

How to Avoid a Computer Disaster



by *Tim Coco*

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It's Monday morning and you stop by Starbucks to get a latte on your way to the office. You arrive at the office earlier than usual to prepare for a busy week. You sit down at your desk, turn on your computer and sip your latte while the computer starts up. As the screen comes to life you notice something strange. There's no email, not even junk mail.

A little more investigation reveals there's nothing on your calendar, your contacts are missing and you can't find the documents you worked on last week. Next you discover all the

time sheets for the month are gone, as are the accounts receivables. This is not the way you'd planned to start your week. You pick up the phone to call your computer guy, Fred, but don't know his number and all your contacts are gone. After fumbling through some business cards stuffed in the back of your desk drawer you find Fred's number. You leave a voice mail with a simple message in a clear but panicked voice . . . "Help!"

A few minutes later Fred calls back and says he's on his way to your office. Fred arrives 45 minutes later and heads straight for the server closet and starts to work. A few minutes later Fred steps into your office ghostly pale with a terrified look on his face. "You don't have a

backup,” Fred says with a trembling voice. “What do you mean we don’t have a backup?” you ask. Fred hesitates for a moment, takes a deep breath and says, “There is no backup of your data and there is no way to get anything back.” At that moment the scope of the disaster becomes clear as does the painful reality that everything you need to do business is gone.

Though this particular story may be fictional it’s one that happens every day. Imagine yourself in that position for a moment. What would you do if you lost all of your electronic data? There is good news, however. This problem can be easily avoided.

Duplicating Your Data

While computer hardware continues to become more reliable, the internal disk drives are the mechanical components that have the highest failure rate. To prevent potential data loss and avoid down time during business hours your servers should have redundant disk drives. This is known as RAID (Redundant Array of Independent Disks). In its simplest form, “mirroring” the server has two identical disks and data is written to both simultaneously. If one of the disks fails the server will continue to run on

the remaining disk. The failed disk can be replaced during off hours, eliminating business disruption. There are other RAID options that provide redundancy as well as high performance for larger firms or more demanding software applications.

Backing up Is Not an Option

Regardless of how reliable or redundant your servers are they still need to be backed up. The backup process simply makes a copy of your data. Your data should be backed up every day. In addition, some of your backups should automatically be stored away from your office in the event of fire or natural disaster.

Backup Types for Different Needs

The most commonly used backup method is magnetic tape. Data is copied from the server onto a tape cartridge at the end of each business day. The tapes are replaced each day and at some point the tapes are reused which overwrites the old data with new. If you are using tape I recommend that you have one tape for every day of the month.

Tape based backups are quickly being replaced by Internet based backup and disk

based backups. Internet based backups copy your data to a backup server using your Internet connection. After the initial backup (which can take a week or more) only the data that’s changed is backed up on a daily basis. The cost is based on the amount of data you backup.

There are, however, some downsides. Many of the Internet based backup solutions will not backup Microsoft Exchange mail servers or SQL databases. In addition, restoring large amounts of data is very time-consuming. In the event all your data needs to be restored, it could take one or more days to complete. This is a great solution for sole practitioner or very small offices.

Backing up your data to disk gives you the best of both worlds. This technology copies data from your server to a backup server using disk drives to store the data. Data is then copied to a secure offsite backup repository. There are other advantages as well. First, you don’t have to copy all backed up data to the offsite repository which reduces monthly storage costs. Second, disk backup solutions allow you to perform multiple backups during the course of the day. For example the backup system could be set up to perform an incremental backup of mission critical data every two hours. In addition, restoring data from a disk based backup solution is very fast.

Recovery Test

The best backup system available is useless if you can’t restore data. Make sure your IT professional periodically restores data from the backup system to ensure it’s working correctly.

In our generation there’s never been a time when practicing the fundamentals of business were more urgently needed. For most companies data is the lifeblood which helps sustain its health and growth. To compromise that data by failing to provide a simple, solid backup system is flirting with disaster.

With all the challenges of running a business, keeping your company’s data safe and secure is one of the simplest, easiest and inexpensive to overcome. Keep your company running smoothly by protecting your data with a good backup system. It will save you precious time and money in the long run.



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