The Dirty Little Secret About Online Backup

How to Evaluate Online Backup for Business

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Executive Summary

How do you *know* your business data is protected? If your server fails or a hurricane hits or some other digital disaster strikes, what would you lose? Your email? Your customer database? Your business contacts? Your business?

Perhaps you're one of the many companies taking advantage of online backup services to protect your data. Online backup is a great way to ensure that critical digital assets, from databases to documents, can be safely restored if there's ever a problem. But if you're using online backup, there's something you need to be aware of. It's the one consideration that your online backup provider might not have mentioned to you.

It's the dirty little secret about online backup.

The secret is that it might take *a lot longer to restore that data than you expect*. What most providers don't mention is that, after a disaster or server problem, it might take *days* to restore critical business data. In fact, the time it takes to restore data, even with a high-speed Internet connection, can mean potential downtime that can be detrimental to your business – even to the point of causing business failure. In fact, some industry sources estimate that approximately half of computer users will experience a loss of data at some point, and businesses that experience a major loss of data may not be able to recover and could end up going out of business within two years.

Luckily, online backup solutions have been around long enough that now there are reliable options that address these issues. For example, one popular option is a hybrid online/local service that allows organizations to maintain up to date local copies of critical business data that are available to speed the recovery process in the event of a data loss. Using a hybrid model can significantly reduce recovery and restore times for small and mid-sized businesses.

In this paper, we'll take a closer look at the dirty little secret of online backup, explore what to look for in online backup solutions, and learn how companies like KineticD are solving the problem of slow recovery times through hybrid disaster recovery solutions.

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RECOVERY – THE DIRTY LITTLE SECRET OF ONLINE BACKUP

Over the past several years, many companies have turned to online backup services as a solution for day-to-day data security. Online backup is a great solution for small and mid-sized businesses. It can ensure that critical data is automatically duplicated and protected off-site in a secure data center. Many businesses start off using online backup services to backup individual laptops or desktops. It's fast, easy, and doesn't require a lot of management.

But if you're using online backup services to back up more than a couple of computers, or to backup servers with large volumes of important business data, there's something you should know.

It's the dirty little secret of online backup—recovery time.

From a backup perspective, most online backup solutions work well. They silently backup gigabytes of data in the background, ensuring your files are safe if there's ever a problem. But when there is a problem, and data needs to be restored, it can take not just hours but days or weeks to get that business-critical data restored. That might be fine for home users restoring lost photos, but most businesses can't wait days or weeks for critical email or customer data to be restored.

The real problem is that the data restore speed is limited to the speed of your Internet connection. And compared to local backup solutions like tape or disk, most Internet connections aren't really that fast. The end result is that restoring large files of lost data over an online connection can take a significant amount of time. Significantly more than many people expect. Table 1 illustrates the average length of time based on file size.

Table 1: Average Restore Times from Cloud Backup

File Type	Average Size	Connection Speed	Restore Time
Word Document	1MB	DSL/Cable (768K)	10 seconds
		T1	5 seconds
Exchange Server DB	100GB	DSL/Cable (768K)	13 days
		T1	6.5 days
Application/Transaction Database	250G	DSL/Cable (768K)	32 days
		T1	16 days

When small and mid-size businesses are looking at online backup services, they are often focused on the relief they will feel knowing that their important digital assets are protected in the event of a catastrophe. They are not looking at the total amount of data their business runs on and what it will take to get that data restored to their desktops and

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servers. To avoid the trap of the dirty little secret of online backup, organizations need to consider the size of the most important data files. It's not hard to have 20 or 25 GB of data to restore your critical business applications, and suddenly you're looking at several days of lost business time. The more data you have, the more difficult this problem becomes.

Backing Up Your Business - Considerations for Online Server Backup

Small and mid-sized businesses need to approach backup and restore like enterprises, but without the heavy price tag. Online backup services are great when it comes to backing up a limited number of individual desktop or laptop computers with a limited amount of information. But when you start backing up servers or individual systems with lots of data, it's smart to understand best practices.

