

Linux: Ein Überblick

Werbung

Wer sind wir? Die Linux-AG!

<https://www.linux-ag.uni-tuebingen.de/presentation/index.xhtml>

Und wer seid ihr? (1/10)

- Microsoft

Und wer seid ihr? (2/10)

- Microsoft
- cmd

Und wer seid ihr? (3/10)

- Microsoft
- cmd
- Android

Und wer seid ihr? (4/10)

- Microsoft
- cmd
- Android
- Linux

Und wer seid ihr? (5/10)

- Microsoft
- cmd
- Android
- Linux
- Ubuntu / Mint

Und wer seid ihr? (6/10)

- Microsoft
- cmd
- Android
- Linux
- Ubuntu / Mint
- Distribution

Und wer seid ihr? (7/10)

- Microsoft
- cmd
- Android
- Linux
- Ubuntu / Mint
- Distribution
- Terminal

Und wer seid ihr? (8/10)

- Microsoft
- cmd
- Android
- Linux
- Ubuntu / Mint
- Distribution
- Terminal
- Bash

Und wer seid ihr? (9/10)

- Microsoft
- cmd
- Android
- Linux
- Ubuntu / Mint
- Distribution
- Terminal
- Bash
- zsh

Und wer seid ihr? (10/10)

- Microsoft
- cmd
- Android
- Linux
- Ubuntu / Mint
- Distribution
- Terminal
- Bash
- zsh
- Compilerflag

Und wer seid ihr? (11/10)

- Microsoft
- cmd
- Android
- Linux
- Ubuntu / Mint
- Distribution
- Terminal
- Bash
- zsh
- Compilerflag
- Off-By-One-Error

Am 6. Juli ist der Tübix (Tübinger Linuxtag):

- <https://www.tuebix.org/>

Was machen wir heute?

- Was ist Linux? Warum nicht Microsoft?
- Anwendungsprogramme: Was sind die Alternativen?
- Standardprogramm für Texte, Präsentationen, Excel
- Dateimanager
- Überblick über verschiedene Distributionen
- Grundlegender Umgang mit dem Terminal

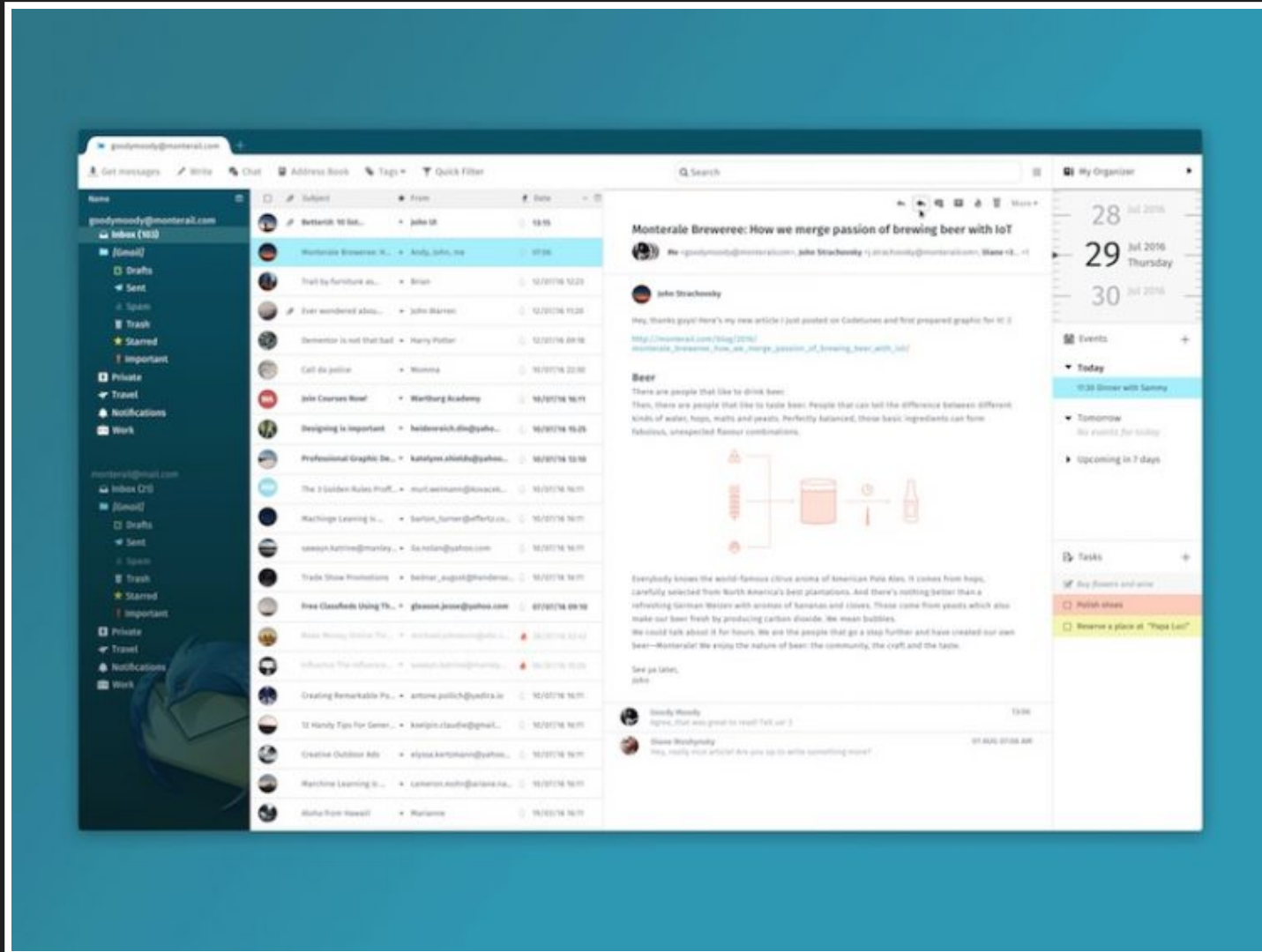
Was ist Linux?

