Reduce Media Production Cycle Times with High Speed Media Ingest and Distribution

 highlights

• Fast, reliable automated data and directory transfers with Aspera® Enterprise Server and clients
• Deployable on-premises or hybrid cloud to reduce cost while maintaining flexibility and control
• Multi-site data distribution reduces cost while providing fast access to data at remote locations
• Significantly better operational efficiency vs. traditional methods
• Enterprise-grade data encryption on access, at rest and in flight
• Easily scale capacity to meet the needs of the business
• Extreme data durability and integrity ensures media assets are protected and remain accurate over the long-term

challenge

• Large media files that need to be transferred to and from remote locations anywhere in the world
• Shipping physical media or using FTP or HTTP tools do not provide the needed speed or security
• Adapting to evolving formats and consumption demands
• Efficiently storing the enormous amount of media content, for reuse, repurposing and long-term preservation

solution

Aspera® and Western Digital worked together to make it easy to deploy an on-premises media cloud for global workflows. Aspera Enterprise Server and clients transfer large media files and content long distances, at the fastest possible speed. Western Digital’s ActiveScale™ cloud object storage systems offer highly scalable and durable media content store in increments of easy-to-install capacity.

Success in today’s global media and entertainment (M&E) industry means companies must deliver compelling content combined with unique user experience, at scale, across any platform, anytime, anywhere. Major film studios, post-production companies, visual effects houses, news and sports broadcasters are creating an ever-increasing amount of high-value content that needs to be moved around the world.

While some media companies still ship content on hard drives to locations around the world for finishing work, modern media workflows can significantly accelerate production cycles and control costs while maintaining a secure workflow environment.

Media Ingest, Production and Distribution Workflow

Western Digital and Aspera media cloud architecture example

Accelerating Global Media Workflows

Connecting global teams and cloud-based platforms with a high-speed digital transport is essential to accelerating media-focused workflows. The ability to efficiently store, protect and move massive volumes of rich media across global production teams and distribution channels at high speed has never been more important. Transporting large media files to global distances using conventional transport methods such as FTP and HTTP are too slow and unsecure.

To be globally competitive M&E companies are embracing modern technologies that include deploying media clouds connected by a high speed digital transport that addresses limitations with legacy methods. These two capabilities produce a powerful capability for M&E companies to support global media workflows from production through distribution.
To address these challenges, Western Digital and Aspera* are working together to deliver a combined solution that includes Western Digital’s ActiveScale™ cloud object storage system for large and growing media projects and Aspera’s server and client software for high-speed transfer of media files.

**High Volume Media Ingest and Distribution**

As the high-speed transfer backbone, Aspera Enterprise Server enables automated high-speed transfer of media files processed into and out of workflows. Using Aspera’s Fast, Adaptive and Secure Protocol (FASP®) technology, large files can be transferred globally at significantly higher speeds than FTP and HTTP over an existing IP network with sophisticated user management, security and bandwidth control capabilities.

Workflows can be enabled with automated ingest and delivery of media and associated files directly to Aspera end points anywhere in the world. This makes it easy for outside organizations to contribute or download digital content as well. Leveraging cloud technologies, Aspera Enterprise Server and clients easily connect to Western Digital’s ActiveScale using a standard cloud interface. Digital assets are encrypted on access, in-transit and at-rest, and data integrity is verified for each transmitted block.

**Storage for High Resolution Media Workflows**

The economies of scale that cloud object storage offer can transform the way media organizations store and archive multiple petabytes of content. Legacy disk and tape-based systems present several challenges, including content accessibility, availability and the complexity of managing the systems as content grows.

**Content Accessibility**

One of the biggest benefits of ActiveScale cloud object storage systems for M&E companies is content accessibly. All assets are visible and transparently available via a global namespace improving productivity of distributed teams. Content on legacy disk-based systems are more difficult to access given hierarchical file structures and long retrieval times from tape libraries. Rapid access to archives make them easier to monetize and can help to enable new workflows and revenue opportunities.

**Resiliency**

Using advanced rateless erasure coding, ActiveScale delivers up to 19 nines durability and can be configured to spread data across three geographic locations, protecting data from a full site outage. Granular data integrity checks help ensure that data stored, is accurate when retrieved. This technology can tolerate 1000 bit-errors per object, which is essential for long-term preservation of large content stores.

**Operational Efficiency**

Managing storage systems at petabyte-scale requires advanced capabilities that minimize intervention and system downtime. ActiveScale cloud object storage helps improve operational efficiency by reducing complex management tasks such as scaling capacity and handling hardware or data integrity failures.

Adding capacity is as simple as adding more nodes. The system will automatically detect and integrate the new capacity without the need to migrate data. In the event of a hardware or a data corruption failure, ActiveScale automatically detects the issue and self-heals in the background without the need to immediately swap-out the failed component or with degraded performance impacting user productivity. Additional capabilities include ActiveScale CM, a cloud-based management tool that can provide prescriptive and predictive analytics on things like capacity trends and performance bottlenecks that can help keep workflows running smoothly.

**Conclusion**

Aspera and Western Digital worked together to make it easy to deploy an on-premises media cloud for global workflows. Aspera Enterprise Server and clients transfer large media files and content long distances, at the fastest possible speed. Western Digital’s ActiveScale cloud object storage systems offer highly scalable and durable media content store in increments of easy-to-install capacity as needed.

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