[GentooPlayerXfce-systemd-BIOS-y.z-xxxxxx.img.xz](#) – for Xfce graphical installation

[GentooPlayer-systemd-BIOS-y.z-xxxxxx.img.xz](#) – Headless non graphical installation

Even if I had a fairly new PC'er I haven't any luck with the UEFI version. So I choose the BIOS version.

When the file is downloaded burn it to your Usbkey.

For linux :

Replace sdX with the name of your Usbkey this is normal sdb and never **sda**.

```
xzcat file.img.xz > /dev/sdX && sync
```

This takes some time. Grab a cup of coffee in the meantime.

NB : mine was **xzcat GentooPlayer-systemd-BIOS-1.3-190106.img.xz > /dev/sdb && sync**

Installation on your your PC :

Insert the usbkey into your PC and boot it. If you are running without any monitor connected try to login using these root credentials.

user : **root**

password : **gentooplayer**

```
ssh root@Your_Ip_Address
```

NB : As gentooplayer is configured to dhcp , you can properly see your ipaddress in your router.

If you where successful you should see this welcome screen.

```
GentooPlayer

4.19.5-rt-rt4-GP-ST-AU
-----
GentooPlayer | 23:55 | dom 06/01/2019
-----
v1.2 | Generic Device (x86_64)
-----
NULL | Rete non rilevata
-----
Support: https://www.nexthardware.com/forum/pc-top-software/90075-gentoplayer-easy-install.html
-----
home Return to this screen
cpu-info View information about the CPU
process-tool To change affinity-scheduler-nice-priority for a single application
irq-affinity To move the system IRQ (usb, rete, etc.) a specific CPU
rtirqconf To configure the priority of system processes (usb, network etc.)
system-commands Displays the list of COMMANDS related to the system and RT
players-commands View the list of COMMANDS related to the player/server
selectkernel Allows the choice between RT and PF kernels, and various configurations
ramsystem Copyng system to RAM
alsa-up Update alsa to the latest version
alsa-dw Install alsa version 1.0.29
gp-update To update Overlay and Script, give this command every now and then
-----
gp-menu Menu Viewer
-----
GentooPlayer-64 ~ #
```

Extremely important.

We're now ready to install the system , but first we need to resize the image. The easy way to do this is to just delete the partition.

If you haven't tried fdisk before, I'll include a screenshot of how it should be done.

```
GentooPlayer-64 ~ # fdisk /dev/sda

Welcome to fdisk (util-linux 2.32).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.


Comando (m per richiamare la guida): d
Numero della partizione (1-3, default 3): 3

Partition 3 has been deleted.

Comando (m per richiamare la guida): n
Partition type
   p   primary (2 primary, 0 extended, 2 free)
   e   extended (container for logical partitions)
Select (default p): p
Numero della partizione (3,4, default 3): 3
First sector (530432-60063743, default 530432):
Last sector, +sectors or +size{K,M,G,T,P} (530432-60063743, default 60063743):

Created a new partition 3 of type 'Linux' and of size 28,4 GiB.
Partition #3 contains a ext4 signature.

Do you want to remove the signature? [Y]es/[N]o: N

Comando (m per richiamare la guida): w

The partition table has been altered.
Syncing disks.

GentooPlayer-64 ~ # █
```

Now it's time to resize the whole filesystem.

you can see the command below **resize2fs /dev/sda3** below which does the trick

```
#resize2fs /dev/sda3

resize2fs 1.43.9 (8-Feb-2018)
Filesystem at /dev/sda3 is mounted on /; on-line resizing required
old_desc_blocks = 1, new_desc_blocks = 4
The filesystem on /dev/sda3 is now 7441664 (4k) blocks long.
```

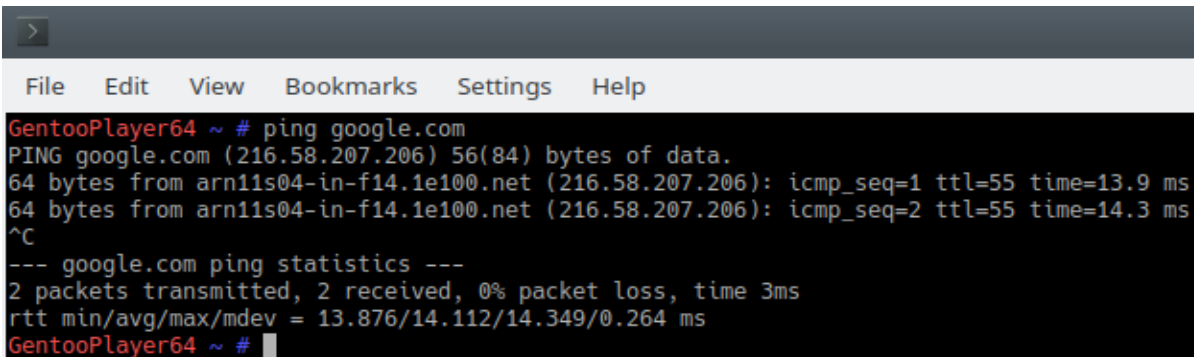
just to check that everything is fine run the following command **df -Bm**

```
#df -Bm
```