- Linux ist der freie Kern vieler Betriebssysteme (Debian, Ubuntu, Android, Arch, ...)
- Wird in vielen Bereichen verwendet: Server, Desktops, IoT devices, Supercomputer, ...

Warum nicht Windows?

- Nicht Open-Source
- Übermittlung von Telemetriedaten nicht abschaltbar
- Abhängigkeit von einem Großkonzern
- Braucht viel Speicherplatz + Windows Updates sind langsam
- Repositories!

E-Mails lesen: Thunderbird



Im Web surfen: Firefox

Wikipedia, the free encyclopedia - Mozilla Firefox

Wikipedia, the free ency x +

https://en.wikipedia.org/wiki/Main_Page

Search

Vulphere Talk Sandbox Preferences Beta Watchlist Contributions Logout

Main page Talk

Read View source View history TW Search Wikipedia

Wiki Loves Love

Documenting festivals and celebrations of love on Commons.

Help Wikimedia and compete for up to \$400 by sending photos.

Learn More and Help!


Welcome to Wikipedia,

the free encyclopedia that anyone can edit.

5,793,221 articles in English

- Arts
- Biography
- Geography
- History
- Mathematics
- Science
- Society
- Technology
- All portals

From today's featured article




Tropical Storm Marco was the only tropical cyclone to make landfall in the United States during the 1990 Atlantic hurricane season. The 13th named storm of the season, Marco formed from a cold-core low pressure area along the northern coast of Cuba on October 9, and tracked northwestward through the eastern Gulf of Mexico. Its circulation produced 65 mph (100 km/h) winds over the western portion of Florida before weakening to a tropical depression and moving ashore near Cedar Key. The cyclone combined with a cold front and the remnants of Hurricane Klaus to produce heavy rainfall in Georgia and the Carolinas. After interacting with the nearby Hurricane Lili, Marco continued northward until being absorbed by a cold front. In Florida, the cyclone triggered flooding of some roadways. Rainfall across its path peaked at 19.89 inches (505 mm) in Louisville, Georgia. The flooding caused 12 deaths, mostly due to drowning, as well as \$57 million in damage. [Full article...](#)

Recently featured: [Ambrose Rookwood](#) · [Mascarene grey parakeet](#) · [Antlia](#)
[Archive](#) · [By email](#) · [More featured articles](#)

Did you know...

- ... that DNA testing suggests that **Loschbour man** (pictured), an 8,000-year-old human skeleton found in Luxembourg in 1935, had dark skin?
- ... that **Cemile Timur** founded, played for, and now coaches a football club recently promoted to the Turkish Women's First League?
- ... that the recently rediscovered and restored 1898 short film *Something Good - Negro Kiss* counters racist caricatures?
- ... that **Philip Petty** received the Medal of Honor for raising his regiment's colors during the Battle of Fredericksburg?
- ... that a storyline about domestic abuse from the **eighteenth series** of *Holby City* sparked 177 calls to the BBC's support line?
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Loschbour man

In the news

- Two bombs** at the Cathedral of Our Lady of Mount Carmel (aftermath pictured) in Jolo, Philippines, kill at least eighteen people and leave more than eighty others injured.
- A mining dam collapses** in Brumadinho, Brazil, leaving more than eighty people dead and hundreds of others missing.
- More than sixty people are killed in **flooding** across South Sulawesi, Indonesia.
- More than a hundred Afghan National Security Forces members are reportedly **killed in an attack** on a military compound in Maidan Shar.


Ongoing: [Venezuelan presidential crisis](#)
Recent deaths: [Ingvald Godal](#) · [Pierre Nanterme](#) · [Varoujan Garabedian](#) · [George Fernandes](#)

[Nominate an article](#)

On this day

February 1: Black History Month begins in Canada and the United States; **Fajr decade** begins in Iran; **National Freedom Day** in the United States

