

History of UNIX

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Multics (Multiplexed Information and Computing Service)

- First Operating System that was developed by AT&T Bell Labs @ MIT
- It was a Time Sharing System

Ken Thompson, Dennis Ritchie, Doug McIlroy, and Joe Ossanna

- Bell Labs Pulled back the project due to its huge size
- The Programmers who were part of this project were all frustrated due to this decision and were dejected

Space Travel by Ken Thomson

- PDP-7 Machine was used for Programming
- The game needed more powerful system in terms of memory management

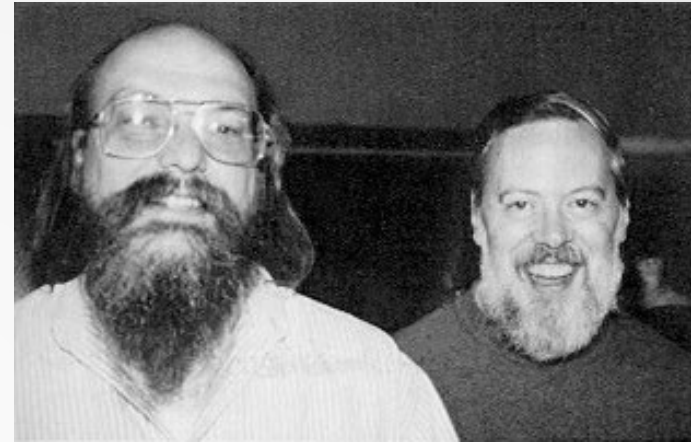


UNICS - UNiplexed Information and Computing Service

- In secret Ken Thomson, Dennis Ritchie and others started working on a new kind of Operating System
- Eventually It was named as **UNIX**

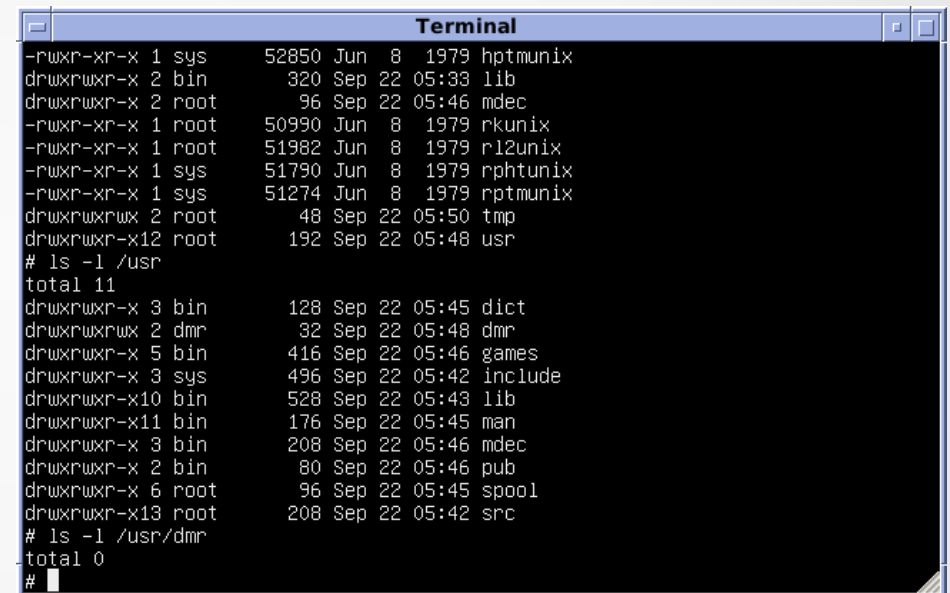
AT&T Bell Labs – Powered by UNIX

- As the System became stable, text editors were written
- Bell Labs started using UNIX as its de facto Operating System in its everyday operation



Sea - See - C

- He was bored and He wrote a C Program
- That C Program later became UNIX Operating System



```
Terminal
-rwxr-xr-x 1 sys      52850 Jun  8  1979 hptmunix
drwxrwxr-x 2 bin       320 Sep 22 05:33 lib
drwxrwxr-x 2 root      96 Sep 22 05:46 mdec
-rwxr-xr-x 1 root    50990 Jun  8  1979 rkunix
-rwxr-xr-x 1 root    51982 Jun  8  1979 rl2unix
-rwxr-xr-x 1 sys     51790 Jun  8  1979 rphtunix
-rwxr-xr-x 1 sys     51274 Jun  8  1979 rptmunix
drwxrwxrwx 2 root       48 Sep 22 05:50 tmp
drwxrwxr-x12 root     192 Sep 22 05:48 usr
# ls -l /usr
total 11
drwxrwxr-x 3 bin       128 Sep 22 05:45 dict
drwxrwxrwx 2 dmr        32 Sep 22 05:48 dmr
drwxrwxr-x 5 bin      416 Sep 22 05:46 games
drwxrwxr-x 3 sys      496 Sep 22 05:42 include
drwxrwxr-x10 bin     528 Sep 22 05:43 lib
drwxrwxr-x11 bin     176 Sep 22 05:45 man
drwxrwxr-x 3 bin     208 Sep 22 05:46 mdec
drwxrwxr-x 2 bin       80 Sep 22 05:46 pub
drwxrwxr-x 6 root       96 Sep 22 05:45 spool
drwxrwxr-x13 root    208 Sep 22 05:42 src
# ls -l /usr/dmr
total 0
#
```

A note signed, "Love, Ken"

- Bell Labs was forbidden from entering any business
- UNIX could not be turned into a product for GOD SAKE
- Ken Thompson quietly began answering requests by shipping out tapes and disks, each accompanied by — according to legend — a note signed, "Love, Ken".

The Journey never stopped

- Multiple Versions of UNIX were released
- Companies Started developing multiple versions of UNIX for their own usage
- Portability and rich capabilities, was likely to become the industry standard operating system for microcomputers (Not RaspberryPi).

No Standards lead to Chaos – UNIX Wars

- A problem that plagued Unix in late 1980's was the multitude of implementations
- AT&T responded by issuing a standard, the System V Interface Definition (SVID, 1985)
- IEEE came up with a new standard for UNIX called POSIX (Portable Operating System Interface)