File system	1M-blocchi	Usati	Disponib.	Uso%	Montato su
udev	10M	1M	10M	1%	/dev
/dev/sda3	28485M	3239M	24023M	12%	/
tmpfs	3828M	0M	3828M	0%	/dev/shm
tmpfs	3828M	1M	3828M	1%	/run
tmpfs	3828M	0M	3828M	0%	/sys/fs/cgroup
tmpfs	3828M	0M	3828M	0%	/tmp
tmpfs	766M	0M	766M	0%	/run/user/0

If you have a similar output depending of your usbkey we are ready to configure the different settings.

Do the famous **ping google.com** test :



```
GentooPlayer64 ~ # ping google.com
PING google.com (216.58.207.206) 56(84) bytes of data:
64 bytes from arn11s04-in-f14.1e100.net (216.58.207.206): icmp_seq=1 ttl=55 time=13.9 ms
64 bytes from arn11s04-in-f14.1e100.net (216.58.207.206): icmp_seq=2 ttl=55 time=14.3 ms
^C
--- google.com ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 3ms
rtt min/avg/max/mdev = 13.876/14.112/14.349/0.264 ms
GentooPlayer64 ~ #
```

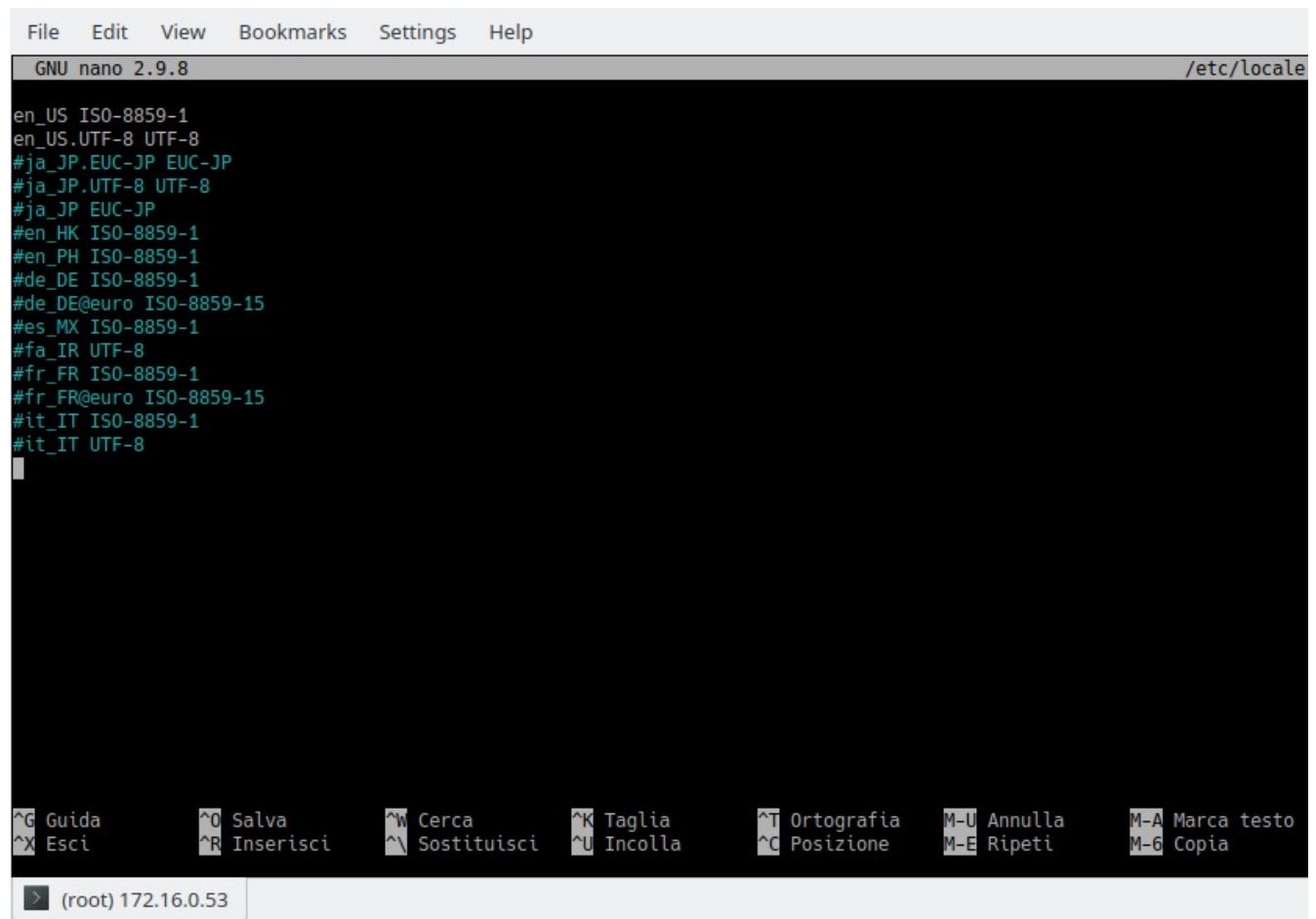
You're now ready to install the system.

