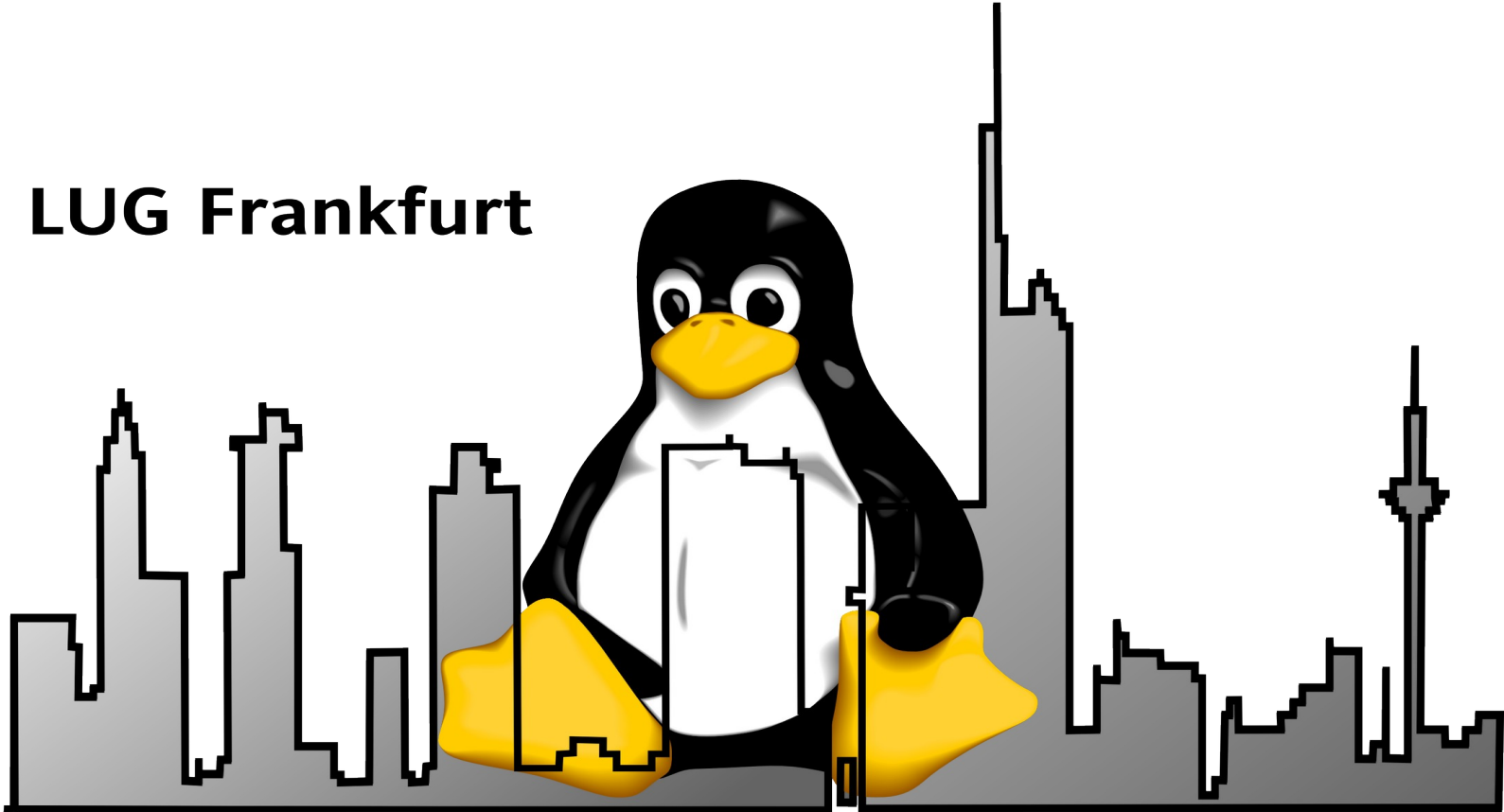
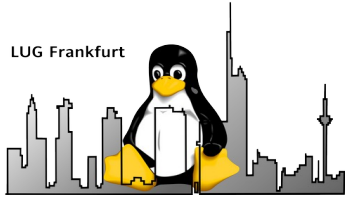