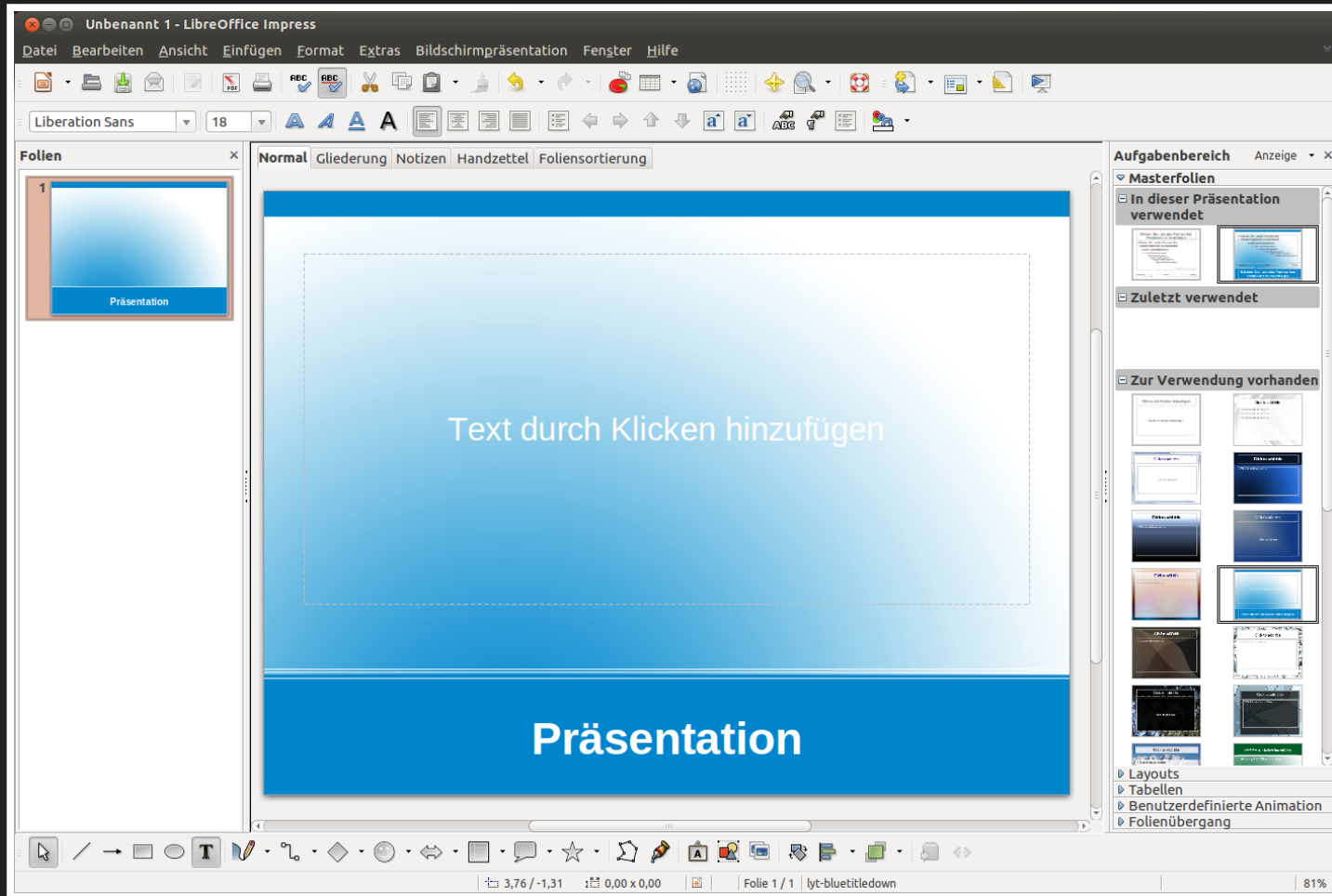
- 1329 – The Teutonic Knights succeeded in their **siege of a fortress** in Samogitia, Lithuania, and baptized the defenders in the Catholic rite.
- 1411 – The **First Peace of Thorn** was signed, ending the **Polish-Lithuanian-Teutonic War**.
- 1960 – Four African American students staged the first **Greensboro sit-ins** at a lunch counter in Greensboro, North Carolina.
- 1972 – **Kuala Lumpur** gained city status, the first settlement in Malaysia to do so after the nation's independence from the United Kingdom.
- 2009 – **Jóhanna Sigurðardóttir** (pictured) became Iceland's first female Prime Minister and



Jóhanna Sigurðardóttir

https://commons.wikimedia.org/wiki/Special:MyLanguage/Commons:Wiki_Loves_Love_2019

