



Preparing for a Computer Disaster

COMPUTERS ARE A LOT MORE RELIABLE THAN THEY USED TO BE. MOST OF THE COMPONENTS CAN RUN FOR 5 YEARS OR MORE, BUT THAT DOESN'T MEAN THEY'RE IMPERVIOUS TO SUDDEN CATASTROPHIC FAILURE. THAT'S WHY WE MUST BE PREPARED FOR THE WORST.

One commercial installation I'm familiar with has some disk drives that have been in service for more than a decade. These drives are in RAID systems. RAID, the acronym for *redundant array of independent disks*, once was an acronym for *redundant array of inexpensive disks*, but nearly all disks are inexpensive now. When a disk fails in a RAID system, the failed disk is replaced and the disk array rebuilds the information that was on the failed disk.

That's why this commercial installation can run disk drives for a decade or more. It's unlikely that two drives in the same array will fail simultaneously. If that happens, though, the organization has its data backed up.

Depending on Computers

COMPUTERS ARE CRITICAL TO THE ONGOING OPERATION OF MOST BUSINESSES. BILLING RECORDS ARE STORED ON THE COMPUTER. WORK IN PROGRESS IS THERE. CORRESPONDENCE WITH CLIENTS IS MAINTAINED ON THE SYSTEM. CONSIDER FOR A MOMENT WHAT WOULD HAPPEN IF YOU SUDDENLY HAD NO ACCESS TO YOUR COMPUTERS.

Each business has differing needs, of course, and therefore requires a unique strategy for maintaining access to data.

When my primary computer abruptly became unavailable in the middle of November, I had the opportunity to re-think my emergency response plan.



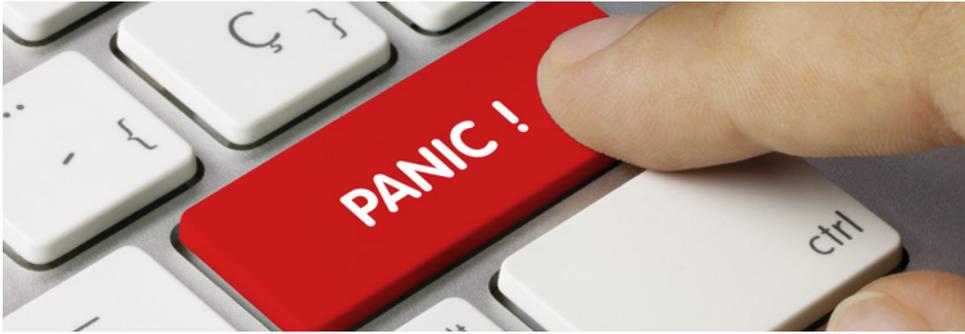
Normally I have 2 monitors, but the emergency setup depended on the notebook computer's screen. If the desktop system had been unavailable for more than a week, I would have set up the notebook system to use more than just the built-in screen.

It's a multi-part program:

- Files are backed up continuously to the online backup service Carbonite. Carbonite's servers are in Boston and I'm in Columbus. That's an advantage because something that destroys my computer is unlikely to affect Carbonite's servers in Boston, nearly 800 miles away. If anything does affect both my computer and Carbonite's servers, I expect that I'll have more to worry about than some missing data. Carbo-

nite's advantage is the continuous backup of files; its disadvantage is the need to restore files via the Internet.

- Part two of my backup program involves portable USB drives that I store off-site. The backups on these drives are updated once a week. The advantage to this arrangement is the fact that I can obtain the drives within half an hour and restore files quickly. The disadvantage is that the files could be six days out of date.



• Part three of my backup program depends on a local network-attached-storage (NAS) drive. Only my current work files are backed up to this drive. The advantage of the NAS drive is that it's available immediately to any computer on the LAN. The disadvantage is that it's in the same physical location as the computer it's backing up. In fact, it's no more than 3 feet from the computer.

When my primary computer's main board failed, the computer wouldn't boot. In the interest of honesty, I must explain that the fault was entirely mine. Being several years old, the main board is no longer being manufactured. I

was able to find one that was still in inventory several hundred miles away.

Panic Time?

NOT EXACTLY. I ARRANGED TO HAVE THE NEW MAIN BOARD SHIPPED TO TCR COMPUTERS, THE COMPANY THAT BUILDS COMPUTERS FOR ME, AND TOOK THE DESKTOP COMPUTER TO THEIR SHOP. THEN I RETURNED TO THE OFFICE, TURNED ON THE NOTEBOOK COMPUTER, AND CONTINUED WORKING ON FILES THAT WERE STORED ON THE NAS DRIVE.

A week later, after the new main board had been installed and the system tested, I brought it back, plugged it in, attached the various peripheral

devices, copied work files from the NAS drive to the desktop drive, and continued as if nothing had happened.

During the interim, I had only a single monitor instead of the two monitors I'm used to. That's problematic for someone who's used to having two large monitors when using programs such as Adobe Dreamweaver, Photoshop, and InDesign – but it's not an insurmountable problem.

The goal of any emergency plan is to maintain operations in a state that's as near normal as possible. Maybe you can't have all the niceties of your normal setup, but you can at least have a workable arrangement.

Be Prepared

THE BOY SCOUT MOTTO SAYS IT ALL..

You can't foresee every possible problem, but you can at least arrange to be able to survive the common, expected problems. In the past 10 or 15 years, my emergency plans have twice allowed me to resume operations just a few minutes after a system failure. Ω

