Storage Solutions for Media and Entertainment

Introduction Solution Highlights Related Products Use Cases

Introduction

The media and entertainment (M&E) industry is a significant driver for development of storage technologies. Infortrend has continuously been pushing boundaries of storage technological advancements to develop cutting-edge solutions, including EonStor GS scale-out unified storage, EonStor CS scale-out NAS, and EonStor DS SAN storage, delivering exceptional performance, density, and scalability, coupled with complete data protection. They offer a perfect balance of capabilities and cost-effectiveness, allowing you to optimize your budget without compromising performance or quality and empowering you to bring your creative vision to life.

Solution Highlights

Our flagship storage solutions can successfully overcome the main challenges which M&E creatives usually encounter, such as:

- · Insufficient performance incapable to support collaborative workflows
- · Limited rack space to install new storage for growing amounts of content
- · Uncertainty in forecasting future storage needs, resulting in additional costs and efforts
- · Storage downtime leading to project delays or even revenue loss



High Performance for 4K/8K Content Creation

Creating and editing rely heavily on storage access speed and responsiveness. With support of high-speed NVMe SSD, 100GbE connectivity, and RDMA technology, our storage solutions deliver extremely high performance and reduced latency to handle demanding M&E workflows. Our storage solutions can support up to 250 streams of ProRes 422 HQ 4K video at 60 frames per second (fps) and 28 streams of uncompressed DPX 12-bit 4K video at 24 fps. This provides a highly efficient collaboration environment and ensures that you can deliver compelling stories on time, without encountering any performance bottlenecks.

GS U.2 NVMe hybrid flash storage perfectly meets the needs of 4K/8K video editing, VFX, and rendering workloads, and GS SAS HDD storage is well-suited for HD/4K video editing, content delivery, and media asset management (MAM).



Effortlessly Store Media Materials

High-density EonStor GS models in 4U 60/90-bay form factors easily fit in a limited rack space. A single GS appliance in 4U 90-bay design can provide up to 1.5PB of usable storage capacity.

High-density models enable you to store more media materials using fewer appliances. As a result, there will be fewer appliances to manage, along with reduced switch ports required, lower total power consumption, and notably, less rack space needed — all contributing to a lower total cost of ownership.



Scale Your Storage Flexibly as Your Media Assets Grow

With scale-out and scale-up capabilities offered by our storage solutions, you can expand both performance and capacity on demand. This eliminates the need to forecast future storage requirements or manage data silos, saving you additional costs and efforts.

When connected to a JB expansion enclosure, a single GS appliance can hold up to 800 drives. As your media assets or performance demands grow, scale-out to up to 4 GS appliances as one storage system. Overall, the solution can provide up to 70PB of usable capacity.



Industry Leading Software Support

You can seamlessly integrate our storage solutions with your post-production workflows, which use industry-leading post-production software like Adobe Premiere, Adobe After Effects, DaVinci Resolve, Final Cut Pro, Avid Media Composer, and NUKE.















Optimize Storage Efficiency

Storage auto-tiering function automatically places ongoing projects on the high-performance SSD tier, while finalized projects are moved to the less expensive HDD tier, which allows M&E companies to avoid wasting expensive storage resources on data that doesn't require it.

To accelerate access to applications and files from ongoing post-production workflows, our storage solutions offer SSD cache, acting as cache to HDDs.



Protect Your Media Content

Our storage solutions feature redundant controller design that ensures smooth and uninterrupted collaborative workflow and eliminates downtimes caused by single controller failure, preventing any disruptions in data access.

With RAID on drives, your digital assets are protected from data loss. Furthermore, our intelligent drive recovery mechanism provides added protection against file corruption and potential hard drive failure caused by long-term operation. Smart management for SSDs allows for prolonging their lifespan and prevents multiple SSD failure. A built-in supercapacitor provides power to write data to drives during power outage.

These features ensure data integrity, prevent errors, and guarantee that your files remain secure and accessible over time.

EonStor GS Scale-out Unified Storage



Top Choice for Demanding M&E Post-Production Workflows



Designed for Mid-size Studios: Revolutionize the way your studio deals with the most demanding post-production workflows, even 4K/8K VFX and color correction tasks. Our EonStor GS features 100GbE, U.2 NVMe SSDs, and PCIe 4.0, which deliver uncompromising performance to ensure smooth and efficient workflows. Utilizing 4U 60/90-bay high density models, M&E studios can effortlessly store media assets within limited rack space.



Explore EonStor GS (../products/gs)

Use EonStor GS to Build an Extremely High-Performance and Cost-Effective NAS Solution to Support Workloads from Content Acquisition to Content Delivery and Archive: With a wide range of EonStor GS models, including U.2 NVMe hybrid flash and SAS HDD model, you can easily find a best fit solution. These models are fully compatible with CIFS/SMB, NFS, and AFP network architectures, as well as with network interfaces such as 10/25/100GbE that are commonly used in the M&E industry.

Solutions for Media Editing Teams (../products/media-entertainment-shared-storage#midsize-workgroup)

EonStor CS Scale-out NAS

Designed to Store Large Content Volumes: With the ability to add up to 144 nodes, our EonStor CS scale-out NAS solutions provide high scalability to store and stream large volumes of media assets.

Explore EonStor CS (../products/cs)



Build the Perfect NAS Cluster for Content Delivery and Large-Capacity Archive: EonStor CS models are compatible with M&E network architectures such as CIFS/SMB, NFS, and FTP. They offer 10GbE/25GbE host interfaces, which can be used for both Internal Network (to exchange data between storage nodes) and Front-End Network (to access media files from workstations)

Solutions for Business-Growing Workgroups (../products/media-entertainment-shared-storage#business-workgroup)

EonStor DS SAN Storage

Designed to Offer Industry-leading SAN Performance:

Maximize block-level performance and seamlessly integrate with M&E file systems, such as Apple Xsan and StorNext, to boost productivity.

