

Debianuel
Notes on a linux experience

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Part I

Notes on linux

Chapter 1

Unix commands

1.1 Commands

```
* sort Sorts lines in ascending, descending and unique order
* grep Searches for regular expressions in strings or files
* basename Strips the path from a path string to leave just the
  filename
* dirname Removes the file from a path string to leave just the
  pathname
* cut Chops up a text string by characters or fields
* wc Count the characters, words, or lines
* [ (test) ] Predicate or conditional processor
* tr 'a' 'b' Transform characters
* expr Simple arithmetic processor
* bc Basic Calculator
* eval Evaluate variables
* echo Output strings
* date Create date strings
* nawk Manipulate text strings
* head | tail Access lines in files
* sed stream editor, performs search and replace
```

1.2 Vi Vim or gVim

```
%%%Motions:
h j k l 0 $ ^  %si multilignes : utiliser gk gj g$ g0
12G : go to line 12
M : go to the middle of the screen
%z stuff - combine it with: set scrolloff=3 for a smoother screen
  offset
zt : will scroll so that the current cursor is at the top
zz : will scroll so that the current cursor is at the middle
zb : will scroll so that the current cursor is at the bottom
CTRL-E CTRL-Y : scroll down
CTRL-B CTRL-F : page backwards page forward
CTRL-U CTRL-D : half page up half page down, or whatever you set with
  scroll (default scroll=0)
CTRL-o CTRL-I : go to older / newer position
w b e : next/previous word
W B E : same but uses spaces as delimiters
```

```

%%% Basic
<C-r> : redo!!!
u U : undo
w : save
wq : save and quit
ZZ : save and close file

%%% Insertions (ne pas se limiter a i!!!)
a i o
A I O

%%% Deletion/ Change / Selection / Copy – Same behavior
x
xp : reverse two letters , usefull for typos like : fro
dd
dj : delete current line and below
dw : delete the rest of the word and next space (good for full words)
de : delete rest of the word but not the space (good for the end of a word
)

%%% Block stuff (don't know proper term)
di} or di{ : delete everything between brackets
dt} : delete till the next bracket but does not delete the }
df} : same but delete the bracket
vi} : select everything between braces (same as vi{)
va} : idem but includes braces
yi} : copy content between braces
ci} : etc ..

% Uppercase -> till the end
D or d$ : delete till end of line $
The same apply for c and C, v V

%%% Replacement
r
cw : change word
bde : delete current word in totallity
bce : change current word in totallity
~ : switch uppercase lowercase

%%% Programming
% : go to next brace
zo : open folded code
zf in verbose mode to fold
zR : unfold all levels
zM : fold all
za : toggle paragraph folding , vim-latex only?
< > : indent , use . to repeat
>>< << : indent
]p : like p but adjusts indent
== : autoindent selection ?
= : autoindent line
If on a first braket { then : =% will indent everythin to the matchning
bracket
If withing a code block then =a{ will work as well

%%% Paragraph reformatting
set textwidth=80 0 to cancel

```

```

gqap : current paragraph
ggqG : all paragraphs in file
J : join with line below; whole file : use cmd paste
rENTER : split ..

%% Copy paste cut
p : put after (uses the register "", i.e. equivalent to ""p)
P : put before
yy p : copy paste one line
dd p : cut paste one line
v y P : select copy paste
"+y et "+gp ou "+gP copie entre documents ???
"Op : paste the register 0 (i.e. the one that has been yanked)
:reg display registers

%% Marks (usefull when copying smthg far away)
ma : mark 'a', not a command no :
'a : go to a

%% Search and replace
/ : search, moving with n and N
:s/aa/bb/g : all in current line
:%s/aa/bb/g : in all document
:l1,l2s/aa/bb/g : all between l1 and l2
:set hlsearch
:nohlsearch

% insert at beginning of line
Select beginning of line using CTR-V then SHIFT+I then type text to insert
, then ESC (not CTRL+C)
% at end of line:
:<,>s/$/TEXT/g bla bla-$

%% Buffers
All files open in vim are listed as buffers. They can be opened, in tab or
windows, it doesnt matter. This means that at any time you can access
any buffer and put it in a tab or a window

:ls : list
:bn
:b number : go to buffer number
:bd : closes current buffer

%% .Vimrc file
:so % : source the file you are editing. if it's .vimrc, then config is
reloaded automatically

%% Windows
:sp : opens in a split window
<C-W> s : splits horizontally
<C-W> v : splits vertically
<C-W> w : loop through windows
<C-W> jkhl :move between windows
<C-W> _ : maximize window
<C-W> c : close window

%% Tabs
:tabnew :new tab
:tabe :open a file in a new tab

```

```

:tabc
:tabn or gT :next tab
:tabN or gt :previous tab

%%% INSERT mode
CTRL+C CTRL+[ or ESC to escape
CTRL+N CTRL+P : Word/variable/command completion!!!
CTRL+H : backspace
LOOK at my vimrc for my Insert settings

%%% the g command on a current word
% go to definition
gd gD
g* : look for this word (it starts immediately.. so use CTRL-O to go to
    previous position)

%%% Recording
qa record a macro in recording a
q stops recording
@a : repeat recording

%%% Command history
in many situations , a better solution is the command-line window which you
    can open in two ways:

    Type q: for commands, or q/ for searches; or
    Type : or / to start entering a command or search , then press the '
        credit' key (default is Ctrl-f :help 'credit').

The advantage of the command-line window is that you can use all Vim's
    editing power, including searching with '/' in normal mode, or using
    whole-line completion (:help compl-whole-line) in insert mode. After
    editing a command, you can:

    Press Enter to execute the current line (and close the command-line
        window); or
    Press Ctrl-c twice to close the command-line window (cancel).

```

1.3 Vim Colorscheme

```

for tests (:help hi)
:so $VIMRUNTIME/syntax/hitest.vim $

```

1.4 Vim QuickFix window

```

:cn : go to next error
:cp : go to previous error

:cw : open quickfix window :cope
:cl : close quickfix window

```

1.5 Vim-latex

```

<-->: press CTRL-J to go to

%%% Vim Latexcommands with switch \
\ll : compile
\lv : view
\rf : refresh folds

%%% Completion
<F9> and grep installed

%%% Latex in insert mode
SCH : chapters
SSE : sections
SSS : sub
SPG : paragraph

%environments
EIF : insert figure
EIT : itemize then <A-I> for items
EEQ
# where I put the Imaps and some shortcuts. On windows, in MyImpas.vim in
  the folder plugin
after/ftplugin/tex.vim

% maths stuffs
'/ :frac
'I :int
<A-L> after of before a parenthesis, completes it with \left ...

%%% References and citations completion with <F9>!!!

%%% LATEX VISUAL mode
'{ puts \left{ around selection
'('

%%% Bib files
BBB : new entry

```

1.6 Vim en color

```

Dans le home mettre un fichier .vimrc avec :
syntax enable
set background=dark
filetype on
A part ca, pour un simple fichier taper ":syntax enable" suffit

- Si on a ce message:
E319: Sorry, the command is not available in this version: syntax on
alors faire un aptitude install vim (car tous les runtime ne sont pas
  presents)

```

1.7 Grep - List of my REGEXP

```

-Inrsi : my typical option

```

```

-sIrni

Basics options:
-r : recursive in folders
--color=auto : for better display
-I : ignore binary files
-E : will interpret the pattern as an extended regexp
-F : will interpret the pattern as a fixed string
-i : ignore case
-n : line number
-s : remove error messages

grep -rI --color=auto pattern .//*

Geany:
-nHiF

%% Regexp
Remember:
. : match one unique char, does not depend on what is before
* : zero, one or several times what is before
? : zero or one time
+ : one time or more
(),n} : n times
(){m,n} : between m and n

%Dates:
echo "1 18 19 20 21 1665 1620 1865 1995 2010 2100" | grep -E "(18|19|20)
[0-9]{2}"
%Extensions 3-4 characters
echo "sdf.png" |grep -E "[.][a-zA-Z]{3,4}$"
%file name ugly
echo "sdf1_d sÄff - klkf.ds fskfjs " |grep -E "^[a-Z0-9\_ -]*[.]"
filename = ${f%.*}

```

1.8 FORLOOPS/ FIND / XARGS and SPACECHARACTERS

```

#!/bin/bash
echo "Looking for "$1

SAVEIFS=$IFS
IFS=$(echo -en "\n\b")

for i in `find -name "*.pdf" -printf '%h/%f\n' 2> /dev/null`
do
    echo "_____ "
    echo "$i";
    echo "_____ "
    pdftotext $i - |grep --color=always $1
#    strings "$i" |grep $1
done;
IFS=$SAVEIFS

```

1.9 TEST

Look at Compound!

```
%%% String is empty
[ -z ${var} ]
```

```
Conditionnals tests are in bracket [ ]
See man test for details , like :
Expression comparison : !EX1 -a Ex2, Ex1 -o Ex2
String comp : S1 = S2, S1!=S2
Int comp : I1 -ne I2
```

```
IF :
if [] || [] && [] ; then ...; elif [] ; then ...; else ...; fi
```

WARNING !! you need spaces around [and = !!!!!!!!!!!!!

1.10 TEST - COMPOUND

```
%%% String matching
[[ "abc def .d,x—" == a[abc]*\ ?d* ]]; echo $?
```

1.11 STANDARD IN, STANDARD OUT

```
| : PIPE
./compile_astra 2>&1 | tee log.log
```

1.12 Shell

```
extension = ${f#*.*}
filename = ${f%.*}

%%% location for local scripts
% if local partition
(/usr/local/bin)
% or in .bash_profile
PATH=$PATH:/home/manu/scripts/
```

1.13 Command FIND - application to album cover file

```
#find ./ -name "*.jpg" -exec echo "'dirname {}'/'cover.jpg' \;
toCover.sh :
#! /bin/sh

a=$1
echo "$a"
path='dirname "$a"'
echo "$path"
cp "$a" "$path/cover.jpg"
echo ""
```



```
find ./ -name "*.jpg" -exec ./toCover.sh '{}' \;
find ./ -name "*.JPG" -exec ./toCover.sh '{}' \;

find ./ -name "*.wma" -exec wma2mp3 '{}' \;

find ./ * -size 0b -type f -exec rm {} \;
```

1.14 Remove consecutive blank lines - duplicate empty line

```
http://unstableme.blogspot.com/2008/12/remove-duplicate-blank-lines-bash-
awk.html
%%% Way1:
cat(1) gives an option named
-s, --squeeze-blank
which says : never more than one single blank line
$ cat -s file.txt
%%% Way2:
$ awk '/^$/{ if (! blank++) print; next } { blank=0; print }' file.txt
```

1.15 AWK

```
awk is a pattern scanning and processing language.
By default it reads standard input and writes standard output.

Usage: awk -f progfile [--] file
Usage: awk 'program' file
Usage: ./awkfscript

-F,      : field separator comma(,)
-F ";"   : field separator semicolon(;)
-F ";;|" : field separator semicolon or comma(;)

#first 1000 lines
awk 'NR<1000 {print}' radial.ini>radi

#lignes paires
NR % 2 == 1 { print $0 }

#affiche le numero de ligne
{ print NR, $0 }

# First three fields
awk -F, 'NR>1 {print $1,$2,$3;}' tab.csv > tab2

# Not matching a pattern
awk '!/Distribution/ {print $0 } ' drift.in

# Cut a line every 20 fields
awk -F, '{for(i=1;i<=NF; i=i+1){ if((i%20)==0 ){ printf $i";\n" }else{
printf $i";" } } printf "\n" }' p.csv > r.csv

# print sum of first record
awk '{ sum += $1 }; END { print sum }' file

awk -F= 'NR<10 {for(i=1;i<=NF;i++){printf $i"=" } ; print "" }' drift.in
```

```

#printf "&NEWRUN\n Distribution='$bunchdir/$3'\n" |tee $2>/dev/null

#awk 'BEGIN{IGNORECASE=1; FS="|=|="}; /distribution/{for(i=1;i<NF;i=i+2){
  if($i~/distribution/)}else{ print " ",$i,"=",$(i+1)} } } NR>1 && !
/distribution/{print} ' $casedir/$2 > $tempBuffer
#cat $tempBuffer |tee -a $2>/dev/null

awk 'BEGIN{IGNORECASE=1; FS="|=|="}; /distribution/{for(i=1;i<NF;i=i+2){ if
($i~/distribution/){split(ARGV[2],a,"="); print a[1]=a[2]; }else{
print " ",$i,"=",$(i+1)} } } NR>1 && !/distribution/{print} ' $
casedir/$2 Distribution='\$bunchdir/$3\'> $2

#! /bin/awk

BEGIN {
  IGNORECASE=1
  FS="|=|="
  split(ARGV[2],a,"=");
  b=tolower(a[1])
}

$0 ~b {for(i=1;i<NF;i=i+2){ if($i~b){split(ARGV[2],a,"="); print " ",a
[1],"=" ,a[2]; }else{ gsub(" ","", $i); print " ",$i,"=",$(i+1)} } }
$0 !~ b {print }

```

1.16 DU and DF

```

%%DU
du -sh FOLDER/FILE : disk utilisation , readable by human, s : include
subfolders
the above will return the total

#listing space used by the subfolders in the current folder
alias duf='du --max-depth=1 -h '

%%DF
df -al : disk space
alias df='df -hT |egrep -i "file|^/' '

```

1.17 Patches - apply patch - create patch -reverse patch

```

%apply a patch
patch -p1 < /path/to/file.patch

man patch

%reverse a patch
patch -R < /path/to/file.patch

% create a patch
diff -crB Folder1 Folder2 > Folder.patch

```

1.18 Git

```
% download latest version
git clone git://git.gnome.org/evince

git branch : list branches
git branch -a : all

% create a local branch corresponding to the remote branch
git checkout -b local-gnome-2-30 remotes/origin/gnome-2-30
% switch to a specific branch (updates files) (useless after previous
command and the switch -b)
git checkout local-gnome-2-30
% Make directory according to this branch
%git pull
```

Chapter 2

Latex

2.1 Install new latex font

Go on the CTAN page concerning urw arial and **read** the readme, that's the best option!

```
as root or staff or user???  
getnonfreefonts-sys --help  
getnonfreefonts-sys --lsfonts  
getnonfreefonts-sys arial-urw  
getnonfreefonts-sys --all
```

```
%%  
getnonfreefonts-sys arial-urw  
% look now for ual.map (sudo updatedb , locate ual.map) probably in /usr/  
  local/texmf/  
echo 'Map ual.map' > /etc/texmf/updmap.d/25-arial  
update-updmap  
vim /var/lib/texmf/web2c/updmap.cfg  
udpmap-sys  
  
texhash  
  
updmap --enable Map utopia.map
```

2.2 Tkz and gnuplot - problem with gnuplot 4.4

```
Edit /usr/share/texmf/tex/generic/pgf/modules/pgfmoduleplot.code.tex  
Replace  
  \xdef\pgf@gnuplot@head#1{set terminal table; set output "#1.table"; set  
    format "%.5f"}  
By  
  \xdef\pgf@gnuplot@head#1{settable; set output "#1.table"; set format  
    "%.5f"}
```

2.3 svg2latex

With inkscape 0.48-1-2, no need to use the script `svg2latex.py`:
`inkscape -z -D --file=A.svg --export-pdf=A.pdf --export-latex`

Better, this can be run when the file is changed directly from latex with:
 an svg included with the a defined **command** "includesvg"

```
\newcommand{\executeiffilenewer}[3]{%
\ifnum\pdfstrcmp{\pdffilemoddate{#1}}%
{\pdffilemoddate{#2}}>0%
{\immediate\write18{#3}}\fi%
}
\newcommand{\includesvg}[1]{%
\executeiffilenewer{#1.svg}{#1.pdf}
{inkscape -z -D --file=#1.svg --export-pdf=#1.pdf --export-latex}%
\input{#1.pdf_tex}%
}
```

2.4 Latex et packages

```
editor
/etc/texmf/texmf.cnf, remplacer la ligne TEXMFHOME = $HOME/texmf
commenter%, remplacer par TEXMFHOME = /home/manu/Config/texmf,
créer l'arborescence texmf/tex/latex/ et y mettre tous ses .sty
Puis faire un :
texhash ~/Config/texmf
possibilité d'installer aussi texline-generic-extra
```

2.5 Latex et windows

Les fichiers créés sous windows peuvent être utilisés. Il faut les ouvrir
 en 8859-16 pour détecter les accents.

```
L'entete doit être
%\usepackage[T1]{fontenc}
\usepackage[latin1]{inputenc}
```

Chapter 3

Debian wheezy with xfce4

3.1 Important stuff to do

```
%- Check out my script SetupSyst for most modifications required
%- Check the policies (see my note on Policikit polkit-1 in this document)
%- set Network automount to false: sudo vim /usr/share/gvfs/mounts/
network.mount
DBus error org.freedesktop.DBus.Error.InvalidArgs: Mountpoint Already
registered.
fixed in: http://git.xfce.org/xfce/thunar/commit/?h=xfce-4.&&id=
a14345dafd7cb6333317d5ebddf62fbddc946c27\

%? not tried :
https://bugzilla.xfce.org/show_bug.cgi?id=7373
Renaming /usr/share/gvfs/remote-volume-monitors/gdu.monitor to gdu.
monitor.foo

%- or recompile source(what I've done): (https://bbs.archlinux.org/
viewtopic.php?id=112184)
cd ~/Config/builds
mkdir thunar-nonetwork
cd thunar-nonetwork
apt-get source thunar
sudo apt-get build-dep thunar

Modify thunar/thunar-shortcuts-model.c and thunar-tree-model.c, and
comment the two lines :

if (thunar_g_vfs_is_uri_scheme_supported ("network"))
system_paths = g_list_append (system_paths, g_file_new_for_uri ("
network://"));

./configure
make
sudo make install

%-purge exim4 (maybe use ssmtp instead, see gmail)
update-rc.d -f exim4 remove
update-rc.d atd remove
update-rc.d -f lpd remove
update-rc.d -f timidty remove
update-rc.d -f rsync remove
```

```
update-rc.d -f bootlogs remove
update-rc.d -f bootlogd remove
update-rc.d -f avahi-daemon remove
update-rc.d -f procps remove
update-rc.d -f stop-bootlogd-single remove
update-rc.d -f stop-bootlogd remove
update-rc.d -f rnmologin remove
update-rc.d -f rc.local remove
update-rc.d -f cups remove
update-rc.d -f networking remove
update-rc.d -f hddtemp remove
aptitude purge minissdpd
```

%- Modify inittab

comment the Ctrl-alt-del **command**, or leave it **for 123**

After doing the autologin, you have to allow anybody to run the x server

```
sudo dpkg-reconfigure x11-common
```

3.2 Rhythmbox problems

- build plugin remember the rhythm and install gir1.2-peas-1.0, and python-all wouldn't hurt
- For cover art : install python-gi-cairo

Chapter 4

Debian squeeze - tweaks - latest updates

4.1 Important stuff to do

```
%%% Gamin instead of fam does not work that well
aptitude install gamin

%%% makefile concurrency and readahead : as root
aptitude install readahead readahead-fedora
echo CONCURRENCY=makefile >> /etc/default/rcS
aptitude install insserv
dpkg-reconfigure insserv sysv-rc

%%% new pager
aptitude install most
update-alternatives --config pager

%%% flash
aptitude install flashplugin-nonfree
%%% java
aptitude install sun-java6-jre sun-java6-plugin
update-java-alternatives --set java-6-sun
```

4.2 FlashPlayer - plugin for mozilla

```
install package flashplugin-nonfree

For upgrades: update-flashplugin-nonfree --install

See which version of flash player you have installed
http://www.adobe.com/software/flash/about/
```

4.3 Chrome - Get latest java working

This HOWTO shows how to get Java Runtime running under Google Chrome

1. Download Java Runtime from <http://www.java.com>
2. Make and opt/ directory in home


```

CODE: SELECT ALL
mkdir ~/opt

3. Move the Java .bin file to ~/opt/
CODE: SELECT ALL
chmod +x jre-6u18-linux-x64.bin
./jre-6u18-linux-x64.bin
cd ~/opt/jre1.6.0_18/bin/
ControlPanel

Select the Java Tab
Click View...
Click Find...
Click Next...
Select ~/opt/jre1.6.0_18/
Click Next...
Click Finish...
deselect the others JREs
Click OK...
Click Apply...
Click OK ...

4. As root
CODE: SELECT ALL
mkdir /opt/google/chrome/plugins
cd /opt/google/chrome/plugins
ln -s ~/opt/jre1.6.0_18/lib/amd64/libnpjp2.so

5. Run Google Chrome with plugins enabled
CODE: SELECT ALL
google-chrome --enable-plugins %U

Add option: allow-outdated-plugins if chrome insists in saying you don't
have the latest version

```

4.4 Compiling evince 2.31 on debian squeeze

```

Get source:
git clone git://git.gnome.org/evince
Dependencies
install gnome-common gtk-doc-tools
libgnome-keyring-dev

libdbus-1-dev
libdbus-glib-1-dev
libpoppler-dev libpoppler-glib-dev

autogen.sh --disable-nautilus

Platform .....:  gnome
GConf Support .....:  yes
  GTK+ Unix Print .....:  yes
  Keyring Support .....:  yes
  DBUS Support .....:  yes
  SM client support...:  xsmp

  Nautilus Plugin .....:  no
  Thumbnailer .....:  yes

```

```

Previewer .....: yes
Gtk-Doc Support....: no
Debug mode.....: no
GObj. Introspection: no
Tests.....: yes

PDF Backend.....: yes
PostScript Backend.: no
TIFF Backend.....: yes
DJVU Backend.....: yes
DVI Backend.....: no
Pixbuf Backend....: no
Comics Backend....: yes
Impress Backend....: no

```

4.5 Compiling inkscape 0.48 for debian squeeze

```

install following packages: intltool libpng-dev libgc-dev libfreetype06-
dev liblcms-dev libgtkmm-2.4-dev libxslt-dev libgsl0-dev libboost-dev
libpopt-dev libwpng-dev libmagick++-dev

run ./configure and look at what it says. I might have misspelled some
packages..
make
sudo make install

```

4.6 Xfce4.8 on debian squeeze

```

http://ahwhattheheck.wordpress.com/2011/07/06/xfce4-8squeeze/

apt-get install gcc gcc-multilib autoconf automake1.9 \
libtool flex bison gdb gcc-4.4-multilib libmudflap0-4.4-dev \
gcc-4.4-locales libgcc1-dbg libgomp1-dbg libmudflap0-dbg \
libcloog-ppl0 libppl-c2 libppl7 automake make gnu-standards \
build-essential intltool python-gobject-dev libdbus-1-dev \
libdbus-glib-1-dev xorg-dev
libx11-dev
libgtk2.0-dev
libglade2-dev \
libwnck-dev
libgudev-1.0-dev
libnotify-dev libgstreamer0.10-dev \
libghc6-gstreamer-dev libkeybinder-dev

```

Chapter 5

APPLICATIONS

5.1 xrandr - arandr - Dynamic Multiple screens - xinerama

arandr is a graphical tool **for** xrandr
make a configuration and **export** it as a script.

```
x='xrandr --query |grep 1920 |wc -l';
```

5.2 Download google books

Greasemonkey script

This is the most powerful and stable way to download Google Book. You can easily download any book from books.google.com using Greasemonkey script. Just follow the simple steps below.

This hack only works with firefox browser. Make sure you install firefox browser.

Now install Greasemonkey Script and **then** install Google book downloader userscript.

Install Flashgot to firefox browser and restart your firefox browser. Search any book on books.google.com and you'll notice a download button at the sidebar as shown in screenshot.

Click the download button to download the images of each. Select the pages you wish to download and **then** right click and **select** FlashGot Selection to download the selected pages.

%%Script topdf

%%!!! Might have problem with DirectClass PseudoClass etc, use :
convert -page A4 -units PixelsPerInch -density 100 files*.png file.pdf

%%!!! watch out **for** the files that are actually jpeg..

5.3 Thunderbird with calendar - Debian squeeze

```
icedove iceowl-extension
```

5.4 Vmail - gmail in vim

```
has recent dependencies
```

5.5 Vimperator - plugin to use vi in firefox

```
Basic motions from vim work : hjkl C-u C-d gg G C-b C-f C-e C-y
C-p C-n : go from one tab to the other

R : refresh
C: cancel
C-i : next
C-o : previous
d : delete tab

f or F : activate hints (numbered links)
F : will open in new tab

/ : search
n / N : go through search results

:o google search in current window
:t google search in new tab
```

5.6 Use Vi mode in bash

```
###Basics
In your .bashrc:
set -o vi

When typing a command, press ESC or CTRL-[ to go to vi mode

###For other terminal app
in the .inputrc file:

set editing-mode vi
set keymap vi
set convert-meta on

### Tips
Pressing # anywhere while in command mode will make the command a comment
so that you can access it later

More:
http://www.jukie.net/bart/blog/20040326082602

man 3 readline
```

5.7 Playlists - Format - Conversions - Rhythmbox - Solving the problem of moved files

Formats:

m3u : just a list of file location , Comments allowed with #
 xspf : a standard xml

Rhythmbox uses its own xml format **for** playlists.

Backup the playlist file : ~/.share/rhythmbox/playlists.xml

Thanks to python scripts found here <http://ubuntuforums.org/showthread.php?t=1740610> you can convert rhythmbox xml file to a lists of m3u files

Content of file rhythmboxplaylist2exeile:

```
#!/usr/bin/python
import os, string
marker = 0
marker2 = 0
orderlist = []
a = open( 'playlists.xml', 'r' )
if not os.path.exists("playlists"):
    os.makedirs("playlists")
os.chdir("playlists")
z = open( 'order_file', 'w' )
for line in a.readlines():
    if marker == 1:
        if line.find('<location>') != -1 and line.rfind('</location>') != -1:
            line = line[line.find('<location>')+10:]
            line = line[:line.find('</location>')]
            line = string.replace( line, '&', '&' )
            if marker2 == 0:
                m = open( name+'.playlist', 'w' )
                z.write(name+'\n')
                marker2 = 1
            m.write(line+'\n')
        elif line.find('</playlist>') != -1:
            if marker2 == 0:
                continue
            m.write('EOF\n')
            m.write('random_enabled=B: False\n')
            m.write('random_mode=S: track\n')
            m.write('repeat_enabled=B: False\n')
            m.write('repeat_mode=S: playlist\n')
            m.write('dynamic_enabled=B: False\n')
            m.write('current_pos=I: -1\n')
            m.write('name=U: '+name+'\n')
            m.write('_is_custom=B: True\n')
            m.write('_needs_save=B: False\n')
            m.close()
            marker = 0
            marker2 = 0
        elif line.find('<playlist name="') != -1:
            if line.rfind('/>') == -1:
                line = line[line.find('<playlist name="')+16:]
                line = line[:line.find('"')]
                line = string.replace( line, '&', '&' )
                name = line
                marker = 1
a.close()
```

```
z.write('EOF\n')
z.close()
```

5.8 Send email with attachment using the shell

```
#mail : simple emails
mail -s "SUBJECT" to@serv.com < mail.txt

#mutt: emails with attachments
echo "text" | mutt -a FILE -s SUBJECT -- to@serv.com

#mail+uencode : can send attachments
```

smtp or sendmail can be used to send mails.

An easy way consists in using an existing gmail account with smtp:
<http://www.webupd8.org/2009/11/use-gmail-to-send-emails-from-terminal.html>

See my script **for** sending external emails with Thunar.

Check `/var/log/mail.log` **for** errors

5.9 Mp3 tag from filenamejwith tagtool

5.10 Equalize MP3 using mp3 gain

```
find . - name '*.mp3' -exec mp3gain -r -k {} \;
```

#But first, to hceck level without doing anything run:

```
find . - name '*.mp3' -exec mp3gain -s s {} \;
```

5.11 xls2csv

```
command among other tool from package "catdoc"
```

5.12 PDF password - password crack - pdfrack - bypass - print by keeping CR

```
## Encrypting info
pdftinfo

## First try ghostscript(if read access but no modif)
gs -q -dNOPAUSE -dBATCH -sDEVICE=pdfwrite -sOutputFile=unencrypted.pdf -c
.setpdfwrite -f crypted.pdf

## For brute force cracking:
```

```
pdfcrack file.pdf -o
pdfcrack file.pdf -o -c 'cat asciilist.txt'
```

5.13 R - Bypass user file

```
R --no-init-file
```

5.14 Iceweasel Backspace to go back one page

```
type about:config in the adress bar
filter for backspace
set the browser.backspace_action value to 0.
```

5.15 Configure pulseaudio for Debian - Iceweasel Soud problem

```
##### Curent config , that seem to work:
### For skype
pulse pulse pulse
### Pulse input device
Internal Audio Analog Stereo -> Analog Line In(set as fallback ???, don't
put it to silence!!!!)
(With headset Analog Microphone will work )

### /etc/pulse/daemon.conf
high-priority = yes
nice-level = -11

realtime-scheduling = yes
realtime-priority = 5

### Xfce application autostart
I desactivate pulseaudio
### Daemon started at boot (will warn because of per user settings)
/etc/init.d/pulseaudio
(update-rc.d pulseaudio defaults)

% The other option is not to start the daemon at boot , and use xfce
autostart.
% As it is , the sound will be such that skype goes cuts rhythmbox. It was
not like this before..It's probably because now they go through /usr/
lib/i386-linux-gnu/libsndfile.so

##### Introduction
The problem comes when several applications try to access the sound device
directly.
There are two options :
- Use a mixer between the application and the hardware (pulseaudio , or
jack)
- Use the hardware mixer with an pplication like dmix provided also

Pulseaudio does this mixing job , and thus , allow playing of several
applications at the same time.
```

Pulseaudio, starts by default, **if** called properly by the application.

So let's try with pulseaudio which is now default in debian and ubuntu. Several people remove pulseaudio and don't have trouble...well, let's take the challenge.

Firefox/Iceweasel/Flash player

vlc & rhythmbox together, no problem, they call pulseaudio.

The problem comes from iceweasel or maybe just the flashplugin which try to access the sound device directly.

If pulseaudio is called first, **then** iceweasel does not have access to the card /dev/snd/*.

If iceweasel is called first and **then** pulseaudio, it's pulseaudio that can't access the card.

To see who is using what:

```
lsof -w | egrep 'snd|dsp'
```

Use this **command** extensively to debug: **if** you see that firefox-bin uses /dev/snd/* **then**, it will obviously not work. The only one that should use it is pulseaudio!

Below I give my solution, but I recently discovered this official page that could help (though it made things worse **for me do** to the gstreamer configuration) : <http://pulseaudio.org/wiki/PerfectSetup>

%%% The solution that worked **for me**:

#(Step 0: As I was quite uncertain of my last install of flashplayer, I did a clean install, but this is not necessary

- Purged flashplugin-nonfree*

- Removed ~/.mozilla/plugins/flashplugin*.so (not sure about the name anymore)

- locate flashplugin* to see **if** everuthing was purged correctly

- install flashplugin-nonfree and that's all

note **for** upgrade: sudo update-flashplugin-nonfree --install

)

#Step 1 : install all the pulseaudio stuff:

```
sudo aptitude install pulseaudio libao4 libpulse-mainloop-glib0
pulseaudio-module-jack pulseaudio-module-hal pulseaudio-module-x11
gstreamer0.10-pulseaudio pulseaudio-utils libasound2-plugins libpulse-browse0 pulseaudio-esound-compat libpulse0
```

If you want to use bluetooth: pulseaudio-module-bluetooth

If you want to use some visual interface stuff: pavumeter paprefs

pavucontrol

!!! PAVUCONTROL is really good. For instance, **for** recording audio card flux. Launch recording with audacity. **then** in pavucontrol /recording change internal to monitor in the audacity line.

#Step 2: Tell ALSA applications to use a "pulse" device.

Create/Edit file ~/.asoundrc (or /etc/asound.conf) with the following content:

```
pcm.pulse {
    type pulse
}
```

```
ctl.pulse {
```



```

    type pulse
}

pcm.!default {
    type pulse
    # If defaults.namehint.showall is set to off in alsa.conf, then this
    # is
    # necessary to make this pcm show up in the list returned by
    # snd_device_name_hint or aplay -L
    hint.description "Default Audio Device"
}

```

```

ctl.!default {
    type pulse
}

```

Note, I added the following **for** skype, but **then** I commented it, I'm not sure it was usefull:

```

#pcm.dmixout {
#    type pulse
#}

```

This will create a pseudo-device called "pulse" that will be used by default by ALSA applications

#Step3: Make sure you have pcm(mixing) volume none zero

In terminal you can use alsamixer (I had to use the option -c 0) or aumixer, or probably the pulse audio commandline pacmd.

or whatever volume mixer interface like xfce4-mixer, or the pulse audio one **if** you installed it.

#Step4: Test

Kill all applications using sound, including pulseaudio. The **command** `lsof -w | egrep 'snd|dsp'` should **return** nothing.

Do some testing. Hopefully you should be able to have youtube/vlc/rhythmbox working all together at the same time **for** a good cacophony.

%% Wait, now I'm having a trouble, rhythmbox does not launch pulseaudio by itself

On some website they advise to configure gstreamer to **set** it to use `pulsesink` and `pulserc`. But this actually made things crash **for** me, rhythmbox or totem won't start pulse automatically.

%What they suggests and that make things didn't work (maybe I'm missing a package or something):

```

gconftool-2 -t string --set /system/gstreamer/0.10/default/audiosink
pulsesink

```

```

gconftool-2 -t string --set /system/gstreamer/0.10/default/audiosrc
pulserc

```

```

gconftool-2 -t string --set /system/gstreamer/0.10/default/musicaudiosink
pulsesink

```

%What worked **for** me is to **set** everything as auto

```

gconftool-2 -t string --set /system/gstreamer/0.10/default/audiosink
autoaudiosink

```

```

fconftool-2 -t string --set /system/gstreamer/0.10/default/audiosrc
autoaudiosrc

```

```

gconftool-2 -t string --set /system/gstreamer/0.10/default/musicaudiosink
autoaudiosink

```

%%

```

In the file /etc/iceweasel/iceweaselrc , replace the line ICEWEASEL_DSP="
  none" by ICEWEASEL_DSP="aoss"
aoss is a simple wrapper script which facilitates the use of the ALSA OSS
  compatibility library.
To install it :
root@localhost:~#apt-get install alsa-oss

Does it work??

%% advanced setups
pacmd list -sinks

pacmd set-default-sink 1

```

5.16 Custom filetypes in geany

```

# to make it really custom, you need to compile one...
Otherwise use an existing parser(perl C, LaTeX) and customize it

# First step
launch Geany, Tool>>Configuration files >> filetype_extensions.conf
Add the line
Bib=*.bib;

and saved in ~/.config/geany/filetype_extensions.conf

cp /usr/share/geany/filetypes.latex /home/manu/.config/geany/filetypes.bib
.conf

```

5.17 Indexation - Search in pdf

```

#
swish++ appear as a good solution, it is configurable via a .conf file

instead of using a conf file, one can use do it manually
convert all pdf to txt via pdftotext
then index them with index++
then search with search++

#
Use tracker... it's easier and more complete
tracker-control -s      : To launch the indexing:
tracker-preferences    : for options
tracker-search-tool    : for graphical interface
tracker search bla     : command line search
tracker search -t bla  : search in documents

```

5.18 OCR Text recognition and searchable PDF

```

Idea:
- splitting pdf
- converting to good image format (1bpp)
- use an OCR tool to create hOCR data (html OCR)

```

```

- use hocr2pdf to put the text data into the pdf
- combine the pdf (using pdfjoin from pdftjam)

%% Step by step tools

# pdftk

# pdf2ppm

# Creating hocr files from images
- tesseract (you need version 3 not 2.04 as in Debian see below)

- cuneiform
cuneiform -l language -f hocr -o output.hocr infile.ppm

# hocr2pdf : puts hOCR data into the pdf (behind images)
hocr2pdf comes with exactimage
-i inputfile
-o output pdf
-n : no image, allows to skip the image normally shadowing the text to
    either save storage space or take a look how exactly the glyphs are
    positioned.
-s : sloppy text can improve copy paste text

example:
hocr2pdf -i scan.tiff -s -o test.pdf < cuneiform-out.hocr

%% Tools / scripts to do it
gkovacs-pdfocr (https://github.com/gkovacs/pdfocr)
pdf2ocr (http://blog.konradvoelkel.de/2010/01/linux-ocr-and-pdf-problem-solved/)

# watchocr is a linux distribution acting as server to do this (using
# hocr2pdf and cuneiform)

%% Script 1 - Using Tesseract 3

#!/bin/bash
echo "usage: pdfocr.sh document.pdf \"author\" \"title\""
# Adapted from http://blog.konradvoelkel.de/2010/01/linux-ocr-and-pdf-problem-solved/
# NOTE: This script has been substantially modified/simplified from the
# original.
# This version does not allow rotation, language selection or cropping.
# Those parameters were all required in the original, but I don't really
# need them.
# If you can think of a way to make them optional, please share.
# This version also uses Tesseract, which I find to be substantially more
# accurate than Cuneiform for English text.
# usage examples:
pdftk "$1" burst dont_ask
for f in pg_*.pdf
do
echo "pre-processing $f ..."
convert -quiet -density 300 -depth 8 "$f" "$f.tif"
echo no splitting
done
for f in pg_*.tif
do

```

```

echo "processing $f ..."
tesseract "$f" "$f" hocr
echo "Merging TIFF and hOCR into PDF file at 150 DPI..."
#Downsample to cut down on file bloat
hocr2pdf -r 150 -i "$f" -o "$f-ocr.pdf" <"$f.tif.html"
done

echo "InfoKey: Author" > in.info
echo "InfoValue: $2" >> in.info
echo "InfoKey: Title" >> in.info
echo "InfoValue: $3" >> in.info
echo "InfoKey: Creator" >> in.info
echo "InfoValue: PDF OCR scan script" >> in.info
pdfjoin --fitpaper --tidy --outfile "$1.ocr1.pdf" "pg_*-ocr.pdf"
rm -f pg_*
pdftk "$1.ocr1.pdf" update_info doc_data.txt output "$1.ocr2.pdf"
pdftk "$1.ocr2.pdf" update_info in.info output "$1-ocr.pdf"
rm -f "$1.ocr1.pdf" "$1.ocr2.pdf" doc_data.txt in.info

%%% Script 2 using cuneiform
#!/bin/bash
pdftk "$1" burst dont_ask
for f in pg_*.pdf
do
echo "pre-processing $f ..."
convert -quiet -rotate  $[90*\$2]$  -monochrome -normalize -density 300 "$f" "
    $f.png"
convert -quiet -crop  $\$6x\$7+\$4+\$5$  "$f.png" "$f.png"
if [ "1" = "$3" ];
then
    convert -quiet -crop  $[\$6/2]x\$7+0+0$  "$f.png" "$f.1.png"
    convert -quiet -crop  $0x\$7+[\$6/2]+0$  "$f.png" "$f.2.png"
    rm -f "$f.png"
else
    echo no splitting
fi
rm -f "$f"
done

for f in pg_*.png
do
echo "processing $f ..."
convert "$f" "$f.bmp"
cuneiform -l  $\$8$  -f hocr -o "$f.hocr" "$f.bmp"
convert -blur 0.4 "$f" "$f.bmp"
hocr2pdf -i "$f.bmp" -s -o "$f.pdf" < "$f.hocr"
rm -f "$f" "$f.bmp" "$f.hocr"
done

echo "InfoKey: Author" > in.info
echo "InfoValue: $9" >> in.info
echo "InfoKey: Title" >> in.info
echo "InfoValue: $10" >> in.info
echo "InfoKey: Creator" >> in.info
echo "InfoValue: PDF OCR scan script" >> in.info
pdfjoin --fitpaper --tidy --outfile "$1.ocr1.pdf" "pg_*.png.pdf"
rm -f pg_*.png.pdf
pdftk "$1.ocr1.pdf" update_info doc_data.txt output "$1.ocr2.pdf"
pdftk "$1.ocr2.pdf" update_info in.info output "$1-ocr.pdf"

```

```

rm -f "$1.ocr1.pdf" "$1.ocr2.pdf" doc_data.txt in.info
rm -rf pg*_files

%%%
pdftk infile.pdf burst dont_ask
pdftk infile.pdf dump_data
pdftoppm pg_001.pdf > pg_001.ppm
cuneiform -l language -f hocr -o out.hocr file.ppm'
ocrosript recognize file.ppm > out.hocr"
hocr2pdf -i file.ppm -s -o infile-new.pdf < out.hocr"

pdftk infile*-new.pdf cat output merged.pdf
pdftk merged.pdf update_info pdfinfo.txt output outfile.pdf

%%% Tesseract 3
sudo apt-get install libpng12-dev
sudo apt-get install libjpeg62-dev
sudo apt-get install libtiff4-dev
sudo apt-get install zlibg-dev
sudo apt-get install leptonica
svn checkout http://tesseract-ocr.googlecode.com/svn/trunk/ tesseract-ocr-
read-only
./runautoconf
./configure
make
sudo make install
#download language data
cd /usr/local/share/tessdata
sudo wget http://tesseract-ocr.googlecode.com/files/eng.traineddata.gz

#activate hocr
cd /usr/local/share/tessdata/configs
sudo vi hocr

You need to know how to use Vim to do this bit
Put this in: "tessedit_create_hocr 1"
Save with ":x"

#usage
Convert -density 300 scanpage1.pdf -depth 8 scanpage1.tif
Tesseract scanpage1.tif outputtext
Tesseract scanpage1.tif outputtext hocr

pdftk burst test.pdf

convert -quiet -monochrome -normalize -density 300 pg_0001.pdf pg_0001.png
convert pg_0001.png pg_0001.bmp
convert -quiet -density 300 -depth 8 -monochrome -normalize pg_0001.pdf pg
_0001.tif
convert -quiet -density 300 -depth 8 -monochrome -normalize pg_0001.pdf pg
_0001.bmp

tesseract pg_0001.bmp pg_0001 hocr
tesseract pg_0001.tif pg_0002 hocr
tesseract pg_0001.png pg_0003 hocr

cuneiform -f hocr -o pg_0001.hocr pg_0001.bmp

convert -blur 0.4 pg_0001.png pg_0004.bmp

```

```

hocr2pdf -i pg_0001.bmp -n -s -o out_0001.pdf < pg_0001.html
hocr2pdf -i pg_0001.tif -n -s -o out_0002.pdf < pg_0002.html
hocr2pdf -i pg_0001.png -n -s -o out_0003.pdf < pg_0003.html
hocr2pdf -i pg_0001.png -n -s -o out_0005.pdf < pg_0004.html

hocr2pdf -i pg_0001.png -n -s -o out_0004.pdf < pg_0001.hocr

#hocr2pdf -i "$f.bmp" -n -s -o "$f.pdf" < "$f.hocr"

#rm -f "$f" "$f.bmp" "$f.hocr"
rm -f "$f" "$f.bmp"

```

5.19 Antivirus for linux- ClamAV - freshclam

```
aptitude install clamav
```

5.20 Install Microsoft Office 2007

```

%%
For debian squeeze:
- maybe there is a way by using wine-unstable (wine 1.1.42)
- Otherwise (what I've done) download the .deb for wine 1.2 for ubuntu
  jaunty
This will require you to desinstall the previous wine. And it's best if
  you remove your ~/.wine directory first

then do a winecfg

do the install
(if you can't type the product key, you probably installed riched20
  librairie with winetricks, remove it)

%% Minimum, it worked
get winetricks
winetricks corefonts tahoma vcrun2005sp1 wsh56js allfonts

%% Font smoothing
wget http://files.polosatus.ru/winefontssmoothing_en.sh
bash winefontssmoothing_en.sh

%% xls2latex
#1
I manage to get xls2latex working, by adding this macro to the custom
  toolbar on top of the ribbon
Open xls2latex
Click on top of the ribbon -> Customize commands -> Macro -> ToLatexTable
#2
I modified the VBA code, now it's working. Use the File Excel2Latex?Linux.
Execute CreateCommandBar
It should be in addins now
I removed the buggy forms
It copy the latex table in the clipboard

%% More???

