Overcoming Data Sprawl with Shuttling

Overcome mass data aggregation and accelerate its activation while controlling costs using Lyve Mobile.

Solution Summary

Lyve™ Mobile from **Seagate®** is an edge storage solution that enables your business to aggregate, store, move, and activate mass data. Scalable, modular, and vendor agnostic, this integrated solution eliminates network dependencies so you can transfer mass data sets in a fast, secure, and efficient manner no matter what industry you're in—from media and entertainment to autonomous vehicles, smart manufacturing, energy farms, healthcare, and beyond.

Benefits Summary

- Scalable, modular, and vendor-agnostic
- Reduce transfer time, no network dependencies
- Physically transfer large data sets securely
- Customer choice for landing destination
- Cost-efficient subscription model

As CIO's and IT managers recognize the impact of data sprawl and the distributed enterprise, they're coming face to face with needing to solve their most looming mass-capacity data challenges. But—most products available today intended to mobilize data end up creating more hurdles than solutions for IT managers.

Unstructured data is being generated at daunting speeds, and is distributed across many locations. But while CIOs can find mass-capacity storage solutions, they often pose a variety of challenges that are hard to overcome like one directional data flow and locked-in ecosystems that are not conducive to edge environments. Further, global networks are bandwidth constrained and other alternatives such as using physical appliances to shuttle data back and forth are not simple, efficient, or secure. In the end, these leaders are left asking: How do I accelerate access to our data to build better products? How can I capitalize on my edge data and increase my company's competitive advantage? And how can I overcome data sprawl and mobilize it so I can actually apply it?

The Challenge

Top edge data challenges faced by businesses today:

- Overcoming data sprawl
- Time to transfer and time to insight
- Security of data collection and transport
- Multi-user and field management of data
- Compatibility across many ecosystems

- Scale to fit expanding and contracting data needs
- New data compliance and security protocols
- Fast movement is needed for mission-critical applications

Top edge data challenges faced by businesses today:

- One directional data flow
- Rising costs of vendor locked-in ecosystems

- Predetermined landing destinations for data
- Expensive egress fees

The Solution

As a leader in mass-capacity storage, **Seagate** has long worked with customers to understand their needs. And what we've discovered is that businesses are hungry for a solution that enables them to simply, securely, and efficiently move and activate their data at the edge. Enter: **Lyve Mobile**.

With storage that's purpose-built for speed- and capacity-intensive workloads, Lyve Mobile solutions help you overcome bandwidth limitations and security risks while putting your data to work faster. What's more, because our devices are vendor agnostic, you can build or complement your hybrid or cloud strategy without vendor lock-in. Our flexible subscription service allows you to optimize your data storage costs and manage your fleet of storage devices without costly hardware upgrades, maintenance, or worrying about device compatibility across your data workflows. You can scale your storage up or down with flexible, modular systems—and only pay for the devices you need when you need them.

In addition, we offer a reserved inventory program for long-term subscriptions to provide supply continuity for the unpredictable project needs that may arise. With the increasing application of automation and machine-generated data, our Lyve Mobile customers come from a multitude of industries: media & entertainment, autonomous vehicles, smart manufacturing, energy farms, healthcare, banking, and beyond. And that's because Lyve Mobile is purpose built for:

- **Simple Edge Data Capture & Consolidation:** Consolidate your sprawled data, initial bulk transfers, or ongoing data movement with secure data shuttles in HDD and SSD arrays.

- **Secure Data Transfers from Endpoint to Edge to Core:** Secure your data movement from far edge to core with modular, rugged, portable, and rackable HDD/SSD mobile devices built for any environment. Not only are these products fast and built for compatibility, but with the increasing concern of data security, these products also come with:

  - Self-encrypting drives (SED) for data encryption, as well as government-grade crypto erase for when your projects are complete

  - Online/offline user management with IT admin permissions, field user permissions, and remote field permission applications

  - Military-grade Pelican case for durable transport, tamper resistant screws, and tamper evident sticker seals for physical security

- **Efficient Edge to Core & Cloud Ingestion:** Our versatile rackmount receiver facilitates ingestion for large bulk transfers and bandwidth-demanding data lift-and-shift projects to the landing destination of your choice. The products themselves are designed to help you put your data to work faster by reducing transfer time with no network dependencies, and with multiple interfaces to suit a variety of ecosystems. Transform your storage from a capital expenditure to an operational expenditure by only paying for the devices you need when you need them.