Erste Schritte mit Debian

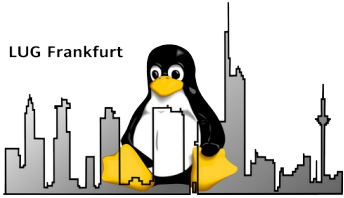
LUG Frankfurt





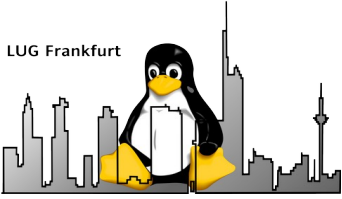
Inhalt

- Zusammenfassung Virtualbox
- Start des Containers um Debian zu installieren
- Konfig-Files und sinnvolle Erweiterungen
- Ausblick



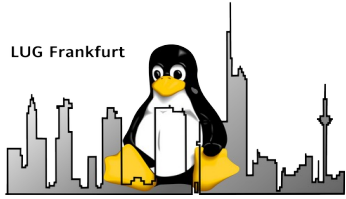
Zusammenfassung Virtualbox

- Neuen Container definiert
- Einrichten des VBox-Containers fralug-basis (Experten-Modus)
- Ziel heute: Installation von Debian bookworm
- Voraussetzungen:
 - DNS- und DHCP-Server im Heimnetz
 - ssh-client auf dem Host-System



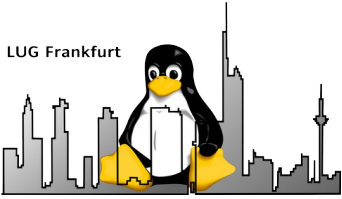
Einstellungen fralug-basis

Allgemein Name: fralug-basis Betriebssystem: Debian (64-bit) Gruppen: fra-lug	Vorschau
System Hauptspeicher: 1024 MB Bootreihenfolge: Optisch, Platte Chipsatz-Typ: ICH9 Beschleunigung: Nested Paging, KVM-Paravirtualisierung	
Anzeige Grafikspeicher: 33 MB Grafikcontroller: VMSVGA Fernsteuerung: deaktiviert Aufnahme: deaktiviert	
Massenspeicher Controller: SATA SATA-Port 0: fralug-basis.vdi (normal, 10,00 GB) SATA-Port 1: [Optisches Laufwerk] debian-12.1.0-amd64-DVD-1.iso (3,72 GB) SATA-Port 2: fralug-basis-sw.vdi (normal, 1,00 GB)	
Audio deaktiviert	
Netzwerk Adapter 1: Intel PRO/1000 MT Desktop (Netzwerkbrücke, enx349971e08228)	
USB USB-Controller: OHCI, EHCI Gerätefilter: 0 (0 aktiv)	
Gemeinsame Ordner Keine	
Beschreibung master: 7-tux-sid Neuinstallation partitions	