```

```
./winetricks msxml3 dotnet20 gdiplus riched20 riched30 vcrun2005sp1
allfonts
```

5.21 Mount .bin/.cue - convert them to .iso

```
The easiest: convert them to iso with bchunk

sudo aptitude install bchunk

The syntax from bchunk is as follows:
bchunk [-v] [-p] [-r] [-w] [-s]

bchunk image.bin image.cue image.iso
Mount the iso:
mount -o loop -t iso9660 image.iso /mnt/image
```

5.22 pdf2png - pdftopng

```
Best I found:
convert -density 300 -format png npoints3.pdf npoint3.png

Bof:
convert -quality 100 npoints3.pdf npoint3.png
mogrify -quality 100 -format png npoints3.pdf

Ma solution : (NON ACTUALISE)
Compiler le code source redhat de Kristian Hogsberg <krh@redhat.com>
(Informatique/Programmation/C/pdf2png)
Chercher cairo/test sur internet

Makefile.am*
Makefile.win*
pdf2png.c*
pdf2png.dev*
pdf2png.layout*
poppler-action.cc*
poppler-action.h*
poppler-attachment.cc*
poppler.cc*
poppler-document.h*
poppler-features.h.in*
poppler.gidl*
poppler.h*
poppler-page.cc*
poppler-page.h*
poppler-private.h*
test-poppler-glib.c*
```

5.23 Fuseiso - Monter iso facilement- thunar shortcut

```
adduser manu fuse

##Mounting command:
```

```
fuseiso -n -p %f %f.mount
appearance conditions:
*.iso;*.ISO;*.bin;*.BIN;*.nrg;*.NRG;*.mdf;*.MDF

## Unmounting command:
fusermount -u %f
*.mount
```

5.24 Meld : File/Folder comparison- thunar shortcut

```
meld %F
```

5.25 Catfish : Find files- thunar shortcut

```
catfish --fileman=thunar --path=%f
(on directories)
```

5.26 Java - iceweasel debian - Network problem

```
installing java:
aptitude install sun-java6-jre sun-java6-plugin
update-java-alternatives --set java-6-sun
```

Here is the solution.

open file
/etc/sysctl.d/bindv6only.conf and **set** net.ipv6.bindv6only=0, **then** restart
the procs with invoke-rc.d procs restart

here are the corresponding bugs

```
http://bugs.debian.org/cgi-bin/bugreport.cgi?bug=560238
http://bugs.debian.org/cgi-bin/bugreport.cgi?bug=560056
```

This wasted quiet some time **for** me, so I thought I'd warn you.
It happens **if** you update package netbase to 4.40 and it can affect other
apps too, especially **if** they are not from the debian repos.
A real debian special ...

5.27 Snapshot - Capture d'ecran

```
xfce4-screenshooter
```

5.28 FOR LOOPS/ FIND / XARGS and SPACE CHARACTERS -> Find in PDF

bash uses space characters as default separators. This is `set` with the variable `$IFS`

```
#Option 1
#!/bin/bash
SAVEIFS=$IFS
IFS=$(echo -en "\n\b")
for f in *
do
    echo "$f"
done
IFS=$SAVEIFS

#Option 2
find . -print0 | while read -d $'\0' file
do
    echo -v "$file"
done

# Application : Script to find in pdf :

#!/bin/bash
SAVEIFS=$IFS
IFS=$(echo -en "\n\b")

echo "Looking for "$1
for i in `find -name "*.pdf" -printf '%h/%f\n' 2> /dev/null`
do
    echo "_____ "
    echo "$i";
    echo "_____ "
    pdftotext $i - |grep --color=always $1
# strings "$i" |grep $1
done;
IFS=$SAVEIFS
```

5.29 Iceweasel / Firefox et java plugin

Récapitulatif d'installation de JAVA et des plugins Java dans Iceweasel

J'ai téléchargé `jre-6u1-linux-i586.bin` ici
[http://sdlc5c.sun.com/...](http://sdlc5c.sun.com/)

J'ai changé les permissions d'accès du fichier afin de pouvoir l'exécuter.

```
#chmod +x jre-6u1-linux-i586.bin
```

J'ai exécuté le fichier à l'aide de la commande suivante :

```
#!/jre-6u1-linux-i586.bin
```

Un répertoire nommé `jre1.6.0` vient d'être créé. J'ai déplacé ce répertoire dans le répertoire `/opt` qui va contenir toutes les applications utilisateurs propriétaires.

```
#mv -f jre1.6.0_01/ /opt/
```

J'ai ajoutÃ© les liens vers les binaires nÃ©cessaires Ã l'aide des commandes suivantes :

```
#ln -s /opt/jre1.6.0_01/bin/java /usr/local/bin/java
#ln -s /opt/jre1.6.0_01/bin/policytool /usr/local/bin/policytool
```

J'ai renseignÃ© le reste du systÃ©me que la Java Runtime Environment est installÃ©e en ajoutant la ligne suivante au fichier /etc/environment

```
#echo JAVA_HOME=/opt/jre1.6.0_01 >> /etc/environment
```

CrÃ©ation de lien vers libjavaplugin_oji.so

```
#ln -sfv /opt/jre1.6.0_01/plugin/i386/ns7/libjavaplugin_oji.so /usr/lib/iceweasel/plugins
```

5.30 VISIO 2003

L'installation marche

#Pour resoudre l'erreur IOPL not enabled :

winecfg

#Go to the Libraries tab, and add an entry called gdipplus. Then, edit the entry you just added, and select Native (Windows).

5.31 Firefox / iceweasel slow, tweak it

%% about:config dans la barre d'adresse

#network.dns.disableIpv6 desactiver l'Ipv6

#Create new Boolean value set to true : config.trim_on_minimize to release memory when iconified, risky

#Create new Integer value set to 0 : nglayout.initialpain.delay to instantateously show page

#set browser.cache.memory.capacity to a fixed size (the default values are : for 256 MB RAM - 14336, 512 MB RAM - 22528, 1 GB RAM - 32768). A good value to try is 16384.

#set browser.sessionhistory.max_total_viewers to 0

#change image.animation_mode to none or once

#browser.sessionhistory.max_entries set it to 5

%% Tools/Options.

set the disk cache memory to a low value (less than 50 MB)

turn off Java

try to avoid these extensions: Adblock, Fasterfox, IE Tab, Session Saver. Use Adblock Plus instead of Adblock.

don't use more than 5 extensions

Other tweaks that can be **done** in the user.js file ou (pref.js quand firefox is closed)

or by about:config

/ Speed Tweak - Common to all Configurations */*

user_pref("network.http.pipelining", true);

user_pref("network.http.proxy.pipelining", true);

user_pref("network.http.pipelining.maxrequests", 8);

user_pref("content.notify.backoffcount", 5);

user_pref("plugin.expose_full_path", true);

```

user_pref("ui.submenuDelay", 0);
/* Speed Tweak – Fast Computer Fast Connection */
user_pref("content.interrupt.parsing", true);
user_pref("content.max.tokenizing.time", 2250000);
user_pref("content.notify.interval", 750000);
user_pref("content.notify.ontimer", true);
user_pref("content.switch.threshold", 750000);
user_pref("nglayout.initialpaint.delay", 0);
user_pref("network.http.max-connections", 48);
user_pref("network.http.max-connections-per-server", 16);
user_pref("network.http.max-persistent-connections-per-proxy", 16);
user_pref("network.http.max-persistent-connections-per-server", 8);
user_pref("browser.cache.memory.capacity", 65536);

Disabling ipv6 is the biggie that tends to speed things up. As mentioned
in the "other" thread.
/* Speed Tweak – Another Tweak */
user_pref("network.dns.disableIPv6", true);

/* Tor Settings */
user_pref("network.http.keep-alive.timeout", 600);
user_pref("network.http.proxy.keep-alive", true);

# Perso :
# Pour avoir les tab de memes tailles , modifier les tab options
max_tabs_undo
tabMaxWidth
tabMinWidth

```

5.32 PDF Cropping - suppression d'espace de marges

```

% Now, I'm using bliss a java application

#Utiliser pdfcrop (script perl d'Eric Doviak et Mark Sherry) disponible
sur source forge

#Sinon, pour avoir la taille (old stuff)
identify x.pdf
Puis
convert -crop 10+10+0+0 x.pdf y.pdf

# Recently : I found it to work by first converting to png with a density
chosen (between 100 and 300 depending)
for i in *.pdf ; do convert -density 150 $i tmp/${i%.*}.png; done
identify * (gives W0xH0)
concert -crop W2xH2+L2+T2 +repage x.png y.png
Option +repage is important, it remove the canvas information, set it to
the new image size.

#convert -crop 950x1160+280+160 +repage x.png y.png

```

5.33 Renommage massif unix

```

ca depend de la version de rename
rename "s/mp4/mp3/g" *.mp4

```

```

rename .mp3 .mp4 *.mp3

rename "s/mp4/mp3/" *.mp4
for i in *htm; do mv $i `basename $i htm`html; done
for i in *htm; do mv $i ${i%%.htm}.html; done

```

5.34 Faire un dictionnaire - Compter le nombre de keywords d'une page web

```

unalias grep

-Virer les commandes HTML : sed -e :a -e 's/<[^>]*>//g;/</N;//ba'
-Utiser tr pour transformer un character en un autre (espace en newline)
  : tr ' ' '\n'
-Virer la ponctuation : tr -d '[:punct:]'
-Virer les lignes avec des caracteres qui ne sont pas des lettres (tab,
  nombres...) : grep -v '^[a-z]'
-Virer les mots de moins de 2 lettres et les lignes vides: grep -E '[a-z]
  ]{3,}'
-Mettre tout en lower case : tr '[:upper:]' '[:lower:]'
-Virer les mot communs :
  grep -v -E -w 'the|and|for|from|with|used'
-Trier avec sort
-Compter les occurences avec uniq et l'option -c : uniq -c
-Trier par nombre reverse: sort -rn

cat *php* | sed -e :a -e 's/<[^>]*>//g;/</N;//ba' | tr ' ' '\n' | tr -d
'[:punct:]' | grep -v '^[a-z]' | grep -E '[a-z]{3,}' | tr '[:upper:]'
'[:lower:]' | grep -v -w -E 'the|and|for|from|with|used|which|are|that|
this|will|can|been|should|using|all|one|two|three|has|taken|where|made|
also|thus|though|have|when|not|such|figure|table|these|could|seen|given
|nbsp|les|des|from|different|est|dans|une|our|qui|between|next|would|
sont|its|see|son|plus|case|que|pour|suivant|nous|par|sur|each|but|than|
only|other|main|figures|tables|more|there|value|values|were|was|low|
high|around|since|very|order|per|into|first|because|found|them|done|
good|their|really|here|got|big|better|well|away|shown|over|like|while|
within|take|due|any|then|under|same|much|most|both|second|lot|use|get|
pas|mais|alors|peut|plot|left|right' | sort | uniq -c | sort -rn | head
-50 | sed 's/'\ 0-9'//g' | xargs

cat SUPERFILE | grep -E '[a-z]{3,}' | tr '[:upper:]' '[:lower:]' | tr -d
'[:punct:]' >SUPERFILE2

cat SUPERFILE3 | grep -v -w -E 'the|and|for|from|with|used|which|are|that|
this|will|can|been|should|using|all|one|two|three|has|taken|where|made|
also|thus|though|have|when|not|such|figure|table|these|could|seen|given
|nbsp|les|des|from|different|est|dans|une|our|qui|between|next|would|
sont|its|see|son|plus|case|que|pour|suivant|nous|par|sur|each|but|than|
only|other|main|figures|tables|more|there|value|values|were|was|low|
high|around|since|very|order|per|into|first|because|found|them|done|
good|their|really|here|got|big|better|well|away|shown|over|like|while|
within|take|due|any|then|under|same|much|most|both|second|lot|use|get|
pas|mais|alors|peut|plot|left|right' | sort | uniq -c | sort -rn | head
-300

```

```

cat test | grep -v -w -E 'the|and|for|from|with|used|which|are|that|this|
will|can|been|should|using|all|one|two|three|has|taken|where|made|also|
thus|though|have|when|not|such|figure|table|these|could|seen|given|nbsp
|les|des|from|different|est|dans|une|our|qui|between|next|would|sont|
its|see|son|plus|case|que|pour|suivant|nous|par|sur|each|but|than|only|
other|main|figures|tables|more|there|value|values|were|was|low|high|
around|since|very|order|per|into|first|because|found|them|done|good|
their|really|here|got|big|better|well|away|shown|over|like|while|within
|take|due|any|then|under|same|much|most|both|second|lot|use|get|pas|
mais|alors|peut|plot|left|right'| sort | uniq -c | sort -rn | head -300

```

5.35 Aspirer un site avec wget

```
http://forum.ubuntu-fr.org/viewtopic.php?id=78954
```

```
wget -r -ll -k -E -A *svg http://www.openclipart.org/user-cliparts/johnny_
automatic?page=$i
```

```
wget -r -l5 -k -E -np www.unsite.com
```

'--no-parent' Do not ever ascend to the parent directory when retrieving recursively. This is a useful option, since it guarantees that only the files below a certain hierarchy will be downloaded. see "Directory-Based Limits", **for** more details.

Explication :

```

-r : récursif sur le site
-l5 : cinq niveaux de récursion au maximum
-k : convertir les destinations des liens pour une lecture locale
-E : convertir les types de fichier au format HTML (pour éviter que la
lecture de sites en PHP ne foire en lecture sous Firefox).
-np: '--no-parent' Do not ever ascend to the parent directory
-A : +list of file types patterns
-c : continue previously stopped download

```

Pour aller plus loin.

Si vous voulez plus d'options, la page de manuel de wget est pleine d'infos utiles, voici des options très intéressantes :

```

-t : spécifier combien de fois que wget devrait essayer de télécharger
chaque fichier.
-w : spécifier combien de temps attendre entre les essais
-c : demander à wget de continuer un téléchargement interrompu.
-T : spécifier au bout de combien de secondes sans réponse wget
abandonne une connexion
--limit-rate : mettre une vitesse de connexion maximale pour ne pas
monopoliser votre bande passante
-Q : limiter la place que prendront tous les fichiers téléchargés, pour
ne pas trop remplir votre disque dur. Dès qu'à la fin d'un
téléchargement le quota sera dépassé, wget s'arrêtera
--load-cookies : importer des cookies (pratique pour les sites où vous
devriez être authentifié)

```

```
-X : exclure un répertoire
```

5.36 Modification pdf - Avec le paquet pdftk

```
# Concaténer les fichiers A1 et A2 pour obtenir le fichier B.pdf
pdftk A1.pdf A2.pdf cat output B.pdf
# Supprimer les 2 premières pages d'un document de 9 pages
pdftk original.pdf cat 3-9 output final.pdf
# Supprimer les page 6 et 7
pdftk original.pdf cat 1-5 8-end output final.pdf

# Garder les pages 69 a 117 impaire
pdftk original.pdf cat 69-117odd output final.pdf

pdftk 'ls -l *.pdf|sort -g|xargs' cat output out.pdf

#decomposer en plusieurs fichiers
pdftk chap.pdf burst

# Rotate an entire PDF document to 180 degrees
pdftk in.pdf cat 1-endS output out.pdf
```

5.37 Manipulation d'images en masse : image magick

```
display : interface graphique moyen (mauvais gimp)

Plusieurs outils pour multiples fichiers dont mogrify
- "mogrify" modifie les image en places alors que
- "convert" les sauve sous un autre nom
- "identify" pour donner des info sur l'image

Options utiles :
mogrify -resize 800x600 *.JPG
mogrify -resize 50% *.JPG
mogrify -negate test.jpg
mogrify -monochrome test.jpg
mogrify -format jpg *.png
mogrify -scale 110x2 *.png # wouldn't work with 110x1

#Animation Gif
convert -delay 20 -loop 0 sphere*.png animation.gif
animate *.gif

convert fig13.png -crop 1530x1210+75+95 test.png

mkdir 16x16
mkdir 24x24
mkdir 32x32
mkdir 48x48
export fold=actions
cd $fold
export size=16x16
mkdir ../$size/$fold
mogrify -resize $size -path ../$size/$fold *.png
export size=24x24
```

```
mkdir ../$size/$fold
mogrify -resize $size -path ../$size/$fold *.png
export size=32x32
mkdir ../$size/$fold
mogrify -resize $size -path ../$size/$fold *.png
export size=48x48
mkdir ../$size/$fold
mogrify -resize $size -path ../$size/$fold *.png
```

5.38 Evince cannot open any pdf documents anymore

```
remove
/usr/local/share/mime/mime.cache
or
~/.local/share/mime/mime.cache
```

5.39 Audio format conversion : ogg, au, mp3, wav, snd,aiff ...

```
SoX is able to handle formats like Ogg Vorbis , MP3, WAV, AIFF, VOC, SND,
AU, GSM

sudo aptitude install sox libsox-fmt-all
```

5.40 dos2unix : package tofrodos

```
Convertit un point bat
```

5.41 Listen ou Exaile ou Quod libet ou banshee ou xrmms pour remplacer Amarok

```
aptitude install listen
aptitude install exaile
```

5.42 WICD pour remplacer Gnome Network Manager

```
aptitude install wicd
```

5.43 Installer un nouveau pager : most

```
better than more or less
    Le pager est un programme qui sert Ã  afficher du texte. Vous avez le
    choix entre plu-
sieurs programmes, grÃ¢ce Ã  un mÃ©canisme d'alternatives. Je vous propose
d'installer
et d'utiliser most, un pager qui permet entre autres de colorer les pages
de manuel.
```

```
# aptitude install most
# update-alternatives --config pager
    La seconde commande vous demande de choisir le pager à utiliser.
    Répondez en
donnant le numéro qui correspond à most. Maintenant, c'est ce programme
    qui sera
utilisé pour afficher les manuels.
```

5.44 Gparted equivalent

Dur à trouver. => parted en ligne de commande
De toute façon, il faut des partitions démontées, donc utilisation d'un
live CD.
Inutile d'installer gparted

5.45 Logiciels équivalent linux / windows

http://wiki.linuxquestions.org/wiki/Linux_software_equivalent_to_Windows_software
http://www.libervis.com/wiki/index.php?title=Table_of_Equivalent_Software

5.46 Personnaliser xterm

```
xrdb ~/.Xdefaults

prompt colore : (variable PS1)
par default : ${debian_chroot:+($debian_chroot)}\u@\h:\w\$
export PS1='\033[1m\033[1;33m\u:\e[32;1m\w\e[33;1m$ \033[m'
export PS1='\[\033[1m\]\[\033[1;33m\]\u:\[\e[32;1m\]\w \[\e[33;1m\]\$
    \[\033[m] '

vim .bashrc
# some more ls aliases
alias ll='ls -lhb'
alias ls='ls -F --color=always'
alias la='ls -lAXh|more'
alias lag='ls -lAgXh|grep'
alias lsd='ls -l|grep drwx'
alias lag='ls -lAgXh|grep'
alias lsd='ls -l|grep drwx'
alias dir='ls --color=auto --format=vertical'
alias cd.='cd .'
alias grep='grep --color=always'

alias cp='cp -i'
alias mv='mv -i'
alias rm='rm'

alias gedit='geany'
alias mydiff='diff -a -b -B -w -y -i --suppress-common-lines'
alias mydiffb='diff -a -b -B -w -y -i'
alias filemanup="java -jar /home/share/Config/Applications/File-
manupilation-v1.315/File-Manupilation-v1.315.jar"
```



```

alias alarmaniac="java -jar /home/share/Config/Applications/Alarmaniac/
    alarmaniac.jar"

vim .Xdefaults

! xterm
-----
xterm*faceName:          monospace: pixelsize=14
!xterm*dynamicColors:   true
!xterm*utf8:             2
!xterm*eightBitInput:   true
xterm*scrollTtyKeyPress: true
xterm*scrollTtyOutput:  false
xterm*scrollBar:        true
xterm*rightScrollBar:   true
xterm*jumpScroll:       true
xterm*multiScroll:      true
xterm*background:       black
xterm*foreground:       green
xterm*title :           xterm
xterm*vt100.geometry :  80x28
XTerm*reverseVideo :    on
XTerm*SaveLines:        1000

! Xcursor
-----
Xcursor*theme:           Vanilla-DMZ-AA
Xcursor.size:            22

A mettre dans le .xinitrc
xrdb ~/.Xdefaults

```

5.47 RAW photo images nikon .NEF

```
ufraw --out-type jpg --compression 90 *.NEF
```

Chapter 6

Xorg - clavier souris touchpad

6.1 Starting different x servers

```
by changing xinitrc , one can open different desktop manager at the same
time
startx -- :1 (by default , startx uses screen 0)
```

6.2 Bien lire le log Xorg

```
grep \(EE /var/log/Xorg.0.log
grep \(WW /var/log/Xorg.0.log
grep disabled /var/log/Xorg.0.log
grep enabled /var/log/Xorg.0.log
grep Unload /var/log/Xorg.0.log
```

6.3 Xorg ou/et HAL

Xorg utilise désormais HAL pour déterminer la configuration. Ce qui a pour conséquences :

- * De simplifier la vie pour les débutants, ou de ceux qui ne veulent pas se prendre la tête. ;-)
- * De rendre le fichier xorg.conf inutile, si souhaité.
- * Que la commande xorgconfig, permettant de générer le fichier de configuration, ait été supprimée.

Si votre matériel n'a rien de spécial, que vous connaissez mal votre configuration matérielle ou que vous n'êtes pas sûr de vos paramètres, il est très probablement plus prudent et sûr de laisser faire HAL. La configuration ne sera peut être pas optimale ou parfaite, mais elle fonctionnera.

%Utiliser xorg.conf, comme avant

Pour ce faire, en root, il faut ajouter à ce dernier dans la section

ServerLayout les deux options suivantes :

Option "AllowEmptyInput" "false"

Option "AutoAddDevices" "false"

La première sert à se débarrasser du warning, ce qui provoque un "bâgagement" du clavier (écrit trois fois la même lettre pour chaque touche tapée, ou suivant les cas est aussi aléatoire). La seconde sert à corriger le "bâgagement" du clavier après suppression du warning.

```
%Configurer HAL
Ca se passe ici, et c'est un peu plus compliqué.
/etc/hal/fdi/policy/
```

6.4 X11 working x11 without hald/dbus

Voir plus haut pour un peu plus de détails
 Bien mettre ces deux options pour que la configuration des devices de xorg.conf soient prises en compte (sinon, configurer HAL)

```
Section "ServerFlags"
    (...)
    Option "AllowEmptyInput" "off"
    Option "AutoAddDevices" "off"
EndSection
```

6.5 Numlockx conflicting

Fine create your own :
 xsetnumlock.c :

```
#include <X11/extensions/XTest.h>
#include <X11/keysym.h>
/*
Requires:
aptitude install libxcb-keysyms1-dev libxtst-dev
Compiled with:
gcc -I/usr/include/X11 -L/usr/lib/X11 -o xsetnumlock xsetnumlock.c -lX11 -lXtst */

int main(void)
{
    Display* disp = XOpenDisplay(NULL);

    if (disp == NULL) return 1;

    XTestFakeKeyEvent(disp, XKeysymToKeycode(disp, XK_Num_Lock),
        True, CurrentTime);
    XTestFakeKeyEvent(disp, XKeysymToKeycode(disp, XK_Num_Lock),
        False, CurrentTime);
    XCloseDisplay(disp);

    return 0;
}

aptitude install libxcb-keysyms1-dev libxtst-dev
gcc -I/usr/include/X11 -L/usr/lib/X11 -o xsetnumlock xsetnumlock.c -lX11 -lXtst
sudo cp xsetnumlock /usr/bin
```

```
aptitude remove libxcb-keysyms1-dev libxtst-dev
```

6.6 Ctrl alt Backspace to restart X server

```
#La solution facile Dans ~/.xinitrc
setxkbmap -option -option terminate:ctrl_alt_bksp
#####OU
#faire ces deux manip dans le xorg.conf

Section "ServerFlags"
    (...)
    Option "DontZap" "off"
EndSection

Section "InputDevice"
    (...)
    Option "XkbOptions" "terminate:ctrl_alt_bksp"
EndSection
```

6.7 QWERTY et accents

Sous xfce il n'y a pas moyen de configurer compose dans les options du clavier :

il faut modifier le /etc/X11/xorg.conf
et ajouter a la section input device keyboard
Option "XkbOptions" "compose:ralt"
Ou tout autre option pour la touche compose ralt, lwin, caps etc...
Un accent se fait alors en tapant Compose, puis en la relachant puis apostrophe , puis e
Attention : accent circonflexe : compose, shit+6 (^) + e
#OU la solution facile Dans ~/.xinitrc
setxkbmap -option -option compose:ralt

6.8 Get keyboard keycodes

Se servir de la commande xev : pour avoir les keycodes

```
# Mute
xmodmap -e 'keycode 160 = XF86AudioMute'
```

6.9 Monitor going to sleep after 10 minutes - Power management

It is probably DPMS which is doing this.
check xset -q
Standby: 60 (in seconds) ...

easy
You can **set** this up by installing xscreensaver and running xscreensaver-demo on advanced tab
But there should be a smarter way...

```

# On the fly (before watching a movie)
Disable dpms
xset -dpms
Put it back with
xset +dpms

xset -dpms          # Disable DPMS
xset +dpms          # Enable DPMS
xset s off          # Disable screen blanking
xset s 150          # Blank the screen after 150 seconds
xset dpms 300 600 900 # Set standby, suspend, & off times (in
seconds)
xset dpms force standby # Immediately go into standby mode
xset dpms force suspend # Immediately go into suspend mode
xset dpms force off # Immediately turn off the monitor
xset -q             # Query current settings

#
Configuring DPMS in xorg.conf in section Monitor (times are in minutes!!!)
Option          "DPMS"
Option          "BlankTime"      "4"
Option          "StandbyTime"    "0"
Option          "SuspendTime"    "0"
Option          "OffTime"        "5"

```

Chapter 7

XFCE - xfce4

7.1 Important xfce folders

```
~/.config/xfce4/panel
~/.config/xfce4/xfconf/——/xfce4-panel.xml
~/.config/xfce4/xfconf/xfce-perchannel-xml/xfce4-keyboard-shortcuts.xml
~/.config/Thunar/uca.xml %custom actions
~/.config/Thunar/accels.scm %shortcuts
~/.cache/sessions
~/.config/user-dirs.conf
```

7.2 Remember where xfce4-panel layout is stored

```
% REMEBMBER: Always do change on the files when X is not running (xfce)

% Things have changed now, xfce-panel applets are more and more configures
  through the xlm file. In the folder panel, there is just stuff like
  quicklauncher. That's way better..

%
There is the directory
~/.config/xfce4/panel
but there is also
~/.config/xfce4/xfconf/——/xfce4-panel.xml
The latter defining the layout!!!!
```

7.3 Disable roll up of windows with mousewheel

```
xfconf-query -c xfwm4 -p /general/mousewheel_rollup -s false
```

7.4 Tiling with xfwm4

```
%%% With Pywo
Now the best for me is definitely pywo with xinerama: acts like winsplit
  revolution
For pure tiling, agencing all windows on screen automatically: use pytyle
```

```
pywo grid_width -g R -w H -h F --xinerama
pywo grid_width -g TL -w H -h F --xinerama
```

```
pywo put -p L;
pywo put -p R;
```

%%% THUNAR TILING (when you go on an edge)
 Download patch on this website (I stored it)
<http://notanothersheep.com/XFCE4WindowTiling>

```
cd built
apt-get source xfwm4
apt-get build-dep xfwm4
cp whatever-path/xfwm4tiling.patch ./
patch -p0 < xfwm4tiling.patch
cd xfwm4-4.8.3
./configure
make
sudo make install
```

If you have several workspace, it won't work well
 xfce settings / Windows Manager / Advanced / Don't wrap workspaces

%%% With wmctrl (former stuff)
 sudo aptitude install wmctrl
 % example TopLeft:
 wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
 ACTIVE: -e 1,83,0,664,460

Modify directly the keyboard shortcuts .config/xfce4/xfconf
 shortcuts.xml

%%% With Compiz (old infos)
<http://ubuntuforums.org/showthread.php?t=801170&highlight=winsplit>
 sudo apt-get install compiz-fusion-bcop compiz-dev compizconfig-settings-
 manager build-essential libtool libglu1-mesa-dev libxss-dev libcairo2-
 dev git-core

```
mkdir ~/compiz
cd ~/compiz
git clone git://anongit.compiz-fusion.org/users/stevek/grid
```

```
cd grid
make
make install
```

7.1 You may need to **enable** "Normal" or "Extra" under desktop effects in
 System->Preferences->Appearance first. (You may also need to chown -R
 user:user ~/compiz in order to get things to compile.)

ccsm

9. Check "grid" under "Window Management".

7.5 Accessing files on the desktop without having to go to the desktop

```
My solution:
install xfce4-xfapplet and file-browser-applet
```

7.6 Cleaning up Xfce menu - applications wine

```
These menu are in these folders
~/.local/share/applications/wine
~/.local/share/desktop-directories/wine-*
~/.config/menus/applications-merged/wine-*
```

```
.local/share/desktop-directories
```

If your wine applications go into Other menu instead of Wine you are missing a menu config file which is not re-created by simply re-installing wine package.

```
.config/menus
```

```
create a folder named applications-merged
```

```
and inside a text file with wine-Programs.menu
```

```
with the following text:
```

```
<!DOCTYPE Menu PUBLIC "-//freedesktop//DTD Menu 1.0//EN"
"http://www.freedesktop.org/standards/menu-spec/menu-1.0.dtd">
<Menu>
  <Name>Applications</Name>
  <Menu>
    <Name>wine-wine</Name>
    <Directory>wine-wine.directory</Directory>
  <Menu>
    <Name>wine-Programs</Name>
    <Directory>wine-Programs.directory</Directory>
    <Include>
      <Filename>wine-Programs-Wenlin.desktop</Filename>
    </Include>
  </Menu>
</Menu>
```

7.7 Understanding Mimetypes

```
~/.local/share/
~/.local/mime
```

7.8 Command for Toggle Desktop

```
#!/bin/sh
if xprop -root _NET_SHOWING_DESKTOP | egrep '= 1' ; then
  wmctrl -k off ;
else
  wmctrl -k on ;
```



```
fi
```

7.9 Notifications

```
sudo aptitude install libnotify-bin
send notification to a notification daemon : xfce4-notifyd par exemple
notify-send jdghjdfh

du -chs %N |xargs -0 notify-send -t 2000 -i openofficeorg-20-database

ffmpeg -i %f 2>&1 |grep Stream | awk -F, '{print $1"\n" "$2 $3 $4"\n"
"$5}' | xargs -0 notify-send -t 2000 -i gnome-volume-control

awk -F, '{print $1"\n" "$2 $3 $4"\n" "$5}' Test
```

7.10 Thunar - Configure shortcuts

Go to Xfce preferences / Appearance / Settings and **enable** editable shortcuts

Then in thunar, pop-up one menu from the menu bar, when you hover an action you can edit the shortcut by simply pressing the keybinding you want. pressing backspace erase it.

Some shortcuts are stored in:
/home/manu/.config/Thunar/accels.scm

7.11 xfce shortcuts are stored in

~/ .config/xfce4/xfconf/xfce-perchannel-xml/xfce4-keyboard-shortcuts.xml
and therer are plenty of other cool files there

7.12 Thunar - User customed actions

Stored in ~/ .config/Thunar/uca.xml
mine : latexclean , To mp3, Zip it!, New folder , Install package , Eps2pdf ,
terminal Fichier

(How Big the selection)
<http://forums.debian.net/viewtopic.php?f=20&t=49558>

7.13 XFCE Default User directories - Thunar Templates

```
%% Easiest
edit ~/.config/user-dirs.conf
This is important for templates!!! I don't like them in my home, I like
them betetr in my .config/Templates
Requires relogging
```

```
%Otherwise Default template directory is ~/Templates
```

```
%%% System wide
```

```
See :  
/etc/xdg/user-dirs.conf
```

```
And mainly, edit :
```

```
`${XDG_CONFIG_HOME:-~/.config}/user-dirs.dirs
```

```
This can be useful for Desktop, Templates , Images, Download etc...
```

7.14 Astuce XFCE : transparent background for panel

```
patch :  
http://forum.xfce.org/index.php?topic=4721.0;prev\_next=prev#new  
  
sudo aptitude install libexo-0.3-dev libxfcegui4-dev xorg-dev libgtk2.0-  
dev libxfce4util-dev libwnck-dev
```

7.15 Astuce XFCE : Handle acpi event for power button, show Xfce logout options

If you would like the xfce **logout** menu to show up when you press your power button, and your machine has acpi support, **then do** the following:

```
* sudo vim /etc/acpi/events/powerbtn  
  
# /etc/acpi/events/powerbtn  
# This is called when the user presses the power button and calls  
# /etc/acpi/powerbtn.sh for further processing.  
  
# Optionally you can specify the placeholder %e. It will pass  
# through the whole kernel event message to the program you've  
# specified.  
  
# We need to react on "button power.*" and "button/power.*" because  
# of kernel changes.  
  
event=button[ /]power  
action=/usr/local/sbin/xfce4-shutdown-as-user.sh  
  
* sudo vim /usr/local/sbin/xfce4-shutdown-as-user.sh  
  
#!/bin/sh  
# xfce4-shutdown-as-user.sh  
#  
# Check how many users are currently logged into X.  
# If only one user is logged in, run a script which sets  
# up the environment to call xfce4-session-logout.  
  
LOGGED_IN_USER='ls -trl /tmp/.ICE-unix/ | tail -n -1 | cut -d' ' -f3 '  
NUM_X_USERS='echo $LOGGED_IN_USER | wc -l '
```

```

if [ $NUM_X_USERS -eq 1 ]; then
    sudo -H -u $LOGGED_IN_USER /usr/local/sbin/xfce4-user-session-shutdown
        .sh
fi

* sudo vim /usr/local/sbin/xfce4-user-session-shutdown.sh

#!/bin/sh
# xfce4-user-session-shutdown.sh
#
# Set up the environment so that DISPLAY and
# SESSION_MANAGER are valid, and xfce4-session-logout can run

HOST='hostname'
SESSION_ID='ls -t /tmp/.ICE-unix/ | head -n1'
# Note that distros use different syntax for the SESSION_MANAGER variable
# (this script has Debian's format).
# If this does not work, then try something like SESSION_MANAGER="local/$
# HOST:@/tmp/.ICE-unix/$SESSION_ID"
# instead. You can always find the correct format for your distribution by
# looking at the
# value of SESSION_MANAGER in a X session.
DISPLAY=:0 SESSION_MANAGER="local/$HOST:/tmp/.ICE-unix/$SESSION_ID" /usr/
bin/xfce4-session-logout

```

7.16 Xubuntu xfce saved session

malgré la **case** d'«coche» dans "sessions et démarrage" du gestionnaire de paramètres de xfce, tous les programmes revenaient à l'ouverture de session.

j'ai effectué les opérations suivantes et tout est rentré dans l'ordre :

dans mon répertoire perso :

- 1) j'ai supprimé le contenu du répertoire `.cache/sessions`
- 2) j'ai édité le fichier `.config/xfce4-session/xfce4-session.rc` pour remplacer :


```

SaveOnExit=true
par
SaveOnExit=false

```

7.17 Sound mixing - xfce4-volumed - amixer - pulseaudio

```

%% Now
My current option: xfce-volumed for + and -, and a personal script for
mute/unmute
I had to compile my own xfce4-volumed to deactivate the grab on mute key

% xfce-volumed
Mute/unmute not compatible with pulseaudio. See option compile above.

%% Former option
% with alsamixer (avec pulseaudio!!! l'option -c 0 est requise (default
device))
amixer -c 0 sset Master toggle

```

```

amixer -c 0 sset Master 1- unmute
amixer -c 0 sset Master 1+ unmute

%% Avec aumix (mieux avec pulseaudio???)
aumix -v+1
aumix -v-1

%% Avec alsamixer
%toggle Mute
amixer sset Master toggle
%decrease
amixer sset Master 1- unmute
%increase
amixer sset Master 1+ unmute

%% Way before - I used keytouch

```

7.18 Applications pour environnement xfce sans dependances gnome ou kde

```

MP3 player : xmms listen banshee quod-libet rhythmbox sonata amarok

xfce4
xfce4-extras/thunar-volman
xfce4-extras/xfce4-screenshooter
xfburn : gravure
xarchiver squeeze : archive management
xfmedia : multimedia player -> nul

Image viewer
gpicview > OK (mon prefere)
mirage-> bof
ristretto -> nul

Liferea : Flux RSS

web browser:
midori -> ok, but bof
khazeakaze

xfbib : edit BibTeX files (for use with LyX),
lyx : between word and latex?????

emelfm2 enca : alternative to thunar, like total commander

catfish : file searching tool
HardInfo (sys-apps/hardinfo) — System Profiler and Benchmark
qalculate-gtk qalculate-bases qalculate-currency qalculate-units
EasyTAG (media-sound/easytag) — Utility for editing MP2, MP3, MP4, FLAC,
Ogg and other media tags

xfmedia or :
haaw! Media Player (media-video/whaawmp) — A lightweight audio/video
player using Gstreamer

```

Chapter 8

SYSTEM

8.1 Password protect single user mode

```
When booting into single user mode you will not be prompted for the root password. This is something every attacker knows and prays on once he has gained physical access to you box. So what do you do?  
su:S:wait:/sbin/sulogin  
to /etc/inittab
```

8.2 Turn off php expose

```
edit php.ini , search for expose and turn it off  
sudo vim /etc/php5/apache2/php.ini
```

8.3 Heure machine exact - NTP daemon

```
installer ntp
```

8.4 Increase password strength with PAM cracklib or passwdqc

```
aptitude install libpam-passwdqc
```

8.5 Init Boot sequence messages in color - [ok]

```
http://ubuntuforums.org/showthread.php?t=50054  
  
Edit /lib/lsb/init-functions  
Find the log_end_msg () function , all the way at the bottom of the file  
- Add GREEN='$(TPUT setaf 2)' below RED='$(TPUT setaf 1)'  
- Instead of echo ". " :  
echo "$UP$END[ ${GREEN}ok${NORMAL} ]"  
  
%% For instance , what I've donee:  
log_begin_msg () {
```

```

if [ -z "${1:-}" ]; then
    return 1
fi
if log_use_fancy_output; then
    GREEN='${TPUT setaf 2}'
    NORMAL='${TPUT op}'
else
    GREEN=''
    NORMAL=''
fi
echo -n " $NORMAL[$GREEN*$NORMAL]  @"
#echo -n " @"
}

if log_use_fancy_output; then
    RED='${TPUT setaf 1}'
    GREEN='${TPUT setaf 2}'
    YELLOW='${TPUT setaf 3}'
    NORMAL='${TPUT setaf 7}'
#    BOLD='${TPUT bold}'
#    UNBOLD='${TPUT rmso}'
    COLS=$((TPUT cols))
    COL=$((COLS-8))
#    UP=$((TPUT cuu1))
    END=$((TPUT hpa $COL))
    START=$((TPUT hpa 0))
else
    RED=''
    GREEN=''
    YELLOW=''
    NORMAL=''
fi
if [ $1 -eq 0 ]; then
    /bin/echo -e "$START$NORMAL[ ${GREEN} ok ${NORMAL}]"
elif [ $1 -eq 255 ]; then
    /bin/echo -e "$START$NORMAL[ ${YELLOW}warn${NORMAL}]"
else
    #/bin/echo -e "$END$NORMAL/${RED}fail${NORMAL}]"
    /bin/echo -e "$START$NORMAL[ ${RED}fail${NORMAL}]"
fi

```

8.6 Nettoyage des log automatique

logrotate se charge de ca, par default en cron.daily. Perso je le fou en cron.weekly.
 Modifier le /etc/logrotate.conf

8.7 Informations systeme

```

lspci
lsusb

```

8.8 Adresse MAC

```
sudo ifconfig
Regarder apres HWaddress
```

8.9 Journaux systemes - bootlog

```
dmesg
/var/log/kren.log messages.log syslog.log
utile de les voir avec gnome-system-log
Bootlog : aller voir /etc/default/bootlogd =Yes
```

8.10 Add a path to locate

```
ADD a NETPATH in the file /etc/updatedb.conf or /etc/cron.daily/locate
```

8.11 ANSI Escape sequences - escape codes for bashrc and login

```
ESC est le cactere code ACII 27 soit en octal 033
L'insérer avec vim en mode insertion : Ctrl+V Ctrl+Esc ( affiche ^[ <=>
ESC)

#Les plus important :
Wherever you see '#', that should be replaced by the appropriate number.
ESC[2J Clear screen and home cursor
ESC[#;#;...;#m Set display attributes where # is
0 : normal display
1 : bold
4 : underline
5 : blink
22:normal
30 black foreground
31 red foreground
32 green foreground
33 yellow foreground
34 blue foreground
35 magenta foreground
36 cyan foreground
37 white foreground
39 default foreground
40 black background
41 red background
42 green background
43 yellow background
44 blue background
45 magenta background
46 cyan background
47 white background
49 default background

#Liste complete : http://isthe.com/chongo/tech/comp/ansi\_escapes.html
```

8.12 Geeking around with the login prompt - Customization

The line before the login is configured in the file `/etc/issue`

8.13 A quiet boot with color-coded error messages in Debian

```
# Less messages :
First of all, change VERBOSE=yes to VERBOSE=no in /etc/default/rcS.
This get rid of some messages from the boot scripts.
Next, add 'quiet' as a kernel option in /boot/grub/menu.cfg. This
tell the kernel and initramfs to be more quiet on the console.

# Usplash
Last, install the usplash package. This enable color coding of the
boot messages. You do not have to enable the splash support to get
the color coding. If you do want to enable the splash support, I
recommend installing some other splash image, for example the one in
debian-edu-artwork-usplash. To enable the splash support add 'splash'
as a kernel option in /boot/grub/menu.cfg.

#also
sudo aptitude install startupmanager
```

8.14 Use aptitude - Utiliser aptitude - liste de paquets - dpkg - apt-get - Manage Packages - package list

```
#Inverse search to see dependencies
aptitude search '~i~Dbash'

#purge tous les paquest qui sont dans l'etat "c" (deleted mais
configuration)
aptitude purge ~c

# Install source packages (as user preferably)!!!
apt-get source PACKAGE
# Install dependencies to build the sources !!!
apt-get build-dep PACKAGE

%%% DPKG -
% package installed
dpkg -l
% Output all packages installed, and use this list to restore a system
install
dpkg --get-selections > liste.dpkg
dpkg --set-selections < liste.dpkg

# package list per repository / liste de paquets par repository, (requires
to install apt-show-versions)
apt-show-versions | grep unstable
apt-show-versions | grep -v squeeze

apt-cache policy
aptitude search "?installed?origin(Debian)"
```



```

%% when a package really is impossible to configure / remove
- Try the force option of apt-get

- edit /var/lib/status, and remove the entry corresponding at the package.
  CAREFUL!!!!!!!!!!!!!! Do Backups!

dpkg -L package : to list the files concerned by this package

##Aptitude

1st caractere : state
p : non present sur le systeme
i : installe
u:paquet virtuel
c : supprime mais config sur le system

2 eme: action prevue
i:install
d: suppr
p:purger, supprimer + supprimer config
A : installe automatiquement

clean : supprime tous les paquets du cache : /var/cache/apt/archives
autoclean: supprime suelement les anciens paquets

```

8.15 Bien maitriser ses paquets - application a nvidia

```

# /etc/apt/sources.list

# /etc/apt/preferences

# que l'on check avec
apt-cache policy

aptitude dist-upgrade -d
apt-cache policy nvidia-glx
apt-cache policy nvidia-kernel-source
dpkg -l | grep nvidia

apt-get update
apt-get install nvidia-kernel-source
m-a a-i nvidia-kernel-source
apt-get install nvidia-glx

```

8.16 Command to reload fstab

```

#to reload /etc/mtab and /etc/fstab
mount -a

```

8.17 Changer le nom de votre machine, change hostname

```

sudo vim /etc/hostname

```

8.18 Rendre clef USB amorçable - install distribution iso from usb bootable

```

%%% Simple option
Simply use UNetbootin (multiplatform , exists as a linux package)

%%% More advance , format partitions , and make it bootable
http://www.sysresccd.org/Sysresccd-manual-en_How_to_install_SystemRescueCd
_on_an_USB-stick

#aptitude install fsarchiver (just to check)
#fsarchiver probe

# s'il y a une partition
mount -t vfat /dev/sdf1 /mnt/usbstick

# reinitialization de la table des partitions
cfdisk /dev/sdb

Select type LBA FAT32

# formatting and labelling the partition
mkfs.vfat -F 32 -n PARTITIONNAME /dev/sdb1

% putting syslinux (for boot)
aptitude install syslinux

% copying the default MBR of syslinux
dd if=/usr/share/syslinux/mbr.bin of=/dev/sdb
   /usr/lib/syslinux/mbr.bin

%%% Debian : directly with the file hd-media/boot.img.gz
zcat hd-media/boot.img.gz > /dev/sdb1
mount the partition on your USB memory stick (mount /dev/sda1 /mnt) and
copy a Debian netinst or businesscard ISO image to it (please note that
the file name must end in .ISO).

%%%# img file
Even though this image is a .img file , it is gzipped , so it needs to be
extracted to your target volume:

gunzip -c FreeNAS-amd64-embedded-xxx.img | dd of=/dev/sdb

```

8.19 Comment savoir si on est 32 ou 64bits

```

%%%methode 1
cat /proc/cpuinfo
model name      : AMD Athlon(tm) 64 Processor 3500+
%%%methode 2 (model name      : Intel(R) Atom(TM) CPU N270   @ 1.60GHz)
perl -e 'print ~123;'
4294967172  #32 bits
18446744073709551492 #64 bits

%%%methode 3 script C
cat test.c

```

```

#include <stdio.h>
#include <unistd.h>

int main(void)
{
    printf("%ld CPU (%u bits)\n", sysconf(_SC_NPROCESSORS_ONLN), 8 *
        sizeof(void*));
    return 0;
}

gcc -W -Wall -O2 test.c
a.out
24 CPU (32 bits)

```

8.20 Exécuter plusieurs versions de Debian avec chroot

<http://www.debian.org/doc/manuals/debian-reference/ch-tips.fr.html>
 Un environnement chroot Debian peut aisément être créé par la commande `debootstrap` de Woody. Par exemple, pour créer un chroot Sid sur `/sid-root` avec une connexion Internet rapide :

```

main # cd / ; mkdir /sid-root
main # debootstrap sid /sid-root http://ftp.debian.org/debian/
... regardez le système se télécharger
main # echo "proc-sid /sid-root/proc proc none 0 0" >> /etc/fstab
main # mount proc-sid /sid-root/proc -t proc
main # cp /etc/hosts /sid-root/etc/hosts
main # chroot /sid-root /bin/bash
chroot # cd /dev; /sbin/MAKEDEV generic ; cd -
chroot # apt-setup # set-up /etc/apt/sources.list
chroot # vi /etc/apt/sources.list # mettre la source sur unstable
chroot # dselect # ou aptitude, installez mc et vim :-)

```

A ce point, vous devriez avoir un système Debian complètement fonctionnel, avec lequel vous pouvez jouer sans avoir peur de toucher votre installation Debian principale.