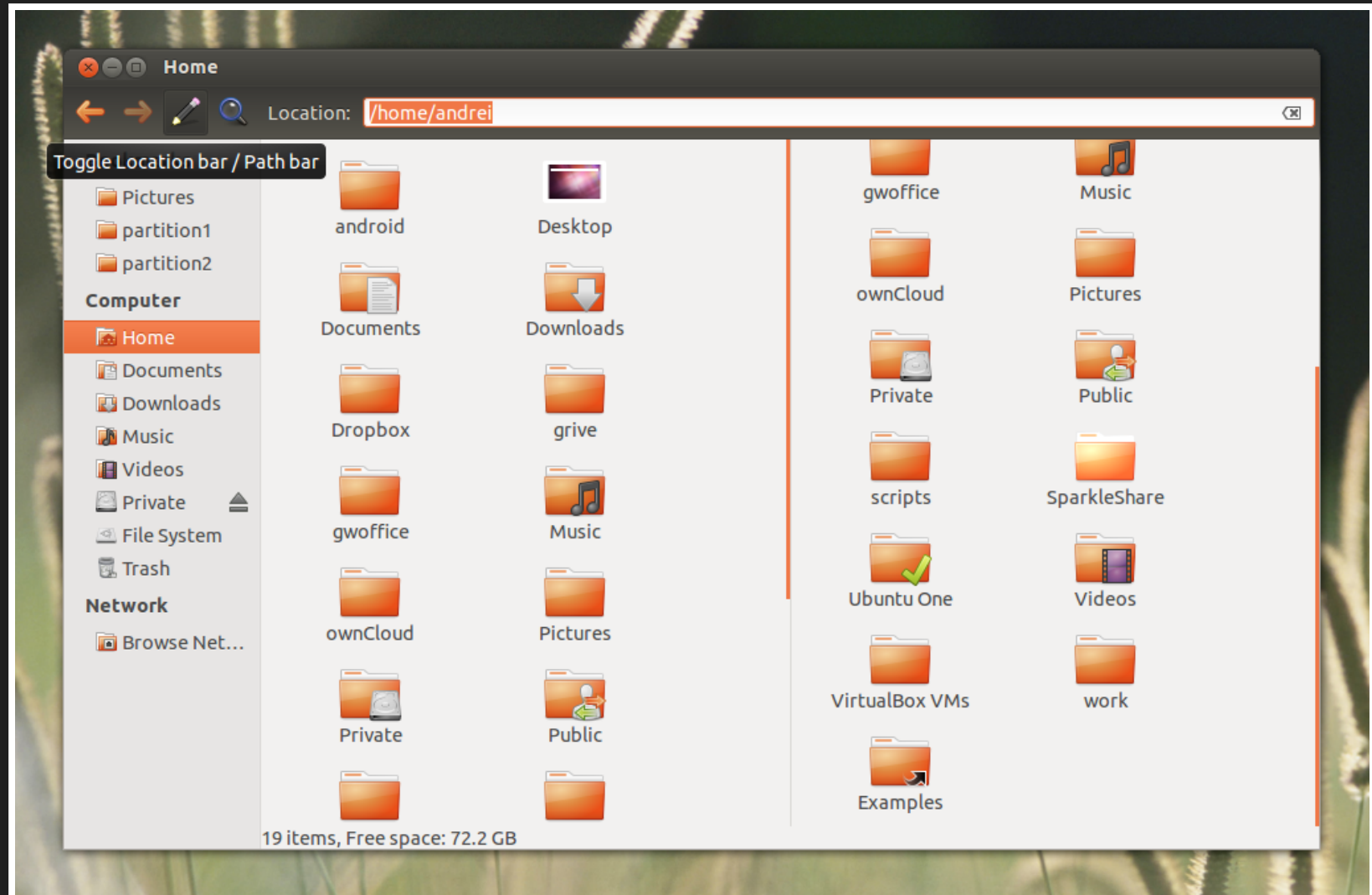
LibreOffice: Texte, Präsentationen, Excel, ...



