Aspera And Dot Help Media and Entertainment Companies Elevate Their Content Transfers

The Media and Entertainment (M&E) industry is confronted with a heightened digital transformation pressure. The demand for high-resolution content is causing rapid growth of video file sizes. Additionally, Covid-19 has accelerated remote working models across the globe, increasing the distance between teams and making online collaboration the new norm. These fast-changing circumstances have left the M&E sector searching for technology solutions to satisfy the demand for easy, fast, secure, reliable, and affordable data file transfers while maintaining business continuity.

The quest for an effective solution creates both technical and operational questions. New data transfer demands can easily disrupt old workflows that served yesterday's requirements well.

To illustrate this point, the imminent 5G adoption will bring Media and Entertainment companies the opportunity to facilitate much faster transfers and low-latency video streaming. This is terrific news for the M&E sector, considering how many M&E professionals work on the run and need to send large video files to team members across the globe against tight deadlines. Moreover, the increasing number of creation and distribution of personal videos guarantees that the demand for fast and easy video transfers will only intensify. As a result, companies that still rely on traditional file transfer modes will soon become ineffective in keeping up with their 5G-ready competitors.

Additionally, the legacy infrastructure that companies have built in the past now requires a modernisation check-up. Even with impressive advancements such as 5G, companies will still need software to utilise 5G's throughput potential. Yet, jumping to procure new hardware or software is not all that simple. Even when legacy systems get a chance to modernise, the existing products and standards still need to be supported in the transition period. There is almost no room for performance oversights. On the other hand, the internal operational culture also requires a holistic data management insight to endure fast-approaching future business demands.

According to Gartner[1], undertaking any digital transformation project can exceed the predicted time and financial investment by twice the estimated amount. In large part, this is due to cultural readiness — 53% of the organisations surveyed remain untested in the face of digital challenge and their digital transformation readiness, therefore, remains uncertain.

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[1] *The IT Roadmap for Digital Business Transformation (excerpt) © 2021 Gartner*

We see many business leaders in the M&E sector getting nervous about the outcomes that new technology solutions will cause their businesses. Staying competitive now means rethinking the existing data distribution models to enable a sustainable and intelligent way forward. Aspera's industry-leading file transfer solution can go a long way to improve the bottom line. However, the needle-moving component in the digital transformation journey is the in-depth overview of the company's underlying architecture, practices, and fast-emerging requirements to deliver a customised roadmap to profitability. As the Aspera experts, Dot's data engineers can hyper optimise the Aspera deployment to ensure business continuity, reduce cost, and increase competitiveness.

The emerging challenges in Media and Entertainment

Today's M&E landscape includes production, editing, and synchronising of high-resolution content in an accelerated fashion. The widespread adoption of 4K video files continues to raise the standards in content consumption. Nowadays, consumers expect the availability of 4K video files on any device on demand. As the past has taught us, the content quality standards will only grow, which will affect the data file sizes to increase accordingly. For this reason, companies should complete an in-depth recap of the upcoming industry-shaping requirements to stay a strong player in the M&E sector.

Transfer speed

The limitations of commonly used file transfer protocols (FTP/SFTP) that utilise traditional transmission control protocol (TCP) have reached a turning point. In essence, the TCP was built almost 50 years ago to facilitate file transfers over the public network. While TCP served the requirements of transfers, because of its inherited design, when large file sizes need to be sent rapidly, TCP disappoints. The speed is decreased due to the larger transfer distances and the TCP-defined round-trip time (RTT) component that ensures low packet loss in the transfer journey. As a result, Media and Entertainment companies require a solution that will somehow circumvent the limitations of the TCP and enable faster transfers.

Transfer distance

On top of transfer speed, the increasing distance among global teams creates additional challenges for Media and Entertainment companies. Many organisations nowadays turn to the support of cloud-based services such as Dropbox or WeTransfer. However, due to high-end use cases of the Media and Entertainment industry, this type of solution is not optimal. The capped transfer sizes plus the pay-as-you-consume pricing model makes it challenging to respond to emerging large file transfer demands. Furthermore, these solutions will inevitably require more upload and download times of the sent files, which can quickly become a liability in this fast-evolving industry.

Transfer control

Maintaining control over the file location is critical for M&E companies, especially when we account for data privacy regulations, such as GDPR and CCPA. With over a hundred data privacy regulations worldwide, companies need granular control over the location status to stay compliant.

Data security

Companies that use the public network to transfer large data files risk having their data intercepted, resulting in compromised data security. Furthermore, some technologies provide data encryption in transit but may not be sufficient to secure data while at rest. Suboptimal protection leads to risks such as stolen intellectual property and piracy of entertainment programs.

