



Ahh, Memories

maddog reflects on events from the early days of Linux and why you can't always trust your memory. By Jon "maddog" Hall

irthdays and anniversaries invite reflection. Birthdays (and, in particular, significant birthdays such as my own recent 60th) often invite introspection and a look back at what one has done with one's life. For couples who have been married for a long time, anniversaries can be a time for them to reflect back on their partnership of many years.

The creation of *Linux Pro Magazine* was both a birth and the beginning of a marriage. Ten years ago, Linux was emerging as a commercial-grade operating system. In 1998, some of the commercial databases had ported to Linux, and Linux was being used as a server system for web servers, firewalls, and other "server-grade" systems by that time.

However, in the period of 1998 to 2000, various companies both embraced and shunned Linux (and some went back and forth in their support). Analysts asked operating officers of various large companies if they were using Linux and received negative answers even though "down in the trenches" Linux was being used at their companies. The era of 2000 also saw significant uptake of Linux in embedded systems, telephony (very significantly the creation of Asterisk, the open source PBX system), and movement toward the increased use of Linux in various telephone handset designs.

It's interesting to listen to some of the current discussions of those events and some of the interpretations of what went on during those years. Like a married couple arguing over some long-past slight and focusing on the elements that they remember most, people's memories of what happened often leave out significant issues.

I was recently at a conference where a speaker commented about the failure of a particular company early in the life of Linux. I caught up with the speaker after the talk and (kindly, I hope) pointed out that the reasons for the company's failure were not quite as simple as stated and were actually quite complex. Unfortunately, the speaker had gotten the information from a former employee of the now-defunct company, and the viewpoint was therefore "colored" to say the least.

In another talk, a speaker mentioned some of the issues involved with trying to connect "foreign" equipment (e.g., modems not manufactured by "The Phone Company") to the carrier's infrastructure. I will not refute the fact that, in the early days, this was not allowed by the phone company, nor will I refute the theory that the phone company was trying to protect its business. I will point out that an uncontrolled attachment of self-dialing modems to the phone system (and particularly "residential accounts") had ramifications. The telephone companies had sized their residential services (and rates) on relatively short calls. The average call had a length of 10 minutes, with gaps in which no one was speaking. After the call was over, the person would hang up the handset, and the resources would be freed up for use by someone else.

Modems attached to computers, on the other hand, might stay logged in for hours, days, or even months, never freeing up the resources. Moreover, in the early days of modems, the modems might not "hang up" properly when they were finished, thus keeping the line open even longer or "forever."

For the telephone companies to survive, certain business strategies were developed. Telephone companies required modems to be connected to "business lines," with higher prices that could help fund the greater investment needed to allow longer connections.

"Foreign" modems had to be tested by the operating system manufacturer with each operating system, architecture, and phone system that was going to use the modem. This last requirement was very grueling for Digital, for example, because we had dozens of modems, dozens of operating systems, and (at one time) four computer architectures that we were supporting. Consequently, our test matrix was very large, as it was for the dozens of telephone companies around the world. To battle this issue, Digital created a standard for modems called "DEC Standard 52."

DEC Standard 52 was designed so that a new modem would be certified as "tested" among the many operating systems, architectures, and telephone company combinations if the new modem met the standard's criteria. Business practices such as the carriers restructuring their charges and modem manufacturers having better control of their devices have now made attaching modems to carriers a non-issue.

How does this relate to the archives of *Linux Magazine*? The answer is that many of these subjects were covered by in-depth articles in the pages of magazines like this. People looking through the archives will find articles covering both the political and technical aspects of these issues. Thus, people now entering the community of free software will not have to rely on half-remembered (or half-stated) ideas. These archives will help people know the history and help keep the incomplete stories from being repeated or distorted.