Seven Ways to Control the Cost of Data Growth

Susan, an employee of a major insurance company, clicked on her email at work to open a cute home video her friend Debbie sent. That 20 MB video file was then stored in her email and, at the end of the day, was diligently backed up by her company’s data storage solution. Just one year later after daily backups of Susan’s email, that one video now takes up 7300 MB of space!

Incredible Data Growth
The incredible growth in the amount of electronic data generated for both business and personal use has resulted in higher costs for data storage and backup. Several factors have lead to these spiraling cost increases, including storage of larger files such as video and audio, multiple backups of the same files, and enforcement of industry compliance regulations. How often is your company backing up duplicate data over the course of a year?

Make Certain That Your Backup Approach Is Foolproof and Reliable
With the exponential increase in the storage of email, video, MP3 files and other large files, business storage needs have grown accordingly. In addition to backing up business information, company computers often end up as the de facto backup for personal music, videos and email, resulting in additional backup storage costs for businesses.

Currently, 75% of documents are stored in email. In 2008 alone, more than 210 billion emails were sent. Backing up the same email attachments sent to different people in the same organization results in increased storage requirements, costs and time for backups.

The Contribution from Regulations
Government regulations such as the Gramm-Leach-Bliley Act, Sarbanes Oxley (SOX) and industry compliance regulations such as the Health Insurance Portability and Accountability Act (HIPAA) have also increasingly contributed to higher levels of data retention and stricter requirements to keep data secure and private. For example, according to HIPAA, healthcare providers must comply with the confidentiality, integrity and availability of individuals’ health information. They are also in the midst of implementing electronic medical records (EMR). While EMR may increase efficiency and lower processing costs, it will also lead to higher data storage requirements. In the financial arena, your mortgage information, credit card activities, investment information and other private financial data protected by the Gramm-Leach-Bliley Act add to the stricter privacy controls and data storage and backup requirements.
As the requirements for more information analysis and access to data increase, larger amounts of historical data will be required. According to IDC, in 2006, 161 exabytes of data were stored, “3 million times the amount of information contained in all the books ever written.” In 2010, more than 988 exabytes are expected to be stored. Inflexible backup systems compound the problem by backing up the same data daily resulting in the need for ever greater amounts of storage.

Grappling with Costs
As companies grapple with the rising costs and complexities of data storage and backup, a variety of options are available to reign in and more effectively manage the costs and improve efficiencies. Companies looking for ways to reduce their backup costs are increasingly turning to more modern and efficient data management solutions that utilize disk-based technology and online backup. How much money could you be saving by implementing the right storage and backup solution? This white paper outlines seven ways that new backup solutions can help control costs.

Seven Ways to Control Costs
Implementing the following cost management techniques may help optimize your storage and backup strategy.

1. Reduce Duplication of Data
Increase the speed of your backup operations and reduce storage costs by eliminating the duplication of data and backing up only new and changed data blocks. With tape backup systems and most disk-based backup systems, the same data is often backed up multiple times, resulting in higher data storage needs and an increased storage footprint. By eliminating duplicate data and only backing up the block-level daily changes, less data storage is needed. In addition, the ability to quickly recover data in the case of a disaster will eliminate unnecessary downtime.

2. Implement Flexible Data Retention Policies and Schedules
Flexible retention policies and schedules allow you to determine the appropriate retention time based on the type of data being stored. By setting and managing retention schedules, you control the amount of data you store. For example, Sarbanes-Oxley Sec. 802(a) requires that audit or review work papers be retained for a period of five years. This is likely a longer period of time than you might keep non-financial data.

In addition to length of time, a system that provides the flexibility of different policies for different file types can also help a company avoid storing employees’ personal files such as video files or MP3 files during backup sessions. Eliminating or reducing the amount of time a type of file is saved, especially large video and audio files, can provide significant cost savings.

3. Use One System That Works With Multiple Platforms
Companies have implemented multiple platforms and applications across different types of servers, operating systems and databases. These organizations are often forced to deploy multiple backup systems to handle each separate platform type. The maintenance time and costs for these systems can really pile up. Having one backup system that can work across different platforms saves time and money, while reducing the complexity of managing and maintaining multiple data storage systems.
4. Support Multiple Locations or Branches With a Centrally Managed, Consistent Backup Solution
Implementing backup systems when your company has multiple offices, retail locations or branches can be a challenge. Tape backup systems are difficult to manage remotely and increase your risk for data loss, downtime and security breaches. Web-based centralized backup allows companies to manage backups from anywhere via a web browser, supporting these distributed environments, which can result in saving time and reducing IT resources.

5. Decrease the Amount of Time Spent Managing the Backup Process
Smart management of your backup process can reduce IT staff requirements and lower operating costs. Using an automated, disk-to-disk, on-site or hosted process, rather than tape or multiple disk-based solutions saves time during the backup process, eliminates tape media management and decreases the time spent to restore data when needed.

Beware of vendors who say they can back up multiple platforms but actually use different technologies for each platform. Each backup system has to be managed separately adding additional time and burden on your organization.

6. Control Long-Term Costs by Choosing a Vendor Whose Solution Can Scale With Your Business
In choosing a solution today, you will want to pick one that best fits your current needs and budget constraints. Your choices include: online, on-site disk-to-disk software, all-in-one appliances or a hybrid solution. Consider using a vendor that can supply the same high-quality technology in different implementation choices. This will enable you to choose the implementation that is most cost-effective for your current needs and provides the greatest flexibility as your business scales and requirements change. A vendor with technology that can be seamlessly implemented in different ways gives you the ability to control costs over the long term.