Inhalt

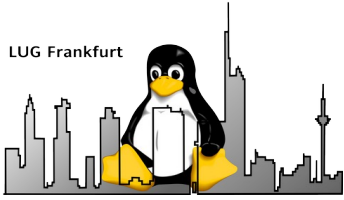
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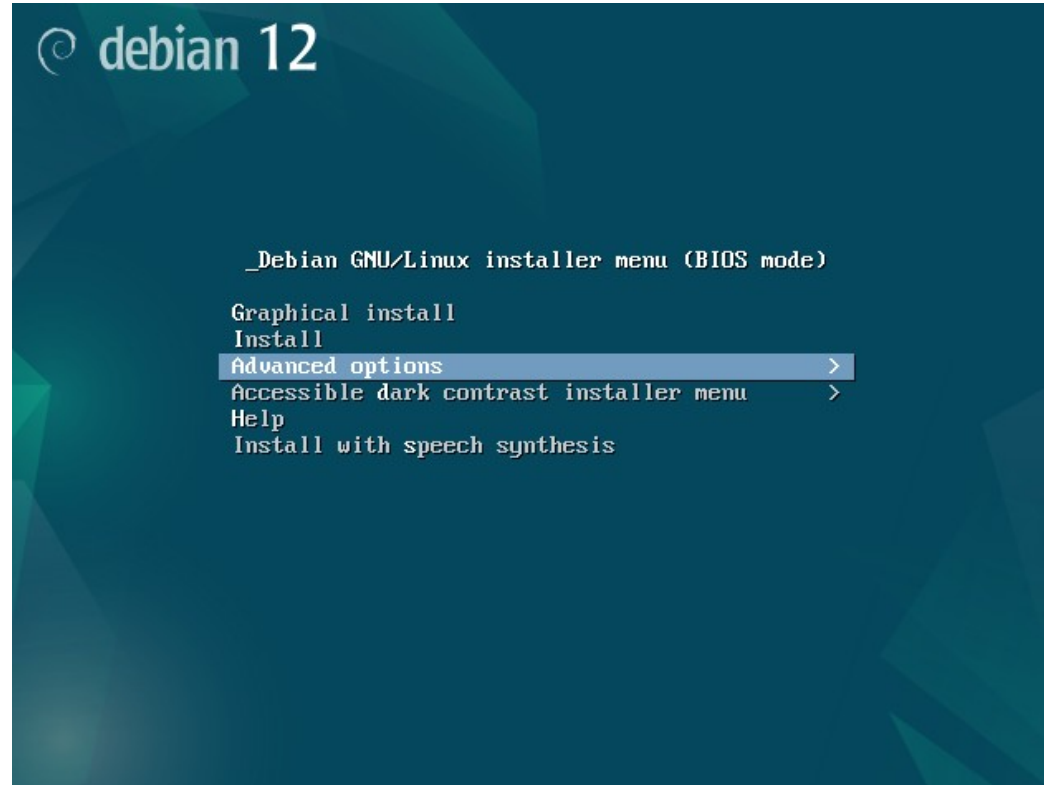
VBox-Manager

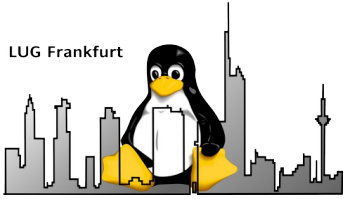


- Auswählen des gewünschten Containers (fralug-basis)
- Starten mit dem grünen Pfeil nach rechts