For example, it's important to understand the complexity of the server environment. Backing up a single desktop/laptop is fairly straightforward. Backing up a multiple-server environment is much more complex. It's not simply a matter of restoring documents and folders from backup and you're done. Rather, the files on the server can have many interdependencies such as a database configuration requiring specific files in a specific order or location. In addition, the volume of information on a server can be much greater than on an individual computer, often as many as hundreds of gigabytes.

To properly leverage online backup and restore, businesses must understand what they need (how much data is there, and what types of server data they have) to be certain they are covered comprehensively in the event of a catastrophe. They also need to understand what may be missing in current offerings. Approaching their backup and restore by considering the requirements for enterprise-class cloud backup and restore is the first step toward ensuring that even small and mid-sized businesses have the right solution for their needs.

Requirements for Enterprise-Class Online Backup and Recovery Management in Technology Companies

While there are many benefits with online backup solutions, businesses need to consider certain issues (including recovery and restore times) when selecting the best cloud backup and recovery solution. This is as true for the enterprise as it is for small and mid-sized businesses. From Upside Research's perspective, the key attributes of an enterprise-class backup and recovery solution are the following:

> **Agentless.** Backup needs to occur for the data and files that exist across the many different devices on the network. Using an agentless solution enables this to occur in the most efficient way possible, without requiring an IT person to physically install an agent on each device to enable backup of data for that device. Agentless

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solutions are also able to determine what critical files are needed for each type of system, such as a SQL server, and ensure that those files are backed up.

Faster restore times. Enough emphasis cannot be placed on the speed of restoring critical files. Aside from complete loss of data, it is absolutely the most important aspect in avoiding business downtime. Therefore, enterprises look for options with online backup that include a local component, backing up high-priority files to an appliance or server. This way, in the event of a data loss, the business can be back up and running quickly.

Hardware agnostic. Local storage of high-priority files doesn't have to be on a proprietary appliance from the vendor. The most flexible and least expensive solutions let the customer use existing hardware or external disk drives that they are comfortable adding. The backup solution should isolate system files from restore files so that files can be restored to different types of machines. In the event of a physical catastrophe that damages the actual computer, you will need to rebuild the hardware and the system, and having the type of files separate will expedite the process by not forcing the purchase of an exact copy of the previous device.

Smart Storage. With the hybrid/local appliance option, businesses have the protection and peace of mind that they can restore data quickly without the cloud whenever necessary. And they know that the irreplaceable database files are also stored securely offsite, with a near-current version available. This way, in the event of a data loss or catastrophe, the business can do a full system restore, using configurations from the local device along with the data, without depending on a bare metal restore, which is significantly more time consuming and thus detrimental to the business.

Pre-configured. Similar to the advantages of agentless solutions, having pre-configured features that take the complexity out of setup by identifying what files are needed for each type of server (e.g. SQL, Exchange) is an important requirement for an enterprise-class online backup solution. It also takes care of restoring files to their correct locations for SMB or non-IT users.

Centralized Administration. To facilitate the management of an online backup solution, enterprises want tools for centralized administration to manage users, devices, and data in the most efficient way possible.

Small and mid-sized businesses can use these same requirements when they evaluate online backup solutions. The challenge is finding these features, such as local backup, centralized administration, and agentless set-up, without the enterprise price tag. Fortunately, there are solutions available today that provide an affordable, enterprise-class online backup solution for small and mid-sized businesses. One of them is KineticD.

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KINETICSECURE: ENTERPRISE-CLASS SOLUTIONS FOR SMALL AND MID-SIZED BUSINESSES

KineticD is a Toronto-based company that provides continuous backup, restore, sharing, and access services for small and mid-sized businesses. The company is an experienced provider of backup and recovery services, with a mature, hardened, scalable platform for online backup. Today, more than 15,000 businesses with over 40,000 users rely on solutions from KineticD. The company's online backup and recovery solution, KineticSecure, provides secure, cloud-based storage for businesses to continuously backup and restore their critical information.

