

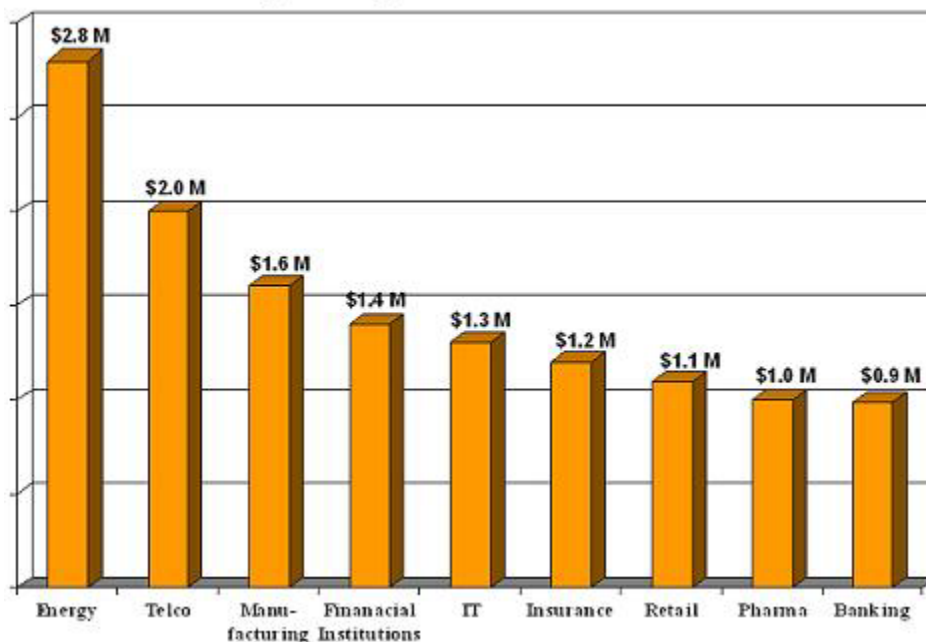
# Disaster Recovery Strategy for Microsoft Environment

## Introduction

In business, a computer disaster equals an event that halts the normal operation of day-to-day business activities. A disastrous event can involve system malfunction, operational errors, virus attacks, acts of nature, accidents, or sabotage. The result of such a disaster is that business stops--orders cease to be placed, accounting activities freeze, data is unavailable, electronic communications halt, and the company has no access to decision-critical information. All of these events cost companies revenue and may result in unrecoverable damage.

Companies that do not have a proper disaster plan pay dearly through lost productivity and financial loss. As corporate data continues to grow exponentially, so too does its value. Losing access to critical data for even an hour can cost a company millions of dollars. The Meta Group reports that the downtime cost for each company in the Energy Industry is \$2.8 million/hour; in the Telecom Industry \$2.0 million/hour; and for Financial Institutions, \$1.4 million/hour. The National Archives & Records Administration reported that 93% of the companies that lost their data center for 10 days or more 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. And anyone who watches nightly television should be aware that disasters could occur anywhere.

**Average Hourly Loss Across Various Industries**



## Microsoft Environment

Microsoft is the dominant player in Small and Medium Business (SMB) market and it is also getting increased acceptance in the enterprise market. Microsoft

Windows Servers and Exchange Servers are ubiquitous in any organization big or small. SQL Server is also being increasingly used with enterprise class applications. But many organizations do not use the proper process for backup and recovery and in particular disaster recovery of Microsoft Servers.

The explosive growth and popularity of Microsoft Servers in general and Exchange Servers in particular presents a challenge to administrators all over the world. This growth coupled with exponential growth in associated data volume makes it difficult to manage, protect and administer the servers. Hence it is imperative to have proper disaster recovery processes in place to protect Microsoft Servers.

### **Common Mistakes**

The biggest mistake typically made by people are thinking that since they are taking backups, they are assured of recovery in case of a disaster or system crash. Based on statistical data, 30-40% of the data stored on tape can never be recovered. Also, most of the tools available today focus on backup, not on recovery. So it is imperative that IT Administrators give enough thought about not only on backup, but also on recovery.

Depending on the criticality of the environment, and the needs of a particular organization, it is always a good idea to take more frequent backups.

### **How to protect your data?**

First of all, companies have to decide how critical their data is. Organizations also have to determine their Recovery Time Objective (RTO) and Recovery Point Objective (RPO).

RTO defines the tolerable maximum length of time that a business process can be unavailable, while RPO defines how much work in progress can be lost.

Also, companies have to decide whether to go for a tape backup or a disk-to-disk backup, or a combination of both. Tapes are the traditional way of doing backup, but when it comes to recovery, they're not very reliable. Disk-to-disk backup is fast, reliable, and the data can be recovered immediately. The best approach will be to back up the data to disk regularly and archive it to tape every week, every month, or every three months based on the criticality of the data.

