STORAGE OF DATA TO TAPE MEDIA

Data protection and archiving to tape media plays a crucial role in the company wide data protection strategies.

While many organizations already know tape for its traditional uses - backup, disaster recovery and compliance - most probably don't realize that modern applications now enable tape to be used as an active, file archive and as NAS storage.

Tape: Long term and reliable data protection

For access to large quantities of stored data, tape's role in big data, cloud, High Performance Computing and IT operations is expanding dramatically. These markets take advantage of the integration of tape's historical benefits (cost-effectiveness and media longevity) and new innovations (data integrity verification and file system interfaces) to offer the right archive and backup solution for large data sets.

Explosive data growth and shrinking IT budgets are putting pressure on companies to find innovative storage solutions to meet their organizational demands. Increasingly that means tape, thanks to its significant cost advantages, reliability, and continued innovations to improve tape's capacity, speed, and ease-of-use.

Data growth

You read about it and experience it first-hand all the time. The amount of data produced by organizations and companies of all sizes is expanding every year and the amount of storage required to hold that data is rapidly expanding as well. For many IT managers, tape remains a primary part of their storage strategy to manage this growth in data. Compared to other storage media such as hard disk or a flash drive, tape technology can store much more data. Today each tape cartridge can save 6.25 TB of data.

Archiving and disaster recovery

Organizations of all sizes should have an archiving strategy for protecting their data for the long term needs of their organization for accounting, tax, legal and regulatory compliance purposes. Tape allows you to easily archive your data in a permanent offsite location because it is so portable, secure and stable. Tape media has an expected 30 year lifespan and is much more durable than disk. Compared to hard disks error rates, the read or write data error rate to tape are much lower. Tape media offer a reliable solution to recovery data in the case of an emergency.

Cost-savings

Tape is an extremely cost effective technology compared to disk for long-term storage. Tape has by far the lowest TCO costs (Total cost of ownership) and enables long-term storage of large data volumes at minimal costs. Costs of tape media a much lower than costs for alternative storage media such as hard disks.

Energy efficiency

Data storage to tape is environmentally friendly and maximum energy efficient. Especially in large IT environments tape media help to save large amounts of energy. The storage of date to tape works without power. Therefore energy cost for operation and cooling hardly come up. Moreover tape produces less electronic waste.

Security

Due to security breaches, loss of hardware containing personal data, corporate fraud, and the growing consumer demand for the protection of personal data, the federal government has passed a number of laws governing the protection of data. Data loss and disclosures can cost companies millions of dollars in lost sales and lost reputation. A reliable encryption help address the threat of lost or stolen tapes. If sensitive data is encrypted on the tape media, the data cannot be compromised if the tape is lost or stolen.

Proven Solution

Tape media technologies are used for more than 60 years. Thanks to a continuous development of this technology, tape media are by far the most matured storage media. At the same time tape media have the potential to fulfill increasing storage capacities and access speed. Therefore tape media offer future security and investment protection.