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Top 10 Reasons for Using Disk-based Online Server Backup and Recovery

INTRODUCTION

Backup of vital company information is critical to a company's survival, no matter what size the company. Recent studies show that 93% of businesses that lose data due to a disaster go out of business within two years.

Increasingly, businesses are turning to disk-based online server backup and recovery solutions as the most cost-effective fit for their requirements, when they have neither the volume of data nor the level of technical staff that characterize most traditional backup and recovery operations.

Data protection solutions that combine the latest advancements in disk-based backup with secure, integrated online technologies offer businesses fast and assured recovery of their critical business data while freeing limited technical staff for more value-driven tasks. They also reduce the burden of removing the data and storing it safely off-site, protecting it from local disasters.

This business advisory discusses the top ten reasons businesses are turning to this technology:

1. *Comprehensive and reliable data protection* assures up-to-date recovery of all critical business data, including the backup of data in open files

2. *Automatic and secure off-site electronic vaulting* guarantees successful disaster recovery

3. *Better control over restoring data* gives businesses access to data when and where it's needed — for any reason

4. *Improved security for all sensitive data* ensures protection during backup, transmission and storage

5. *A complete data protection solution* addresses the entire data protection workflow and provides a higher level of reliability, productivity and cost containment

6. *Immediate data restoration* either over the Internet or from on-site rapid recovery appliances reduces down-time costs

7. *Enhanced ability to demonstrate compliance* with regulations around information protection is enhanced through consistent, repeatable processes and controls

8. *Freedom from routine backup and restore tasks* allows redirection of staff time to value-driven projects with greater impact on productivity and profitability

9. *Increased competitive advantage* is promoted through improved access to data, more predictable cost control and flexible solutions that change with the business

10. *Greater reliability in recovering all data* where and when needed is ensured, with successful data recovery guaranteed in writing

REASON #1: COMPREHENSIVE AND RELIABLE DATA PROTECTION

If lightning strikes your building at 5:10 p.m., you need to ensure you can restore that day's data. Unfortunately, if you rely on a nightly backup process, complete restoration of that data will be impossible. Even then, a recent study of their data backup operations conducted by *Storage* Magazine revealed that only 37% of businesses actually test their internal backups regularly, and of those that did, an alarming 77% found they were unable to fully recover their data. The data they did recover was sometimes days or even weeks old.

Online backup and recovery solutions solve this problem by automatically transmitting changes in files and databases across the Internet to a secure, off-site facility for more continuous backup. The effort by your staff to achieve this level of backup is minimal — just "set-it-and-leave-it," greatly increasing reliable data protection for your business.

The best online backup and recovery solutions not only protect recently changed files that are closed but also capture changes in open files and databases, which represent some of your most important business data — and do so without disrupting your business flow. They automatically capture system information as well as data, ensuring you can easily restore a full system to an alternate location, with minimal technical staff assistance.

This kind of "hands off, lights out" comprehensive and continuous backup means that, in the event of a disruption or disaster, you can restore data from a point in time just moments before the interruption, rather than from the previous evening (or earlier), dramatically improving your ability to meet Recovery Point Objectives and reduce the cost of downtime.

REASON #2: AUTOMATIC AND SECURE OFF-SITE ELECTRONIC VAULTING

You think you're doing everything right. You back up your data on a regular basis. You ensure your backup equipment and configurations are up-to-date and working properly. You test your restores. Yet, when a sprinkler pipe bursts in your building and spills water over your servers and backup media, you lose all of your critical data in one night.

Even if you're extremely careful about backing up your data, that's only half of the process. To truly protect that data, you must also move it off-site. Too many businesses store backup media on-site, needlessly exposing them to risk from fire or flood. Some businesses assign an employee to take backup media home. While that might work (when they don't forget!), what if the employee leaves the media in a car, vulnerable to theft or temperature damage? The time and money you spend recreating lost data can be costly, not only in terms of lost productivity, but also in terms of lost revenue and customer good will.

On the other hand, disk-based online backup and recovery uses your current Internet connection to automatically transfer data off-site. Your backup data is immediately off-premises in just minutes after it's been updated. No matter what type of disaster strikes a business, you can restore data from moments before the disaster happened.

REASON #3: BETTER CONTROL OVER RESTORING DATA

If you experience a site disaster and need to immediately get your data up and running at a different location, traditional backup and recovery methods can require more time and effort than is feasible for businesses with limited technical staff. No business, large or small, can afford to be without access to its critical data for hours, let alone days.