Existing architectures

The demanding data transfer workloads in Media and Entertainment have nudged companies to explore alternative ways to transfer data files. Companies have tested different approaches. In some cases, they would employ FTP-based solutions, and in others, they would design bespoke network architectures that will enable faster and more efficient transfers. However, this approach can add unnecessary maintenance overheads to the company's IT department due to its complexity.

Lack of support

Upgrading to new solutions is a matter of organisational makeover as well as technology implementations. Moreover, the lack of data experts who can assist in building a future-ready solution creates additional causes for friction. Yet, the industry's standard upgrades create pressure on IT departments to take action, which often leads to ill-informed procurement decisions, unnecessary overheads, and suboptimal system configurations.

Installation (mis)diagnosis

When the load of new business demands grows, many companies spend some time researching the best solution, aligning the internal stakeholders, and after careful consideration — the software installation process can begin. However, not all vendors consider the state of maturity the company is currently at, nor do they look years down the line to predict the next steps in case of demand change. As a result, companies continue to run the software under the same setup up years after it's been implemented. Business leaders often stay in the dark regarding further optimisation or cost-reduction possibilities as well as the opportunities to deploy more advanced features.

The bottom-line costs of improper data management

Media and Entertainment companies cannot afford to waste time and resources on suboptimal file transfer performance anymore. The downside

of doing so will lead to increased costs that are spent on unfit licence models, improper storage procurements, wasted time in operational catch-up or worse, it may result in financial and reputational damages due to non-compliant data management practice.

How Aspera solves data transfer challenges in Media and Entertainment

Aspera supports the ever-evolving Media and Entertainment use cases by providing next-generation technology designed to address and optimise every step of the data transfer process. Aspera outperforms traditional data file transfer methods with its FASP protocol that dynamically adjusts the available bandwidth to accelerate file transfers, securely and cost-effectively. Its user-friendly interface, superior security capabilities, and capacity to distribute infinite file sizes makes Aspera the most desirable data transfer solution in the M&E industry.

Transfer speed

In response to this emerging demand for accelerated file transfers across great distances, IBM Aspera has developed an award-winning network-optimised technology called FASP (Fast Adaptive and Secure Protocol). This unique technology circumvents TCP's limitations by combining a faster and simpler transmission protocol called UDP (Datagram Oriented Protocol) and Aspera's custom software. This patented technology outperforms the traditional TCP-enabled file transfer modes by applying its adaptive rate control that optimises the network's available bandwidth on the fly and ensures other TCP-based mission-critical applications run uninterrupted. As a result, Aspera is faster than any competing online transfer solution in the market.

Transfer control

Aspera delivers a user-friendly interface that has preserved its simplicity despite the powerful capacity of the product. Users can quickly and easily locate and download content files and continuously visualise files distributed across different locations. Additionally, Aspera administrators can create highly personalised access and operation policies for each end-user. Aspera's drag-and-drop functionality allows easy movement of transfers between shares so that users can adjust their transfer priorities with ease and speed.

Existing architecture

Aspera mitigates the infrastructure restraints by allowing users to transfer files over the public network and their existing infrastructure. Aspera users can utilise their in-house hardware and software using minimum memory and CPU to enable scaling to maximum throughputs. Aspera runs on all operating systems, including Microsoft Windows, Linux, and Mac OS X.

Security

Aspera's FASP technology delivers built-in security to all stages of the data transfer process. It identifies a secure pipeline to accommodate large data files using strong cryptography and producing one-off encryption keys for each transfer. In every industry, especially M&E, security should cover the end-to-end data journey. Aspera's security includes secure authentication of both the sender and receiver, encryption (at rest and in transit) and integration with antivirus technologies. Additionally, the Open SSH with a choice of AES-CFB or AESGCM - 128 and greater, and FIPS-140 cryptographic capabilities and blockchain support guarantee meeting any regulatory compliance and protection requirements. With this level of security, companies that have to send sensitive data files using their existing infrastructure can rest assured that their file transfers are accompanied by military-grade protection.

What else can Aspera do for you?

Aspera's capabilities go beyond fast, easy, and secure data file transfers. The software's rich choice of features helps fine-tune the file transfer process by providing functionalities that meet your current M&E requirements while also ensuring continuous evolution alongside them.

IBM Aspera Enterprise on Demand

Aspera Enterprise on Demand delivers additional functionalities to accommodate versatile file transfer requirements. On top of the full benefits of Aspera's technology design, users can leverage additional capabilities, such as:

- Adjust transfer priorities
- Initiate transfers from multiple endpoints (mobile, web, third-party solutions and more)
- Leverage various cluster configuration options
- Transfer files to multiple locations simultaneously
- Obtain maximum resource control

IBM Aspera Sync

Aspera Sync is a high-performance multi-directional file synchronisation and replication tool. The feature helps ensure business continuity, increase operational efficiency, ease the disaster recovery process, and optimise the data storage practice.

