

Linux Distributions

What is a Linux distribution?

- A specific flavor of Linux OS
- Also referred to as Distro
- Linux kernel is the core component
- There are hundreds of Linux distros



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- A Linux distribution is a specific flavor of the Linux operating system. It may also be referred to as a distro. All Linux distributions must use the Linux kernel. This is the core component of the Linux operating system that enables the system to properly use the computer's hardware. And today, there are hundreds of Linux distros, each tailored for a specific audience or task.

Linux distro differences

- System utilities
- Graphical user interface (GUI)
- Shell commands
- Support types:
 - Community versus enterprise
 - Long-term support (LTS) versus rolling release



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- so what differentiates Linux distros from each other? Each Linux distro includes a unique set of default utilities that are part of the operating system, such as commands and applications that come prepackaged with the distribution. Each distro has its own graphical user interface, or GUI, that you use to interact with the operating system. Each distro supports a specific set of commands that you can use in a shell, a window for entering and receiving output from commands. And lastly, each distro provides differing levels of support. It could be developed and managed as a community-backed project or maintained by a commercial enterprise. And it could be a long-term support version, or LTS, or a rolling release, where stable package updates are released on a rolling schedule.

Linux distros: Debian

- First release in 1993 (0.01), first stable release in 1996 (1.1)

- Stable, reliable, fully open source
- Supports many computer architectures
- Largest community-run distro

Linux distros: Ubuntu

- First release in 2004 (4.10)

- Debian-based
- Developed and managed by Canonical
- Three editions:
 - Ubuntu Desktop
 - Ubuntu Server
 - Ubuntu Core

Linux distros: Fedora

- Fedora is known as a stable operating system

- Supports many architectures
- Very reliable and secure
- Actively developed, large community
- Sponsored by Red Hat

Linux distros: SUSE Enterprise

- SUSE Linux Enterprise (SLE) available in two editions:
 - Server (SLES)
 - Desktop (SLED)
- Supports many architectures
- SUSE Package Hub

Linux distros: Arch Linux

- Do-it-yourself approach
- Highly configurable
- Requires strong understanding of Linux and system tools
- Leading-edge software

Recap

In this video, you learned that:

- Linux distros differ by UIs, their shell applications, and how the OS is supported and built.
- The design of a distro is catered toward its specific audience.
- Debian is stable, reliable, and open source.
- Red Hat Enterprise Linux is focused on enterprise customers.
- SUSE Linux Enterprise supports many architectures.

Sure! Let's talk about Linux distributions in simple terms.

A Linux distribution, often called a "distro," is like a special version of the Linux operating system. Imagine Linux as a big pizza, and each distribution is a unique topping combination that caters to different tastes. Each distro uses the core part of Linux, known as the Linux kernel, which helps the operating system communicate with your computer's hardware. There are many different distros

available, each designed for specific users or tasks, just like how some people prefer pepperoni on their pizza while others might like veggies.

What makes each Linux distribution different from one another? Well, each one comes with its own set of tools and applications, like a unique recipe. Some have different ways to look and feel, known as graphical user interfaces (GUIs), which is how you interact with the system. Additionally, they may support different commands you can use in a command line, and they vary in how they are maintained—some are community-driven, while others are managed by companies. This variety allows users to choose a distro that best fits their needs, whether for personal use, servers, or even specialized tasks.