SEAGATE
LYVE™ Cloud

Scalable and Automated Backup and Archive Solution

IBM Spectrum Protect and Seagate Lyve Cloud deliver an efficient and centralized data protection solution for enterprise needs.

Challenge Summary

With the rapid growth of data, organizations from every sector are vulnerable to data storage challenges. Security concerns are a main priority as organizations seek to protect confidential information while working in alignment with new regulatory requirements. Hardware failures, natural disasters, and cyberattacks are only a few of the potential risks in data storage for businesses—not to mention the inconvenience of having to maintain physical storage devices. This increase in data growth and regulations is driving demand for longer retention periods and, therefore, a need for secure protection and simple data retrieval.

Benefits Summary

- Flexible Data Protection
- Predictable Backup Storage Economics
- Scalable Multicloud Data Protection
- Cyber Resiliency and Disaster Protection

IBM Spectrum Protect and Seagate® Lyve™ Cloud work together to provide enterprises a modernized solution for protecting data and, ultimately, their business. Scalable, cost efficient, and secure, this joint effort offers an automated and effective data recovery option to protect against potential security threats and data losses. Furthermore, it delivers an exceptional performance with predictable pricing models, secure backup and archive, and easy retrievals.

Lyve Cloud's focus on predictable cost, security, and efficient accessibility, combined with IBM Spectrum Protect's extremely scalable data protection solution, removes extra costs and fees, reduces network requirements, and maintains cyber resiliency against threats, data loss, and disasters.

With Seagate Lyve Cloud and IBM Spectrum Protect, enterprises are guaranteed the most optimal cloud data protection solution.

The Challenge

As the digital age progresses, many enterprises are turning to modernized workflows and business processes to accelerate growth. But with digital transformation comes a rapid growth in data. To ensure businesses across verticals are operating in compliance with industry-specific rules, new regulations have been introduced that demand longer data retention periods.

In addition to verifiable compliance, rapid growth of data demands a more efficient solution for capturing all information and harnessing it for business opportunities and new projects. With today's options, physical storage media such as tape is becoming increasingly difficult and expensive to maintain as the primary copy for data protection and management.

Businesses are seeking data storage solutions that provide efficient protection and simple retrieval—ones that work with different data types, lower operational costs, and protect against security threats, data losses, and disasters.

The Solution Approach

Organizations want the safest and most secure data storage and backup solutions for their business assets—their data. This includes searching for an option that is cyber resilient and cost effective, and that supports all types of data sets and files. Workflows are growing increasingly important in attempting to work with a proliferation of data.

IBM Spectrum Protect and Lyve Cloud work to create the most efficient backup data storage solution with proper integration, predictable data protection economics, and secure protection against threats.

Predictable Economics

Lyve Cloud provides flexible pricing models that ensure all data storage costs are transparent with no surprise charges or extra lock-ins due to egress fees and API charges. Customers can utilize this benefit and save total costs when storing large data sets and backups. This reduces operational costs as well as constant maintenance charges when working with on-premises infrastructure. Lyve Cloud's pay-as-you-go model means customers pay for only what they store, with no extra read or write costs. Ultimately, Lyve Cloud reduces total storage prices so customers can focus on their business growth with no limits.

### Data Security and Object Immutability
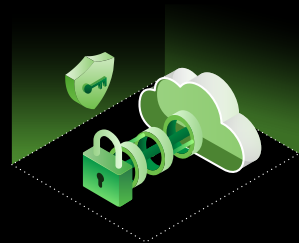
Seagate is an industry leader in data protection solutions. Lyve Cloud safeguards all data with encryption in transit and at rest, two-factor authentication, and secure data transfer. With industry-standard encryption, customer data can be transferred securely for faster connections and a simplified workflow.

Lyve Cloud also provides customers with the option to enable object immutability for buckets. This allows users to protect data from being deleted or modified by anyone, including the owner. With this and other security features, Lyve Cloud provides a robust solution that support anti-ransomware strategies.