8.21 Probleme d'heure

```

# hwclock -r #or hwclock --show
# hwclock -w #or hwclock --systohc
# hwclock -s #or hwclock --hctosys

sudo hwclock --hctosys #reset l'heure systeme a partir de l'heure
hardware
sudo hwclock --systohc #reset l'heure hardware a partir de l'heure
systeme

sudo date +%H:%M --set="21:42" #set l'heure systeme a celle que l'on
veut

```

8.22 Make your own init script - launching scripts at boot - init.d

Sinon, pour qu'il se lance au démarrage, il faut que tu crées un petit script de rien du tout et que tu le mettes dans ton dossier ou sont les scripts de démarrage...

Par exemple, si le script plus haut s'appelle automat-ssh.sh, le script de démarrage peut être : (on l'appellera init-automatssh.sh pour la suite)

```
#!/bin/bash
automat-ssh.sh
```

Tu le copies dans /etc/init.d/

Tu lui donnes les bons droits : `chmod +x init-automatssh.sh`

Tu repères ton dossier de démarrage. (Si tu ne le connais pas, regarde dans `inittab`, au niveau du `runlevel`.)

Si c'est 2 (c'est mon cas), alors dans /etc/rc2.d/, tu fais un liens vers ton super script!

```
ln -s /etc/init.d/init-automatssh.sh /etc/rc2.d/S90automatssh.sh
```

(S90 sera le 90ième service lancé, je mets 90, parce que je pense que ton réseau est déjà lancé à ce stade du démarrage...)

8.23 Bip systeme - tab - arret systeme

```
%%% Method 1
```

Fermer le clappet au PC beep avec alsamixer

```
%%% Method 2
```

X **command** : to run in a terminal or put in `.xinitrc`

```
xset b off
```

```
%%% Method 3 (first check is lsmod returns pcpkr)
```

#You can disable this by editing a file and entering two simple lines.

```
sudo vim /etc/modprobe.d/blacklist
```

```
#silly speaker beep
```

```
blacklist pcpkr
```

If you don't want to **wait until** a reboot, simply **type**:

```
sudo rmmod pcpkr
```

8.24 Configurer son reseau a la main

```
#Ajouter l'interface eth0 en dhcp /etc/network/interfaces
```

```
auto eth0
```

```
iface eth0 inet dhcp
```

redemarrer le network : `/etc/init.d/networking restart`

veiller le reseau avec

```
ifup eth0
```

8.25 Conversion UTF8 ISO-8859-1

```

http://www.haypocalc.com/wiki/UTF-8_et_Linux
#iconv
iconv -f iso-8859-1 -t utf-8 <in >out    # vers UTF-8
iconv -f utf-8 -t iso-8859-1 <in >out    # vers latin-1
iconv -f utf-8 -t iso-8859-1 file1 > file2

#file -i: connaitre l'encodage
file -i filename

file -i * |grep utf-8 |awk -F: '{print $1;}' |xargs

#us-ascii
US-ascii ne conteint pas d'accents.
La table de caractères us-ascii est strictement inscrite dans utf-8 et
tous les caractères de us-ascii ont la même valeur dans us-ascii et
dans utf8. Donc vouloir convertir de us-ascii vers utf8 n'a tout
simplement pas de sens.

```

8.26 Initramfs

```

initramfs
sudo mkinitramfs -o /boot/initramfs-2.6.26
http://forum.ubuntu-fr.org/viewtopic.php?id=238953

```

8.27 Restaurer une installation Debian - Restore Debian install - Package list

```

Si tu veux pouvoir reproduire une installation sous Debian, j'ai entendu
parler du couple:
dpkg --get-selections > liste.dpkg
pour lister les paquets installés sur Debian au format pour la commande
suivante:
dpkg --set-selections < liste.dpkg
qui fera le "restaure" des paquets sur une autre machine Debian.

si tu veux voir tout tes package installé fait un ls /var/cache/apt/
archives
Ou encore
aptitude search '~i !(~M)'

```

8.28 Accents, caracteres accentues, font terminal amarok

```

dpkg-reconfigure locales
avoir fr_FR.UTF-8

```

8.29 Configurer sudoers

```

editer /etc/sudoers
pour autoriser sudo avec password ajouter la ligne :

```

```
%sudo ALL=(ALL) ALL
sans password :
%sudo ALL=NOPASSWD:ALL
```

8.30 Eteindre / redemarrer : droits utilisateur

On peut passer par le fichier de sudoers mais le plus simple c'est d'ajouter l'utilisateur au groupe powerdev

```
sudo adduser manu powerdev
```

8.31 Demarrage - gestionnaire de connexion - autologin

Pour l'autologin

— Modifier le fichier definissant le terminal principal/les terminaux :

— Sous Debian :

Code:

```
gedit /etc/inittab
```

Commenter la ligne `:#1:2345:respawn:/sbin/getty tty1`

La remplacer par : `1:2345:respawn:/sbin/mingetty tty1 —autologin MONLOGIN`

`1:2345:respawn:/bin/login -f YOUR_USER_NAME tty1 / dev/tty1 2>&1`

```
1:2345:respawn:/bin/login
-f manu tty1 /dev/tty1
2>&1
```

— Sous Ubuntu :

Code:

— Installer mingetty : `sudo apt-get mingetty`

```
gedit /etc/event.d/tty1
```

Commenter la ligne : `#exec /sbin/getty -n 38400 tty1`

La remplacer par : `exec /sbin/mingetty tty1 —autologin MONLOGIN #exec /sbin/getty -l /usr/sbin/autologin -n 38400 tty1`

Mise en garde :

Si on a un gestionnaire de connexion, il est necessaire de le desactiver!

Pour cela j'ai utilise `sysv-rc-conf`, programme qui permet de gerer les services charges au demarrage. On desactive tous les runlevel de slim ou gdm ou kdm.

Quelques remarques :

Rq1 : A mon avis l'option autologin ne marche pas avec getty, d'ou le besoin d'utiliser mingetty → Utiliser login sous Debian

Rq2 : Mingetty est equivalent a rungetty, mais soit disant plus light!

Rq3 : Sur internet on trouve : utiliser getty en faisant un script shell perso, ou en compilant son propre petit fichier c

8.32 Demarrage - gestionnaire de connexion - auto-startx - autostartx

– Créer/éditer le fichier `~/.bash_profile` (en utilisateur, pas en root)
 Y insérer :

```
Code:

# Load X11
#if [ -z "$DISPLAY" ] && [ $(tty) == /dev/tty1 ]; then
if [ 'ps -le |grep startx|wc -l' == 0 ]; then
    startx
fi
```

Permettant ainsi de lancer X à chaque ouverture de session sur le terminal 1.

Maintenant si vous avez plusieurs gestionnaire de fenêtre (fluxbox/gnome/xfce..), je pense que le choix de celui-ci se fait via le fichier `.xinitrc`. À confirmer.

Rq: j'ai eu un problème, mes utilisateurs n'avaient pas la permission de lancer `startx` (erreur : `unable to open Xwrapper.config ...`). J'ai réinstaller ou reconfigurer, je sais plus, mon serveur x.

8.33 Autologin, fenêtre de connexion sans gdm

You can also use `getty` to autologin:

1) Create a file `/usr/sbin/autologin` which is as follows:

```
#!/bin/bash
exec login <your_username>
```

Replace `<your_username>` with the name of the user you want to login automatically. Then make that file executable via

```
sudo chmod a+x /usr/sbin/autologin
```

2) Edit the file

```
/etc/event.d/tty1
and change the line
exec /sbin/getty 38400 tty1
to
exec /sbin/getty -l /usr/sbin/autologin -n 38400 tty1
```

FILESYSTEMS, UTILISATEURS, GROUPEs, DROITS

9.1 Policykit - local authority - rights for reboot, mount usb etc..

```
Consolekit in wheezy does not behave well with startx, it's probably a
matter of the session being active or not
Ether go back to the squeeze version, or manage the policykit yourself by
creating .pkla files in the folder
/etc/polkit-1/localauthority/50-local.d (that's the folder the most
appropriate for our use)
```

```
% Info:
```

```
man pklocalauthority
```

```
ls /usr/share/polkit-1/actions/
```

```
% Sleep and hibernation
```

```
create a file, say 10-upower.pkla with
```

```
[upower]
Identity=unix-user:*
Action=org.freedesktop.upower.*
ResultAny=yes
```

```
% mounting drives
```

```
[udisks]
Identity=unix-user:*
Action=org.freedesktop.udisks.*
ResultAny=yes
```

```
% shutdown, reboot
```

```
[stop]
Identity=unix-user:manu
Action=org.freedesktop.consolekit.system.stop
ResultAny=yes
```

```
[restart]
Identity=unix-user:manu
Action=org.freedesktop.consolekit.system.restart
ResultAny=yes
```


9.2 Les droits d'endossement SetUID et SetGID

<http://www.commentcamarche.net/faq/3603-securite-droits-d-acces-gnu-linux#iii-les-droits-speciaux>

```
chmod 4644 fichier
chmod 4700 fichier
chmod 4755 fichier
```

```
chmod u+s (4000)
chmod g+s (2000)
```

Les droits d'endossement dans GNU/Linux sont représentés par :

- * la lettre s (si le droit x est positionné)
- * la lettre S (si le droit x n'est pas positionné)

Numériquement, les droits d'endossement sont représentés de la façon suivante :

- * 4000 – pour l'endossement de l'identité du propriétaire
- * 2000 – pour l'endossement de l'identité du groupe

Le comportement des droits d'endossement.

- * Pour les fichiers programme ou exécutable
 - o SUID = 4000 – le processus a les droits du propriétaire du programme exécuté
 - o SGID = 2000 – le processus a les droits du groupe du programme exécuté
- * Pour les répertoires
 - o SGID = 2000 – les fichiers qui se trouvent dans le répertoire appartiennent au groupe du répertoire

Les droits d'endossement sont très importants pour la sécurité.

Au lieu de donner l'accès à un fichier, on donne le droit d'accès à une commande.

Le kernel (ou noyau), au moment de l'exécution de la commande endosse l'identité du propriétaire ou du groupe de la commande au lieu de celle de l'utilisateur qui a lancé la commande.

Donc l'accès au fichier se fait par le biais de la commande **et** non pas directement.

Quand un utilisateur se connecte sur un système GNU/Linux, il détient 2 UID (UserIdentity) et 2 GID (GroupIdentity) : le réel et l'effectif.

- * Au moment de l'exécution d'une commande les UID et GID sont les réels, les effectifs sont attribués à la commande.
- * Quand les droits d'endossement ne sont pas positionnés, alors les UID et GID effectifs sont identiques aux UID et GID réels.
- * Si les droits d'endossement sont positionnés alors l'UID et/ou GID effectifs sont ceux de la commande. Ce qui veut dire que les UID et GID effectifs sont ceux qui contrôlent les droits d'accès à une commande

<p>Pour connaître les fichiers avec les droits d'endossement de votre système tapez dans un terminal la commande suivante :</p> <pre># find / -perm -2000 -o -perm -4000 -exec ls -l {} \; 2>/dev/null</pre>
<p>Un bon exemple c'est la commande crontab. Cette commande crée un fichier dans /var/spool/cron/crontabs pour l'utilisateur qui a exécuté la commande crontab. L'accès au répertoire /var/spool/cron/crontabs est interdit aux utilisateurs sauf root.</p> <pre>\$ cd /var/spool/cron/crontabs/ bash: cd: /var/spool/cron/crontabs/: Permission non accordée</pre>
<p>Quand l'utilisateur lance la commande crontab -e (pour éditer son fichier /var/spool/cron/crontabs/nom_user), la commande s'exécute avec l'UID et GID réel de l'utilisateur mais avec l'UID et GID effectif de root.</p> <pre>\$ ls -l /usr/bin/crontab -rwxr-sr-x 1 root crontab 26872 2004-07-28 22:44 /usr/bin/crontab</pre>
<p>On voit que la commande crontab est la propriété de root et qu'elle fait partie du groupe crontab avec le droit SGID.</p>
<p>Et comme root a le droit de créer dans /var/spool/cron/crontabs le fichier sera créé.</p> <pre># ls -l /var/spool/cron/crontabs/lami20j -rw-r----- 1 lami20j crontab 225 2006-07-22 16:00 /var/spool/cron/crontabs/lami20j</pre>
<p>On voit que l'utilisateur lami20j est le propriétaire du fichier et qu'il a les droits de lecture et d'écriture. Cependant il ne peut pas le faire directement.</p>

9.3 Begin:waiting for resume on startup, resume process

<p>The resume script check if the swap partition exists.</p> <ol style="list-style-type: none"> 1. first make the swap partition work again by <pre>sudo mkswap /dev/sda6</pre> (where sda6 should be the corresponding partition on your system. Check parted to ensure this. This will DESTROY all your data if you use it on a data partition, like your /home one) (if not working (occupied), you need to free it <pre>swapoff /dev/sda6</pre>) 2. then compute the UUID of the new swap partition <pre>sudo blkid /dev/sda6</pre> 3. change the UUID code in both these files <pre>/etc/fstab</pre> (only change the one concerning /dev/sda6!) <pre>/etc/initramfs-tools/conf.d/resume</pre> 4. rebuild the initramfs with

```
update-initramfs -u
```

5. reboot

You can also change back the swap UUID with this **command** (thanks Lowell)
`mkswap -U UUID /dev/swapdev`
 where `UUID` is the ID shown in both mentioned `/etc` files (the ID should be the same in both them, otherwise follow the 1-3 steps!)

9.4 Forcer le montage en ecriture d'une partition ntfs apres un mauvais demontage de windows

```
demonter le disque
puis le monter avec l'option force:
sudo mount -t ntfs-3g /dev/sdb1 /media/StorageDisk -o force
```

9.5 Disque externe en lecture seule

```
cat /etc/mtab
/dev/sdc1 /media/Storage fuseblk rw,nosuid,nodev,noatime,allow_other,
    blksize=4096 0 0

sudo vol_id -u /dev/sdxx
UUID : 0C3C5FC03C5FA40C

defaults Correspond a rw,suid,dev,exec,auto,nouser et async
# gid=100 assignera l'ensemble des fichiers au groupe dont le gid (pour
  group id, identifiant de groupe) est 100. Sous Ubuntu, le gid 100
  correspond au groupe users, auquel tous les utilisateurs font
  normalement partie. Vous pouvez retrouver une liste de tous les groupes
  existants sur votre machine avec leur gid dans le fichier /etc/group.
  Si vous omettez cette option, tous les fichiers seront assignés au
  groupe 0, soit root (le compte système).
# uid=1000 assignera l'ensemble des fichiers de la partition à l'
  utilisateur dont l'UID (pour User ID, identifiant d'utilisateur) est
  1000. Sous Ubuntu, l'UID 1000 correspond au premier utilisateur, créé
  lors de l'installation de Ubuntu. Si vous omettez cette option, tous
  les fichiers seront assignés à l'utilisateur root (le compte système
  ).
# L'option umask=002 donnera les droits d'accès, sur l'ensemble des
  répertoires et fichiers, en lecture et en écriture à tous, de même
  qu'en exécution au propriétaire du fichier.
```

9.6 Utilisateurs et groupes

```
Utilisateurs : (/etc/passwd /etc/shadow)

useradd -m          -m pour creation automatique du dossier dans home
passwd -d USER    (vide le passwd, l'utilisateur le change en tappant passwd
)
usermod
addgroup user group
```

```

userdel
id
groups

Groupes : (/etc/group -> gid et membre du groupe)
groupadd
groupmod
groupdel

Droits fichiers dossiers :
chmod 770 fold
chown -R user:group fold
chown :gid fold
chown uid fold
chmod u=rwX,g=rwXs,o= fold -> le s est important, tous les fichiers
    creer dans le dossier et sous dossier appartiennent au grope

```

9.7 Droits partage dossier fichiers

Les bases de droit UNIX

Les droits sous unix dans leur version POSIX sont relativement simples. Un utilisateur est défini par un identifiant **et** un groupe. Le nom de ce groupe est généralement le même que le nom de l'identifiant. Ainsi lorsque l'on crée un nouvel utilisateur par la commande `adduser gaston`, est automatiquement fabriqué l'identifiant `gaston` ET son groupe `gaston`. L'idée sous-jacente de ce groupe un peu spéciale, est que seul l'utilisateur y appartient **et** personne d'autre.

La commande `addgroup` permet quant à elle d'ajouter de nouveaux groupes qui ne sont à l'origine liés à aucun utilisateur. Après il est possible d'ajouter arbitrairement un utilisateur à un de ces groupes avec la commande `usermod`. Un utilisateur est donc le seul à appartenir au groupe qui porte le nom de son identifiant, mais peut appartenir à plein d'autres groupes.

Chaque ressource (fichier ou un dossier) est décrit par un groupe, un identifiant **et** trois niveaux de droits. Chacun de ces trois niveaux correspond à une des conditions suivantes appliquée à l'utilisateur qui tente d'accéder à la ressource :

1. u ou user – Son identifiant est celui de la ressource.
2. g ou group – Il appartient au groupe de la ressource.
3. o ou other – Il n'est ni du bon groupe, ni du bon identifiant.

A chacun de ses niveaux correspond une série d'autorisation : droit de lecture (r), droit d'écriture (w) **et** droit d'exécution (x). Sachant qu'exécuter un dossier consiste sous Unix à pouvoir rentrer dedans... Ainsi lorsqu'un utilisateur accède à une ressource, UNIX cherche la première condition vérifiée, regarde les droits qui correspondent **et** les applique. La commande pour changer les droits sur une ressource est `chmod`. Par exemple `chmod gu+rw,o-rw`, donne un accès lecture (r) **et** écriture (w) pour la condition (1) **et** (2), **et** aucun droit pour la condition (3).

<p>Lorsqu'un utilisateur fabrique un fichier, ce dernier lui appartient, c'est à dire que le groupe et l'identifiant du fichier sont ceux de l'utilisateur (d'où l'intérêt du groupe privé). Les droits du fichier sont généralement de type <code>rw</code> pour groupe et propriétaire, et <code>r</code> seulement pour les autres. Ces droits par défaut peuvent cependant être changés par la commande <code>umask</code> qui permet d'enlever des droits aux fichiers créés. Par exemple <code>umask go-w</code> fera que tous les prochains fichiers n'auront plus le droit d'écriture que sur <code>o</code> (le propriétaire). L'<code>umask</code> par défaut est donc <code>o-w</code>.</p>
<p>Pour une information plus poussée sur les droits unix, je vous conseille de lire l'excellent article sur wikipedia.</p>
<p>Première approche du partage</p>
<p>Par "partage", il faut entendre ici "système de fichier". Il n'est absolument pas question de NFS, CIFS ou autre appareillage du même acabit. L'idée de départ du besoin est la suivante :</p>
<ul style="list-style-type: none"> * Sur une machine j'ai des utilisateurs, disons <code>gaston</code>, <code>josette</code> et <code>robert</code> * J'ai des dossiers qui sont chacun partagés par un ensemble différent d'utilisateurs. Le dossier <code>/photos</code> est partagé par <code>josette</code> et <code>gaston</code>, mais <code>/vidéos</code> l'est par <code>gaston</code> et <code>robert</code>. * Je veux que lorsqu'un utilisateur crée une ressource (dossier ou fichier) dans un dossier (ou sous-dossier), les autres utilisateurs ayant accès à ce dossier puisse modifier cette ressource.
<p>Simple n'est-ce pas ? On se dit dans une première approche qu'il suffit :</p>
<ol style="list-style-type: none"> 1. De créer autant de groupes que de dossier. 2. De changer les droits de chaque dossier (de manière récursive) de sorte à les donner au groupe en écriture. 3. D'ajouter dans ce groupe chaque utilisateur ayant accès au dossier.
<p>Ce qui nous donne :</p>
<pre># création des utilisateurs adduser gaston adduser josette adduser robert</pre>
<pre># création des deux groups addgroup acces-photos addgroup acces-videos</pre>
<pre># changement des droits sur les dossiers : lecture/écriture/ traverse pour groupe et utilisateur, rien pour les Autres. chown o-rwx,gu+rwX /vidéos /photos -Rc Le mode d'accès de '/vidéos/nos_vacances.avi' a été modifié à 0660 (rw-rw----).</pre>
<pre># changement du group d'appartenance chown :acces-videos /vidéos -Rc chown :acces-photos /photos -Rc</pre>
<pre># ajout des utilisateurs aux différents groups usermod -a -G acces-videos,acces-photos gaston usermod -a -G acces-videos josette</pre>

```
usermod -a -G acces-photos robert
root#
```

A partir de là tout va bien ou presque, car les ennuis commencent lorsqu'un utilisateur commence à créer un fichier dans un partage. Comme nous l'avons vu plus haut, ce nouveau fichier héritera de l'identifiant et du groupe de l'utilisateur qui l'aura créé. La conséquence, à cause de l'**umask** par défaut, est l'impossibilité d'être modifié par qui que ce soit, vu que tout le monde est other dans ce cas de figure.

Droit SGID et SUID

Les droits SUID et SGID s'appliquent généralement aux exécutables en donnant à l'utilisateur qui les lance les mêmes droits que l'utilisateur (SGID) ou le groupe (SGID) auquel l'exécutable appartient. Ainsi sur une commande appartenant à root, un `chmod u+s` permettrait à n'importe qui de la lancer AVEC les droits root...

Dans le cas qui nous intéresse, SGID a une propriété un peu moins connue. En effet lorsque cette fois c'est un dossier qui dispose du droit SGID, tous les dossiers et tous les fichiers qui seront créés immédiatement en dessous auront le même groupe que lui. Plus intéressant encore, tout dossier créé aura en plus le SGID de positionnement.

Ainsi notre problème se règle très simplement en positionnant au départ le SGID sur tous les dossiers (et seulement les dossiers !!) :

```
root#find /vidéos -type d -exec chmod g+s {} \;
root#find /photos -type d -exec chmod g+s {} \;
root#
```

Ensuite, SGID étant positionné, tous les prochains fichiers créés ici auront le bon groupe et tous les nouveaux dossiers le SGID.

Conclusion

L'avantage de cette approche est que la majorité des applications qui vont accéder au système de fichier vont respecter ces droits. Maintenant ce n'est pas l'absolue panacée car le fichier ou le dossier continue d'appartenir à l'utilisateur qui l'a créé, et rien ne l'empêche d'aller modifier les droits, y compris le SGID. Il y a aussi certaines applications comme tar qui vont modifier ces droits et l'on risque alors à nouveau l'incohérence. Mais cette méthode règle une grande partie des problèmes et une petite tâche CRON peut venir finir le travail.

9.8 org.freedesktop.hal.storage

```
sudo nano /etc/PolicyKit/PolicyKit.conf
<?xml version="1.0" encoding="UTF-8"?> <!-- -*- XML -*- -->

<!DOCTYPE pkconfig PUBLIC "-//freedesktop//DTD PolicyKit Configuration 1.0
//EN"
"http://hal.freedesktop.org/releases/PolicyKit/1.0/config.dtd">

<!-- See the manual page PolicyKit.conf(5) for file format -->
```

```

<config version="0.1">
  <define _admin_auth group="users" />
  <match action="org.freedesktop.hal.power-management.shutdown">
    <return result="yes" />
  </match>
  <match action="org.freedesktop.hal.power-management.reboot">
    <return result="yes" />
  </match>
  <match action="org.freedesktop.hal.power-management.suspend">
    <return result="yes" />
  </match>
  <match action="org.freedesktop.hal.power-management.
    hibernate">
    <return result="yes" />
  </match>
  <match action="org.freedesktop.hal.storage.*">
    <return result="yes" />
  </match>
  <match action="hal-storage-mount-fixed-extra-options"> <!-- for
    internal devices mounted with extra options like a wished mount
    point -->
    <return result="yes" />
  </match>
  <match action="hal-storage-mount-removable-extra-options"> <!--
    for external devices mounted with extra options like a wished
    mount point$
    <return result="yes" />
  </match>
</config>

```

Chapter 10

Grub, dual-boot, MBR

10.1 Configure Grub 2 - create grub.d configs

```
%%% Bad way : edit Config file :
/boot/grub/grub.cfg

%%% Clean way: make grb.d scripts
http://blogs.koolwal.net/2008/12/28/windows-xpvista-dual-boot-does-not-
boot-from-grub2-or-grub-pc/

%as root of course..
nano /etc/grub.d/11_Windows (this will essentially create a new file)
#!/bin/sh -e
echo "Adding Windows" >&2
cat << EOF
menuentry "Windows XP" {
set root=(hd0,1)
chainloader +1
}
EOF

chmod a+x /etc/grub.d/11_Windows
nano /etc/grub.d/05_debian_theme
COLOR_NORMAL="green/black"
COLOR_HIGHLIGHT="white/black"

update-grub2
```

10.2 Instal grub in MBR

```
%%%%%%%%%
# booter sur System rescue CD
# mounter FS
mount /dev/sda3 /mnt/tmp
# Installer grub 1 (/dev/sda SANS NUMERO)
grub-install --root-directory=/mnt/tmp /dev/sda
# --root-dir ca evite de monter /proc et /dev et de chrooter
# Cette methode reinstall grub 1.
# Il faudra donc faire un update-grub une fois que tout marche
```



```
%%%
```

installer grub dans le MBR (Master Boot Record).

Il faut tout d'abord savoir quelle est la partition qui contient votre fichier `/boot/grub/stage1`, etc. Ce point est très important. La commande

```
df /boot/grub/stage1
```

devrait vous renseigner avec précision.

Il faudra, selon cet exemple, que le répertoire `/boot/grub` contienne tous les fichiers nécessaires à grub : `stage1`, `xxx_stage1_5` (xxx étant les filesystems dont vous avez besoin), `menu.lst` (qui est un lien vers `grub.conf`), `stage2`.

Supposons que ce soit la partition `/dev/hda5`. On lancera alors les commandes :

```
/sbin/grub
root (hd0,4)
setup (hd0)
quit
```

```
%%##
```

1. Marquer la partition où se trouve `/boot` comme active (drapeau boot avec l'utilitaire `fdisk` par exemple) et à marquer la partition Windows.
2. Installer un MBR générique avec la commande `install-mbr` du paquet `mbr`.
3. Démarrer sur un Live-CD (comme Knoppix ou Kaella), monter la partition contenant `/boot`, se chrooter à dedans, et lancer un `grub-install`.
4. Démarrer sur un Live-CD et réinstaller GRUB dans le MBR de cette manière :

```
# grub
grub> root (hd0,4)
grub> setup (hd0)
grub> quit
```

```
%% Complements – Chroot etc
```

Complements (éléments disparates à organiser) : à partir d'un live `cd` – monter le bon `hdaX`

```
mount /dev/hdax /mnt/temp
```

– le chrooter :

```
chroot /mnt/temp
chroot /mnt/temp /bin/sh -i
chroot /mnt/temp /bin/bash
```

– monter éléments qui peuvent être utiles à l'installation

```
mount -o bind /dev/ /mnt/temp/dev
mount -o bind /proc /mnt/temp/proc
cp /proc/mounts /mnt/temp/etc/mtap
```

```
sudo grub
> find /boot/grub/stage1
> root (hdx,y)
> setup hd0
> quit
```

```
grub-install /dev/hdax
exit
umount /mnt
```

```
sudo -s  
su -
```

10.3 Installer un dual boot avec Vista, sans utiliser le MBR

```
Installer Vista  
Installer ubuntu, mais ne pas installer grub sur le MBR, l'installer dans  
  /boot/grub de la partition linux.  
Installer Easy BCD sous vista  
Ajouter un choix vers une partition linux.
```

Chapter 11

WIFI

11.1 Configurer ma carte wifi bcm4312, broadcom

```
#commandes utiles
iwconfig
ifconfig
ifconfig wlan0 up
lspci | grep -i network
lsmod # voir les modules charges
lshw -C network

% wicd
wicd should be configured with the right interface name for the wifi!!! it
  does find it and activate it otherwise.

#Pour kernel 2.6.32 (what I've done with 2.6.32-4 and 5)
(-install firmware-b43 ... maybe useless?)
- install source from broadcom-b43
- go to /usr/src/modules/broadcom-sta/i380
Puis a partir des sources de broadcom :
make                (cree wl.ko)
make install        (le met dans /lib/modules/2.6.32-XXX/kernel/drivers/net/
  wireless/)
depmod              (pour que wl soit reconnu)

- Ensuite!!! L'important est la sequence dans laquelle les modules se
  chargent :
tout deloader : rmmod b43 b44 wl ssb
Puis dans l'ordre :
modprobe wl
modprobe ssb
modprobe b44

Un depmod -a ne doit pas faire de mal pour generer les dependances entre
modules

S'il faut appliquer des blaklists, cela signifie qu'il faut surement
  refaire un iniramfs
update-initramfs -u

En effet, b44 peut etre chargÃ© dans l'initramfs. Ca se verifie en tappant
:
```

```

gunzip -c /boot/initrd.img-$(uname -r) | cpio --list | grep b44

#pour kernel superieur a 2.6.30
http://wiki.debian.org/wl#Squeeze
http://forums.debian.net/viewtopic.php?f=16&t=30648&sid=20
ba5ccea3f4a09829421b08a694b069&start=120
http://www.archlinux.it/wiki/index.php?title=Broadcom_BCM4312
sudo aptitude install broadcom-sta-sources
puis aller dans le repertoire /usr/share/doc/broadcom-sta-source/
et lire le readme

/etc/modprobe.d/broadcom-sta-common.conf
# original contents was the line immediately below
# install wl /sbin/modprobe -qr b43 ssb; /sbin/modprobe --ignore-install
wl $CMDLINE_OPTS
install wl /sbin/modprobe -qr b44 ssb; /sbin/modprobe --ignore-install wl
$CMDLINE_OPTS

```

My best guess, was that the reason my wifi isn't working that it's related to the module ssb. I can not keep the module from being loaded and I can not remove the module. After reading some about blacklisting <http://wiki.debian.org/KernelModuleBlacklisting> I saw that I was not entering 'blacklist ssb' in the correct file and I followed the instruction the the URL. I had previously noticed that there was some dependency of b44 on ssb and I couldn't remove ssb **until** b44 was out of the way. I decided to (I don't really know why) look at `/etc/modprobe.d/broadcom-sta-common.conf` and noticed the removal of b43 module instead of b44 module. So when I changed 'b43' to 'b44' I **then** had wifi. As noted in a previous post, b44 is my wired ethernet.

The only thing that might be a concern, is that my wireless device is named eth1 instead of wlan0. Not that it really matters but in keeping convention, my wireless should be wlanX not ethX.

ou

```

sudo aptitude install broadcom-sta-modules-2.6.30-1-686
puis
blacklist (/etc/modprobe.d/blacklist.d ) b43 b44 ssb
les virer
rmmod b43; rmmod b44; rmmod ssb;
Enfin, ajouter wl et peut-etre lib80211_crypt_tkip dans /etc/modules

```

Sinon, patcer soi meme les fichiers `wl_linux.c` et `wl_linux.h` lors de la compilation du driver `wl.ko` (voir plus bas)
afin de ne pas utiliser `ieee80211` mais `lib80211`

```

#Pour kernel < 2.6.30
De la balle !!!!!!! :
Utiliser les drivers broadcom :
http://www.broadcom.com/support/802.11/linux_sta.php
Utiliser le patch si besoin(kernel >2.6.28)
Le module ieee80211_crypt_tkip a change de nom, maintenant c'est lib80211_
crypt_tkip
donc, faire :
modprobe lib80211_crypt_tkip
puis
insmod wl.ko

```

Article explicatif :
<http://jomcode.com/fadhil/?p=59>
 J'ai sauve le fichier tar dans mon Config

```
tar -xvzf hybrid-portsrc-x86_32_5_10_27_6.tar.gz
```

```
make -C /lib/modules/$(uname -r)/build M=$(pwd)
```

Of course, you need to make sure you have all the required kernel headers before building it.

Once that's **done**, your directory listing should look like this:

```
built-in.o
hybrid-portsrc-x86_32_5_10_27_6.tar.gz
lib
Makefile
modules.order
Module.symvers
src
wl.ko
wl.mod.c
wl.mod.o
wl.o
```

The magic file we need is `wl.ko`. Make sure you don't have `b43`, `b43legacy` or `b43xx` loaded by running this:

```
rmmod bcm43xx; rmmod b43; rmmod b43legacy
```

And **for** good measure remove `ndiswrapper` modules:

```
rmmod ndiswrapper
```

Now load the module `ieee80211_crypt_tkip`:

```
modprobe ieee80211_crypt_tkip
```

And finally load the `wl.ko` module:

```
insmod wl.ko
```

Now **if** you **do** an `ifconfig`, you should see `wlan0` right after your `eth0` and `lo` devices. **Y**

ippee-kay-yay! Test it out by scanning and connecting to a network.

If it works, **then** you might want your module to load upon boot, which is something the Broadcom readme doesn't touch on.

Let me school you how.

Copy the `wl.ko` file to `/lib/modules/2.6.26-1-686/kernel/net/wireless/`

```
cp wl.ko /lib/modules/2.6.26-1-686/kernel/net/wireless/
```

Create the module dependencies:

```
depmod -a
```

Try loading your new module!:

```
modprobe wl
```

If you get no error on modprobe, **then** it worked perfectly! Next you have to tell your system to load the module at startup. On my debian system, I **do** this by editing the file `/etc/modules` to include the following:

```
ieee80211_crypt_tkip
wl
```

Now, reboot and you've got official Broadcom wifi goodness!

