

What is Linux:

Linux is an open-source, monolithic kernel originally written by Linus Torvalds in 1991. It was written to be a binary compatible clone of the UNIX operating system.

By itself, the kernel cannot offer a complete usable system. Distributions offer a complete operating system based on the linux kernel. Some distributions come with a variety of tools and utilities pre-installed while others are more bare bones and allow the user to configure the system according to their needs and preferences.

Windows and MacOS like workflows can be easily created on linux. Compatibility software such as WINE allows using most windows software on linux. There are also open-source alternatives available for most windows based software.

Software on linux is organised in packages. All distributions come with package managers which can be used to install almost any software without the need to visit websites to download and install software.

Drivers for hardware are present in the kernel and its modules. Most driver issues occur with NVIDIA graphics cards as their driver source code is proprietary. However most distributions either automatically detect and install the correct drivers or provide easy ways to install them yourself.

Linux improves performance by consuming less resources. This is especially handy for older hardware which struggles using windows but can run linux smoothly.

Linux runs on embedded systems, android phones and tablets, servers, the large hadron collider and many other infrastructures. It is used by major corporations such as NASA, Oracle, Google, IBM, Amazon, Dell and even Microsoft. Most of the top 500 supercomputers in the world use linux.