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## /dev/random



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**WELCOME TO /DEV/RANDOM, A KAYAK** tour along the sporadically navigable wide spots in my stream of consciousness.

Various incarnations of UNIX have played a major role in my life, both professionally and personally, for a quarter-century now. Before I get too old and doddering to set fingers to keyboard, I thought I'd share some of my own UNIX experiences, those of close acquaintances, and possibly even a few from total strangers if the mood strikes me. It would have been better for public relations if I could have found some computing luminary to introduce me in glowing terms as a shining UNIX guru and heavyweight player in the industry, but the price for that sort of bald-faced hype has gone through the roof since Oracle declared themselves "hackproof," and frankly we just don't have the budget for it. You're free to pretend, if you like.

I first tumbled down the UNIX rabbit hole in 1981, as a graduate student at Texas A&M University. Prior to then I'd encountered only O/S 370, and that via a blistering eight-baud teletype terminal, although I actually started on the path to hackerdom in the early 1970s with the occasional bout of phreaking. One might reasonably wonder how a person who styles himself a classic "geek" avoided contact with perhaps the ultimate technological expression of that proclivity, the personal computer. Easy—there weren't any. OK, that's not literally true: there were the Apples, the Altair, the TRS-80, and a few others. But as one of the original scions of West Texas poverty, none of those were available to me. No, I earned my geek appellation in part by building several radio telescopes (including a three-meter parabolic dish and a multi-element Yagi interferometer array) in my backyard and on the roof of the science building at my high school. My neighbors must have thought I was some sort of spy, since home satellite dishes were largely unknown in 1975.

Like any good geek, I loved the SR-10 calculator I had to rake a lot of rocks to afford, but it was at the beginning of my sophomore year of college that I landed the part-time job that would largely determine my future career path: remote terminal operator. I learned JCL (Job Control Language)

and keypunch and suddenly found myself alone in a data center at nights and on weekends—just me, the blinking lights, and all that free time. IBM 370 JCL was a wonderfully cryptic jumble of punctuation marks worthy of an NSA analyst, and I ate it up like candy. I felt all intellectual and tingly inside, punching in those slashes and asterisks and assorted operands, then hitting “autoverify.” My very first hacker handle (I used it with my CB radio, too) was “ddname,” in fact, although I eventually just shortened it to “deedee.” Another warning sign of incurable geekhood and future government service.

In the summer of 1981 a friend of mine had an account on a VAX in the Physics Department at Texas A&M running, I seem to remember, AT&T version 7. It was my first UNIX, my shining virgin leap into the interactive console command line. I was hooked in 10 minutes, maybe less. No cards to punch, for one thing, and a seemingly bottomless pool of commands to explore, most of which resembled actual words. The idea that you could write and run a shell script in “real time” was pretty seductive, too. My prior experience with academic computing was that you punched in a program, put the box of rubber-banded cards with your name on it in a basket, and came back the next day for your error messages. With UNIX, however, you got instant gratification and/or smackdown. Intoxicating it was, young Skywalker.

Printed manuals were hard to come by in those days, which meant that any problem solving had to be done by trial and error. At my age now that sort of mental exercise just makes me tired, but back then it was an irresistible challenge to my nerditude. Hacking out a shell script in the wee hours was all part of the game. I still see some of the Perl scripts I wrote (albeit much later) for performance monitoring and so on floating around in old archives on the Web, like resin-cast trilobites in a museum gift shop.

Another fateful defining moment occurred when my friend and I discovered, via a physics grad student, that a text-based game we had heard about called “Adventure” resided on this very box. Unfortunately, playing it required an account with much better privileges than those of a mere student assistant. We paged through the user roster until we found a professor who was on sabbatical, a professor with faculty-level access to the crucial VAX. All we needed was the elusive account password. In those prehistoric days you couldn’t just go online and download Jack the Ripper or LOphtCrack. If you wanted to launch a dictionary attack, you had to supply your own injection code and your own wordlist. We did our research and loaded it with words and numbers that seemed as though they might be significant to the professor in question, including family member/pet names, phone numbers, faculty ID number, office number, and so on. Finally nailed it after about an hour of runtime with his street address and dog’s name. Piece o’ cake. We did the happy hacker hop of victory, cracked our knuckles, and got down to serious entertainment.

We played Adventure all that summer, breathlessly mapping out the twisty little passages on the back of used green and white-striped tractor-fed printer paper and typing “plugh” every few minutes to see what might happen, always careful to scrub logs and reset quotas after each session. It was my introduction to computer hacking, computer gaming, and UNIX all rolled into one, and it was a heck of a lot of fun. Call me an old fuddy-duddy (you won’t be the first), but the “point, click, and r00t” mantra of the Metasploit generation just doesn’t have the same allure.