Lyve Cloud functions as a secure provider of air-gap protection for customer data. Object immutability provides the essential security against these attacks, so that all data is kept safe and unable to be retrieved by anyone.
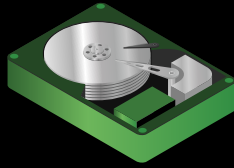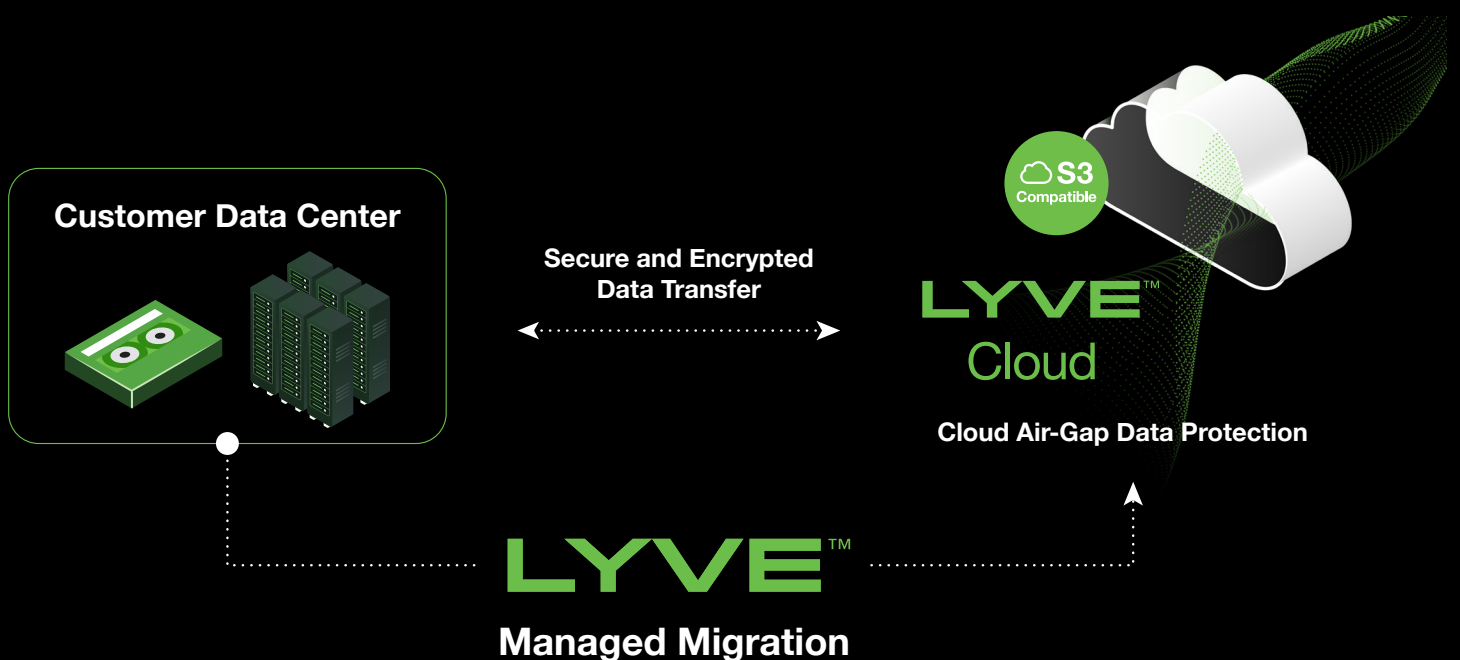
Data Integrity

Lyve Cloud maintains data integrity as a priority by utilizing Seagate's own hard drives. It's designed with 29 nines of durability and crafted for 99.99% availability to configure and protect against potential corruption.
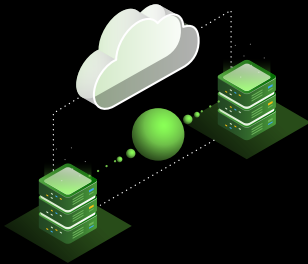
Managed Migration

Businesses that are looking to overcome migration challenges from tapes can turn to Lyve Managed Migration, fully managed migration services offered through Seagate Lyve Cloud. Lyve Managed Migration is an easy, streamlined solution designed to help customers extract large data sets from physical storage devices such as tapes and move them into Lyve Cloud.

