Building the Air-Gap - Removable Storage is essential for Business Continuity and Backup

Protect your business and save costs with removable storage solutions.

Alongside employees, business data is one of the most important assets of a company. Data protection and business continuity is essential in order to continue after a catastrophic data loss event. Data loss could mean the loss of information which can never be recovered or rebuilt. There are endless reasons for data loss or a partial data loss:

- Local disasters could destroy the backup on your local device
- Ransomware attacks could lock your data
- A user could accidentally or purposely delete data that is important to continue with your business
- Hardware and/or software solutions and updates can cause data loss or delay in business continuity

Why removable storage

Removable storage offers many benefits:

- It doesn't consume any power when off-line
- It can hold data which isn't frequently used to free up expensive online storage
- It can be used for long-term archiving of business relevant and compliance data
- It can be integrated into a backup strategy to implement a 3-2-1 backup scheme for full disaster and malware protection
- It can be used for data transportation and data exchange
- It offers advantages over Cloud solutions in terms of data access latency and recovery delay
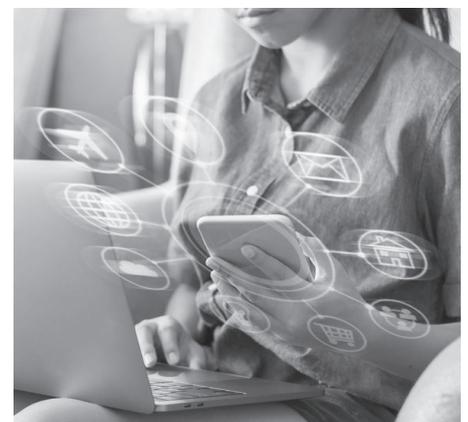- It offers enormous cost savings compared to the Cloud

A serious threat

Ransomware has emerged as the most dangerous cyber threat for organisations. Every day, we read about new incidents in the news. Ransomware is a malicious software that blocks access to the victim's data until a ransom is paid. After a ransomware attack, systems might be locked, or files are encrypted or inaccessible.

Ransomware attacks are typically carried out using a Trojan that is disguised as a legitimate file, like invoices, order confirmations or notifications, that the user is tricked into downloading or opening when it arrives as an email attachment. Another threat are links on already infected websites.

Also new technologies, like IoT (Internet of Things) with its use of sensors, open the doors for hackers and spies. WIFI controlled devices, like washing machines, climate control devices or even electrical shutters can provide entry for cyber theft and vandalism.

Sensors of shutters, motion detectors, rain, wind, etc. send their data unsecured to the data pre-processing server in your local data centre. All these sensors are a potential security threat and an easy way for hackers to access your business data.
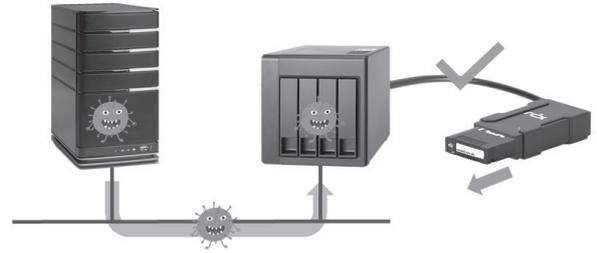
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When storage devices are no longer connected to the network, the backup data is safe and cannot be threatened by malware attacks. Therefore, businesses should utilise removable storage media. Removable disk systems can detach the storage media from the network to ensure data accessibility after a local disaster or a ransomware attack. This can be done either by setting the storage device off-line or removing the storage media and transporting it to a safe location outside the campus (off-site). Eject operations can be configured or scripted with most backup software.

The same applies for the data stored on tape. It is protected against virus and ransomware attacks. As the tape format is not a file system, crypto lockers and viruses do not have a chance to infect the data, even if a tape media is in the drive. However, local disasters should also be taken into consideration, where tapes will be destroyed as well. Therefore, tapes should also be stored off-site outside the datacentre. When tape libraries with hundreds or thousands of tape media are used, they should be located in a separate datacentre.

