# 1 Latex

## 1.1 makea3.sh

```
pdfnup --nup 2x1 bk11teil1.pdf --a3paper --landscape --outfile ./bk11a3teil1.pdf
pdfnup --nup 2x1 bk11teil2.pdf --a3paper --landscape --outfile ./bk11a3teil2.pdf
```

pdfjam

## 1.2 Serienbrief

## 1.3 Eigenes Package erstellen

## 1.4 Eigenes Style-file erstellen

It worked, thanks ! So the steps are :

1. make the tree : ~/texmf/tex/latex ;
2. copy the .cls and .sty files in /texmf/tex/latex ;
3. check if TEXMFHOME is /texmf
   by running kpsewhich -var-value=TEXMFHOME ;
   if not,
   add export TEXMFHOME= /texmf in the .bashrc file and relog ;
4. run texhash /texmf
   as root?
5. compile the document.

# 2 Git

```
git --version (November 2019: 2.11.0)

git config -l

git init

git add .

git commit

git log

git diff

git status

git status -s
Datei .gitignore: *.temp
```

sign in: klausjunker Password: ...
Hilfe:
https://rogerdudler.github.io/git-guide/index.de.html
oder:
git clone host:/pfad/zum/repository
also:
git clone https://github.com/klausjunker/vimrc

## 2.1 Beispiel: debian-install

git add .
git commit
git push origin master
git clone https://github.com/klausjunker/debian-install

# 3 Mysql einrichten

## 3.1 /etc/skel/.my.cnf

```
[mysql]
prompt=^A^[[1;32m^B\u^A^[[1;31m^B:\N^A^[[1;33m^B[\d]^A^[[1;31m^B>^A^[[m^B\_
```

## 3.2 ~/.my.cnf

```
# Konfigurationsdatei für mysql
[mysql]
prompt=^A^[1;32m^Bu^A^[1;34m^B:\N^A[1;33m^B[\d]^A^[[1;31m^B>^A^[[m^B\_
database=testuser
[client]
user=testuser
password=wichtig
```

### 3.3 jkadd

```
#!/bin/bash
Version="0.5  vom 5.1.2020"
echo "Klaus Junker: $0 --- Version: $Version";
addgroup schueler
#------------------------------------------------------------------------
if (($#<2)); then
echo "Usage: $0 Benutzer Passwort  und optional 4 Bemerkungen";
exit ;
fi
#echo "debug: $1 $2 $3 $4 $5 $6"
#------------------------------------------------------------------------
adduser --ingroup schueler -gecos "$3,$4,$5,$6" --disabled-password $1
usermod --password  `perl -e "print crypt($1,'aa');"` $1
#------------------------------------------------------------------------
mysqluser="'$1'@'localhost'"
mysqluser2="'$12nd'@'localhost'"
echo "database=$1" >> /home/$1/.my.cnf
echo "[client]" >> /home/$1/.my.cnf
echo "user=$1" >> /home/$1/.my.cnf
echo "password=$2" >> /home/$1/.my.cnf
#echo debug: $mysqluser, $mysqluser2
#------------------------------------------------------------------------
mysql -e "create user $mysqluser   identified by '$2';"
mysql -e "create user $mysqluser2  identified by '$2';"
mysql -e "create database $1;"
mysql -e "create database $12nd;"
mysql -e "grant all on $1.* to $mysqluser;"
mysql -e "grant all on $12nd.* to $mysqluser2;"
#------------------------------------------------------------------------
for i in {1..9..1}
  do
    mysql -e "create database $1_$i;"
    mysql -e "grant all on $1_$i.* to $mysqluser;"
  done
mysql -e "flush privileges;"
#------------------------------------------------------------------------
```

### 3.4 jkdel

```
#!/bin/bash
Version="0.5  vom 5.1.2020"
echo "Klaus Junker: $0  --- Version: $Version";
# Klaus Junker
if (($#<2)); then
  echo "Usage: $0 Benutzer yes";
exit ;
fi
if [ "$2" = "yes" ]; then
  echo "delete $1"
  userdel -r $1
  mysqluser="'$1'@'localhost'"
  mysql -e "drop user if exists $1@localhost;"
  mysql -e "drop user if exists $12nd@localhost;"
  mysql -e "drop database if exists $1;"
  mysql -e "drop database if exists $12nd;"
  for i in {1..9..1}
    do
      mysql -e "drop database if exists $1_$i;"
    done
  mysql -e "flush privileges;"
else
  echo "$2 sollte yes sein!"
  echo "Usage: $0 Benutzer yes";
fi
echo Ende $0
```

# 4 Hardware-Info

# 5 apt-cacher-ng

apt-get install apt-cacher-ng
vim /etc/apt-cacher-ng/acng.conf

```
CacheDir: /daten/var/cache/apt-cacher-ng
LogDir: /daten/var/log/apt-cacher-ng
#Port: 3142
...
```

cp /var/cache/apt-cacher-ng/* /daten/var/cache/apt-cacher-ng/*
cp /var/log/apt-cacher-ng/* /daten/var/log/apt-cacher-ng/*
chown apt-cacher-ng.apt-cacher-ng /daten/var/cache/apt-cacher-ng -R
chown apt-cacher-ng.apt-cacher-ng /daten/var/log/apt-cacher-ng -R
Kontrolle: firefox http://192.168.1.55:3142/acng-report.html
Client: /etc/apt/sources.list

```
deb 192.168.1.55:3142/debian/ buster main contrib non-free
deb-src 192.168.1.55:3142/debian/ buster main contrib non-free
```

