Mastering Disaster

A DATA CENTER CHECKLIST

TELEHOUSE®

Disaster Doesn't Sleep

It's not always a hurricane or a power grid failure that causes businesses to lose their data.

More often than not, an isolated event like a pipe bursting on the floor above you, or a fire below you can be just as catastrophic. In fact, technology failure and human error are the major culprits in most data loss cases.

Regardless of what initiates the problem, a disaster is a disruptive event that threatens the stability of your business. But with the right Data Center partner, the impact of an event doesn't have to be a catastrophe.

The effect on a business that loses its data

• 50% of businesses that lose data for 10 days or more file for bankruptcy within 6 months

• 93% fail within a year

• 20% of companies reported losses from outages cost them from $50,000 to over $5million. *

But with a Disaster Recovery plan in place, it doesn't have to be YOUR business.

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Disaster-Resistant Infrastructure

Anticipating interruptions and failures needs should be built into the ecosystem of your Data Center. Take a tour with the Facilities Manager. Discuss various scenarios, get an understanding of their infrastructure, what points of failure exist and how they are prepared to handle emergencies.

The number one priority is to establish the facility is designed with N+1 redundancy for power and cooling, which gives you the resiliency you need.

Ask if the facility is designed to operate independently of the power grid and that backup generators are in place and operational.

What is their fail-over protocol? If hardware or routers fail, what happens? Is the network also redundant? Are their network devices connected to separate patch panels? No detail is too small when it comes to redundancy.

Look for a secure, power-protected and reliable Data Center infrastructure, along with the right people that can mitigate access to and restore your data, IT systems and management controls.

Businesses depend on the accessibility and uptime of mission-critical systems and applications daily business functionality. Even brief periods of downtime may result in huge financial loss, disrupted operations, or have legal ramifications.

✓ **Discuss many scenarios**

✓ **N+1 redundancy**

✓ **Seamless fail-over**
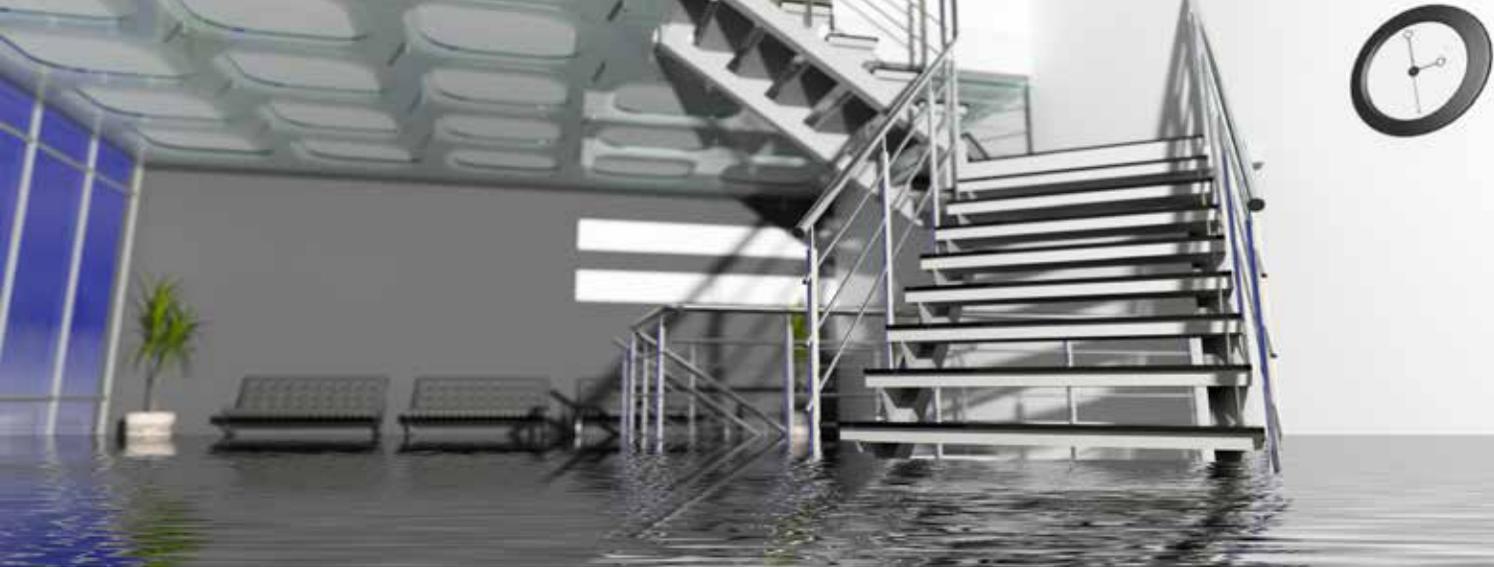
✓ **The right people**

Knowing what to look for in your Data Center provider's own Disaster Recovery Plan and how the staff responds in an emergency can assure continuity for your business.

Documentation and The Importance of Drills

A carefully documented and tested Disaster Recovery plan assures that your Data Center operations team knows how to react in an emergency.

It should include the communications chain, the tasks each person is responsible for, where to go, how to reach suppliers and vendors, and an equipment backup plan. Ask your provider to see their documentation and review it with them.

Having a plan is crucial, but practicing it makes it perfect.

The purpose of mock drills is to discover problems so they can be addressed. The power should be taken off the grid and the backup generators tested. Equipment, cooling systems and backups should be tested regularly. Look for a provider who is documenting their test results.

