


Linux Distributions

Expedition into the linux distro jungle

 logo tux tux

Was ist eine Distribution?

- Linux Geschmacksrichtung
- Kernel Gemeinsam
- Der Rest ist austauschbar
- Fokus: user-friendly, user-centric, commercial

- Package managers
 - dpkg
 - Pacman
 - Portage
 - Nix package manager
 - Snap
 - ...
- Repositories

Debian (1993)

- Package manager: **dpkg** (APT)
- Sehr stabil
- 2GB / 10 GB (Desktop/!Desktop)

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Ubuntu (2004)

- Einsteigerfreundlich
- Desktop / Server / Core
- Package manager: **dpkg** (APT), Snap

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Arch Linux (2002)

- Rolling Release: Immer aktuell
- Minimalistische Distro
- Package manager: **pacman** (AUR)
- Alles wird selbst installiert und konfiguriert

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EndeavourOS (2019)

- Komfortabler Installer
- Minimalistische Distro
- Package manager: **pacman** (AUR)
- Community-driven

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SteamOS

- Fokus: **Gaming**
- Entwickelt von Valve
- Steam Deck

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Linux vs Windows tested in 10 games - Linux 17% faster on Average

[source](#)

Fedora (2003)

- Gesponsert von Red Hat
- Sehr aktuell, experimentell
- Package manager: **dnf**
- Fokus: Entwickler und neue Technologien

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OpenSUSE (2005)

- Cooles logo
- Packages werden gut durchgetestet
- Konfigurationswerkzeug: **YaST**
- Package manager: **zypper**

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NixOS (2003)

- Deklarative Konfiguration (=> Einfach reproduzierbar)
- Einfache Rollbacks
- Package manager: **nix**

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```
{...}: {
  services.avahi = {
    enable = true;
    nssmdns4 = true;
    openFirewall = true;
    publish = {
      enable = true;
      addresses = true;
      domain = true;
      hinfo = true;
      userServices = true;
      workstation = true;
    };
  };

  networking = {
    networkmanager.enable = true;
    firewall.enable = true;
  };

  services.mullvad-vpn.enable = true;

  programs.ssh.startAgent = true;

  hardware.bluetooth = {
    enable = true;
    powerOnBoot = true;
    settings = {
      General = {
        Enable = "Source,Sink,Media,Socket";
      };
    };
  };
}
```

Gentoo (2000)

- Source-Based Distro
- Extrem anpassbar
- Nutzer kompiliert Pakete selbst (Performance-Optimierung)
- Package manager: **Portage**

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```
COMMON_FLAGS="-march=native -O2 -pipe"

USE="wayland -X iptables dist-kernel zsh-completion networkmanager vaapi \
    dbus -elogind pipewire alsa -kde -qt3 -qt4 -qt3support tray"

MAKEOPTS="--jobs 8 --load-average 9"

CFLAGS="${COMMON_FLAGS}"
CXXFLAGS="${COMMON_FLAGS}"
FCFLAGS="${COMMON_FLAGS}"
FFLAGS="${COMMON_FLAGS}"

L10N="de en en-GB en-US"

VIDEO_CARDS="intel nvidia"

LC_MESSAGES=C.utf8

ACCEPT_KEYWORDS="~amd64"
```

Android-Based Distributions

- GrapheneOS
- LineageOS
- ChromeOS
- ...

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Red Star OS

- Nordkoreanisches Linux
- UNSERE DATEN

TempleOS

- Von Terry A. Davis entwickelt
- Heilig

Uwuntu

- UwU

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Faktoren:

- LTS-Release <---> Rolling Release
- Bloated <---> Minimal
- Security <---> Convenience
- Control <---> Guided
- Skill level

GENTOO - DEMO

I use gentoo btw.