***Linux History***

The history of Linux began in 1991 with the commencement of a personal project by [Finnish](https://en.wikipedia.org/wiki/Finland) student [Linus Torvalds](https://en.wikipedia.org/wiki/Linus_Torvalds) to create a new free operating system kernel. Since then, the resulting [Linux kernel](https://en.wikipedia.org/wiki/Linux_kernel) has been marked by constant growth throughout its history. Since the initial release of its [source code](https://en.wikipedia.org/wiki/Source_code) in 1991, it has grown from a small number of [C](https://en.wikipedia.org/wiki/C_Programming_Language) files under a license prohibiting commercial distribution to the 4.15 version in 2018 with more than 23.3 million lines of source code without comments.

In 1991, while studying [computer science](https://en.wikipedia.org/wiki/Computer_science) at [University of Helsinki](https://en.wikipedia.org/wiki/University_of_Helsinki), Linus Torvalds began a project that later became the [Linux kernel](https://en.wikipedia.org/wiki/Linux_kernel). He wrote the program specifically for the hardware he was using and independent of an operating system because he wanted to use the functions of his new PC with an 80386 processor. Development was done on MINIX using the [GNU C Compiler](https://en.wikipedia.org/wiki/GNU_Compiler_Collection). The GNU C Compiler is still the main choice for compiling Linux today, but can be built with other compilers, such as the [Intel C Compiler](https://en.wikipedia.org/wiki/Intel_C_Compiler).

Linus Torvalds had wanted to call his invention Freax, a [portmanteau](https://en.wikipedia.org/wiki/Portmanteau) of "free", "freak", and "x" (as an allusion to Unix). During the start of his work on the system, he stored the files under the name "Freax" for about half of a year. Torvalds had already considered the name "Linux," but initially dismissed Torvalds first published the Linux kernel under its own license, which had a restriction on commercial activity.

The software to use with the kernel was software developed as part of the GNU project licensed under the GNU General Public License, a free software license. The first release of the Linux kernel, Linux 0.01, included a binary of GNU's Bash shell.

Sadly, a kernel by itself gets you nowhere. To get a working system you need a shell, compilers, a library etc. These are separate parts and may be under a stricter (or even looser) copyright. Most of the tools used with linux are [GNU software](https://en.wikipedia.org/wiki/GNU) and are under the GNU [copyleft](https://en.wikipedia.org/wiki/Copyleft). These tools aren't in the distribution - ask me (or GNU) for more info.

[](https://en.wikipedia.org/wiki/File:Tux.svg)

Torvalds announced in 1996 that there would be a mascot for Linux, a penguin. This was due to the fact when they were about to select the mascot, Torvalds mentioned he was bitten by a [little penguin](https://en.wikipedia.org/wiki/Little_penguin)  on a visit to the [National Zoo & Aquarium](https://en.wikipedia.org/wiki/National_Zoo_%26_Aquarium) in Canberra, Australia. [Larry Ewing](https://en.wikipedia.org/wiki/Larry_Ewing) provided the original draft of today's well known mascot based on this description. The name [Tux](https://en.wikipedia.org/wiki/Tux_(mascot)) was suggested by James Hughes as derivative of *Torvalds UNIX*, along with being short for *tuxedo*, a type of suit with color similar to that of a penguin

***Linux Philosophy***

When new users encounter Linux, they often have a few misconceptions and false expectations of the system. Linux is a unique operating system, and it’s important to understand its philosophy and design in order to use it effectively. At the center of the Linux philosophy is a concept that we now call open source software.

Open source is a term that applies to software for which the source code—the inner workings of the program—is freely available for anyone to download, modify, and redistribute. Software covered under the GNU GPL, described in the previous section, fits into the category of open source. Not surprisingly, though, so doe’s software that uses copyright licenses that are similar, but not identical, to the GPL. For example, software that can be freely modified but that does not have the same strict requirements for redistribution as the GPL is also considered open source. Various licenses fit this category, including the BSD License and the Apache Software License .

***Linux distributions***

A Linux distribution (often abbreviated as distro) is an [operating system](https://en.wikipedia.org/wiki/Operating_system) made from a software collection, which is based upon the [Linux kernel](https://en.wikipedia.org/wiki/Linux_kernel) and, often, a [package management system](https://en.wikipedia.org/wiki/Package_management_system). Linux users usually obtain their operating system by downloading one of the Linux distributions, which are available for a wide variety of systems ranging from [embedded devices](https://en.wikipedia.org/wiki/Embedded_device) (for example, Opener) and [personal computers](https://en.wikipedia.org/wiki/Personal_computer) (for example, [Linux Mint](https://en.wikipedia.org/wiki/Linux_Mint)) to powerful [supercomputers](https://en.wikipedia.org/wiki/Supercomputer) (for example, [Rocks Cluster Distribution](https://en.wikipedia.org/wiki/Rocks_Cluster_Distribution)).

A typical Linux distribution comprises a Linux kernel, [GNU](https://en.wikipedia.org/wiki/GNU) tools and libraries, additional software, documentation, a [window system](https://en.wikipedia.org/wiki/Window_system) (the most common being the [X Window System](https://en.wikipedia.org/wiki/X_Window_System)), a [window manager](https://en.wikipedia.org/wiki/Window_manager), and a [desktop environment](https://en.wikipedia.org/wiki/Desktop_environment). Most of the included software is [free and open-source software](https://en.wikipedia.org/wiki/Free_and_open-source_software) made available both as compiled binaries and in [source code](https://en.wikipedia.org/wiki/Source_code) form, allowing modifications to the original software. Usually, Linux distributions optionally include some [proprietary software](https://en.wikipedia.org/wiki/Proprietary_software) that may not be available in source code form, such as [binary blobs](https://en.wikipedia.org/wiki/Binary_blob) required for some [device drivers](https://en.wikipedia.org/wiki/Device_driver).[[1]](https://en.wikipedia.org/wiki/Linux_distribution#cite_note-1) A Linux distribution may also be described as a particular assortment of application and utility software (various GNU tools and libraries, for example), packaged together with the Linux kernel in such a way that its capabilities meet the needs of many users.[[2]](https://en.wikipedia.org/wiki/Linux_distribution#cite_note-2) The software is usually adapted to the distribution and then packaged into [software packages](https://en.wikipedia.org/wiki/Package_(package_management_system)) by the distribution's maintainers. The software packages are available online in so-called [repositories](https://en.wikipedia.org/wiki/Software_repository), which are storage locations usually distributed around the world. Beside glue components, such as the distribution installers (for example, [Debian-Installer](https://en.wikipedia.org/wiki/Debian-Installer) and [Anaconda](https://en.wikipedia.org/wiki/Anaconda_(installer))) or the package management systems, there are only very few packages that are originally written from the ground up by the maintainers of a Linux distribution.

***Linux Communities***

StackOverflow is the community that is not just focused on Linux but approximately anything related with IT. It is mostly known among programmers. You can also ask Linux/open source related issues and get your answers.

Unix.stackexchange.com is another forum of StackExchange focused just on Linux/Unix topics. I love large number of tags that let you dig in more specific issues. On this community, there are higher chances you'll get the whole tag for your issue not just posts. If you don't have any issue but want to learn about a specific topic then unix.stackexchange.com is a good place to go for.