

# GentooInstall

## Gentoo linux

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가

(

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### Gentoo handbook

## 1.1

가 Gentoo

Gentoo linux

Linux

Gentoo

Linux

IRC

IRC

#gentoo

#gentoo

PC가

가

2~3

1

가

## 1.2

### 1.2.1

Gentoo linux home page ( )

[view](#)

Gentoo linux user group ( )

[view](#)

Gentoo linux 2004.1 handbook ( )

[view](#)

Gentoo linux ?LiveCD 1.4 (x86) ISO download

[download](#)

USE ( )

[view](#)

portage ( )

[view](#)

Linux Repository, including kernel source

[download](#)

[view](#)

1.4 ( )

[view](#)

FAQ

[view](#)

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- [view](#)
- [view](#)
- [view](#)
- [view](#)

가

가

1.0 Init System

USE

Env.d HOWTO

Nano Basics Guide

Gentoo Oracle 가

Linux from scratch (LFS)

### 1.2.2 가 #

- 
- emerge portage ( emerge
- ebuild emerge
- rc-update ntsysv
- env-update /etc/env.d /etc/profile.env
- net-setup Network
- adsl-setup, adsl-start, adsl-stop, adsl-connect ADSL
- genkernel gentoo kernel . ( )
- w3m X가 ... ( links
- [cdrecord](#) CD burning
- qpkg .)
- chroot
- fdisk

### 1.2.3 #

- CD **livecd**

1. <http://ftp.gentoo.or.kr/releases/x86/2004.1/livecd/install-x86-minimal-2004.1.iso> : livecd x86 ( 가 CD)
2. <http://ftp.gentoo.or.kr/releases/x86/2004.1/stages/x86/stage1-x86-2004.1.tar.bz2> : Stage 1
3. <http://ftp.gentoo.or.kr/releases/x86/2004.1/stages/x86/stage2-x86-2004.1.tar.bz2> : Stage 2
4. <http://ftp.gentoo.or.kr/releases/x86/2004.1/stages/x86/stage3-x86-2004.1.tar.bz2> : Stage 3

- stage 3 stage 2가 stage 2 stage 1 stage 3
- stage 1 stage 2 가 stage 3
- 1 stage 3 stage 1 stage 3 **make.conf**

### 1.3 #

#### 1.3.1 Live CD #

- [LiveCD](#) ISO image . 82MByte mirror가 10

1. [Stage 1](#) / [Stage 2](#) / [Stage 3](#)

- CD 1
- ISO CD [LiveCD](#)가 Windows . ( CD )

```
cdrecord -v -eject speed=4 dev=0,0,0 install-x86-minimal-2004.1.iso
```

- CD가 CD

#### 1.3.2 Network #

- Gentoo linux 가 Gentoo mirror Network 가
- adsl **net-setup** **adsl-setup** adsl network
- IP IP(dhcp)

```
livecd gentoo # net-setup eth0
```

• **adsl**

**adsl ID, Password, DNS**

```
livecd gentoo # adsl-setup
... /* ADSL ID, Password, DNS (STANDALONE) */
livecd gentoo # adsl-start
..Connected!
livecd gentoo #
```

• **"/etc/resolv.conf"**

**nameserver**

• **Gentoo 2004.1**

**NIC가**  
2004.0

가

가

2004.1

NIC가

가

2004.0

2004.0

2004.1

2004.1

가

**2004.0**



2004.1

**1.3.3 Root**

(

)#

• **Gentoo 1.4**

2004.0

sshd

```
.)
```

```
livecd gentoo # passwd root
New UNIX password: xxxxxxxx
Retype new UNIX password : xxxxxxxx
```

• **sshd**

```
livecd gentoo # /etc/init.d/sshd start
...
* Generating RSA-Hostkey... [ ok ]
...
* Starting sshd... [ ok ]
```

"ssh root@< 가 가 >"

• **ssh** "~/.ssh"

"known\_hosts"

**1.3.4** #

```
.)
```

```
cdimage root # /sbin/fdisk -l
```

```
Disk /dev/hda: 30.0 GB, 30005821440 bytes
255 heads, 63 sectors/track, 3648 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
```

Device	Boot	Start	End	Blocks	Id	System	
/dev/hda1	*	1	13	104391	83	Linux	100MByte
/dev/hda2		14	1058	8393962+	83	Linux	8GByte
/dev/hda3		1059	3614	20531070	83	Linux	20GByte
/dev/hda4		3615	3648	273105	82	Linux swap	256MByte

```
• /dev/hda1="/boot", /dev/hda2="/backup", /dev/hda3="/", /dev/hda4="swap"
```

```
cdimage root # mke2fs -j /dev/hda1 ; mke2fs -j /dev/hda2 ; mke2fs -j /dev/hda3
cdimage root # mkswap /dev/hda4 ; swapon /dev/hda4
```