With Aspera Sync, users can:
- Synchronise bulk data over WAN faster
- Detect file changes efficiently
- Configure replication jobs to run continuously for real-time synchronisation or on-demand
- Leverage real-time reporting of transfer progress and performance

IBM Aspera Endpoint

Aspera Endpoint brings a simplified monitoring of thousands of concurrent transfer sessions and multi gigabit-per-second aggregate throughput.

Aspera Endpoint allows users to:
- Set automatic or scheduled file transfers
- Adjust bandwidth according to transfer priority
- Set up high-speed file repository to enable backups of content files

IBM Aspera Orchestrator

The Aspera Orchestrator feature helps users increase productivity by utilising file-based workflow automation and orchestration. It provides an interactive graphical designer and drag-and-drop visual elements to ease the workflow orchestration process.

With Aspera Orchestrator, users can:
- Define logical streams of existing workflows
  Monitor active workflows in near real-time
- Drill down into a detailed history of operations
- Configure retry behaviours on errors or failures

IBM Aspera Streaming

IBM Aspera Streaming enables any size data or bit rate video streaming with near-zero latency over the Internet with maximum transmission reliability and security.

Users can leverage Aspera Streaming to:
- Enable bi-directional data and video streaming between endpoints
- Send one stream source to multiple destinations concurrently
- Reduce cost in comparison to legacy delivery options (expensive linear satellite or proprietary network systems)

Aspera success stories powered by Dot Group

The Dot Group enables Aspera customers to use the software's full capacity or fine-tune its specific features. With our expert Aspera guidance, M&E organisations learn how to right-size or optimise their current infrastructure and design the most optimal Aspera license ownership model to enable best practice data transfers.

Our in-depth data engineering knowledge allows us to meet any M&E company at their current data maturity level, understand their requirements, and help build a roadmap to a more cost-effective, ultra-efficient, and secure future.

From big production studios to small media companies, Aspera helps optimise every step of the content distribution process with maximum security and rock-solid reliability. With Dot's guidance, Aspera customers in the M&E sector benefited across several production stages.

Dot helped M&E companies deploy Aspera to:
- Allow editors to send daily in-production content to collaborators quickly
- Ease the remote work collaboration by setting up an efficient and unified content distribution platform
- Maintain cross-departmental alignment throughout the production process
- Accelerate the approval process by speeding up the content transfers
- Enable efficient collaboration between production and post-production stage
- Save time by maximising the speed of each content transfer
- Reduce infrastructure cost by reviewing and optimising the technical requirements

In the Media and Entertainment industry, the Aspera customers range from small to large companies with short- or long-term contracts. Regardless of your current maturity stage or your specific requirements, Dot can deliver Aspera with a hug. As the Aspera experts, we help navigate and enrich your data transfer experience at every stage of the journey.

How Dot helps maximise Aspera benefits

We are the Aspera manual
Coming from our 20+ year-long IBM and Aspera engineering background, the Dot Group brings an unparalleled knowledge base about the Aspera product and best practices required for the most optimal deployment. Our in-depth understanding of the product enables us to stay on top of periodic Aspera updates, so we can continue to maximise the benefits for various M&E use cases. As IBM's Premier Business Partner, Dot Group data engineers are the Aspera experts for any current and future-focused data file transfer requirements within the M&E industry.

Technical review
Dot's data engineers help companies perform a technical review of their current data estate and build a roadmap towards a more efficient and cost-effective future. We consider the complexity of the existing infrastructure to right-size, upgrade, and maximise its functionalities. With us, you gain clarity about your underlying infrastructure and build a robust data-focused foundation to facilitate your future growth.

Optimising your Aspera installation

Dot delivers Aspera support from top to bottom. Our 20 year-long comprehensive Aspera engineering background enables us to provide unparalleled service that examines the company's data foundation, infrastructure, specific requirements, and future goals to maximise the Aspera benefits while ensuring the solution is also cost-effective.

Dot's former Aspera engineers will perform a technical review of your infrastructure to mitigate any risks and reduce unnecessary costs. We will design an Aspera licence ownership model that will best utilise your current infrastructure configuration to help you move forward as efficiently as possible. There is always an opportunity to optimise the details of your file transfer process, and as the Aspera experts — we will surely find it.

Personalised support

As the Aspera experts, we provide personalised Aspera support for customers looking to expedite their data file transfers or fine-tune their existing Aspera deployment. Regardless of where you find yourself in your data journey, you can rest assured that our tailored approach to your Aspera demands will satisfy your current and future data transfer requirements.

Click here to get in touch with one of our experts to maximise your Aspera deployment.