

ISCB20.01 – Introduction to LINUX for Biologists

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SECTION-1.1: Introduction to UNIX/LINUX

Multics

- Multics has influenced all modern operating systems that started in 1964
- An operating system(OS) written on "Assembly language"
- Multics OS Project(Under Bell Labs & MIT) - can run multiple programme at the same time(Multiplexed)
- Ken Thompson and Dannis Ritchie and others

UNIX

- Ken Thompson and Dannis Ritchie get FRUSTRATED and BORED in the Multics OS project
- In the spare time they created a alternative programme (Uniplexed - Unics - UNIX)
- An operating system(OS) written on C
- AT&T licensed it(only source code) in late 1970 and sold it as a commercial product from 1980s as "System V" because of some legal problem with the company.
- NOT FREE

UNIX

- Between 1970-1980 AT&T used to sold source code only to the universities
- Studied at the University of Helsinki(Finland)
- Dedicated to make a OS in the final year project by molding UNIX (remove some complexity and add some features to it.); BUT GOT BANNED

GNU project

- Free software, mass collaboration project that was introduced by Richard Stallman under "GNU General Public License"
- Free as in freedom
The term "free software" is sometimes misunderstood—it has nothing to do with price. It is about freedom. Here, therefore, is the definition of free software.
- By the early 1990s, many of the programs required in an operating system (such as libraries, compilers, text editors, a Unix shell, and a windowing system) were completed, although low-level elements such as device drivers, daemons, and the kernel, called GNU Hurd, were stalled and incomplete.

- Linus Torvalds principal developer of the Linux kernel, which is the kernel for GNU/Linux operating systems (distributions)
- The first prototypes of Linux were publicly released later in 1991.
- Doesn't use the source code of Unix but it uses the same philosophy;
So Linux is "Unix LIKE not Unix CLONE"

Linux Distro

- Ubuntu
- Red Hat Enterprise Linux(Paid) - Bug fix, Support, Training
- Fedora
- Gubuntu
- Android

Thank You