### **Disaster Recovery Plan**

The best way to prepare for a disaster is to avoid the disaster. Therefore, look for any potential problems you can find, and correct them. You should address those issues that you can solve and which will provide benefit. Regardless of the cause, fast and effective recovery of your IT environment is essential. You must be able to quickly implement your recovery plan--which must be tested and well documented before problems occur.

Developing a disaster recovery plan for your systems in general, and databases in particular, is tedious and time consuming. If you can automate the entire process through configurable templates, then the entire process can be completed within a short period of time, saving time and resources. Also, one should focus not only on backup, but also on recovery. When a disaster occurs, it can take hours, if not days, depending on the complexity of the situation, to have all your systems and databases up and running. Users should look for applications that will help them to recover to the point of failure, or to a point in time quickly without the need to write any script or code.

Companies can create a cost-effective disaster recovery site by simply investing in standby servers. They provide a high level of data protection and fast recovery if the primary server fails. Standby solution bridges the gap between a highly expensive failover clustering solution and native backups. The standby server can even act as a read-only device during normal operations. The extra server generally costs much less than buying extra peripherals or services.

Unlimited budget does not guarantee total protection. In fact, in today's environment, even the most profitable company with lots of cash will think twice before spending money on unnecessary or redundant projects or tools. As explained before, RTO and RPO will determine the type of plan and systems that need to be put in place. Companies should have a clear understanding of their requirements, and then design/implement a disaster recovery and business continuity plan.

Before jumping on to implementing a plan or an application, it is imperative that users properly think through all the different scenarios and the impact a particular disaster will have on their business. With proper planning, even companies with highly mission critical data and information can implement a plan within a reasonable budget. Of course, what is reasonable is always subjective.

### **Disaster Recovery Strategy for SMB Market**

Today the need for disaster recovery extends far beyond major enterprises. Every small and medium business (SMB) depends on its network for virtually all its activities.

But what is an SMB to do? Few have the trained staff to do extensive planning or can afford to take on major activities that have no immediate payoff. Furthermore, most disaster recovery software and services are aimed at large companies with sophisticated computer systems, in-house expertise, and large budgets. What about a typical SMB with one or two IT people and the usual Microsoft software and Intel servers?

Fortunately, there are solutions that are reasonably priced and easy to implement. Companies can use a combination of disk and tape backup solutions to protect their systems. The best strategy nowadays is to back up your data to disk regularly and then archive it to tape every so often depending on how critical it is. Be sure to test tape recovery; it is a notoriously fickle and uncertain operation. A trial run now will avoid big problems later.

## **SonaSafe from Sonasoft**

Unlike most of the other backup solutions, Sonasoft's software is designed for disk-to-disk backup, it is application specific, and leverages lots of the great capabilities of SQL, Exchange and Windows Servers. Sonasoft's SonaSafe application automates the entire backup through configurable templates. When a crash occurs, due to system malfunction, user error, or due to any other reason, one can recover to the point-of-failure, or to a point-in-time, with just point and click. When things go wrong, users can recover the entire server, database, or mailbox or even a single message with just one click.

Key Benefits of SonaSafe Backup and Recovery Suite for Microsoft Servers:

- Create Automated Backup and Recovery Plan
- Total protection for Exchange, SQL and Windows Servers
- Centralize Administration and Management of multiple servers
- Lower IT costs through efficient disk-to-disk backup
- Improve productivity through "Point-Click" recovery
- Reduce Tape Backup Media Costs
- Recover individual databases, emails or files with just one-click
- Protect data with minimal impact on your network infrastructure
- Manage backup and recovery remotely on multiple servers
- Reduce storage costs through excellent compression capability
- Data can be stored on the same server, DAS, NAS or IPSAN

