



eWEEK at 30: Linux Makes Open Source a Software Industry Force

By Sean Michael Kerner | Posted 2013-12-31



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One of the great technology industry success stories that has emerged during eWEEK's existence is the rise of the open-source Linux operating system.

Linux started from humble beginnings in Finland, born in the brilliant mind of creator Linus Torvalds and has emerged to become a dominant force in the modern IT landscape. Linux today is the enabling engine for the embedded devices that will

make up the Internet of things, it powers enterprise servers, supercomputers and the world's largest stock exchanges too.

The rise of Linux went hand in hand with the rising support for open-source software technology of all kinds. Computer users and software developers began initiating open-source projects of all kinds as an alternative to a commercial PC operating system and application software market that since the 1980s was dominated to a great degree by Microsoft.

The journey of Linux all began with the first public mention by Linus Torvalds on Aug. 26, 1991 in a comp.os.minix usenet posting.

"I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones," Torvalds wrote. "It is NOT portable (uses 386 task switching etc), and it probably never will support anything other than AT-hard disks, as that's all I have."

Minix is a Unix-type operating system that was started in 1987, while GNU (GNU is Not Unix) was another attempt to do the same thing, started in 1983. With Linux, Torvalds attempted to succeed where others had failed and it was a combination of technical ingenuity, charisma and collaboration that over time, won the day.

On Oct. 5, 1991 in a comp.os.minix usenet posting, the first public code emerged with the 0.02 release that became the spark that ignited the Linux revolution.

In January of 1992, Linus Torvalds released the Linux 0.12 kernel and with it came a key change that provided the fuel necessary to encourage wider participation in Linux development.

Starting with the 0.12 release, the Linux kernel has been licensed under the GNU General Public License (GPL), which is an open-source license that requires reciprocal contributions. What that means is that developers can't just take GPL code, modify it and then keep the modification for themselves. They need to release the modification back to the community. It is that spirit of collaboration and shared development that pushed Linux forward from the 1990s to the modern day.

The Linux kernel itself is only one part of a complete operating system and that's where Linux distributions come into play. A Linux distribution includes a Linux kernel as well as the other necessary components that make up a modern operating system. That is what made 1993 a big year for Linux distributions with multiple efforts entering the nascent open-source marketplace.

One of the first Linux distributions was the Slackware Linux distribution that was launched in 1993 and is still alive and well today. Debian Linux also got its start in 1993 and today serves as the base for multiple popular distributions including Ubuntu as well as remaining popular in its own right.

One of the earliest commercial Linux success stories that *eWEEK* followed throughout the 1990s was the rise to prominence of Red Hat Linux. Marc Ewing released the first publicly available version of Red Hat Linux in October of 1994 in what has become known as the Halloween release.

In 1995, Red Hat Linux merged with Bob Young's ACC Corporation, which had been selling Linux products since 1993.

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From 1995 onwards, Red Hat became a force to be reckoned with in the commercial Linux world, culminating in the company's massive initial public offering on Aug. 11, 1999 when share value tripled in a single day, going from \$14 to just over \$52.

Support from some of the world's largest IT companies helped keep Linux and Red Hat on the road to commercial success. In July of 1998, Oracle announced that it would be porting its namesake database to Linux, which proved to be a strong vote of confidence in the open-source operating system.

IBM's contribution to the development of Linux in the 1990s also cannot be overstated. IBM established its Linux Technology Center in 1999 and, in 2000, it cast a huge vote of confidence in the operating system when it announced a \$1 billion investment in Linux research and development that served as an essential foundation for the growth of Linux over the next decade.

In 2000, Daniel Frye, director of IBM's Linux Technology Center in an exclusive interview (<http://www.eweek.com/c/a/Linux-and-Open-Source/Linux-Looms-Large-At-IBM/>) with *eWEEK* said that, "Linux was becoming a 'highly disruptive force' that will do for applications what the Internet had done for networks—become a common, open, pervasive platform that created an explosion of innovation in e-business applications."

Three years later, in 2003, *eWEEK* reported (<http://www.eweek.com/c/a/Linux-and-Open-Source/Linux-Brings-In-1-Billion-in-Revenue-for-IBM?mchk=1>) that IBM disclosed that it had generated a cumulative \$1 billion in revenue from Linux.

In 2002, Linux Torvalds published his own autobiography which solicited an interesting observation (<http://www.eweek.com/c/a/Enterprise-Applications/For-Torvalds-The-Revolution-Was-Fun/>) from *eWEEK*'s Spencer Katt editorial cartoon.

"El Gato winced when he heard HarperCollins was publishing a celebrity's autobiography titled "Just for Fun: The Story of an Accidental Revolutionary.""

Spencer was willing to bet that "it's the inspiring story of how Lil Britney Spears left Kentwood, La., to become a teen music phenomenon." Imagine the Katt's chagrin when a pal informed him it was the title for a tome chronicling the life of fun-loving Finnish Linux inventor Linus Torvalds.

In hindsight, Torvalds' 2002 autobiography only chronicled the beginning of the Linux story. In the years since, Linux market share has grown and the technology has continued to evolve at a rapid pace with an increasing volume of companies and developers collaborating on the effort. Torvald's 1992 decision to license Linux under GPL continued to be a driving force in 2013. The "Who Writes Linux 2013" (<http://www.eweek.com/developer/who-writes-linux-in-2013.html>) report found (<http://www.eweek.com/enterprise-apps/slideshows/linux-development-7-surprising-facts-about-who-writes-linux-apps.html>) that more than 10,000 developers from 1,000 companies have contributed to Linux since 2005.

Linux in 2013 powers the vast majority of the world's supercomputers; It's the foundation for a large proportion of the world's mobile smartphones, powers the world's stock exchanges and is an integral part of the core infrastructure that enables the Internet.

After more than 20 years of existence, Linux continues to evolve with its founder Linus Torvalds still at the helm. At the LinuxWorld USA 2013 (<http://www.eweek.com/developer/linus-torvalds-talks-linux-development-at-linuxcon.html>) conference in New Orleans, Torvalds recounted that he started off as a developer because of a necessity. His friends were playing games on their computers that he couldn't afford, so he had to learn to program.

Even after all this time, Torvalds says he has yet to get bored with Linux, which remains at the core of what he plans to do with his life for the foreseeable future.

"I don't see any project coming along being more interesting to me than Linux," Torvalds said. "I couldn't imagine filling the void in my life if I didn't have Linux."

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