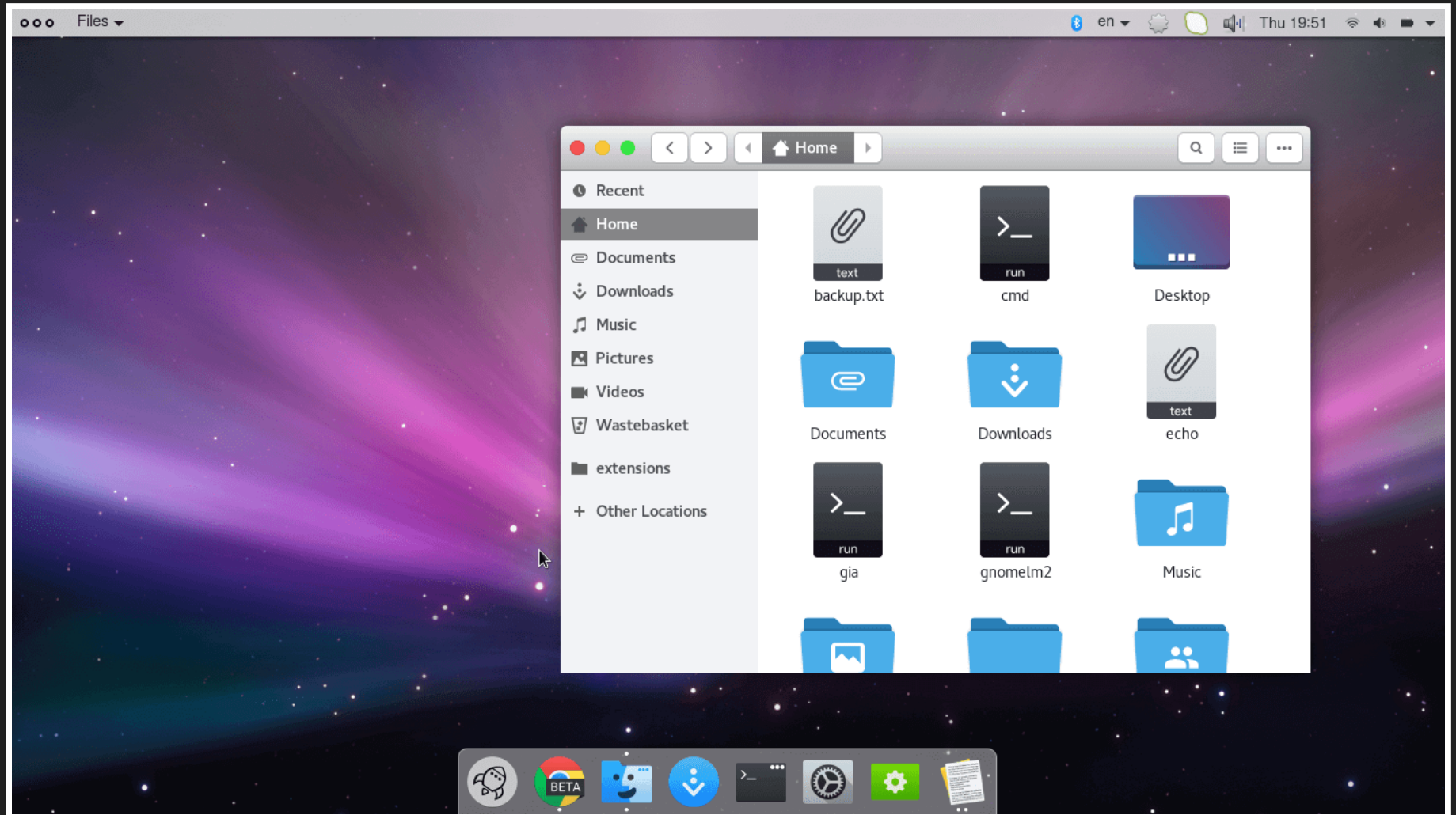
Dateimanager: Nautilus ... :D



Dateimanager: Nautilus



Impressionen (1/7)



Impressionen (2/7)

The screenshot displays a Linux desktop environment with a purple and blue starry background. The top bar shows the date and time as "Sat May 5, 21:36:27" and system status icons. The left sidebar contains icons for Home, a folder labeled 'F', and a file named 'Feem_Linux_4.2.6_bet...'. The main window is the 'Tweaks' application, showing the 'Appearance' section. The 'Appearance' section includes a search bar, a list of categories on the left (Appearance, Desktop, Extensions, Fonts, Keyboard & Mouse, Power, Sound, Startup Applications, Top Bar, Windows, Workspaces), and a list of settings on the right. The 'Appearance' settings include: Animations (checked), Themes (Applications: Vimix-Light-Laptop-Beryl, Cursor: MacOS Cursor Set, Icons: Paper-Vimix, Shell: Flat-Mac v0.2), Background (Image: squircle_5k2-3840x2400.jpg, Adjustment: Zoom), and Lock Screen (Image: desktop-locksreen.xml, Adjustment: Zoom). The right window is the 'Resources' monitor, showing CPU History, Memory and Swap History, and Network History. The CPU History graph shows usage for CPU1 (18.4%), CPU2 (12.1%), CPU3 (11.2%), and CPU4 (15.8%). The Memory and Swap History graph shows Memory usage at 2.1 GiB (56.9% of 3.8 GiB) and Swap usage at 0 bytes (0.0% of 3.4 GiB). The Network History graph shows Receiving at 0 bytes/s (Total Received: 714.4 KiB) and Sending at 0 bytes/s (Total Sent: 48.1 KiB).

Applications ▾ Places ▾ Tweaks ▾ Sat May 5, 21:36:27 1 [System Icons] 100% ▾

Home

F

Feem_
Linux_
4.2.6_bet...