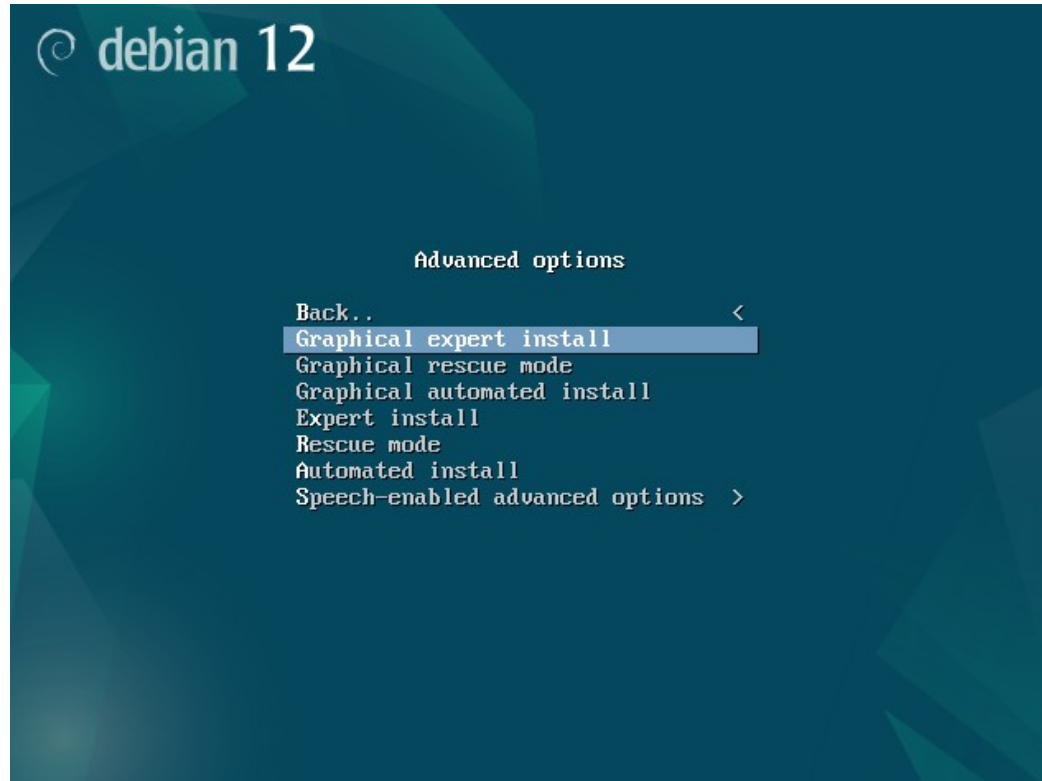


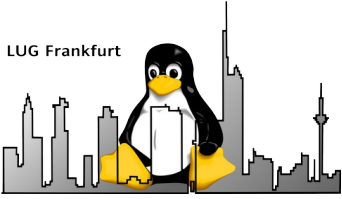
Debian-Install 1





Debian-Install 2





Debian-Install 3

Debian installer main menu

Choose the next step in the install process:

