

# Required Reading

## BUSINESS SMARTS

*"Change is not in the air; it has hit the ground running. If it hasn't affected you or your business in some way, you are in the minority."*

If you run a business, take a moment to read, "Overcoming the Economic Storm," from Jeffrey Gitomer's column in *SUCCESS Magazine*. Whether you are prospering or just trying to keep the doors open, there is something in here for everyone.

<http://tinyurl.com/OvercomingtheEconomicStorm>

## WHITE PAPER: BUSINESS TRAVEL

The Austere Traveller:  
The Effect of Corporate Cutbacks on  
Hotels

Amadeus commissioned a global survey of business travelers. Download the complete report at:

<http://tinyurl.com/AustereTraveler>

## GREEN PLUG POWER ADAPTER RALLY SUPPORT

Wouldn't it be great if your cell phone, laptop, camera, printer and MP3 player all used the same electrical power adapter instead of a separate wall wart for each gadget? Check out this article on *PCWorld*.

<http://tinyurl.com/GreenPowerAdapter>

## MINOR DISASTERS CAN BE VERY DISRUPTIVE

Many hotels have plans in place in case of a serious natural disaster such as a hurricane or tornado. Probably just as many hotels put up with the annoyance of a strong thunderstorm or brief power outage. But what about the in-between situations, ones that are not totally destructive but cause extended power outages and periods of unstable power or surges. These situations can sometimes last a day or more, with repairs to IT equipment taking much longer.

What can be done to protect IT equipment during these periods and what procedures should be followed once power is restored?

High winds can down trees and power lines. Winds as low as 40 mph can topple a tree, especially if it is diseased, damaged or distressed. Larger felled trees can not only knock out the power but block roads as well, hindering repair efforts. While some detection of downed lines can be done at a central location, it is many times necessary for crews to inspect certain sections of the grid to determine the exact repair needed.

Lightning strikes can also damage wiring as well as cause fires and power surges. During a storm, lightning can cause considerable damage to IT equipment, especially if the equipment is not protected by a surge protector or UPS. During cleanup and repair, the power may be restored for a period of time, only to be disrupted again by another downed tree or a repair that did not hold.

Many hotels have a diesel-powered generator, but not all generators can restore power to the entire hotel. Any IT equipment not on the generator should be completely unplugged from the power source, including power strips and UPS, if the power is expected to be out for an extended period. UPS batteries can last from 10 minutes to several hours, but will eventually run out of charge. The engineering department should be aware how much diesel is needed to keep generators running. Fuel might not be available during periods of long power outages.

Unstable power can create surges in voltage that can damage IT equipment. Even the best surge protectors are not invincible to a severe surge. Unstable power also can alter settings within equipment (that might not be readily apparent). Programmable devices, such as modems and routers, can be susceptible to either losing settings altogether, or losing just some of the settings.

It is important to have the settings of all routers, switches, DSL modems and other similar devices printed out and electronically saved. During a storm recovery

**What can be done to protect IT equipment during periods of extended power outage and periods of unstable power?**

phase, these settings should either be reloaded or manually verified against a hard copy backup. A hotel that was recently recovering from storms did not notice that an electronic time clock had gone offline until the next day. It was assumed that the clock itself had lost its settings and the service company was notified. The company could not find anything wrong so the internal IT staff investigated. The cause of the problem was one altered setting in a router, caused by a power surge. All other settings in the router remained intact and were correct.

Another issue that can occur is altered IP addresses. A device serving as the DHCP server for a hotel had its IP scheme reset to the factory default. As new addresses were issued, they conflicted with ones already in the workstations. This caused some devices to go offline. A simple release/renew solved the issue, once it was identified.

Category 5 wiring is rarely damaged by power surges, lightning or outages but it can happen. More than likely, however, what appears to be wiring is actually a switched hub that has gone offline during a storm or outage. Switches are used to repeat signals on long runs and to provide additional access to the network. Engineering should have complete wiring diagrams on file, including the placement of switches, so that each can be inspected and power cycled after a storm or extended power outage.

Computers that will not reboot after a storm may have a damaged hard drive. The data on the drive may be salvageable, however. Professional IT recovery specialists should be consulted to determine the correct course of action. Equipment that will not power up at all may have had the internal power supply damaged. These power supplies can be replaced by internal IT staff with the proper equivalent replacement model.

In-house personnel should always keep data backups up to date, especially in anticipation of upcoming periods of bad weather. Additional backups should be performed in these situations. Some inventory of parts, especially inexpensive ones, such as power supplies and switched hubs, should be maintained, either by the IT or the engineering departments.

The use of contracted IT professionals during a recovery period can expand the depth of resources available to the project and also shorten the recovery time.

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