



DISASTER PREVENTION & RECOVERY GUIDE

DISASTER PREVENTION: Natural disasters can not be prevented but over the years, we've seen many disasters that were the result of poor or non-existent planning or prevention measures. To add to the pain of suffering through a preventable disaster, most insurance policies do not cover this type of situation.

DISASTER RECOVERY: Once that disaster occurs, do you have a plan in place to recovery in the shortest amount of time with the least amount of disruption to your business? It's dramatic, but how many days can your business survive without access to the outside world?

PHONE & VOICE MAIL SYSTEMS: Fortunately, most systems are quite reliable today. However there are a number of important areas to address to lessen the chances of problems:

BACKUP: You should always maintain two current data backups of your systems. One copy of the backup should be stored at your location and the other stored in a separate location. Most telecom vendors will be happy to maintain a remote backup of your systems

VENDOR: You'll want to make sure that you have an established relationship with a quality service vendor. A support plan will guarantee you priority response times in the event of an emergency. It's wrong to think that your vendor will provide priority service with no support plan in place.

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POWER PROTECTION: A properly engineered battery backup system will keep your telecommunications system operational during a power outage. In addition, it is important have electrical protection in place to protect your system from power surges, spikes and brownouts. Most battery backup systems provide both backup and protection.

Keep in mind that the longer the duration, the more battery packs, which translates into greater space requirements and higher costs. When engineering for battery backup, the systems in their entirety should be considered:

- ***PHONE SYSTEM***– Obvious
- ***VOICE MAI*** – This is crucial if you use automated attendant
- ***CHANNEL SERVICE UNIT (CSU)*** – A CSU is used on every T1 and PRI – to keep your circuit up, this unit must have power
- ***TELEPHONES*** – IP telephones require separate power supplies unlike older phone systems. You need to consider how to provide backup power to your telephones.

BACKUP SYSTEMS: Engineering and buying a battery backup system is the first step of protection. On an ongoing basis, the backup system must be maintained. Specifically, monitor the following:

BATTERY CONDITION: Batteries lose potency and eventually die. It is important to test the batteries at least monthly. Most systems have a “test” button and many have software that can electronically monitor battery condition

CAPACITY: If you expand your telecommunications system, remember to expand your battery capacity.

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TRUNKS (LINES): The connections to your local service providers (SBC or CLEC such as XO, TelePacific, etc) is the weakest link of your telecommunications system. It's not that they are bad companies – it's only that they are more vulnerable to failure due to the fact that much of their infrastructure is outside in the public world unlike your PBX that is safely sitting in your office.

There are several ways to decrease the likelihood of having no dial tone and decrease the amount of time to recover from such a failure.

REDUNDANT CIRCUITS: Analog circuits are redundant by nature due to the fact that each line comes in on a separate pair of wires. T1's and PRI's have 23 or 24 channels of voice communication on one circuit. If one of those circuits fails, you've lost all of your communications. The answer is to have a separate T1 or in the case of smaller companies, a handful of analog lines for failover purposes.

REDUNDANT CARRIERS: There are instances where a carrier may have a problem that will affect all of their services. By utilizing two separate carriers, you will mitigate this risk. If one carrier has a problem you can rely on the other carrier.

LONG DISTANCE BYPASS: If you lose your long distance carrier you can manually re-route your outgoing calls by inserting a "PIC" code to override your existing carrier:

1. Secure outside line
2. Dial 1010XXX (the PIC code) and the LD number, including the "1".

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TRUNKS (LINES) CONT'D:

COMMON LONG DISTANCE COMPANY PIC CODES:

AT&T 1010288
Sprint: 1010777
MCI/Worldcom: 1010222
Qwest: 1010971

ALTERNATIVE WORK SITE: As part of an effective disaster plan you should have a designated secondary place from which you can conduct business. Obviously, this location will not be nearly as efficient and equipped as your present facility but you can at minimum, carry on your business at some level.

RE-ROUTING CALLS: To enable calls to be re-routed to an alternate location, you need to have call routing capabilities established. All providers have some type of emergency routing or forwarding feature available, but there is typically a charge for setting up this capability. It needs to be established in advance with each of your carriers.

Basically, you'll want to enable the call routing feature for:

- Each hunt group in your phone system
- Faxes
- Toll free numbers

Once in place you need to publish the procedure for enacting this re-routing.

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CELL PHONES: Cell phones can make a horrible situation better. You should establish a plan whereby individual's cell phones can be "taken over" by the company for outbound calling. You should work out the priorities of types of calls so that there is no misunderstanding when the plan goes into place.

VOICE MAIL: Another option for disaster recovery is the use of a voice mail service bureau. You set up a voice mail box in advance and arrange to have your carrier do a "call forward no answer" on 8 rings or more. It's not the best, but it's far better than a ring no answer!

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The 12 Steps of Disaster Recovery

1. I admit that I am powerless over technology, that it runs and does not run at seemingly random intervals. I am also powerless over the forces (e.g., corrupted AC, natural disasters) that may affect technology.
2. I believe there are systems available to help me recover what data I lose because of the precarious nature of technology, or to switch me to a working system.
3. I will invest in such a system.
4. I will take an inventory of my voice and fax system and realize all of its strengths and weaknesses.
5. I will share that inventory with a trusted vendor or spiritual guide.
6. I will repair my system's weaknesses.
7. I will ask a trusted vendor or spiritual guide to repair my system for me.
8. I will make a list of all the persons my system has harmed.
9. I will make amends to those persons except in cases where another person would be harmed by doing so.
10. I will continue to take inventory and track changes on my system, and will promptly make changes to my backups as necessary.
11. I understand the gravity to not doing disaster planning and prevention
12. I will carry the message of disaster recovery to those still suffering from unprotected systems and practice the "principles" (outlined in the above steps).

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