

Nostalgia – UNIX & Me

“It was the best of operating systems, it was the worst of operating systems, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, in short, we had Unix...”

This is a quote from a 1995 Microsoft white paper on Windows NT. Another thing in that paper was some little known history on Unix that you may, or may not, know...

“...In 1968, while working for the Computer Research Group at Bell Labs in California, Ken Thompson and Dennis Ritchie were part of a joint Bell Labs/MIT team that was building a time-sharing operating system for the General Electric GE645 mainframe, which normally ran GECOS (General Electric Comprehensive Operating System, later shortened to GCOS). Although visionary for its time, this new OS, known as MULTICS (MULTiplexed Information and Computing System), had serious drawbacks and never found favor with AT&T management. (At this exact same time in Seattle, Wash, I was working on the GE265-GECOS time-sharing system at G.E.’s ISD division, writing Dartmouth Basic programs).

During the MULTICS project, Ken became interested in a program called Space Travel, whose salient feature was a spaceship that could be piloted through a simulated galaxy. Unfortunately, Space Travel did not run well under MULTICS on the GE645 mainframe. Undaunted, Ken took the logical approach to the problem. He borrowed a PDP-7 minicomputer from another group at Bell, wrote an operating system, and ported Space Travel to it. In 1970, Brian Kernighan jokingly called this new operating system UNICS (UNiplexed Information and Computing System) in reference to the much larger MULTICS. Soon after, the name was shortened to Unix.”

Since AT&T could not market Unix because of an anti-trust decree, the source code was given out freely, even to universities. So this meant that the original Unix, now called System V, could be re-written by anyone. During the 1980’s, several well known versions were developed and marketed, such as Berkley Unix (BSD4.1,2,3), Sun Os, SCO, HP/UX and OSF/1 (IBM & DEC).

Recently, standardization efforts are leaning to one of two versions, AT&T System V and BSD. However, the old Unix is really not the new Unix anymore. And now, there is a new game in town...Windows NT, which really grew out of DEC’s VMS Operating System of the 1970’s. In 1988, Dave Cutler, ex-DECie and VMS developer, joined Microsoft to lead development on NT, which was supposed to take the client/server and networking industry by storm. We are still waiting...”

My first computer job was in the USAF in 1964, working on an IBM 7283 Terminal Cube. Since then I have worked with many operating systems over the years, including Univac-OS, IBM-OS, RTMOS, GECOS, MULTICS, GCOS, VMS, UNIX, TRS-DOS, CPM, MSDOS, Linux, Win95, NT and Win2000/XP. My favorite was GCOS on a Honeywell DPS6 computer, which I consider to be the most user friendly of them all.

As far as Unix is concerned, I lovingly refer to it as “the only operating system in the world that acts like your bothering it”.

Tom Sparks
Bellingham, Wash
Jan 2005

About me:

I have been in the computer industry for over 40 years and a software engineer since 1979. I am currently retired from an oil refinery in the Pacific Northwest where I supported DEC Alpha and Linux systems. I currently maintain my own Linux server, write web pages and do php/mysql programming for fun and profit.