

Overview

First let me say I DON RECOMMEND THIS DEVICE! I bought the first one in February 2013 and today 1st of July is my 3rd device! Yes it died twice already! Before I used SSD to install xbmcbuntu on it (yes lazyness ...) now I'll try on an SDXC 64GB card and... Archlinux.

The purpose is to have a Home Theater PC to play music and videos directly on the TV.



Fix Me!

Since there's no way to boot on SD card reader ... I have to reinstall it on hard drive later

Outpu of lspci

```
00:00.0 Host bridge: Intel Corporation 2nd Generation Core Processor Family DRAM Controller (rev 09)
00:01.0 PCI bridge: Intel Corporation Xeon E3-1200/2nd Generation Core Processor Family PCI Express Root Port (rev 09)
00:16.0 Communication controller: Intel Corporation 7 Series/C210 Series Chipset Family MEI Controller #1 (rev 04)
00:1a.0 USB controller: Intel Corporation 7 Series/C210 Series Chipset Family USB Enhanced Host Controller #2 (rev 04)
00:1b.0 Audio device: Intel Corporation 7 Series/C210 Series Chipset Family High Definition Audio Controller (rev 04)
00:1c.0 PCI bridge: Intel Corporation 7 Series/C210 Series Chipset Family PCI Express Root Port 1 (rev c4)
00:1c.1 PCI bridge: Intel Corporation 7 Series/C210 Series Chipset Family PCI Express Root Port 2 (rev c4)
00:1c.2 PCI bridge: Intel Corporation 7 Series/C210 Series Chipset Family PCI Express Root Port 3 (rev c4)
00:1c.3 PCI bridge: Intel Corporation 7 Series/C210 Series Chipset Family PCI Express Root Port 4 (rev c4)
00:1d.0 USB controller: Intel Corporation 7 Series/C210 Series Chipset Family USB Enhanced Host Controller #1 (rev 04)
00:1f.0 ISA bridge: Intel Corporation 7 Series Chipset Family LPC Controller (rev 04)
00:1f.2 SATA controller: Intel Corporation 7 Series Chipset Family 6-port SATA Controller [AHCI mode] (rev 04)
00:1f.3 SMBus: Intel Corporation 7 Series/C210 Series Chipset Family SMBus Controller (rev 04)
01:00.0 VGA compatible controller: NVIDIA Corporation GF119 [GeForce GT 610] (rev a1)
01:00.1 Audio device: NVIDIA Corporation GF119 HDMI Audio Controller (rev a1)
02:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168 PCI Express Gigabit Ethernet controller (rev 06)
03:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168 PCI Express Gigabit Ethernet controller (rev 06)
04:00.0 USB controller: Renesas Technology Corp. uPD720202 USB 3.0 Host Controller (rev 02)
```

05:00.0 Network controller: Intel Corporation Centrino Wireless-N 135 (rev c4)

lsusb

Bus 001 Device 002: ID 8087:0024 Intel Corp. Integrated Rate Matching Hub
Bus 004 Device 002: ID 8087:0024 Intel Corp. Integrated Rate Matching Hub
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 003 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 004 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 001 Device 003: ID 090c:1000 Silicon Motion, Inc. - Taiwan (formerly Feiya Technology Corp.) Flash Drive
Bus 001 Device 004: ID 0bda:0129 Realtek Semiconductor Corp. RTS5129 Card Reader Controller
Bus 004 Device 003: ID 8087:07da Intel Corp.
Bus 004 Device 004: ID 04d9:a06b Holtek Semiconductor, Inc.

