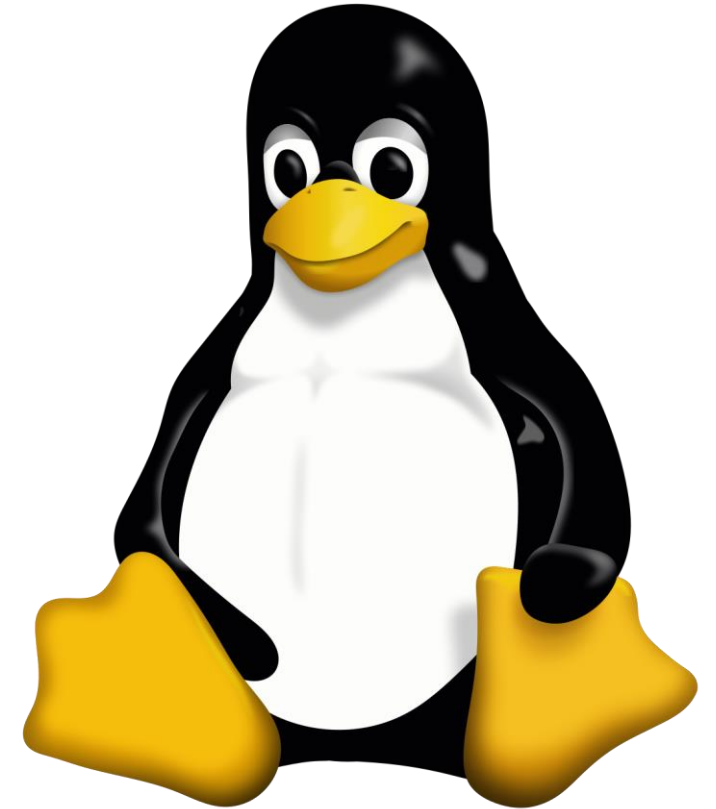


Start your journey with Linux



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What is Shell?

- ❖ The shell is a program that takes keyboard commands and passes them to the operating system to carry out.
- ❖ Almost all Linux distributions supply a shell program from the GNU Project called bash. The name “bash” is an acronym for “Bourne Again SHell”,
- ❖ a reference to the fact bash is an enhanced replacement for sh, the original Unix shell program written by Steve Bourne.

History – Unix to Linux

- ❖ Unix is one of the most popular operating systems worldwide because of its large support base and distribution.
- ❖ It was originally developed as a multitasking system for minicomputers and mainframes in the mid-1970s.
- ❖ Most popular operating system even confusing interface and lack of central standardization. There is no single implementation of Unix.
- ❖ Originally developed by Bell Labs, Unix eventually forked into several versions, including a popular distribution from the University of California at Berkeley, called BSD.
- ❖ Linux was built from the ground up, although earlier versions included some code from BSD as well.

Linux History

- ❖ Linux is a freely distributable version of Unix, originally developed by **Linus Torvalds**, who began work on Linux in 1991 as a student at the University of Helsinki in Finland.
- ❖ Linus now works for Transmeta Corporation, a company in Santa Clara, California, and continues to maintain the Linux kernel, that is, the lowest-level core component of the operating system.

Linux History

Linux could not have come into being without the GNU tools created by the Free Software Foundation. The Free Software Foundation is a group formed in 1984 by Richard Stallman to promote the development of software that can be developed, redistributed, and modified by anyone — here, "free" refers to freedom, not just cost.

Underlying the Free Software Foundation's philosophy is a deep-rooted moral conviction that all software should be free (again, in the sense of freedom); this philosophy is shared by many in the Linux community. This ideal is embodied in the GNU General Public License (or GPL), the copyright license under which Linux is released. We'll discuss this in more detail later in the chapter.

GNU Project

- ❖ The GNU Project, which is the main result of the Free Software Foundation's efforts, has produced many invaluable tools and applications that Linux has depended upon, including the Emacs text editor, gcc compiler suite, and many others.
- ❖ GNU tools have been intertwined with the development of Linux from the beginning. Because of the critical contributions of the GNU Project, the Free Software Foundation even requests that distributions of Linux with accompanying utilities be called GNU/Linux.

Linux popularity

- ❖ Today, Linux is a full-featured, complete implementation of Unix, with a vast array of applications, programming languages, tools, and hardware support. Linux supports the X Window System GUI, TCP/IP networking, multiprocessor machines, advanced hardware and software for scientific and parallel computing, and much more.
- ❖ Nearly every major free software package has been ported to Linux, and a great deal of commercial software is available. In fact, many developers start by writing applications for Linux, and port them to other Unix systems later

Happiness is



Some Popular Distributions



Linux Architecture

