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## Protecting Your Company's Most Vital Asset - *Information*

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*... Any asset is "only as valuable as ones efforts to protect it".*

*Any record created, received or maintained by its employees is both a tangible and intangible corporate asset.*

## **A Company's Most Important Asset**

In its simplest definition, an asset is anything of value to a person or company. Assets offer an advantage to those that own, control and depend upon them. Additionally, we know that the fundamental fact (and basis for much of our of our contract law) that any asset is considered "only as valuable as ones efforts to protect it". Hence the advent, reliance and importance of contracts, agreements, copyrights, trademarks, intellectual property, pass codes and other devices and in-sundry means to make sure that what is important to us is, and remains, ours. We rely and have a fiduciary responsibility as business professionals to assure that our asset is at our disposal when we want it and need it.

Securing and protecting any asset is fundamental to its value and care must be taken to exceed the risks, hazards, efforts and attempts associated with that which would choose to take our asset from us.

The data and information your company collects and maintains in any format--is considered a tangible asset. A company record contains information needed to support the company's mission, its business operations and activities. Company records contain the information both necessary and vital for transaction processing, the development and delivery of products and services, planning, decision-making, legal and regulatory compliance, proof and evidence, market analysis. More commonly the mass of company records serve to document the corporate experience.

### ***An organization's records are its property.***

Any company record created, received or maintained is a tangible corporate asset. The company's authority and stewardship over these records is the same as its authority over other assets such as real estate, property, equipment, inventory, patents, discoveries, plans, strategy and investments. Therefore, a company's data could and should frequently be considered its most fundamentally valuable asset. It offers for posterity the other intangible activities within an organization. It is the map and guide to a business process from conception to disposal.

Just consider how many of the different type of items listed above are recorded as digital records in your current inventory.

### **The High Cost of Data Loss**

Critically important in today's data driven world we Records Managers focus on is the increasing variety of electronic records such as computer files and databases, word processing files, e-mail's, Instant Messages, voice mail, video clips, wire, transfers, electronic document images, CAD/CAM, calculations from intellectual property, acquired data, leads and prospect lists, computer generated graphics, as well as audio and video files and records. Data accumulation is a requirement and less and less tolerance is provided for deleting any data type from virtually any source, even materials that later proven to deem worthless or even damaging.

Deleting data has rarely been a conscious practice but now any records destroyed suggests the worse case and raises questions as to why. Why were they deleted? Challengers and adversaries gain momentum and an argument when important communications cannot be forthcoming when needed.

Company's stakeholders expect durable record keeping and long term access even to the potential demise of integrity and an increase of suspicion.

In addition to this "hoarding" tendency and virtual necessity - there are legal regulations that must be followed by companies to insure the proper use, storage and final disposition of corporate records. Currently, there are over 13,000 laws and regulations that govern or effect record retention in the United States. And some of these requirements carry very stiff legal and financial penalties for records

mismanagement and/or noncompliance. This alone makes one realize why servers and data stores are getting bigger by the day and the command "delete \*.\*" is as little used today as the rotary dial telephone.

In the last thirty years and accelerating at a phenomenal rate records- legitimate assets - have been created and maintained in non-paper format. Due to their intangible and portable nature, electronic records are more susceptible to theft, mishandling, loss, disaster, human error, electronic attacks (virus/malware) and employee non-compliance with acceptable retention practices - than paper records.

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As the rise of the importance of data processing and collection increases, companies have been constantly moving their applications ever closer to the end user - from backroom mainframes to servers and then to desktops, mobile PCs and now cellular devices. This creates even more data. It is reported that more than half (>60%) of all corporate data now resides, unprotected by the way on PC desktops and laptops. Your (and your competitor's data) is everywhere. It is distributed, networked and accessible from many places and by many different means. Are you using ASP's (Application Service Providers) fro some deployment? Well good - you data is success able from access any where in the world an internet connection can be made.

### ***So what is the business problem you ask?***

We agree that data is an invaluable and important asset; it is growing in volumes and accessible from many points for both proper and improper use. We need to protect it and make it

available in its ever changing forms for a variety of proactive and reactive reasons.

Alas, there are other fundamental risks. Let's consider the following published facts and statistics:

- 96% of business workstations are not having their data backed up on a regular basis (if at all),
- 68% of all corporate data loss is due to a technical failure
- Hard drive failure is the most common cause of loss (38%)
- 31% of PC users have lost all of their PC files to events beyond their control at one time or another,
- 25% PC users suffer some form of data loss every year
- 20% of all computers suffer a fatal, unexpected hard drive crash during their lifetime
- 12% of data loss is due to human error
- 60% of all corporate data is stored on PC desktops and laptops
- ***A hard drive crashes every 15 seconds***

What are companies doing to protect these records in this catastrophe inevitable environment? Unfortunately, very little. Almost half (40%) of small to medium sized companies don't back up their electronic or digital records in any fashion whatsoever.