One of the great benefits of online backup and recovery solutions is that the wide range of control it offers users. You choose which functions happen automatically while retaining the ability to manage and monitor the entire backup and recovery process anywhere and anytime.

When you need to recover from a site disaster — or wish to restore data to a different location for any reason — all authorized users have to do is log on to a Web interface, click on the files they want to restore and specify the location. The restore process begins automatically, recreating data at the desired location, even if it's thousands of miles away.

Online backup and recovery systems that automatically capture system information, as well as data ensure you can easily restore a full system to alternate hardware at the new location, with minimal technical staff assistance.

Further, solutions that allow you to control retention scheduling and policies for data on a per-server (or per-folder basis), allow you to select the level of protection appropriate for the criticality of specific types of data on a per-server or even per-folder basis. You can also retrieve all versions of data quickly over the Web from catalog of historic versions.

REASON #4: IMPROVED SECURITY FOR ALL SENSITIVE DATA

Your corporate server manages large amounts of sensitive data — customer records, employee records, intellectual property, and more. These are vital information assets you never want to expose to external parties. A recent survey by the Enterprise Strategy Group indicates that only 7 percent of companies always encrypt their data. Yet, by failing to secure data through encryption, businesses unintentionally leave their data vulnerable to competitors, thieves, hackers and just plain human error.

With online backup and recovery, stored at a highly secure, off-site location, your data remains safe. The best online backup and recovery solutions encrypt all of your data before it is transmitted over the Internet, sends it through a secure communication tunnel and then keeps it encrypted in the off-site location, so only authorized users with the correct keys can decrypt it.

Online backup and recovery solutions can also allow customers to audit access to their administration management system for additional security as well as change control.

REASON #5: A COMPLETE DATA PROTECTION SOLUTION

Data protection is not a single activity or one-time event. It's a multi-step, complex workflow of interconnected processes that extend far beyond simple on-site backup, including:

1. *Backup* or replication of critical data on another device
2. *Removal* of replicated data to an off-site location to protect it against man-made or natural disasters
3. *Storage* of replicated data that both protects and organizes data so that it can be easily and quickly recovered
4. *Recovery* of replicated data from storage whenever and wherever needed

If your current data protection solution doesn't address all of these steps, your company risks the unacceptable exposure of only partial protection that could easily result in the loss of irreplaceable data and costly, crippling downtime.

Fortunately, disk-based online backup and recovery solutions offer require one, low-overhead solution that addresses each step in the data protection workflow — while actually reducing the time, workload and cost associated with them. They provide:

- Fast, comprehensive and continuous data backup
- Automatic and immediate transmission to an off-site location
- Secure storage that reflects your specific retention scheduling and policies
- Immediate recovery at the level of granularity you desire

REASON #6: IMMEDIATE DATA RESTORATION

Businesses run in real time and rely on electronic data: anything from payroll and customer files, to email and other important documents. When disaster strikes, you don't have the luxury of waiting hours upon hours to restore your data.

Since online backup and recovery services immediately move data off-site by backing it up to disk over the Internet, you not only have the security of data that's residing at least 50 miles away, you can also restore that data effortlessly. Instead of waiting hours, Internet-based restores enable you to recover data in minutes.

The best online backup and recovery services transmit only changes in files and databases — a highly efficient approach that optimizes fast recovery, particularly in cases of data corruption, one of the most common causes of data loss. They also give you control over how much bandwidth is used during any specified time to accommodate your workload and dataflow. They may also offer an optional on-site rapid recovery appliance to allow you to recover large amounts of data while meeting stringent Recovery Time Objectives.

REASON #7: ENHANCED ABILITY TO DEMONSTRATE COMPLIANCE

Today, most industries are adopting their own ever-changing regulations governing off-site data protection and retention periods. For example, in healthcare, HIPAA requires patient information confidentiality, but if an office assistant puts the backup media containing the confidential information in his car and decides to stop at the store on the way home, the patients' confidential information is exposed to theft or damage. Similarly, certain financial records must be retained for many years, but if you can't recover those records, you can be personally liable.

