



NetApp High-Performance E-Series Solution for Media and Entertainment

BACKGROUND

There is an increasing demand to provide high-bandwidth content in new and cost-effective ways to support the massive uptake in users of streaming services. A shared storage repository with infinite bandwidth and a boundless container can benefit all aspects of media operations.

CHALLENGE

By moving to a more centralized, shared content repository, media operations can consolidate high-speed production workflows and rendering pipelines, accelerating large-scale transcoding and delivery architectures. They can also implement a global repository for optimized licensing and monetization workflows. Media and entertainment companies gain key benefits from this move, but along with this centralization comes a need for massive bandwidth, extreme capacity, and continuous availability from the underlying storage arrays. These needs can overwhelm media-specific storage systems.

SOLUTION OVERVIEW

The NetApp® E-Series solution features a complete line of high-performance, high-density storage systems. NetApp E-Series storage systems can be configured for all sizes of media operations, from corporate media and local broadcast news operations to 4K resolution postproduction and large cable and internet delivery services. The solution is architected with modular, flexible components that can be configured to meet the specific requirements of your media operations. By deploying components that are optimized for your requirements, you enable efficiency at all stages of media workflows (ingest, manage, produce, process, deliver, archive, and transact) and can easily manage your digital libraries.

THE SPEED YOU NEED

Bandwidth and reliability are the critical components of successful media distribution. The NetApp solution provides both high bandwidth and high IOPS with an excellent price/performance ratio. E-Series delivers the extreme performance that you need (up to 12GBps read/write) for video editing and finishing of ultra-high-definition (UHD) content. This sustained high bandwidth also enables seamless recording and playout of media content.

Because E-Series is also optimized for random I/O and IOPS, the automated processes that transcode clips to multiple formats, render images, check quality, and fingerprint copies all perform better with low-latency, high-performance E-Series storage. Designed to provide both massive sequential and random I/O, E-Series storage outperforms competitors in media transactional workloads, in which milliseconds can be translated into dollars. Whether configured with SSDs or with HDDs, the NetApp solution can make an important difference in your media transactional workflows.

LIMITLESS SCALABILITY

The modular design of the NetApp solution offers a granular, building-block approach to growth. The solution enables you to scale seamlessly from terabytes to petabytes by adding capacity in any increment. The ability to scale bandwidth and capacity independently offers even greater flexibility and more cost-effective expansion.

AROUND-THE-CLOCK RELIABILITY

Production is all about staff productivity. NetApp enables you to edit, to color-grade, to animate, and to design with the confidence that your media will be available. E-Series storage is architected to provide maximum uptime with optimized reliability, availability, and scalability that are built into the platform. Standard redundant components provide 99.999%+ reliability, proven by the more than 1 million shipped units that are backed by over 20 years of industry-leading storage system design and development.

EASY DEPLOYMENT AND SUPPORT

The NetApp E-Series solution makes enterprise storage easy. The modular design enables your engineers to nondisruptively add performance and capacity without complex deployments or migrations. Dynamic replication enables you to easily configure new systems for faster deployment. And scripts enable you to automate common tasks for easier management.

The NetApp 60-drive enclosure, with its five-nines reliability, is easily serviced. It has retractable disk drawers and optimizes storage density to consolidate all stages of media workflows into a single, centralized repository. By consolidating siloed storage, you benefit from an infrastructure that delivers maximum storage capacity with excellent performance. You also reduce or eliminate file copies between silos.

The E-Series solution also features proactive monitoring and support to automate issue resolution and to reduce management overhead. Worldwide support and 4-hour parts delivery help keep your workflows running.

BUSINESS BENEFITS

Accelerate Performance

- Deploy systems that deliver up to 12GBps read/write performance per controller pair.
- Deliver massive sequential and random I/O that outperforms competitors in media workloads.

Improve Reliability

- Get 99.999%+ availability and industry-leading durability, based on nearly 1 million units shipped.

Scale Limitlessly

- Support large media repositories with boundless containers.

LOWER TOTAL COST OF OWNERSHIP

As file sizes grow, media production studios need to be smart about storage, or their storage costs can spiral out of control. With price/performance-optimized building blocks from NetApp, small to large configurations are cost efficient. In addition, NetApp HDDs and SSDs meet strict quality, performance, and interoperability requirements before acceptance. This extra scrutiny results in failure rates that are 4 times lower than commodity HDD and SSD devices. And NetApp leverages high-density drives, resulting in lower costs for power, cooling, and support. You also benefit from the flexibility to support 100Gb InfiniBand, 100Gb NVMe over Fabrics, 8/16/32GB FC, and 12Gb SAS connectivity. All these benefits add up to significantly lower TCO.

MORE INFORMATION

To learn more about NetApp high-performance computing solutions for media, visit netapp.com/hpc.

ABOUT NETAPP

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit www.netapp.com. #DataDriven