

Free and Open-Source OS

Systems II

Definitions

- **open-source** operating systems (available in source-code format)
- **free** operating systems (+ no-cost use, redistribution, and modification)
- **proprietary closed-source** software
- **hybrid** (macOS vs. Darwin)

<https://gnu.org/philosophy/open-source-misses-the-point.html>
(by RMS)



Short history of GNU/Linux

- 1950s: most software come with source code
- 1980s: most software is proprietary
- 1984: GNU (GNU's Not Unix!), Free Software Foundation (FSF), GNU General Public License (GPL)
- 1991: Linux (Unix-like kernel), Linus Torvalds
- 1992: Linux rereleased under GPL

Linux vs. GNU/Linux, distributions

BSD UNIX and OpenSolaris

BSD

- started at UCB in 1978 as a derivative of Bell Labs' original UNIX
- released in 1994
- open source descendants: FreeBSD, NetBSD, OpenBSD, ...

Solaris

- commercial, UNIX-based, Sun Microsystems
- 2005: OpenSolaris project
- 2009: Sun bought by Oracle
- Project Illumos, <https://www.illumos.org/>