Since fully half of companies that lose their data in a disaster go out of business as a result, most companies recognize their fiduciary responsibility to protect critical data assets. With disk-based online backup and recovery, you can automatically stay ahead of the game. Online backup and recovery enables you to automatically get your data off-site to a secure facility — a requirement for many industries. As privacy and records-retention regulations take effect, online backup offers protection traditional on-site methods never can, because data is always secured — in transmission, storage and access.

Another benefit of outsourcing server data protection is that the best solutions help you demonstrate consistent, repeatable processes and controls around information protection. The same Web-based management tools that make it easy for you to manage and monitor backup and recovery also allow you to control archive requirements that ensure compliance with corporate and regulatory guidelines.

REASON #8: FREEDOM FROM ROUTINE BACKUP AND RESTORE TASKS

The unpleasant reality is that many traditional backup and recovery methods are time-consuming and tedious. And while businesses know they must protect their data, those with limited technical staff would prefer to focus their time on more strategic, value-driven projects rather than monitoring the progress of manual backups, reviewing logs and troubleshooting problems.

"Set-it-and-leave-it" online backup and recovery solutions reliably and automatically offload these functions, freeing staff for work that has a more direct impact on your competitive advantage, productivity and profitability. They also standardize the backup process across your organization without employing technical staff at each location.

At the same time, as these solutions free staff from manual chores, they also empower them with Web-based management tools for managing and monitoring all aspects server data protection when desired.

There are two ways of implementing online backup and recovery solutions — and they both give you more freedom in redirecting staff time. First, you may use these solutions on a subscription basis from reliable third parties offering them as managed services. Trained staff provide 24x7 coverage, proactively monitoring backup and recovery on behalf of their customers. The best of these managed services offer simple, predictable pricing, with resources that allow their customers instant scalability and no capital investment in traditional backup and recovery technology. Second, companies managing very large volumes of data may find it more cost-effective to license online backup and recovery software, installing and managing it in-house. Solution providers offering flexible buying models for both licensed software and managed services accommodate either type of implementation, supporting growth and change in your business.

REASON #9: INCREASED COMPETITIVE ADVANTAGE

More than 37% of small and medium-sized businesses have already deployed disk-based backup solutions — and nearly another one-third are considering it now. These solutions include online backup and recovery solutions.

Access to all your data, all the time, is the prerequisite to successfully competing by responding faster, more proactively and more knowledgeably. Online backup and recovery gives you an edge by fully protecting your data and enabling you to immediately recover it when disaster strikes — or when you wish to restore data to a different location for any reason.

More importantly, you achieve a significant competitive advantage by freeing up valuable staff resources for other projects that have a more direct impact on your productivity and profitability.

When used as a managed service, online backup and recovery solutions offer better cost-control with predictable pricing, with the service provider bearing the cost of scalable resources and updating technologies as disk-based backup evolves. This gives your business freedom and flexibility as it grows and changes — another key to remaining nimble in a competitive environment.

REASON #10: GREATER RELIABILITY IN RECOVERING ALL DATA

Even very large businesses with major investments in traditional backup and recovery operations are moving to incorporate disk-based technologies into their backup and recovery data protection programs. In addition to a desire for faster recovery, another key driver of this evolution is that analysts have estimated that with traditional methods, recoveries fail about half of the time due to a variety of reasons, including human error, bad media, software bugs and more. Disk technologies have proven to be much more reliable. As a result, the Gartner Group estimates that by the year 2008, the majority of data restores will occur from disk, not from traditional media.

Online backup and recovery maximizes what matters most to businesses — reliable recovery of all their data when they need it — by combining more reliable disk media with the use of an existing Internet connection to securely move backed up data to a safe, remote off-site location. The ease of use of online backup and recovery ensures it will be reliably used — because backup and recovery are automatic "set-it-and-leave-it" processes. Finally, the best managed service providers of online backup and recovery guarantee recovery in writing in their Service Level Agreements.

SUMMARY

Many businesses don't identify critical vulnerabilities in their existing data protection methods until disaster strikes — and then, of course, it's too late. Online backup and recovery solutions fully protect business-critical data from natural and man-made disasters, human error, virus attacks, equipment failures and other business disruptions.

The top ten reasons for using this type of data protection solution have been presented in this advisory to encourage you to examine your own data protection strategies for potential risk and improved cost-effectiveness. For a more in-depth look at the benefits of online backup and recovery solutions and help in evaluating them, please see our White Papers:

· Protecting Server Data in Small and Medium-sized Businesses

· Protecting Server Data in Remote and Branch Offices

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