# 6 Grundinstallation

1. vim mc ssh git
2. sagemath
3. mysql default-mysql-server default-mysql-client (mysql-workbench?)
4. xfce4: -terminal -goodies
5. texlive: -science-doc -latex-lang-german latexilla
6. firefox-esr-l10n-de chromium -l10n
7. libreoffice: -calc -writer -help-de
8. pdf: atril / evince / xpdf
9. ebook: djView callibre
10. ftp: FileZilla
11. vlc
12. java default-jre -jdk
13. playonlinux
14. k3b?
15. bilder: pinta feh fbi
16. w3m lynx less more man manpages-de
17. notebook: upower

ohne aptitude:

1. go: KGS, leela
2. geogebra (aktueller!)
3. win: Drago

## 6.1 Grafik-Konsole beim Start

```
systemctl set-default multi-user.target
systemctl set-default graphical.target
```

# 7 WLAN

## 7.1 aptitude

1. rfkill
2. wireless-tools: iwconfig iwlist
3. wpasupplicant
4. firmware-b43-installer (b43-fwcutter)

dpkg-reconfigure firmware-b43-installer

## 7.2 Hardware

- lspci -nnk | grep -i wlan
  lshw -c network
- modprobe -rf b43
  modprobe b43
- rfkill list
  Ergebnis soll sein:
  Hardblocked: no (im BIOS: abstellen)
  Dell D531 Wireless
  Bluetooth no
  internal-wifi yes
  wireless hotkey none
  Lan/wifi auto switch off
  Softblocked: no
  rfkill unblock 0 (bzw. 1 ... )
- ip link set dev wlan0 up
- iwconfig
  Ergebnis: wlan0 ESSID: .....
  iw dev wlan0 link

## 7.3 /etc/network/interfaces

```
allow-hotplug wlan0
iface wlan0 inet static
    address 192.168.1.x/24
    gateway 192.168.1.1
    wpa-ssid ...
    wpa-psk  ......
```

```
allow-hotplug wlan0
iface wlan0 inet dhcp
    wpa-ssid ...
    wpa-psk  ......
```

Kabel-Anschluss:
Welche Schnittstelle hat die Netzwerkkarte? cat /proc/net/dev

```
#allow-hotplug eth0
auto eth0
iface eth0 inet static
address 172.16.1.105/24
gateway 172.16.1.1
```

### 7.4 Wpa

```
wpa_passphrase SSID PW >> wpa.txt
chmod 600 /etc/network/interfaces
```

### 7.5 /etc/resolv.conf

```
search asdf
nameserver 192.168.1.1
```

### 7.6 WLAN-Router-Schule

WLAN (dlink-dir600): 172.16.1.104
Gateway: 172.16.1.1
Adress-Raum Notebooks Junker: 192.168.1.*
SSID: OpenWrt-jk
password: ...
IP intern: 192.168.1.1
root-password(root): ...
auch mit ssh root@192.168.1.1:
wpa2personal
to do: MAC-Filter, dhcp, ...

# 8 Vim

## 8.1 ASCII-Code eingeben

im Insert-Modus:

```
ctrl+v  ...  ↵   (dez)
ctrl+v  x..  ↵   (hex)

Beispiele:
ctrl+v 65 <space> ergibt: A
ctrl+v 065  ergibt: A
ctrl+v 223  ergibt: ß
ctrl+v x61  ergibt: a
ctrl+v <ESC> ergibt  ^ [    (ohne Leerzeichen!)
```

## 8.2 UTF-8 eingeben

```
:dig
Ctrl+k  + 2Zeichencode

Beispiel: Ctrl+k NO  ergibt: ¬
```

## 8.3 Unicode eingeben

(im Insert-Modus):

```
ctrl+v u ....  ↵    (hex)
ctrl+v U ....  ↵    (hex)

Beispiele:
Return 23CE  ctrl + u + 23ce ergibt:  ↵
Violinschlüssel: 1D11E  ctrl + U + 0001 + d11e
Euro:  ctrl+v u 20ac  ergibt: €
```

Bemerkung: Den Violinschlüssel kann Latex aber nicht verarbeiten!

## 8.4 Hexmode ein/aus:

```
:%!xxd
:%!xxd -r
```

## 8.5 vim beenden

in .vimrc:

```
:autocmd VimLeave * silent !clear
```

### 8.6 Anzeigen des Zeichen-Codes

Cursor auf dem Zeichen)
mit: ga → Hexcode (Ascii/Unicode)
mit g8: UTF-8 Kodierung
1.Beispiel:
ß ga → 223(dez) 00DF(hex) g8 → c3 9f
binär: 000 1101 1111
2.Block (von 0080-07FF): 110x xxxx 10xx xxxx
110(0 0011) 10(01 1111) → c3 9f
2.Beispiel:
↵ ga → 23ce g8 → e2 8f 8e
binär: 0010 0011 1100 1110
3. Block von (0800-FFFF): 1110 xxxx 10xx xxxx 10xx xxxx
1110 (0010) 10(00 1111) 10(00 1110) → E2 8F 8E

### 8.7 Variablen in Vim

```
let @a="Text"
echo @a

:!echo % && echo %:r

:help  filename-modifiers
```

### 8.8 Register

```
:reg

kopieren in reg: "ayy
einfügen aus reg: "ap
```

### 8.9 Buffers

```
:help buffers

:badd f1.txt
```

### 8.10 console-setup

Datei /etc/default/console-setup

```
FONTFACE="Fixed" - > FONTFACE="TerminusBold"
FONTSIZE="8x16" - > FONTSIZE="12x24"
BEEP = OFF
```

Neustart:

```
/etc/init.d/console-setup restart
```

### 8.11 Default-Einstellungen

```
update-alternatives --config x-www-browser
```