EditShare®

FUELING YOUR NEED FOR (STORAGE) SPEED

EFS NVMe is here

Unlocking Unparalleled Bandwidth For Collaborative Finishing Projects, VFX, and Color Correction

VFX, finishing, and color correction studios face challenges in finding shared storage that supports simultaneous editing and high-quality VFX work without video playback issues caused by network congestion or oversubscription. To cope with this, these studios often resort to setting up separate storage islands for each task, leading to duplication of resources, higher costs, and hindrance in collaboration and workflow efficiency.

Meet EFS NVMe—an innovative addition to the EditShare EFS Shared Storage family, setting new benchmarks for performance, efficiency, and throughput in the media and entertainment industry. Gone are the days of relying solely on expensive and redundant isolated storage setups like Direct Attached or SAN storage for each workstation. With the remarkable bandwidth of EFS NVMe, creative professionals can now enjoy the time-saving advantages and creative freedom of shared media storage and collaborative workflows, even when handling high-data-rate formats like uncompressed 4K, 6K, or even 8K file-per-frame projects.

EFS

EditShare users can utilize EFS NVMe to unlock collaborative workflows with a variety of leading professional creative and finishing tools, including Blackmagic Design DaVinci Resolve Studio®, Autodesk Flame Premium®, Digital Vision Nucoda®, Avid Media Composer®, Adobe Premiere Pro®, Apple Final Cut Pro®, Adobe After Effects®, film scanning and restoration tools, and many more. Enabling all creative users including editors, VFX artists, colorists and others to store material centrally means less duplicate media being copied around to different pools of isolated storage. It also means that it is extremely easy for new versions of animations and other renders to get handed off into the edit, without a time consuming process of copying and moving them around to deliver them. EFS NVMe is set to become the envy of storage platforms, empowering creative professionals to complete their finishing projects collaboratively with unprecedented levels of quality, efficiency and excellence.

Fueling the Need for Speed

EFS NVMe stands as a testament to visionary engineering, designed from the ground up to handle the simultaneous reading and writing of multiple streams of the most demanding, bandwidth-intensive formats. From uncompressed file-per-frame sequences like DPX and EXR to cutting-edge Camera RAW in resolutions surpassing 4K and 6K, EFS NVMe ensures uninterrupted workflow, maintaining every frame with unparalleled precision. It tackles finishing codecs such as DNxHR 444 and ProRes 4444XQ, or XAVC, heralding a new era where creative potential knows no bounds.

A single NVMe storage node delivers an astounding 18 GB/s of aggregate media throughput, sufficient to play 15 streams of 4K DPX 16 bit RGB at 24 fps, or more than 30 streams of Ultra-HD Apple ProRes 4444XQ UHD at 60 fps, easily supporting the most demanding formats across your facility.

The extreme bandwidth needed to read and write high bitrate media to and from each workstation is supported by our Native EFS Client driver software which is available for Mac OS, Windows and Linux. These native drivers are a key advantage of the EFS NVMe solution, offering much greater performance, higher availability and increased security over standard protocols like SMB. Improvements to these EFS native drivers can now allow a single Mac or Windows workstation to read file-per-frame content in excess of 3GB/sec, enough to playback all commonly used 4K DPX formats (up to 16 bit RGB 4K DCI at 59.94) and even some 8K DPX formats.

EFS

The native drivers also include our intelligent SwiftRead technology, which allows the client drivers to read data directly from the fastest available node in a cluster, further improving performance and availability for 3+ node storage groups. In addition, EditShare EFS's Quality of Service (QoS) feature ensures perfect playback for mission critical editing or grading sessions, even when the system is under heavy load and bulk media is being pushed or pulled into or out of the system. For enterprise installations, EFS also supports high-availability configurations that provide additional protection for media assets and file metadata against potential hardware failures, as well as increasing uptime and data availability.