cpuinfo

processor : 0
vendor_id : GenuineIntel
cpu family : 6
model : 42
model name : Intel(R) Celeron(R) CPU 847 @ 1.10GHz
stepping : 7
microcode : 0x28
cpu MHz : 792.000
cache size : 2048 KB
physical id : 0
siblings : 2
core id : 0
cpu cores : 2
apicid : 0
initial apicid : 0
fpu : yes
fpu_exception : yes
cpuid level : 13
wp : yes
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx rdtscp lm constant_tsc arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc aperfmperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx est tm2 ssse3 cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic popcnt tsc_deadline_timer xsave lahf_lm arat epb xsaveopt pln pts dtherm tpr_shadow vnmi flexpriority ept vpid
bogomips : 2195.44
clflush size : 64
cache_alignment : 64
address sizes : 36 bits physical, 48 bits virtual
power management:

```
processor      : 1
vendor_id     : GenuineIntel
cpu family    : 6
model         : 42
model name    : Intel(R) Celeron(R) CPU 847 @ 1.10GHz
stepping      : 7
microcode     : 0x28
cpu MHz       : 792.000
cache size    : 2048 KB
physical id   : 0
siblings      : 2
core id       : 1
cpu cores     : 2
apicid        : 2
initial apicid : 2
fpu           : yes
fpu_exception : yes
cpuid level   : 13
wp            : yes
flags         : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca
cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx
rdtscp lm constant_tsc arch_perfmon pebs bts rep_good nopl xtopology
nonstop_tsc aperfmperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx est
tm2 ssse3 cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic popcnt tsc_deadline_timer
xsave lahf_lm arat epb xsaveopt pln pts dtherm tpr_shadow vnmi flexpriority
ept vpid
bogomips      : 2195.44
clflush size  : 64
cache_alignment : 64
address sizes  : 36 bits physical, 48 bits virtual
power management:
```

Base install

References

- [Installation guide](#)

First install

Boot on the USB stick (I created mine using unetbootin ~ lazy :D - the isos are taken from here → <https://www.archlinux.org/download/> take the mirror closest to you and select the netinstall ISO)

Basic

Remote access

Let's launch the network + sshd so we can copy paste some nice commands right from an already installed machine

```
ip addr show
```

Start sshd

```
systemctl start sshd
```

Set a root password

```
passwd
```

Partitionning

I'll have a super simple setup here:

- swap 4GB
- / 20GB
- /home 40GB

Formatting

Let's format all these partitions in ext4 format.

```
mkfs.ext4 -L LINUX /dev/sdb1  
mkfs.ext4 -L HOME /dev/sdb3  
mkswap -L SWAP /dev/sdb2
```

Mount them

Mounting and creating mount points:

```
mount /dev/sdb1 /mnt  
mkdir /mnt/home  
mount /dev/sdb3 /mnt/home  
swapon /dev/sdb2
```

Check

```
mount
```

Base system

I'll then install base packages plus base-level packages

```
pacstrap /mnt base base-devel
```

Fstab

For SSD tweaks and to make it shine: [SSD](#)

- generate fstab

```
genfstab -L -p /mnt >> /mnt/etc/fstab
```

Yes I use Labels, UUID sucks

</code>

Bootloader

I use Syslinux since it does its job well! [Syslinux](#)

```
pacstrap /mnt syslinux
```

Configuration

Environment

Let's go to our new system!

```
arch-chroot /mnt
```

- /etc/hostname

```
echo HTPC > /etc/hostname
```

- /etc/locale.gen

I'll use en_US.utf-8/iso8859 and fr_FR.* so uncomment:

```
en_US.UTF-8 UTF-8
en_US ISO-8859-1
fr_FR.UTF-8 UTF-8
fr_FR ISO-8859-1
fr_FR@euro ISO-8859-15
```

The generate locales

```
locale-gen
```

- /etc/locale.conf [Locale](#)

```
LANG="en_US.UTF-8"
```

```
# Keep the default sort order (e.g. files starting with a '.'
# should appear at the start of a directory listing.)
```

```
LC_COLLATE="C"
```

- /etc/vconsole.conf

Default keyboard in console (FR ... the only wireless keyboard I have ;())

```
echo "KEYMAP=fr" > /etc/vconsole.conf
```

- /etc/localtime

```
ln -s /usr/share/zoneinfo/Europe/Paris /etc/localtime
```

- /etc/mkinitcpio.conf

No touch just regenerate it in case ...

```
mkinitcpio -p linux
```

- root password

```
passwd
```

Umount stuff cleanly

First use Ctrl+D to escape from the chroot then:

```
umount /mnt/home /mnt
```

Now is the time to light a candle and type

```
reboot
```

Reboot

-----I am here -----

Pimping up shit created by systemd

So, happily you used to refer to your network card as eth0? Forget it! Now huge brains have decided for you, even if you don't have any issue that the notation will change! Great ... so my eth0 is called ... wait for it: enp0s25 perfect. So let's remove that shit! (wlan0 is called wlp3s0 by the way - unfortunately, so far they didn't change the lo interface \o/ it's called ... lo ... what a lack of imagination!!)

```
ln -s /dev/null /etc/udev/rules.d/80-net-name-slot.rules
```

