

Backing Up

Your firm's technology — and the priceless data it contains — is useless if you don't protect yourself

By Julie Sturgeon For those in the information technology field, sleep never seems to come easy. Like many, Jerett Fuller, the IT coordinator at California Pools & Spas of Arizona, is always concerned about whether his firm's high-tech data is kept safe.

A natural disaster could erase it in a nanosecond. Someone could walk out the door with a laptop or a server after hours. Even a temporary setback — say the business down the street experiences a steam-pipe explosion — could separate the staff from its vital data and shut down pool-building operations for several days.

As a first line of defense, the Mesa, Ariz.-based *Pool & Spa News* Top Builder keeps its

servers in their own locked room. Fuller also backs up the data every week, with incremental saves throughout the day and every night.

Unfortunately, not everyone is so diligent about backing up files and securing IT equipment, which could leave a company in the lurch if the unexpected were to happen.

The procedures required to back up computerized systems and secure technology are painless and the rewards endless, which pool and spa firms will learn instantly if they drop a laptop in a pool or knock a desktop to the floor. Here are some issues to keep in mind when evaluating the security of your company's high-tech assets.

Seeing the light

Getting companies to recognize the value of the data their computerized systems contain is the first step in formulating a solid backup plan, experts say. In fact, protecting this data is so important many insurance companies that carry a business' errors-and-omissions policies want to see a good data backup plan in action.

"Insurance companies probably won't insure you for various types of business losses incurred by not having a good backup system," says Jennifer Walzer, CEO of BackUpMyInfo.com based in New York.

Yet backing up is like insurance, says Dana Friedman, CEO of Dragonfly Technologies, a small-business computer consultancy also in New York. According to Friedman, you have to scare people with the potential loss rather than sell them on the gains.

For the more positive-minded, backups mean you never say good-bye to your efforts. So if you need to return to a previous pool design drawing, the saved files can produce what you tossed into the trash long ago. It's also far more affordable than bringing in data recovery experts to extract what they can from damaged computers, Friedman notes.

So what's the hang-up? When Walzer digs into a business' backup history, many times she gets the runaround. The owner says the controller is in charge, the controller says it's the office manager's responsibility and so on. As a result, no one has backed up files for several quarters.

Paul Chisholm, CEO of mindSHIFT Technologies in Boston, often finds other human errors at work, too: Someone stays late to catch up on paperwork and therefore overrides the automated backup procedure, for instance.

"Small businesses think it will never happen to them. Or if so, they can go back to paper record keeping," he says. "But the

acceptable recovery solution, but they're quick to warn companies of the drawbacks, too. For one thing, tape corruption means 20 percent to 30 percent of backups fail, Chisholm points out, though technological improvements continually drive that rate lower.

"You really have to have the discipline in your business so that someone comes in

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world is getting pretty complex now even for small-business owners."

Storage options

The country's widespread failure to back up can be chalked up in part to the fact that computer users aren't well-educated on the topic, Friedman says.

"People think they are prepared because they made a copy on a thumb drive," she explains. Yet the size of those miniature drives alone means they are easily lost or broken, which makes them a fine choice for data transfer but a poor option for permanent storage.

More advanced businesses prefer tape drives or discs to hold their myriad files. Consultants recognize these tools as an

today and checks the files from last night to make sure it backed up properly," he notes. "But if your day starts at 4:30 a.m. in someone's backyard, my guess is it's not high on the priority scale."

Second, the data on a tape drive typically isn't encrypted. If someone steals your hardware and its customer information, you could be in big trouble for compromising credit card numbers and other financial records.

On top of that, troubles can arise if your computer has a virus. If you replicated everything onto that tape, you no longer have a secure copy from which to work.

Finally, restoring that stored data to the company laptops isn't as easy as it seems. "You can't tell a computer, 'OK, restore me'

Choosing wisely

Like any industry, the range of services in the off-site backup and storage business run the gamut. Dana Friedman has seen most of them.

"We are approached by vendors of every shape and size, hawking every type of product or service one could possibly imagine, including off-site backup. Not only do they not offer support, but sloppy execution in the backup process," says Friedman, the CEO of Dragonfly Technologies, a small-business computer consulting firm based in New York.

So how can you avoid becoming a victim of your safety net? For starters, the quality companies still believe in human interaction. For instance, these firms will send you a monthly report and actually go over it with you, pointing out, for example, when too many employees leave open particular applications that prevent proper backups.

"I'll tell you, 99.9 percent of online data backup companies offer no support. So, although they're very affordable, you're on your own to figure out everything," points out Jennifer Walzer, CEO of BackUpMyInfo.com, which is based in New York. She suggests retailers ask these questions before signing a contract:

■ **Is my data encrypted?** It's important that these companies give you the ability to log in any time, use a simple password and download your files in a readable format. The encryption should be on their end if an outsider hacks in.

■ **Can you handle my data load?** If you're just looking for replication of QuickBooks files, Word documents or the occasional spreadsheet, most places offer adequate space. If you have an exchange server for e-mail and are running SQL databases for client information, the typical consumer backup service may be over its head.