11.2 Cracker wifi WEP

```
%
% La suite aircrack-ng comprend plusieurs programmes dont les 3 principaux
% sont
% * airodump-ng, le logiciel de capture de paquets, c'est lui qui scan les
% rÃseaux et conserve les paquets qui serviront Ã dÃcrypter la clef.
% * aireplay-ng, un logiciel dont la principale fonction est l'envoi de
% paquets dans le but de stimuler le reseau et capturer plus de paquets.
% * aircrack-ng, le logiciel de crack de clef, c'est un logiciel qui Ã
% partir des informations capturÃes Ã l'aide d'airdump va nous donner
% la clef (si biensur on en a un nombre suffisant).
%
%
%
%
%
% http://www.cdc.informatik.tu-darmstadt.de/aircrack-ptw/
%
% Aircrack-ptw
% Our tool is quite similar to aircrack-ng.
% Tutotrial aircrack-ng : http://www.aircrack-ng.org/doku.php?id=simple_
% wep_crack
% For ptw :
% * In Step 3, you MUST NOT use the parameter -ivs. Just skip this
% parameter, the other command line arguments still apply.
% * In Step 5, you should use aircrack-ptw instead of aircrack-ng. ls
% -la output*.cap will give you a list of capture files airodump-ng has
% created. Usually, if you did not interrupt airodump-ng, there should be
% only one file named output-01.cap. Just start aircrack-ptw output-01.
% cap to get the key. If aircrack-ptw was not successfull, wait a few
% seconds and start it again.
%
%
%
% Aircrack-ng :
% sudo aptitude install build-essential
% sudo aptitude install libssl-dev libsqlite3-dev
% ?sqlite
%
% apt-get install libpcap0.8-dev.
%
%
```

11.3 Monitor mode for wifi usb key : TL-WN321G chipset Ralink rt73

```
http://aircrack-ng.org/doku.php?id=rt73
```

```
wget http://homepages.tu-darmstadt.de/~p_larbig/wlan/rt73-k2wrlz-3.0.3.tar
.bz2
```

```
tar -xjf rt73-k2wrlz-3.0.3.tar.bz2
```

```
cd rt73-k2wrlz-3.0.3/Module
```

```
make
```

then, as root, **type**

```
make install
```

```
modprobe rt73
```

Conseil perso :

rechercher dans /lib/modules/2.6.30/ les fichiers **rt73***

Deplacer les modules rt2x00 (rt73usb, rt2500 etc) dans un dossier (/root/rt-old par exemple)

Recreer les dependances module :

```
depmod -ae
```

et redemarrer

Activer le mode monitor a la main :

```
iwconfig rausb0 mode monitor
```

Ou avec airmo-ng

```
ifconfig rausb0 up
```

```
airmon-ng start rausb0
```

La commande iwpriv donne acces ou "fonctions" de l'interface

```
iwpriv raus0
```

Chapter 12

SERVERS - PHP SQL APACHE SAMBA FTP SSH

12.1 VirtualBox

```
%% SSH from guest to host
install openssh-server on host
Add a host-only network in VirtualBox General preferences
In the virtual machine option, add on top of the nat interface, another
interface, host-only
In the guest machine configure the second interface eth1 the same way than
eth0 in /etc/network/interfaces:
auto eth1
iface eth1 inet dhcp
By defaults the host ip will be 192.168.56.1 and the guest ip
192.168.56.101
You can add shortctus to these IP in /etc/hosts

%% File sharing
Devices -> Install guests additions
aptitude install dkms linux-headers build-essentials
aptitude install xserver-xorg xserver-xorg-core
mount /dev/sr0 /media/cdrom
./VBoxLinux
```

12.2 SQL editor: sqlitebrowser

12.3 Free shell servers

```
USER@shellmix.com -p 22
USER@elitter.net -> allows command to be runed even after logout and
closing of the shell!
```


12.4 Debian Serveur

LAMP : Linux Apache Mysql Php

mail (SMTP avec Postfix **et** POP/IMAP avec Cyrus)
 temp (NTP)
 dns (bind9)
 le DHCP (dhcpd)
 partage de fichiers (NFS ou Samba)
 impression (CUPS)

%%% SSH de base – open sshd server (**et** non client)
 aptitude install openssh-server

%%% Pour plus de securit  et utilisation plus commode utiliser des clefs (DSA)

```
# On cree le couple de clef publique/priv e sur la machine cliente
$ ssh-keygen -t dsa
cree le fichier /home/clientuser/.ssh/id_dsa.pub
# il faut ensuite donner la clef publique au serveur pour quelle figure
dans la liste des clef autoris e de l'utilisateur serveur
- soit en utilisant ssh-copy-id -i ~/.ssh/id_dsa.pub serveruser@IP
- soit en activant temporairement la connexion par mot de passe (PAM et
Password), et en faisant un scp ou un echo >> dans le fichier /home/
serveruser/.ssh/authorized_keys de l'utilisateur server. Une fois le
transfert effectu , on desactive la connexion par mot de passe
- soit en la donnant par clef USB a l'administrateur du serveur!
# On redemarre le serveur ssh pour prendre en compte la clef publique du
client, et possible modification du fichier sshd_config
```

%%% Exemple d'options pour le fichier sshd_config and public key

```
## Low security
#Port 12120
#PermitRootLogin no
#RSAAuthentication yes
#PubkeyAuthentication no
#AuthorizedKeysFile %h/.ssh/authorized_keys
#UsePAM yes

## Higher security
Port 12120
PermitRootLogin no
RSAAuthentication yes
PubkeyAuthentication yes
AuthorizedKeysFile %h/.ssh/authorized_keys
PasswordAuthentication no
UsePAM no
AllowUsers manu
DenyUsers test guest admin root snort apache nobody
MaxStartups 1
```

%%% Pour encore plus de securit  avec des program qui banissent
 aptitude install tiger fail2ban

%%% Notes

- il est preferable que le fichier authorized_keys ait les droits 600
- il faut que dans sshd_config, le home soit referr  comme ~h/.ssh/authorized_keys

```

- utiliser ssh -v donne les details de debug

# sous windows, client de base : putty

SSH c'est du TCP port 22

# les bons tutos
http://technique.arscenic.org/connexion-distante-au-serveur-ssh/article/
  securisation-ssh-poussee
http://doc.ubuntu-fr.org/ssh
http://wiki.debian-facile.org/config:ssh
http://www.coagul.org/spip.php?article168

# scan des ports ouverts
http://www.frameip.com/scan/scan.php

%% Connexion Ã un serveur SSH via un autre serveur SSH
Si vous avez deux serveurs SSH mais qu'il est nÃcessaire de se connecter
  au premier pour pouvoir accÃder au deuxiÃme, cette commande permet de
  rÃaliser les deux connexions :
ssh root@serveur1 -t ssh root@serveur2

%% Tunnel cryptÃ en SSH
Il se peut que vous vouliez Ãtablir une connexion distante pour transiter
  des donnÃes de maniÃre 100% transparente et sÃcurisÃe, nous allons
  donc Ãtablir un tunnel ssh.
  # ssh -L 5901:localhost:5900 user@80.80.80.80

Cette technique est trÃs utile pour relier en local un bon nombre d'
  utilisation, comme sur kde distant, un serveur smtp personnel, une
  boite mail ( pop ou imap ) personnelle, un bon nombre d'utilisations
  ont recours Ã cette technique.

DÃtail sur la ligne de commande SSH
ssh : invoque le protocole
-L invoque de la crÃation d'un tunnel cryptÃ
5901 : port cotÃ local
localhost : indique que l'accÃs se fera en local de maniÃre
  transparente
5900 : port du service distant
user@80.80.80.80 : indique avec quelle user et sur quelle ip on va
  Ãtablir la connection

```

12.5 Video surveillance - Zone minder

```

http://www.csquad.org/cocoon/tags/public/zoneminder/zoneminder.html#N1004A
http://forum.debian-fr.org/viewtopic.php?f=1&t=17162&view=next

```

12.6 CUPS

```

Debugging commands:
ping localhost -> if doesn't work, add loopback lo in network interfaces
  , ifup lo, ifconfig lo or restart
netstat -nl |grep 631
iptables -nvL
netstat -tunva

```

```
netstat -tapln | grep cups
vim /var/log/cups/error_log

cat /etc/network/interfaces
cat /etc/hosts
cat /etc/hosts.allow
```

12.7 Telnet

Pour faire du telnet a priori il faut lancer le daemon openssh-inetd (je l'ai desactive au demarrage)

```
Http avec telnet
telnet www.google.fr 80
```

12.8 Creer une base de donnees sql pour amarok

```
installer mysql-server
lancer MySQL avant de faire ces manipulations :
sudo /etc/init.d/mysql start

pour acceder a mysql : taper
mysql -u root -p

#creer un base de donnees pour amarok
http://mikesubuntu.blogspot.com/2007/09/how-to-set-up-mysql-database-in-amarok.html
$mysql -p -u root
>CREATE DATABASE amarok;
>USE mysql;
>GRANT ALL ON amarok.* TO amarok@localhost IDENTIFIED BY 'amarok';
>FLUSH PRIVILEGES;
>quit

In Amarok use the following settings:
Hostname: 127.0.0.1
Database: amarok
Port: 3306
Username: amarok
Password: Your Password
```

12.9 PHP mysql et apache sous ubuntu

```
http://giminik.developpez.com/articles/apache/debian/

# Les paquest necessaires
sudo aptitude install apache2 php5 mysql-server php5-mysql libapache2-mod-
php5

#Le mot de passe administrateur mySQL vous est demandÃl: Entrez-en un.

### Apache
sudo /etc/init.d/apache2 reload
```

```

#Un ajustement de la politique des droits permet de mieux utiliser ce
rÃpertoire
sudo groupadd www-data
sudo addgroup manu www-data
sudo chown -R www-data:www-data /var/www
sudo chmod -R u=rwX,g=rwXs,o=--- /var/www
# permettra Ã apache de lire le rÃpertoire pour produire les pages
# permettra Ã tous les utilisateurs membres du groupe www-data de
travailler sur les fichiers (en gÃnÃral, il faut crÃer ce groupe "
www-data" et se mettre comme membre)
# permettra Ã tous les fichiers et rÃpertoires crÃÃs dans ce
rÃpertoire d'avoir les mÃmes propriÃtÃs au travers du groupe (GIG
activÃ par g=s)
# faire un lien vers son dossier site :
ln -s /home/manu/Sites /var/www/sites

Have a look at the file /etc/apache2/envvars
export APACHE_RUN_USER=manu
export APACHE_RUN_GROUP=www-data

### Test/Install Php
# Creation d'un fichier test
echo "<? phpinfo(); ?>" > /var/www/test.php

Une fois l'installation terminÃ, ouvrez http://localhost dans votre
navigateur

La racine de votre site web est situÃe dans /var/www
et ouvrez http://localhost/test.php dans votre navigateur.
lynx http://localhost/test.php

# Si ca ne marche pas editer /etc/apache2/apache2.conf :
AddType application/x-httpd-php .php
LoadModule php5_module /usr/lib/apache2/modules/libphp5.so

#####
### SQL
#####

Si vous avez une erreur comme celle-lÃ :
ERROR 2002 (HY000): Can't connect to local MySQL server through socket
'/var/run/mysqld/mysqld.sock' (2)

il suffit de lancer MySQL avant de faire ces manipulations :
sudo /etc/init.d/mysql start

pour acceder a mysql : taper
mysql -u root -p
Pour changer le password root :
update mysql.user set Password=PASSWORD("test") where User="root";

#To create a new mysql user 'guest' with 'all privileges' on the database
'demo':
mysql > create database demo
mysql >GRANT ALL PRIVILEGES ON demo.* TO 'guest'@'localhost' IDENTIFIED BY
'guest' WITH GRANT OPTION;
mysql> UPDATE user SET Password=PASSWORD('guest') WHERE user='guest';
That's it! MySQL is ready! Don't forget to remember the root password as
we might be using it with phpmyadmin.

```

```
#####
### Php My Admin
#####
The phpmyadmin configuration file is located at: /etc/phpmyadmin folder.
Usually it is automatically setup with a sim-link in /etc/apache2/conf.d/
phpmyadmin.conf
Check it, if not present, either link it to /etc/phpmyadmin/apache.conf or
add the following line in /etc/apache2/apache2.conf:
Include /etc/phpmyadmin/apache.conf

restart apache

Goto http://localhost/phpmyadmin
If you have "You don't have permission to access /phpmyadmin/ on this
server."
then edit the file /etc/phpmyadmin/apache.conf and allow access to the
folder:

<Directory /usr/share/phpmyadmin>
    Options FollowSymLinks
    DirectoryIndex index.php
    Order deny,allow
    Allow from 127.0.0.1

# To be able to import sql files in phpmyadmin
edit php.ini:

; http://php.net/post-max-size
post_max_size = 20M

; Maximum allowed size for uploaded files.
; http://php.net/upload-max-filesize
upload_max_filesize = 200M

# Other info
http://mikesubuntu.blogspot.com/2007/09/how-to-set-up-mysql-database-in-
amarok.html
http://www.cyberciti.biz/faq/mysql-command-to-show-list-of-databases-on-
server/
http://www.howtoforge.com/quick-n-easy-lamp-server-centos-rhel

# Commands sql
show databases;
```

12.10 Apache - example of htaccess file

The module RewriteEngine is really **nice**, but not allowed on all servers. One can use a workaround with the module Multiviews, and something like a file tag.php containing:

```
<?php
$url = $_SERVER[ 'PATH_INFO' ];
$get = explode("/", $url);
?>
```

so that /tag.php/a/b/c/d or /tag/a/b/c/d will be dealt the same by the script in tag.php.

```

Options Indexes Multiviews
IndexOptions FancyIndexing FoldersFirst
IndexOptions SuppressHTMLPreamble
IndexOptions SuppressDescription
IndexOptions IconsAreLinks
IndexOptions SuppressLastModified
#HTMLTABLE
#XHTML SuppressRules SuppressLastModified SuppressSize
IndexOptions NameWidth=70
HeaderName /_includes/indexheader.php
ReadmeName /_includes/indexfooter.php
IndexIgnore .htaccess _includes _CONTENT.php

AddIcon /images/mimetypes/folder.png ^ ^DIRECTORY^ ^
AddIconByType (SND,/images/mimetypes/audio-x-generic.png) audio/*
AddIconByType (IMG,/images/mimetypes/image-png.png) image/*
AddIconByType (TXT,/images/mimetypes/text-x-generic.png) text/*
AddIconByType (VID,/images/mimetypes/video-x-generic.png) video/*
AddIconByType (XOF,/images/mimetypes/x-office-document.png) x-office/*

AddIcon (ZIP,/images/mimetypes/package-x-generic-packed.png) .tar .gz .7z
.zip .bz2
AddIcon (DOC,/images/mimetypes/x-office-document.png) .rtf .doc .docx .zip
.bz2
AddIcon (PPT,/images/mimetypes/x-office-presentation.png) .ppt .odp
AddIcon (XLS,/images/mimetypes/x-office-spreadsheet.png) .xls .xlsx .ods
AddIcon (HML,/images/mimetypes/text-html.png) .html .php .css .htm
AddIcon (PDF,/images/mimetypes/application-pdf.png) .pdf .ps .dvi
AddIcon (TEX,/images/mimetypes/text-x-tex.png) .tex .bib

DefaultIcon /images/mimetypes/text-x-generic-template.png
AddIcon /images/mimetypes/go-up.png ..

#Options +FollowSymlinks
#RewriteEngine on
#RewriteRule ^articles/([^\s/]+)/([^\s/]+).zip hi.php?section=$1&file=$2 [NC]

```

12.11 Apache - probleme de liens symbolic

ce site-enabled marche
avec un lien symbolic de /var/www/sites/ dans /home/manu/Sites
es droits du repertoire sont ecriture pour utilisateur **et** groupe **et** ,manu:
www-data

Faire bien attention a l'ordre Deny,Allow qui est par default , **et** donc pas
de droit d'accès

```

<VirtualHost *:80>
    ServerAdmin webmaster@localhost

    DocumentRoot /var/www

    # Disable access to the entire file system except for the
    # directories that
    # are explicitly allowed later.

```

```

    <Directory />
        AllowOverride None
        Order Deny,Allow
        Deny from all
    </Directory>

    <Directory /var/www >
        Order allow,deny
        allow from all
        AllowOverride All
        Options Indexes FollowSymLinks
    </Directory>

</VirtualHost>
~

```

12.12 Aide server apache - les bases

Bien regarder le contenu de tous les fichiers /etc/apache2 :

- Le localhost par default est dans sites-availables\
- Les sites-enabled sont des liens vers les sites-available
- ports.conf : les port sur lesquels le serveur ecoute
- conf.d/ : config de php, securites
- httpd.conf : le fichier de conf pour l'utilisateur. A mon avis : c'est pas plus mal d'en mettre un dans son home, et d'inclure ce fichier a la fin de apache2.conf

Attention a l'option : "AllowOverride None", les .htaccess n'ont aucun effet a cause de cela

Ce site a le merite d'etre simple (sauve dans config):

```

http://blaireaunix.free.fr/apache.php
http://www.nemako.net/dc2/?post/2006/01/13/77-personnaliser-apache-avec-htaccess

```

12.13 Aide server apache - l'autoindex et le probleme de php

Hierarchie :

```

/var/www/sites/site1/           #le site en question
/var/www/sites/site1/.htaccess #definit les changement de regles pour l'
    option Indexes - autoindex
/var/www/sites/site1/_includes/.htaccess #!!! tres important : autorise
    le php
/var/www/sites/site1/_includes/header.php # le nouveau header
/var/www/_includes/ -> sites/sites1/_includes/header.php #un lien
    symbolique a partir de la racine du site

```

Mon httpd.conf :

```

#pour activer le .htaccess dans ce dossier, et ainsi changer l'option
    indexes
<Directory "/var/www/sites/site1/">
    AllowOverride All
    Order allow,deny
    allow from all

```

```

</Directory>
#pour autoriser un header/footer en php, en le considerant comme du texte
<Directory "/var/www/_includes/">
    AllowOverride All
    Order allow,deny
    allow from all
</Directory>

#.htaccess a la racine de site1 : on change la methode d'indexation
Options Indexes
IndexOptions FancyIndexing FoldersFirst
IndexOptions SuppressHTMLPreamble
IndexOptions SuppressDescription
IndexOptions NameWidth=50
HeaderName /_includes/header.php
ReadmeName /_includes/footer.php
IndexIgnore .htaccess

#.htaccess dans le dossier /_includes/ : considere le php comme du texte ,
uniquement dans ce dossier!
# on supprime le listage dans ce dossier par securite
AddType text/html .php
AddHandler application/x-httpd-php .php
Options -Indexes

```

12.14 Aide server apache - protection par mot de passe

protéger des pages et répertoires

Dans ce chapitre, nous allons voir les différentes étapes pour protéger les pages contenues dans `/var/www/test/` et ses sous-répertoires.

1. créer un fichier mot de passes (vide pour l'instant), par exemple `/var/www/.htpasswd`
2. Éditer le fichier de la forme :

```
fred:gWK3udIcGH832
bob:BgG6vsQflVS66
```

Ce fichier doit contenir les mots de passe sous forme cryptée uniquement. Pour le créer, il faut d'abord mettre n'importe quoi à la place du mot de passe.

Exemple :

```
fred:blabla
bob:bob
```

Puis, pour les crypter, on va taper `"htpasswd -b /var/www/.htpasswd bob mot-de-passe en clair"`. Maintenant, le mot de passe de bob sera crypté. Il faut faire pareil avec tous les comptes. Si on ne veut pas que le mot de passe apparaisse en clair sur la ligne de commande, il faut taper `"htpasswd /var/www/.htpasswd bob"` et il va demander de taper le mot de passe.

3. Éditer le fichier `/var/www/test/.htaccess` et copier dedans :

```
AuthUserFile /var/www/.htpasswd # fichier mot de passe
AuthGroupFile /dev/null # idem pour le groupe
```



```
AuthName "AccÃs rÃservÃ"      # texte qui apparait dans la boite de
                             # dialogue
AuthType Basic               # pour lui dire d'utiliser AuthUserFile
<Limit GET POST>
Require valid-user          # autorise tous les utilisateurs qui sont dans
                             # htpasswd. On pourrait mettre "Require user fred" pour n'autoriser que
                             # fred
</Limit>
```

12.15 iptables

```
http://wiki.debian.org/iptables

#listing
iptables --list

#clearing them
iptables -F
iptables -X
iptables -t nat -F
iptables -t nat -X
iptables -t mangle -F
iptables -t mangle -X
iptables -P INPUT ACCEPT
iptables -P OUTPUT ACCEPT
```

12.16 Server FTP

```
aptitude install ftpd (openbsd-inetd)
ou
aptitude install proftpd

#
/etc/init.d/proftpd start
# Liste des exclus
/etc/ftpusers

# Security
- installer fail2ban(!!!!) et le configurer dans /etc/fail2ban/jail.local
  (!!! read below)
- installer Lynix tiger chkroot qui aident a detecter les failles de
  securites
- installer ufw

#fail2ban problem avec iptables
iptables ne peut pas recevoir trop de commandes a la suite
modifier /etc/fail2ban/actions.d/
iptables.conf
et
iptables -multiport

mettre
sleep 3.0
apres la premiere ligne de actionstart et actionstop
```

```

sur internet un mec propose quelquechose d'aleatoire:
actionstart = sleep ${RANDOM:0:1}.${RANDOM:0:1}
               iptables -N fail2ban-<name>
               iptables -A fail2ban-<name> -j RETURN
               iptables -I INPUT -p <protocol> -m multiport --dports <port>
               -j fail2ban-<name>

%%Livebox : Les passives ports c'est tres important!!!
http://forum.ubuntu-fr.org/viewtopic.php?id=110641
plages de port ftp:
active: 20-21 20-21
passive: 6000-6100 6000-6100

#<IfModule mod_dynmasq.c>
# DynMasqRefresh 28800
#</IfModule>
#MasqueradeAddress %%%%.dyndns.org

#DisplayXXX il faut avoir les droits d'accès aux fichiers welcome, connect
, quit, goaway...

#
/etc/init.d/fail2ban start
/etc/init.d/ufw start
/etc/init.d/proftpd start
#

Run the Ufw firewall wizard.
Install a rate limiting rule to guard against DOS and brute forcers:

# General new connection rate limiting for DOS and Brute Force protection
iptables -I INPUT -p TCP -m state --state NEW -m limit \
--limit 30/minute --limit -burst 5 -j ACCEPT

```

12.17 DynDNS

- Créer un compte gratuit sur dyndns
- créer un host (avec IP address)
- Configurer la Livebox `http://192.168.1.1`
Configuration / Avancee/ DNS Dynamique
Nom du compte (login de DynDNS)
Password login DynDNS
HostName: celui choisit sur DynDns (`monserveurftp.dyndns.org`)
- Configurer la livebox2 : redirection des ports
Serveurs LAN, Ajouter.
Nom du serveur : "Serveur web".(HTTP ou FTP)
Protocole : TCP qui est le protocole généralement utilisé pour les serveurs web.
Du port 80 Au port 80.
Adresse IP locale : c'est l'adresse IP de la machine où est installé le serveur. Elle est de la forme `192.168.1.XXX`

12.18 Voisimage reseau : pyNeighborhood

```
#pyNeighborhood est un tres bon logiciel pour voisinage reseau
aptitude install pyNeighborhood

#Changer les commandes de montage/demontage en mettant sudo devant

#Au lieu de umount.cifs , mettre umount !
```

12.19 Samba fusesmb pyNeighborhood

```
# pour le serveur installer samba
aptitude install samba
#et definir un nom de reseau , comme WORKGROUP

# pour le client installer smbclient

#samba
$ nmblookup VJK
querying VJK on 82.211.206.255
82.211.206.142 VJK<00>
82.211.206.92 VJK<00>
# <00> est le cas courant <20> est pour un serveur

#chercher pour le reseau BRANET OU pour les resaux SAMBA
nmblookup BRANET __SAMBA__
#chercher pour le reseau BRANET ET pour les resaux SAMBA
nmblookup -B BRANET __SAMBA__

# This time we are testing the ability of programs (such as nmbd ) to use
broadcast. It's essentially a connectivity test, done via a broadcast
to the default broadcast address. A number of NetBIOS/TCP-IP hosts on
the network should respond with "got a positive name query response"
messages. Samba may not catch all of the responses in the short time it
listens , so you won't always see all the SMB clients on the network.
However, you should see most of them:

manu@server$ nmblookup -d 2 '*'

# le -N c'est pour etre anonyme, je pense que ca doit revenir au meme que
-U% pour les serveur SAMBA mais pas pour windows
$ smbclient -N -L 82.211.206.142
Domain=[KINGS-WIN] OS=[Windows 5.1] Server=[Windows 2000 LAN Manager]
      Sharename      Type            Comment
      -----
      SharedDocs     Disk

$ smbclient \\\\kings-win\\SharedDocs -U user passwd
$ smbclient '\\kings-win\\SharedDocs' -U user passwd
$ smbclient '\\kings-win\\SharedDocs' -N
smb: \> quit

$ smbclient '\\olympes\\Public' -N

#fusesmb
cp /usr/share/doc/fusesmb/examples/fusesmb.conf.ex ~/.smb/fusesmb.conf
chmod 600 ~/.smb/fusesmb.conf
```

12.20 Communiquer avec les reseaux microsoft

```
#Installation de Samba, polices Microsoft et cabextract
sudo apt-get install samba msttcorefonts cabextract

#jout de l'utilisateur au groupe sambashare doivent etre automatique
sudo adduser $USER sambashare
```

12.21 Activation du voisinage rÃseau Windows dans Thunar

```
#Installation de fusesmb :
sudo apt-get install fusesmb
#VÃrifier la prÃsence du module fuse dans /etc/modules :
sudo vim /etc/modules
#modprobe fusemb
#RedÃmarrer le serveur X : Ctrl + Alt + bacs Space
#menu XFCE / SystÃme / Users : cocher pour les utilisateurs devant
utiliser
```

12.22 fusemb

```
sudo modprobe fuse
#Il faut ensuite penser Ã rajouter le groupe fuse Ã votre utilisateur.
sudo gpasswd -a $USER fuse
#
cd ~
mkdir -p Network
fusemb Network
A partir de maintenant, vous pouvez voir le voisinage rÃseau de la forme
  Ã DOMAINES/MACHINES/PARTAGES Ã. Pour dÃmonter le point de montage :
fusionmount -u Network
```

Chapter 13

Multimedia

13.1 Lire wmv windows media video ?

```
sudo aptitude install w32codecs
```

13.2 Video capture

```
% guvcview (bug with audio compression though)

% ffmpeg
ffmpeg -f video4linux2 -i /dev/video0 -pix_fmt yuv420p -s vga -r 8 -f alsa
-ac 1 -ar 16000 -i hw:1,0 -vcodec mpeg4 -b 400k -acodec libmp3lame -ab
80k video.avi
```

13.3 Timidity is not yet configured.

```
When running : /etc/init.d/timidity start
it shows
```

```
Timidity is not yet configured.
Enable Alsa Sequencer first by editing /etc/default/timidity.
```

```
sudo nano /etc/default/timidity
and uncomment the line for ALSASEQ
```

13.4 Timidity GUI

```
For debian, the one present by default:
timidity -ia file.midi
For other interface look at timidity -h.
GTK: -ig
```

13.5 Midi

1. Install TiMidity++. If you are a Debian user, this package is available in the official repositories. Other binary versions may be available. You can also compile from **source**. Instructions and download location available at the TiMidity website. Binary packages **for select** distros:
 - * Debian package
 - * Slackware binaries
 - * RPM packages
2. Get some good sound patches. Debian users can use Freepats. But I recommend the eaw patches which are of higher quality. No Debian packages are available, but luckily you can just download it and extract it in any location. You can download the tar.gz here. Just extract it into your home directory. Let's say /home/hari/eawpats.
3. Replace the default TiMidity++ timidity.cfg file (rename the old file to something like timidity.conf.old) with the one in the /home/hari/eawpats/linuxconfig folder. Just edit it to make sure the location points to the directory where you extracted the EAW patches. The config file is located usually in the /etc/timidity/ folder in Debian. I don't know about other distros. Here is how the file looks like. Just change the dir setting to whichever location you extracted the EAW patches to:

```
dir /home/hari/eawpats/
source gravis.cfg
source gsdrums.cfg
source gssfx.cfg
source xgmap2.cfg
#mid -> wav: timidity input.mid -Ow1S -s 44100 -o output.wav
```

All right, you've now installed it. To **test** it, you need to play a MIDI file. If you have one, just run

```
timidity filename.mid
```

13.6 FFMPEG et MP3 lame sous debian

<http://blog.fclement.info/content/ffmpeg-et-mp3-avec-debian>

conversion

```
ffmpeg -i %f -vn -ar 44100 -ac 2 -ab 128k -y %n.mp3
```

```
ffmpeg -i %f -vcodec mpeg2video -acodec libmp3lame -ar 22050 -s 320x240 -y
%n.avi
```

```
ffmpeg -i Test_avi.avi -vcodec mpeg2video -acodec libmp3lame -ar copy -s
copy -y out.avi
```

mencoder en 2 passes avec

```
-ovc lavc -lavcopts vcodec=mpeg4 avec un bitrate=(HxL)/325 Ã (HxL)/350
oÃ H et L sont les largeur et hauteur.
```

Le bitrate video par dÃ faut de mencoder, je crois est de 800. J'utilisais plutÃ 900.

Chapter 14

Optimizations ?

14.1 Swappiness

Système avec beaucoup de mémoire vive : diminuer la valeur pour limiter les accès disques et la charge processeur, au prix d'une utilisation de la mémoire plus importante.

La valeur par défaut est 60, si vous disposez de plus de 1Go de mémoire n'hésitez pas à descendre à 20, voir aussi bas que 5 au-dessus de 2 Go. De toute façon même si la valeur 0 est utilisée et que du swapping soit nécessaire, le noyau dépassera le réglage, simplement il ne le fera qu'en dernier recours et non systématiquement en avance. J'utilise la valeur 10 qui me donne satisfaction, la mémoire vive est plus utilisée et je n'ai jamais de swap, les applications et l'environnement de bureau sont plus réactifs, en particulier après une courte période d'inutilisation.

Pour changer ce réglage éditez le fichier /etc/sysctl.conf en root et ajoutez à la fin du fichier les lignes :

```
#swappiness perso  
vm.swappiness=10
```

pour choisir une valeur de 10.

Pour rendre le changement effectif utilisez :

```
# /sbin/sysctl -p
```

14.2 Optimisation - Date de modif

Pour ce qui est des options propres au système d'exploitation, avec un système journalisé comme ext3 ou reiserfs le système va enregistrer l'heure précise d'accès à un fichier lors de sa création, modification ou simplement de son ouverture. Ce dernier point est un gâchis de ressources sur un poste de travail (sur un serveur il peut se justifier par la nécessité de pouvoir effectuer des contrôles sur les accès à un fichiers donnés, mais le premier pirate venu modifiant ce paramètre d'un simple " touch " on peut douter de son

<p>efficacitÃ...). Pour supprimer ce comportement ajoutez l'option <code>noatime</code> dans votre fichier <code>/etc/fstab</code>. Un exemple de lignes modifiÃes :</p> <pre>/dev/sda1 / ext3 defaults,noatime,errors=remount-ro 0 1</pre> <p>Cette option est applicable Ã la partition <code>root</code> et <code>/home</code>, mais Ãgalement aux autres partitions contenant des donnÃes si vous avez un partitionnement plus ÃlaborÃ (/usr ; /tmp ; ...), l'option n'est pas utile sur <code>/boot</code>, et pas utilisable sur <code>/swap</code>.</p> <p>Comme alternative, l'option <code>relatime</code> est un bon compromis. Certains programmes comme "mutt" (client de courriel en ligne de commande) peuvent Ãtre perturbÃs par "noatime", ce qui ne sera pas le cas de "relatime".</p>

14.3 Readahead

<p>Readahead est un programme conÃgu pour accÃlÃrer le chargement d'autres programmes, plus particuliÃrement pendant la sÃquence de dÃmarrage. Ã noter que le paquet "readahead" semble Ãtre en voie d'abandon dans Debian et Ubuntu. Sur Debian il est remplacÃ par "readahead-fedora" Ã partir de Squeeze.</p> <p>Pour que "readahead[-fedora]" fonctionne votre noyau doit Ãtre compilÃ avec le support du systÃme d'audit. C'est le cas des noyaux par dÃfaut Debian. Si vous compilez vous mÃme votre noyau vÃrifiez avec :</p> <pre>\$ grep CONFIG_AUDIT= /boot/config-\$(uname -r)</pre> <p>AprÃs son installation, il faut lui permettre de "profiler" la sÃquence de dÃmarrage.</p> <p>Sur grub2 :</p> <ul style="list-style-type: none"> * SÃlectionnez l'entrÃe correspondant Ã votre systÃme, et Ãditez la avec la touche [e]. * Placez vous sur la ligne "linux", et Ãditez la directement. * Ajoutez en fin de la ligne "linux" l'option <code>profile</code>. * Poursuivez le dÃmarrage avec [ctrl][x] <p>Ceci n'est plus nÃcessaire avec "readahead-fedora", des tÃches "cron" se chargeant de la configuration sans intervention de l'utilisateur (c'est beau le progrÃs ;-)</p> <p>Le dÃmarrage peut Ãtre sensiblement plus lent que la normal, ce sera l'unique fois, l'option "profile" que vous avez ajoutez aura disparu au prochain dÃmarrage. Les dÃmarrages suivant devraient Ãtre plus rapides. Vous pouvez jeter un oeil aux fichiers de configuration dans <code>/etc/readahead/</code> (/etc/readahead.conf pour "readahead-fedora"), ils contiennent la liste des exÃcutables et bibliothÃques Ã prÃ-charger en cache pour le dÃmarrage (fichier "boot"), et le fonctionnement normal (fichier "desktop").</p> <p>Readahead ne prÃsente aucun danger pour votre systÃme, il est encore plus efficace utilisÃ conjointement au options suivantes :</p> <pre>%% makefile concurrency and readahead # aptitude install readahead-fedora # echo CONCURRENCY=makefile >> /etc/default/rcS</pre>

```
# aptitude install insserv
# dpkg-reconfigure insserv sysv-rc
```

Cela consiste à réorganiser totalement la séquence d'exécution des scripts "init", et permettre leur exécution parallèle (en particulier sur les processeurs multicoeurs). Si vous constatez des problèmes d'initialisation de certains scripts "init" avec ces réglages (peu probable), faites un rapport de bug au mainteneur du paquet en question. Il lui suffit de corriger les entrées des script "init".

"readahead" peut être utilisé conjointement à "upstart" présent ci-dessous, lisez /usr/share/doc/readahead-fedora/README pour les éventuelles précautions (en particulier d'installer "auditd" si présent).

14.4 Optimisation - Preload

Preload est un "daemon adaptatif pour readahead", qui se lance en tâche de fond sur votre système, qui observe quel programme vous utilisez le plus souvent, et les met en cache en vue d'accélérer le temps de chargement des applications. En utilisant Preload, vous mettrez votre mémoire non utilisée au travail (en gros elle sera utilisée utilement), et améliorer les performances général de votre ordinateur de bureau.

Installer Preload sur Ubuntu est faisable facilement avec la commande:
 sudo apt-get install preload

14.5 Optimisation - Démarrer les applications plus rapidement avec Prelink

```
sudo apt-get install prelink
sudo gedit /etc/default/prelink
```

Changer l'option:

```
PRELINKING=unknown en PRELINKING=yes
```

Pour lancer Prelink, taper la commande suivante dans la console:

```
sudo /etc/cron.daily/prelink
```

Ceci prendra quelques temps à finir (autour de 10-15 minutes).

Si vous voulez lancer Prelink à chaque fois que vous mettez à jour votre système, ajouter un script dans le dossier /etc/apt/apt.conf.d/ (quand il dit script c'est un fichier hein...), appelé le S99prelink, et mettez la ligne suivante à l'intérieur:

```
DPkg::Post-Invoke {"echo Running prelink, please wait...;/etc/cron.daily/prelink";}
```

14.6 Optimisation - Suppression services - Init scripts

```
Debian squeeze goes towards concurrency boot ie in /etc/default/rcS
CONCURRENCY=makefile
```

See "/usr/share/doc/insserv/README.Debian".

<http://wiki.debian.org/LSBInitScripts/DependencyBasedBoot>

```

dpkg-reconfigure insserv sysv-rc

####To see the boot and reboot sequence dependency graph, use

aptitude install insserv graphviz
/usr/share/insserv/check-initd-order -g > boot.dot
/usr/share/insserv/check-initd-order -g -k > reboot.dot
dotty boot.dot
dotty reboot.dot

###
http://www.debian-administration.org/articles/629
http://www.debian-administration.org/articles/620

### Runlevels (S does not mean service but single!)
runlevel      directory      description of runlevel usage
N             none         system bootup (NONE) level (no "/etc/rcN.d/" directory)
0             /etc/rc0.d/   halt the system
S             /etc/rcS.d/   single-user mode on boot (alias: "s")
1             /etc/rc1.d/   single-user mode switched from multi-user mode
2             /etc/rc2.d/   multi-user mode
3             /etc/rc3.d/   ,,
4             /etc/rc4.d/   ,,
5             /etc/rc5.d/   ,,
6             /etc/rc6.d/   reboot the system
7             /etc/rc7.d/   valid multi-user mode but not normally used
8             /etc/rc8.d/   ,,
9             /etc/rc9.d/   ,,

### Go back to default:
# for squeeze and later
insserv anacron

# prior to 6.0 (prior to squeeze)
update-rc.d anacron defaults

man insserv
man update-rc.d
man init

##Manually :
/etc/init.d
/etc/rc0.d
/etc/rcS.d

%%
Nouveau outil, graphique mais bien plus complet : BUM
sudo aptitude install bum
%%
Install a tool - sysv-rc-conf. It is a perl based boot process adjustment
tool.
Code:
sudo sysv-rc-conf

-P switch with sysv-rc-conf to remove old empty entries.

%% List of services
acpid (2 3 4 5 -> D?) ??????????????

```

acpi-support	support de l'acpi (gestion de l'Ãnergie)
alsa	serveur de son
alsa-utils(S)	?????????
anacron (2 3 4 5 -> D)	or kept, logrotate useful for instance.. but well)
:	cron anachronic
apmd	usefull for battery monitor demon apm (ancien acpi) (gestion de l'Ãnergie)
apparmor (D)	service, securite)
aport (D)	(info sur les crash)
atd (D)	????? daemon atd (diffÃrent de cron dans le principe)
aumix(2 3 4 5->D)	if different than amixer) : manager son en mode texte
avahi-daemon(D?)	permet de dÃcouvrir automatiquement les ressources rÃseau et de s'y connecter
binfmt-support(?????????)	: pour wine - utiliser d'autres bin format
bootclean.sh	efface les rÃpertoires /tmp,/var/run et /var/lock
bootlogd (S ->D)	un des premiers scripts exÃcutÃ, lance le daemon bootlogd
bootlogs (1 2 3 4 5 ->D)	un des premiers scripts exÃcutÃ, lance le daemon bootlogd
bootmisc.sh	effectue diverses tÃches, genre sauver le rÃsultat de dmesg dans /var/log/dmesg, afficher le motd, etc)
checkfs.sh	vÃrifie si les partitions dÃfinies dans /etc/fstab ont besoins d'Ãtre vÃrifiÃes (fsck)
checkroot.sh	vÃrifie si la racine est ok, monte les swap dÃfinis dans /etc/fstab, en cas de problÃme boot en single mode
console-screen.sh (S)	initialise la console (polices notamment, dÃfini par console-tools)
cpid	daemon acpi (gestion d'Ãnergie)
cpufrequtils (2 3 4 5 -> D)	see following info) : for cpu freq management check the output of cpufreq-info and cat /sys/devices/system/cpu/cpu0/cpufreq/scaling_governor If "ondemand", you're good. For laptop: unplug your power cord and check if it gives you "powersave".
cron (ON)	daemon crond, qui lance des taches de maniÃre pÃriodique
cups (D)	gestionnaire d'impression
cupsys (D)	gestionnaire d'impression
dbus-1 (2 3 4 5)	Important for power management, daemon dbus (http://www.freedesktop.org/Software/dbus)
dhcdd (ON):	Interface D-Bus pour le client DHCP ISC
discover	essaye de dÃtecter tout ton matÃriel
dns-clean	efface les fichiers /etc/resolv.conf laissÃe par ppp
evms	daemon qui gÃre le stockage d'une maniÃre avancÃe
exim4	: gestion de mail -> paquets destinÃs
fancontrol :	(partie du paquet lm-sensors)
fam	File Alteration Monitor, permet de notifier les programme d'un changement sur les fichiers (genre tu ouvre ton home dans konqueror, dans un console tu efface un fichier dans ton home, konqueror affichera immÃdiatement la modification, sans besoin de recharger le rÃpertoire), actuellement remplacÃ par gamin
fetchmail	mail? rÃcupÃrer des mails sur des serveurs distants (pop/imap)
fuse (S)	
gdm	gestionnaire de connexion graphique (le truc qui vous demande votre login/pass)
hal(ON) :	gestionnaire des peripheriques (combinÃ Ã Udev/DBus) est un systÃme qui permet d'autodetecter les pÃriphÃriques)
halt (nothing)	pour arreter le PC

hddtemp (D):	used by sensors utils
hdparm (S)	gestion des DD (rÃglage des disques dur, genre activer le DMA, mettre en udma5) et Ãtat du raid via /proc/mdstat
hostname.sh	declaration de ton hostname (Ã partir de /etc/hostname)
hotplug	lance diffÃrents sous-systÃmes hotplug (Ã partir de /etc/hotplug et /etc/hotplug.d) gÃre tout ce qui est dÃtection du matÃriel, comme l'insertion d'un matÃriel, etc), assez complexe)
hwclockfirst.sh	synchronise l'horloge matÃrielle avec l'horloge logicielle
hwclock.sh	
ifupdown (S)	initialise l'Ãtat des interfaces (activÃes ou non)
ifupdown-clean (S) ???	
inetd	daemon inetd, sert Ã lancer d'autres services (serveur ftp, http, etc) de maniÃre sporadique
initrd-tools.sh	s'occupe de l'initrd (libÃration et rÃcupÃration de la mÃmoire utilisÃe par celui-ci)
ivman (ON) :	like hal support automount of different media
jabber :	
jackd(D?) :	server de son permettant connexions au peripherique audio
kbd (S) :	??????????
keyboard-(S) :	??????????
keymap.sh	charge le mappage clavier adÃquat
killprocs (S) ??????????	
klogd (D)	daemon qui enregistre les messages du noyau
laptop-mode (parsing tete de lecture , gestion disque pour economie d' energie , batterie)	
libdevmapper1.00	gÃre les fichiers pÃriphÃriques nÃcessaires Ã libdevmapper
lm-sensors(D?) :	
loadcpufreq (2 3 4 5) ??????????	
lpd (D):	printing service
lpnrg(2 3 4 5-> D) :	enhanced lpr/lpd printer spooling system for local or remote printers
lvm	gestionnaire de stockage avancÃ
makedev	crÃe les fichiers de pÃriphÃrique dans /dev
mdadm	monte les arrays raid dÃfinies dans /etc/mdadm/mdadm.conf
mdadm-raid	lance le daemon qui surveille les arrays raid
module-init-tools (S) ??????????	rÃsoudre les dÃpendances et charger les modules nÃcessaires
modutils	chargement des modules
mountover (S) ??????????????????	
mountall.sh	montage des partition (systÃmes de fichiers "locaux " ie non rÃseaux dÃfinis dans /etc/fstab)
mountnfs.sh	monte les systÃme de fichiers nfs et samba figurant dans /etc/fstab
mountvirtfs	montage fs virtuel (/proc, tmpfs, devpts , /sys, usbfs)
networking (S->D)	activation des interfaces rÃseaux dÃfinies dans /etc/network/interfaces et rÃgle quelques autres trucs, genre le forwarding, la protection syn cookies, l'anti-spoofing)
nfs-common (2 3 4 5 S-> D?) ??????????	
ntpdate	synchronisation de l'horloge logicielle Ã l'aide d'un serveur de temps via le protocole ntp
nvidia-glx	gestion du module propriÃtaire nvidia

saned (D?):	scanner et reseau
samba	daemon samba (partager/voir des fichiers/ imprimantes sur un rÃ©seau netbios)
screen-cleanup	efface les "pipes" laissÃ©s par le logiciel screen
sendsigs (nothing)	envoi des signaux KILL pour tuer les processus restants a l'extinction
single (1)	executÃ© par init quand tu rentre en "single mode"
skeleton	un exemple de script Ã mettre ici
stop-bootlogd (2-5 : D)	stop le daemon bootlogd
stop-bootlogd-single (S : D)	
sudo (2-5-> D)	fait le mÃ©nage dans les fichiers temporaires de sudo, make sure privileges don't persist across reboots
sysklogd	lance syslogd, qui sauve les messages du systÃ©me dans /var/log
udev (S)	daemon qui crÃ©e de maniÃ©re dynamique et personnalisÃ©e des liens dans /dev
udev-mtab (S)	
umountfs (nothing)	dÃ©monte les swap et tous les systÃ©mes de fichier locaux
umountnfs.sh (nothing)	dÃ©monte tous les systÃ©me de fichier exceptÃ©s la racine
urandom (S)	sauvegarde/restaure la "graine alÃ©atoire" pour le gÃ©nÃ©rateur de nombres alÃ©atoire /dev/urandom, le fichier est /var/ lib/urandom/random-seed et est restaurÃ©/sauvegardÃ©
wicd (2 3 4 5)	
winbind(D) :	utiliser par samba pour se connecter a des machines windows et gerer les droits utilisateurs
xfree86-common	initiliase le serveur xfree (xorg maintenant) notamment les sockets
wpa-ifupd	

14.7 Bootchart

L'installer, puis ajouter l'option au kernel dans grub :

```
kernel /vmlinuz-2.6.10 ro root=/dev/hda1 init=/sbin/bootchartd
```

Un tarball est gÃ©nÃ©rÃ© dans /var/log. en tapant bootchart dans son home,
un png est gÃ©nÃ©rÃ©.

14.8 Optimisation - Config reseau demarrage

La configuration rÃ©seau ralentit un peu le dÃ©marrage d'Ubuntu.

Pour le fixer, Ã©ditez votre fichier "/etc/hosts" en tapant la commande:

```
sudo gedit /etc/hosts
```

Vous devriez y voir les lignes suivantes:

```
127.0.0.1 localhost
```

```
127.0.1.1 toto
```

"toto" est le nom de votre machine (votre localhost name)

Ajoutez dans la premiÃ©re ligne le nom de votre machine:

```
127.0.0.1 localhost toto
```

```
127.0.1.1 toto
```

Sauvegardez **et** quittez gedit. RedÃ©marrez votre PC.

14.9 Optimisation - chargement polices

```
le chargement de bcp de polices ralentis le systeme je crois
donc si tu veux virer des polices inutiles... style tu fais jamais de
  traitement de texte...
tu peux supprimer des polices
alors pour ca tu ouvres synaptic, tu cherches ttf et tu supprimes toutes
  les polices sauf:
  ttf-dejavu, ttf-opensymbol, ttf-bitstream-vera

puis ds un terminal tu tapes :
  sudo fc-cache -f -v
```

Voilà !