This process enables customers to access an active archive that can be easily analyzed and managed, with information dating back for decades or more. Not only can businesses enable this stored data and harness it for new initiatives and future opportunities, they can also benefit economically by reducing the costs associated with managing physical storage. Customers never have to worry about the constant necessity of migrating tapes to ensure readability and maintain data access.

Customer Data Center

Secure and Encrypted Data Transfer

S3 Compatible

LYVE™ Cloud

Cloud Air-Gap Data Protection

LYVE™

Managed Migration

Partner Solution

Cloud Integration

IBM Spectrum Protect is compatible with all cloud environments. It offers built-in cloud integration that is seamless and easy to complete.

With IBM Spectrum Protect, customers have the option to backup data to the cloud, which means servers will deduplicate the data, compress it, optionally encrypt it, and send it out to storage pools within the cloud. This encryption works on top of the default data encryption that's carried out by Lyve Cloud when data is being transferred, thus creating an additional layer of data protection.

Additionally, IBM Spectrum Protect includes the option to back up metadata to Lyve Cloud in case of potential attacks that require businesses to turnactivate disaster recovery methods. With this capability, Spectrum Protect can work seamlessly with Lyve Cloud through its agile cloud integration.

In current multicloud environments, this joint solutions infrastructures and resources allow servers to run flexibly in the cloud, on premises, or in a hybrid model. Spectrum Protect servers can be hosted in the cloud, and can protect workloads running in the cloud or on premises. These qualities allow for Spectrum Protect to be closer to the source of the data storage and aligns all proper workflows to function smoothly and in alignment with a multicloud environment.

Architecture

IBM Spectrum Protect's architecture further supports the idea of its robust functionality. With a dedicated server to hold all metadata into data bases, its flexible hierarchy can appeal to the organizational needs of the customer. The infrastructure of Spectrum Protect is flexible and scalable, supporting an increase in data growth and proper integrity for the organization.

Operations Center → **Server IBM** → **Storage Hierarchy** → **WAN, LAN, SAN** → **S3 Compatible LYVE™ Cloud**
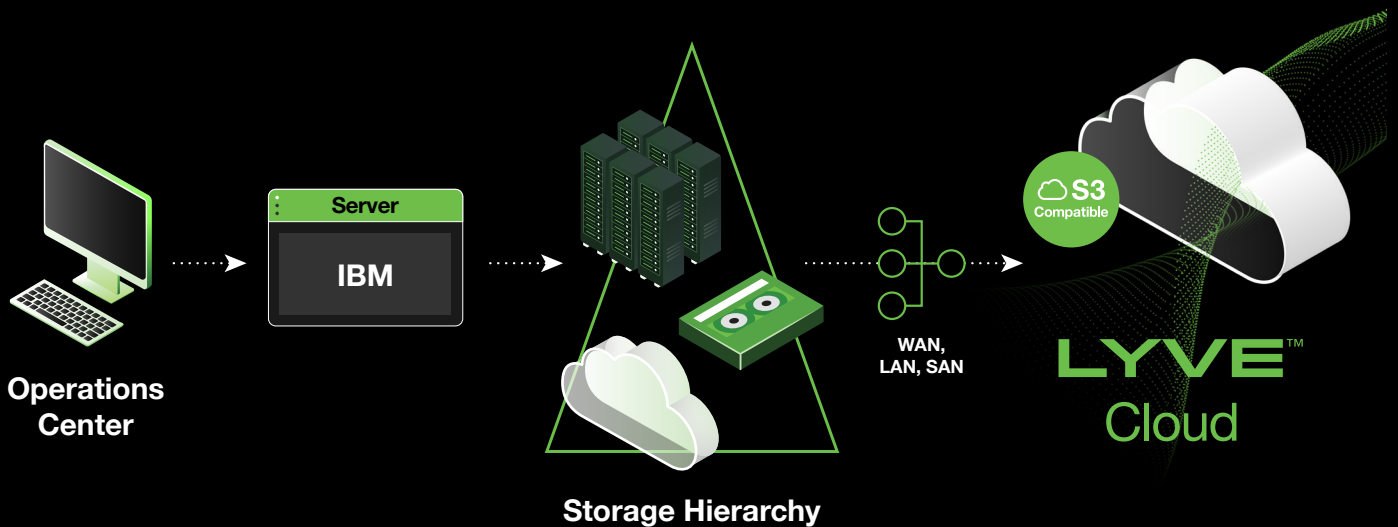
Multi-Workload Support