• **ext2** **ext3** **mke2fs** **"-j"**

• **"/mnt/gentoo"** **mount**

```
cdimage root # mount /dev/hda3 /mnt/gentoo
cdimage root # mkdir /mnt/gentoo/boot
cdimage root # mount /dev/hda1 /mnt/gentoo/boot
cdimage root # cd /mnt/gentoo
```

• **stage1** **package** **"/mnt/gentoo"**

```
livecd gentoo # cd /mnt/gentoo
livecd gentoo # wget http://ftp.gentoo.or.kr/releases/x86/2004.1/stages/x86/stage1-x86-:
...
livecd gentoo # tar -xvzf stage1-x86-2004.1.tar.bz2
...
```

• **Stage1** **package** **proc** **proc** **mount**

```
livecd gentoo # mount -t proc proc /mnt/gentoo/proc
```

• **swap** **MByte** **2** **가 256?**

**1.4 Mirror** #

• **mirror** **Gentoo linux** **mirror** **package**

**mirror가**

```
cdimage root # mirrorselect -i -o >> /mnt/gentoo/etc/make.conf
```

- Network mirror . ( )
- mirror http://ftp.gentoo.or.kr

### 1.4.1 chroot #

- chroot "/"

```
cdimage root # cp /etc/resolv.conf /mnt/gentoo/etc/resolv.conf
cdimage root # chroot /mnt/gentoo /bin/bash
cdimage / # env-update
cdimage / # source /etc/profile
```

- "/mnt/gentoo" "/"

### 1.4.2 Portage #

- Gentoo portage portage

```
cdimage / # emerge sync
```

- . ( 30 1 )

### 1.4.3 #

- Gentoo "/etc/make.conf" vi
- "nano" vi
- chroot vi가 vi
- "ALT + F2" console
- "/mnt/gentoo/etc/make.conf"

```
CHOST="i686-pc-linux-gnu"
CFLAGS="-O2 -mcpu=i686 -fomit-frame-pointer -pipe"
CXXFLAGS="-O2 -mcpu=i686 -fomit-frame-pointer -pipe"
GENTOO-MIRRORS="http://ftp.gentoo.or.kr/"
```

- -fomit-frame-pointer package inline package
- assembly가 package package
- 가 package
- ( Hacking tool tool 가
- !)

### 1.4.4 Boot strap #

- binutils, gcc, gettext, glibc "emerge sync" script가 가
- stage 3 "emerge system"

```
cdimage / # cd /usr/portage
cdimage / # scripts/bootstrap.sh
cdimage / # source /etc/profile /* bootstrap
```

- : ! bootstrap "emerge system"

? 가 system

```
cdimage / # cd /usr/portage
cdimage / # scripts/bootstrap.sh ; source /etc/profile ; emerge system
```

### 1.4.5 System #

- Gentoo build

```
cdimage / # emerge system
```

- . ( 12 )

### 1.4.6 #

- GMT

```
cdimage / # ln -sf /usr/share/zoneinfo/Asia/Seoul /etc/localtime
```

### 1.4.7 fstab #

- mount fstab mount
- | # <fs>                       | <mountpoint> | <type>  | <opts>    | <dump/pass> |
|------------------------------|--------------|---------|-----------|-------------|
| /dev/hda1                    | /boot        | ext3    | noatime   | 1 1         |
| /dev/hda2                    | /storage     | ext3    | noatime   | 0 0         |
| /dev/hda3                    | /            | ext3    | noatime   | 0 0         |
| /dev/hda4                    | none         | swap    | sw        | 0 0         |
| /dev/cdroms/cdrom0/mnt/cdrom |              | iso9660 | noauto,ro | 0 0         |



```
cdimage / # emerge sys-apps/pcmcia-cs
cdimage / # rc-update add pcmcia default
```

**1.4.11.3 vim #**

```
cdimage / # emerge vim
```

**1.4.11.4 cvs #**

```
cdimage / # emerge cvs
```

**1.4.12 가 #**

- root root
- : livecd
- !

```
cdimage / # passwd
```

- 가

```
cdimage / # adduser {MyUser} -m -d /home/{MyUser} -G users,wheel,audio -s /bin/bash
cdimage / # passwd {MyUser}
```

**1.4.13 #**

- 
- cdimage / # echo {My PC name} > /etc/hostname
- cdimage / # echo {My domainname.com} > /etc/dnsdomainname /\* hostna
- cdimage / # echo {My nis.domainname.com} > /etc/nisdomainname /\* hostna

**1.4.14 Network #**

- network IP . "/etc/conf.d/net"
- (adsl adsl-setup
- adsl-start .)
- network script가

```
cdimage / # rc-update add net.eth0 default /* eth0 가
```