14.10 Open office optimization

```
Options -> Memory
Cache : 128 Mo
Memory per object 32
Java ->disable

open office rapide
http://forum.ubuntu-fr.org/viewtopic.php?id=130569&p=1
```

Chapter 15

Misceleanous

15.1 Java Gcj versus Sun - select defaults JVM

```
sudo update-alternatives --config java
(gcj-base)
(sun-java)
```

15.2 Connexion ssh avec mot de passe automatique, methode bourrin mot de passe en clair

```
Utilisation d'expect (a installer)
Creation d'un script :

#!/usr/bin/expect -f
set force_conservative 1;

set timeout 2
spawn ssh ton-login@la-ou-tu-veux
expect "password: $"
send "ton-passwd\n"
interact
```

15.3 Nvidia drivers

```
Actually since you already have a nvidia drivers installed you should be
able to get away with:
# aptitude install nvidia-kernel-source module-assistant kernel-package
linux-headers-2.6.30-1-686
Then, boot into the new kernel and, after you get dumped to the console:
m-a a-i nvidia-kernel-source

Screw it, telecharger et utiliser les drivers proprietaires sur le site
web nvidia
```

15.4 Virer le Usplash splash screen demarrage ubuntu

```
sudo /boot/grub/menu.lst
virer les options quiet et splash
```

Pour passer au splash screen d'ubuntu, il faut après avoir tapé ça (cf la doc):

Code:

```
sudo update-alternatives --config usplash-artwork.so
```

et choisi le splash d'ubuntu, il faut taper cette commande également qui gère le splash screen

Code:

```
sudo dpkg-reconfigure linux-image-$(uname -r)
```

ensuite on peut supprimer /usr/lib/usplash/usplash-theme-ubuntu.so

```
%!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
%!!! WATCH OUT - End Of File
```

```
%!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```


Part II

Supplementary notes

Chapter 16

Configuration Files

16.1 `/.bashrc`

```
source /home/manu/Config/profiles/bashrc_common

#export PS1='|/|033[1m|]|/|033[1;33m|]|u:|/|e[32;1m|]|w|/|e[33;1m|]|$
|/|033[m|]|'
#export PS1="|033[33;40m|u@|h|w|]|$|007|033[0m|007"
#export PS1='|/|033[33;40m|]|/|u@|h|/|e[33;40m|]|w|/|e[33;1m|]|$|/|033[m
|]|'

#####
# PROGRAM PATHS and VARIABLES
#####
#export MATLABPATH=/home/manu/Config/matlab
#path for listen music player
#export MOZILLA_FIVE_HOME=/usr/lib/iceweasel
#export LD_LIBRARY_PATH=/usr/lib/iceweasel
# /usr/lib/listen/listen.py "$@"

#intel fortran
#source /opt/intel/Compiler/11.1/069/bin/ifortvars.sh ia32
source /opt/intel-fortran/bin/ifortvars.sh ia32

LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/opt/cuda/lib/

#gpg --keyserver keyserver.ubuntu.com --recv 778978B00F7992B0
#gpg --export --armor 778978B00F7992B0 | sudo apt-key add -
# ~/.bashrc: executed by bash(1) for non-login shells.
# see /usr/share/doc/bash/examples/startup-files (in the package bash-doc)
# for examples

# If not running interactively, don't do anything
[ -z "$PS1" ] && return

# don't put duplicate lines in the history. See bash(1) for more options
export HISTCONTROL=ignoredups
# ... and ignore same successive entries.
export HISTCONTROL=ignoreboth

# check the window size after each command and, if necessary,
# update the values of LINES and COLUMNS.
shopt -s checkwinsize
```

```

# make less more friendly for non-text input files , see lesspipe(1)
[ -x /usr/bin/lesspipe ] && eval "$(lesspipe)"

#Killing PC BEEP
#xset -b
#setxkbmap -option compose:ralt
#####
# ALIASES
#####
# some more ls aliases
alias ll='ls -lhb'
alias lsnoco='ls -F --color=none --group-directories-first'
alias ls='ls -F --color=always --group-directories-first'
alias la='ls -lAXh'
alias lag='ls -lAgXh|grep'
alias lsd='ls -l|grep drwx'
alias dir='ls -l'
alias lad='ls -lAh|grep drwx'
alias cd..'='cd ..'
alias grepnoco='grep --color=none'
alias grep='grep --color=always'

# systeme
alias reboot='sudo reboot'
alias vigrub='sudo vim /boot/grub/grub.cfg'
alias vix='sudo vim /etc/X11/xorg.conf'
alias viinit='sudo vim /etc/inittab'

alias gedit='geany'
alias mydiff='diff -a -b -B -w -y -i --suppress-common-lines'
alias mydiffb='diff -a -b -B -w -y -i'
alias mywget='wget -r -l5 -k -E'
alias df='df -hT |egrep -i "file|^/'
alias duf='du --max-depth=1 -h'
alias R='R --no-save'
alias RR='R --no-init-file'
#
function ff {
    grep -Inrsi $1 ./*
}
#
alias f=ff

# tracker
alias asearch='tracker-search'
alias tsearch='tracker-search -t'
alias msearch='tracker-search -m'
alias vsearch='tracker-search -v'
alias isearch='tracker-search -i'

alias lhm='xmodmap -e "pointer = 3 2 1 4 5 7 6 8 9"'
alias rhm='xmodmap -e "pointer = 1 2 3 4 5 6 7 8 9"'

#Aptitude
alias update='sudo aptitude update;sudo aptitude safe-upgrade'
alias api='sudo aptitude install'
alias aps='aptitude search'
alias apss='aptitude show'

```

```

alias apc='apt-cache policy '

#####
# Vim Editing mode in Bash
#####
set -o vi

# ^p check for partial match in history
bind -m vi-insert "\C-p":dynamic-complete-history

# ^n cycle through the list of partial matches
bind -m vi-insert "\C-n":menu-complete

# ^l clear screen
bind -m vi-insert "\C-l":clear-screen

#####
# GVIM SINGLE INSTANCE

function gv {
if [ "$#" -eq "0" ]; then
    /usr/bin/gvim --servername GVIMLOCAL
else
    if echo "$*" | grep -q -- "--servername" ; then
        # echo "Command already has --servername use it"
        /usr/bin/gvim $*
    else
        #echo "Use default VIM server VIMLOCAL"
        /usr/bin/gvim --servername GVIMLOCAL --remote-tab-silent $*
    fi
fi
}
#alias gvim=gv
# alias gvim='gvim -p --remote-tab-silent '

# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
if [ -f /etc/bash_completion ]; then
    . /etc/bash_completion
fi

#pgp --keyserver keyserver.ubuntu.com --recv 778978B00F7992B0
#pgp --export --armor 778978B00F7992B0 | sudo apt-key add -

```

16.2 /.bash_profile

```

echo "-----"
echo "----- BASH PROFILE -----"
echo "-----"

#if [ 'tty' = "/dev/tty1" ]; then
# startx&
#fi

```

```

# Load X11
#if [ -z "$DISPLAY" ]; then

#export PS1='| | 033[1m| | | 033[1;33m| | u:| | e[32;1m| | w | | e[33;1m| | $
| | 033[m| | '
#source .bashrc

PATH=$PATH:/home/manu/Config/scripts/
PATH=$PATH:/opt/cuda/bin/
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/opt/cuda/lib/

#For your .xinit you may want to use 'exec ck-launch-session dbus-launch
—sh-syntax —exit-with-session startxfce4', it's what I have found to
work better.
# if [ "$(tty)" = "/dev/tty1" ] ; then
    if [ 'ps -le|grep xinit|wc -l' == 0 ]; then
        exec ck-launch-session startxfce4 ;
        #xinit;
        echo "";
        echo "Bye Bye";
        echo ""
        source .bashrc
    fi
# fi

# && [ $(tty) == /dev/tty1 ] ; then
# startx&
#fi

```

16.3 /.xinitrc

```

echo "_____
"
echo "_____ BEGIN XINITRC _____
"
echo "_____
"

#####
# This file is not used by nodm, see .xsession
#####

#if [ -x /usr/bin/numlockx ]
#then
# /usr/bin/numlockx on
#fi
#/usr/bin/xsetnumlock&

#xterm config
xrdb ~/.Xdefaults
#if which dbus-launch > /dev/null && test -z "$DBUS_SESSION_BUS_ADDRESS" ;
then
# eval "$(dbus-launch —sh-syntax —exit-with-session)"
#fi

#/home/manu/Config/scripts/ScreenConf.sh

```

```

#exec ck-launch-session startxfce4

#setxkbmap -option terminate:ctrl_alt_bksp
setxkbmap -option compose:ralt

#bootchart
# exec xfce4-session
exec ck-launch-session xfce4-session;
setxkbmap -option compose:ralt
#exec startxfce4

#fluxbox
#blackbox
#icewm
#sawfish
#

echo "_____
"
echo "_____ END XINITRC _____
"
echo "_____
"

```

16.4 /.xsession

```

echo "_____
"
echo "_____ BEGIN XSESSION _____"
echo "_____
"

#####
# This file is not used by nodm, see .xsession
#####

#if [ -x /usr/bin/numlockx ]
#then
# /usr/bin/numlockx on
#fi
#/usr/bin/keytouchd&
# /home/share/Config/_MyScripts/cnx-vjk.sh
#/etc/init.d/init-cnx-vjk.sh&
#/usr/bin/xsetnumlock&

#xterm config
#xrdb ~/.Xdefaults
#if which dbus-launch > /dev/null && test -z "$DBUS_SESSION_BUS_ADDRESS" ;
# then
# eval "$(dbus-launch --sh-syntax --exit-with-session)"
#fi

#exec ck-launch-session startxfce4
#exec startxfce4

#setxkbmap -option compose:ralt

```

16.5 `/.Xdefaults`

```

! xterm
-----
xterm*faceName:      monospace: pixelsize=14
!xterm*dynamicColors:  true
!xterm*utf8:         2
!xterm*eightBitInput:  true
xterm*scrollTtyKeypress: true
xterm*scrollTtyOutput: false
xterm*scrollBar:      true
xterm*rightScrollBar: true
xterm*jumpScroll:     true
xterm*multiScroll:    true
xterm*background:    black
xterm*foreground:    green
xterm*title : xterm
xterm*vt100.geometry : 80x28
XTerm*reverseVideo : on
XTerm*SaveLines: 1000
!xterm*iconPixmap:    /home/share/Config/_Appearance/xapp.xbm
!xterm*iconMask:      /home/share/Config/_Appearance/xapp-mask.xbm

! Xcursor
-----
Xcursor*theme: Vanilla-DMZ-AA
Xcursor.size: 22

! VIM stuffs
Vim*foreground: Black
Vim.background: white

```

16.6 `/.vimrc`

```

set nocompatible

"-----
" Indent
"-----
"'autoindent' uses the indent from the previous line.
"'smartindent' is like 'autoindent' but also recognizes some C syntax to
" increase/reduce the indent where appropriate.
"'cindent' Works more cleverly than the other two and is configurable to
" different indenting styles.
"'indentexpr' The most flexible of all: Evaluates an expression to compute
" the indent of a line. When non-empty this method overrides
" the other ones. See |indent-expression|.
set smartindent
set cindent
set tabstop=4
set shiftwidth=4 " 4 characters for indenting
set et " expand tab

"-----
"" From vimrc example
"-----

```

```

" allow backspacing over everything in insert mode
set backspace=indent,eol,start whichwrap+=<,>,[,]
set history=50      " keep 50 lines of command line history
set ruler      " show the cursor position all the time

set mouse=a

" Only do this part when compiled with support for autocommands.
if has("autocmd")
    " Enable file type detection.
    " Use the default filetype settings, so that mail gets 'tw' set to 72,
    " 'cindent' is on in C files, etc.
    " Also load indent files, to automatically do language-dependent
    indenting.
    filetype plugin indent on
    " Put these in an autocmd group, so that we can delete them easily.
    augroup vimrcEx
        au!
        " For all text files set 'textwidth' to 78 characters.
        autocmd FileType text setlocal textwidth=78
        " When editing a file, always jump to the last known cursor
        position.
        " Don't do it when the position is invalid or when inside an event
        handler
        " (happens when dropping a file on gvim).
        autocmd BufReadPost *
            \ if line("'\"") > 0 && line("'\"") <= line("$") |
            \   exe "normal! g'\"" |
            \ endif
    augroup END
else
    set autoindent      " always set autoindenting on
endif " has("autocmd")

" Convenient command to see the difference between the current buffer and
the
" file it was loaded from, thus the changes you made.
command DiffOrig vert new | set bt=nofile | r # / Od_ / diffthis
    \ | wincmd p | diffthis

" Detect filetype and use syntax highlighting syntax enable
syntax on          " syntax highlighting
filetype on
if has("gui_running")
    set guifont=Monospace\ 10 " use this font
    set background=light      " adapt colors for background
    set guioptions-=m "remove menu bar
    set guioptions-=T "remove toolbar
    set guioptions+=b "add horizontal bar
    colorscheme ManuWhite
    set nospell
else
    colorscheme ManuGreen      " use this color scheme
    set background=dark      " adapt colors for background
    set nospell
endif
" Editor general

```



```

" line numbering
set number
nnoremap \tn :set invnumber number?<CR>

" spell check
nnoremap \ts :set invspell spell?<CR>

" Sessions
set ssop=blank , buffers , curdir , folds , tabpages , winsize , resize , winpos

" used by CTRL-U and CTRL-D ? well , well well ...
set scroll=4
set scrolloff=3

" always in the file directory
"set autochdir
"autocmd BufEnter * silent! lcd %:p:h

" =====
" Keywords
" =====
set isk=a-z,A-Z,48-57,_,,128-167,224-235
"set isk+=: " for latex in the ftplugin dir

" =====
" Wrapping and horizontal bar
" =====
function ToggleHorizontalScrollbar()
  "set guioptions+=b
  if &go =~# "b"
    set go-=b
  else
    set go+=b
  endif
endfunc
set lbr " line break
noremap <F10> :set nowrap! <CR>
"~ map <F9> :set guioptions+=b <CR>
noremap <F11> :call ToggleHorizontalScrollbar()<CR>
noremap <F6> :set guioptions+=m <CR>

" =====
" Search
" =====
" Press F3 to toggle highlighting on/off , and show current value.
noremap <F3> :set hlsearch! hlsearch?<CR>
set hlsearch
set incsearch " do incremental searching
set ignorecase " ignore case
set smartcase " but don't ignore it , when search string contains uppercase
  letters

" =====
" Completion
" =====
set completeopt=menu,longest , preview
set showcmd " display incomplete commands at the bottom of the screen
set wildchar=<Tab> wildmenu wildmode=longest , list , full
set wildcharm=<C-Z>

```

```

set wildignore=*.o,*~,*.*mo,*.*mi,*.*a,*.*cmx,*.*cma,*.*aux,*.*dvi,*.*aut,*.*bbl
,*.blg,*.*dvi,*.*fff,*.*ps,*.*toc,*.*ttt

" Foldinpeg
"highlight Folded ctermfg=yellow ctermbg=NONE
"set foldtext=getline(v:foldstart)
set foldmethod=indent " fold indented regions
set foldminlines=1
set foldnestmax=2
set nofoldenable
set foldlevel=1 " fold from the beginning

" Tabs
"tab firefox-like
nmap <C-t> :tabnew<CR>
nmap <C-S-tab> :tabprevious<CR>
nmap <C-tab> :tabnext<CR>
map <C-S-tab> :tabprevious<CR>
map <C-tab> :tabnext<CR>
imap <C-S-tab> <Esc>:tabprevious<CR>
imap <C-tab> <Esc>:tabnext<CR>
set showtabline=2 " always tabs visible

" Buffers
" Buffer explorer \be
" Bluid in features
" smart buffer switching pressing :b tab of F10
"nnoremap <F10> :b <C-Z>

" Comment / Toggle comment
" Commenting blocks of code.
let b:comment_leader = '// '
autocmd FileType c, cpp, java, scala, php let b:comment_leader = '// '
autocmd FileType sh, ruby, python let b:comment_leader = '# '
autocmd FileType fortran let b:comment_leader = '! '
autocmd FileType conf, fstab let b:comment_leader = '# '
autocmd FileType tex, matlab let b:comment_leader = '% '
autocmd FileType mail let b:comment_leader = '> '
autocmd FileType vim let b:comment_leader = '" '
" mapping
noremap <silent> ,cc :<C-B>silent <C-E>s/^/<C-R>=escape(b:comment_leader
, '\\')<CR>/<CR>:nohlsearch<CR>
noremap <silent> ,cu :<C-B>silent <C-E>s/^<V-C-R>=escape(b:comment_leader
, '\\')<CR>//e<CR>:nohlsearch<CR>
noremap <silent> ,ct :call ToggleComment(&ft)<CR>

" Windows like
set winaltkeys=no
" CTRL-X are Cut
"vnoremap <C-X> "+x

```



```

imap <C-w> <C-o><C-w>
" min win height to 0, 1 default
set wmh=0

"
"
"
" INSERT MODE TWEAKS and COPY PASTE TWEAKS
"
" Dealing with long lines automatically...
nmap k g<Up>
nmap j g<Down>
" navigate without lifting hand off of keys
" imap <C-space> <Plug>IMAP_JumpForward
" imap <C-H> <Left>
" imap <C-J> <C-o>g<Down>
" imap <C-K> <C-o>g<Up>
" imap <C-L> <Right>
" imap <A-4> <C-o><End>
" imap <A-0> <C-o><Home>
" duplicate line
inoremap <A-d> <C-o>yy<C-o>P<Down>
noremap <A-d> yyp
"inoremap <M-D> <C-o>yy<C-o>P<Down>
"inoremap <M-D> <C-o>yy<C-o>P<Down>
"noremap <M-D> yyp
set clipboard=unnamed

set sessionoptions+=resize
" insert only one character, enabling repetitions as '5s '
function! RepeatChar(char, count)
    return repeat(a:char, a:count)
endfunction
nnoremap s :<C-U>exec "normal i".RepeatChar(nr2char(getchar()), v:count1)
<CR>

" Ctrl-j/k deletes blank line below/above, and Alt-j/k inserts.
" nnoremap <silent><A-J> m': silent +g/\m^\s*$/d<CR> ':noh<CR>
" nnoremap <silent><A-K> m': silent -g/\m^\s*$/d<CR> ':noh<CR>
" nnoremap <silent><A-j> :set paste<CR>m'<Esc> ':set nopaste<CR>
" nnoremap <silent><A-k> :set paste<CR>m'<Esc> ':set nopaste<CR>

" Eclipse-like parenthesis handling
" imap ( (<Left>
" imap { {<Left>
" imap (* (* *)<Left><Left><Left>
" Same for quotes, except in vim files (where " is comment, obviously)
" au BufRead if &ft != 'vim' | inoremap " "<Left> | endif
" 'Escapes' for the above
" imap (( (
" imap () ()
" imap {{ {
" imap "" ""
" imap {} {}

"
"
"
" VIM-LATEX
"

```

```

" REQUIRED. This makes vim invoke Latex-Suite when you open a tex file.
filetype plugin on

" IMPORTANT: win32 users will need to have 'shellslash' set so that latex
" can be called correctly.
set shellslash

" IMPORTANT: grep will sometimes skip displaying the file name if you
" search in a single file. This will confuse Latex-Suite. Set your grep
" program to always generate a file-name.
set grepprg=grep\ -nH\ $*

" OPTIONAL: Starting with Vim 7, the filetype of empty .tex files defaults
" to
" 'plaintex' instead of 'tex', which results in vim-latex not being loaded
.
" The following changes the default filetype back to 'tex':
let g:tex_flavor='latex'
let g:Tex_Menus=0
#####
" Latex compilation
#####
let g:Tex_DefaultTargetFormat = 'pdf'
let g:Tex_MultipleCompileFormats=''
let g:Tex_FormatDependency_pdf = ''
let g:Tex_CompileRule_pdf = 'pdflatex -interaction=nonstopmode $*;'
let g:Tex_CompileRule_dvi = 'latex --interaction=nonstopmode $*;'
let g:Tex_CompileRule_ps = 'dvips -Ppdf -o $*.ps $*.dvi;'
let g:Tex_UseMakeFile = 1
let g:Tex_GotoError=0 " if set to 1 then after \ll then vim will go to the
" next error

" Inverse search
"let g:Tex_ViewRule_pdf = '"C:\bin\SumatraPDF\SumatraPDF.exe" -inverse-
" search "gvim -c \":RemoteOpen +\%l \%\f\ ""'

"remember command for dynamically changing warning level :TCLevel 3
let g:Tex_IgnoredWarnings =
    \'/usr/share'. "\n".
    \'/texmf'. "\n".
    \'Underfull'. "\n".
    \'Overfull'. "\n".
    \'specifier changed to'. "\n".
    \'You have requested'. "\n".
    \'Missing number, treated as zero.'. "\n".
    \'There were undefined references'. "\n".
    \'Citation %.%# undefined'. "\n".
    \'Label'. "\n".
    \'Warning'
let g:Tex_IgnoreLevel = 11

"Latex Folding
let g:Tex_FoldedSections='part , chapter , section '
let g:Tex_FoldedEnvironments=''
let g:Tex_FoldedCommands=''
let g:Tex_FoldedMisc=''
let g:Tex_AutoFolding=1
let g:Tex_Folding=1

```

```

"To put in a *.latexmain to override for a project
"let Tex_DefaultTargetFormat = 'pdf'
"let g:Tex_MultipleCompileFormats='pdf'
"let Tex_FormatDependency_pdf = 'dvi,ps,pdf'
"let Tex_CompileRule_dvi = 'latex --interaction=nonstopmode $*'
"let Tex_CompileRule_ps = 'dvips -Ppdf -o $*.ps $*.dvi ;echo "Rule DVI>PS
    defined in Main"; read A'
"let Tex_CompileRule_pdf = 'ps2pdf $*.ps ;echo "Rule PS>PDF defined in
    Main"; read A'
"let g:Tex_ProjectSourceFiles = 'bib/*.bib ,tex/*.tex'

#####
" Sessions
#####
"~ function! SaveSession()
"~   if v:this_session != ""
"~     echo "Saving."
"~     exe 'mksession! ' . '"' . v:this_session . '"'
"~   else
"~     echo "No Session."
"~   endif
"~ endfunction
"~
"~ au VimLeave * :call SaveSession()
"~

#####
" Matlab
#####
source $VIMRUNTIME/macros/matchit.vim
autocmd BufEnter *.m compiler mlint

#####
" SpellCheck
#####
set mousemodel=popup_setpos

#####
" OmniCpp
#####
" omnicppcomplete options
set tags+=~/vim/tags/tags_cpp
map <F12> :!ctags -R --c++kinds=+pl --fields=+iaS --extra=+q <CR><CR>
" add current directory's generated tags file to available tags
set tags+=./tags

" --- OmniCppComplete ---
" -- required --
set nocp " non vi compatible mode
filetype plugin on " enable plugins

" -- configs --
let OmniCpp_NamespaceSearch = 2 " search namespaces in this and included
    files
let OmniCpp_GlobalScopeSearch = 1
let OmniCpp_ShowAccess = 1
let OmniCpp_ShowPrototypeInAbbr = 1 " show function prototype (i.e.
    parameters) in popup window
let OmniCpp_MayCompleteDot = 1 " autocomplete with .

```

```

let OmniCpp_MayCompleteArrow = 1 " autocomplete with ->
let OmniCpp_MayCompleteScope = 1 " autocomplete with ::
let OmniCpp_SelectFirstItem = 2 " select first item (but don't insert)
let OmniCpp_LocalSearchDecl = 1 " don't require special style of function
  opening braces

" automatically open and close the popup menu / preview window
" au CursorMovedI,InsertLeave * if pumvisible() == 0|silent! pclose|endif
" set completeopt=menuone,menu,longest,preview

" auto close options when exiting insert mode or moving away
autocmd CursorMovedI * if pumvisible() == 0|pclose|endif
autocmd InsertLeave * if pumvisible() == 0|pclose|endif
set completeopt=menu,menuone

" Setup the tab key to do autocompletion
function! CompleteTab()
  let prec = strpart( getline('.'), 0, col('.')-1 )
  if prec =~ '^\\s*$' || prec =~ '\\s$'
    return "\\<tab>"
  else
    return "\\<c-x>\\<c-o>"
  endif
endfunction

inoremap <tab> <c-r>=CompleteTab()<cr>

```

16.7 /.conkyrc

Chapter 17

Shell scripts

17.1 exaileplaylist2rhythmo

```
#!/usr/bin/python

import os, string

h = open( 'playlists.xml', 'w' )

h.write('<?xml version="1.0"?>\n')
h.write('<rhythmdb-playlists>\n')
h.write(' <playlist name="Play Queue" type="queue"/>\n')
h.write(' <playlist name="My Top Rated" type="automatic" sort-key="Rating
" sort-direction="1">\n')
h.write(' <conjunction>\n')
h.write(' <equals prop="type">song</equals>\n')
h.write(' <subquery>\n')
h.write(' <conjunction>\n')
h.write(' <greater prop="rating">4.000000</greater>\n')
h.write(' </conjunction>\n')
h.write(' </subquery>\n')
h.write(' </conjunction>\n')
h.write(' </playlist>\n')
h.write(' <playlist name="Recently Added" type="automatic" sort-key="
Artist" sort-direction="0">\n')
h.write(' <conjunction>\n')
h.write(' <equals prop="type">song</equals>\n')
h.write(' <subquery>\n')
h.write(' <conjunction>\n')
h.write(' <current-time-within prop="first-seen">604800</current-
time-within>\n')
h.write(' </conjunction>\n')
h.write(' </subquery>\n')
h.write(' </conjunction>\n')
h.write(' </playlist>\n')
h.write(' <playlist name="Recently Played" type="automatic" sort-key="
Artist" sort-direction="1">\n')
h.write(' <conjunction>\n')
h.write(' <equals prop="type">song</equals>\n')
h.write(' <subquery>\n')
h.write(' <conjunction>\n')
h.write(' <current-time-within prop="last-played">604800</current
-time-within>\n')
```



```

h.write(' </conjunction>\n')
h.write(' </subquery>\n')
h.write(' </conjunction>\n')
h.write(' </playlist>\n')

if not os.path.exists('playlists'):
    os.makedirs('playlists')
os.chdir('playlists')
a = open('order_file', 'r')
for b in a.readlines():
    if b[-1:] == '\n':
        b = b[:-1]
    if b[-1:] == '\r':
        b = b[:-1]
    if b == 'EOF':
        break
    c = open(b+'.playlist', 'r')
    b = string.replace(b, '&', '&')
    h.write(' <playlist name="'+b+'" type="static">\n')
    for line in c.readlines():
        if line[-1:] == '\n':
            line = line[:-1]
        if line[-1:] == '\r':
            line = line[:-1]
        if line != 'EOF':
            if line.find('\t') != -1:
                line = line[:line.find('\t')]
            line = string.replace(line, '&', '&')
            h.write(' <location>'+line+'</location>\n')
        else:
            break
    c.close()
    h.write(' </playlist>\n')
a.close()
h.write('</rhythmdb-playlists>\n')
h.close()

```

17.2 cnx-vjk.expect

```

#!/usr/bin/expect -f
set force_conservative 1;

set timeout 2
spawn ssh -T -l LOGIN HOST
expect "password: $"
send "MOTDEPASSE\n"
interact

```

17.3 backupSyst

```

#!/bin/sh

#initialization
HOME=/home/manu

```

```

folder=backup_data/
mydate=$(date +%Y-%m-%d-%H%M)
folder=$HOME"/ Config/"$folder$mydate
mkdir -p $folder
cd $folder
echo $folder

#creating arborescence
mkdir -p home/config
mkdir -p home/local/share/rhythmbox
mkdir -p home/mozilla/firefox/
mkdir -p etc/network
mkdir -p log
mkdir etc/event.d
mkdir etc/grub.d/
mkdir etc/cron.daily/
mkdir etc/cron.weekly/
mkdir etc/X11
mkdir etc/apt
mkdir etc/texmf
mkdir etc/samba
mkdir etc/default
mkdir etc/ssh
mkdir etc/apache2
mkdir etc/logrotate.d
mkdir -p lib/lisb/
mkdir etc/proftpd
mkdir etc/fail2ban
#mkdir -p etc/gdm/Init/

# liste des paquets
dpkg --get-selections > liste-paquets.dpkg

#home folder
cp $HOME/Config/profiles/bash* home/
cp $HOME/.vimrc home/vimrc
cp -r $HOME/.vim/ home/vim
cp $HOME/.xinitrc home/xinitrc
cp $HOME/.Xdefaults home/Xdefaults
cp $HOME/.conkyrc home/conkyrc
cp $HOME/.asoundrc home/asoundrc
cp -r $HOME/.config/* home/config/
cp $HOME/.local/share/rhythmbox/*.xml home/local/share/rhythmbox/
#cp -r $HOME/.mozilla/firefox home/mozilla/firefox

#system
cp /etc/fstab etc/fstab
cp /etc/modules etc/modules
#cp /etc/event.d/tty1 etc/event.d/tty1
cp /etc/issue etc/issue
cp /etc/inittab etc/
cp /etc/sudoers etc
cp /etc/group etc/
cp /etc/passwd etc/passwd

```

```

cp /etc/cron.daily/* etc/cron.daily/
cp /etc/cron.weekly/* etc/cron.weekly/
cp /etc/logrotate.conf etc/logrotate.conf
cp /etc/logrotate.d/rsyslog etc/logrotate.d/rsyslog
cp /etc/network/interfaces etc/network/interfaces
cp /etc/X11/xorg.conf etc/X11/xorg.conf
cp /etc/apt/sources.list etc/apt/sources.list
cp /etc/apt/preferences etc/apt/preferences
#cp /boot/grub/menu.lst menu.lst
cp /boot/grub/grub.cfg grub.cfg
cp /etc/grub.d/* etc/grub.d/
cp /etc/sysctl.conf etc/
cp /etc/default/rcS etc/default/rcS
cp /lib/lsb/init-functions lib/lsb/

#programs
cp /etc/latex2html.conf etc/
cp /etc/texmf/texmf.cnf etc/texmf/texmf.cnf
cp /etc/samba/smb.conf etc/samba/
cp -R /etc/apache2/* etc/apache2/
cp /etc/ssh/ssh_config etc/ssh/
#cp /etc/gdm/Init/Default etc/gdm/Init/Default
cp /etc/proftpd/proftpd.conf etc/proftpd/
cp /etc/proftpd/msg/* etc/proftpd
cp /etc/fail2ban/jail.local etc/fail2ban

#processus init
cp -R /etc/init.d etc/init.d
cp -R /etc/rc0.d etc/rc0.d
cp -R /etc/rc1.d etc/rc1.d
cp -R /etc/rc2.d etc/rc2.d
cp -R /etc/rc3.d etc/rc3.d
cp -R /etc/rc4.d etc/rc4.d
cp -R /etc/rc5.d etc/rc5.d
cp -R /etc/rc6.d etc/rc6.d
cp -R /etc/rcS.d etc/rcS.d

#logs
cp /var/log/dmesg log/dmesg
cp /var/log/daemon.log log/daemon.log
cp /var/log/messages log/messages
cp /var/log/syslog log/syslog
cp /var/log/kern.log log/kern.log
cp /var/log/aptitude log/

#Giving rights to all files
cd ../.. /
chown -R manu:manu $folder

```

17.4 RisoUnMount

```

#!/bin/bash
#####

```

```
# Default script:
#####
umount /mnt/R-home/
umount /mnt/S-group/
umount /mnt/T-apps/
umount /mnt/U-garb/
```

17.5 showTag

```
#!/usr/bin/python

#####
# Show Tag
#####
# Description: notify audio tags
# Written by : Emmanuel Branlard
# Date : March 2011
# Dependencies :
# License : Feel free to modify and adapt it
# Note :
#####
import mutagen
import optparse
import subprocess
parser = optparse.OptionParser()
(options, args) = parser.parse_args()

def getKey(audio, key):
    try:
        f=audio[key].pop().encode('utf-8')
    except KeyError:
        print "caught"
        f=""
    return(f)

audio=mutagen.File(args[0], easy=True)
artist=getKey(audio, 'artist')
album=getKey(audio, 'album')
songtitle=getKey(audio, 'title')
genre=getKey(audio, 'genre')
year=getKey(audio, 'date')

print artist
print songtitle
print album
print genre
print year
subprocess.call(["notify-send", artist+"\n"+songtitle+"\n"+album+"\n"+genre
+" \n"+year])
```

17.6 syncStorage

```
#!/bin/sh
# Sould be run as user
```

```

#variables
OPTS="-av"
DEST=/media/Storage

#####
# DATAWIN
#####
SRC=/media/DataWin

#without deletion
rsync $OPTS $SRC/Etudes/ $DEST/Etudes/
rsync $OPTS $SRC/Images/ $DEST/Images/

#with delete propagation
rsync $OPTS --delete $SRC/Config/ $DEST/Config/
rsync $OPTS --delete $SRC/Data/ $DEST/Data/
rsync $OPTS --delete $SRC/Informatique/ $DEST/Informatique/
rsync $OPTS --delete $SRC/Musique/ $DEST/Musique/
rsync $OPTS --delete "$SRC/Musique - Data/" "$DEST/Musique - Data/"
rsync $OPTS --delete "$SRC/Musique Classique/" "$DEST/Musique Classique/"
rsync $OPTS --delete $SRC/Projets/ $DEST/Projets/
rsync $OPTS --delete $SRC/Work/ $DEST/Work/

#####
# Linux
#####
SRC=/home/manu

#without deletion
rsync $OPTS $SRC/Sites/ $DEST/Sites/

#with delete propagation
rsync $OPTS --delete $SRC/Config/ "$DEST/Config - Linux/"

```

17.7 audioInfo

```

#!/bin/bash
#####
# audioInfo: prints audio info, metadata, bit rate
#####
# Description :
# Written by : Emmanuel Branlard
# Date : March 2011
# Dependencies :
# License : Feel free to modify and adapt it
# Note :
#####
Duration='ffmpeg -i "$@" 2>&1 |grep Duration | awk -F":|," '{print $3}:"
int($4)}'
MetaData='ffmpeg -i "$@" 2>&1 |grep -E " artist |title |album |genre|TYER"
|awk -F: '{print " " "$2}''

```

```

Stream='ffmpeg -i "$@" 2>&1 | grep Stream | awk -F, '{print $1"\n" "$2 $3
    $4"\n" "$5}' '
Bitrate='ffmpeg -i "$@" 2>&1|awk '/bitrate:/ {print $6" "$7}' '

#xargs -0
echo $Duration
echo $Stream
echo $MetaData
Out="MetaData:
$MetaData

-----
Length: $Duration
Bitrate: $Bitrate

-----
Audio:
$Stream"
notify-send -t 3000 -i gnome-volume-control "$Out"

```

17.8 shrinkFig2

```

#!/bin/sh
#####
# Shrink Fig
#####
# Description : Shrink Figure to 60%
# Written by : Emmanuel Branlard
# Date : March 2011
# Dependencies : image magick
# License : Feel free to modify and adapt it
#####
for i
do
    mogrify -resize 60% $i
done

```

17.9 ifort-setup

```

#!/bin/bash

source /opt/intel/Compiler/11.1/069/bin/ifortvars.sh ia32

```

17.10 texclean

```

#!/bin/bash
rm *.aux
rm *.toc
rm *.log
rm *.bbl
rm *.out
rm *.cb

```

```

rm *.blg
rm *.lot
rm *.lof
rm *.tps
rm *.maf
rm *.ilg
rm *.glo
rm *.mtc*
rm *.ptc*
rm *.bmt
rm *.idx
rm *.ind
rm *.snm
rm *.nav
rm *.cb2

```

17.11 sendit

```

#!/bin/sh
#####
# Send It
#####
# Description : Send file by email
# Written by : Emmanuel Branlard
# Date : October 2011
# Dependencies : mutt
# License : Feel free to modify and adapt it
#####
#notify-send "Email to:$a $1"

export mydate=$(date +%Y-%m-%d-%H%M%S);
xterm -geometry 30x2+550+400 +sb -e 'echo "email address";read a;echo $a>/
tmp/sendit$mydate.tmp';
#xterm -geometry 30x2+550+400 +sb -e 'a=EMAIL@gmail.com;mydate=$(date +%Y
-%m-%d-%H%M%S); echo $a>/tmp/sendit$mydate.tmp;a';

to='cat /tmp/sendit$mydate.tmp';

notify-send "$to

$@" -i mail-attachment -t 3000;
echo "Hi
I attached $# File(s) to this email.
Best ,
Emmanuel

Sent with my geeky shell script " | mutt -a "$@" -s "Sent file(s) ($1)" --
    $to ;

rm /tmp/sendit$mydate.tmp
notify-send "File sent!"
$@" -t 3000 -i mail-forward

```

17.12 topdf

```

#!/bin/bash

if [ $# -eq 0 ]
then
    Files=*.png
    Files="$Files"
else
    l=$@
    Buff=""
    First=""
    for i in $l
    do
        if [ ! `echo $i | grep -E "[.][a-zA-Z]{3,4}$` = "" ]
        then
            File="$Buff $i"
            Buff=""
            First=""
            File2=`echo $File | tr ' ' '_`
            #
            if [ $File != $File2 ]
            then
                mv "$File" $File2
            fi
            #
            Files="$Files $File2"
        else
            if [ -z ${First} ]
            then
                Buff="$i"
                First="no"
            else
                Buff="$Buff $i"
            fi
        fi
    done
    #
    echo $Files
fi
FileOut=`echo $Files | grep -Eo "^[a-Z0-9\_ -]*[.]" | tr ' ' '_`_`.pdf"

echo $FileOut

#convert $Files "$FileOut"
convert -page A4 -units PixelsPerInch -normalize -density 100 $Files "$FileOut"

```

17.13 pdfFind

```

#!/bin/bash
echo "Looking for "$1

SAVEIFS=$IFS
IFS=$(echo -en "\n\b")

```



```

for i in `find -name "*.pdf" -printf '%h/%f\n' 2> /dev/null`
do
    echo "_____ "
    echo "$i";
    echo "_____ "
    pdftotext $i - |grep --color=always $1
# strings "$i" |grep $1
done;
IFS=$SAVEIFS

```

17.14 GETAPTKEY

```

#!/bin/sh
# @(#) TITLE MESSAGE: Recuperation des cles GPG et exportation vers apt
# @(#) Feilong version 05/01/2009
# @(#) Syntaxe: GETKEY KEY
# @(#) MACHINE VM DEBIAN lenny
if [ $(id -u) != "0" ]; then
echo "Seul root peut executer ce shell" >&2
exit 1
fi
if [ $# -ne 1 ]; then
echo "syntaxe : GETKEY <votre cle>"
exit 1
fi
gpg --keyserver hkp://wwwkeys.eu.pgp.net --recv-keys $1
if [ $? -ne 0 ]; then
echo "Une erreur est survenu pendant le chargement de la clé"
exit 1
fi
gpg --armor --export $1 | apt-key add -
if [ $? -ne 0 ]; then
echo "Une erreur est survenu pendant l'export de la clé vers apt"
exit 1
fi
apt-get update

```

17.15 shrinkFig

```

#!/bin/sh
#####
# Shrink Fig
#####
# Description : Shrink Figure to 40%
# Written by : Emmanuel Branlard
# Date : March 2011
# Dependencies : image magick
# License : Feel free to modify and adapt it
#####
for i
do
    mogrify -resize 40% $i
done

```

17.16 `svg2latex.py`

```
#!/usr/bin/python
'''
Copyright (C) 2008,2009,2010 Richard Henwood, rjhenwood@yahoo.co.uk

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it under the terms of the GNU General Public License as published by
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Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

'''

# We will use inex module with predefined effect base class.
import string

from optparse import OptionParser
from xml.dom.minidom import parse, parseString, Node
from string import Template

import pprint
import re
import sys
import os.path
import math
import subprocess
import tempfile
import shutil
import platform

class svg2latex():
    """ Constructor.
    Defines "--what" option of a script."""

    myHorizontalFudgePX = -8 # we have to knudge text over a bit to get
        it to align horizontally.
    #flow_x_offset = -3.47433
    #flow_y_offset = 9.4698369
    flow_x_offset = 0.0
    flow_y_offset = 0.0

    #####
    def svgfile_handler(option, opt, value, parser):
        print ("option = %s" % option)
        print ("opt = %s" % opt)
        print ("value = %s" % value)
        print ("parser = %s" % parser)
```

```

def __init__(self):
    # Call base class constructor.

    usage = """Convert svg to latex picture format and use
Inkscape to generate a pdf for all the bits
which are not text.

-f [--svgfile]          <filename> svgfilename.
-l [--latexoutfile]    <filename> name for latex output file.
-o                    overwrite the output files automatically.
-e                    create an eps file instead of pdf.

A pdf file is also created. This is given the same name as the
latex outfile with the extension 'pdf'. This file is generated by
Inkscape, which must be on the path for this script to work.