Choose language

Access software for a blind person using a braille display

Configure the speech synthesizer voice

Configure the keyboard

Detect and mount installation media

Load installer components from installation media

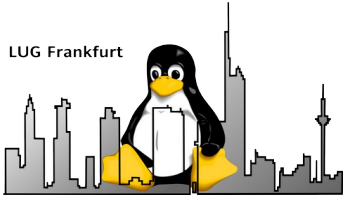
Change debconf priority

Check the integrity of installation media

Save debug logs

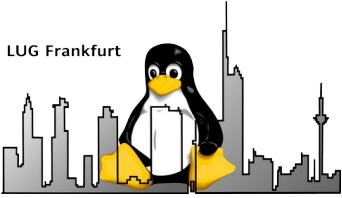
Execute a shell

Abort the installation

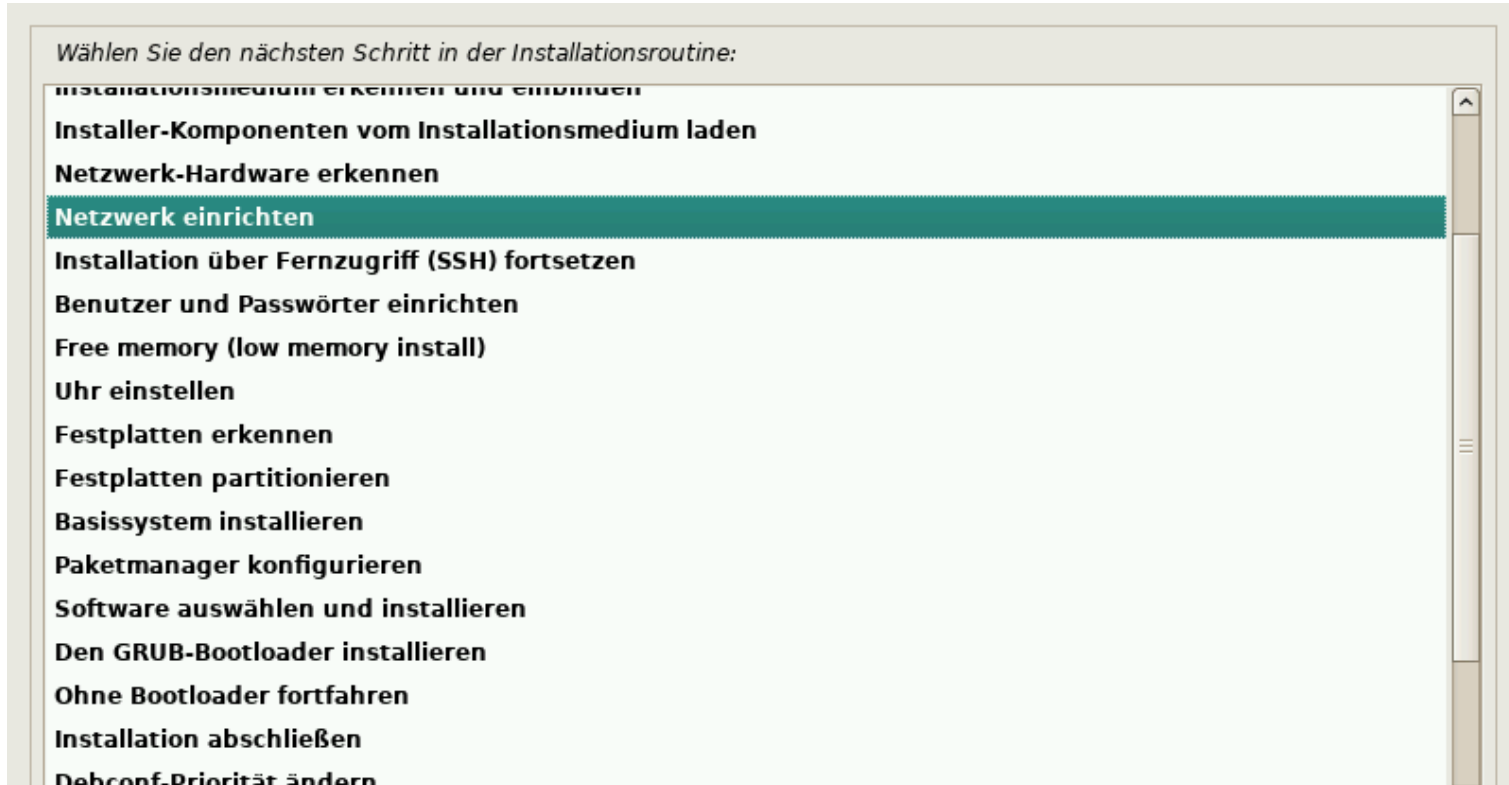


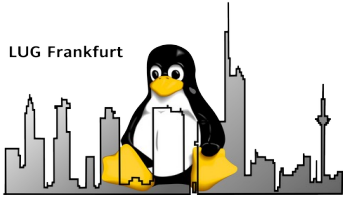
Debian-Install 4

- fdisk-udeb: Manually partition a hard drive (fdisk)**
- fuse-modules-6.4.0-4-amd64-di: FUSE modules**
- load-media: Load installer components from removable media**
- lowmem: free memory for lowmem install**
- mbr-udeb: Master Boot Record for IBM-PC compatible computers**
- multipath-modules-6.4.0-4-amd64-di: Multipath support**
- nbd-modules-6.4.0-4-amd64-di: Network Block Device modules**
- network-console: Continue installation remotely using SSH**
- openssh-client-udeb: secure shell client for the Debian installer**
- squashfs-modules-6.4.0-4-amd64-di: squashfs modules**



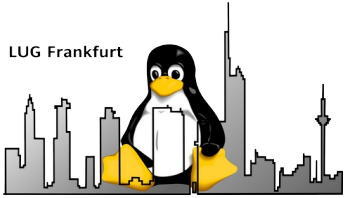
Debian-Install 5





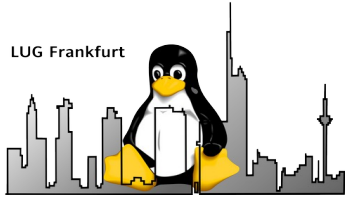
Debian-Install 6

- Netzwerk einrichten
 - Rechnername: **fralug-basis**
 - Domain: blabla.xyz (oder fritz.box)
- Installation über Fernzugriff (SSH) fortsetzen
 - Passwort: **doit**
- ssh installer@10.xxx.yyy.zzz
 - Installer starten (Expertenmodus)
- Anmeldung als root zulassen
- Uhr über NTP einstellen