Reboot! Yeah you know just like on Windows©

Network

Dhcpd for eth 0

Once you have back a proper name for you interfaces ...

```
systemctl enable dhcpd@eth0
```

And then it slows down your boot! Isn't that nice? Well coded.

Reference: [Network](#)

Netctl for wifi

Reference: <https://wiki.archlinux.org/index.php/Netctl>

```
pacman -S netctl wpa_supplicant
```

```
cd /etc/netctl/examples/
```

Copy on of the example regarding the type of network you want to access:

```
cp wireless-wpa-configsection ../university
```

Edit the file with proper settings (SSID / user ...)

```
cd /etc/netctl
vi university
```

I don't use auto-wifi service I start it when needed:

```
netctl start university
```

SSHD

Access remotely:

```
pacman -Sy openssh
```

Enable it at boot

```
systemctl enable sshd
```

Security

Reference: [SHA_Password](#)

```
vi /etc/pam.d/passwd  
password required pam_unix.so sha512 shadow nullok rounds=65536
```

Then rehash your passwords!

```
passwd
```

User

```
useradd -g users -m -s /bin/bash warnaud  
passwd warnaud
```

Fix VI/VIM

```
# ls -altrh `which vi`  
lrwxrwxrwx 1 root root 2 Nov 16 18:34 /usr/bin/vi -> ex
```

Prefer vim?

```
pacman -S vim  
rm /usr/bin/vi && ln -s /usr/bin/vim /usr/bin/vi
```

GPM

Since gpm is a dependency of vim let's use it!

```
systemctl enable gpm
systemctl start gpm
```

Xorg / XDM

Xorg

Reference: [Xorg](#) & [Intel](#) Install all those packages ...

```
# pacman -S xorg-server xorg-apps xorg-fonts xorg-fonts-100dpi xorg-
fonts-75dpi xorg-twm xorg-xclock xorg-xinit xorg-xdm xterm xf86-video-intel
xorg-xmessage xorg-xcalc xorg-xfontsel xorg-utils
```

Reply to questions:

```
:: There are 37 members in group xorg-apps:
:: Repository extra
  1) xorg-bdftopcf  2) xorg-iceauth  3) xorg-luit  4) xorg-mkfontdir  5)
xorg-mkfontscale  6) xorg-sessreg  7) xorg-setxkbmap  8) xorg-smproxy
  9) xorg-x11perf 10) xorg-xauth  11) xorg-xbacklight 12) xorg-xcmsdb
13) xorg-xcursorgen 14) xorg-xdpyinfo 15) xorg-xdriinfo 16) xorg-xev
 17) xorg-xgamma 18) xorg-xhost 19) xorg-xinput 20) xorg-xkbcomp 21)
xorg-xkbevd 22) xorg-xkbutils 23) xorg-xkill 24) xorg-xlsatoms
 25) xorg-xlsclients 26) xorg-xmodmap 27) xorg-xpr 28) xorg-xprop 29)
xorg-xrandr 30) xorg-xrdb 31) xorg-xrefresh 32) xorg-xset 33) xorg-
xsetroot
 34) xorg-xvinfo 35) xorg-xwd 36) xorg-xwininfo 37) xorg-xwud
```

```
Enter a selection (default=all):
:: There are 2 members in group xorg-fonts:
:: Repository extra
  1) xorg-font-util 2) xorg-fonts-encodings
```

```
Enter a selection (default=all): 1
resolving dependencies...
:: There are 4 providers available for libgl:
:: Repository extra
  1) mesa-libgl 2) nvidia-304xx-utils 3) nvidia-libgl
:: Repository community
  4) catalyst-utils
```

```
Enter a number (default=1): 1
```

Add some modules at boot for KMS

```
vi /etc/mkinitcpio.conf
```

```
...  
MODULES="i915"  
...
```