"""

    parser = OptionParser(usage)
    parser.add_option("-f", "--svgfile", dest="svgfilename",
                    help="svg input file")
    parser.add_option("-l", "--latexoutfile", dest="latexfilename",
                    help="latex file to output to")
    parser.add_option("-o", "--overwrite", dest="overwrite",
                    action="store_true",
                    help="automatically overwrite output")
    parser.add_option("-e", "--epsoutput", dest="epsoutput",
                    action="store_true",
                    help="make eps instead of pdf")

    (options, args) = parser.parse_args()

    if options.latexfilename is None:
        print ("--latexoutfile not specified")
        sys.exit(usage)

    self.latexfilename = options.latexfilename
    latexhead, latextail = os.path.split(self.latexfilename)
    if (latexhead is not None and latexhead is not ""):
        latexhead += os.sep
    latexroot, latexext = os.path.splitext(latextail)

    self.epsfileoutput = None
    if options.epsoutput is None:
        self.lateximagefile = latexhead + latexroot + '.pdf'
    else:
        self.lateximagefile = latexhead + latexroot + '.eps'
        self.epsfileoutput = 1

    self.latexsvgtmp = tempfile.NamedTemporaryFile(delete=False)

    if options.svgfilename is None:
        print ("--svgfile not specified")
        sys.exit(usage)
    if options.overwrite is None:
        self.autooverwrite = 0
    else:
        self.autooverwrite = options.overwrite

```

```

self.svgfilename = options.svgfilename

print (" svg filename = %s" % self.svgfilename)
print (" latex image file = " + self.lateximagefile)
print (" latex input file = " + self.latexfilename)

self.origsvg = parse(self.svgfilename)
self.notextsvg = parse(self.svgfilename)

# these namespaces are useful.
# xmlns:sodipodi="http://sodipodi.sourceforge.net/DTD/sodipodi-0.
  dtd"
# xmlns:inkscape="http://www.inkscape.org/namespaces/inkscape"
# xmlns="http://www.w3.org/2000/svg"

#####

def tidyup(self):
    os.unlink(self.latexsvgtmp.name)

#####

def makePDF(self):

    # first, make a copy of the svg with all the text removed.
    for element in self.notextsvg.getElementsByTagName("flowRoot"):
        element.parentNode.removeChild(element)

    for element in self.notextsvg.getElementsByTagName("text"):
        element.parentNode.removeChild(element)

    # and save it in a temp file
    self.notextsvg.writexml(self.latexsvgtmp)
    self.latexsvgtmp.close()

    # now call inkscape with this file to produce a
    # pdf version.
    # TODO: this is a hard dependency on inkscape which might
    # be nice to replace with cairo at some later
    # date...

    tempdffile = tempfile.NamedTemporaryFile(delete=False)
    tempdffile.close()

    exportcmd = "--export-eps"
    if self.epsfileoutput is None:
        exportcmd = "--export-pdf "

    inkscapecmd = "inkscape"
    if platform.system() == 'Windows':
        inkscapecmd = "C:\\Program Files\\Inkscape\\inkscape.exe"
    sys.stderr.write(inkscapecmd+exportcmd+tempdffile.name+"--file "+
        self.latexsvgtmp.name+"\n")
    subprocess.call([inkscapecmd, exportcmd, tempdffile.name, "--file",
        self.latexsvgtmp.name])
    #print "copying file to: " + self.lateximagefile
    shutil.copy(tempdffile.name, self.lateximagefile)

```

```

os.unlink(tempdffile.name)

#####

def toLatex(self):
    filename = self.latexfilename
    if os.path.isfile(filename) and not self.autooverwrite:
        sys.stderr.write("File '" + filename + "' already exists.
            Quitting.\n")
        sys.exit()

    FILE = open(filename, "w")

    # we need to extract the global translation of the whole
    # page.
    dom1 = parse(self.svgfilename)
    #pprint.pprint(dom1)
    ele_g = dom1.getElementsByTagName("g")[0]

    ele_svg = dom1.getElementsByTagName("svg")[0]
    pgheight = ele_svg.attributes["height"].value
    if pgheight.endswith("mm"):
        pgheight = pgheight.rstrip("mm")
        pgheight = float(pgheight) * 3.5433
    pgwidth = ele_svg.attributes["width"].value
    if pgwidth.endswith("mm"):
        pgwidth = pgwidth.rstrip("mm")
        pgwidth = float(pgwidth) * 3.5433

    latexstr = self.page_info(pgwidth, pgheight)

    # TODO, remove the g_trans var from global scope.
    for node in dom1.getElementsByTagName("flowRoot"):
        g_trans_x, g_trans_y = self.get_g_trans(node)
        latexstr += "\n"
        latexstr += self.process_flow(node, pgwidth, pgheight, g_trans
            _x, g_trans_y)
        latexstr += "\n"
    for node in dom1.getElementsByTagName("text"):
        g_trans_x, g_trans_y = self.get_g_trans(node)
        latexstr += "\n"
        latexstr += self.process_text(node, pgwidth, pgheight, g_trans
            _x, g_trans_y)
        latexstr += "\n"
    latexstr += " \\end{picture}\n"
    latexstr += "\\endgroup\n"

    FILE.writelines(str(latexstr.encode("utf-8")))
    FILE.close()

#####

def get_g_trans(self, node):
    #pprint.pprint(node.toxml())
    x_trans, y_trans = (0, 0)
    while not node.nodeType == Node.DOCUMENT_NODE:
        if node.hasAttribute("transform") == True:
            #print "found transform..."

```

```

        trans_str = node.attributes["transform"].value;
        tmp_x, tmp_y = self.get_trans(trans_str)
        x_trans += tmp_x
        y_trans += tmp_y
        node = node.parentNode
    return x_trans, y_trans

def get_trans(self, trans_str):
    trans_str = trans_str.rstrip("")
    x_trans = 1.0
    y_trans = 1.0
    if "translate" in trans_str:
        #print "translate! str = ", trans_str
        trans_str = trans_str.lstrip("translate(")
        values = trans_str.split(",")
    else:
        #print "not translate! str = ", trans_str
        trans_str = trans_str.lstrip("matrix(")
        values = trans_str.split(",")
        # fix the x,y if there is a scale value included in the matrix
        #print "values = ", values[0], values[3]
        #values[-2] = float(values[0]) * float(values[-2])
        #values[-1] = float(values[3]) * float(values[-1])

    return float(values[-2]), float(values[-1])

def get_global_trans(self, trans_str):
    tmp_str = trans_str.lstrip("translate(")
    tmp_str = tmp_str.rstrip("")
    return map(lambda x: float(x), tmp_str.split(","))

#####

def page_info(self, pgwidth, pgheight):

    pagestr = ''
    pagestr += "\\begingroup\\n"
    pagestr += " \\setlength{\\unitlength}{0.8pt}\\n" # this is standard
        SVG units, as PT.
    pagestr += " \\begin{picture}("
    pagestr += str(pgwidth)
    pagestr += ","
    pagestr += str(pgheight)
    pagestr += ")\\n"
    pagestr += " \\put(0,0){\\includegraphics"
    pagestr += "{"
    pagestr += re.sub(r'\\', r'/', self.lateximagefile)
    pagestr += "}"\\n"
    return pagestr

#####

def process_style(self, stylenode):
    color = "{black}"
    fontSize = ""
    customColors = ""
    colorNum = 1
    mboxcode = ''
    fontSizeInt = 1;

```

```

fontSizeFloat = 10;
if stylenode is not None:
    for styleElement in string.split(stylenode, ';'):
        directive, value = string.split(styleElement, ':')
        if directive == "text-align":
            #print "directive found:", directive, value
            if value == 'center':
                mboxcode = 'c'
            elif value == 'end':
                mboxcode = 'r'
            else:
                mboxcode = 'l'
        if directive == "fill":
            if re.match(r'^#', value) is not None:
                color = "{inkcol" + 'colorNum' + "}"
                red = '0x' + value[1:3]
                green = '0x' + value[3:5]
                blue = '0x' + value[5:7]
                customColors += "\\definecolor{inkcol" + 'colorNum'
                    ' + "}{rgb}{'"
                customColors += 'eval(red)/255.0' + ', '
                customColors += 'eval(green)/255.0' + ', '
                customColors += 'eval(blue)/255.0' + '}'\n'
                colorNum += 1
            else:
                color = "{" + value + "}"
        if directive == "font-size":
            fontSize, fontSizeFloat = self.fontSizeLookup(value)
#print "fontsize: " + fontSize
#print "fontsizefloat: " + fontSizeFloat
return color, fontSize, customColors, colorNum, mboxcode,
    fontSizeFloat

#####
def process_tspan_transform(self, transform, tmpx, tmpy):
    rotate = 0
    transX = 0
    transY = 0
    if transform is not None:
        transArrTmp = re.split(r"[,\(\\)]", transform)
        transArr = []
        for element in transArrTmp:
            if re.search('[+-]?[d+\.]?[d*]', element):
                transArr.append(element)
        transX = tmpx #float(transArr[-2])
        transY = tmpy #float(transArr[-1])
        if re.match(r'^matrix', transform) is not None:
            rotate = self.get_angle(transArr[0], transArr[1], transArr
                [2], transArr[3])
        # print "determinant= ", self.get_determinant(transArr[0],
            transArr[1], transArr[2], transArr[3])
        transX, transY = self.do_transform(transArr[0], transArr
            [2], transArr[1], transArr[3], tmpx, tmpy)
    return rotate, transX, transY

#####
# this processes <text> dom elements.
# it is as ugly as it looks.
# TODO: add code to deal with 'align-centre' style.

```

```

def process_text(self, flowNode, imgWidth, imgHeight, g_x_trans, g_y_trans):
    #tmpstr = ''

    style = flowNode.attributes["style"]
    color, fontSize, customColors, colorNum, mboxcode, fontSizeInt =
        self.process_style(style.value)
    put = Template('\put($x,$y)')

    rotate, transX, transY = (0.0, 0.0, 0.0)

    tmpx = float(flowNode.attributes["x"].value)
    tmpy = float(flowNode.attributes["y"].value)

    if flowNode.hasAttribute("transform"):
        transform = flowNode.attributes["transform"].value
        # this is a hack for the cases where inkscape optimises
        # a 180o rotation into a scale(-1,-1)
        if transform.startswith("scale("):
            transform = "matrix(-1,0,0,-1)"

        rotate, transX, transY = self.process_tspan_transform(
            transform, 0.0, 0.0)

    alltext = ''
    (x2, y2) = (None, None)
    for element in flowNode.getElementsByTagName("tspan"):
        #x1 = (float(element.attributes["x"].value))
        #y1 = (float(element.attributes["y"].value))
        x1 = tmpx
        y1 = tmpy
        x2 = transX + x1*math.cos(rotate) - y1*math.sin(rotate)
        y2 = transY + x1*math.sin(rotate) + y1*math.cos(rotate)
        x2 += g_x_trans
        y2 += g_y_trans

        y2 = float(imgHeight) - y2
        myWidth = float(imgWidth)

        if mboxcode == 'c':
            # this block adjusts x coord for
            # cases where we wish to centre the text.
            x2 -= myWidth/2.0

        if element.hasAttribute("style"):
            fontSize = self.get_fontsize(element.attributes["style"].
                value, fontSize)
        if element.firstChild is not None:
            alltext += "\\textcolor" + color + "{" + fontSize + "{" +
                element.firstChild.data + "}}\\\\\\n"

    # vskip -1cm
    #print "text: " + alltext + " g_pos ", g_x_trans, g_y_trans
    #print "\\n"
    txt = Template('{\\rotatebox{' + 'self.toDEG(rotate)' + '}'{\\
        makebox(0,0)[t1]{\\strut}{\\$text}}}%\\n')

```



```

miniPg = '\n \\begin{minipage}[h]{' + str(myWidth * 0.8) + 'pt
} \\vspace{-2ex} \\n'
if mboxcode == 'c':
    miniPg += '\\begin{center} \\n'
    miniPg += alltext
    miniPg += '\\end{center} \\n'
elif mboxcode == 'r':
    miniPg += '\\begin{flushright} \\n'
    miniPg += alltext
    miniPg += '\\end{flushright} \\n'
else:
    miniPg += alltext

miniPg += '\\end{minipage}'
return customColors + put.substitute(x=x2, y=y2) + txt.substitute(
    text=miniPg)

```

```
#####
```

```

def process_flow(self, flowNode, imgWidth, imgHeight, g_x_trans, g_y_
trans):
    tmpstr = ''
    style = flowNode.attributes["style"]
    color, fontSize, customColors, colorNum, mboxcode, fontSizeInt =
        self.process_style(style.value)
    put = Template('\\put($x,$y)')
    #print "flow processing"

    rotate, transX, transY = (0.0, 0.0, 0.0)
    if flowNode.hasAttribute("transform"):
        transform = flowNode.attributes["transform"]
        rotate, transX, transY = self.process_tspan_transform(
            transform.value, 0.0, 0.0)

    for element in flowNode.getElementsByTagName("rect"):
        x1 = (float(element.attributes["x"].value))# + g_x_trans +
            self.flow_x_offset
        y1 = (float(element.attributes["y"].value))# + g_y_trans +
            self.flow_y_offset
        x2 = transX + x1*math.cos(rotate) - y1*math.sin(rotate)
        y2 = transY + x1*math.sin(rotate) + y1*math.cos(rotate)
        x2 = x2 + g_x_trans
        y2 = y2 + g_y_trans
        #print "x2: ", (float(element.attributes["x"].value)), g_x_
            trans, transX, x1, x2
        #print "y2: ", (float(element.attributes["y"].value)), g_y_
            trans, transY, y1, y2
        y2 = float(imgHeight) - y2

        tmpstr += put.substitute(x=x2, y=y2)
        myWidth = float(element.attributes["width"].value)

    alltext = ''
    for element in flowNode.getElementsByTagName("flowPara"):
        if element.hasAttribute("style"):
            fontSize = self.get_fontsize(element.attributes["style"].
                value, fontSize)
        if element.firstChild is not None:

```

```

        alltext += "\\textcolor" + color + "{" + fontSize + "{" +
            element.firstChild.data + "}}\\n"

#print alltext
txt = Template('{\\rotatebox{' + 'self.toDEG(rotate)' + '}}{\\
    makebox(0,0)[t1]{\\strut}{\\$text}}}%\\n')
miniPg = '\\n    \\begin{minipage}[h]{' + str(myWidth * 0.8) + 'pt
    }\\n'
if mboxcode == 'c':
    miniPg += '\\begin{center}\\n'
    miniPg += alltext
    miniPg += '\\end{center}\\n'
elif mboxcode == 'r':
    miniPg += '\\begin{flushright}\\n'
    miniPg += alltext
    miniPg += '\\end{flushright}\\n'
else:
    miniPg += alltext

miniPg += '\\end{minipage}'
tmpstr += txt.substitute(text=miniPg)
return customColors + tmpstr
#####

def get_fontsize (self , att , fontSize):
    size = att.partition("font-size:")[2]
    size = size.partition(";")[0]
    if size is None:
        return fontSize
    return self.fontSizeLookup(size)[0]

def do_transform(self , a,b,c,d,x,y):
    x2 = float(a)*float(x) + float(b)*float(y)
    y2 = float(c)*float(x) - float(d)*float(y)
    return (x2, y2)

def undo_transform(self , a,b,c,d,x,y):
    x2 = float(a)*float(x) + float(b)*float(y)
    y2 = -float(c)*float(x) + float(d)*float(y)
    return (x2, y2)

def get_determinant(self , a,b,c,d):
    return float(a)*float(d) - float(b)*float(c)

def get_angle(self , x1, x2, y1, y2):
    #sys.stderr.write("angle  '" + x1 + "'." + x2 + "'." + y1 + "'." +
        y2 + "'")
    acosA = math.acos(float(x1))
    if (math.asin(float(x2)) >= 0):
        return float(acosA)
    else:
        return 2*math.pi - float(acosA)

def toDEG(self , rad):
    return 360-180.0*rad/math.pi

def fontSizeLookup (self , pxSize):

```

```

sizeStr = "\\normalsize"
if not re.search('px$', pxSize):
    try:
        float(pxSize)
    except ValueError:
        sys.stderr.write("found unusual font size: " + pxSize + "
            assuming '\\normalsize' missing.\n")
        return "\\normalsize", 10

    sys.stderr.write("found unusual font size: " + pxSize + "
        assuming 'px' missing.\n")
    pxSize += "px"

#print "Psize = " + pxSize
size = re.split(r"px$", pxSize)
#print "size = " + size
size[0] = float(size[0])
if size[0] < 7:
    return "\\tiny", size[0]
if size[0] < 8:
    return "\\scriptsize", size[0]
if size[0] < 9:
    return "\\footnotesize", size[0]
if size[0] < 10:
    return "\\small", size[0]
if size[0] < 12:
    return "\\normalsize", size[0]
if size[0] < 14:
    return "\\large", size[0]
if size[0] < 18:
    return "\\Large", size[0]
if size[0] < 20:
    return "\\LARGE", size[0]
if size[0] < 24:
    return "\\huge", size[0]
if size[0] >= 24:
    return "\\Huge", size[0]

sys.stderr.write("found unusual font size: " + pxSize + " assuming
    normalsize.")
return "\\normalsize", 10
#|tiny 5 5
#|scriptsize 7 7
#|footnotesize 8 8
#|small 9 9
#|normalsize 10 10
#|large 12 12
#|Large 14 14.40
#|LARGE 18 17.28
#|huge 20 20.74
#|Huge 24 24.88
#else:
#    sys.stderr.write("found unusual font size: " + pxSize + "
#        assuming normalsize.")
#    return "\\normalsize", 10

```

```

svgfile = svg2latex()
svgfile.toLatex()
svgfile.makePDF()
svgfile.tidyup()
print ("completed")

```

17.17 RisoMount

```

#!/bin/bash
#####
# Default script:
#####
mount /mnt/R-home/
mount /mnt/S-group/
mount /mnt/T-apps/
mount /mnt/U-garb/

```

17.18 xfce4ToggleDesktop

```

#!/bin/sh
if xprop -root _NET_SHOWING_DESKTOP | egrep '= 1' ; then
    wmctrl -k off ;
else
    wmctrl -k on ;
fi

```

17.19 pdfocr

```

#!/bin/bash
echo "Usage: pdf2ocr.sh FILE.pdf lang"
if [ -e tmp ] ;
then
    echo "Folder tmp/ exists - Continue anyway ?" ;
    echo " YES : Press Enter " ;
    echo " NO : Press Ctrl+C " ;
    read reply
else
    mkdir tmp
fi

echo " "
echo "- Entering folder tmp"
cd tmp
ERRORS=0

echo " "
echo "- Bursting with pdftk ..."
pdftk "../$1" burst dont_ask

echo " "
for f in pg_*.pdf
do
    echo "- Pre-processing $f ...";

```

```

    convert -quiet -monochrome -normalize -density 300 "$f" "$f.png";
done

echo " "
for f in pg_*.png
do
    echo "- Processing $f ..."
    convert "$f" "$f.bmp"
    echo "Merging BMP and hOCR into PDF file ..."
    cuneiform -l $2 -f hocr -o "$f.html" "$f.bmp"
    convert -blur 0.4 "$f" "$f.bmp"
    OUT=$?
    hocr2pdf -i "$f" -s -o "$f.pdf" < "$f.html"
    OUT='expr $? + $OUT'
    if [ $OUT -gt 127 ] ;
    then
        echo "$f" >> ../errors.log ;
        ERRORS='expr $ERRORS + 1' ;
        cp "${f%.png}" "$f.pdf"
    fi
    rm -f "$f.bmp"
done

echo " "
echo "- Binding with pdftk ..."
pdftk pg_*.png.pdf output "../$1-OCR.pdf"

echo " "
if [ $ERRORS -gt 0 ] ;
then
    echo "- Number of errors $ERRORS"
    cat ../errors.log
fi
echo "Done, should I delete all the temporary files?"

echo " YES : Press Enter ";
echo " NO  : Press Ctrl+C ";
read reply

rm -r pg_*

```

17.20 pdfocr-tess

```

#!/bin/bash
echo "usage: pdfocr.sh document.pdf \"author\" \"title\""
# Adapted from http://blog.konradvoelkel.de/2010/01/linux-ocr-and-pdf-problem-solved/
# NOTE: This script has been substantially modified/simplified from the original.
# This version does not allow rotation, language selection or cropping.
# Those parameters were all required in the original, but I don't really need them.
# If you can think of a way to make them optional, please share.
# This version also uses Tesseract, which I find to be substantially more
# accurate than Cuneiform for English text.

```

```

# usage examples:
#echo "InfoKey: Author" > in.info
#echo "InfoValue: $2" >> in.info
#echo "InfoKey: Title" >> in.info
#echo "InfoValue: $3" >> in.info
#echo "InfoKey: Creator" >> in.info
#echo "InfoValue: PDF OCR scan script" >> in.info
#pdfjoin --fitpaper --tidy --outfile "$1.ocr1.pdf" "pg_*-ocr.pdf"
#rm -f pg_*
#pdftk "$1.ocr1.pdf" update_info doc_data.txt output "$1.ocr2.pdf"
#pdftk "$1.ocr2.pdf" update_info in.info output "$1-ocr.pdf"
#rm -f "$1.ocr1.pdf" "$1.ocr2.pdf" doc_data.txt in.info
#!/bin/bash
echo "Usage: pdf2ocr.sh FILE.pdf lang"
if [ -e tmp ] ;
then
    echo "Folder tmp/ exists - Continue anyway ?" ;
    echo " YES : Press Enter ";
    echo " NO : Press Ctrl+C ";
    read reply
else
    mkdir tmp
fi

echo " "
echo "- Entering folder tmp"
cd tmp
ERRORS=0

echo " "
echo "- Bursting with pdftk..."
pdftk "../$1" burst dont_ask

echo " "
for f in pg_*.pdf
do
    echo "- Pre-processing $f ...";
    # convert -quiet -monochrome -normalize -density 300 "$f" "$f.png";
    convert -quiet -density 300 -depth 8 "$f" "$f.tif"
done

echo " "
for f in pg_*.tif
do
    echo "- Processing $f ..."
    tesseract "$f" "$f" hocr
    echo "Merging BMP and hOCR into PDF file ..."
    hocr2pdf -i "$f" -o "$f-ocr.pdf" <"$f.html"
    OUT=$?
    if [ $OUT -gt 127 ] ;
    then
        then
            echo "$f" >> ../errors.log ;
            ERRORS='expr $ERRORS + 1' ;
            cp "${f%.tif}.png" "$f.pdf"
        fi
    fi
done

echo " "

```

```

echo "- Binding with pdftk ..."
pdftk pg_*.png.pdf output "../$1-OCR.pdf"

echo " "
if [ $ERRORS -gt 0 ] ;
then
  echo "- Number of errors $ERRORS"
  cat ../errors.log
fi
echo "Done, should I delete all the temporary files?"

echo " YES : Press Enter ";
echo " NO : Press Ctrl+C ";
read reply

rm -r pg_*

```

17.21 PulseMediaKeys.sh

```

#!/bin/bash
#### Create ~/.pulse/mute if not exists
ls ~/.pulse/mute && /dev/null
if [[ $? != 0 ]]
then
  echo "false" > ~/.pulse/mute
fi

####Create ~/.pulse/volume if not exists
ls ~/.pulse/volume && /dev/null
if [[ $? != 0 ]]
then
  echo "65536" > ~/.pulse/volume
fi

CURVOL='cat ~/.pulse/volume'      #Reads in the current volume
MUTE='cat ~/.pulse/mute'         #Reads mute state

if [[ $1 == "increase" ]]
then
  CURVOL=$((CURVOL + 1311)) #3277 is 5% of the total volume, you can
  change this to suit your needs.
  if [[ $CURVOL -ge 95536 ]]
  then
    CURVOL=95536
  fi
elif [[ $1 == "decrease" ]]
then
  CURVOL=$((CURVOL - 1311))
  if [[ $CURVOL -le 0 ]]
  then
    CURVOL=0
  fi
elif [[ $1 == "mute" ]]
then
  if [[ $MUTE == "false" ]]
  then

```

```

    pactl set-sink-mute 1 1
    echo "true" > ~/.pulse/mute
    icon="audio-volume-muted"
    notify-send -t 500 -i $icon "Mute: on"
    exit
else
    pactl set-sink-mute 1 0
    echo "false" > ~/.pulse/mute
    icon="audio-volume-low"
    # if [[ $CURVOL -ge 50000 ]]
    # then
    #     icon="audio-volume-high"
    # elif [[ $CURVOL -ge 30000 ]]
    # then
    #     icon="audio-volume-medium"
    # fi
    a=00
    # p='expr $CURVOL$a / 65536'
    icon="audio-volume-medium"
    notify-send -t 1000 -i $icon "Mute: off"
    exit
fi
fi
# a=00
# p='expr $CURVOL$a / 65536'
# icon="audio-volume-low"
# if [[ $CURVOL -ge 50000 ]]
# then
#     icon="audio-volume-high"
# elif [[ $CURVOL -ge 30000 ]]
# then
#     icon="audio-volume-medium"
# fi
# echo $CURVOL

pactl set-sink-volume 1 $CURVOL
echo $CURVOL > ~/.pulse/volume # Write the new volume to disk to be read
    the next time the script is run.
# notify-send -t 500 -i $icon "$p%"

```

17.22 alarmaniac

```

#!/bin/sh
cd /home/manu/Config/bin/Alarmaniac/
java -jar alarmaniac.jar

```

17.23 keyboardSetup

```

#!/bin/bash

echo "_____ BEGIN KEYBOARD SETUP
_____ "
setxkbmap -option compose:ralt

```



```
echo "_____ END KEYBOARD SETUP
_____"
```

17.24 pdfAutoRename

```
#!/bin/sh
for i in *.pdf ; do
  echo ""
  echo ""

  ";
  filebase=${i%.*};

  INFO='pdftotext "$i 2>/dev/null';
  FIRSTPAGE='pdftotext -f 1 -l 1 "$i" -|head -c 1000|tr -d '[*]';

  Title='echo $INFO|awk -F ":" '/Title/ {print $2}';
  Author='echo $INFO|awk -F ":" '/Author/ {print $2}';
  Subject='echo $INFO|awk -F ":" '/Subject/ {print $2}';
  Date='echo $FIRSTPAGE|grep -E -o --color=none "(18|19|20)[0-9]{2}"|xargs
  |cut -c 1-4';

  ### Display information
  echo File is : ${i%.*};
  echo Title: $Title
  echo Author: $Author
  echo Subject: $Subject
  echo Date: $Date

  ### Predifined scheme
  title=" - $Date - "pdftotext -f 1 -l 1 "$i" - | tr -d '[*]'|awk '!/[0-9.]/'|awk '/./'|tr '\n' ' '|head -c 100';
  titleRis1=" - $Date - "pdftotext -f 1 -l 1 "$i" - |tr -d '[*]'|awk '!/Ris/'|awk '/./'|awk '!/[.,]/'|tr '\n' ' '|head -c 100';
  titleRis2=" - $Date - "pdftotext -f 1 -l 1 "$i" - |tr -d '[*]'|awk '!/Ris/'|awk '/[A-Za-z0-9.]/'|awk '/./'|awk '!/[.,]/'|tr '\n' ' '|head -c 100';
  titlesandia=" - $Date - "pdftotext -f 1 -l 1 "$i" - |tr -d '[*]'|awk '!/[0-9.]/'|awk '/!/SANDIA REPORT/'|awk '/!/Unlimited Release/'|awk '/./'|tr -d '\n'|head -c 100';
  titlebegin=" - $Date - "echo $FIRSTPAGE|cut -c 100';
  titleupper=" - $Date - "echo $FIRSTPAGE|grep -E -o --color=none "[A-Z]{2}[A-Z]*"|xargs |cut -c 1-100';
  titleECN='pdftotext -f 1 -l 1 "$i" - |awk '!/[0-9.]/'|awk '/./'|tr '\n' ' '|head -c 64|tr ' ' ' _';

  ### Making a choice
  nchosen=1;
  if test "echo $FIRSTPAGE|cut -c -11" = "WIND ENERGY"
  then
    echo "Wind Energy Publication"
    Date='pdftotext -f 1 -l 1 "$i" -|awk -F "Published" 'NR < 2 {print $2}'|grep -E -o --color=none "(18|19|20)[0-9]{2}";
    Title='pdftotext -f 1 -l 1 "$i" -|awk 'NR==5 {print $0}';
    Author='pdftotext -f 1 -l 1 "$i" -|awk 'NR==6 {print $0}'|tr -d '[:punct:]'|cut -c 1-30';
```

```

titlechosen="$Author - $Date - $Title"
nchosen=5
elif test "`echo $FIRSTPAGE|cut -c -11`" = "ECN"
then
    titlechosen=titleECN
    nchosen=8
elif [ -n "`echo $Subject|grep "Journal"``" ]
then
    echo "JOURNAL OF FLUID MECHANICS"
    Year=`echo $INFO| awk -F " :| " '/CreationDate/ {print $NF
    }`
    titlechosen="$Author" - "$Year" - "$Title"
    nchosen=5b
elif [ -n "`echo $FIRSTPAGE|grep "Ris"``" ]
then
    echo "RISO INSIDE"
    if [ `expr length "$titleRis1" -gt 12 ]
then
    titlechosen=$titleRis1
    nchosen=2;
else
    titlechosen=$title
    nchosen=1;
fi
elif [ -n "`echo $FIRSTPAGE|grep "SANDIA"``" ]
then
    echo "SANDIA INSIDE"
    titlechosen=$titlesandia
    nchosen=4
elif [ -n "`echo $Subject|grep "Journal"``" ]
then
    echo "JOURNAL OF FLUID MECHANICS"
    Year=`echo $INFO| awk -F " :| " '/CreationDate/ {print $NF}`
    titlechosen="$Author" - "$Year" - "$Title"
    nchosen=5b
elif [ -n "$Title" ]
then
    titlechosen=$Title;
    nchosen=5;
else
    titlechosen=$title;
    nchosen=1;
fi
if [ `expr length "$title" -lt 7 ]
then
    nchosen=0;
    titlechosen="$filebase"
fi

titlepdfinfo="$Author" - $Date - "$Title

### User interact
echo "- Choices :"
echo 1 - $title
echo 2 - $titleRis1
echo 3 - $titleRis2
echo 4 - $titlesandia
echo 5 - $titlepdfinfo
echo 6 - $titlebegin

```

```

echo 7 - $titleupper
    echo 8 - $titleECN
echo ""
echo "$nchosen)->"$titlechosen
echo ""
echo "-Type enter for default , number for choice , 0 for nothing"
read choice
if [ -n "$choice" ]
then
    echo "Using choice $choice"
    case $choice in
        0) dest="$filebase" ;;
        1) dest="$title" ;;
        2) dest="$titleRis1 " ;;
        3) dest="$titleRis2 " ;;
        4) dest="$titlesandia" ;;
        5) dest="$titlepdfinfo" ;;
        6) dest="$titlebegin" ;;
        7) dest="$titleupper" ;;
        8) dest="$titleECN" ;;
    esac
else
    echo "Using default:"
    dest=$titlechosen
fi
# echo "mv $i $dest"
mv "$i" "$dest.pdf"
done

```

17.25 unix2win

```

#!/bin/bash
#####
# unix2win:
#####
# Description : mv input files from unix format to windows compatible
#               format
# Written by : Emmanuel Branlard
# Date : May 2011
# Dependencies :
# License : Feel free to modify and adapt it
# Example :
#   find ./* -type f -execdir unix2win {} \;
#####
#####
for file ;
do
    newfile='echo $file | sed -e 's/[^a-Z_0-9\./-]//g' ;'
    if [[ "$file" != "$newfile" ]]
    then
        echo $file ;
        echo $newfile ;
        mv "$file" "$newfile" ;
    fi
done

```

17.26 formatWebVersion

```
#!/bin/sh
#
# cd Debianuel
# cp -r debianuel debianuel-bkp
#
# cd debianuel
#
#
# rename "s/html/php/g" *.html
# sed -i "s/[.]html/.php/g" *.php
# sed -i "s:</HEAD>::g" *.php
#
#
# old_value="<BODY >";
# new_value="<? include ( '../_includes/haut.php ' );?>";
# sed -i "s:$old_value:$new_value:g" *.php
#
# old_value="<ADDRESS>";
# new_value="<? include ( '../_includes/bas.php ' ); ?>";
#
# sed -i "s:$old_value:$new_value:g" *.php
#
#
# old_value="</ADDRESS>";
# new_value="";
# sed -i "s:$old_value:$new_value:g" *.php
#
#
#
```

17.27 DoBootchart

```
#!/bin/sh

#initialization
HOME=/home/manu
folder=/home/manu/Config/scripts/Bootchart
mydate=$(date +%Y-%m-%d-%H%M)

cd $HOME
bootchart

cp bootchart.png $folder/bootchart$mydate.png
```

17.28 Terminator.sh

```
#!/bin/bash
# echo "_____ BEGIN TERMINATOR
# _____"
# #x='xrandr --query |grep 2720 |wc -l'; #home
# # sleep 5
```

```

# echo "_____ BEGIN TERMINATOR
# _____"
# x='xrandr --query |grep 3360 |wc -l'; #riso
# if [[ $x > 0 ]]
# then
#     terminator --geometry +2000 -m -l 4terms
#     /home/manu/Config/builds/terminator/terminator -0.95/terminator --
#     geometry +2000 -m -l 4terms
# else
#     terminator -m -l 4terms
# fi
# Screen 0: minimum 2720 x 1024, current 2720 x 1024, maximum 2720 x 1024
# default connected 2720x1024+0+0 0mm x 0mm
#     2720x1024     50.0*

```

17.29 svg2png

```

#!/bin/bash
#####
# WHAT is svg2png ?
# Script to convert svg files to png
# svg2png does not modify the file which you select, it creates a new file
#
# It cannot convert a directory but you can select several files.
#
#####
# INFO
# Author : yeKcim - yeknan@yahoo.fr - http://yeknan.free.fr
# Licence : GNU GPL
# Dependency
# zenity
# inkscape
# Based on
# WQM_audioconverter
# History
# 15.01.2006 : v0.1 : First public version
# Install
# Put on ~/.gnome2/nautilus-scripts/
# In a console : chmod u+x ~/.gnome2/nautilus-scripts/svg2png

version="0.1"
#####
# TRADUCTIONS
##### Default = English #####
title="svg2png "$version"
pleasesel="Please select at least one file."
noselec=""$title" converts svg to png. "$pleasesel"
nobin="Program inkscape is not installed, please install !"
warning="Warning"
choix="Export type ?"
drawing="Drawing"
canvas="Canvas"
exportof="Picture to convert :"
case $LANG in
##### FranÃ§ais #####
fr* )
title="svg2png "$version"

```

```

pleasesel="Merci de s'acquiescer au moins un fichier."
noselec="$title" permet de convertir des svg en png. "$pleasesel"
warning="Attention"
nobin="Le programme inkscape n'est pas installé, veuillez l'
    installer !"
choix="Type d'export ?"
drawing="Dessin"
canvas="Page"
exportof="Image à convertir : " ;;
esac

#####
# PROGRAMME
##### Test d'installation #####
which inkscape 2>/dev/null
if [ $? != 0 ]
then
    zenity --error --title="$title" --text="$nobin"
    exit 0
fi

#### Pas de fichiers s'acquiescer ####
if [ $# -eq 0 ]; then
    zenity --error --title="$warning" --text="$noselec"
    exit 1
fi

##### Page/image ? #####
while [ ! "$choixutilisateur" ] # Réciter la fenêtre tant que l'
    utilisateur n'a pas fait de choix
do
    choixutilisateur='zenity --title "$title" --list --column="$exportof" $
        canvas $drawing --text "$choix" '
    ##### Choix -> Sortie boucle #####
    if [ $? != 0 ]; then
        exit 1
    fi
    [ $? -ne 0 ] && exit 2 # Annulation
done

if [ $choixutilisateur == $drawing ]; then
    type="--export-area-drawing";
fi

##### Résolution ? #####
while [ ! "$resolution" ] # Réciter la fenêtre tant que l'
    utilisateur n'a pas fait de choix
do
    resolution='zenity --entry --title "$title" --text "Résolution : " --
        entry-text "90" '
    ##### Choix -> Sortie boucle #####
    if [ $? != 0 ]; then
        exit 1
    fi
    [ $? -ne 0 ] && exit 2 # Annulation
done

##### Export png #####
while [ $# -gt 0 ]; do

```

```

picture=$1
png_file='echo "$picture" | sed 's/\\.\\w*$/\\.png/'
inkscape $type --export-dpi="$resolution" --export-png="$png_file" "$
picture"
shift
done

```

17.30 m3u2xspf.py

```

#!/usr/bin/env python
#
# Convert an M3U playlist to XSPF.
#
# Usage: m3u2xspf < input.m3u > output.xspf
#
# Copyright (c) 2006, Matthias Friedrich <matf@mafr.de>
#
# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation; either version 2, or (at your option)
# any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
# GNU General Public License for more details.
#
__revision__ = '$Id: m3u2xspf,v 1.4 2007/03/30 16:31:03 matthias Exp
matthias $'
__version__ = '0.2'

import sys
import urllib
import urlparse
import os.path
import optparse
import xml.sax.saxutils as saxutils

class XmlWriter(object):
    def __init__(self, outputStream, indentAmount=''):
        self._out = outputStream
        self._indentAmount = indentAmount
        self._stack = []

    def prolog(self, encoding='UTF-8', version='1.0'):
        pi = '<?xml version="%s" encoding="%s"?>' % (version, encoding)
        self._out.write(pi + '\n')

    def start(self, name, attrs={}):
        indent = self._getIndention()
        self._stack.append(name)
        self._out.write(indent + self._makeTag(name, attrs) + '\n')

    def end(self):
        name = self._stack.pop()
        indent = self._getIndention()

```

```

self._out.write('%s</%s>\n' % (indent, name))

def elem(self, name, value, attrs={ }):
    # delete attributes with an unset value
    for (k, v) in attrs.items():
        if v is None or v == '':
            del attrs[k]

    if value is None or value == '':
        if len(attrs) == 0:
            return
        self._out.write(self._getIndention())
        self._out.write(self._makeTag(name, attrs, True) + '\n')
    else:
        escValue = saxutils.escape(value or '')
        self._out.write(self._getIndention())
        self._out.write(self._makeTag(name, attrs))
        self._out.write(escValue)
        self._out.write('</%s>\n' % name)

def _getIndention(self):
    return self._indentAmount * len(self._stack)

def _makeTag(self, name, attrs={ }, close=False):
    ret = '<' + name

    for (k, v) in attrs.iteritems():
        if v is not None:
            v = saxutils.quoteattr(str(v))
            ret += ' %s=%s' % (k, v)

    if close:
        return ret + '/>'
    else:
        return ret + '>'

def createAnnotation(url):
    """Get file name part, split off extension, rewrite underscores."""
    path = urllib.unquote(urlparse.urlsplit(url)[2])
    filename = os.path.splitext(os.path.basename(path))[0]
    return filename.replace('_', '-')

#
# MAIN
#

optParser = optparse.OptionParser(
    usage='%prog [-ah] [file]',
    version='%prog ' + __version__
)

optParser.add_option('-a', '--annotation',
    action='store_true', dest='add_annotation',
    default=False, help='create annotation elements based on the file name')

(options, args) = optParser.parse_args()

```



```

#
# Write the playlist in XSPF format.
#
xml = XmlWriter(sys.stdout, indentAmount='  ')

xml.prolog()
xml.start('playlist', { 'xmlns': 'http://xspf.org/ns/0/', 'version': '1'
})
xml.start('trackList')

for line in sys.stdin:
    line = line.rstrip('\n')

    if line.startswith('#') or len(line.strip()) == 0:
        continue

    if line.startswith('http://'):
        url = line
    else:
        url = 'file://' + urllib.pathname2url(line)

    xml.start('track')
    xml.elem('location', url)

    if options.add_annotation:
        xml.elem('annotation', createAnnotation(url))

    xml.end() # track

xml.end() # trackList
xml.end() # playlist

# EOF

```

17.31 tomp3

```

#!/bin/bash
#####
# To MP3
#####
# Description : au2mp3 m4a2mp3 wma2mp3 mp32mp3 flv2mp3 anything2mp3
# Written by : Emmanuel Branlard
# Date : Feb 2011
# Dependencies : ffmpeg, lame, sox, faad ,mplayer
# License : Feel free to modify and adapt it
#####
for i
do
    # Out File
    j='echo "$i"|tr '_' ' ' '
    j=${j%.*}.mp3
    echo "File $j"

    if [ -f "$j" ]
    then
        echo "File exists $j -> skipping"
    else

```

```

echo "File does not exists"
if [[ "$i" == *.au ]]
then
    sox "$i" "$i".wav
    ffmpeg -i "$i".wav -vn -acodec libmp3lame -y "$j"
    rm "$i".wav
elif [[ "$i" == *.m4a ]]
then
    faad -o - "$i" | lame -h -b 192 - "$j"
elif [[ "$i" == *.wav ]]
then
    lame "$i" "$j"
elif [[ "$i" == *.wma ]]
then
    #wma > mp3 Rip with Mplayer / encode with LAME
    mplayer -vo null -vc dummy -af resample=44100 -ao
    pcm:waveheader "$i" ;
    lame "audiodump.wav" "$j";
    rm "audiodump.wav"
elif [[ "$i" == *.mid* ]]
then
    #
    echo To be done
elif [[ "$i" == *.mp3 ]]
then
    #mp3 > mp3
    lame "$i" "audiodump.mp3"
    mv "audiodump.mp3" "$j"
else
    echo "Format unknown" ;
    ffmpeg -i "$i" -vn -ab 128k -ac 2 -ar 44100 -y "$j"
    ">/dev/null ;
fi
done

```

17.32 ECN-RenameByTitle.sh

```

#!/bin/bash
for i in *.pdf ; do
    echo ""
    echo "_____";
    echo "${i%.*}";
    title='pdftotext -f 1 -l 1 $i - | awk '!/[0-9.]|/'|awk '/. / '|tr '\n' '
    '|head -c 64|tr ' ' ' ' ' '
    mv "$i" "${i%.*}_$title.pdf"
done

```

17.33 rhythmboxplaylist2exaile

```

#!/usr/bin/python

import os, string

```

```

marker = 0
marker2 = 0
orderlist = []
a = open( 'playlists.xml', 'r' )
if not os.path.exists("playlists"):
    os.makedirs("playlists")
os.chdir("playlists")
z = open( 'order_file', 'w' )
for line in a.readlines():
    if marker == 1:
        if line.find('<location>') != -1 and line.rfind('</location>') !=
-1:
            line = line[line.find('<location>')+10:]
            line = line[:line.find('</location>')]
            line = string.replace( line, '&', '&' )
            if marker2 == 0:
                m = open( name+'.playlist', 'w' )
                z.write(name+'\n')
                marker2 = 1
            m.write(line+'\n')
        elif line.find('</playlist>') != -1:
            if marker2 == 0:
                continue
            m.write('EOF\n')
            m.write('random_enabled=B: False\n')
            m.write('random_mode=S: track\n')
            m.write('repeat_enabled=B: False\n')
            m.write('repeat_mode=S: playlist\n')
            m.write('dynamic_enabled=B: False\n')
            m.write('current_pos=I: -1\n')
            m.write('name=U: '+name+'\n')
            m.write('_is_custom=B: True\n')
            m.write('_needs_save=B: False\n')
            m.close()
            marker = 0
            marker2 = 0
        elif line.find('<playlist name="') != -1:
            if line.rfind('/>') == -1:
                line = line[line.find('<playlist name="')+16:]
                line = line[:line.find('"')]
                line = string.replace( line, '&', '&' )
                name = line
                marker = 1
a.close()
z.write('EOF\n')
z.close()

```

17.34 rhythmboxstart

```

#!/bin/sh
#launching
rhythmbox&
#after a while using the client to play
sleep 2;rhythmbox-client --play --hide&

```

17.35 keywordsSetUp

```
#!/bin/bash
SAVEIFS=$IFS
IFS=$(echo -en "\n\b")

echo "Converting pdfs "
for i in `find -name "*.php" -printf '%h/%f\n' 2> /dev/null`
do
    echo "_____ "
    echo "Keywords $i";
    echo "_____ "
    cp $i "$i.tmp"
    cat "$i.tmp" | awk '$0 !~ NAME="keywords" {print $0}; $0 ~ NAME="
    keywords" {print "<META NAME=\"keywords\" CONTENT=\"
    KEYWORDSSHOULDGOHERE\ ">" }' >$i
    rm "$i.tmp"
done;
IFS=$SAVEIFS
```

17.36 pm-inhibit.py

```
#!/usr/bin/python

import dbus
import time
#import os
import signal, sys

if len(sys.argv) != 3 :
    sys.stderr.write('Usage: pm-inhibit.py <appname> <reason>\n')
    sys.exit(1)

def sighandler(signum, frame) :
    dev.UnInhibit(cookie)
    exit()

bus = dbus.Bus(dbus.Bus.TYPE_SESSION)
devobj = bus.get_object('org.freedesktop.PowerManagement', '/org/
    freedesktop/PowerManagement/Inhibit')
dev = dbus.Interface(devobj, "org.freedesktop.PowerManagement.Inhibit")
cookie = dev.Inhibit(sys.argv[1], sys.argv[2])

# going away from dbus when dieing should be enough, but be sure
signal.signal(signal.SIGTERM, sighandler)
print cookie

while 1 == 1 :
    time.sleep(30)
```

17.37 pdfBind

```
#!/bin/bash
```

```

if [ $# -eq 0 ]
then
  Files=*.pdf
  Files="$Files"
else
  l=$@
  Buff=""
  First=""
  for i in $l
  do
    if [ ! `echo $i |grep -E "[a-zA-Z]{3,4}$` = "" ]
    then
      File="$Buff $i"
      Buff=""
      First=""
      File2=`echo $File|tr ' ' '_`
      #
      if [ $File != $File2 ]
      then
        mv "$File" $File2
      fi
      #
      Files="$Files $File2"
    else
      if [ -z ${First} ]
      then
        Buff="$i"
        First="no"
      else
        Buff="$Buff $i"
      fi
    fi
  done
  #
  echo $Files
fi