## **Customer Case Study**

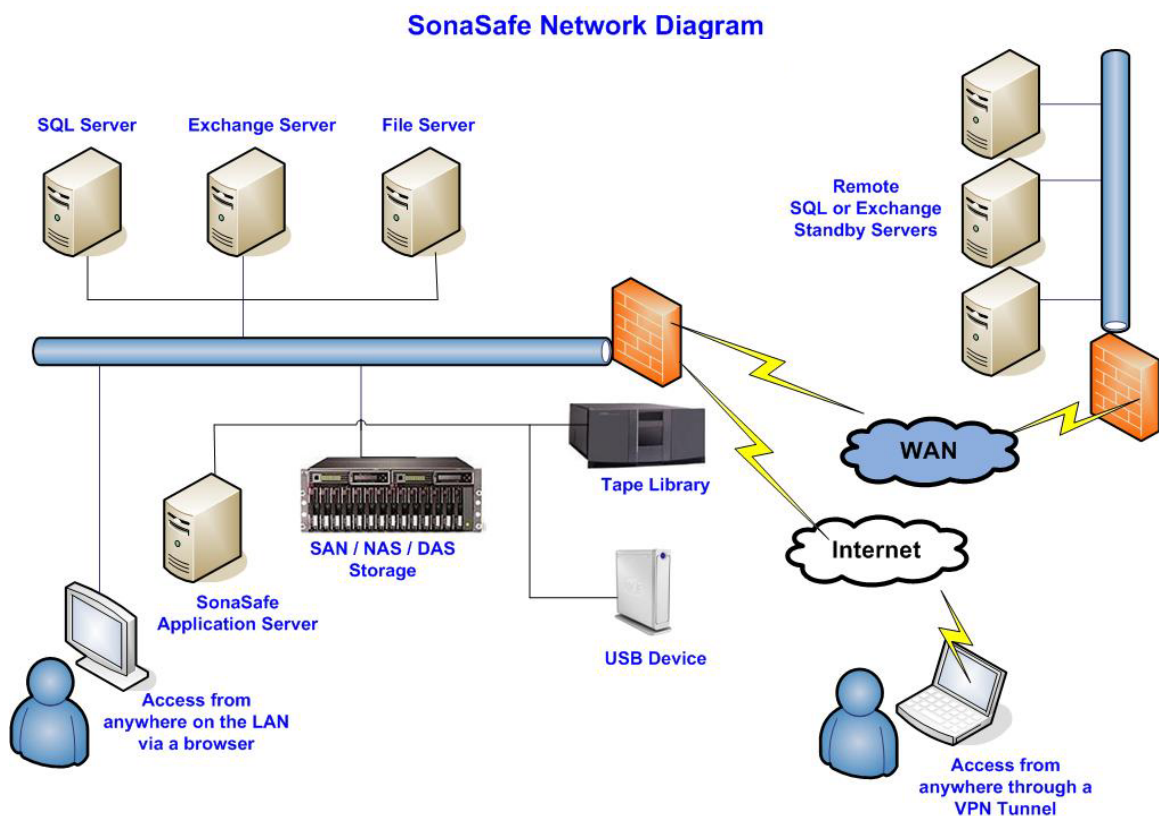
Marketron International is a leading provider of broadcast management solutions for the radio, TV, and cable industries. Marketron was looking for a disaster recovery solution that could provide both backup and recovery services at their production data center facility, as well as replication of data to their remote DR facility. They needed a solution that was not only simple to use and cost effective, but also safe and reliable to protect valuable data.

Marketron uses a number of Microsoft Standard Edition SQL Servers. As Marketron scaled up, its SQL deployment of customer data, using standard backup software and manual log-shipping practices, became cumbersome, time-consuming, and costly.

Sonasoft provided a simple solution, which was easy to use and quick to deploy. Also, SonSafe enabled Marketron to centrally manage all the servers and reliably update the remote standby servers. Marketron was looking at various solutions, but the cost was prohibitively high. Sonasoft offered a solution which not only provided superior value, but at one fourth of the cost.

Using SonaSafe, the customer is automatically updating the remote standby servers every 15 minutes. Efficient compression provided by SonaSafe, reduced storage requirements by almost 85%. The customer is currently backing up 25 primary SQL servers in the San Francisco Bay area, and 25 Standby servers 700 miles away are getting updated every 15 minutes in Salt Lake City, Utah.

The size of the transactional backup frequently reaches over 1 GB in size, even after compression, but SonaSafe efficiently restores the data on the standby server. When a system crashes, Marketron is able to recover it immediately to the point of failure without any data loss. Also, when a primary server goes down, the standby server can take over immediately and the whole operation can continue without any downtime.



## Conclusion

Businesses of all sizes must take backup and disaster recovery seriously. Who knows what can happen? In recent years, information and data has become a vitally important corporate asset essential to business continuity all around the world. The ability to recover critical data quickly after a disaster is a fundamental requirement of economic viability. Microsoft SQL, Exchange and Windows Servers are being increasingly used in mission critical environments and hence recovering them from a disaster is crucial for business continuity.

It is very important to have a disaster recovery plan that is easy to follow, well documented, and known by employees. Relying on one employee or on a process that is not documented will only leave a company vulnerable, especially in disastrous scenario. It is imperative to have proper processes and software implemented and tested to recover quickly from a disaster.

### **About Sonasoft®**

Sonasoft Corp. automates the disk-to-disk backup and recovery process for Microsoft Exchange, SQL and Windows Servers with its groundbreaking SonaSafe® Point-Click Recovery® solutions. Designed to simplify and eliminate human error in the backup and recovery process, SonaSafe solutions also centralize the management of multiple servers and provide a cost-effective turnkey disaster recovery strategy for companies of all sizes. For more information, please visit [www.sonasoft.com](http://www.sonasoft.com).

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