Data protection tape format

LTO NewsBytes

The Storage Dilemma - What are the best practices for backup and data retention?

Not all data is considered equal -- in fact, this in itself is the reason why there's not one simple solution to all data needs. In our last edition of LTO NewsBytes, we outlined the second of five best practices: implement tiered storage architectures. Overall, a tiered architecture matches high-value, time critical data and less-frequently accessed data to the appropriate medium.

Best Practice 3 of 5: Mitigate Risk

A key objective in every storage environment is to mitigate risk as much as possible. And it's not just about the reliability of the technology you choose, but the overall strategy towards protecting your data. To best accomplish this, the following factors must be taken into account:

Multiple Levels of Protection

At least three copies of data stored in different locations - with at least one of these stored in a remote region - helps to mitigate disasters such as flood, fire, earthquake or criminal attack. Additionally, having data copies held on different forms of storage media, such as a mixture of disk and tape, can provide additional protection from a media error and corruption.

Keep at Least One Copy Offline

System isolation helps to prevent intentional or unintentional corruption of data. Operators in disk-only environments beware: replicating data from disk to disk may not protect against a virus, sabotage or system error where the replicated backup data can also quickly become corrupted. To protect against this, a backup copy held on tape, offline and away from the system is the best practice.

Protect Data at Rest and in Transit

New stories about data loss or theft appear on a regular basis. Protecting data at rest is quickly becoming an imperative with new regulations and business agreements. The answer: data encryption, which can be performed using tape and disk hardware solutions that deliver low-cost, scalable protection without impact on system performance.

Implement the Right Technology Mix

Today's tape drives include technology features that help overcome common failure issues to provide outstanding data integrity and reliability. For example, LTO drives are specified with an impressive MTBF of 250,000 hours. To enhance reliability, disk drive manufacturers developed RAID, which is more about "uptime" than about data protection. Remember: if you have a virus that destroys data or if files are accidentally (or even deliberately) erased, RAID does not offer protection. Only an offline backup is going to really protect you from losing data.

...Don't Gamble With Your Data

To see all of the best practices and more about the roles of disk and tape for backup and data protection, visit the Ultrium.com web site for a white paper entitled "The Evolving Role of Disk and Tape in the Data Center" by Sylvatica Consulting and stay tuned for the next edition of LTO NewsBytes highlighting the next best practice.

Learn More About Best Practices

View a replay of our informative eSeminar, where you'll hear Debbie Beech of Sylvatica discuss backup and long-term storage best practices that organizations should be using to balance the evolving roles of disk and tape technologies as part of a comprehensive, tiered storage architecture to address these complex needs. The accompanying white paper is also available at the LTO Ultrium Web site.

What About Encryption?

Every month, companies risk data loss that could potentially expose millions of sensitive records. Data encryption can help address these issues, but how is it best applied and which tools can be utilized to address security? The answer: a white paper from Silverton Consulting provides insight into encryption methods and how to address security issues with LTO-4 encryption.

Tape Fallacies Exposed!

Much to the chagrin of the "Tape is Dead" crowd, tape remains a key component of the storage environment. According to David Hill of Mesabi Group, the fact is that tape shines in areas such as recovering from data corruption, has dramatic cost advantages over disk, and is more than acceptable from a manageability and usability perspective. Hill takes on tape fallacies in an upcoming white paper expected next month, brought to you by the LTO Program. Check out the LTO Ultrium Web site for updates.

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Use LTO-4 Technology with Tape Drive Encryption, Your Smart Bet for Data Protection!

For more details, check out white papers, articles and other useful information at www.ultrium.com