Linux History

History of Linux

In order to know the popularity of linux, we need to travel back in time. In earlier days, computers were like a big house, even like the stadiums. So there was a big problem of size and portability. Not enough, the worst thing about computers is every computer had a different operating system. Software was always customized to serve a specific purpose, and software for one given system didn't run on another system. Being able to work with one system didn't automatically mean that you could work with another. It was difficult, both for the users and the system administrators. Also those computers were quiet expensive. Technologically the world was not quite that advanced, so they had to live with the size for another decade. In 1960, a team of developers in the Bell Labs laboratories started working on a solution for the software problem, to address these compatibility issues. They developed a new operating system, which was simple, elegant , written in C Programming language instead of Assebly language and most important is it can be able to recycle the code. The Bell Labs developers named their this project as " UNIX ".

Unix was developed with small piece of code which is named as kernel. This kernel is the only piece of code that needs to be adapted for every specific system and forms the base of the UNIX system. The operating system and all other functions were built around this kernel and written in a higher programming language, C. This language was especially developed for creating the UNIX system. Using this new technique, it was much easier to develop an operating system that could run on many different types of hardware. So this naturally affected the cost of Unix operating system, the vendors used to sell the software ten times than the original cost. The source code of Unix, once taught in universities courtesy of Bell Labs, was not published publicly. So developers tried to find out some solution to to provide an efficient solution to this problem.

A solution seemed to appear in form of MINIX. It was written from scratch by Andrew S. Tanenbaum, a US-born Dutch professor who wanted to teach his students the inner workings of a real operating system. It was designed to run on the Intel 8086 microprocessors that had flooded the world market.

As an operating system, MINIX was not a superb one. But it had the advantage that the source code was available. Anyone who happened to get the book 'Operating Systems: Design and Implementation' by Tanenbaum could get hold of the 12,000 lines of code, written in C and assembly language. For the first time, an aspiring programmer or hacker could read the source codes of the operating system, which to that time the software vendors had guarded vigorously. A superb author, Tanenbaum captivated the brightest minds of computer science with the elaborate lively discussion of the art of creating a working operating system. Students of Computer Science all over the world worked hard over the book, reading through the codes to understand the very system that runs their computer.

And one of them was Linus Torvalds. Linus Torvalds was the second year student of Computer Science at the University of Helsinki and a self-taught hacker. MINIX was good, but still it was simply an operating system for the students, designed as a teaching tool rather than an industry strength one. At that time, programmers worldwide were greatly inspired by the GNU project by Richard Stallman, a software movement to provide free and quality software. In the world of Computers, Stallman started his awesome career in the famous Artificial Intelligence Laboratory at MIT, and during the mid and late seventies, created the Emacs editor.

In the early eighties, commercial software companies lured away much of the brilliant programmers of the AI lab, and negotiated stringent nondisclosure agreements to protect their secrets. But Stallman had a different vision. His idea was that unlike other products, software should be free from restrictions against copying or modification in order to make better and efficient computer programs. With his famous 1983 manifesto that declared the beginnings of the GNU project, he started a movement to create and distribute softwares that conveyed his philosophy (Incidentally, the name GNU is a recursive acronym which actually stands for 'GNU is Not Unix'). But to achieve this dream of ultimately creating a free operating system, he needed to create the tools first. So, beginning in 1984, Stallman started writing the GNU C Compiler (GCC), an amazing feat for an individual programmer. With his smart technical skills, he alone outclassed entire groups of programmers from commercial software vendors in creating GCC, considered as one of the most efficient and robust compilers ever created.

Linus himself didn't believe that his creation was going to be big enough to change computing forever. Linux version 0.01 was released by mid September 1991, and was put on the net. Enthusiasm gathered around this new kid on the block, and codes were downloaded, tested, tweaked, and returned to Linus. 0.02 came on October 5th.

Further Development

While Linux development, Linus faced some of the difficulties such as cross opinions with some people. E.g. Tanenbaum the great teacher who wrote the MINIX. He sent the letter to Linus as :-

“I still maintain the point that designing a monolithic kernel in 1991 is a fundamental error. Be thankful you are not my student. You would not get a high grade for such a design "
Linus later admitted that it was the worst point of his development of Linux. Tanenbaum was certainly the famous professor, and anything he said certainly mattered. But he was wrong with Linux, for Linus was one stubborn guy who never like defeats. Although, Tanenbaum also remarked that “Linux is obsolete.” So very soon thousands of people form a community and all joined the camp. Powered by programs from the GNU project, Linux was ready for the actual showdown. It was licensed under GNU General Public License, thus ensuring that the source codes will be free for all to copy, study and to change. Students and computer programmers grabbed it.

Everyone tried and edited the source code and then it gives the start for commercial vendors to start their market. They compiled various software and distributed them with that operating system which people are familiar with. Red Hat, Debian gained more response from outside world. With the new graphical interface system like KDE, GNONE the linux becomes popular. The best thing today about Linux is it's powerful commands.

Rise of the Desktop Linux

What is the biggest complaint about Linux ??? That is it's Text mode. Many people get scared of seeing the command base interface which is not understandable. But if anyone starts learning the commands, it goes on interesting topics to learn new about the Operating System. Still now, very friendly GUI's are available for it's flexibility. Anyone can install the Linux without having the prior experience. Everything is well explanatory at the time of installation. Most distributions are also available in Live CD format, which the users can just put in their CD drives and boot without installing it to the hard drive, making Linux available to the newbies. The most important point about Linux is it's open source. So Computer users

having low budget can have Linux and learn linux as it is free.

Linux's Logo - Penguin

The logo of Linux is Penguin. It's called as Tux in technological world. Rather Tux, as the penguin is lovingly called, symbolizes the carefree attitude of the total movement. This cute logo has a very interesting history. As put forward by Linus, initially no logo was selected for Linux. Once Linus went to the southern hemisphere on a vacation. There he encountered a penguin, not unlike the current logo of Linux. As he tried to pat it, the penguin bit his hand. This amusing incident led to the selection of a penguin as the logo of Linux sometime later.

Source: http://www.go4expert.com/articles/linux-history-t5124/