

# Unix



# VVS



# Linux



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## Multi-user and multitasking

Useful for mainframes and server systems.

## An operating system

Late 1960s

AT&T's Bell Labs



## Main variants:

- AIX (IBM).
- Solaris (formerly Sun Microsystems, now Oracle)
- HP-UX (Hewlett Packard)

## Proprietary and commercial.

Sold by the respective vendors and comes with **licensing fees**.

# Linux

## Not a complete operating system

It serves as the core (**kernel**) of various Linux distributions (distros) that include system libraries, utilities, and often desktop environments and application software.

## Popular distributions:

- Ubuntu
- Debian
- Fedora
- CentOS...

## A Unix-like operating system kernel

1991

## Linus Torvalds

A Finnish computer science student, started this project as a hobby and released the first version of the kernel, known as version 0.01, on September 17, 1991.

## Linux is **open-source** and free

Distributed under the GNU General Public License (GPL), anyone can use, modify, and distribute it.



# Through Linux' history

Contributions from developers worldwide. The GNU General Public License (GPL) was adopted for Linux, making it free software.

1991-1994

1994

The first stable Linux kernel, version 1.0, was released.

Linux gained popularity in server and academic environments due to its stability and customizability.

Mid-1990s

Late 1990s

Companies like Red Hat and SUSE began offering commercial support for Linux, contributing to its adoption in enterprise environments.

Linux extended its reach to embedded systems, supercomputers, and desktop computing.

Early 2000s

2005-2010

The rise of Linux on mobile devices, particularly with the Android operating system, which is based on the Linux kernel.

Linux powers a vast array of devices, from servers and smartphones to IoT devices and embedded systems.

Today



# Linux distributions

A Linux distribution (or distro) is a **COMPLETE OPERATING SYSTEM** package that includes:

- the **LINUX KERNEL**,
- system libraries,
- utilities,
- desktop environments and application software.

Distributions provide different configurations and package management systems to cater to various use cases and preferences.



# Popular Linux distributions



Known for its ease of use and strong community support. Ubuntu has both desktop and server editions.

A robust, community-driven distribution known for its stability and adherence to free software principles.



**Red Hat**

**Enterprise Linux**

A commercially supported distribution aimed at the enterprise market.

Derived from RHEL, CentOS provides a free, community-supported alternative with RHEL compatibility.



**CentOS**



A cutting-edge, community-driven distribution sponsored by Red Hat. It serves as a testing ground for new technologies.

A lightweight and highly customizable distribution with a rolling release model.



# To Sum up

## Linux

### Origin

Created in 1991 by Linus Torvalds as an open-source and free Unix-like operating system kernel.

### Licensing

Distributed under the GNU General Public License (GPL), which allows anyone to use, modify, and distribute it freely.

### Variants

Numerous Linux distributions exist, each with its own package management system and configurations.

### Community

Supported by a large and diverse open-source community, leading to rapid development and innovation.

### Cost

Generally free to use, with optional paid support for some distributions.

### Usage

Usually used in servers, desktops, mobile devices (Android), embedded systems, and more.

## Unix

Developed in the late 1960s at AT&T's Bell Labs as a proprietary operating system.

Historically, Unix was proprietary and commercial. Some modern Unix-like systems are open-source.

Various Unix-like operating systems exist, including AIX (IBM), Solaris (Oracle), HP-UX (Hewlett Packard), and others.

Typically developed by specific vendors and organizations, often with less community involvement.

Historically, Unix was commercial and required licensing fees. Some open-source Unix-like systems are available at no cost.

Used in enterprise and server environments, especially where stability and support are critical.





**Don't forget to  
share**

