

# The Cloud Advantage

Technology Paper

## Five Ways the Cloud Is Better for Business When Disaster Strikes

### Hurricane Sandy Sends the Wake-Up Call

Hurricane Sandy caused an unprecedented level of damage and disruption, crippling many businesses on the eastern seaboard. Faced with extended power outages, fuel shortages, flooding, and transportation limitations, some companies managed to keep their businesses running while others suffered significant downtime that caused revenue loss and, potentially, damage to their reputation. Why such a drastic difference among companies hit hard by the same storm in the same region?

Organizations with well-architected, thoroughly tested, and fully documented disaster recovery (DR) plans and solutions were able to bounce back quickly when Superstorm Sandy wreaked havoc onshore. Those who were less prepared had their operations knocked completely offline. Are you ready for a disastrous event like Sandy?



## Top Five Advantages of Cloud-Based Disaster Recovery

1. A current copy of your data is always outside the disaster zone: your data stays high and dry in the cloud, no matter what's happening back at the office.
2. A third-party team offsite, unaffected by the disaster, can restore your critical systems in the cloud while you and your staff focus on restoring order onsite.
3. You have on-demand access to a virtually unlimited resource—for exactly as long as you need it. Until your sites are back online, keep your systems up and running by shifting services to the cloud; when your systems are back in business, let that part of the cloud go.
4. Even if your offices aren't ready for your return, you have secure remote access to critical systems, applications, and data in the cloud for as long as you need it.
5. Faster, cheaper, better: Cloud technology has enabled vastly more-efficient and secure data transfers and storage, plus disk-to-disk remote recovery. Meeting your Recovery Time Objectives (RTOs) is easier, less expensive, and more reliable in the cloud. Plus, you don't have to worry about your tapes being driven around in the aftermath of a disaster.

For most organizations, a current and comprehensive disaster recovery plan is an undisputed priority—but it's also a big challenge. If your organization is still relying on tape or your DR plan is getting a little dusty, no one would blame you. Disasters come in varying degrees—from simple human errors (the cleaning crew unplugged one of your servers to power their vacuum cleaner) to natural disasters (hurricanes, tornadoes, and earthquakes) that are unavoidable and can impact an entire region. Given the risk of disasters and that today's cloud-based DR offers such compelling advantages, there never has been a better time to regroup and truly be ready for anything.

## The Cloud Keeps Your Data Outside the Disaster Zone

A risk-mitigation strategy for mission-critical systems and data must take into account the magnitude and reach of regional disasters. That is, the DR site where you store copies of your data and applications should be a significant distance (outside the disaster zone) from the primary data center that runs your production systems. Remember, Hurricanes Sandy and Katrina flooded buildings, wiped out roads, and decimated basic infrastructure services for hundreds of miles. Clearly, it would be inadequate to use a tape-based DR solution with a risk-mitigation strategy that included having tapes delivered by truck to an offsite facility 100 miles from your primary data center.

Moving to the cloud eliminates a number of dependencies and single points of failure inherent to tape-based DR solutions:

- Transportation access such as roads must be functional to deliver tapes to a DR site. Cloud-based data recovery operates remotely, so transportation systems are not a factor.
- Tape-storage facilities must be located out of the disaster zone but within driving distance of the production site—a tough balancing act. With your data in the cloud, this becomes a nonissue.
- For any DR solution to be successful, physical storage media must be defect-free. Tape failure rates often exceed 15 percent.

In a disaster that spans a large region, one or more of these dependencies is likely to cause a tape-based recovery effort to fail. The cloud protects your business against such dependencies entirely.

**Cloud Advantage #1:** Cloud DR ensures that an up-to-date copy of your data resides outside the disaster zone, hundreds or even thousands of miles away from your primary data center, and can be easily recovered from anywhere.

## You Can Tap Offsite Experts to Manage Your Recovery

Storing a current copy of critical data and applications out of the disaster zone is absolutely vital and the right first step, but it's only part of the story. With your data safely out of the region, who will manage the recovery and operations of your systems—particularly if the disaster has impacted your staff? You could ask your employees, who may have been impacted by the disaster, to travel hundreds of miles to your DR site to perform recovery operations and manage the site indefinitely. Or you could temporarily expand your contract with your cloud service provider.

