

The following is an excerpt from "Running LINUX, 2nd Edition, pages 4-5 by Matt Welsh and Lar Kaufman, published by O'Reilly (ISBN: 1-56592-151-8) [Copyright of the book, © 1st Edition May 1995; © 2nd Edition August 1996]." Duplication here was granted by the publisher's permission.

[Excerpt]

A Brief History of Linux

(skipping three paragraphs)

Linux is a freely distributable version of UNIX developed primarily by Linus Torvalds at the University of Helsinki in Finland. Linux was developed with the help of many UNIX programmers and wizards across the Internet, allowing anyone with enough know-how and gumption the ability to develop and change the system. The Linux kernel uses no code from AT&T or any other proprietary source, and much of the software available for Linux is developed by the GNU project at the Free Software Foundation in Cambridge, Massachusetts. However, programmers all over the world have contributed to the growing pool of Linux software.

Linux was originally developed as a hobby project by Linus. It was inspired by Minix, a small UNIX system developed by Andy Tannenbaum, and the first discussions about Linux were on the Usenet newsgroup *comp.os.minix*. These discussions were concerned mostly with the development of a small, academic UNIX system for Minix users who wanted more.

The very early development of Linux dealt mostly with the task-switching features of the 80386 protected-mode interface, all written in assembly code. Linus writes:

After that it was plain sailing: hairy coding still, but I had some devices, and debugging was easier. I started using C at this stage, and it certainly speeds up development. This is also when I start to get serious about my megalomaniac ideas to make "a better Minix than Minix." I was hoping I'd be able to recompile *gcc* under Linux some day...

Two months for basic setup, but then only slightly longer until I had a disk driver (seriously buggy, but it happened to work on my machine) and a small filesystem. That was about when I made 0.01 available [around late August of 1991]: it wasn't pretty, it had no floppy driver, and it couldn't do much anything. I don't think anybody ever compiled that version. But by then I was hooked, and didn't want to stop until I could chuck out Minix.

No announcement was ever made for Linux version 0.01. The 0.01 sources weren't even executable: they contained only the bare rudiments of the kernel source and assumed that you had access to a Minix machine to compile and play with them.

On October 5, 1991, Linus announced the first "official" version of Linux, version 0.02. At this point, Linus was able to run *bash* (the GNU Bourne Again Shell) and *gcc* (the GNU C compiler), but not much else was working. Again, this was intended as a hacker's system. The primary focus was kernel development; none of the issues of user support, documentation, distribution, and so on had even been addressed. Today, the Linux community still seems to treat these ergonomic issues as secondary to the "real programming" --- kernel development.

Linus wrote in *comp.os.minix*,

Do you pine for the nice days of Minix-1.1, when men were men and wrote their own device drivers? Are you without a nice project and just dying to cut your teeth on a OS you can try to modify for your needs? Are you finding it frustrating when everything works on Minix? No more all-nighters to get a nifty program working? Then this post might be just for you.

As I mentioned a month ago, I'm working on a free version of a Minix-lookalike for AT-386 computers. It has finally reached the stage where it's even usable (though may not be depending on what you want), and I am willing to put out the sources for wider distribution. It's just version 0.02... but I've successfully run *bash*, *gcc*, GNU *make*, GNU *sed*, *compress*, etc. under it.

After version 0.03, Linus bumped the version number up to 0.10, as more people started to work on the system. After several further revisions, Linus increased the version number to 0.95, to reflect his expectation that the system was ready for an "official" release very soon. (Generally, software is not assigned the version number 1.0 until it's theoretically complete or bug-free.) This was in March of 1992.

[End of excerpt]