Early days of Linux

2026-11

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Slides and other info



liw.fi/2026-minidebconf

1988-1990

- two new Swedish speaking students in CS meet
- access to `kreeta`
- typo `rm`, find Usenet
- military service

Summer of 1990 or 1991



Fall of 1990

- C & Unix programming course
  - Ultrix 2.0-1
  - SunOS
- two weirdos in terminal room
- hypothetical discussions about operating systems
  - Plan 9
  - QNX

1991: Linus gets a PC

- previously Sinclair QL and Commodore VIC-20
- January 5: Linus' first PC
  - no-name 386 with 4 MiB RAM
- Prince of Persia
- Minix

Freax

- about April 1991: assembly language, A/B threads
- I write `sprintf`
- Linus writes drivers for keyboard, serial port, hard drive, terminal emulation, support for Minix file system
  - reading Usenet from home, such science fiction!
  - Linus dials his hard drive, implements file permissions
  - much porting of free software
  - Freax becomes self hosting
- August: Linus posts to `comp.os.minix` about new kernel

comp.os.minix pre-announcement, 1991-08-25

Hello everybody out there using minix -

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

Note: "just a hobby, won't be big and professional like gnu"

I've currently ported bash(1.08) and gcc(1.40), and things seem to work. This implies that I'll get something practical within a few months, and I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-)

Linus (torvalds@kruuna.helsinki.fi)

PS. Yes - it's free of any minix code, and it has a multi-threaded fs. It is NOT protable (uses 386 task switching etc), and it probably never will support anything other than AT-harddisks, as that's all I have :-(.

Later in 1991: Linux

- September, October: tarball uploads to `ftp.funet.fi`
  - name changes to Linux
- Linus installs Linux on my PC
- Linus announces Linux to `comp.os.minix`, much interest
- non-free license: no commercial use
- RMS visits Finland, I take Linus to listen to him
  - others pressure Linus to change the license, too
- Christmas break: virtual memory implementation
- kernel compilation takes around 45 minutes on my PC

1992

- Linux license change to GPL
- Tanenbaum–Torvalds debate
  - https://en.wikipedia.org/wiki/Tanenbaum%E2%80%93Torvalds_debate
  - Linux is obsolete
  - x86 will be replaced
  - monolithic kernel is *soo* 1970s
- X11 / X386 is ported to Linux
- The Linux Documentation Project starts
- I make a few issues of Linux News, first ever Linus interview
  - liw.fi/linux-news
  - replaced by comp.os.linux.announce Usenet group
- first Linux distribution, SLS
- kernel compilation takes around 45 minutes on my PC

1993

- Red Hat starts
- SLS morphs into Slackware
- Debian starts
- both Linus and I start working for uni
  - shared office
  - pranks
- kernel compilation takes around 45 minutes on my PC

1994

- Linux 1.0 is released
  - big announcement event for the public and the press (one TV channel came)
  - clips on Youtube
- kernel compilation takes around 45 minutes on my PC

1995

- I and Linus do a software engineering project for uni; I teach him CVS
- Linux breaks Sun systems on the university network; Linux is banned until fixed
- Port of kernel to DEC Alpha architecture
- kernel compilation takes around 45 minutes on my PC

Some time passes

- Open source, IBM investment
- KDE, GNOME, the desktop wars
- MS attacks FOSS
- Ubuntu
- open source takes over the world, and beyond

2026

- Linux runs on
  - billions of devices
  - on all continents
  - on all oceans
  - in the air
  - in orbit
  - on Mars
  - sometimes in the air on Mars
  - possibly in orbit around Mars
- but it's **"just a hobby, won't be big and professional"**
- kernel compile with default configuration takes 15 minutes on my laptop

🟦 Lessons learned

How to succeed in open source and life:

- Be lucky
- Be in the right place at the right time
- Befriend the right people
- Be stubborn

Fin?

Questions?

lwn.net/Articles/928581 - "The early days of Linux", from 2023