FileOut=`echo $Files|grep -Eo "^[a-Z0-9\_-]*[.]"|tr ' ' '_`"Bind.pdf"
echo $FileOut

pdftk $Files cat output "$FileOut"

```

17.38 compilWebVersion

```

#!/bin/bash
unalias grep
#####
# Preliminary tests
#####
if [ $# == 0 ]
then
  echo "No arguments !";
  exit;
fi
cpt=`ls /usr/bin 2>/dev/null |grep gawk|wc -l`
if [ $cpt == 0 ]

```

```

then
    echo "Install gawk !";
    exit;
fi

cpt='ls /usr/bin 2>/dev/null |grep latex2html|wc -l'
if [ $cpt = 0 ]
then
    echo "Install latex2html !";
    exit;
fi

#
echo "Entering folder $1"
cd $1
#
echo "Trying *report*.tex"
cpt='ls *eport*.tex 2>/dev/null|wc -l'
echo $cpt
if [ $cpt -ne 1 ]
then
    if [ $cpt -gt 0 ]
    then
        ls *eport*.tex
        echo "Ambiguity on the main file name !"
        exit;
    else
        echo "Trying *.tex"
        cpt='ls *.tex 2>/dev/null|wc -l'
        echo $cpt
        if [ $cpt -ne 1 ]
        then
            ls *.tex
            echo "Ambiguity on the main file name !"
            exit;
        else
            f='echo *.tex';
        fi
    fi
else
    f='echo *eport*.tex';
fi

echo ""
echo "Main file: $f"
cp $f ${f}/tex/backup.tex}
title='grep titlea $f |awk -v FS="[{}]" '{print $4}' | xargs '
echo "Title: $title\n"
echo ""
echo "Press ENTER if every thing's OK , Ctrl+C otherwise"
read

#####
# Removing pdf
#####
echo "#####"
echo "Converting pdf to png"

```

```

echo "#####"
rm *.pdf 2>/dev/null
../pdf2pngCleanUp

#####
# latex work
#####
echo "#####"
echo "Formatting"
echo "#####"

echo "Modifying figure width"
grep -nHFR '\\\newcommand{\\\fitfig} .* > tmp.tmp
ff='gawk -F: '{print $1}' tmp.tmp'
if 'test -e $ff'
then
  sed -i "s/{\\\fitfig}[1]{[#0-9\\a-zA-Z]*}/{\\\fitfig}[1]{14cm}/g" $ff
fi

echo "Commenting xcolor"
grep -nHR .*{xcolor} .* > tmp.tmp
ff='gawk -F: '{print $1}' tmp.tmp'
if 'test -e $ff'
then
  sed -i "s/.*usepackage.*{xcolor}*/%\\\\usepackage[table]{xcolor} /g" $ff
fi

echo "Modifying for parshape"
grep -nHR .*\\\parshape .* > tmp.tmp
ff='gawk -F: '{print $1}' tmp.tmp'
if 'test -e $ff'
then
  sed -i "s/.*\\\parshape%/g" $ff
fi

rm tmp.tmp
echo "Modifying $f for undefined commands before \begin{document}"
old_value=".*\\\begin{document}";
new_value="\\\newcommand{\\\rowcolors}[3]{ } \\\\renewcommand{\\\
  arrayrulecolor}[1]{ } \\\\renewcommand{\\\rhead}[1]{ } \\\\renewcommand{\\\
  hypersetup}[1]{ } \\\\renewcommand{\\\lstset}[1]{ } \\\\renewcommand{\\\
  framebox}[1]{#1} \\\\renewcommand{\\\script}[1]{ } \\\\renewcommand{\\\
  command}[1]{ } \\\\renewcommand{\\\dtutext}[1]{#1\\\par} \\\\begin{
  document}";
sed -i "s/$old_value/$new_value/g" $f

echo "#####"
echo "Running pdflatex a first time on $f"
echo "#####"
pdflatex $f

echo "#####"
echo "Running bibtex on $f"
echo "#####"

```

```

ff=*.aux
bibtex $ff

echo "#####"
echo "Running pdflatex a second time on $f"
echo "#####"
pdflatex $f

#####
# latex 2 html and postformatting
#####
echo "#####"
echo "Now Running latex2html"
echo "#####"

echo "Running latex2html on folder $1"
latex2html -html_version 4.0,ISO-8859-1 -address " " -split 2 $f -dir $1 -
  mkdir -t "$title"

echo "Done. If results are bad, check that the package xcolor has been
  commented."

echo "Formatting"
cp -r $1 "$1-bkp"
cd $1
rename "s/html/php/g" *.html
sed -i "s/[.]html/.php/g" *.php
sed -i "s:</HEAD>::g" *.php

old_value="<BODY >";
new_value="<? include ('../_includes/haut.php');?>";
sed -i "s:$old_value:$new_value:g" *.php

old_value="<ADDRESS>";
new_value="<? include ('../_includes/bas.php'); ?>";
sed -i "s:$old_value:$new_value:g" *.php

old_value="</ADDRESS>";
new_value="";
sed -i "s:$old_value:$new_value:g" *.php

old_value="</ADDRESS>";
new_value="";
sed -i "s:$old_value:$new_value:g" *.php

#####
# Keywords
#####
echo "#####"
echo "Keywords"
echo "#####"
keywords='cat *php* | sed -e :a -e 's/<[^>]*>//g;</N;//ba' | tr ' ' '\n'
  | tr -d '[:punct:]' | grep -v '^[a-z]' | grep -E '[a-z]{3,}' | tr '[:
  upper:]' '[:lower:]' | grep -v -w -E 'the|and|for|from|with|used|which|
  are|that|this|will|can|been|should|using|all|one|two|three|has|taken|
  where|made|also|thus|though|have|when|not|such|figure|table|these|could
  |seen|given|nbsp|les|des|from|different|est|dans|une|our|qui|between|

```



```

next | would | sont | its | see | son | plus | case | que | pour | suivant | nous | par | sur |
each | but | than | only | other | main | figures | tables | more | there | value | values |
were | was | low | high | around | since | very | order | per | into | first | because | found |
them | done | good | their | really | here | got | big | better | well | away | shown | over |
like | while | within | take | due | any | then | under | same | much | most | both | second |
lot | use | get | pas | mais | alors | peut | plot | left | right ' | sort | uniq -c | sort
-rn | head -50 | sed 's/'\[ 0-9\]'\//g' | xargs | sed 's/[\ ]/./g' '

echo "Keywords: $keywords"

../.. /keywordsSetUp.sh

old_value='KEYWORDSSHOULDGOHERE';
new_value="$keywords";
sed -i "s:$old_value:$new_value:g" *.php

cd ../

#final cleaning
texclean 2>/dev/null

```

17.39 LaunchSession.sh

```

#!/bin/bash

if [ $1 = "vortex" ]; then
  DIR="/work/publications/notes/"
  thunar "$DIR";
  gvim -S "$DIR"SessionVortex.vim"
fi

if [ $1 = "vortexcode" ]; then
  DIR="/work/VortexCode/VortexElements/"
  thunar "$DIR";
  gvim -S "$DIR"Session.vim"
fi

if [ $1 = "momentum" ]; then
  DIR="/work/publications/notes/"
  thunar "$DIR";
  gvim -S "$DIR"SessionMomentum.vim"
fi

if [ $1 = "book" ]; then
  DIR="/work/publications/book/"
  thunar "$DIR";
  gvim -S "$DIR"Session.vim"
fi

```

17.40 rhythmboxstartlong

```
#!/bin/sh
#launching
rhythmbox&
#after a while using the client to play
sleep 20;rhythmbox-client --play --hide&
```

17.41 convertEnc

```
#!/bin/bash
#
# Conversion de toute une arborescence d'un encodage dans un autre.
# Exemple d'utilisation :
# mise a jour de sa distribution Linux de iso-8859-1 vers UTF-8
#
# Necessite : convmv et iconv
#
# Utilisation :
# $ ./convertEnc.sh Documents/Divers
#
# IMPORTANT : faites une copie de vos donnees et travaillez sur cette
#             copie !!
# (Je ne peux etre tenu responsable si vous corrompez vos donnees, soyez
#   prudents)
#
# Ce script ne demande qu'a etre ameliore...
#
### Protection contre les espaces (JacquesF -> guillemets autour des
#   variables ou cela n'etait pas fait)
#
# Sebastien de Boissieu (c) 2006
# $Id: convertEnc.sh,v 1.8.2.1 2007/03/17 22:39:29 sebastien Exp $
# Licence : GPL 2

FROM="iso-8859-1"
TO="UTF-8"

echo "Conversion de $FROM en $TO"

# Procedure pour renommer un fichier si nom deja existant
renomme()
{
  nbe=0
  num="_$nbe"
  nouvnom="$1"
  while [ -e "$nouvnom" ];
  do
    let nbe=nbe+1
    num="_$nbe"
    nouvnom="$1$num"
  done
  export nouvnom
}

# Conversion recursive des noms de fichiers et repertoires
convert_names()
{
```

```

echo "Conversion des NOMS de fichiers et repertoires"
#convmv -r -f $FROM -t $TO --qfrom --qto --notest "$1"
convmv -r -f $FROM -t $TO --notest "$1"
echo ""
}

# Routine de conversion du contenu d'un fichier
do_convert()
{
  fic="$1"
  echo " Fichier $fic"
  # Lecture du type mime
  encForm='file -bi "$fic" | awk -F "charset=" '{ print $2 }''
  if [ ! "$encForm" = "" ]; then
    # le fichier possede un charset
    echo " -> $encForm"
    if [ ! "$encForm" = "$TO" ]; then
      # ce charset est different de celui vise
      # nom du fichier converti temporaire
      renomme "$fic" "$TO"
      nouv_fic="$nouvnom"
      # la conversion
      iconv -f "$encForm" -t $TO "$fic" -o "$nouv_fic"
      # reussite ou echec de la commande cruciale ?
      status=$?
      if [ $status == 0 ]; then
        # Pour conserver la/les date(s) :
        touch -r "$fic" "$nouv_fic"
        # Pour conserver le proprietaire
        chown --reference "$fic" "$nouv_fic"
        # pour conserver les droits :
        chmod --reference "$fic" "$nouv_fic"
        # on ecrase l'ancien fichier par le nouveau
        if [ -w "$fic" ]; then
          ### JacquesF
          ### Sur mes tests, si le fichier n'est pas accessible en
          ecriture
          ### un mv -f sur le fichier remplace pourtant celui-ci (
          droits d'ecriture dans le repertoire)
          mv -f "$nouv_fic" "$fic"
        else
          echo "Le fichier $fic n'est pas accessible en ecriture"
          echo "Le fichier converti se nomme $nouv_fic"
        fi
      else
        echo " -> Echec: $nouv_fic corrompu ?"
        echo " $fic conserve."
      fi
    fi
  fi
}

# Conversion recursive du contenu des fichiers texte
convert_content()
{
  #echo "Conversion du contenu des fichiers"
  if [ -d "$1" ]; then
    # c'est un repertoire

```

```

if [ -x "$1" ]; then
  # On peut entrer dans le repertoire
  echo "Entree dans : $1"
  ### Protection si le repertoire contient un espace
  chemin_orig="`pwd`"
  cd -- "$1"

  # liste complete (avec fichiers caches)
  # Attention : si liste trop longue ca peut planter
  # passer par xargs -> man xargs
  for fic in `ls * .* | xargs` ; do
    if [ $fic != "." -a $fic != ".." ]; then
      base_fic=$(basename -- "$fic")
      #echo "$fic -> $base_fic"
      echo " Analyse de : $base_fic"
      # recursivite
      if [ -d "$base_fic" ]; then
        # Si repertoire, on execute la procedure dessus
        convert_content "$base_fic"
      else
        # sinon on fait la conversion
        do_convert "$base_fic"
      fi
    fi
  done
  echo "Sortie de : $1"
  cd "$chemin_orig"
else
  echo "Entree INTERDITE dans : $1"
fi
else
  # On fait la conversion sur le fichier
  do_convert "$1"
fi
}
#=====

# Debut execution
if [ $# -gt 0 ]; then
  ### Alerte avant lancement du script
  clear
  echo -e "\n\nATTENTION : ne travaillez jamais sur les donnees d'
    origine !"
  echo -e "\nEtes-vous certain de vouloir modifier ces fichiers ?"
  echo -e "\tAppuyez sur Ctrl-C pour annuler ou sur Return pour
    continuer \c"
  read Tempo
  echo
  ### Fin de l'alerte
  # pour l'instant on ne considere que le 1er argument
  echo "Sur: $1"
  echo ""
  ### On n'est pas a l'abri d'un repertoire avec des espaces dans le
    nom
  convert_names "$1"
  echo "====="
  # Remarque : si $1 est un repertoire dont le nom a ete converti
  # le contenu de $1 est obsolete.

```

```

# on le converti :
nom=$(echo "$1" | iconv -f $FROM -t $TO)
convert_content "$nom"

echo "Fini"
else
echo "Utilisation :"
echo "$0 chemin/repertoire"
### Alerte par precaution
echo "Ne travaillez jamais sur les donnees d'origine mais seulement
sur une copie de celles-ci"
fi

```

17.42 pdfAlternRotation

```

#!/bin/sh
#####
# Altern Rotation :
#####
# Rotate by 180 degrees every other page of a pdf
# written by Emmanuel Branlard
# Oct 2009
# This script uses pdftk
# Feel free to modify and adapt it
# To separate 'file.pdf' into single page files :
# pdftk file.pdf burst
#####
echo 'Every other pdf file in the current directory will be rotated'
echo 'Warning : do a backup of the pdf files first'
echo ' Press Ctrl+C to cancel'
echo ' Press Enter to Continue';
read reply

j=0
# looping on all pdf files in the folder
for i in *.pdf ; do
j='expr $j + 1';
printf 'File %d : %s ' $j $i
if [ 'expr $j % 2' -eq 0 ]; then
printf ' -> Rotating... ';
cp $i $i.bkp
pdftk $i.bkp cat 1S output $i
rm $i.bkp
fi
echo ''
done

echo 'Do you want to concatenate the file ?'
echo ' Press Ctrl+C to cancel'
echo ' Press Enter to Continue';
read reply

echo 'Binding...'
pdftk *.pdf cat output bind.pdf

echo "Done. File 'bind.pdf' created"

```

17.43 4terms

```
#!/bin/sh
xfce4-terminal -T T4 --geometry 80x26+800+450 &
xfce4-terminal -T T1 --geometry 80x26+84+0 &
xfce4-terminal -T T3 --geometry 80x26+800+0 &
xfce4-terminal -T T2 --geometry 80x26+84+450 &
```

17.44 MoveWindowLeftRight.sh

```
#!/bin/bash

pywo put -p $1
pywo put -p M --xinerama
```

17.45 ScreenConf.sh

```
#!/bin/bash

echo "----- BEGIN SCREENCONF -----"
"
sleep 3
echo "----- BEGIN SCREENCONF -----"
"

#x='xrandr --query |grep 2720 |wc -l'; #home

x='xrandr --query |grep 1920 |wc -l'; #riso

echo "x:"$x

if [[ $x > 0 ]]
then
    #/home/manu/Config/profiles/screenlayout/RisoScreenPersoLaptop.sh
    xrandr --output LVDS-1 --mode 1440x900 --pos 1920x0 --rotate normal --
        output VGA-1 --mode 1920x1080 --pos 0x0 --rotate normal
fi
```

17.46 xsetnumlock.c

```
#include <X11/extensions/XTest.h>
#include <X11/keysym.h>

/*
Requires:
aptitude install libxcb-keysyms1-dev libxtst-dev
Compiled with:
gcc -I/usr/include/X11 -L/usr/lib/X11 -o xsetnumlock xsetnumlock.c -lX11 -
lXtst */

int main(void)
```

```

{
Display* disp = XOpenDisplay(NULL);

if (disp == NULL) return 1;

XTestFakeKeyEvent(disp, XKeysymToKeycode(disp, XK_Num_Lock),
True, CurrentTime);
XTestFakeKeyEvent(disp, XKeysymToKeycode(disp, XK_Num_Lock),
False, CurrentTime );
XCloseDisplay(disp);

return 0;
}

```

17.47 ref

```

#!/bin/sh
#####
# Ref
#####
# Description : uses locate to search through references
# Written by : Emmanuel Branlard
# Date : Dec 2011
# Dependencies :
# License : Feel free to modify and adapt it
# Use: ref Word1 Word2 etc.
#####

a="";
for i
do
    a=$a "$i";
    b=$b|" "$i;
done
# locate -iA $a |grep --colour=never _Refs|cut -b 13-|grep --colour=auto -
# i -E "$b"
locate -iA $a |grep --colour=never _Refs|grep --colour=auto -i -E "$b"

```

17.48 DEFAULT

```

#!/bin/bash
#####
# Default script:
#####
# Description :
# Written by : Emmanuel Branlard
# Date : Oct 2009
# Dependencies :
# License : Feel free to modify and adapt it
# Note : To separate 'file.pdf' into single page files :
#       pdftk file.pdf burst
#####
echo "Script name is [$0]"
echo "This Process ID is [$$]"
echo "This Parameter Count is [#]"

```

```
echo "All Parameters      [ $@ ]"
echo "The FLAGS are      [ $- ]"
#####
#sh syntax
# if [ $# -eq 0 ]; then echo "No arguments"; fi
# Expression comparison : !EX1 -a Ex2, Ex1 -o Ex2
# String comp : S1 = S2, S1!=S2
# Int comp :      I1 -ne I2
#bash syntax
#if [ $# == 0 ]; then echo "No arguments"; fi
# for f in *
# do
#   echo "$f"
# done
```


Chapter 18

Debian

18.1 Install Debian from scratch

```
#####  
### Au cas, configuration du reseau a la main - Interface Ethernet  
#####  
# si le reseau eth0 n'apparait pas en faisant ifconfig, alors  
vim /etc/network/interfaces  
#ajouter  
#allow-hotplug eth0  
#iface eth0 inet dhcp  
#  
#la commande ifup eth0 reveille l'interface (interface up)  
  
#####  
### Au cas, configuration du reseau a la main - Interface WIRELESS  
#####  
# pour avoir le wifi, avec clef wifi ralink usb : wireless-tools et  
# firmware-ralink  
# modprobe rt73usb (si pas automatique)  
  
### Tout d'abord, methode pas a pas, ensuite on configure /etc/network/  
# interfaces  
; ifconfig  
#(virer eth0 avec ifconfig eth0 down)  
# iwconfig (wlan0 devrait y etre)  
# mettre en route la clef  
; ifconfig wlan0 up  
# faire un listing  
; iwlist wlan0 scan  
# Configurer le essid  
; iwconfig wlan0 essid WANADOO-F658  
# Mettre en mode managed si pas deja  
; iwconfig wlan0 mode managed  
# Configure clef  
; iwconfig wlan0 key XXXXXXXXXXXXXXXXXXXXXXXX  
# ou, difference??  
; iwconfig wlan0 key restricted XXXXXXXXXXXXXXXXXXXXXXXX  
# enfin on active l'interface  
; ifup wlan0  
  
### Configurer par le fichier
```

```

#Restreindre les permissions d'accès à /etc/network/interfaces , pour
  éviter de divulguer la clef mot de passe
# chmod 0600 /etc/network/interfaces
#
# WEP
#auto wlan0
#iface wlan0 inet dhcp
#   wireless-essid Mon_EssiD
#   wireless-key 1234567890ABCDEF
#
# WPA
# installer wpasupplicant pour gerer les options wpa-*
#Ouvrir /etc/network/interfaces dans un éditeur:
# vim /etc/network/interfaces
# Entrer les données de votre réseau sans fil ; SSID et Clef WPA . Par
  exemple:
#auto wlan0
#iface wlan_maison inet dhcp
#   wpa-ssid NomRéseau
#   wpa-psk Mot-Passe-Clef-WPA
#La commande auto montera l'interface sans fil automatiquement au
  démarrage du système. La commenter ou la supprimer si ce fonctionnement
  n'est pas désirer.
# Sauvegarder et sortir de l'éditeur.
# Monter votre interface. Cela démarrera wpa_supplicant en arrière plan
# ifup wlan0=wlan_maison

#####
### Modifier les sources et ajouter contrib et non free
#####
# vim /etc/apt/sources.list
## squeeze security
#deb http://ftp.fr.debian.org/debian/ lenny main contrib non-free
#deb-src http://ftp.fr.debian.org/debian/ lenny main contrib non-free

#deb http://security.debian.org/ lenny/updates main contrib non-free
#deb-src http://security.debian.org/ lenny/updates main contrib non-free

#deb http://www.debian-multimedia.org/ lenny main contrib non-free
#deb http://www.backports.org/debian lenny-backports main contrib

#gpg --keyserver pgpkeys.mit.edu --recv-key 778978B00F7992B0
#gpg --export --armor 778978B00F7992B0 | sudo apt-key add -

#####
### Installer Lynx pour naviguer sur internet au cas ou
#####
aptitude install lynx

# Une fois l'installation debian terminée, installer un serveur x :(nv
  pour nvidia, ati sinon)
# Pour une install minimale , bien comprendre les dependances du serveur X

```

```

# =>lire les infos d'aptitude, ca prend du temp de prendre en main l'
interface d'aptitude, mais on s'y fait
# si on ne comprend pas trop aptitude, taper #aptitude show nom-du-paquet,
et lire les dependances
# Ce lien est peut-etre utile : http://forum.ubuntu-fr.org/viewtopic.php?
id=8630&zp=17

#####
### Methode bourrin, pour avoir une debian + fluxbox fonctionelle
#####
#Si on veut etre tranquile on installe Xorg ou x-window-system-core (je ne
sais plus trop la difference)
#Xorg depend de x-server-xorg, xauth, xinit, x11-apps, xfonts-base, xterm
#aptitude install xorg xterm
#dpkg-reconfigure xserver-xorg
##on tente de lancer le serveur x, on a juste un terminal dans un coin
#startx
##on installe un gestionnaire de fenetre
#apt-get install fluxbox
#startx

#####
### Methode pas a pas
#####
#Si on veut faire ca etape par etape pour une config minimum, faut s'
accrocher, c'est vraiment histoire d'etre minimaliste
# mais ca aide a comprendre les differentes couches et surtout ca apprend
a installer juste ce dont on a besoin (au lieu des gros paquets)
# Les paquets -core contiennent le minimum, les paquets -all, sont des
fourres tout
# par contre, je ne me souviens plus trop ce que j'ai fait
# Voila ce que je crois avoir fait : (a chaque etape, essayer de lancer le
server x (startx, qui est fournit par xinit) et regarder ce qu'il dit)

aptitude install ntf3g

# !!! Use aptitude to install dependences!!!!

#serveur X de base
aptitude install xserver-xorg-core

# to be able to install xinit without too much stuff...
#LES INPUTS : xserver-xorg-input-all : tous les input (clavier, souris,
trucs dans le genre si je me souviens bien)
# si on est tatillon on peut customiser pour eviter d'installer tous les
input :
sudo aptitude install xserver-xorg-input-mouse xserver-xorg-input-kbd

#LES OUTPUTS: nv : pilotes graphique libres pour nvidia (ca evite d'
installer xserver-xorg-video-all)
aptitude install xserver-xorg-video-nouveau
aptitude install xserver-xorg

# to be able to install xterm without too much stuff

```

```

# use aptitude to manage dependencies!!!
aptitude install font-config-config libfontconfig1 libutempter0 libxft2
libxrender1 ttf-dejavu-core xbitmaps xterm

#Now we are ready for xinit
aptitude install xinit

#et ca, ca reste un mystere, essayer sans au debut
#aptitude install x-window-system-core
#aptitude install x11-session-utils
#aptitude install xserver-xorg-intel

#outils necessaires au lancement du server x,comme startx
aptitude install xauth xinit

# applications x (obscure)
#aptitude install x11-apps

# configurer le serveur x et prendre en compte les bons drivers
dpkg-reconfigure xserver-xorg

#polices de base nécessaires
#a priori , on peut se permettre d'installer toutes les autres polices
scalable, 100 dpi 75dpi etc... : xfonts-100dpi, xfonts-scalable
aptitude install xfonts-base

# xterm (terminal de base, pas besoin des autres emulateurs de terminaux,
il est tres bien)
aptitude install xterm

#a ce stade startx devrait marcher, meme sans gestionnaire de fenetre!!!
(on a juste un terminal dans un coin)
#ca sert a rien d'aller plus loin tant que ca marche pas !
#ensuite on peut s'interresser au gestionnaire de fenetre (windows manager
(wm)) comme : fluxbox, xfwm(ce lui d'xfce4) , plus lourd : gnome

# install de fluxbox (ca vaut le coup d'essayer, et ca coute pas grand
chose)
aptitude install fluxbox

#Lancer le serveur x :
startx

#
aptitude install cpp

aptitude install xfwm4
aptitude install xfce4-panel
#install thunar with aptitude gui
#ie needs desktop-file-utils libgudev-1-0-0 libnotify4 libthunarx-2-0

aptitude installxfce4-session

```

```

#Pour gnome, attention c'est lourd, pour decomposer gnome voir plus loin(
je n'ai jamais fait))
aptitude install gnome-core
#Pour gnome, gestionnaire de login, pas obligatoire
aptitude install gdm

#Pour de la bureautique (tres important pour tout ce qui est montage,
policykit et compagnie)
aptitude install hal dbus udev

#Synaptic pour aider a installer :
aptitude install synaptic

#####
### nvidia proprietaire, deux methodes kiff kiff
#####
aptitude install linux-headers-`uname -r`
aptitude install nvidia-glx
aptitude install nvidia-settings
# configuration manuelle du serveur x
nano /etc/X11/xorg.conf

#Pour installer vraiment facilement et durablement les drivers nvidia sur
debian(avoir non-free aux sources) :
# l'installation se fait a l'aide du module-assistant (m-a)
aptitude install module-assistant
m-a prepare
m-a a-i nvidia
aptitude install nvidia-glx
#config automatique du serveur x et choisir "nvidia" comme driver
dpkg-reconfigure xserver-xorg

#####
### la suite c'est un peu en vrac, ce n'est pas de moi
#####

Paquets necessaires (en plus du x-window-system-core, bien sur) pour un
gnome minimal:
- gnome-applets: sinon pas de tableau de bord
- nautilus: sinon pas d'icone sur le bureau (et pas de navigation interne)
- gnome-session: ca semble logique
- xscreensaver: pour ne pas se faire insulter au demarrage de gnome
- metacity (ou sawfish ou autre): sinon pas de gestionnaire de fenetre
En plus, je conseille au moins le paquet xterm, c'est quand meme bien
pratique une console sous gnome.

```

Peut-etre aussi gnome-audio, mais je ne suis pas sur.

```
#####
# xfce léger
#####
xfwm + thunar + mousepad
```

```
#####
# gnome
#####
J'ai refait une synthèse des paquets utiles propres à gnome
```

#Pour éviter gnome-core

Paquets nécessaires (en plus du x-window-system-core, bien sur) pour un gnome minimal:

- gnome-applets: sinon pas de tableau de bord
- nautilus: sinon pas d'icone sur le bureau (**et** pas de navigation interne)
- gnome-session: ca semble logique
- xscreensaver: pour ne pas se faire insulter au demarrage de gnome
- metacity (ou sawfish ou autre): sinon pas de gestionnaire de fenetre

En plus, je conseille au moins le paquet xterm, c'est quand meme bien pratique une console sous gnome.

Peut-etre aussi gnome-audio, mais je ne suis pas sur.

Les outils d'administration graphiques indispensables :

- synaptic : interface graphique à aptitude, permet la gestion des paquets
- gnome-system-tools : gestion des utilisateurs, configuration de l'horloge, configuration réseau, etc.
- gnome-system-monitor : gestion des processus tournant sur le système, permet de voir la charge CPU, la charge mémoire, etc.
- gnome-volume-manager : montage automatique des médias (cd-rom, disquettes...) et éventuellement lancement automatique de ceux-ci
- gnome-cups-manager : ajout/suppression d'imprimantes
- gnome-control-center : configuration de l'accessibilité, des polices du bureau, des propriétés souris/clavier, du volume sonore, de la résolution graphique, des thèmes de bureau, etc.

Les outils graphiques utiles :

- gnome-nettool : interface graphique aux outils réseaux : ifconfig, ping, netstatus, traceroute, port scanning, DNS lookup, finger, whois
- alacarte : gestion des menus gnome (ajout/suppression d'entrées)
- gnome-utils : formater les disquettes, faire des screenshots, ...
- gnome-media : lecteur de CD, enregistreur de son, réglage du volume
- gconf-editor : permet de modifier la configuration de certains programmes
- gnome-power-manager : gestion de l'arrêt de l'écran/HDD, mise en veille
- gnome-keyring-manager : gestion du trousseau

Remarque : le paquet gnome-desktop-environment est une très bonne base pour les paquets utiles de gnome. Il reprend la majorité des paquets ci-dessus (il ne lui manque que alacarte et gnome-cups-manager), avec en plus la gestion archives (zip/tar) pour nautilus (file-roller), un visualiseur de pdf (evince), la calculatrice... Il contient également des programmes qui pourraient être inutiles comme Evolution, des jeux ... A vous de faire le tri.

Les outils/programmes plus ou moins célèbres **et** les petits **ú** plus **ž** :

- gnome-themes : divers thèmes pour gnome
- xscreensaver **et** xscreensaver-gl : économiseurs d'écrans (mieux que gnome-screensaver)
- gtkorphan : permet de supprimer les paquets orphelins souvent (**et** pas toujours !) inutiles
- gnome-mount : ajoute à Nautilus des raccourcis pour (dé)monter **et** éjecter les médias
- gimp : le célèbre outils de création graphique
- openoffice.org : la suite libre équivalente à Microsoft Office
- brasero : logiciel de gravure

18.2 Program list

```
#####
### install rapide, copy paste dans le terminal
#####
#en vrac
aptitude install \
  xpdf mirage xscreensaver gimp gpicview xfig f-spot \
  nano vim geany\
  unzip zip bzip2 tar eterm brasero gcalctool Gmount-iso \
  alsa-utils ntfs-3g numlockx network-manager-gnome sysv-rc-conf preload
  prelink gnome-system-monitor \
  openoffice.org wine \
  gxine vlc amarak audacity timidity \
  octave kile eclipse texlive\
  iceweasel amule amsn transmission filezilla pidgin jabber \
  jumpnbump \

#####
### install un peu plus detaillee, avec moins d'applications
#####
#installation du gestionnaire de fichier(thunar, pour xfce) et d'editeurs
  texte (nano, vim en terminal, geany, bien sympa je le prefere a gedit)
aptitude install thunar nano vim geany

# Navigateur
aptitude install iceweasel

#installation de ntfs-3g pour gerer les partitions NTFS
aptitude install ntfs-3g

# install lecteur pdf (evince better)
aptitude install xpdf

#install visionneuse d'image mirage
aptitude install mirage

#install screensaver
aptitude install xscreensaver

#Lecteur Multimedia gxine : Un peu "lourd" (~20Mo de ram) vrai lecteur
```

```

#aptitude install gxine

#quelques fonctionnalites pratiques :
aptitude install numlockx unzip zip bzip2 tar

#Eterm : terminal sympa /usr/bin/Eterm, voir plus loin pour config
    caracteres accentues, pour tunning du fond d'ecran : (voir fichier
    dedie)
#aptitude install eterm

# Audio
aptitude install alsa-utils

#Open office
aptitude install openoffice.org

# gimp
aptitude install gimp

#gnome network manager
aptitude install network-manager-gnome

#outils internet
aptitude install transmission amule

# autologin leger
#aptitude install mingetty

#geeker avec les services
aptitude install syst-rc-conf

```

```

aptitude install \
vim gvim geany evince \
mirage gimp gpicview inkscape \
unzip zip bzip2 tar \
numlockx sysv-rc-conf terminator\
openoffice.org-writer openoffice.org-calc openoffice.org-impress\
vlc audacity rhythmbox timidity \
wicd iceweasel amule transmission filezilla \
icedove iceowl-extension \
meld filelight texmaker\
jumpnbump frozen-bubble \

aptitude install \
xclip libnotify-bin \
readahead readahead-fedora \
flashplugin-nonfree sun-java6-jre sun-java6-plugin \
gamin \

    ntfs-3g
    wmctrl
    xclip

    smbfs
    arandr

libcurl3 #for chrome

```



```
lsb-core #for google-earth
```

Chapter 19

Fluxbox

19.1 Install Debian with Fluxbox

```
#####  
###Installation du serveur X, a revoir  
#####  
# bourrin x-window-system-core xterm  
# dpkg-reconfigure xserver-xorg  
# apt-get install fluxbox  
# startx  
# voir details des paquets dans aptitude  
# x-window-system-core xserver-xorg-intel, x11-session-utils xfonts  
  -100dpi xfonts-scalable  
# pour sur il faut minimum xinit (startx), xauth, xserver-xorg-video-nv  
  des inputs, les x11-apps  
aptitude install x-window-system-core xinit xauth xserver-xorg-video-nv  
  xserver-xorg-input-mouse xserver-xorg-input-kbd x11-apps  
  
#installation de l'emulation du terminal  
aptitude install xterm  
  
#installation de nvidia proprement  
m-a prepare  
m-a a-i nvidia  
aptitude install nvidia-glx  
  
# configuration de X, choisir nvidia comme driver!!!  
dpkg-reconfigure xserver-xorg  
#installation du windows manager  
aptitude install fluxbox  
#on peut lancer x  
startx
```

19.2 Notes on Fluxbox

```
\section{Fluxbox et power manager  
dans le .fluxbox de home, rajouter :  
gnome-power-manager &
```

19.3 Tuning Fluxbox Appearance

D'après le wiki de `debian-facile.org`

```
#####
##Startup : le fichier .fluxbox/startup
#####
```

If you have network manager, just stick "nm-applet &" in the startup file (but make sure its before the "exec /usr/local/bin/fluxbox.... " line). It works **for** me.

I had to add "gnome-keyring-daemon &" along with "nm-applet &" in order to get wifi with WEP to work and not constantly ask **for** the WEP key to be re-entered.

```
xscreensaver -nosplash &
idesk &
nm-applet&
wmlaptop&
numlockx&
```

Now I have to get the front audio keys on my laptop to start working...

I used a combination of `xmodmap` and keybindings, in conjunction with `alsamixer`. my `.xmodmaprc` contains

```
! vol up
keycode 176 = XF86AudioRaiseVolume
! vol down
keycode 174 = XF86AudioLowerVolume
! vol mute
keycode 160 = XF86AudioMute
(check the keycodes for your buttons using xev) and then I have
```

```
XF86AudioMute :ExecCommand amixer set Master toggle
XF86AudioLowerVolume :ExecCommand amixer set Master 5%-
XF86AudioRaiseVolume :ExecCommand amixer set Master 5%+
in .fluxbox/keys. Hope this helps; check the xmodmap man page for more.
```

```
#####
##Mettre son fond d'écran sous fluxbox
#####
#fbsetbg necessite eterm
#sinon aller voir le fichier .fluxbox/startup
```

```
fbsetbg -f /chemin/de/votre/fond d'ecran
```

```
#sauvegarder les infos Editer ~/.fluxbox/init et lui ajouter cette ligne:
session.screen0.rootCommand: fbsetbg -l
```

```
#####
## Icones sur le bureaux
```

```
#####
#Installation de idesk
apt-get install idesk

#Créer le dossier .idesktop, pour contenir les .lnk.
mkdir ~/.idesktop

table Icon
  Caption: xchat
  Icon: /home/syb/.idesktop/icones/xchat.xpm
  X: 32
  Y: 66
  Command: xchat
end

#Lancer idesk à chaque démarrage de fluxbox editer ~/.fluxbox/startup et
  dec commenter ou ajouter la ligne idesk
idesk

#####
## Tuning de thunar
#####
Telecharger un theme :
http://www.gnome-look.org/content/show.php/Vista-Inspirate?content=28352

bzip2 + tar -xvf
Copier "Vista-Inspirate_1.0" dans ==>/usr/share/icons
Dans ce repertoire il y a un fichier " index.theme " dans lequel ce trouve
  le nom du thème "Name=Vista-Inspirate_1.0"
J'ouvre avec un éditeur le fichier .gtkrc-2.0 situer dans /home/user/
Je rajoute > gtk-icon-theme-name = "Vista-Inspirate_1.0"

Ce qui me permet de garder le thème qui gère les boutons , les onglets ,
  les barre de défilement ,
mais de changer les iconnes des fichiers et répertoires dans thunar.