7. Consider Outsourcing the Entire Management Process
With lean IT staffs and increasing compliance regulations, outsourcing your entire backup and recovery solution is one option that can lower your capital expenses and provide a fixed monthly cost. Reducing the drain on IT resources and feeling secure in the knowledge that you are working with data storage experts allows your organization to more strategically allocate resources.

How One Company Met the Challenge of Data Growth
One e-commerce management company recently faced several data storage challenges that were driving up costs. With new clients coming on board, leading to immediate increases in data storage, as well as multiple databases that needed daily backup, the company’s old tape backup system was no longer cost-effective or secure enough. Plus, too much data was bogging the system down, leading to long backup windows, a high risk of hardware failure and data storage loss.

As the company began to look at choosing a new solution, several key requirements were identified. The customer chose to use EVault SaaS online backup and recovery because it met all of their needs.

The most important factor in choosing EVault SaaS online backup was that it provided reliable and secure backup so that if the servers went down, data could be quickly and easily recovered. EVault provides end-to-end encryption for data security and has tier 3 and 4 data centers with SAS 70 Type II certification. This provided the customer with the assurance that their data would be protected and could not be accessed by
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As the company's storage requirements increased, it became imperative that storage space be used more efficiently. With EVault, the customer no longer made multiple copies of the same data, only new or changed data would be backed up. Data compression also further reduced the amount of storage required driving down costs of storage and shrinking the backup window.

One of the most important factors in choosing the EVault solution was EVault's flexibility and customer service. EVault worked with the customer to determine the best solution—online, appliance, software or a hybrid. Multiple options and costs were available to meet the customer's needs, allowing them to choose the best solution for their budget. EVault customer service was able to monitor the customer's implementation and provide them with guidance.

After implementation, EVault was able to help this customer reduce the amount of time needed for backup, implement flexible retention policies to better match their business needs, and reduce their backup storage footprint. The customer's total data storage footprint had swelled to 2.7 TB with a single critical database at 900 GB. With data compression, deduplication and backup of only new or changed data blocks, the database was reduced to only 200 GB of storage resulting in a savings of $2,700 per month. Over time, even larger savings will be realized as data growth is further controlled and reduced. The customer was also able to budget fixed costs for data backup that will result in additional savings, rather than always dealing with the unknown.

**Faster Backup Times and Lower Storage Cost**
EVault's patented technology identifies the new or changed data blocks, compresses and encrypts the data, and stores only these changes, resulting in significantly faster backup times and minimal backend storage. Smart management of retention policies, reducing the amount of data storage by only backing up needed data, and compressing the data that is backed up can result in enormous savings by reducing the total amount of data stored.

**Example: 24 TB vs 730 GB**
The chart below shows an example of what can happen over the course of just one year of using EVault data protection solutions.

Starting with 1 TB of original data a legacy system that runs full daily backups would grow to 24 TB of data while an EVault data protection solution would result in only 730 GB resulting in storage savings of 70%.

**Cost Reductions Over Tape Backups**
EVault disk-based and online backup solutions deliver a number of cost saving benefits over tape backups:

- Eliminates cost of maintenance on tape drives.
- Eliminates tape purchase.
- Eliminates tape management time and offsite tape storage costs.

Transportation costs alone due to moving the tapes to a storage warehouse (and back if data recovery is needed) raise your overall maintenance expenditures.
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With EVault disk-based backup solutions, your data is automatically backed up and can be stored on-site, offsite or both with local and remote vaults, reducing your ongoing maintenance costs.

Reduce administrative, operational and personnel costs
EVault data protection is easy to manage, plus it offers breadth of platform support so you can back up and recover with one vendor, rather than having to manage multiple vendors and interfaces. Using one vendor reduces administrative and IT resource costs and maintenance costs on multiple solutions.

EVault data protection supports multiple operating systems including Microsoft Windows, Novell Netware, Solaris, Red Hat Linux, SUSE, IBM AIX, HP-UX, and IBM i Series. Also supported are: Microsoft SQL Server, Microsoft Exchange Server, Microsoft SharePoint, Oracle on Solaris and Windows, VMware and Microsoft clustering services.

Manage to budget rather than unknown costs over time
Many vendors offer only one option in their data protection solutions. EVault provides the flexibility so you can choose the cost structure and deployment vehicle that best fits the economic model for your company. EVault solutions include an upfront software purchase or an all-in-one appliance purchase. Service options include a pay-as-you-go subscription service (SaaS) model or an outsourced fully managed service model. Hybrid models such as an appliance for local backup and subscription for remote disaster recovery are also available. EVault works with clients to create a customized solution to best fit their needs.

Find the right vendor with the best managed services
Many disk-based vendors don’t provide the flexibility or high enough levels of customer service. EVault’s managed data backup services provide you with expert online data backup management when you don’t have the time or resources to do it yourself. EVault's configuration choices allow for matching the right solution and costs for your specific needs.

Put your trust in EVault Data Protection Solutions
There are many choices for backup but putting your trust in a company with proven, reliable solutions for recovery of your data is crucial. Over nearly 30,000 customers trust EVault data protection solutions to ensure their mission-critical data is always available when they need it. Proven solutions and services provide the flexibility you need to employ the most cost-effective backup and recovery solution. EVault's long-term partnership approach and quick response helps customers find savings over time, even when data increases rapidly or new challenges arise.

Take the Next Step
To learn more about EVault storage solutions, call us at 1.877.901.DATA (3282), email us at concierge@evault.com, or visit us at www.evault.com.