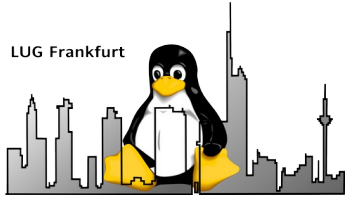
Debian-Install 7

- Festplatten-Partitionierung (manuell)
 - MBR
 - sda1: / (XFS, relatime, Name: fralug-basis, bootflag)
 - sdb1: swap
- Basissystem installieren (linux-image-amd64)
 - Alle verfügbaren Treiber
- Softwareauswahl (**nur**)
 - SSH-Server
 - Standard-Systemwerkzeuge



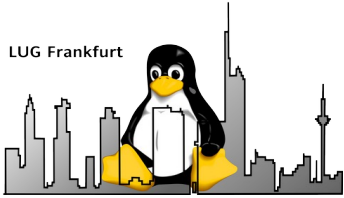
Debian-Install 8

- Grub auf /dev/sda
- Systemzeit (HW-Uhr): UTC
- Reboot
- Virtualbox entfernt automatisch das ISO-File der DVD
- Alle weiteren Aktionen via `ssh fralug@fralug-basis`



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Konfiguration-1

- /etc/default/grub

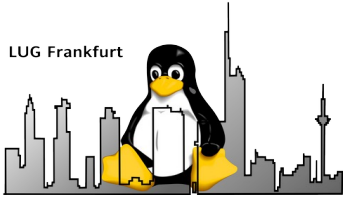
```
GRUB_CMDLINE_LINUX_DEFAULT="quietipv6.disable=1"  
GRUB_DISABLE_RECOVERY="falsetrue"  
GRUB_GFXMODE=1024x768  
GRUB_GFXPAYLOAD_LINUX=keep
```

- /etc/hosts

```
127.0.1.1      fralug-basis fralug-basis.blabla.xyz
```

- /etc/networks

```
blabla.xyz    10.x.y.0
```

Konfiguration-2

- /etc/dhcp/dhclient.conf

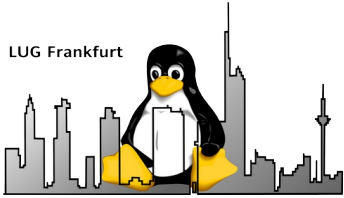
```
request subnet-mask, broadcast-address, time-offset, routers,  
       domain-name, domain-name-servers, domain-search,  
# host-name, dhcp6.name-servers, dhcp6.domain-search,  
# dhcp6.fqdn, dhcp6.sntp-servers, netbios-name-servers, netbios-scope,  
       Interface-mtu, rfc3442-classless-static-routes, ntp-servers;  
send dhcp-client-identifier 0:a0:24:ab:fb:9c "fralug-basis";
```

- /etc/initramfs-tools/conf.d/resume

```
RESUME=UUID=d3c08724-15c7-4ec1-b8b7-fa32c5ba1e29none
```

- /etc/inputrc

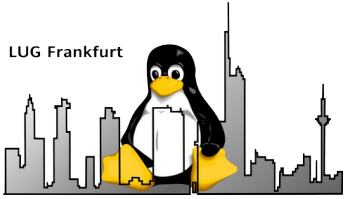
```
set-convert-meta off
```



Konfiguration-3

- `/etc/apt/sources.list`
`deb http://ftp.debian.org/debian bookworm main contrib non-free ↵
non-free-firmware`
- `/etc/apt/apt.conf.d/02nosuggestions`
`APT {
 Install-Recommends "false";
 Install-Suggests "false";
};