Il est possible que ce message :
bad image index

(thunar:chiffre quelconque(ou PID)): Gtk-WARNING **: Icon cache '/usr/
  share/icons/hicolor/icon-theme.cache' is invalid

Et/ou quelque chose dans le genre de :

(thunar:chiffre quelconque(ou PID)): Gtk-WARNING **: Error loading theme
  icon for stock; Icon 'gnome-fs-home' not present in theme
Apparait
On peu le corrigé par un :
sudo gtk-update-icon-cache -f /usr/share/icons/hicolor/
```

Chapter 20

Languages and programs

20.1 Unix

linux commands

`du -sh FOLDER/FILE` : disk utilisation , readable by human, `s` : include subfolders

`df -al` : disk space

- * `sort` Sorts lines in ascending, descending and unique order
- * `grep` Searches **for** regular expressions in strings or files
- * `basename` Strips the path from a path string to leave just the filename
- * `dirname` Removes the file from a path string to leave just the pathname
- * `cut` Chops up a text string by characters or fields
- * `wc` Count the characters, words, or lines
- * `[(test)]` Predicate or conditional processor
- * `tr 'a' 'b'` Transform characters
- * `expr` Simple arithmetic processor
- * `bc` Basic Calculator
- * `eval` Evaluate variables
- * `echo` Output strings
- * `date` Create date strings
- * `nawk` Manipulate text strings
- * `head` | `tail` Access lines in files

FORLOOPS/ FIND / XARGS and SPACECHARACTERS

SHELL SCRIPTS NOTES

Conditionnals tests are in bracket []

See man **test for** details , like :

Expression comparison : `!EX1 -a Ex2`, `Ex1 -o Ex2`

String comp : `S1 = S2`, `S1!=S2`

Int comp : `I1 -ne I2`

IF :

```
if [] || [] && [] then ... elif [] then ... else ... fi
```

WARNING !! you need spaces around [and = !!!!!!!!!!!

STANDARD IN, STANDARD OUT

| : PIPE

```
./compile_astra 2>&1 | tee log.log
```

deadbbg

<http://www.onlinecomputerbooks.com/>

20.2 Awk

awk

awk is a pattern scanning and processing language.

By default it reads standard input and writes standard output.

Usage: **awk** -f progfile [--] file

Usage: **awk** 'program' file

Usage: ./awkfscript

```
-F,          : field separator comma(,)
-F ";"      : field separator semicolon(;)
-F ";|,"    : field separator semicolon or comma(;)
```

#first 1000 lines

```
awk 'NR<1000 {print}' radial.ini>radi
```

#lignes paires

```
NR % 2 == 1 { print $0 }
```

#affiche le numero de ligne

```
{ print NR, $0 }
```

First three fields

```
awk -F, 'NR>1 {print $1,$2,$3;}' tab.csv > tab2
```

Not matching a pattern

```
awk '!/Distribution/ {print $0 } ' drift.in
```

Cut a line every 20 fields

```
awk -F, '{for(i=1;i<=NF; i=i+1){ if((i%20)==0 ){ printf $i";\n" }else{
    printf $i";" } } printf "\n" }' p.csv >r.csv
```

print sum of first record

```
awk '{ sum += $1 }; END { print sum }' file
```

```

awk -F= 'NR<10 {for(i=1;i<=NF;i++){printf $i"=" }; print "" }' drift.in

#printf "&NEWRUN\n  Distribution=$bunchdir/$3'\n" |tee $2>/dev/null

#awk 'BEGIN{IGNORECASE=1; FS=","}; /distribution/{for(i=1;i<NF;i=i+2){
    if($i~/distribution/){}else{ print " ",$i,"=",$(i+1)} } } NR>1 && !
    /distribution/{print} ' $casedir/$2 > $tempBuffer
#cat $tempBuffer |tee -a $2>/dev/null

awk 'BEGIN{IGNORECASE=1; FS=","}; /distribution/{for(i=1;i<NF;i=i+2){ if
($i~/distribution/){split(ARGV[2],a,"="); print a[1]=a[2]; }else{
print " ",$i,"=",$(i+1)} } } NR>1 && !/distribution/{print} ' $
casedir/$2 Distribution=\`$bunchdir/$3\`> $2

#!/bin/awk

BEGIN {
    IGNORECASE=1
    FS=","
    split(ARGV[2],a,"=");
    b=tolower(a[1])
}

$0 ~ b {for(i=1;i<NF;i=i+2){ if($i~b){split(ARGV[2],a,"="); print " ",a
    [1],"=" ,a[2]; }else{ gsub(" ","",$i); print " ",$i,"=",$(i+1)} } }
$0 !~ b {print }

```

20.3 Vim

LESSON 1 SUMMARY

1. The cursor is moved using either the arrow keys or the hjkl keys.
 h (left) j (down) k (up) l (right)
2. To start Vim from the shell prompt **type:** vim FILENAME <ENTER>
3. To **exit** Vim **type:** <ESC> :q! <ENTER> to trash all changes.
 OR **type:** <ESC> :wq <ENTER> to save the changes.
4. To delete the character at the cursor **type:** x
5. To insert or append text **type:**

i	type inserted text	<ESC>	insert before the cursor
A	type appended text	<ESC>	append after the line

NOTE: Pressing <ESC> will place you in Normal mode or will cancel an unwanted and partially completed **command**.

LESSON 2 SUMMARY

1. To delete from the cursor upto the next word **type:** dw
 2. To delete from the cursor to the end of a line **type:** d\$
 3. To delete a whole line **type:** dd
 4. To repeat a motion prepend it with a number: 2w
 5. The format **for** a change **command** is:
operator [number] motion
- where:
- operator – is what to **do**, such as d **for** delete
 - [number] – is an optional count to repeat the motion
 - motion – moves over the text to operator on, such as w (word), \$ (to the end of line), etc.
6. To move to the start of the line use a zero: 0
 7. To undo previous actions, **type:** u (lowercase u)
To undo all the changes on a line, **type:** U (capital U)
To undo the undo's, **type:** CTRL-R

LESSON 3 SUMMARY

1. To put back text that has just been deleted, **type** p . This puts the deleted text **AFTER** the cursor (**if** a line was deleted it will go on the line below the cursor).
2. To replace the character under the cursor, **type** r and **then** the character you want to have there.
3. The change operator allows you to change from the cursor to where the motion takes you. eg. Type ce to change from the cursor to the end of the word, c\$ to change to the end of a line.
4. The format **for** change is:
c [number] motion

LESSON 4 SUMMARY

1. CTRL-G displays your location in the file and the file status.
G moves to the end of the file.
number G moves to that line number.
gg moves to the first line.

2. Typing `/` followed by a phrase searches **FORWARD** for the phrase.
Typing `?` followed by a phrase searches **BACKWARD** for the phrase.
After a search **type** `n` to find the next occurrence in the same direction
or `N` to search in the opposite direction.
`CTRL-O` takes you back to older positions, `CTRL-I` to newer positions.
3. Typing `%` **while** the cursor is on a `(,), [,], {, or }` goes to its match.
4. To substitute new **for** the first old in a line **type** `:s/old/new`
To substitute new **for** all 'old's on a line **type** `:s/old/new/g`
To substitute phrases between two line #'s **type** `:#,#s/old/new/g`
To substitute all occurrences in the file **type** `:%s/old/new/g`
To ask **for** confirmation each time add `'c'` `:%s/old/new/gc`

LESSON 6 SUMMARY

1. Type `o` to open a line **BELOW** the cursor and start Insert mode.
Type `O` to open a line **ABOVE** the cursor.
2. Type `a` to insert text **AFTER** the cursor.
Type `A` to insert text after the end of the line.
3. The `e` **command** moves to the end of a word.
4. The `y` operator yanks (copies) text, `p` puts (pastes) it.
5. Typing a capital `R` enters Replace mode **until** `<ESC>` is pressed.
6. Typing `":set xxx"` sets the option "xxx". Some options are:

<code>'ic'</code>	<code>'ignorecase'</code>	ignore upper/lower case when searching
<code>'is'</code>	<code>'incsearch'</code>	show partial matches for a search phrase
<code>'hls'</code>	<code>'hlsearch'</code>	highlight all matching phrases

 You can either use the long or the short option name.
7. Prepend "no" to switch an option off: `:set noic`

20.4 Language C++

```
\section{Interface graphique GTK : GTK+ en C , GTKmm en C++}
http://forums.codeblocks.org/index.php?topic=3181.0
```

Dans Codeblocks, voir Project → Build options

Compiler options

```
'pkg-config gtk+-2.0 --cflags '
```

```
'pkg-config gtkmm-2.4 --cflags '
```

Si glade :

```
'pkg-config gtkmm-2.4 libglademm-2.4 --cflags '
```

```

Linker option :
'pkg-config gtk+-2.0 --libs '
'pkg-config gtkmm-2.4 --libs '
Si glade :
'pkg-config gtkmm-2.4 libglademm-2.4 --libs '

\section{Un makefile propre GTKmm}
CC=g++
CFLAGS=-Wall -W -g 'pkg-config gtkmm-2.4 libglademm-2.4 --cflags '
LFLAGS='pkg-config gtkmm-2.4 libglademm-2.4 --libs '
OBJECTS=main.o application.o
HEADERS=application.hpp
TARGET=helloworld

all: $(TARGET)
$(TARGET): $(OBJECTS)
$(CC) $(LFLAGS) -o $(TARGET) $(OBJECTS)
%.o: %.cc
$(CC) $(CFLAGS) -c $< -o $@
clean:
    rm -f $(OBJECTS) $(TARGET) *~

\section{heritage de gtk::window}

class Fenetre : public Gtk::Window
{
public:
    Fenetre();

private:
    Gtk::VBox * v;
    Gtk::Button b1, b2;
    Gtk::Label * l;
    Glib::RefPtr xml;
};

Fenetre::Fenetre() :
    v(0),
    b1("Ok"),
    b2("Annule"),
    l(0)

```

```
{
    // on charge le fichier
    xml = Gnome::Glade::Xml::create("fenetre.glade");

    // on récupère des pointeurs sur les éléments de l'interface
    xml->get_widget("vbox1", v);
    xml->get_widget("label1", l);

    // on déplace la VBox de l'instance générée par le fichier glade
    // vers la fenêtre courante
    xml->reparent_widget("vbox1", *this);

    // on connecte deux boutons
    b1.signal_clicked().connect(SigC::slot(*this, &Gtk::Window::hide))
    ;
    b2.signal_clicked().connect(SigC::slot(*this, &Gtk::Window::hide))
    ;

    // on ajoute les deux boutons précédents dans notre VBox qui
    // appartient à cette instance
    v->add(b1);
    v->add(b2);

    // on affiche tout le monde
    v->show_all_children();
}

int main(int argc, char ** argv)
{
    Gtk::Main application(&argc, &argv);
    Fenetre f;
    application.run(f);
}
```

Chapter 21

Makefiles

21.1 Fortran

```
#####  
### General syntax  
# target: dependencies  
# command  
#  
### Variables : in a command:  
# $@ : target name  
# $< : current(first) dependency  
# $ĖĖ : all dependency, even in other folders(cf VPATH)  
# $? : dependency that have been modified (were not up to date)  
# $* : target name without extension (%)  
# * : like in a shell, *.c *.o  
# In target and dependency  
# % : particular target or rule  
#  
# Functions $( )  
# SRC=$(wildcard *.o)  
#####  
FC = ifort  
CC = gcc  
FFLAGS = -g  
CFLAGS = -Df2cFortran  
LDFLAGS =  
INCLS =  
BINNAME =  
NWTCLIB = ../../NWTC_Lib/Source/  
INFLOWLIB = ../../InflowWind/Source/  
PATHSEP =:  
#####  
  
SRC=$(wildcard *.f90)  
OBJ= $(patsubst %.f90,%.o,$(SRC))  
  
all: $(OBJ)  
  
init:  
@echo $(SRC)  
@echo $(OBJ)
```

```

@cd $(NWTCLIB) ; $(MAKE) all);
@cd $(INFLOWLIB) ; $(MAKE) all);

clean:
  rm *.mod *.o

%.o: %.f90
  $(FC) $(FFLAGS) $(INCLS) -c $< -I$(NWTCLIB) -I$(INFLOWLIB)

AeroDyn.o : SharedTypes.o AeroMods.o AeroSubs.o
AeroSubs.o: GenSubs.o AeroMods.o
GenSubs.o : AeroMods.o

```

21.2 Latex

```

#-----
# DOCUMENT OPTIONS
#-----
MASTER=WTbook-Branlard
OS=WINDOWS
USE_BIBTEX=1
USE_MAKEINDEX=1
USE_MAKEGLOSS=0
USE_PSTRICKS=0
#-----
# PATHS
#-----
FIGSDIR=figs
FIGSDUMPDIR=figsdump
SVGDIR=svg
SVGTEXDIR=svgtex
BIBDIR=bib
SRCDIR=.
#-----
# BINARIES
#-----
ifeq ($(OS),Windows_NT)
  LATEX = C:/Unix/Miktex/miktex/bin/latex
  BIBTEX = C:/Unix/Miktex/miktex/bin/bibtex
  DVIPS = C:/Unix/Miktex/miktex/bin/dvips
  PDFLATEX = C:/Unix/Miktex/miktex/bin/pdflatex
  MAKEINDEX= C:/Unix/Miktex/miktex/bin/makeindex
  LATEXHTML= C:/Unix/Miktex/miktex/bin/latex2html
  PS4PDF= ps4pdf
else
  LATEX = latex
  BIBTEX = bibtex
  DVIPS =dvips
  PDFLATEX =pdflatex
  MAKEINDEX= makeindex
  LATEXHTML= latex2html
  PS4PDF= ps4pdf
endif
test:

```

```

@echo Done
@echo $(LATEX)

CONVERT=convert
LN=ln
PDFTOEPS=pdftops -eps
EPSTOPDF=epstopdf
SVGTOLATEX=svg2latex.py
SVGTOPDF=inkscape -D -A
SVGTOEPS=inkscape -D -E

#-----
# FLAGS
#-----
TEX_FLAGS = --file-line-error-style --interaction=nonstopmode
BIB_FLAGS =
HTML_FLAGS =
PDFLATEX_FLAGS = --file-line-error-style --interaction=nonstopmode
PS2PDF_FLAGS = -dMaxSubsetPct=100 -dCompatibilityLevel=1.2 -
               dSubsetFonts=true -dEmbedAllFonts=true
MAKEINDEX_FLAGS = -s pre/index_style.ist
MAKEGLOSS_FLAGS = -s pre/glossaire_style.ist
DVIPS_FLAGS = -Ppdf -G0

#-----
# SRC FILES
#-----
FIGS=$(notdir $(wildcard $(FIGSDUMPDIR)/*))
FIGSRC=$(patsubst %, $(FIGSDUMPDIR)/%, $(FIGS))

TEXSRC = $(wildcard $(SRCDIR)/pre/*.tex) \
         $(wildcard $(SRCDIR)/tex/*.tex)

BIBSRC = $(wildcard $(BIBDIR)/*.bib)
# Using Bibtex
ifneq ($(strip $(BIBSRC)),)
BBLSRC = $(MASTER).bbl
endif

#-----
# Display Codes (this is so we can track passes)
#-----
SETCOLOR_BLACK = @echo "\\033[0;30m"
SETCOLOR_RED = @echo "\\033[0;31m"
SETCOLOR_GREEN = @echo "\\033[0;32m"
SETCOLOR_BLUE = @echo "\\033[0;34m"

#-----
# PNG
#-----
PNGS=$(notdir $(wildcard $(FIGSDUMPDIR)/*.png))
PNGS2EPSS=$(patsubst %, $(FIGSDIR)/%, $(PNGS:.png=.eps))
PNGS2PDFS=$(patsubst %, $(FIGSDIR)/%, $(PNGS:.png=.pdf))
#-----

```

```

# JPG
#
JPGS=$(notdir $(wildcard $(FIGSDUMPPDIR)/*.jpg))
JPGS2EPSS=$(patsubst %,$(FIGSDIR)/%,$(JPGS:.jpg=.eps))
JPGS2PDFS=$(patsubst %,$(FIGSDIR)/%,$(JPGS:.jpg=.pdf))
#
# EPS
#
EPSS=$(notdir $(wildcard $(FIGSDUMPPDIR)/*.eps))
EPSS2EPSS=$(patsubst %,$(FIGSDIR)/%,$(EPSS:.eps=.eps))
EPSS2PDFS=$(patsubst %,$(FIGSDIR)/%,$(EPSS:.eps=.pdf))
#
# PDF
#
PDFS=$(notdir $(wildcard $(FIGSDUMPPDIR)/*.pdf))
PDFS2EPSS=$(patsubst %,$(FIGSDIR)/%,$(PDFS:.pdf=.eps))
PDFS2PDFS=$(patsubst %,$(FIGSDIR)/%,$(PDFS:.pdf=.pdf))
#
# SVGTEX
#
SVGTEXS=$(notdir $(wildcard $(SVGTEXDIR)/*.svg))
SVGTEXS2PDFS=$(patsubst %,$(FIGSDIR)/%,$(SVGTEXS:.svg=.pdf))
SVGTEX2SEPSS=$(patsubst %,$(FIGSDIR)/%,$(SVGTEXS:.svg=.eps))
#
# SVG
#
SVGS=$(notdir $(wildcard $(SVGDIR)/*.svg))
SVGS2PDFS=$(patsubst %,$(FIGSDIR)/%,$(SVGS:.svg=.pdf))
SVGS2SEPSS=$(patsubst %,$(FIGSDIR)/%,$(SVGS:.svg=.eps))
#

#
# CONVERSION TO EPS
#
$(FIGSDIR)/%.eps : $(FIGSDUMPPDIR)/%.png
    $(CONVERT) "$<" EPS3:"$@"

$(FIGSDIR)/%.eps : $(FIGSDUMPPDIR)/%.jpg
    $(CONVERT) "$<" EPS3:"$@"

$(FIGSDIR)/%.eps : $(FIGSDUMPPDIR)/%.pdf
    $(PDFTOEPS) "$<" "$@"

$(FIGSDIR)/%.eps : $(FIGSDUMPPDIR)/%.eps
    $(LN) "$<" "$@"

$(FIGSDIR)/%.eps : $(SVGTEXDIR)/%.svg
    $(SVGTOLATEX) -f "$<" -l "$(FIGSDIR)/$*.tex" -e -o

$(FIGSDIR)/%.eps : $(SVGDIR)/%.svg
    $(SVGTOEPS) "$@" "$<"

#
# CONVERSION TO PDF
#
$(FIGSDIR)/%.pdf : $(FIGSDUMPPDIR)/%.png

```

```

$(CONVERT) "$<" "$@"

$(FIGSDIR)/%.pdf : $(FIGSDUMPDIR)/%.jpg
$(CONVERT) "$<" "$@"

$(FIGSDIR)/%.pdf : $(FIGSDUMPDIR)/%.eps
$(EPSTOPDF) "$<" --outfile="$@"

$(FIGSDIR)/%.pdf : $(FIGSDUMPDIR)/%.pdf
$(LN) "$<" "$@"

$(FIGSDIR)/%.pdf : $(SVGTEXDIR)/%.svg
$(SVGTOLATEX) -f "$<" -l "$(FIGSDIR)/$*.tex" -o

$(FIGSDIR)/%.pdf : $(SVGDIR)/%.svg
$(SVGTOPDF) "$@" "$<"

#-----
# MAIN COMMANDS
#-----
all : allpdf

allpdf : figspdf pdfall

# $(MASTER).pdf

#$(MASTER).pdf $(TEXSRC) $(FIGSRC) $(BIBSRC)

clean :
@rm -f *.aux *.bbl *.blg *.log *.dvi *.idx *.ilg *.ind *.toc *.lot *.thm
*.cb *.cb2 *.gls *.mtc0\
*.lof *~ *.bak *.blg *.exa *.adx *.bmt *.mtc *.out *.som *.glo *.glx *.
tns *.tpt *.maf *.brf

cleansvgs :
rm -f $(SVGTEXS2PDFS) $(SVGS2PDFS)

figssvg : $(SVGTEXS2PDFS) $(SVGS2PDFS)

cleanfigs :
rm -f $(FIGSDIR)/*

figspdf : $(JPGS2PDFS) $(PNGS2PDFS) $(SVGTEXS2PDFS) $(SVGS2PDFS) $(
EPSS2PDFS) $(PDFS2PDFS)

figseps : $(JPGS2EPSS) $(PNGS2EPSS) $(SVGTEXS2EPSS) $(SVGS2EPSS) $(
EPSS2EPSS) $(PDFS2EPSS)

fipspng :

figslower :

```



```

for i in figsdump/* ;do ext='echo $$i#*./|tr '[:upper:]' '[:lower:]' ';
    mv "$$i" "$${i%.*}.$$ext"; done

#-----
# SEQUENCES
#-----

pdf:
    $(PDFLATEX) $(PDFLATEX_FLAGS) $(MASTER)

pdfall:
ifeq $(USE_PSTRICKS),1)
    @echo "===== PSTRICKS"
    "
    $(PS4PDF) $(MASTER).tex
endif
    @echo "===== PDFLATEX1"
    "
    $(PDFLATEX) $(PDFLATEX_FLAGS) $(MASTER)
ifeq $(USE_BIBTEX),1)
    @echo "===== BIBTEX"
    "
    $(BIBTEX) $(BIB_FLAGS) $(MASTER)
endif
ifeq $(USE_MAKEINDEX),1)
    @echo "===== MAKEINDEX"
    "
    $(MAKEINDEX) $(MAKEINDEX_FLAGS) $(MASTER)
endif
ifeq $(USE_MAKEGLOSS),1)
    @echo "===== MAKEGLOSS"
    "
    $(MAKEINDEX) $(MAKEGLOSS_FLAGS) -o $(MASTER).gls $(MASTER).glo
endif
    @echo "===== PDFLATEX2"
    "
    $(PDFLATEX) $(PDFLATEX_FLAGS) $(MASTER)
    @echo "===== PDFLATEX3"
    "
    $(PDFLATEX) $(PDFLATEX_FLAGS) $(MASTER)

    #~ $(LATEX) $(TEX_FLAGS) $(MASTER)
    #~ $(DVIPS) $(DVIPS_FLAGS) -o $(FIGSDIR)/PSTRICKSFIGURES.ps $(MASTER).
    dvi
    #~ $(PS2PDF) -dAutoRotatePages=/None pst-pdf-example1-
    pics.pdf
    #~ $(PDFLATEX) $(PDFLATEX_FLAGS) $(MASTER)

latexquick:
    $(LATEX) $(MASTER)

latex:
    $(LATEX) $(TEX_FLAGS) $(MASTER)
    $(BIBTEX) $(BIB_FLAGS) $(MASTER)
    $(LATEX) $(TEX_FLAGS) $(MASTER)
    $(LATEX) $(TEX_FLAGS) $(MASTER)

```

```

#-----
# LATEX
#-----
# To accomplish 2 compilation we chain from tex->aux->dvi

# To generate a .aux file from a .tex file

# To generate a .dvi file from a .tex file
$(MASTER).dvi : $(MASTER).aux
    $(LATEX) $(TEX_FLAGS) $< >/dev/null

# To generate a .ps file from a .dvi file
$(MASTER).ps : $(MASTER).dvi
    $(DVIPS) $(DVIPS_FLAGS) -o $@ $<

#-----
# INDEX
#-----
index: $(MASTER).aux $(MASTER).idx $(MASTER).ilg $(MASTER).ind

# To generate a .idx file from a .tex file
%.ilg : %.idx
    $(MAKEINDEX) $(MAKEINDEX_FLAGS) $(*F)

bibindex : bibtex index
    #makeindex -s bibidx/manuel.ist $(MASTER)
    #makeindex -s bibidx/glossaire.ist $(MASTER).glo -o $(MASTER).glx
    #bibtex $(MASTER)

#-----
# HTML Output
#-----
html : $(MASTER).html fipspng

#-----
# PDFLATEX
#-----
$(MASTER).pdf : $(MASTER).tex
    $(PDFLATEX) $(PDFLATEX_FLAGS) $<

%.aux : %.tex
    $(PDFLATEX) $(PDFLATEX_FLAGS) $<

#-----
# BIBTEX
#-----
%.bbl : %.tex
ifneq ($(strip $(BIBSRC)),)
    echo "Here"
    $(BIBTEX) $(BIB_FLAGS) $(*F)

```

```
endif
```

```
# Dependencies
```

```
##$(MASTER).tex : $(TEXSRC) $(FIGSRC)
```

```
##$(MASTER).aux : $(TEXSRC) $(FIGSRC) $(BLSRC)
```

```
##$(MASTER).bbl : $(BLSRC) $(MASTER).aux
```

```
##$(MASTER).pdf : $(MASTER).aux $(TEXSRC) $(FIGSRC) $(BLSRC) $(BLSRC)
```

```
##$(MASTER).dvi : $(TEXSRC) $(FIGSRC) $(BLSRC)
```

Chapter 22

Kernel compilation

```
## Solution a la main (modules_installes fout les modules dans /lib/
modules )
# cd /usr/src/linux
# make clean
# make menuconfig
# make && make modules_install
# make install

# cp arch/i386/boot/bzImage /boot/kernel-2.6.26-x-y
# cp .config /boot/config-2.6.26-x-y
# vi /boot/grub/grub.conf
# reboot

## Solution debian simple
# make-kpkg --initrd --revision=1 kernel_image kernel_headers
# cd ../
# dpkg -i linux*.deb

## Solution debian avec compilations modules
# man make-dpkg
# put modules sources in /usr/src/modules (default location)
make-kpkg --initrd --append-to-version=.rastamanu --revision=2 --added-
modules=nvidia-kernel,broadcom-sta kernel_image kernel_headers modules
_image

make-kpkg --append-to-version=.batmanu --revision=1 --added-modules=nvidia
-kernel,broadcom-sta kernel_image kernel_headers modules_image

make-kpkg --append-to-version=.ironmanu --revision=1 --added-modules=
nvidia-kernel,broadcom-sta kernel_image kernel_headers modules_image

after install, the modules are in the folder /lib/modules/

(default locations for modules sources)
/usr/src/modules
```

```
(
make-kpkg kernel_source
make-kpkg kernel_doc
)

## Solution debian Target buildpackage cree tous les deb : kernel_image,
dbg, headers, doc, etc...
su -c 'make-kpkg --initrd buildpackage'
cd ..
su -c 'dpkg -i linux*.deb'
```

Livre utile – Linux Kernel in a Nutshell

<http://www.kroah.com/lkn/>

-> Principe

Tout ce qui doit être chargé en permanence a compiler en dur (ext3, acpi **et** co...) **et** le reste en module (cryptage notamment)

Dépendances

→ Paquets basique :

```
sudo aptitude install build-essential kernel-package initramfs-tools
    fakeroot debconf-utils dpkg-dev debhelper bin86
```

→ Paquets pour créer le ".config"

".config", c'est le fichier de configuration contenant les instructions de compilation.

*Pour une interface graphique (bleue) en console : installez le paquet libncurses5-dev

Pour une interface en TK : installez le paquet tk-dev

*Pour une interface en GTK+ (noyau 2.6 seulement) : installez les paquets libglib2.0-dev libgtk2.0-dev libglade2-dev

Pour créer une configuration en mode console :

```
make config ## Déconseillé pour les débutants et même les autres
```

Pour créer une configuration en mode semi-graphique (menu bleu) :

```
make menuconfig
```

Pour créer une configuration en GTK :

```
make gconfig
```

Pour créer une configuration en TK ou en QT :

```
make xconfig
```

→ Droit d'écriture pour les sources :

```
$groups
```

Si vous n'appartenez pas au groupe "src", ajoutez-vous :

```
$sudo adduser $USERNAME src ## besoin de se fermer la session pour que
    cette commande prenne effet.
```

```
$sudo chown $USERNAME /usr/src ## si la commande du dessus ne vous donne
    pas l'accès en écriture du dossier /usr/src...
```

Il faut maintenant se reconnecter sous votre login pour que les nouveaux droits soit fonctionnels.

```
su - $USERNAME ## Entrer votre mot de passe
```

Allez dans le répertoire /usr/src :

```
cd /usr/src
```

Téléchargement des sources

-> Le kernel

Telecharges le dernier kernel stable [http://www.kernel.org/pub/linux/kernel/...4.tar.bz2](http://www.kernel.org/pub/linux/kernel/...) (wget ...)

OU

```
#aptitude search linux-source
# aptitude install linux-source-2.6.24
(placé dans /usr/src/)
```

Avec votre utilisateur , placez vous dans votre répertoire personnel ``${HOME}` } puis créez un répertoire `src/`, décompactez l'archive contenant les sources du noyau :

```
$ mkdir `${HOME}/src && cd `${HOME}/src/
```

```
$ tar -xvf /usr/src/linux-source-2.6.24.tar.bz2
```

Vous obtenez un répertoire ``${HOME}/src/linux-source-2.6.24`. Nous allons faire un lien symbolique pointant sur le répertoire précédemment créé **et** nous placer enfin dans le répertoire des sources :

```
$ ln -s `${HOME}/src/linux-source-2.6.24 `${HOME}/src/linux
```

-> les modules complémentaires : `alsa` **et** `nvidia` (installer **et** décompacter les sources)

Pour la compilation rajouter :

```
--added-modules=alsa-driver,nvidia-kernel-new
```

La configuration du `.config`

On peut commencer par prendre le `.config` actuel :

```
cp /boot/config*/.config `${HOME}/src/linux/.config
```

Afin de connaître précisément votre matériel, vous pouvez utiliser les commandes

```
$ lspci
```

```
$ lshw, sans oublier l'arborescence /proc/
```

http://doc.ubuntu-fr.org/tutoriel/kernel_options

Les options section par section

- * Code maturity level options: Permet de cacher ou de faire apparaître les options qui sont encore en développement **et** donc considérées comme instables (souvent utile de dire 'oui' ici si l'on veut pouvoir profiter des dernières avancées du noyau).
- * General setup: Ensemble d'options générales sur votre système (sauf si vous voulez compiler pour des architectures très particulières, vous pouvez le laisser tel quel).
- * Loadable module support: Options concernant la gestion des modules (le défaut est presque toujours correct pour une utilisation normale).
- * Block layer: Les entrées/sorties sur votre carte-mère (inutile d'y toucher).
- * Processor **type** and features: Options relatives au(x) processeur(s): **type** (x86, Sparc, ...), hyper-thread, dual-core, SMP, etc.
- * Power management options (ACPI, APM): Options concernant l'économie d'énergie, la mise en veille **et** l'ACPI/APM.
- * Bus options (PCI, PCMCIA, EISA, MCA, ISA): Gestion de tous les endroits où vous pourriez enficher des cartes (PCI, PCMCIA, ISA, etc).
- * Executable file formats: La gestion des fichiers exécutable (Le support ELF doit toujours être à 'Y').
- * Networking: Options concernant les protocoles réseau gérés par votre noyau (le défaut est bien souvent suffisant, mais jetez y un coup d'oeil à tout hasard).
- * Device Drivers: Options concernant tous les pilotes matériel (c'est bien souvent ici que l'on passe le plus de temps).
- * File systems: Options concernant les systèmes de fichiers gérés par votre noyau (vous aurez à y jeter un coup d'oeil).
- * Instrumentation Support: Option de profilage du noyau (inutile de l'activer).
- * Kernel hacking; Options de débogage du noyau (inutile de l'activer sauf si vous avez des envies particulières).
- * Security options: Options concernant le modèle de sécurité de votre noyau (le défaut est suffisant)
- * Cryptographic options: Algorithmes cryptographiques pouvant être implantés dans le noyau (le défaut est suffisant).
- * Library routines: Bibliothèques communes du noyau (le défaut est suffisant)

La compilation

-> Options :

- Les modules complémentaires :
 - added-modules=alsa-driver,nvidia-kernel-legacy
- Ajouter un nom de version :
 - append-to-version=.‘date +%y%m%d‘
- Si fakeroot installé
 - rootcmd fakeroot
- initrd

Cela permet de créer un fichier initrd. Cela est particulièrement utile si vous souhaitez utiliser des modules du noyau afin qu’ils soient pris en compte dès l’amorçage de l’image de votre noyau.

Notez que cette option nécessite le paquet `initramfs-tools`, que vous pouvez installer en tapant :

```
# aptitude install initramfs-tools
```
- les cibles de `make-kpkg` : sont par exemple `clean`, `binary` (fait `.deb` `doc` `etc` **et** `grub`), `kernel_image` (fait `.deb` **et** `grub`), ou `buildpackage` (qui fait `clean` **et** `binary`)

-> Compilation

Sous Ubuntu :

```
sudo make-kpkg --initrd buildpackage
```

Sous Debian

```
su -c 'make-kpkg --initrd buildpackage'
```

Retournez dans le dossier précédent :

```
cd ..
```

```
su -c 'dpkg -i linux*.deb'
```

Installation des *.deb

Sous Ubuntu

```
sudo dpkg -i linux*.deb
```

Sous Debian

```
su -c 'dpkg -i linux*.deb'
```

Desinstallation du kernel

```
aptitude remove --purge kernel-image-2.6.7-‘date +%y%m%d‘
```

http://doc.ubuntu-fr.org/tutoriel/comment_compiler_un_kernel_de_kernel.org

<http://www.andesi.org/noyau:compilation-d-un-noyau-a-la-sauce-debian>

```
http://gershwin.ens.fr/vdaniel/Doc-Locale/Outils-Gnu-Linux/Linux_Doc/YAGIL-2.2.1/HTML/c4517.html
```

Chapter 23

Old notes on linux

23.1 Google Earth

```
sudo aptitude install googleearth--package
make--googleearth--package
sudo dpkg -i googleearth_4.2.205.5730+0.5.2-1_i386.deb
```

23.2 Matlab : Ajouter un repertoire dans la variable PATH

Unix Systems

On a Unix computer you can **set** the MATLABPATH environment variable by typing something like the following at the sytem prompt (not the MATLAB prompt). Si plusieurs paths, les concatener avec ":".
export MATLABPATH=/home/share/Config/matlab

It doesn't seem to work, so use Matlab directly : File / Set Path ...
If you don't have writing rights, **then** save pathdef.m and copy it to the bin directory of matlab

23.3 Configure skype sound

Son entrant : HDAINTEL
Le plus important :
Digital input **source** must be digital mic 1, instead of analog input

Plus clairement :
Avec xfce4-mixer :
Onglet Capture :
Capture **et** digital en mode en registrement
Onglet Options :
MicJacMode Mic In
Playback Source: Analog mux 1

Peut-etre : virer pulseaudio

23.4 Hacker xterm - source code

```
http://www.davidsimmons.com/soft/xtermhacks/
Source code :
http://invisible-island.net/xterm/xterm.html
```

23.5 Configurer Geany

```
http://marcimat.magraine.net/Geany-SVN-et-plugins-sous-Ubuntu
```

Transformer les caractères accentués en un coup de crayon

```
* sudo aptitude install recode
* Clic droit dans geany > format > envoyer s'éllection > définir une
  commande personnalisée
* ajouter recode ..html
* Puis Editer > préférences > raccourcis > format > Envoyer vers la
  commande personnalisée 1. Sélectionner votre raccourci... pour
  moi, ce sera : control+&
```

23.6 Télécharger les jaquettes des pistes de la liste de lecture d'amarok dans leur dossier

```
for ((i=0;i<`dcop amarok playlist getTotalTrackCount`;i++)) ; do echo "
  Traitement de : `dcop amarok player nowPlaying`; cp -f "$(dcop amarok
  player coverImage)" "$(dirname "$(dcop amarok player path)"/"$(dcop
  amarok player artist)" -\ "$(dcop amarok player album)".jpg"; dcop
  amarok player next ; done
```

```
for ((i=0;i<`dcop amarok playlist getTotalTrackCount`;i++)) \
do echo "Traitement de : `dcop amarok player nowPlaying`; \
cp "$(dcop amarok player path)" "$(dcop amarok player nowPlaying)"
dcop amarok player next ; \
done;
```

23.7 Config souris logitech lx8 left handed

```
http://tuxtweaks.com/2008/09/how-to-south-paw-logitech-lx8-in-linux/
# tout d'abord la config de base de xorg.conf
```

```
Section "InputDevice"
  Identifier      "Configured Mouse"
  Driver          "mouse"
  Option          "CorePointer"
  Option          "Device" "/dev/input/mice"
  Option "Protocol" "ExplorerPS/2"
  Option "ZAxisMapping" "4 5"
  Option "ButtonMapping" "1 2 3 8 9 6 7" #RH
  # Option "ButtonMapping" "3 2 1 9 8 6 7" #LH
EndSection
```

```
# Ensuite gere l'alternance avec xmodmap dans .bashrc
```

```
# aliases for left and right handed Logitech LX8 mice
alias lhm='xmodmap -e "pointer = 3 2 1 4 5 7 6 8 9"'
alias rhm='xmodmap -e "pointer = 1 2 3 4 5 6 7 8 9"'

## faire marcher le scoll horizontal
#http://tuxtweaks.com/2008/12/update-logitech-lx8-in-ubuntu/
```

23.8 Mise en veille et hibernation qui plante avec cartes Nvidia

```
Rajouter dans la section device de /etc/X11/xorg
Option      "NvAGP" "1"
Option      "NoLogo" "true"

Peut etre Modifier /etc/acpi/sleep.sh
# Ajout sinon crash on resume. Copie ligne de hibernation.sh
# Unset video posting
unset POST_VIDEO

Si la mise en veille sur ram (suspendre) ou sur disque (hiberner) ne
fonctionne pas, il est possible d'utiliser une autre méthode utilisant
le paquet apt://uswsusp.

http://www.shallowky.com/linux/x-screen-blanking.html
```

23.9 Equivalent win split revolution with wmctrl - raccourcis clavier xfce

```
SEE MY SECTION ON TILING!!!!!! USE PYWO

Les raccourcis clavier xfce sont stockes dans :
.config/xfce4/xfconf .... shortcurts.xml

Modifier le fichier xfce
.config/xfce4/xfconf .... shortcurts.xml

sudo aptitude install wmctrl

TopLeft:
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 1,83,0,664,460

TopRight:
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 0,745,0,664,460

Bottom Left:
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 1,83,444,664,444

Bottom Right:
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 0,745,445,664,444
```

```
bottom :
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 0,83,445,1322,444
```

```
top :
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 0,83,0,1322,460
```

```
left :
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 1,83,0,664,886
```

```
right :
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 0,745,0,664,886
```

```
Middle :
wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;wmctrl -r :
ACTIVE: -e 0,83,0,1322,898
```

```
Modifier le fichier xfce
.config/xfce4/xfconf .... shortcuts.xml
```

```
<channel name="xfce4-keyboard-shortcuts" version="1.0">
  <property name="commands" type="empty">
    <property name="default" type="empty">
      <property name="&lt ;Alt&gt ;F2" type="empty"/>
      <property name="&lt ;Control&gt ;&lt ;Alt&gt ;Delete" type="empty"/>
      <property name="XF86Display" type="empty"/>
      <property name="Print" type="empty"/>
      <property name="&lt ;Alt&gt ;Print" type="empty"/>
    </property>
    <property name="custom" type="empty">
      <property name="&lt ;Alt&gt ;F2" type="string" value="xfrun4"/>
      <property name="&lt ;Control&gt ;&lt ;Alt&gt ;Delete" type="string"
        value="xflock4"/>
      <property name="XF86Display" type="string" value="xrandr --auto"/>
      <property name="override" type="bool" value="true"/>
      <property name="XF86AudioMute" type="string" value="aumix -v0"/>
      <property name="XF86AudioRaiseVolume" type="string" value="aumix -v
        +10"/>
      <property name="&lt ;Control&gt ;Escape" type="string" value="xfce4-
        popup-menu"/>
      <property name="&lt ;Meta&gt ;F1" type="string" value="xfhelp4"/>
      <property name="&lt ;Control&gt ;&lt ;Meta&gt ;Delete" type="string"
        value="xflock4"/>
      <property name="&lt ;Meta&gt ;F2" type="string" value="xfrun4"/>
      <property name="&lt ;Control&gt ;&lt ;Meta&gt ;Escape" type="string"
        value="xkill"/>
      <property name="XF86AudioLowerVolume" type="string" value="aumix -v
        -10"/>
      <property name="&lt ;Super&gt ;r" type="string" value="xterm -fa
        Monospace -fs 11 -fg &quot ;green&quot ; -bg &quot ;black&quot ;"/>
      <property name="&lt ;Super&gt ;e" type="string" value="thunar"/>
      <property name="&lt ;Control&gt ;&lt ;Alt&gt ;KP_1" type="string" value=
        "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
        wmctrl -r :ACTIVE: -e 0,0,445,644,430"/>
      <property name="&lt ;Control&gt ;&lt ;Alt&gt ;KP_9" type="string" value=
        "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
```

```

    wmctrl -r :ACTIVE: -e 0,738,0,644,430"/>
    <property name="&lt ; Control&gt;&lt ; Alt&gt;KP_4" type="string" value=
    "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
    wmctrl -r :ACTIVE: -e 0,0,0,644,876"/>
    <property name="&lt ; Control&gt;&lt ; Alt&gt;KP_2" type="string" value=
    "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
    wmctrl -r :ACTIVE: -e 0,738,445,1298,430"/>
    <property name="&lt ; Control&gt;&lt ; Alt&gt;KP_3" type="string" value=
    "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
    wmctrl -r :ACTIVE: -e 0,738,445,644,430"/>
    <property name="&lt ; Control&gt;&lt ; Alt&gt;KP_8" type="string" value=
    "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
    wmctrl -r :ACTIVE: -e 1,0,0,1298,430"/>
    <property name="&lt ; Control&gt;&lt ; Alt&gt;KP_7" type="string" value=
    "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
    wmctrl -r :ACTIVE: -e 1,1,0,644,430"/>
    <property name="&lt ; Control&gt;&lt ; Alt&gt;KP_5" type="string" value=
    "wmctrl -r :ACTIVE: -b add,maximized_vert,maximized_horz"/>
    <property name="&lt ; Control&gt;&lt ; Alt&gt;KP_6" type="string" value=
    "wmctrl -r :ACTIVE: -b remove,maximized_vert,maximized_horz;
    wmctrl -r :ACTIVE: -e 0,738,0,644,876"/>
  </property>
</property>

```

23.10 Tip XFCE : How to include all application while switching windows

There are some hidden option with Xfce that allows the panel as well as apps like Gkrellm to be included **while** you switch from one window to another with the Alt+Tab shortcut.

Just edit the file `~/.config/xfce4/xfwm4/xfwm4rc` and add the line below

```
cycle_minimum=false
```

23.11 Migrate from Ext3 a Ext4

```

% References
Inspire de :
http://www.webstrat.fr/blog/web-technology/migrer-ses-partitions-ext3-vers-ext4-sous-linux-ubuntu

Rescue CD utilise: (il faut un version recente pour avoir le support ext4)
http://www.sysresccd.org/Sysresccd-manual-en_How_to_install_SystemRescueCd_on_an_USB-stick

% Intro
Ci-dessous comment migrer la partition systeme du format ext3 a ext4.
Pour eviter toute perte de donnee, on va d'abord tester sur une partition
intermediaire, puis ensuite recommencer la meme operation, de sorte qu'
on a toujours une partition avec un system complet.
(si partition home separee, idem mais moins dur)
% Step 1
Partition systeme: sda3

```

```

Avec gparted , creer une partition ext 4 aussi grande que sda3 -> ici sda9

% Step 2
Booter sur un live CD avec support ext4 et grub (sur clef USB, c'est
beaucoup plus rapide!)
- monter les deux partitions
mount -t ext3 /dev/sda3 /mnt/deb3
mount -t ext4 /dev/sda9 /mnt/deb4
- copier de l'un a l'autre (v pour versatile):
rsync -av /mnt/deb3/* /mnt/deb4/
(Perso, sous mon systeme (pas le live CD), j'ai fait la copie de tous les
gros repertoires de "/" sauf /sys, /proc et /dev avec la commande
cp -a /bin /boot /var /etc/ /usr /opt /lib /media/PartitionExt4
Le "-a" est important pour les liens symboliques!
Puis, sous le live CD, j'ai finalisÃ© avec un rsync. Ca permet de
continuer a bosser sur son systeme normal pendant la copie de la
plupart des fichiers systemes. )

% Step 3 (Sous le live CD toujours)
- on install le grub de sda9 dans le MBR
grub-install --root-dir=/mnt/deb4 /dev/sda
- A ce stade, si on redemarre on aura toujours le systeme precedent, car
les fichiers du boot de sda9 sont identiques a ceux de sda3 et donc
referent au boot de sda3 (hd0,2). Du coup, il faut modifier le fichier
/mnt/deb4/boot/menu.lst et remplacer les (hd0,2) par (hd0,8) et sda3
par sda9.

% Step 4 (Sous le live CD toujours)
on modifie le /etc/fstab pour que la partition / soit bien sda9

% Step 5
- on redemarre
- au menu grub, on verifie que c'est bien le grub de sda9
- on verifie que c'est bien le systeme de sda9 qui est lance est pas celui
de sda3
- une fois le system en place, on fait un update-grub.

% Step 6
Si tout marche impeccable, on recommence tout. On formate sda3, on copie
de sda9 a sda3, installe grub et fstab, redemarrage, tests, update-grub
et on supprime sda9.

```

23.12 Fluxbox et wifi

```

dans le .fluxbox de home, rajouter :
nm-applet &

```

```

btw networkmanager need hal and dbus to be started.
DAEMONS=(syslog-ng !network hal dhcdd networkmanager netfs crond ipw3945d
)

```

23.13 WIFI, et GESTIONNAIRE DE TROUSSEAU

Avoir sa connexion wifi mais a chaque fois Ãtre obligÃ de rentrer le mot de passe du trousseau pour pouvoir se connecter, c'est un peu lourd, surtout quand vous Ãtes tout seul sur votre machine, nous allons donc automatiser tout Ãa grace Ã PAM qui gÃre l'authentification automatique.

Il vous faut avant tout installer ceci =>

```
Code:
build-essential
libtool
libglib2.0-dev
libgnome-keyring-dev
libpam0g-dev
```

Ensuite installez ceci `pam_keyring`.

Maintenant vous avez juste Ã configurer le fichier `gdm` dans `/etc/pam.d/`.

ajoutez Ã la fin du document =>

```
Code:
auth optional pam_keyring.so try_first_pass
session optional pam_keyring.so
```

23.14 Probleme gnome barre verticale - liste de fenetres

<https://bugs.launchpad.net/ubuntu/+source/gnome-panel/+bug/187540>

I've created patches **for** `gnome-panel` and `libwnck` solving this bug.

Applicable **for** `gnome-panel 1:2.22.2-0ubuntu1` and `libwnck22 2.22.1-0ubuntu1` as they are in Hardy.

Dans un premier temps on telecharge les outils necessaires, les sources **et** paquets d'install. On placera tout ca dans le repertoire `gnomepatch`

Depuis le repertoire perso :

```
mkdir gnomepatch
cd gnomepatch
sudo apt-get install fakeroot
sudo apt-get install devscript
sudo apt-get build-dep gnome-panel
sudo apt-get build-dep libwnck
apt-get source gnome-panel
apt-get source libwnck
```

Ensuite,recuperer les patchs de puis le site

<https://bugs.launchpad.net/ubuntu/+source/gnome-panel/+bug/187540>
(je les ai gardes sur mon disque)

Detarrer `paskma-patch.tar` en mettant tous les fichiers dans notre repertoire `gnomepatch`

Il faudra peutetre modifier les fichiers si les versions sont mauvaises.

Pour moi, `libwnck` en etait a la version 3 **et** non 1.

On patch :

```
patch -p0 < gnome-panel-paskma.patch
patch -p0 < gnome-panel-paskma-chagnelog.patch
patch -p0 < libwnck-paskma.patch
patch -p0 < libwnck-paskma-chagnelog.patch
```

```
cd gnome-panel-2.22.2
debuild -us -uc
cd ..
```

```
cd libwnck-2.22.1
debuild -us -uc
cd ..
```

```
On installe
sudo dpkg -i *.deb
```

23.15 Mot de passe mise en veille

```
gconf-editor
```

Se rendre dans la branche apps > gnome-power-manager > lock

DÃ¢cocher la **case** hibernate pour dÃ¢sactiver le mot de passe lors de la sortie du mode hibernation.

DÃ¢cocher la **case suspend** pour dÃ¢sactiver le mot de passe lors de la sortie du mode veille.

DÃ¢cocher la **case** gnome_keyring_ibernate pour ne pas bloquer le mot de passe du trousseau lors de la sortie du mode veille (par exemple quand on est connectÃ¢ au wifi).

23.16 NetworkManager - wifi au reveil apres mise en veille ou hibernation

```
gconf-editor
```

Se rendre dans la branche apps > gnome-power-manager > general / network_sleep

23.17 Histoire de memoire vive detectee

Compiler le Kernel avec CONFIG_HIGHMEM64G=y ???
car il seblerait que 4Gb ne suffisent pas.

23.18 Debian - conseil

N'oublie pas la ligne suivante dans ton /etc/apt/sources.list de Lenny pour le multimedia:

```
deb http://www.debian-multimedia.org/ lenny main
```

```
http://forum.ubuntu-fr.org/viewtopic.php?id=221929&p
```

```
http://forum.ubuntu-fr.org/viewtopic.php?id=4325
```

```
http://forum.ubuntu-fr.org/viewtopic.php?pid=1008363
```

23.19 Optimisation

```
http://ubuntuforums.org/showthread.php?t=189192&highlight=improve+
performance
```