Real Life Applications

Accelerate ADAS Algorithm Development for Autonomous Vehicles

Lyve Mobile solutions help AV companies directly ingest data captured by a fleet of AV sensors, which can reach up to 50TB per day per vehicle, so it can then be transferred quickly and securely to local data centers for analysis. With capacities ranging from 48TB to 96TB and support for HDD or SSD, the Lyve Mobile Array provides ample space for daily data capture for each AV in the fleet. The addition of the Lyve Mobile Mount—an accessory built to secure the Mobile Array onto any vehicle and withstand extreme conditions—facilitates data ingestion in real time.

Secure Data Transfer for Feature Media Productions

Lyve Mobile helps film teams move their data across multiple locations—which sometimes means sending up to 100TB to three different locations—while adhering to data compliance protocols and avoiding security risks by providing encrypted SED drives, AES-256 bit encryption, online/offline user management, tamper-resistant screws, tamper-evident safety seals, and secure erase/crypto erase. Compared to today's alternative ingest methods, Lyve Mobile equips teams with the capability to directly ingest content on set and then physically transport that content to multiple destinations, all while maintaining complete control over data confidentiality. The result is that they're able to save steps, reduce equipment needs, and decrease complexity.

Edge-to-Core Data Ingest for Oil and Gas Seismic Collection

When data insights are the foundation of a company's competitive advantage, Lyve Mobile's vendor-agnostic approach enables faster data transfers in remote areas where bandwidth is limited or non-existent. Teams are able to keep captured data in motion and send up to 1PB per mission to a designated data center which could potentially be located thousands of miles away. To add some perspective, each 80TB of transferred data can take up to eight days with a 1Gb/s Ethernet connection. But with Lyve Mobile, that time decreases to just one day. That's an entire week saved. So for a complete mission of 1PB, companies could be improving their transfer times by two to three months, and thereby putting their data to use much, much faster.
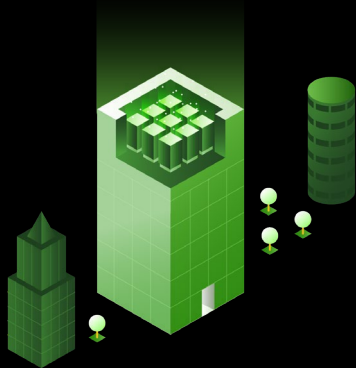
Data Consolidation and Edge Storage for Smart Cities

In the case of traffic signals, multiple sensors and thousands of cameras collect data, creating a myriad of files across many devices. Lyve Mobile helps eliminate this data sprawl by aggregating the data from multiple local collection sites and providing a secure repository for consolidation at the edge where it can then be prepared for shuttling and analysis. This can represent a flow of over 100TB of data per month being consolidated and analyzed. Compared to many of today's gum and shoe string approaches, Lyve Mobile workflows help standardize data transfer processes for data compliance, user access, and device assignment.

Conclusion

The versatility, scalability, and modularity of Lyve Mobile solutions is designed to help businesses overcome a broad range of challenges related to data spawl, regardless of IT infrastructure or industry. Through a simple, secure, and efficient approach to edge storage, businesses can capture data at the source, consolidate it as needed, and transfer it anytime, anywhere without bandwidth constraints or security risks.

Whether you're looking to simplify in-field device management, quickly refresh IT equipment, increase cash flow through a lower entry cost for equipment, or all the above, Lyve Mobile has you covered.

Ready to Learn More?

Visit us at seagate.com/products/data-transport/

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