ATTO Technology and Infortrend
Automated Data Management for Digital Media Environments

Challenge

Technological developments in the media & entertainment industry have advanced significantly during the past few decades. With the widespread adoption of 2K, 4K, 3D and now 8K video, along with enhanced motion capture, CGI and other VFX, media producers have unprecedented tools for creative expression. But the increasing file sizes that accompany these advances can easily overwhelm legacy storage due to their higher bandwidth and capacity demands. To put the situation in perspective, between now and 2019, demand for digital storage in the entertainment industry is expected to grow 5.4X, with capacity shipped per year increasing from 14,449PB to 50,649PB.

Social media has greatly expanded streaming of real-time and on-demand video from a wide range of devices, leading to increased pressure on media creators and distributors to provide content “anytime and everywhere.” The result is squeezed editing timeframes, a need for transcoded versions to feed multiple platforms and a drastic increase in ingest requirements to increase not only performance but reliability and stability. In addition, in an industry where production teams collaborate all around the globe, having real-time remote access to media content becomes crucial. This accounts for recent gains in interest in the cloud for media & entertainment applications.

To satisfy these new demands, media & entertainment storage solutions must provide flexible and scalable capacity, high performance and high availability, all while reducing costs, protecting content and increasing the efficiency of all processes involved in media production — a tall order for most storage providers.

Solution: ATTO and Infortrend

In an effort aimed at solving media & entertainment storage challenges, Infortrend combined ATTO Technology, Inc. high-performance connectivity solutions with two of its comprehensive storage systems: the EonStor™ DS 4000 and DS 3000 Series.

The EonStor DS 4000 Series is optimized for high bandwidth workstations, while the EonStor DS 3000 is designed for small editing groups and archiving. Both series meet current and future media demands by delivering proven throughput, AV-optimized features, high fault-tolerance and flexible scalability in storage area networks and Direct Attached Storage environments.
Automated Data Management

Combined ATTO and Infortrend solutions feature Automated Data Management, a new class of tools typically implemented within converged infrastructure solutions such as network backup appliances that simplifies data management. By using specific policies and rules to classify information and determine where to best store and archive it, Automated Data Management ensures that IT resources are maximized and that data is efficiently managed and protected throughout the content creation process.

Dynamic Load Balancing

A feature enabled by ATTO MultiPath Director™ distributes workloads across multiple ports to increase reliability and availability. Also optimizes resource utilization to maximize throughput and minimize response time.

Automated Tiering

Automatically moves frequently accessed data to higher-performing solid-state drives (SSDs), and cold data to high-capacity hard disk drives (HDDs). This increases ROI and greatly optimizes storage performance by efficiently distributing data to ensure that SSDs and other high-performance drives have the necessary capacity to deal with mission-critical media applications.

Automatic Path Failover and Failback

Failover is the process of transmitting I/O in a non-disruptive manner from a primary to a secondary path. Failback seamlessly transitions I/O back to the primary path when connection is restored. MultiPath Director offers redundant data paths with failover/failback capabilities to maintain continuous availability and a high degree of reliability – both crucial in media production.

Combined ATTO and Infortrend storage solutions provide a fully integrated, industry-proven, future-proof option for business use and 4K/8K media editing. They also fill an important market gap by providing cost-effective high-performance storage that meets the expanding needs of both IT and media & entertainment applications.