**1.4.15 autoload #**

- module 가
- "/etc/modules.autoload.d/kernel-2.x"

```
module
Ethernet driver module .o( .ko) e100.o( 2.6 e100.ko)
```

```
# This is assuming that you are using a 3com card.
# Check /lib/modules/<kernel version>/kernel/drivers/net for your card.
# 3c59x
e100
```

**1.4.16 Bootloader #**

- lilo loader lilo grub
- cdimage / # emerge -p grub /\* Grub \*/
- cdimage / # emerge -p lilo /\* Lilo가 \*/
- cdimage / # emerge lilo /\* lilo가 lilo \*/

- lilo "/etc/lilo.conf"
- grub "/boot/grub/grub.conf"

```
# Start LILO global section
boot=/dev/hda
map=/boot/map
install=/boot/boot.b
prompt
timeout=50
lba32
default=linux
```

```
#Linux section
image=/boot/bzImage-2.6.4
label=linux
read-only
root=/dev/hda3
```

```
#/dev/hda1 Windows
```

```
#Windows section
other=/dev/hda1
label=dos
```

```
# End of lilo.conf
```

- lilo (grub grub ?)

**1.4.17 #**

- ) (
- .

```
cdimage / # etc-update
cdimage / # exit
cdimage / # cd /
cdimage / # umount /mnt/gentoo/boot
cdimage / # umount /mnt/gentoo/proc
cdimage / # umount /mnt/gentoo
cdimage / # reboot
```

- [?LiveCD](#)

### 1.4.18 가 portage #

- X [?LiveCD](#)

#### chroot

##### 1.4.18.1 Gnome #

- Linux GUI가 가 가 Gnome

- "gtk2" USE 가

```
USE="X gtk2 gnome -qt -kde"
```

- KDE QT USE "-qt -kde" 가 KDE

- "-gpm" USE

- "USE" "emerge gnome" (KDE "emerge kde")

- gnome mozilla 가

- libgnomeprintui 가
  - mkdir /var/tmp/portage/fontconfig-2.2.1/image ln -
  - s /usr /var/tmp/portage/fontconfig-2.2.1/image/usr
  - emerge gnome

- gentoo X가 X
  - "/etc/X11/gdm/gdm.conf" "emerge gdm" "/etc/rc.conf" gdm
  - gdm "XSESSION=Gnome"

xdm

```
cdimage / # rc-update add xdm default
```

- X ["/etc/X11?/XF86Config"](#) [XFree86](#) 가
- ["/root/?XF86Config.configure"](#) [?XFree가](#)

```
cdimage / # /usr/X11R6/bin/XFree86 -configure
...
cdimage / # mv /etc/X11/XF86Config /etc/X11/XF86Config.backup
cdimage / # cp /root/XF86Config.configure /etc/X11/XF86Config
```

### 1.4.18.2 #

- krisna " " (nabi)

```
cdimage / # emerge nabi
```

- nabi [/etc/env.d/00basic](#)
- update ["/etc/env.d/00base"](#) 가
- ["/etc/env.d/02useretc"](#) ( ) update 가

```
#
LANG="ko_KR.euckr"
# ko_KR.euckr:ko_KR:ko:en_US:en
SUPPORTED="ko_KR.euckr:ko_KR:ko"
SYSFONT="lat0-sun16"
SYSFONTACM="iso01"
```

```
# nabi - !
XMODIFIERS="@im=nabi"
XIM_PROGRAM=/usr/bin/nabi
```

- [/etc/env.d/00basic](#) [/etc/profile.env](#)

```
cdimage / # env-update
```

- gnome " " " " 가
- " 가 gnome ["/usr/bin/nabi"](#) 가

### 1.4.18.3 #

- X 가 ( ? )

Windows

"/usr/share/fonts/ttf/korean/ms"

- "/usr/share/fonts/"  
fc-cache

- AA 가 Xft(Fontconfig)  
(Gnome2.x, KDE3.x, Xfce4...)

"~/.fonts"  
~/.fonts.conf - mattengi

- [Fonts in XFree86](#)
- [Fontconfig](#)
- [\(GPL\)](#)

- X font server service "rc-update add xfs default"  
"fc-cache"

1.4.18.4 mplayer #

- mp3 " " "XMMS"

- 가 pmp3 [pmp3](#) ~  
=3=33

- mplayer!