Full System update : *Found this on the italian page, but it should work.*

```
#gp-update
#emerge-webrsync
#emerge --update --deep --with-bdeps=y --newuse @world
#emerge --depclean
#revdep-rebuild
```

Setup your keyboard and locale , we'll do it to english user.

#nano /etc/locale.gen



```
File Edit View Bookmarks Settings Help
GNU nano 2.9.8 /etc/locale

en_US ISO-8859-1
en_US.UTF-8 UTF-8
#ja_JP.EUC-JP EUC-JP
#ja_JP.UTF-8 UTF-8
#ja_JP EUC-JP
#en_HK ISO-8859-1
#en_PH ISO-8859-1
#de_DE ISO-8859-1
#de_DE@euro ISO-8859-15
#es_MX ISO-8859-1
#fa_IR UTF-8
#fr_FR ISO-8859-1
#fr_FR@euro ISO-8859-15
#it_IT ISO-8859-1
#it_IT UTF-8
^G Guida      ^O Salva      ^W Cerca      ^K Taglia      ^T Ortografia  M-U Annulla   M-A Marca testo
^X Esci      ^R Inserisci  ^N Sostituisci ^U Incolla     ^C Posizione   M-E Ripeti    M-6 Copia
> (root) 172.16.0.53
```

The run the following programs

```
locale-gen
localedef --list-archive
localectl set-locale LANG=en_US.utf8
localectl set-keymap us
localectl set-x11-keymap us
```

And after a reboot I was on english locale.

Setting up player example squeezelite-R2 :

run **sqconfig** it's very self explaining.
sqadd2 – adding it to system boot.

Check with **htop**

```
1 [
2 [
3 [
4 [
Mem[|||||
Swp[
```

PID	USER	PRI	NI	VIRT	RES	SHR	S	CPU%	MEM%	TIME+	Command
5187	squeezeli	20	0	36396	8128	2328	S	0.7	0.1	0:00.01	/usr/bin/squeezelite-R2 -C
5190	root	20	0	15492	3864	2860	R	0.0	0.0	0:00.19	htop
5153	squeezeli	20	0	23332	8388	2616	S	0.0	0.1	0:00.12	/usr/bin/squeezelite -C 1 -
5156	squeezeli	20	0	23332	8388	2616	S	0.0	0.1	0:00.03	/usr/bin/squeezelite -C 1 -
5184	squeezeli	20	0	36396	8128	2328	S	0.0	0.1	0:00.04	/usr/bin/squeezelite-R2 -C
1	root	20	0	46900	7164	5400	S	0.0	0.1	0:02.78	/usr/lib/systemd/systemd
3311	root	20	0	52608	8704	8180	S	0.0	0.1	0:00.30	/lib/systemd/systemd-journald
3874	root	20	0	56632	7436	4384	S	0.0	0.1	0:00.82	/lib/systemd/systemd-udev
4506	systemd-n	20	0	46804	3740	3304	S	0.0	0.0	0:00.07	/lib/systemd/systemd-networkd
4549	root	20	0	38384	4652	4116	S	0.0	0.1	0:00.07	/lib/systemd/systemd-logind
4565	messagebu	20	0	36812	3476	3040	S	0.0	0.0	0:00.05	/usr/bin/dbus-daemon --syst
4586	root	20	0	14736	2036	1884	S	0.0	0.0	0:00.00	/sbin/agetty -o -p -- \u --
4643	root	20	0	22140	3776	3380	S	0.0	0.0	0:00.01	/usr/sbin/sshd -D -e
4763	root	20	0	70916	5568	4836	S	0.0	0.1	0:00.06	sshd: root@pts/0
4767	root	20	0	45912	5668	4900	S	0.0	0.1	0:00.02	/lib/systemd/systemd --user
4768	root	20	0	67764	1588	16	S	0.0	0.0	0:00.00	(sd-pam)
4772	root	20	0	14480	4020	3228	S	0.0	0.1	0:00.05	-bash
5154	squeezeli	20	0	23332	8388	2616	S	0.0	0.1	0:00.02	/usr/bin/squeezelite -C 1 -
5155	squeezeli	20	0	23332	8388	2616	S	0.0	0.1	0:00.02	/usr/bin/squeezelite -C 1 -
5161	mpd	20	0	213M	13340	11740	S	0.0	0.2	0:00.00	/usr/bin/mpd --no-daemon
5162	mpd	-51	0	213M	13340	11740	S	0.0	0.2	0:00.00	/usr/bin/mpd --no-daemon
5160	mpd	20	0	213M	13340	11740	S	0.0	0.2	0:00.07	/usr/bin/mpd --no-daemon
5185	squeezeli	20	0	36396	8128	2328	S	0.0	0.1	0:00.00	/usr/bin/squeezelite-R2 -C
5186	squeezeli	20	0	36396	8128	2328	S	0.0	0.1	0:00.00	/usr/bin/squeezelite-R2 -C

```
F1Help F2Setup F3Search F4Filter F5Tree F6SortBy F7Nice - F8Nice + F9Kill F10Quit
```