Tweaks

Appearance

Animations

Desktop

Extensions

Fonts

Keyboard & Mouse

Power

Sound

Startup Applications

Top Bar

Windows

Workspaces

Appearance

Themes


Applications Vimix-Light-Laptop-Beryl ▾

Cursor MacOS Cursor Set ▾

Icons Paper-Vimix ▾


Shell (None) ⬆ Flat-Mac v0.2 ▾

Background

Image  ⬆

Adjustment Zoom ▾

Lock Screen

Image  ⬆

Adjustment Zoom ▾

Resources

Processes Resources File Systems

CPU History

60 seconds

CPU1 18.4% CPU2 12.1% CPU3 11.2% CPU4 15.8%

Memory and Swap History

60 seconds

Memory 2.1 GiB (56.9%) of 3.8 GiB

Swap 0 bytes (0.0%) of 3.4 GiB

Network History

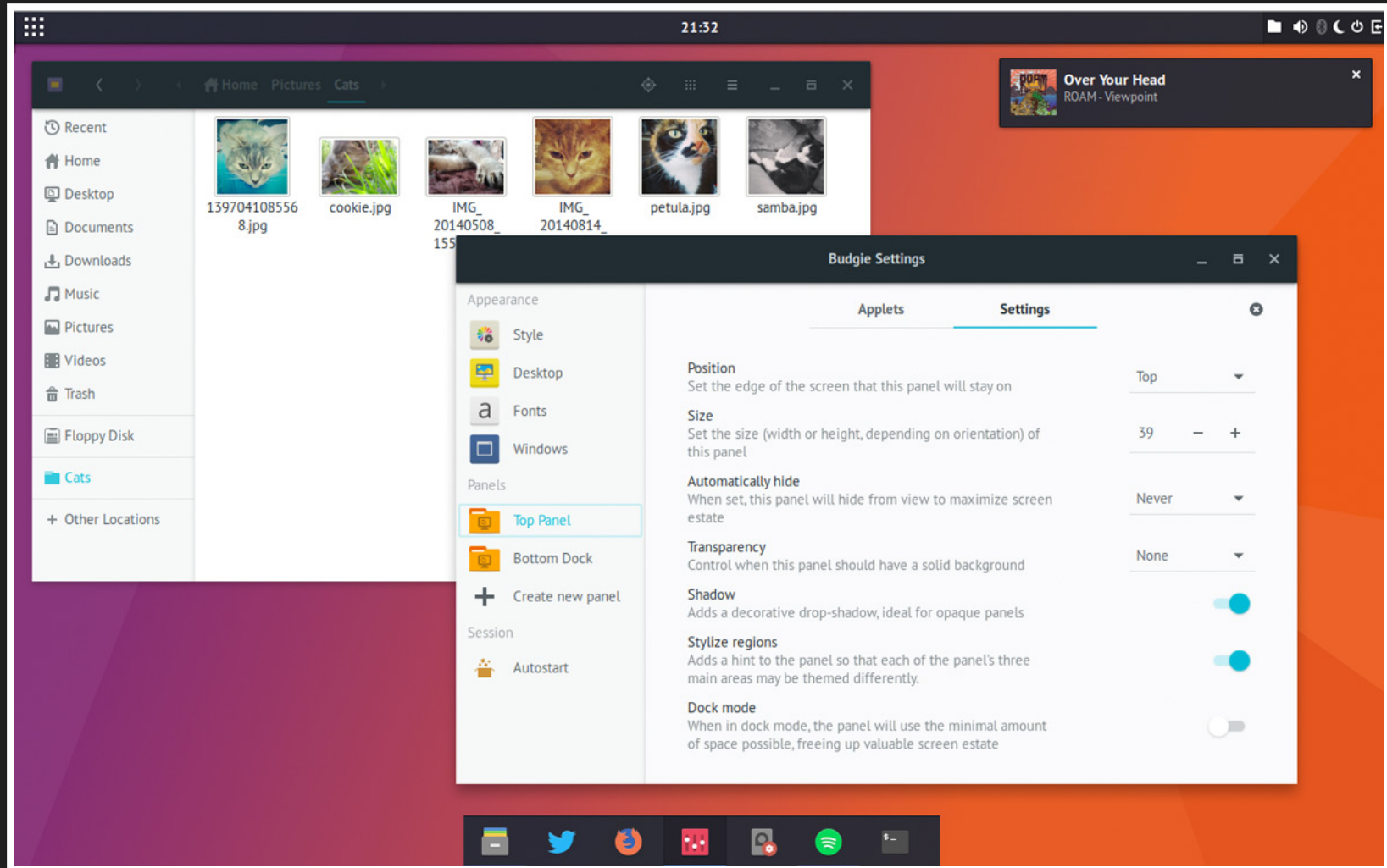
60 seconds

Receiving 0 bytes/s
Total Received 714.4 KiB

Sending 0 bytes/s
Total Sent 48.1 KiB

25

Impressionen (3/7)



Impressionen (4/7)

The screenshot shows a music player interface with a playlist on the left and a large background image of a maple leaf on wet, dark stones. The playlist is titled 'Kindlmer - unter' and contains 60 tracks. The background image is a close-up of a single yellow maple leaf lying on a bed of dark, wet, reflective stones.