■ **Who are you?** While their Web sites may be impressive, the firms you consider to handle backing up your data should have a few credentials under their belts. Someone who started a backup business yesterday in his/her basement probably isn't stable enough to entrust with your business' future.

—J.S.

because it doesn't work that way. Pool and spa owners are busy. They don't have time to play Russian roulette trying to restore everything properly," Walzer says.

On the other hand, in a true emergency, getting files back as soon as possible is key, "and so having something on site for that purpose isn't the worst idea in the world," Friedman says.

Fuller chose the tape method for California Pools, using Symantec's Backup Exec software to automate the process in the middle of the night. He also uses the RAID system (Redundant Array of Independent Disks), which spreads the data across multiple tapes for added insurance. It made sense in his case from a sheer size standpoint: The company's data is so extensive, it currently requires 80 percent of a terabyte to back up.

"We were producing too much data to push it off site effectively," Fuller says. "But for a smaller company, especially in the construction industry, it's a very good option. A lot of the large online backup sites have snapshot capability. They have support for SQL servers and exchange e-mail services. So you can have most of the benefits that you get from the Symantec software we use."

Others prefer an off-site backup route because it removes the data from harm's way in the case of a natural or man-made disaster. "You should not be able to touch, feel or hug your data," Walzer says. "Look at what happened during Hurricane Katrina. A lot of business owners backed up on

Chisholm says, so it's not unusual for his clients to do as many as six daily routines, as well as one monthly and one quarterly backup.

Worth saving?

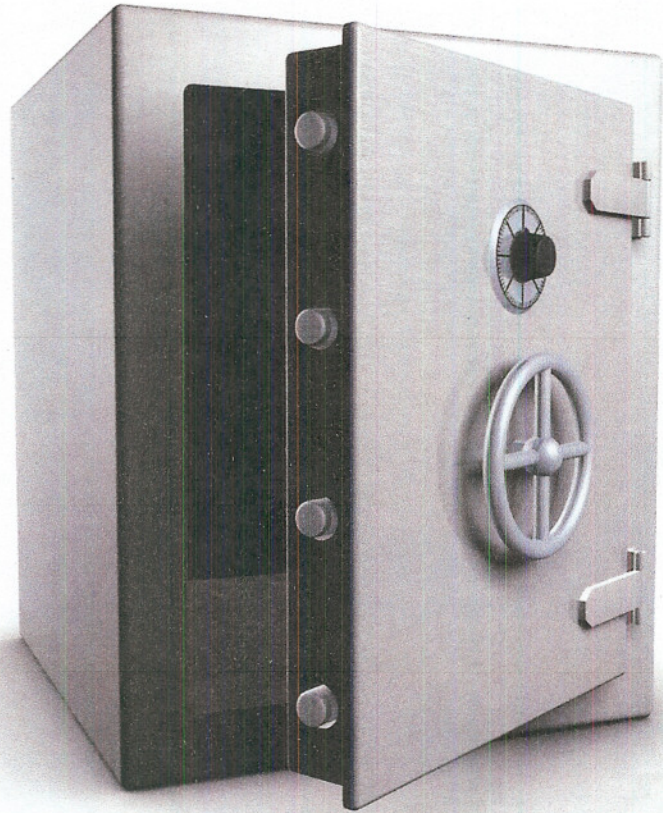
A final challenge pool and spa firms must deal with is deciding what is and is not worth backing up. Most experts agree: If it's important to your business, it's worth saving.

At California Pools, Fuller saves any files that were changed since the last backup, as well as e-mails, Excel spreadsheets, PowerPoint presentations, banking records and customer relationship databases.

Just don't take the phrase "full backup" literally, Friedman cautions small businesses. For example, there's no earthly reason to waste gigabyte space backing up common software such as Microsoft Word, which exists on disks in every big-box electronics store in the country. Save your space to store the documents you created in Word instead.

But whatever you do, don't procrastinate.

"We are relying on computers more and more today," Walzer says. "I can't stress it enough. Pool builders work so hard to build their companies, why in the heck should they decide to skip out on protecting one of the most important assets of their whole world?" ■



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magnetic tapes for the week, took them home, and lost them in the floods like everything else."

Not to mention, electronic, off-site backups also may be conveniently scheduled in the middle of the night without human intervention.

An off-site solution usually is priced by the amount of data you store. Smaller companies should expect to pay between \$8 and \$12 per gigabyte, which translates to \$200 to \$500 a month. The number of times you back up the information is unlimited,

Finally, if your salesperson loses a laptop in the back of a taxi or leaves it at a gate in the airport, an off-site storage operator can destroy all the existing information on that computer the first time a user tries to log onto the network. It doesn't mean you'll ever see the hard goods again, of course, but it does protect any sensitive customer data.

Of course, if the advantages of tape and off site make sense for your business, there's no reason an owner can't choose both, Friedman points out.