Acceleration method

```
vi /etc/X11/xorg.conf.d/20-intel.conf
```

```
Section "Device"  
    Identifier "Intel Graphics"  
    Driver      "intel"  
    Option      "AccelMethod"  "sna"  
EndSection
```

```
vi /etc/X11/xorg.conf.d/10-evdev.conf
```

```
Section "InputClass"  
    Identifier "evdev keyboard catchall"  
    MatchIsKeyboard "on"  
    MatchDevicePath "/dev/input/event*"  
    Driver "evdev"  
    Option "XkbLayout" "us"  
    Option "XkbVariant" "intl"  
EndSection
```

XDM

Reference: <https://wiki.archlinux.org/index.php/XDM>

```
pacman -S xorg-xdm
```

Enable systemd service

```
systemctl enable xdm.service
```

Optional, if you made a customize version

```
vi /usr/lib/systemd/system/xdm.service
```

```
[Unit]  
Description=X-Window Display Manager  
After=systemd-user-sessions.service  
  
[Service]  
ExecStart=/usr/bin/xdm -c /etc/X11/xdm/lcars-xdm/xdm-config -nodaemon
```

```
Type=notify
NotifyAccess=all

[Install]
Alias=display-manager.service
```

Copy the necessary files from /etc/skel

```
cp /etc/skel/.xsession ~/.
```

make sure its permission are 774

Fvwm

```
pacman -S fvwm
```

Import my configuration:

```
mkdir ~/.fvwm && cd .fvwm && svn co
https://fvwm.svn.beanstalkapp.com/fvwm/trunk/bazooka .
```

Alsa

Reference: <https://wiki.archlinux.org/index.php/Alsa>

```
pacman -S alsa-utils
```

Set volume levels:

```
alsamixer
```

Test:

```
speaker-test -c 2
```

Laptop / powersaving (doesn't work ...)

Reference: <https://wiki.archlinux.org/index.php/Laptop>

ACPID

To have access to buttons + power settings, first install acpi and acpid

```
pacman -S acpi acpid
```

Reference:<https://wiki.archlinux.org/index.php/Acpi> and <https://wiki.archlinux.org/index.php/Acpid> and https://wiki.archlinux.org/index.php/ACPI_hotkeys Start the daemon and enable it:

```
systemctl enable acpid
```

```
systemctl start acpid
```

TPB

For other nice osd display install tpb



```
yaourt -S tpb
```

Reference:https://wiki.archlinux.org/index.php/ThinkPad_OSD Configure it:

```
vi /etc/tpbrc
```

```
OSDCOLOR      Green
OSDVERTICAL   0
OSDHORIZONTAL 0
OSDPOS        MIDDLE
OSDALIGN      CENTER
```

Udev

Create a special rule to suspend everything if battery is at 2%



Doesn't work ...

```
vi /etc/udev/rules.d/lowbat.rules
```

```
## SLEEP IF BATTERY IS LOW
SUBSYSTEM=="power_supply", ATTR{status}=="Discharging", ATTR{capacity}=="2",
RUN+="/usr/bin/systemctl suspend"
```

i915

Power consumption for Intel Graphics:

```
vi /etc/modprobe.d/modprobe.conf
```

```
options i915 i915_enable_rc6=1 i915_enable_fbc=1 lvds_downclock=1
```

Rebuild the kernel:

```
mkinitcpio -p linux && mkinitcpio -p linux-ck
```

TLP

Reference: <https://wiki.archlinux.org/index.php/TLP> Install required packages:

```
yaourt -S tlp tp_smapi tp_smapi-ck dkms-acpi_call-git smartmontools
```



tp_smapi doesn't seem to launch ... Enable the service:

```
systemctl enable tlp
```

Sysctl

Reference: <https://wiki.archlinux.org/index.php/Sysctl>  add in /etc/sysctl.conf

```
vm.dirty_writeback_centisecs=1500  
vm.laptop_mode=5
```

Thinkpad

Disable Touchpad

Deactivate the useless touchpad:

```
vi /etc/X11/xorg.conf.d/10-evdev.conf
```

```
Section "InputClass"  
    Identifier "evdev touchpad catchall"  
    MatchIsTouchpad "off"  
    MatchDevicePath "/dev/input/event*"  
    Driver "evdev"  
EndSection
```