" " "  
~/.mplayer/config  
mplayer  
, mplayer  
mplayer

<http://www1.mplayerhq.hu/MPlayer/contrib/fonts/korean> - dotum20 가  
)

```
font={mplayer }/font.desc
# UTF
subcp=ko-kr
unicode=1
```

- mplayer "/usr/share/mplayer/fonts"

- "~/.mplayer/config"  
가 ( )  
"/etc/mplayer.conf"

- xine 가  
"emerge xine-lib;emerge xine-ui"

- mplayer Mozilla plugin [portage](#)

1.4.18.5 CD-RW cdrecord #

- CD-RW "emerge cdrtools" "cdrecord"

1.4.18.6 #

- 

1.4.18.7 FTP server #

```
cdimage / # emerge proftpd
cdimage / # cp /etc/proftpd/proftpd.conf.sample /etc/proftpd/proftpd.conf
/* "/etc/proftpd/proftpd.conf" */
cdimage / # rc-update add proftpd default
cdimage / # /etc/init.d/proftpd start
```

1.4.18.8 가 #

```
bash # emerge nmap /* */
bash # emerge valgrind /* Memory leak */
bash # emerge rpm /* RedHat RPM Source rpm */
bash # emerge unzip /* ZIP */
bash # emerge unrar /* RAR */
bash # emerge unlzh /* LZH */
bash # emerge telnet-bsd /* Telnet client */
bash # emerge ltrace /* Library */
bash # emerge strace /* / */
bash # emerge upx /* */
bash # emerge gentoolkit /* */
```

1.5 Gentoo linux Stage3 #

- Stage 3 Stage 1 Stage 3 bootstrap  
Stage 1 Stage 3  
Stage 1 tar.bz2 /mnt/gentoo Stage 3  
kernel , bootstrap  
/etc/  
"emerge sync"

1.6 FAQ #

- Q: X ?  
o A: /etc/rc.conf "rc-update add



- Q: xdm default t" xdm ?
  - A: "emerge -C <portage >" 가
- Q: service service
  - A: service "rc-status"
    - service "rc-
- Q: update show" man page 가
  - A1: UTF-8 "LC\_CTYPE=utf-8"
    - ,"/etc/env.d/00basic" LC\_CTYPE="utf-8" 가
    - "env-update" "source /etc/profile"
  - A2: LANG 가 ko\_KR.euckr
    - LESSCHARSET="iso8859" "/etc/env.d/00basic"
- Q: ("synaptics") ?XFree가
  - 가 가( 5 +) 가
  - ? 가
  - A: "/etc/X11?/XF86Config"
    - (Download driver (HOWTO))

```
Section "InputDevice"
# Identifier "Mouse0"
# Driver "mouse"
# Option "Protocol" "PS/2"
# Option "Edges" "1900 5400 1900 4000"
# Option "Finger" "25 30"
# Option "MaxTapTime" "180"
# Option "MaxTapMove" "220"
# Option "VertScrollDelta" "100"
# Option "MinSpeed" "0.02"
# Option "MaxSpeed" "0.18"
# Option "AccelFactor" "0.0010"
# Option "ZAxisMapping" "4 5"
# Option "Device" "/dev/mouse"
# Option "Emulate3Buttons" "true"
# Option "Emulate3Timeout" "70"
```

```
Driver "synaptics"
Identifier "Mouse0"
Option "Device" "/dev/psaux"
Option "Protocol" "PS/2"
Option "LeftEdge" "1900"
Option "RightEdge" "5400"
Option "TopEdge" "1900"
Option "BottomEdge" "4000"
Option "FingerLow" "25"
Option "FingerHigh" "30"
Option "MaxTapTime" "180"
Option "MaxTapMove" "220"
Option "VertScrollDelta" "100"
Option "MinSpeed" "0.02"
```

```
Option "MaxSpeed" "0.18"
Option "AccelFactor" "0.0010"
Option "SHMConfig" "on"
# Option "Repeater" "/dev/ps2mouse"
EndSection
```

- Q: package ?
  - A: "emerge -f <portage >"(fetchonly)
    - "/usr/portage/distfiles"
- Q: (Screen capture) 가 ?
  - A: "?PrintScrn"
    - "Alt + ?PrintScrn"
- Q: 가
  - A: "/usr/portage/distfiles"
    - ! .)
- Q: ?
  - A1: portage "emerge sync"
    - "emerge rsync" . portage update가 "emerge -u world"
    - 가
- Q: ?
  - A: 1.2?GByte
    - 20G 18G가
    - 1.0?GByte 가 (X )
- Q: gentoo gdesklets ? "emerge" mask
  - A: gdesklets emerge
    1. "ACCEPT\_KEYWORDS=~x86" emerge gdesklets-core"
    2. "/usr/portage/x11-plugins/desklets-\*"
      - 가
    3. "/usr/bin/gdesklets"
    4. .
    5. "/usr/share/gdesklets/Display"
    6. desklet-meminfo
      - "usr/share/gdesklets/Displays/meminfo/dark-the"
      - "gdesklets meminfo.display"
    7. meminfo
    8. . ( )
- Q: Apache 2 ?PHP4 PHP가
  - A:
    1. "emerge apache" ( Apache 2 가 .)
    2. "emerge mod\_php"
    3. apache "/etc/conf.d/apache2" 가



가 . 2004.1 stage 3  
가 .  
..... --