

Never Again

By Greg Scott

My “Never Again” moment occurred way back in 1984. I was a 2nd-level support specialist for Digital Equipment Corporation at the time. In those days, real computers were the size of refrigerators, PCs were toys that high-school kids played with late at night, and Al Gore hadn’t yet invented the Internet.

A DEC VAX system in an upper floor of an old building in Anderson, Indiana, handled inventory tracking for a large electronics manufacturer. This company supplied ignition and other components for one major customer, which operated automobile assembly lines all over the world. Without these electronic components, the assembly lines would grind to a halt. Hundreds of thousands of workers would be idled and untold numbers of partially built cars would sit, waiting for parts.

One day, the aging hard disks inside this VAX system decided to spray random garbage all over the place. This was really bad for the MUMPS database that handled the newly developed “Just In Time” shipping process.

Even worse, MUMPS was a scripting language and database, all rolled into one—the code and database were mixed together inside one giant file. It was this file that became corrupted. MUMPS files had an index in the beginning that pointed to all the pieces of all the scripts and data. This index was destroyed. So not only was the database lost, the programs with all the logic to manipulate the database were also gone.

The next step, naturally, was turning to the backups. Funny thing—nobody did backups on this system. Ever. The operations group thought the developers handled backups. And the developers thought operations did backups. Only when it was too late did the groups talk to each other to find out that nobody had done backups. The one and only copy of the program and database that a global automobile manufacturer depended on were inside a corrupted MUMPS file in a VAX system on the third floor of an old building in a small town in Indiana. And now they were gone.

What’s Your Worst IT Nightmare?

Do you have a story to share for our “Never Again” series? If so, write it up in 300-800 words and e-mail it to Keith Ward at kward@redmondmag.com. Please use “Never Again” as the subject line. Include your contact information so we can verify the story. <<<end insert box>>>

The manufacturer sent its workers home that day, and assembly lines all over the world that depended on these parts began preparations to shut down. My phone rang, and I suddenly found myself at O’Hare airport waiting for a flight, without even a change of underwear. The CEO of the assembly line company was on the phone with the CEO of DEC, and corporate VPs of just about everything and everyone were calling other corporate VPs, looking for status updates. And I was the guy thrust into the center of this storm.

The plan was simple: Get the hardware fixed, find out the nature of the corruption with this MUMPS file, recover anything and everything possible, and get the company back on its feet—fast.

I would love to take credit for all the hard work that happened over the next few days, but I ended up contributing very little. I put together some macro assembly language routines to read the raw disk blocks in an effort to figure out what sectors had good data and what was corrupt. The development team also quickly put together some code to recover bits and pieces of the database and application. After roughly two days of working nonstop, the development team had recovered about 80 percent of what was lost. The plant started shipping blindly, guessing how many of what parts each customer needed while the database was down, and the development team steadily recovered the rest over the next several days. To my knowledge, the electronics plant only sent home one shift for one afternoon. No auto assembly lines shut down and the incident never became public.

I was there the day the world economy almost crashed because of a poorly-maintained computer that nobody took seriously. I was witness to a heroic recovery effort. And I learned how to wash underwear using a bar of soap in a hotel sink.