Check alternate

solution: https://wiki.archlinux.org/index.php/Synaptics_Touchpad

TrackNav enhancement

This hack will enable scrolling using the middle button + the TrackPoint™ ® ©

```
vi /etc/X11/xorg.conf.d/20-thinkpad.conf
```

```
Section "InputClass"
  Identifier "Trackpoint Wheel Emulation"
  MatchProduct "TPPS/2 IBM TrackPoint|DualPoint Stick|Synaptics
Inc. Composite TouchPad / TrackPoint|ThinkPad USB Keyboard with
TrackPoint|USB Trackpoint pointing device"
  MatchDevicePath "/dev/input/event*"
  Option "EmulateWheel" "true"
  Option "EmulateWheelButton" "2"
  Option "Emulate3Buttons" "false"
  Option "XAxisMapping" "6 7"
  Option "YAxisMapping" "4 5"
EndSection
```

Bluetooth

Reference: <https://wiki.archlinux.org/index.php/Bluetooth>

```
pacman -S bluez
```



Any of this required?

```
Optional dependencies for bluez
  gstreamer0.10-base: bluetooth GStreamer support
  alsa-lib: Audio bluetooth devices support [installed]
  dbus-python: to run bluez-simple-agent
  pygobject: to run bluez-simple-agent
  libusb-compat: USB adapters support
  cups: CUPS backend
```

I kind of never use bluetooth so I start it when necessary

```
systemctl start bluetooth.service
```



.. have some fun with it

Multimedia Keys

Mute/Volume up and Down are recognized by default in xev, so with xbindkeys let's map them

```
pacman -S xbindkeys
```

Create a file that contain the definition of the buttons + the action(s)

```
vi ~/.xbindkeysrc.scn
```

Here I'll map Mute / Volume up / Volume Down

```
(xbindkey ("XF86AudioMute") "amixer set Master toggle")
(xbindkey ("XF86AudioRaiseVolume") "amixer set Master 2dB+ unmute")
(xbindkey ("XF86AudioLowerVolume") "amixer set Master 2dB- unmute")
```

Last but not least, add

```
xbindkeys &
```

To your ~/.xinitrc or whatever file launched at login

Systemd journal

It's always nice to see some logs even if they are in binary format

```
Hint: You are currently not seeing messages from other users and the system.
Users in the 'systemd-journal' group can see all messages. Pass -q to
turn off this notice.
```

Fix:

```
sudo gpasswd -a USERNAME systemd-journal
```

Other software

Archlinuxfr repository

```
vi /etc/pacman.conf
```

```
...
[archlinuxfr]
SigLevel = Never
Server = http://repo.archlinux.fr/$arch
```

\o/ No signature

Yaourt

Reference: <http://archlinux.fr/yaourt-en>

```
pacman -Sy yaourt
```

Sudo

```
pacman -S sudo
```

```
visudo
```

```
...
root ALL=(ALL) ALL
someuser ALL=(ALL) ALL
```

Just add the 'someuser' line

Compilation options



just for fun not really mandatory Reference: <https://wiki.archlinux.org/index.php/Makepkg.conf>

```
vi /etc/makepkg.conf
```

Modify CFLAGS/CXXFLAGS:

```
# -march=native also sets the correct -mtune=
CFLAGS="-march=native -O2 -pipe -fstack-protector --param=ssp-buffer-size=4
-D_FORTIFY_SOURCE=2"
CXXFLAGS="${CFLAGS}"
```

Modify MAKEFLAGS (4 = output of nproc)

```
MAKEFLAGS="-j4"
```

Mandatory packages - for terminal users

List of software I use and abuse

```
yaourt -S screen bash-completion wavemon glances htop bmon irssi lftp rsync
wget curl bc figlet toilet pmount dfc git rdesktop
```

I use yaourt since some of them are not in repositories and then built from aur

Cups

Reference: <https://wiki.archlinux.org/index.php/Cups>

```
pacman -S libcups cups cups-filters ghostscript gsfnts
```

CK Kernel

For more aggressive scheduling, you can use the ck patchset
References:

- <https://wiki.archlinux.org/index.php/Kernel26-ck>
- <https://wiki.archlinux.org/index.php/Repo-ck>



Super up-to-date



```
vi /etc/pacman.conf
```

Add at the end:

```
[repo-ck]
SigLevel = PackageRequired
Server = http://repo-ck.com/$arch
```

Add keys for signing shit ...

```
pacman-key -r 5EE46C4C
pacman-key --lsign-key 5EE46C4C
```

Refresh pacman's database:

```
pacman -Sy
```

Install kernel-ck matching your architecture (see Repo-ck page for reference)

```
pacman -S linux-ck-ivybridge linux-ck-ivybridge-headers
```

Add a nice entry in syslinux

```
vi /boot/syslinux/syslinux.cfg
```

```
...
DEFAULT arch-ck
...
LABEL arch-ck
    MENU LABEL Arch Linux CK
    LINUX ../vmlinuz-linux-ck
    APPEND root=/dev/sdb3 ro
    INITRD ../initramfs-linux-ck.img quiet ipv6.disable=1 elevator=bfq

LABEL arch-ck-fallback
    MENU LABEL Arch Linux CK Fallback
    LINUX ../vmlinuz-linux-ck
    APPEND root=/dev/sdb3 ro
    INITRD ../initramfs-linux-ck-fallback.img
```

...

Bye bye IPv6 and change the schedule to Con Kolivas' bfq

URxvt

```
pacman -S rxvt-unicode urxvt-perls
```

(Not yet implemented :)

```
URxvt.perl-ext-common:      default,clipboard,url-select,keyboard-select
URxvt.url-select.launcher:  chromium
URxvt.url-select.underline: true
URxvt.keysym.M-u:          perl:url-select:select_next
URxvt.keysym.M-Escape:    perl:keyboard-select:activate
URxvt.keysym.M-s:         perl:keyboard-select:search
```

X11 software

```
yaourt -S chromium hsetroot imagemagick vlc emelfm2 flashplugin xosd
```

For acrobat reader/skype, there's a need for the multilib repository ... well coded too!

```
vi /etc/pacman.conf
```

Uncomment:

```
[multilib]
Include = /etc/pacman.d/mirrorlist
```

Then:

```
yaourt -Sy acroread skype
```



tons of 32bits libraries



acroread libre-office* fonts skype...

Final stuff

<https://wiki.archlinux.org/index.php/Readahead>

Ntfs share

Reference: <https://wiki.archlinux.org/index.php/Ntfs>

```
pacman -S ntfs-3g
```

```
vi /etc/fstab
```

```
#  
# /etc/fstab: static file system information  
#  
# <file system> <dir> <type> <options> <dump> <pass>  
# /dev/sdb3 UUID=34cedc78-e156-4dbb-a428-4d594d6b34a8  
LABEL=LINUX / ext4  
defaults,noatime,discard 0 1  
  
# /dev/sda2 UUID=f8a1e862-64b7-41d7-ac7d-4b75b346ceb5  
LABEL=VAR /var ext4  
rw,relatime,data=ordered 0 2  
  
# /dev/sda3 UUID=57552366-9356-43bf-8bd2-bb0b25a1d318  
LABEL=HOME /home ext4  
rw,relatime,data=ordered 0 2  
  
# /dev/sda1 UUID=dcba8ead-fb4b-4e06-a9e5-1a55f1c353e0  
LABEL=SWAP none swap defaults  
0 0  
  
# /dev/sda4 Windows  
LABEL=DATA /media/data ntfs-3g  
uid=warnaud,gid=users 0 0
```

NTP

Reference: <https://wiki.archlinux.org/index.php/Ntp>

```
pacman -S ntp
```

```
vi /etc/ntp.conf
```

```
server 0.fr.pool.ntp.org iburst  
server 1.fr.pool.ntp.org iburst  
server 2.fr.pool.ntp.org iburst  
server 3.fr.pool.ntp.org iburst
```

```
systemctl start ntpd
```

Well I don't enable it since ... I mostly have no connection at boot on a laptop



From:

<https://wiki.fortier-family.com/> - **Warnaud's Wiki**

Permanent link:

<https://wiki.fortier-family.com/os/archlinux/htpc>

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