Artist	Title	Time
FISHER	Stop It	2:44
Back Talk, Idnto Elbay, Patrick	Paradise - Patrick Topping Remix	6:10
Dennis Cruz, Harvy Valente	Paradise - Dennis Cruz Remix	6:35
PAWSA	Anxious	6:38
Matt Sassart	Cops Mood	6:38
Matt Sassart	Phantom	6:10
Matt Sassart	Relax	6:25
Janie Jones, Digitarla	Planets, Spaceships - Original Mix	6:50
David Herrera	Volvorata	6:33
Victor Vera	Talised	6:10
Mink	Farth	5:23
Josh Butler	Got a Feeling (Pleasurekraft vs. B	6:40
Matt Sassart	Port Cool	6:16
Matt Sassart	Frank Det	6:40
dubspeake	Primary M293	7:40
Cogy, Carl Golden	Profound Pleasure (Feat. Carl Gold	3:15
Cogy, Carl Golden	Profound Pleasure (Feat. Carl Gold	7:33
Dosem	Projection - Original Mix	6:16
The Cube Guys	Psycho Killer - Original Mix	5:41
Dale Howard, Santi	Pulsar - Santi Remix	5:45
Paul Ritoh, Ron Costa	Pulse - Ron Costa Remix	6:30
Toni Alvarez, Miguel De Retz,	Pump Up The Swag - M. Fukuda Remix	7:16
Matt Sassart	Saturday	6:05
Josh Taylor, Justin Jag, Janie	Pussy Pop - Janie Jones Remix	6:30
Ron, Skudge	7 - Skudge Amx	6:20
> Kindlmer	unter	1:20
Matt Sassart	Stony Door	6:59
ANNA	Redemption	7:27
Saxon	Rebound	6:50
Ruben Mandolini	Understand (Original Mix)	6:02
Miguel Bastida, Hatzer	Roundup - Hatzer Remix	7:55
Matador, Felix De Housecat, Ju	The Enemy - Julian Jaxx1 Remix	5:36
Matador, Fur Coat	Mout & Bones - Fur Coat Remix	6:21
Skoben	Sattbeast	7:06
Pleasurekraft	Satyr Song - Original Mix	7:40
Pleasurekraft	Satyr Song - Umek Remix	6:05
Matt Sassart	Shaman - Original Mix	6:33
Raffaele Rizzit	Total Black	5:40
Rhythm & Sound	Free For All - Soundstream Remix	5:47
Benton	Visitors - Original Mix	6:32
Popof	Seranitty	7:00
Kindlmer	Shadow & Construction - Original M	6:47
Harvey Kelly	Shake	7:11
Bos Roos	Midnight People	5:28
Sidney Charles	So Deep	6:48
Josh Butler	Snake Skin - Original	5:30
Josh Butler	Snake Skin	5:38
Leoo & Jan, Matt Sassart	Snip Shot - Matt Sassart Remix	6:24
Ruben Mandolini	Modular Love	6:46
Darius Syssostian, Josh Butler	Solar Wind	6:06
OC & Verde	Solstice - Original Mix	9:32
Ant Brooks, Matt Sassart	Industrial	6:41
Kollektiv Turmstrasse	Sorry I Am Late - Extended	8:10
Kollektiv Turmstrasse, Unorth	Sorry I Am Late - Unorthodox Remix	8:03
Mike Rodgers, Carl Cox	Oh Baby - David Toth's Dub Tech M	7:32
Enrico Sangiuliano	Sparrows In My Glass	6:52
PAWSA	The Shapeshifter - Original Mix	5:45
Ben Renner	Stand Out - Original Mix	6:38
Teenage Mutants	Barbès - Original Mix	5:58
Ell Brown	Sundara - Original Mix	6:48
Josh Butler	Tropics	6:13
Pirupa, Carlo Lio	Sunday Morning - Carlo Lio Remix	6:47
Detlef, Ossay Jones	Swagon - Original Mix	6:10

Impressionen (5/7)

The screenshot displays the KDE Plasma desktop environment. The background is a scenic mountain landscape. In the top right corner, there is a circular analog clock showing approximately 12:06. A terminal window in the upper center shows system statistics and a list of running processes. The application menu is open on the left side, with the 'Офис' (Office) category selected. The Dolphin file manager is open in the foreground, showing the 'Домашняя папка' (Home) directory with various folders like 'Видео', 'Документы', 'Загрузки', 'Изображения', 'Музыка', 'Рабочий стол', and 'Git'. The system tray at the bottom shows the time as 12:06 and the temperature as -8°C.

```
1 [|||||100.0%] Tasks: 127, 468 thr: 3 running
2 [|||||14.6%] Load average: 2.45 2.63 2.58
3 [|||||90.0%] Uptime: 11:46:37
4 [|||||27.9%]
Mem[|||||.44G/3.75G]
Swp[|||||309M/4.66G]
```

PID	USER	PRI	NI	VRT	RES	SHR	%CPU	%MEM	TIME+	Command
17994	alex	20	0	260G	240M	93704	4.0	6.3	0:42.02	/usr/bin/plasmashell
15394	alex	20	0	3380M	200M	100M	3.3	5.2	2:40.78	/usr/bin/kwin_x11 --crashes
13989	alex	20	0	3223M	205M	61172	2.0	5.4	0:22.18	/usr/bin/clementine
1376	alex	20	0	899M	69500	53852	1.3	1.8	0:37.48	/usr/bin/yakuake
18871	alex	20	0	27452	4040	3188	1.3	0.1	0:05.27	htop