Simple, Scalable and High Performance Networking

For connectivity, EFS NVMe uses easy to configure and high throughput Ethernet connections, with no requirements for costly and inflexible fiber-channel or other exotic connection types. It supports all popular ethernet standards and speeds up through dual 100 Gigabit server network connectivity which is required to unlock the full disk bandwidth of the NVMe array. Multiples of any of these network port types can be bonded together from the server for increased bandwidth, using intelligent load balanced network interface bonding to spread the load.

Scalable | Integrated

NVMe is the perfect partner to add to an existing EFS cluster. In these multi-tiered systems, administrators can easily migrate projects back and forth between EFS NVMe and HDD nodes, enabling you to meet the demands of your project.

Also like all EditShare shared storage solutions, the new EFS NVMe seamlessly integrates with the EditShare FLOW production MAM, allowing users to log, track, search and retrieve 4K/UHD or any assets across online, nearline and archive EditShare storage platforms.

Security That Does Not Stifle The Creativity Process

Included with all EFS models including EFS NVMe, EditShare Guardian offers reassurance to facilities handling valuable content by ensuring regulatory compliance and facilitating investigations into security incidents or breaches. Through its integrated real-time dashboard, Guardian provides administrators with the visibility and control necessary for efficient and comprehensive management of their EditShare environment, safeguarding their valuable media assets.

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Technical Specifications | Hardware Platform

- HPE DL380 Gen 11 Hardware (2RU)

- 24 enterprise-grade read-intensive NVMe drives in 2, 4, 8, or 16 TB capacities. Hot-swappable, front-accessible. Endurance: 1 DWPD (Drive Write Per Day)

- Processor: 4th Gen Intel Xeon 12 core (Sapphire Rapids)

- RAM: 128GB DDR-5 AM

- Dual HW RAID Controllers, RAID-50

- Hot-swappable components including power supplies, fans, NVMe media drives, boot drives

- Operating System (OS) Boot Drives: 2 x M.2 NVMe SSDs, hot-swappable, rear-accessible, hardware RAID-1 mirror protection (1+1)

- 4 x 1 Gb network ports included + HPE iLO management port

- 10GBASE-T, 10 GbE SFP+, single & dual 10/25G SFP28, and single & dual 100/50/40G QSFP28 NIC options available

Models | Storage Capacities

MODEL	RAW STORAGE (TB/TiB)	USABLE STORAGE COPY-1 (TB/TiB)
EFS NVME 24 TB	23.0 TB / 20.9 TiB	20.2 TB / 18.3 TiB
EFS NVME 48 TB	46.1 TB / 41.9 TiB	40.3 TB / 36.7 TiB
EFS NVME 96 TB	92.2 TB / 83.8 TiB	80.6 TB / 73.3 TiB
EFS NVME 192 TB	184.3 TB / 167.6 TiB	161.3 TB / 146.6 TiB
EFS NVME 384 TB	368.6 TB / 335.1 TiB	322.6 TB/ 293.2 TiB

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Technical Specifications

ELECTRICAL

INPUT VOLTAGE	100-240 VAC
INPUT FREQUENCY	50-60 Hz
POWER CONSUMPTION (STEADY STATE/PEAK)	1600W

DIMENSIONS

SERVER	Height/Width/Depth 8.73cm x 44.8cm x 72.7cm 3.44in x 17.64in x 28.62in
SHIPPING	50-60 Hz

WEIGHT

MAX WEIGHT	33 kg (72.75 lbs)

ENVIRONMENTAL

OPERATING TEMPERATURE	10°C (50°F) - 35°C (95°)
OPERATING HUMIDITY	8% - 90%, non-condensing
STORAGE TEMPERATURE	-30°C (-22°F) - 60°C (140°F)
STORAGE TEMPERATURE	5% - 95% non-condensing

THERMAL EMISSIONS

For 1600W Power Supply	5918 BTU/hr (at 200 VAC), 5888 BTU/hr (at 220 VAC), 5884 BTU/hr (at 240 VAC)

Elevate your creative journey with EFS NVMe—Where Performance Meets Efficiency.

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