The New Overland-Tandberg™

Founded in 1980, Overland-Tandberg provides "best in class" data storage and archive solutions that are reliable and mindfully built for the SOHO, SMB, SME and Enterprise markets. Celebrating our 40th year of operations, in over 90 countries, our brands have created a rich and trusted heritage, built on game changing patented technologies that are enhanced through our people and partners. We combine a delicate blend of science and art in our solutions to ensure we align our aspirational goals of inclusiveness, yet taking a humanistic approach to our core beliefs, and keep us in front of the competitive landscape ready for the next 40 years and beyond.

Using RDX

While tape is more prevalent in medium and large enterprises, SMBs and SOHOs prefer to use removable disk-based systems. Created in 2006, Overland-Tandberg's RDX technology is a family of removable disk systems that handles and operates like traditional tape drives and media yet has all of the advantages of a disk system like random access, high transfer rates and data reliability. The RDX system utilises a unique removable media that is ruggedly designed for portability and is environmentally friendly. RDX QuikStor media provides easy and uncomplicated handling due to its protective, shock-proof and static discharge resistance cartridge design. This makes RDX media ideal for easy data transportation via courier services or mail. The media electronics are fully protected against electrostatic discharge events while handling the media or in long-term archive / off-site storage applications.

The RDX removable disk family consists of RDX QuikStor single drive systems and RDX QuikStation network attached appliances with 4 or 8 media bays. RDX media are available in various capacities. They are fully backward and forward compatible with all past, present and future RDX media and systems. Unlike other removable storage, no technology update or data migration effort is needed to maintain data accessibility while your IT and business is evolving.

Using Tape

Overland-Tandberg's tape and tape automation systems are based on 40 years of expertise in high-capacity data storage. Utilising industry leading LTO tape technology, the NEO Series tape family provides reduced cost of ownership, improved data availability, improved reliability, ease of data management and protection from cyber-attacks.

LTO is a trusted tape technology with a 12-generation roadmap. The LTO consortium is introducing new generations regularly with higher capacities and transfer rates along with new features to further protect business data and content. The high transfer rate of currently 300MB/s uncompressed and up to 750MB/s compressed allows fast backups and restores of large backup sets. Integrated WORM and encryption capabilities ensure data protection during archive and transit and meet compliance requirements for data storage.

The NEO tape automation family of products offers a broad range of libraries and autoloaders. The NEO S-Series provides affordable and easy to use backup and archiving capabilities for SMB environments. The flexible and scalable NEO XL-Series libraries grow with capacity and performance demands to satisfy all business needs for SME and Enterprise customers that need Terabytes to Petabytes of protected, secure and cost-efficient data storage.

A few words about Cloud

As we have only talked about disk and tape solutions, we should also mention Cloud. Smaller companies rely on Cloud storage due to its convenience and benefit of no extra hardware and administration effort. Also, Cloud protects the data from local disasters.

However, hackers found their way to the Cloud and Cloud is also threatened by virus and ransomware attacks. An additional factor is cost. The cost is increasing exponentially depending on storage capacity and retention time. Removable storage technologies like RDX or tape reach the breakeven point mostly after 2 to 3 years. Cloud users are dependent on internet availability and speed as well as high latency. To get lost data back takes hours or days and is expensive.

Conclusion

Removable storage has a long history and today it is still an important part of the IT infrastructure. Virus and malware threats are increasing, removable storage not only plays an important role for disaster protection, it helps companies save money while enhancing their business continuity and backup strategies for disaster recovery.

The choice of whether removable disk or tapes are used depends entirely on the requirements of the respective business environment. The simultaneous use of both technologies can make sense if, for example, branch offices need a decentralised backup solution with removable disks and a consolidated backup to tape libraries is carried out in the headquarters. Also, production environments might prefer a backup to removable disk when on location, as they withstand harsh environments, and perform their backup and archiving tasks in the office environment on tape.

Further information

If our White Paper has not answered all your questions about your backup challenges, Overland-Tandberg storage specialists are available globally to offer you help in finding the best solution for your business. Visit our contacts page to reach out to a specialist in your region.

Sales and support for Overland-Tandberg products and solutions are available in over 90 countries.
Contact us today at salesemea@overlandtandberg.com

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