

History of Unix and Linux

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The Cannots of Computing

From the 1960s to the 1990s, computer programmers could not do the tasks that a user takes for granted in 2010. Here is a short timeline of software milestones.

1961: Spacewar (first shooter video game)

1969 to 1973: C programming

1972: Ball mouse

1978: Visicalc

1979: WordStar

1983: Lotus 123

1984: First GUI OS (Macintosh)

1984: Presenter (PowerPoint)

1991: Visual Basic 1.0



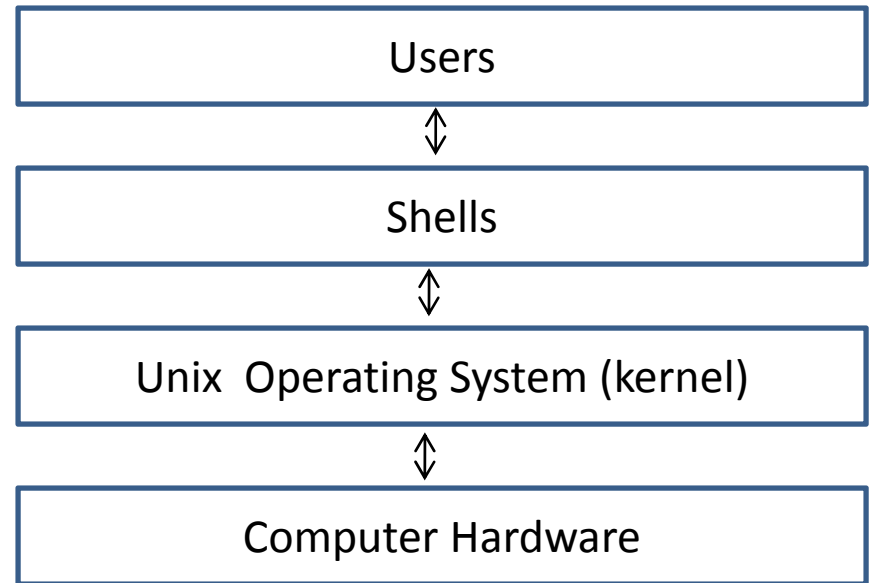
Origins of Unix

Invented in 1969 by Ken Thompson and Dennis Ritchie, his first collaborator. Wrote an OS for an inexpensive computer that ran his game, Space Travel.

Originally called UNiplexed Information and Computing Service, a play on words from a previous project, Multics

Code was written in Assembler, and the applications in B. C evolved from B in 1971.

Thompson and Ritchie were awarded the National Medal of Technology from President Clinton in 1999.



Some Original 1971 UNIX Commands

Unix commands are short executables that enable the user to accomplish tasks.

In the early years of computing, users used short words or letter combinations to execute tasks.

Graphical User Interface (GUI) replaced the use of text screens found in MSDOS and UNIX programs.

b	compile B program
boot	reboot system
cat	concatenate files
cc	C compiler
chdir	change working directory
chmod	change access mode
chown	change owner
cp	copy file
ls	list directory contents
mv	move or rename file
roff	run off text
sleep	suspends program execution
sort	sort ascii numbers
switch	supplied as a library function
time	time in seconds since 1/1/1971
wc	get word count
who	who is one the system

UNIX Rewritten in C

Thompson first tried to rewrite Unix in Fortran but it did not work.

Rewritten in C programming language in 1973.

C programming language is the most popular language today for coders.



Pipes Added

Pipes were implemented by Doug McIlroy

A pipe allows the output of one command to be inputted into another command



Unix and Linux Shells

Unix uses shells such as Ashell , which is a UNIX/Linux program that interprets the commands a person enters from the keyboard

A list of shells:

Bourne

Korn

C Shell

Bash

Ash

Tcsh

zsh



The Advent of Linux

GNU project was started in 1984 to provide a free operating system by Richard Stallman.

Linus Torvalds announces and then writes Linux and releases it in September of 1991. He uses the programs from the GNU project and writes the Linux kernel.

Linus Torvalds wanted a more open Operating System that would take suggestions from other people.



Versions of Linux

There are multiple versions of the operating system available for different purposes.

Over 200 Linux Operating System shown on the www.linux.org website.

aLinux	Hard Hat
Astaro Security	Knoppix
BlueCAT	Mandriva
CHAINSAWLINUX	MkLinux
Coyote	Slackware
Crux	Red Hat Enterprise
Debian GNU	Rock
DeLi	OpensUSE
Devil	SUSE Linux Enterprise
EnGarde Secure	Turbo
Fedora	Ubuntu
Freesco	White Glove
Gentoo	Yellow Dog

Linux Versions Used in our Lessons

We will use the following Linux versions on projects in the next eight weeks.

- Knoppix Linux
- Fedora Linux
- Ubuntu Linux