### **When the inevitable happens: what is the cost of recovering it?**

Recreating data stores from scratch is resource intense and time consuming. Published reports estimate applying electronic means to restore or recover data runs at between \$2,000 and \$8,000 per megabyte (Mb). Note that it is commonplace in today's off the shelf PC's to support Gigabytes of data – so it's easy to do the math when considering an enterprise or even server based deployment that fails. It's also a great time to consider that when data is lost – and it has happened to everyone to varying degrees – does anyone just say “oh, well”. Of course not. Our previous agreement here validates the importance of the data and our reactions to the “open barn door” after the horses have escaped” is helplessness. Sales have lost all forecasts, engineering's charts and plans are gone, accounting must do cash detail by hand and recreate the current balance sheet. The POS (Point of Sale) must be reset, web Site redesigned and our customer's emails and contact information is not to be found. Not a pretty picture.

I was personally involved in an informal study where our team estimated that it would take 19 person days and cost approximately \$17,000 to retype/re-enter 20 Mb of sales information back into an application from the source documents if they were available. Likewise to recreate 20Mb of accounting information, it would take 21 days and cost \$19,000. Again this is rudimentary – and does not even consider the human error aspect of a massive data recreation.

In 2001, a “Cost of Downtime Survey” revealed the following information from companies that participated in a blind survey about dealing with data loss and recreation. This study focused NOT on the re-entry like above – but the operational cost of the company not having access to data for the “weeks” while data is restored to those needing it.

:

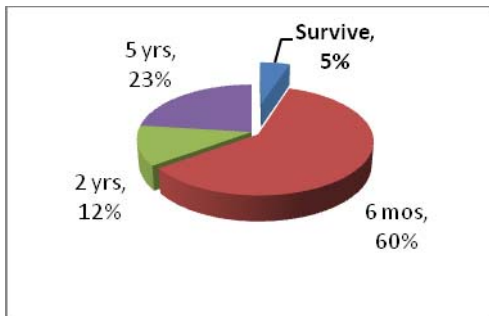
- 46% reported a cost per hour of up to \$50,000
- 28% reported a cost per hour between \$51,000-\$250,000

- 18% reported a cost per hour between \$251,000-\$1,000,000
- 8% reported a cost per hour of more the \$1,000,000

**What happens if data isn't available?**

More than half of companies that lose a significant portion of their company records close down within 6 months of the loss. After two years the number reaches 80%.

93% of companies that lose their data center for 10 days or more due to a disaster filed for bankruptcy within one year of the disaster. 50% of businesses that found themselves without data management for this same time period filed for bankruptcy *immediately*.



(Source: National Archives & Records Administration in Washington, DC)

Pretty astounding information. Records are assets and in the “balance sheet” of practical business operations protecting access to data is required, smart, fundamental and important

As Certified Records Managers we review and effect strategist that speak to keeping what is important to a company. We press the importance to management and staff to have a logical and repeatable plan. We know where the data is and what is potentially important and necessary. Every company and situation is different but what remains the standard across all organizations is to look hard at the ridiculous risk of not protecting data.

**The MirroredStorage.com Solution.**

I have reviewed the technology available from Mirrored Storage and therefore advocate for just such a system as an effective and fundamentally sound cornerstone to protect a company’s data.

First on my list for a technical back-up solution was taking a hard look at the security dimension. Whenever data is moving it is at its most venerable state. It is exposed greater to all of the hazards we reviewed earlier. I see that with Mirrored Storage your Data is Secure. Mirrored Storage’s Remote Backup System offers an extensive list of encryption standards including:

<b>DES</b> (8.3 Standard) the old US Federal Standard
<b>TDES</b> (Triple-DES) a much more secure form of DES
<b>Blowfish</b> (Variable-Key) is probably the most secure of all listed standards. It uses a key length that is variable from four bits to 448 bits
<b>AES 128-bit</b> is the new US Federal Standard. Remote Backup supports three levels of AES from 128 bits to 256 bits
<b>AES 192-bit</b>
<b>AES 256-bit</b> is the most secure of the three AES options; but is slower than the others

I saw proof that each data file is securely encrypted before it leaves the appliance using your choice of the methods listed above. Data assets then travel safely encrypted over the Internet and are stored on the Mirrored Storage remote backup servers as a group of numbered files containing your encrypted data. Your encryption key is unique to you. No one with Mirrored Storage or the data center will ever

have access to your files or your information. Never. Just like a Swiss Bank safety deposit box – what goes in stays in the vault. Only you have the ability to access your data.

