Linus Torvalds Biography

Linus Torvalds was born in Helsinki in 1969. He is Known for being the principal developer of git, Linux and Linux Kernel. Linux Kernel was released in 1991 and git was released in 2005, modelled after a proprietary software called BitKeeper. Linus won the millennium Technology prize in Finland for the creation of Linux kernel. From 97-99 Linus assisted in choosing the binary standard for Linux and Unix which assisted him in creating integrable software. Linux Kernel is a computer operating system kernel written in C and assembly language. The kernel, also known as "The Linux" manages the Memory, CPU and peripheral devices/hardware whilst being the lowest level of an Operating system. Linux kernel is a monolithic Unix-like open source operating system. Linus developed the kernel using Richard Stallman's open source GNU Unix-compatibletools. These tools are what inspired Linus to develop all his software to be open source, a feature that still serves him today as over sixteen percent of the Linux kernel contributors are volunteers/non-paid individuals. Linus' open source creation of git furthermore enabled developer to collaborate and track progress in software development.

Many Linux based operating systems (Ubuntu Linux, Linux Mint, Arch Linux, Deepin, Fedora, Debian, openSUSE) use this kernel since it easily integrated in the software development process. Many other kernels are developed with a given base operating system to form a cohesive unit, like FreeBSD and MAC OS Whereas Linus developed Linux kernel independently for other components of an operating system to come from a variety of different sources. The integrability of the kernel allows for immense variety and scalability. The monolithic Linux kernel changed many researcher's minds, who were of the opinion that kernels of this sort were obsolete. Linus' development of such a kernel motivated developers to develop similar kernels such as BSD, Solaris, OS-9, AIX, HP-UX, DOS, Microsoft Windows (95,98,Me), OpenVMS, XTS-400 etc. The Basic functions of the Linux kernel are: Resource Allocation, Process Management, I/O Device Management, Memory Management, Inter-Process Communication, Scheduling, System Calls and interruption handling, Security and protection management

Real-time trading is now possible due to the Linux kernel. This functionality powers over 50 percent of the world's financial transactions and one hundred percent of the fortune

500 banks. The success of Linux in the financial world is based on the performance and security the kernel has to offer.

A few other open source projects along with the development of the kernel are the driving forces to the standardization of hardware/software development practices. We see this especially as Linus helped choose the standard for Linux and Unix from 1997-1999. His help shows that the influence he had in standardization process. Now, the standardization of computer practices allows better interoperations between developers and businesses.

Open source became a huge trend once Linus practiced this belief with the competent software he developed. This created competition with companies and pressured them to also release their software to the public. This "open-source" movement somewhat lead by Linus allowed for more co-creation and innovation between developers.

Aspects of Open source combined with efficiency and scalability attracted governments. Most Governments drew attention to Linux so that governments could continue their significant history of open source. This lead to the developments in governmental technology systems to be greatly influenced by Linus' practices.

Along with this, over twenty-four thousand flight per day are guided through air traffic controls in America, All guided by the security features provided by Linux.

Linux enables developers to get on-demand services effectively that allows for rapid provisioning, again, due to its integrability and lack of cost-prohibitive licensing. A great example of this is when a developer needs a VM or an IT Ops needs to provision a server, they can do so quickly and painlessly with Linux in comparison to other Operating systems.

The greatest legacy of all that Linus has left is by far the push towards open source rather than proprietary software. It gives the user more transparency and responsibility whilst also allowing developers to build on each other's work to further innovate.

The most interesting yet admirable trait about Linus is that he seems to be similar to the stereotypical intolerant, fractious software developer, yet he has noticed it and is willing to change these traits so that he can work better with people. He explains "I'd like to be a nice person and curse less and encourage people to grow rather than telling them they are idiots." He has called his personal attacks he has engaged in whilst working at the Linux Foundation "unprofessional and uncalled for." After this realization, he has taken some "time off" to "get some assistance on how to understand people's emotions and respond appropriately." This is admirable as it is clear his technical skills are amongst the best in the world yet he has

identified his shortcomings in regards to inter-personal skills and is now working on them. His intention for co-creation and optimal team work is shown in the creation of git, open source and his willingness to improve his inter personal skills.

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