Fix it for free
DIY

maddog troubleshoots a broken Windows system and saves his niece

some money in the process. **BY JON "MADDOG" HALL**

My niece was having problems with her system, which because of her work must run Microsoft, and she decided to take it to a repair depot to have the hardware checked to see if anything was wrong. Nothing wrong could be found by running hardware diagnostics.

She took her system home, and it was still running slow, so she took it back. The store said that although they had scanned the system for viruses, they were recommending a complete reinstall of the OS to "fix the problem" at the additional cost of US$ 160. They would charge more to back up her data, and unless she could prove that she had a legitimate copy of Microsoft, they would charge her for licenses, too.

At the traditional Christmas gathering, I told my niece I was not an expert on Microsoft products, but I would do my best to get the data off the system and onto a backup device (in her case, a nice LightScribe CD-R drive) then "scrub" the system and ready it for the reinstall of the software. I also volunteered to run a "Live" version of Linux to test the system and see whether her computer's problem was a hardware issue.

Using the backup solution that came with the system, I found it would not write to her LightScribe drive and required a floppy to finish the backup; however, the hardware did not have a floppy drive. Booting Linux off a "Live CD," I mounted the drives, found her data, and copied the data to a thumb drive. Step one was finished, and I had saved her about US$ 80.

Because I had the Live CD running, I looked at hardware messages to see whether any broken or malfunctioning hardware might account for the slowness. Everything reported back as functioning, but I noticed another partition on her main disk that seemed to indicate it was for "restoration."

Again using the live version of Linux, I went to the Internet, found an electronic copy of the original hardware manual, and read that the system had a "recovery partition" on the disk. All I had to do was hit F10 as the system was booting, and I could restore the system to its initial state. Because I had all her data backed up, I restored the Microsoft software to what it was initially. Cost savings: US$ 160, plus the savings of another set of Microsoft licenses.
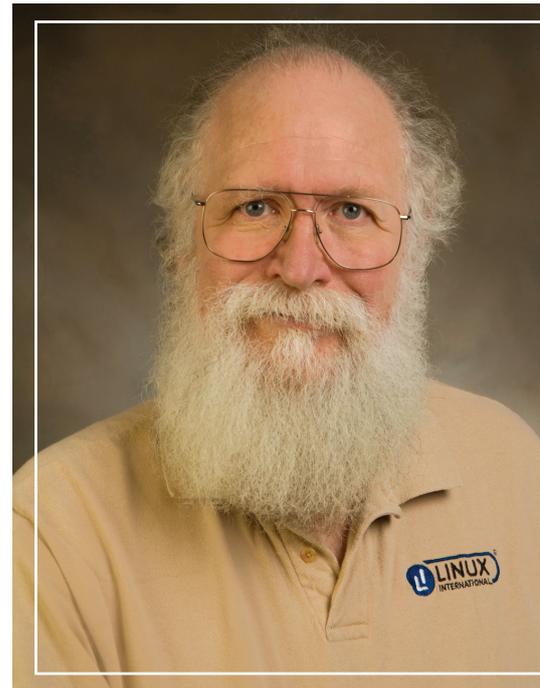
My niece had also added a video card with a DVI connector, so she could use two monitors. I installed the software drivers, but could not get the second LCD to work. I tried every configuration of the software I could and still could not get the display to function.

So, I booted Linux again, configured the system for multi-display, and looked at the system messages. Oddly enough, the messages told me that the interface card was working, and it could even determine the make of the monitor (which told me that the monitor's electronics were at least working somewhat), but no desktop appeared.

To the Internet again for the manual of the LCD. The monitor had onboard menus, so I reached over and started hitting the buttons on the LCD, but none of the menus came up.

I told my niece that although I had saved her several hundred dollars in repair costs, it looked as if her LCD monitor had malfunctioned. I offered to finish setting up her system by using an LCD I had brought with me, so when she had a new LCD she could simply plug it in.

When I plugged the DVI cable into my monitor, nothing happened. Becoming suspicious, I unplugged her cable from the back of the machine and was going to plug in my cable when I looked at the DVI connector and saw that one of the pin sockets was severely deformed. Looking at the end of her cable, I saw that two of the pins were smashed together so that both pins were going into the one deformed socket of the DVI connector, causing the pins to short against each other.

To "re-mold" the socket, I used a straightened paperclip, then I used it again to push the two pins apart and try to straighten them out. Next, I carefully plugged her cable into the socket, and the LCD lit up. Because my niece never took her monitor into the store when she took her system in, it would probably have taken the people at the store a long time to find out why the monitor was not working.

Total cost savings – much of it due to Linux and its "openness" – US$ 400-600. When someone asks whether Free Software can save you money, the answer is yes, even with Microsoft. ■