



FIVE STEPS FOR DATA SAFETY

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The most important asset to a company is its data. In the event of a technical failure or glitch, the loss of data, customer records, business plans and intellectual property can be devastating. Statistics show that without proper backups, two thirds of companies go out of business within six months of a data disaster.

Could your company survive if all data was lost and you had to start over from scratch? In a survey performed by the Disaster Recovery Preparedness Council, 20% of companies stated losses between \$50,000 and \$5,000,000 due to downtime after data loss. In addition,

more than 40% of data recoveries were not successful when plans were executed

How can a company ensure business continuity in the event of data loss?

RAID (Redundant Array of Independent Disks)

1 RAID is a technology that keeps your data safe on a local server by combining multiple physical disk drives into a single logical unit. In a mirrored RAID configuration, data is automatically duplicated from the primary disk to a backup disk. This allows recovery from the backup in the event of a complete drive failure. A striped RAID configuration writes data across three or more discs. If a striped drive fails, the server is able to operate normally while the drive is replaced.

Secondary System Backup

2 While using RAID for disk drive redundancy is recommended, this practice will not prevent data loss if an entire system fails. Your organization's backup strategy should incorporate an enterprise backups solution.

There are three methods to choose from in an enterprise backup solution. A full backup copies all of the files and folders of a given system. This is the initial step when performing system backups, to ensure availability of your businesses data. However, relying only

on a full backup can lead to increased storage costs. An incremental backup begins with a full backup and then only completes additional backups when changes are made to a file over time. One benefit of an incremental backup is the reduced file size and storage cost of your data, however restoration times may be increased with this method. Finally, differential backups store copies of cumulative changes, which lessens recovery time but places storage costs and file sizes between full and incremental backups.

The Cloud

3 Most cloud service providers operate with geographically diverse data centers, which makes it an ideal solution for disaster recovery storage. The cloud can also decrease capital expenditures by eliminating server replacement cycles and costly power and cooling for your data center. Operational costs are also lowered, as fewer employees are required to administer these systems.

Policies

4 The development of policies, standards and procedures are integral to protecting your company's digital assets. Organizations must calculate acceptable risks and develop policies, standards and procedures to

document backup frequency, locations and restoration tests.

Data Center Redundancy

5 Offsite data center storage at a colocation facility offers premium data protection. This offers complete recovery in the event of power loss, natural disaster or fire. Business risk can also be reduced by storing IT resources separately from business operations. Geographic diversity, secured access and reliable power failovers are some of the benefits of data center storage.

What other steps can organizations take to protect themselves? Merit Network, the nation's longest running non-profit research and education network, is excited to provide Michigan's largest FREE online and in-person cybersecurity training event on September 27th.

Our workshops are designed to provide qualifying government and higher education institutions with limited financial resources training on industry standards for security policies, best practices and national frameworks.

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