Checklist for Debian System

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1 Basic Linux terminal operations

The following commands are really important and you will use them a lot

```
ls          # List contents of a directory
ls -lah     # -list -all -humanreadable
man         # Displays manual pages
cat         # Print file in current terminal (quickly look at file contents)
pwd         # Print the current working directory
cd          # Change Directory, you will use this a lot
rm          # Removes Files (forever! be careful) | rmdir for empty directories
cp          # Copy file1 to file2 (cp file1 file2)
mkdir       # Create a new Directory
find -name  # find a file (from the current directory)
grep        # Find words in a file
tar -xvf    # Install Programs on linux that end on .tar.gz
chmod       # Change file Permissions quickly
echo        # Print a string to the terminal, or to file: echo "String" >> a.txt
```

Next, this is how you can quickly handle files in linux

```
# Write a string, or sentence to a file. Using only one ">" will OVERWRITE the
# file if it exists, so be careful. Using two ">>" will append to the file
echo "test" >> a.txt

# You can use the output from one command as the input for another.
# The following command will print ONLY THOSE LINES of a file, that contain
# a specified string.
cat "File.txt" | grep "string"
# If you only want the first line in which it occurs, just pipe it again
cat "File.txt" | grep "string" | head 1
```

2 Program startup

Linux has startup files, that load everytime a certain program is started. **This is very useful**. For example `.bashrc` is loaded, everytime you open a terminal. If you want to tell your terminal, in which paths it has to look for programs, this is where you would do it. Other examples are:

```
/home/yourname/.profile             # Loads on startup
/home/yourname/.vimrc               # Loads on starting vim
/home/yourname/.config/i3/config    # Loads, when i3 is started
```

3 Common Problems

3.1 wpa_supplicant

For automatic network connection make sure that the default interface (in this case `wlp3s0` is configured in your `/etc/network/interfaces`):

```
# The primary network interface
# This makes sure the interface is configured on startup
allow-hotplug wlp3s0
iface wlp3s0 inet
# Give a more verbose output for debugging dhcp
wpa-debug-level 3
# Path to your config file. Make sure it's correct
wpa-conf /etc/wpa_supplicant/wpa_supplicant.conf
```

3.2 Fonts

Installing fonts is difficult. But it doesn't have to be. Just make sure to choose one directory (and only one) to include newly installed fonts from. The default is `/usr/share/fonts/`. Put all fonts you want to install there and run `fc-cache` afterwards. Then, on startup, tell the system where the fonts are by putting the following line into your `/home/yourname/.config/i3/config`:

```
exex xset +fp /usr/share/fonts/
```

3.3 Pc Speaker (beep!)

The Speaker can be quite annoying. To disable it, simply add two lines to `/etc/modprobe.d/blacklist.conf` (the `.conf` is important!!)

```
blacklist pcspkr
blacklist snd_pcsp
```

3.4 Backlight

Configuring xbacklight to change screen brightness is not straightforward. You'll need to make some changes to `/etc/X11/xorg.conf`. If you get the "No outputs have backlight property" error, it is because xrandr/xbacklight does not choose the right directory in `/sys/class/backlight`. You can specify the directory by setting the Backlight option of the device section in xorg.conf. For instance, if the name of the directory is `intel_backlight`, the device section can be configured as follows:

```
/etc/X11/xorg.conf
-------------------
Section "Device"
    Identifier  "Card0"
    Driver      "intel"
    Option      "Backlight"  "intel_backlight"
EndSection
```

After a reboot, you should be able to use the normal commands `xbacklight -dec 20` etc.

3.5 Copy to clipboard in vim

It **IS** possible to yank lines to the system clipboard in vim. Add the following lines to your `.vimrc`

```
"yank to clipboard
if has("clipboard")
    set clipboard=unnamed " copy to the system clipboard

    if has("unnamedplus") " X11 support
        set clipboard+=unnamedplus
    endif
endif
" paste from clipboard
vnoremap <C-c> :w !pbcopy<CR><CR> noremap <C-v> :r !pbpaste<CR><CR>
" }}}
```

Then install `vim-gtk` through your package-manager.

4 Stuff i just cant seem to remember. And tips

- Pavucontrol for microphone levels: `./ts3client_runscript.sh`
  To create bootable usb-drive:

  ```
  sudo dd bs=4M if=/path/to/iso of=/dev/sd$$ status=progress && sync # $$
  ```

- To create FAT32 Filesystem use

  ```
  mkfs -t vfat /dev/sd
  ```

- Copy stuff to clipboard

  ```
  echo "test" | tr -d '\n' | xclip -selection clipboard/primary
  ```

- Colors of urxvt

  ```
  color0  (black) = Black
  color1  (red)   = Red3
  color2  (green) = Green3
  color3  (yellow)    = Yellow3
  color4  (blue)  = Blue3
  color5  (magenta)   = Magenta3
  color6  (cyan)  = Cyan3
  color7  (white) = AntiqueWhite
  color8  (bright black)  = Grey25
  color9  (bright red)    = Red
  color10 (bright green)  = Green
  color11 (bright yellow) = Yellow
  color12 (bright blue)   = Blue
  color13 (bright magenta)    = Magenta
  color14 (bright cyan)   = Cyan
  color15 (bright white)  = White
  ```

- For large screens i recommend adding this to `.Xresources`

```
Urxvt*font: xft:consolas:size=12
```

- The default font (in case you want to revert is `Urxvt*font: 6x13`
  To configure mouse speed:

```
xinput --list                          # Lists all devices (mouse is 10)
xinput --list-props 10                 # Find out Transf. Matrix ID (140)
xinput set-prop 10 140 .5 0 0 0 .5 0 0 0 1  # Set mouse speed to 50%
```

- To connect Apple devices, you need to configure the USB protocol.
  Identify the usbmuxd process: Open up a terminal and type,

```
ps aux | grep usbmux
```

  which should return an output like

```
    usbmux    6781  0.0  0.0 230120  6584 ?        Sl
    09:30   0:00 /usr/sbin/usbmuxd -u -U usbmux
```

  Kill usbmuxd: The highlighted number (6781) above is the process id/number for usbmuxd (unique for all systems and the state of a system). What we want to do is to kill this process and restart it. This can be done by the following command in the terminal,

```
sudo kill -9 6781
```

  restart usbmuxd: With usbmuxd dead we need to manually start it again in order for Ubuntu to one again recognize the iPhone/iPad/iPod. Bring up the terminal once again and type,

```
sudo usbmuxd -u -U usbmux
```