alex : htop

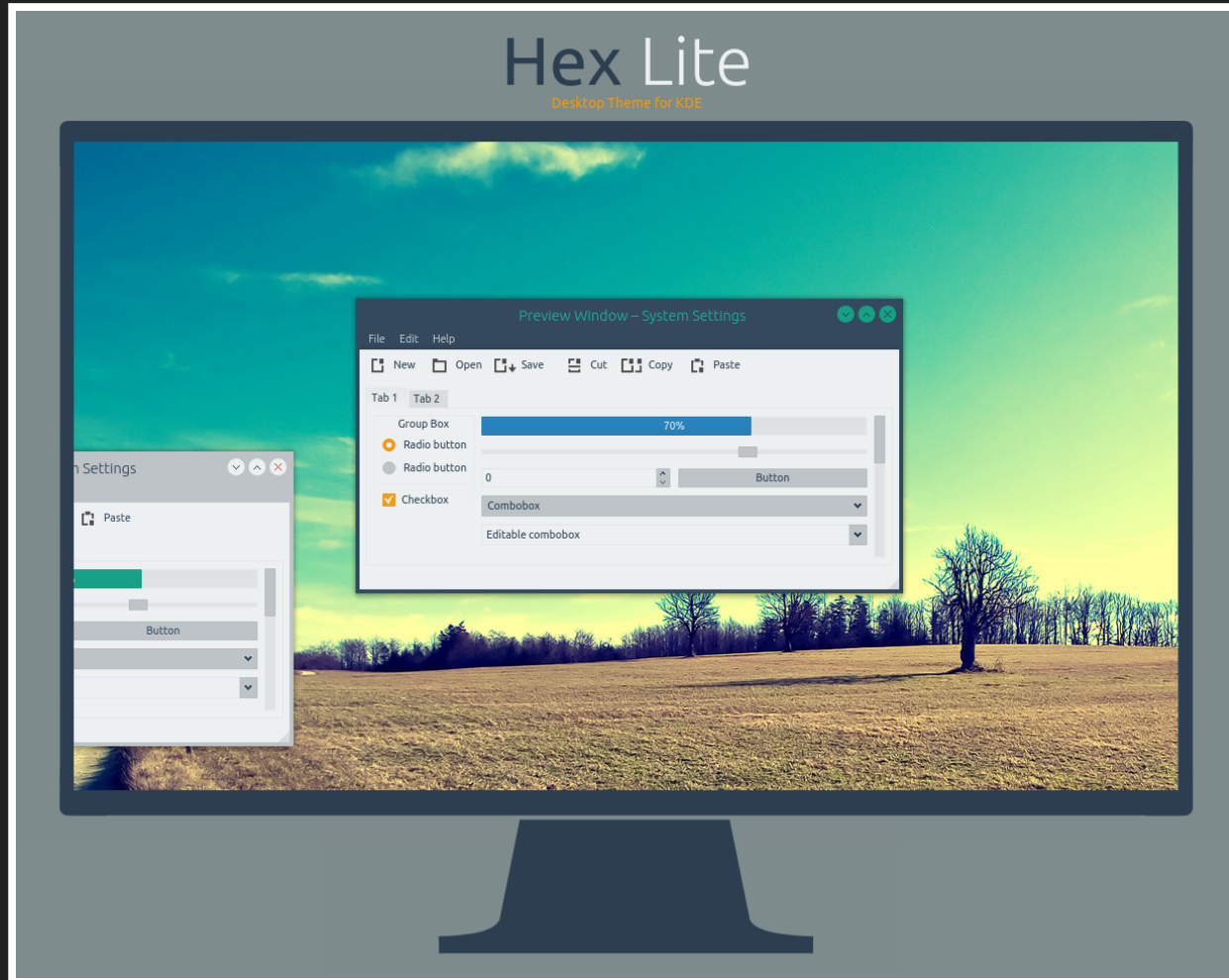
alex — Dolphin

Домашняя папка

- Видео
- Документы
- Загрузки
- Изображения
- Музыка
- Рабочий стол
- Git

7 папок | свободно 10,6 Гиб

Impressionen (6/7)



Impressionen (7/7)

The screenshot displays a Linux desktop environment with the following components:

- Browser Window:** DuckDuckGo search engine homepage with the logo and search bar.
- Wallpaper:** A wireframe cat face.
- Terminal Window:** Shows system information for Arch Linux x86_64 on an XPS 13 9370. The output includes OS, Host, Kernel, Uptime, Packages, Shell, Resolution, WM, Theme, Icons, Terminal, and Font details.
- Music Player Window:** Displays a playlist for 'Apocalyptica - Toreador II' with 18 tracks. The current track is '12 Apocalyptica - Toreador II (Reflections: Revised)'.

Distribution: Ubuntu

- weit verbreitet
- gutes deutsches Supportforum
- einfach zu installieren & zu bedienen
- keine aufwändige Wartung

Distribution: Ubuntu Studio

- für Grafiker, Musiker, Videobearbeiter, Vlogger, Künstler, ...

Distribution: elementary

(sieht aus wie: )

System Settings

🔍 Buscar opciones

Personal

- Brillo y bloqueo
- Escritorio
- Región e idioma
- Seguridad y privacidad
- Tweaks
- Valores predeterminados

Hardware

- Color
- Energía
- Impresoras
- Monitores
- Ratón y touchpad
- Sonido
- Tableta Wacom
- Teclado

Red e inalámbricos

- Bluetooth
- Online Accounts
- Red

Administración

- Acceso universal
- Acerca de
- Cuentas de usuario
- Fecha y hora



Distribution: Andere Distributionen

(für erfahrene Anwender)

- NixOS
- Arch
- Manjaro
- Debian
- Red Hat Enterprise
- Fedora
- Kali Linux

**Welche Distro ist die richtige
für mich?**

<https://distrochooser.de/>

Probleme, die Linux lösen kann

- YouTube-Videos können direkt über das Terminal heruntergeladen werden
- Aktionen von “git” und “ssh” können zentral über das Terminal erfolgen
- Alle Programme werden über den Paketmanager verwaltet. Es muss nicht jedes Programm einzeln aktualisiert werden.
- Systemrettung via Live-USB-Stick
- Automatisierte Tasks

Grundlegende Befehle für das Terminal

- man (**man**ual)
- cd (**ch**ange **dir**ectory)
- mv (**m**ove)
- rm (**r**emove)
- cp (**c**opy)
- zip (**z**ipper)
- ssh (**s**ecure **s**hell)
- wget (**w**eb **g**et)
- cat (**c**oncatenate)
- nano
- apt-get
- git -> siehe weiterer Workshop

Live-Demo

Installparty: Ubuntu

Lizenz

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