

# Will our next operating system be OS/2, NT, or Unix?

Unix System Laboratories is gearing up now for the mother of all operating system battles in personal computing. Like you should be, I'm doubtful about Unix, a perennial Rodney Dangerfield, but I'm rooting for it.

For 20 years OS developers have been rediscovering **Multics** — Multiplexed Information and Computing Service — MIT's prehistoric main-frame time-sharing system. Sad cases in point are the recent rediscovery of virtual memory, multitasking, higher level languages, and integrated networking. With all my college degrees I have to think — do I not? — that these belated rediscoveries were inevitable because so many PC pioneers did not finish college. They probably never even heard of **Multics**.

In the early 1970s, Unix rose from the main-frame ashes of **Multics**. Unix had to be smaller (hence not **Multics**, just Unix) so it would fit on minicomputers, and it had to be portable because there were so many different minicomputer architectures. This was way before Apple introduced personal computers based on pitiful 8-bit microprocessors — for which even Unix was way too big.

In the early 1980s, Unix launched its second



August 1981. PC-DOS grabbed the high-volume market away from Unix, with IBM, Intel, and Microsoft making ours nearly a single-architecture world. Unix might have died quietly in 1982 had it not been for Sun and its technical workstation market.

Now, in the early 1990s, we personal computer jockeys are in the midst of another processor revolution and its associated OS war.

IBM is trying valiantly to get sorely missed **Multics** features onto our desks with OS/2. Microsoft is trying to parlay its DOS monopoly on Intel micros with a portable Windows NT for the many new RISC machines.

But, hold on ... Unix is back, more advanced and portable than ever. And the third time's a charm, they say.

Unix proponents see that OS/2 and NT are promising what Unix has had for years and years. They admit Unix lost to DOS because Unix was too big for 16-bit personal computers, but they note personal computers have grown and that OS/2 and NT are huge. They admit Unix has been difficult to use in the past, but they note that Unix has had windows for a long time now. And, they admit Unix has in the past come in too many flavors, but they note Unix will now run on the lat-

has teamed up with USL. You will soon see a series of announcements from USL and Novell packaging Unix as the answer to OS/2 and NT.

Will Unix, with all of its advanced features, be at last usable by mere mortals — can an icon be invented for GREP? Will there be enough of a standard to create a Unix market for lots of application developers? Will Unix be priced right for desktops? Will Unix offer a migration path from DOS, Windows, and the rest of the current PC world? Will Unix leverage its overbearing openness — Posix, DCE, TCP/IP, and OSI? Will Unix be small and fast enough this time?

Will the AIX team at IBM rise up to challenge OS/2 and Taligent? Will the Ultrix team at DEC rise up to challenge VMS and NT? Will the A/UX team at Apple rise up to challenge System 8 and Taligent? Will these Unix teams and the many others rise up together under the Unix banner, or will they miss the point by asking us, for example, to choose between SVR3 and SVR4 — as if we understand or care? Will the complex of companies involved in the new Unix standard work together to build momentum, or will they fritter it away, rearranging furniture on the deck of the Titanic?

I can't wait to find out. What do you think? Let me know.