Spectrum Protect can lower operational costs while providing a thorough process for protecting data through a centralized method that can be utilized for multiple types of workloads, including file systems, applications, hypervisors, and data received from API or S3 solutions.

File Systems: Spectrum Protect creates a backup and archive method that depends on either how much data is being stored or how long the data is being stored for. When considering the quantity of data, data is backed up incrementally, but restores are what's needed by the business in the event of primary data failure. This reduces network and storage requirements by a huge amount and allows users to recover what they choose and keep the rest of their information safely stored. When considering retention periods for storing data, files are sent to Spectrum Protect to be retained for the requested length of time.

Applications: Within applications, multiple file sets all depend on one another, and therefore must be backed up and stored together for proper consistency. This process requires constant running 24×7. IBM Spectrum Protect works with the application's API to automate backups.

Hypervisors: With these data sets, Spectrum Protect provides protection for individual virtual machines and the files inside them. This creates an off-host backup with block-level incremental backups that have retention set for long-term storage.

Disaster Recovery

In the case of potential disasters where data is jeopardized, IBM Spectrum Protect takes all backup data and replicates the information onto different Spectrum Protect servers incrementally, creating offsite copies. This feature is built in and requires no extra maintenance or setup from customers. In the case of potential failures, clients can do data restorations from the other servers that the data has been copied onto.

Spectrum Protect's Disaster Recovery Manager automates all recovery plans on a nightly basis and has a detailed tracking system for offsite data once placed.

IBM also offers Bare Machine Recovery through which it can rapidly bring the system back from an operating system failure to the state of its last backup, including all OS adjustments and customizations.

IBM Spectrum Protect's ability to integrate with cloud environments, work with functional architecture, and support multiple workload types supports all data successfully with proper integration and protection.

Total Solution

Together, IBM Spectrum Protect and Seagate Lyve Cloud bring forth their biggest strengths to provide customers with a safe, secure, and seamless backup storage solution for data retention.

Seagate's industry-leading security standards, encryption in transit and at rest, and object immutability all guarantee that data stored will be kept safe and secure. Customers with physical tapes or devices that have trouble migrating to safer destinations can leverage Lyve Managed Migration services to carry out the robust and scalable process of moving data to Lyve Cloud.

IBM's built-in secure sockets layer communication, ransomware alerts, and additional encryption provides additional security for customers concerned about protecting their large data sets when backing them up to the cloud or retrieving them in the case of potential risks. Together, both solutions provide efficient and flexible air-gap protection for important data.

Lyve Cloud also offers simple, pay-per-terabyte pricing. There are no extra fees for API calls, retrieval, egress, or cloud lock-in. With this flexible pricing model, customers can choose how much they want to store—all within an optimal budget for the organization.

IBM's simplified data protection infrastructure and Lyve Cloud's durability and high availability ensure proper data integrity with an easy-to-use platform for storing and managing data.

Conclusion

With IBM Spectrum Protect and Seagate Lyve Cloud, enterprises receive the best backup solution for their business storage needs. This joint solution provides a simple, scalable, and secure approach across multiple workloads designed for each organization, all while utilizing a cost-effective and agile method to harness data to its full potential toward continued business transformation.

Features & Benefits

- Multi-Workload Protection
- Scalable Data Transfers
- Space Management
- Flexibility in Data Storage
- Efficient Storage
- Cloud Air-Gap Protection
- Cost Effective

Ready to Learn More?

www.ibm.com/products/data-protection-and-recovery
www.seagate.com/services/cloud/storage

seagate.com

SEAGATE