If you are only going to use squeezelite-R2 and not the other ones, just remove them from boot.

sqremove
mpdremove

After a reboot only your favorite player is running.

```

1 [ 0.0%] Tasks: 14, 3 thr; 1 running
2 [ 0.0%] Load average: 1.21 0.69 0.27
3 [ 0.0%] Uptime: 00:01:36
4 [ 0.0%]
Mem[||||] 108M/7.48G
Swp[ ] 0K/0K

```

PID	USER	PRI	NI	VIRT	RES	SHR	S	CPU%	MEM%	TIME+	Command
4880	root	20	0	15492	3812	2780	R	0.0	0.0	0:00.26	htop
4881	squeezeli	20	0	36396	8124	2328	S	0.0	0.1	0:00.05	/usr/bin/squeezelite-R2 -C 1 -D -o hw:CARD=D2Qute,DEV=0 -r 44100 384000 -a 49
1	root	20	0	46668	6804	5312	S	0.0	0.1	0:01.98	/usr/lib/systemd/systemd
3328	root	20	0	52608	9056	8524	S	0.0	0.1	0:00.29	/lib/systemd/systemd-journald
3883	root	20	0	55796	6560	4204	S	0.0	0.1	0:00.52	/lib/systemd/systemd-udev
4570	systemd-n	20	0	46804	3864	3432	S	0.0	0.0	0:00.05	/lib/systemd/systemd-networkd
4747	root	20	0	38252	4624	4104	S	0.0	0.1	0:00.03	/lib/systemd/systemd-logind
4750	messagebu	20	0	36812	3444	3008	S	0.0	0.0	0:00.01	/usr/bin/dbus-daemon --system --address=systemd: --nofork --nopidfile --system
4775	root	20	0	14736	2056	1900	S	0.0	0.0	0:00.00	/sbin/agetty -o -p -- \u --noclear tty1 linux
4776	root	20	0	22140	3828	3432	S	0.0	0.0	0:00.00	/usr/sbin/sshd -D -e
4778	root	20	0	70916	5680	4944	S	0.0	0.1	0:00.01	sshd: root@pts/0
4782	root	20	0	45908	5696	4924	S	0.0	0.1	0:00.02	/lib/systemd/systemd --user
4783	root	20	0	67908	1616	24	S	0.0	0.0	0:00.00	(sd-pam)
4787	root	20	0	14360	3832	3220	S	0.0	0.0	0:00.01	-bash
4883	squeezeli	20	0	36396	8124	2328	S	0.0	0.1	0:00.00	/usr/bin/squeezelite-R2 -C 1 -D -o hw:CARD=D2Qute,DEV=0 -r 44100 384000 -a 49
4884	squeezeli	20	0	36396	8124	2328	S	0.0	0.1	0:00.00	/usr/bin/squeezelite-R2 -C 1 -D -o hw:CARD=D2Qute,DEV=0 -r 44100 384000 -a 49
4885	squeezeli	20	0	36396	8124	2328	S	0.0	0.1	0:00.00	/usr/bin/squeezelite-R2 -C 1 -D -o hw:CARD=D2Qute,DEV=0 -r 44100 384000 -a 49

Ramsystem :

Is quite self explaining too, but this it what I'm doing.

Save to Ramdisk and reboot in RAM – press 3,8,9 – and just confirm.

It takes a little while the first time, afterwards it's quite fast.

When you boot into ramsystem, It takes a little while before we actually are running in ram. Be a little patience and check by tying **home** . If we are running in ram you'll get this output.

[illegible]

Back to Normal mode – load **ramsystem** and press **10** , and confirm it.

Important links :

GentooPlayer italian site here [Italian Site](#)
GentooPlayer download x86_64 [Download](#)