If you have a cloud DR solution, you have an experienced team outside the disaster zone already in place. If your team is offline and focused on local emergencies, you can rely on your cloud provider—trusted, knowledgeable experts who know your business and your DR plan—to guide and manage the recovery of your key systems.

**Cloud Advantage #2:** Ready 24x7x365 access to an offsite, third-party team of DR specialists that can guide recovery of your critical systems and manage operations in the cloud on your behalf.

## The Cloud Expands and Contracts to Meet Your Needs

As you work to recover as quickly as possible, the cloud gives you far more flexibility and agility than an on-premise or do-it-yourself DR approach. You can scale your cloud usage on demand and run your systems in the cloud for long as you need to, then roll back the resource as soon as your systems are up and running.

Without the cloud, making these types of changes to your IT environment can take months. If your systems are damaged or taken out by a disaster, you have to order hardware and software, wait for it to arrive, then install and provision services. Some companies opt to establish their own DR site, but this requires massive upfront investments in real estate, computer hardware, networks, software, and other infrastructure. Duplicate data centers also require ongoing maintenance and updates to match the primary data center as it expands to accommodate business growth and other changes. It's critical that you ensure the secondary site stays identical to the primary site; if the primary site goes down, you need to spin up services in your secondary facility. If the secondary site does not have adequate resources to handle the demand, the recovery effort will likely fail.

With the cloud, your systems are rebuilt in a virtualized environment, making machine provisioning fast and easy, and your recovery successful and complete. And if your facilities are not ready for onsite systems, you can expand your cloud usage as needed to run your business within the cloud for as long as required.

**Cloud Advantage #3:** Nearly unlimited cloud resources scale on demand to meet the needs of your business in just minutes, keeping your systems up and running in a virtualized environment until your sites are back online.

## During Recovery the Cloud Provides Safe, Remote Access to Systems and Data

In a disaster such as Hurricane Sandy, many companies suffer losses to both their primary and secondary data centers. For example, after one business impacted by Sandy had its primary site taken offline by flooding and a power outage, it successfully transitioned to its own secondary DR site, located only a short distance away. However, the company soon became concerned about the secondary site's exposure to more flooding from another fast-approaching storm. The IT staff was available and ready to keep the business running, but with one site already down and the DR site at risk of flooding, how could the company possibly count on the integrity of the secondary location? Instead of risking it, the company contacted a highly trusted cloud DR service provider who was able to quickly send the company's data into the cloud. After recovering the systems in a secure, virtualized environment, the service provider granted secure remote access to the company's recovered systems and data in the cloud—and kept it there until the customer's physical site was declared safe again.

**Cloud Advantage #4:** Your displaced staff is provided secure remote access to your critical systems, applications, and data in the cloud for as long as they need it.

# The Cloud Advantage



## Better, Faster, Cheaper

The latest cloud technologies and architectures make it much more affordable and significantly easier for you to achieve your RTOs and deliver on service-level agreements (SLAs) critical to the success of your business. Disk-to-disk replication, encryption, data deduplication, virtualization, and WAN optimization techniques enable fast, secure transport of your data and applications to geographically dispersed locations. The cloud offers a combination of advancements that add up to significantly increased speed and reliability when you really need it. With a cloud DR solution, the technology itself mitigates your risk exposure to natural disasters, and provides the speed and efficiencies you need to meet your recovery time objectives.

**Cloud Advantage #5:** Cloud architecture, technologies, and processes enable you to achieve the RTOs needed to deliver on SLAs to your customers.

## Take the Next Step:

### How EVault Data Protection Can Help

Only EVault® Cloud Disaster Recovery Service from Seagate® guarantees you'll be back up and running within the 1-, 24-, or 48-hour SLA window you choose.

To learn more about EVault cloud services from Seagate, call us at 1.877.901.DATA (3282), email us at [conciierge@evault.com](mailto:conciierge@evault.com), or visit us at [www.evault.com](http://www.evault.com).

[www.seagate.com](http://www.seagate.com)

AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000  
ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888  
EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

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TP658.1-1013US October 2013

2014.09.0011\_wp\_us (updated 09/20/2014)