Explore EonStor DS (../products/ds)



Use EonStor DS That Fully Supports Apple Xsan and StorNext: EonStor DS is a pure SAN storage solution, ideal for M&E studios adopting a clustered file system, which allows multiple clients to share block storage via a high-speed Fibre Channel or iSCSI network.

SAN and 3rd Party File System Integration (../solutions/media-entertainment-san-storage)

Recommendation for Effective Configuration

For your convenience, we offer our Product Configuration Tool to help you find a suitable storage model in just a few clicks. Start by selecting your application and specifying your requirements. The tool will then generate a preliminary configuration based on commonly used settings, giving you a solid starting point. From there, you can easily request a quotation.

Product Configuration Tool

Use Cases

Video Editing

- Scenario: An M&E studio is seeking a storage solution capable of accommodating 10 to 15 workstations simultaneously using DaVinci Resolve for 4K video editing. The solution must offer a large capacity to store video footage and high performance to ensure smooth playback and editing.
- Our Advantages: Infortrend provides a cost-effective high-density storage for large video footage, featuring a built-in U.2 NVMe SSD cache that boosts video editing workflow efficiency, enhancing project turnaround time and productivity.
- Recommended Products: EonStor GS 3000/4000 G3 high-density models (../products/gs#gohdd)





VFX

- Scenario: A VFX house is in search of a storage solution that enables 60 to 80 employees across four departments
 —post-production, production, creativity, and administration—to simultaneously edit and store data.
 They use 39 Windows and 33 Mac computers equipped with VFX and video editing tools, such as Davinci Resolve, Adobe After Effects, Autodesk Maya, Flame, Nuke etc.
- Our Advantages: Infortrend offers a high-density storage with a built-in U.2 NVMe SSD cache for cost-effective video storage and accelerated visual effects processing. This design provides large capacity storage while reducing hardware footprint, making it an efficient choice for your video production needs.
- Recommended Products: EonStor GS U.2 high-performance storage series (../products/gs#u2ssd) & EonStor GS 3000/4000 G3 high-density models (../products/gs#gohdd)

Rendering

- Scenario: A rendering service provider is searching for a storage solution for their render farm, which consists of 100 render nodes running on Windows 10 Professional operating system and SMB Direct 3.1.1. The films are rendered in 4K resolution with a 10-bit YUV video format. The storage solution should provide a throughput of 2.5GB/s for reading and 2GB/s for writing.
- Our Advantages: Infortrend provides high performance storage solutions that meet the total read/write throughput requirements, provide flexible scalability to accommodate future capacity needs, and SMB Multi-channel to increase network performance. The redundant controller design ensures data availability, providing an added layer of protection against data loss.
- Recommended Products: EonStor GS 3000/4000 G3 high-density models (../products/gs#gohdd)





Ingestion and Content Delivery

- Scenario: A content creation company is seeking storage solutions that require high throughput for video ingestion from film scanners and high capacity for cold material archiving, with specific network requirements of 100GbE and 25GbE for each solution. Additionally, ingested data migration is scheduled every night.
- Our Advantages: Infortrend's storage solutions
 effectively meet the demanding requirements of content
 creation companies by offering high-performance, large
 capacity, and specialized network capabilities. The GS
 U.2 in 2U 24-bay with SSDs and 100GbE and GS 4U 60 bay solution with HDDs and 25GbE offer high-density
 designs that enhance capacity efficiency and reduce Total
 Cost of Ownership (TCO). Furthermore, our scale-out
 feature provides a single namespace for simplified
 management and reduced complexity, while data
 migration capabilities ensure data integrity and
 availability.
- Recommended Products: EonStor GS U.2 high-performance storage series (../products/gs#u2ssd) & EonStor GS 3000/4000 G3 high-density models (../products/gs#gohdd)

Broadcasting

- Scenario: A TV company is looking for two NAS sets with 10G and 25G channels respectively for over-the-top (OTT) media services. Both systems must deliver read/write throughput of 3 GB/s and 1 GB/s, along with 760 TB capacity to store video content. These NAS units will also serve as storage for video-on-demand (VOD) content, enhancing the content experience for their OTT service.
- Our Advantages: Infortrend's EonStor GS is an enterprise unified storage solution that offers a wide range of benefits. It integrates SAN, NAS, and cloud services, and comes with scale-out capability, providing flexible expansion of both performance and capacity. Its high-density design meets large capacity demands, while high throughput allows for fast data transfer. The use of SSD cache speeds up video playback.
- Recommended Products: EonStor GS 3000/4000 G3 high-density models (../products/gs#gohdd)



Success Stories



Ciner Media Group

"Thanks to Infortrend's robust and reliable EonStor GS unified storage system, now we have high performance and capacity in a smaller rack space," said Cem GÜMRÜKÇÜ, Broadcasting Systems Manager, Ciner Media Group.

Learn More (successstories/content/100)



WQED-TV

"Having been a customer of Infortrend storage for years, upgrading the existing storage for broadcasting to an Infortrend solution was a natural choice. We are extremely satisfied with the stability and price of their storage solutions," said Paul Byers, Executive Director of Engineering at WQED.

Learn More (successstories/content/130)

See All Success Stories

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Storage Solutions for More Applications



High Performance Computing

Accelerate your research discoveries like never before with integration with widely-used HPC file systems.

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Simplify backup and restore process with full functions and integration with industry-leading backup software.

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