The operations team should be holding mock drills frequently, so that when a stressful event occurs, nobody panics. Reacting should be a habit, and with frequent simulated events, everyone will respond more effectively.

A dedicated Disaster Recovery Data Center may need to serve as a temporary location for your employees, systems and network operations as you begin the recovery and restoration aspects of your DR-BC plan.

You want to make sure it remains operational no matter what Mother Nature throws at you.

- Documentation is essential
- Review the provider's plan
- Practice makes perfect
- Temporary offices

Your Data Center's own Disaster Recovery Plan needs to be well-documented and well-practiced so things go smoothly under pressure.

Thinking Ahead: Spare Parts

Even the best disaster planning can fail if even a single part breaks. A smart Data Center provider knows keeping hot spares for their equipment can make the difference in continuing operations.

Strong relationships with fuel providers who supply generators in cases of long outages such as Sandy kept some, but not other Data Centers up and running. Ask your provider what arrangements they have made with their suppliers.

Vendors often cannot deliver parts during emergencies, so having them on hand is crucial. Planning ahead and investing in extra parts costs money, but is well worth the cost to have them in stock.

Ask your provider if there will be someone on-site to swap out parts quickly.

Scheduled maintenance on equipment and batteries is crucial to preventing failure. Logging repairs can tell the engineers when to replace parts or whole systems. The procedure should be monitored by the Facilities Manager, Engineers and Management.

Ask to see maintenance records, when the last failure was and where, when equipment was last updated or replaced. How do they test software before it is deployed?

You want a Data Center provider who thinks and plans ahead.

- Stocking hot spares
- Getting fuel deliveries
- Investing in safety
- Expertise must be on site

Continuity can hinge on a single part. Ask your provider if they invest in hot spares so that if one breaks, they have a replacement for it.

Regular testing and maintenance is crucial to preventing equipment failure.

Look at the logs to see the schedule, the results and the upgrades.

Communication

In stressful situations, there is a lot of confusion. Effective communication can keep things under control and leadership in charge.

Your provider needs to have a chain of communication that is reviewed and tested regularly, as staff changes, new technology and changing situations can break that chain. Mock drills should be performed frequently.

Ask if they have the resources to be proactive with their own staff, as well as with their customers. Are they prepared to man the phones 24/7? How do they keep customers informed?

Social media, texting and email are great ways to keep customers updated. Having a dedicated staff member assigned to post updates to keep people informed hourly goes a long way to giving them peace of mind.

The Data Center's NOC (Network Operations Center) is the communications and information hub. They monitor systems and can sound the alarm if needed.

Look for a clear chain of command, multiple lines of communication and a proactive team to you can rest a little easier in an emergency.

✓ Chain of communication

✓ Do they have resources?

✓ Are they socially active?

✓ Is there a chain of command?

A proactive Data Center team stays connected by manning the phones, posting on social media, email and by whatever means necessary.

They understand how stressed their clients are and how important it is to keep them informed.

Experience and Innovation

You are dealing with sophisticated equipment in your Data Center, but it all comes down to the people who run it.

They can make the difference in a disaster situation.

Look for the team who:

- is there 24/7/365

- has the highest level of training and expertise

- collaborates and meets regularly to solve problems

- is dedicated to the health of the facility

- knows what to do in an emergency

- is proactive and thinks ahead

- never relaxes about security and operations

The fastest recovery happens because of strategic planning, a trained team and proactive communications.

Future-proof your data and your infrastructure with a trusted partner who is on your side. It might just save your business form disaster.

It's all about the people

Look for collaboration

Proactive and thinks ahead

A major financial client of ours had a flood in both of their office locations, costing them millions every day they were down. In response, TELEHOUSE provided 70 staff members workspace, phones, and network operations for 8 months in our Staten Island Data Center. This saved the client billions—and it saved their business.

> "Congratulations to all those involved in keeping the Telehouse Staten Island facility fully functional during Hurricane Sandy. Not once did we experience a disruption in connections or service. Telehouse has proved it is a first class provider for colocation services. This was a well-planned, executed and communicated disaster recovery effort, accomplished even as Staten Island was dealing with a direct hit from the hurricane.
> Thanks to all for a job well done."

Keith A. Heckel, VP of IT Infrastructure, Mitsui Sumitomo Marine Management

About Telehouse

✓ **A provider you can trust**

You want a provider you can trust, especially when things get tough.

As a proven recovery specialist, TELEHOUSE mitigates the risks associated with downtime by offering customers access to its Disaster Recovery Business Continuity site located in the Teleport Center on Staten Island (NY).

✓ **25 years of uptime**

This facility's clients have never lost critical power in its 25 years of operations. In the event your primary site is compromised and unavailable, or your organization experiences an outage due to unpredictable events or forces outside of your control, our dedicated Disaster Recovery Data Center can serve as a temporary location for your employees, systems and network operations as you begin the recovery and restoration aspects of your DR-BC plan.

✓ **Enjoy peace of mind**

TELEHOUSE offers our customers the peace of mind of knowing that their critical IT infrastructure is protected with our disaster recovery services.

TELEHOUSE® | Mastering disaster means planning and *THINKING NEXT*

Contact Telehouse

Call us at 718-355-2500

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Ask us about mastering disaster.

TELEHOUSE®