KineticSecure offers the combination of cloud-based and local backup, with a hardware-agnostic local component that can use a standard server or external backup hard drives. The complete current data structure is captured locally, and then streamed to the cloud, protecting all of the current data. KineticSecure also provides plug-ins to assist with set-up, including Oracle, SQL Server, QuickBooks, and a number of other common server types.

KineticSecure Stands Apart

There are many cloud-based backup and recovery options available, so it is important to recognize the ways that KineticD separates itself from other solutions.

- **Patented technology.** KineticSecure's patented Continuous Backup™ technology on the client automatically detects and saves incremental file changes, ensuring that the most up-to-date versions of files are protected.
- **Open appliance choice.** While many other solutions require proprietary appliances for the local backup storage, KineticSecure is device agnostic, providing a software layer that enables customers to use their existing storage or the disk appliance of their choice. This makes KineticSecure significantly more affordable than other solutions and adds a level of flexibility that appeals to SMBs of all shapes and sizes.
- **Faster recovery.** In addition to its continuous backup capabilities, and lower cost than other solutions, KineticSecure brings perhaps the greatest benefit to any SMB: business continuity. The speed of recovery enabled by the hybrid online-local backup, combined with the layer of off-site protection, protects a small to mid-sized business to ensure that business continues as usual, with minimal interruption when something unexpected happens.
- **Flexibility.** The flexibility of KineticSecure is evident in its ability to support multiple locations and remote workers, and synchronously backup and create redundancies among different locations, making recovery much easier and further reducing restore times.

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FINAL RECOMMENDATIONS

While we have listed a number of requirements to consider when evaluating online backup and recovery solutions, there are some final recommendations in general that will help keep costs down and ensure business continuity. One of them relates to storage capacity. It is all well and good that you have a cloud-based solution and are backing up all of your data and files. However, since many of the solutions are priced based on storage capacity, it is important that you only backup what needs to be backed up. For example, we recommend that you store only unrecoverable data online. Applications are not unrecoverable, since they can be re-installed from original media. And, applications tend to require more storage capacity than regular files, which will drive up costs. To ensure speed of recovery, keep a local store of the data you need most. Then, you can get any changed or different information from the cloud once you have restored your systems.

When is the last time you tested your restore process? One of the questions we asked at the beginning of this report was How do you *know* your business data is protected? Even if you currently have an online backup and recovery service, the only way you will know that you are completely covered is if you test the restore process. Most customers never test their restore capabilities until they need it – and this is a big mistake. If you don't know how long it would take to restore your systems, you don't really understand the potential business impact an outage will have. Therefore, testing your restore process can shed important light on how well-prepared your current configuration is in the event of a catastrophe.

THE FUTURE OF ONLINE BACKUP AND RECOVERY

Like big companies, small and mid-sized companies are rapidly moving to a business environment that is digital – one where their most critical information is on computer systems. More than ever before, they need to ensure that their files are backed up and protected. Organizations are frequently picking online (or cloud) backup servers because they provide offsite storage, are generally less expensive and are more reliable than local storage options. The enterprise-class requirements that were listed above, including faster restore time, agentless solutions, easy set-up and administration, and a local/cloud combination, are all important factors to consider when evaluating backup and recovery solutions for your business.

Among the companies offering a solution with these features is KineticD, a veteran of the online backup market that offers a cost-effective, flexible approach to online backup and recovery. With a free trial offer, small and mid-sized businesses have the opportunity to try KineticSecure for free and evaluate if it is the right solution for their backup needs. And, most importantly, they can use the information in this report to ensure they are not among those businesses trapped by online backup's dirty little secret.

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About Upside Research, Inc.

Upside Research is a research and consulting firm focused on helping clients put application development, Web services, business process management, integration, and enterprise infrastructure challenges in perspective. Upside Research helps organizations find practical ways to achieve their IT goals and profit from the diversity of a changing technology landscape.

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