This very important and fundamental concept meets or exceeds all existing regulatory compliance programs including the broadest and most strenuous including:

- Health Insurance Portability and Accountability Act (HIPAA)
- Gramm-Leach-Bliley Act (GLBA)
- Sarbanes-Oxley Act (SOX)
- Payment Card Industry Data Security Standard (PCI-DSS)

Also high on my interest list and my observed features is that the offering was simple and easy to use. Once set up it is virtually effort free and void of any human involvement whatsoever. Mirrored Storage Remote Backup was designed to work from an in-house master appliance so no special knowledge on your part is needed.

***That guarantees your organization has at least three backup copies of your encrypted data for your security and protection.***

#### Seamless Interface

With Mirrored Storage I saw conclusive proof that any and all data within your enterprise can and will be backed up on the set schedule and according to the type of your choice.

When one uses Mirrored Storage the appliance will automatically determine where applications, records, files, spread-sheets, e-mail, documents, messages, index files, databases, videos,

etc. are located on each individual device. Virtually any and all other folders can be easily added or removed from the appliance.

Mirrored Storage Remote Backup utilizes a mirrored technology to keep your information safe at an alternative location. The result is that your valuable assets are not only on your specific electronic device but can also be stored on the appliance as well as the Mirrored Storage's Remote Backup Server and the Mirrored Server.

That guarantees your organization has at least three backup copies of your encrypted data for your security and protection.

As I explored further and looked for a strait forward but feature rich application to support a fundamentally sound back-up of corporate records I was demonstrated the following key ingredients that make this such a valuable solution:

#### ***Multiple Versions of Files***

Mirrored Storage keeps multiple (encrypted) versions of your files. If a file gets corrupted, or if you just need an earlier version of a file, you simply go online and download whichever version of the file you need.

#### ***When a Change is Made, only the Change is backed up.***

Once you have a file backed up, the Mirrored Storage software detects and extracts only the data that changes for the backup. Changes or additions only were transmitted to join the previous archive really taking a load off of network traffic. I saw substantially large files updated and stored in a matter of seconds.

The changes are stored by Mirrored Storage Remote Backup as various versions of the original file. This is why you can recover so many earlier versions of your files without taking up a lot of extra storage space. Mirrored Storage Remote Backup uses a patented technology, something they call BitBackup, to accomplish the backup and restore the files.

### ***Internet Interruptions are Not a Problem***

Something else I really liked and saw demonstrated. If your internet connection or other event interrupts your backup process, you are covered. It is designated to be un-interruptible. If your connection gets interrupted, the backup will simply pause until the connection returns. Then, it will continue your backup from where it left off.

### ***You Choose What to Delete***

Mirrored Storage Remote Backup will never delete your files automatically. If you delete a file by mistake, rest assured that it will still be available in one of the off-site data stores. That's what a reliable backup is for and that's the promise that is delivered.

A utility is available that is called a "clean-up wizard" to reconcile the all files (at your selection) on your PC with your online backup and suggest things you may wish to delete. Once you have reviewed the list, you can choose to delete those files you no longer need to keep.

### ***Pay Only for What You Use***

When I looked to compare Mirrored Storages business proposition to the "fine print" with other backup plans, I noticed items such as: *"we reserve the right to monitor our system to identify excessive consumption of network resources,"* or, *"if your usage greatly exceeds the average level of monthly usage,"* or *"we reserve the right to offer an alternative pricing plan..."*

With Mirrored Storage.com, helps you add as many users as you like. Even USB memory keys and iPhone and Smartphone devices are covered. (That's right; ever loose your cell-phone?) In all cases, you only pay for what you use. There are no extra charges for uploads,

downloads, storage or versioning like you will see with many other plans.

Seems to me that most online backup plans are based on "buckets" of storage space. You pay "x" per month for a set amount of storage space. With others, if you try to backup more than the contracted amount of storage space, your backup will fail and you will have to 1) delete some data or 2) upgrade your plan. Besides the additional expense of upgrading the plan, a change often requires reinstallation of software.

With Mirrored Storage you are charged only for the amount of storage space you actually use. It's that simple.

### **Summary**

In my detail review of Mirrored Storage I was very impressed. As a Corporate Records manager I know that Data retention and availability is a frequently mismanaged and underestimated trend in business. We spend billions keeping a virus from destroying our data but fail to introduce a policy and a process that allows for unassisted and unattended removal of your data into a secure space far from the hazards and risks your data faces.

Having data is what is key and a deployment of Mirrored Storage is a fantastic start at a very thorough effort to meet and exceed the required and logical need to secure your most important asset – your information.

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