Aptitude {
 Recommends-Important "false";
};`



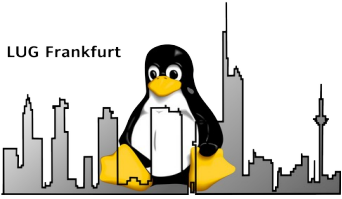
Konfiguration-4a

- /root/.bashrc

```
if [ -f /etc/bash_completion ]; then
    . /etc/bash_completion
fi
```

```
PS1='${debian_chroot:+($debian_chroot)}\[\033[01;31m\]\u@\h\[\033[00m\]:\[\033[01;34m\]\w\[\033[00m\]\$ '
```

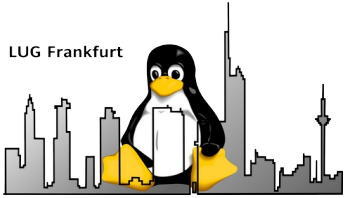
```
if [ -d "$HOME/bin" ] ; then
    PATH="$PATH:$HOME/bin"
fi
```



Konfiguration-4b

- /root/.bashrc

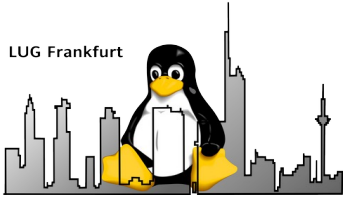
```
# ls to be colorized:  
#export LS_OPTIONS='--color=auto'  
#eval "$(dircolors)"  
#alias ls='ls $LS_OPTIONS'  
#alias ll='ls $LS_OPTIONS -l'  
#alias l='ls $LS_OPTIONS -la'  
# Some more alias to avoid making mistakes:  
#alias rm='rm -i'  
#alias cp='cp -i'  
#alias mv='mv -i'  
alias ..='cd ..'  
alias ...='cd ../..'  
alias grep='grep --color=auto'  
alias ip='ip -color=auto'
```



Konfiguration-5

- /home/fralug/.bashrc

```
# some more ls aliases
alias ll='ls -l'
alias la='ls -A'
alias l='ls -la'
alias rm='rm -i'
alias cp='cp -i'
alias mv='mv -i'
alias ..='cd ..'
alias ...='cd ../..'
alias grep='grep --color=auto'
alias ip='ip -color=auto'
```

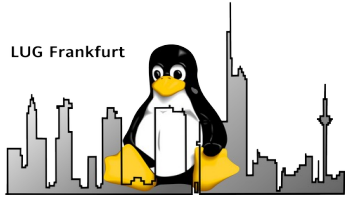


Konfiguration-6

- apt update; apt install aptitude
- aptitude install debfoster deborphan
- /root/bin/Install_check

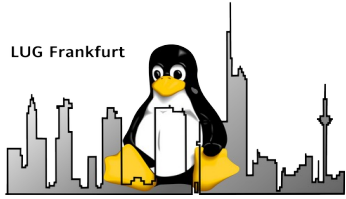
```
#!/bin/bash
set -x
aptitude clean
aptitude -f install
debfoster
deborphan
COLUMNS=200 dpkg -l | grep -v ^ii
```

- aptitude upgrade



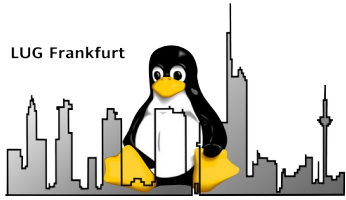
Konfiguration-7

- aptitude install mc
- aptitude install jed (Editor mit emacs-Syntax)
- Zwischenbilanz
 - ca. 1,4 GB auf der Platte belegt.



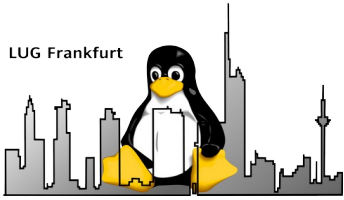
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- **Ausblick**



Ausblick

- Ausdünnen der Debian-Installation
- Upgrade auf Debian-SID



Ende

**Danke für's zuhören und
viel Spaß mit Debian**

Fragen und Anmerkungen gerne an m1ist@hk-vision.de