EFS300

Enterprise-scale high-perfomance shared storage for media production

EFS 300 Enterprise Scale-out Storage

EFS 300 is scale-out shared storage that delivers the benefits of EditShare File System-based storage in configurations that can meet the performance and capacity requirements of the largest postproduction environments. Thanks to its simple building-block approach scaling capacity and bandwidth as the needs of the organization grow is as easy as plugging additional storage nodes.

Whether configured as a single 64 TB node or a fully expanded 5 Petabyte cluster, the EFS 300 always presents a single namespace to manage. This eliminates administrative tasks like balancing user workloads between volumes or workspaces as well as building multiple sets of user accounts and/or permission sets.

The EFS 300 employs the EFS Native Client, an advanced, multi-threaded driver whose low overhead and latency provides Windows, OS X and LINUX workstations with exceptional performance. By supporting bonded Ethernet ports, it extends the usefulness of legacy 1G and 10G networks by supporting payloads in excess of the native network bandwidth. In addition, this allows the use of fault-tolerant MLAG protocols to eliminate switch-related single points of failure.

In multi-node EFS 300 clusters, the EFS Native Client provides further performance benefits by enabling parallel transactions between workstations and storage nodes to avoid the typical "hot spots" associated with NAS clusters. Also, depending on the number of nodes present, an EFS 300 can support XOR and COPY protection schemes that can tolerate the loss of one or more storage nodes.

Finally, EditShare SwiftRead permits client workstations to seek parity or copy data from elsewhere in the cluster when a storage node is congested or down.

A Complete Post Production Environment

The rich feature set of the EFS 300 separates it from other storage solutions. In addition to providing ultra-reliable, ultra-scalable high performance storage, it includes powerful applications to address the most common video production requirements.

EFS 300 is equipped with **FLOW Production Asset Management** to provide file-based ingest, logging, cataloging, searching, cuts-only editing and drag and drop to Apple Final Cut X®, Adobe Premiere Pro®, Avid Media Composer Ultimate® and other NLE applications as well as provide web-based access via AirFLOW and remote editing via FL:OW Story.

Ark Media Archive is also bundled with the EFS 300. It permits users to set up automatic tasks to backup critical media assets and to park unused assets in nearline disk and offline tape storage. Ark users can also restore backups from nearline and offline destinations.

EditShare Manager is a comprehensive application that enables system administrators to manage users, permissions, quotas, workspaces, projects, reporting and other aspects of system usage. Like all members of the EFS storage family, the EFS 300 never requires maintenance windows for tasks like defragmentation, storage expansion or software updates.

EditShare Connect is client software that enables collaboration between project members.

EditShare®

It provides access to permitted media assets and workstations, it enforces read and write permissions, quotas and implements project sharing and bin locking.

An EFS 300 master node can support a small number of direct connected client workstations and can also host a tape library via an optional SAS HBA. A larger number of clients can be supported with the addition of an appropriate network switch.

EFS 300 Product Information

Hardware Specification

- Based on HPE DL380 Gen10 Rack-mountable
- 2U server with 16HDDs (4 drives in midplane)
- Intel Xeon Processor
- Operating System (OS) disks: SSDs, hotswappable, rear-accessible, RAID-1 protection (1 +1)
- Storage disks: 16 x enterprise-grade HDDs in 4, 6, 8, 10, or 16 TB capacities, hot-swappable, front-accessible, RAID-6 protection (14+2)
- RAID Controller and standard RAID 6
- protection
- 16 enterprise-grade HDDs in 4, 8, 10 or 16 TB capacities

EFS 300 Scalability

An EFS 300 offers unlimited scalability. A single master node will support the addition of 8 additional storage nodes. Further expansion, up to 5 Petabytes total storage, is possible by adding one or more dedicated metadata controllers and dedicated servers for Flow and Ark. Additionally, for existing owners of EditShare storage, an EFS 300 can be added to any existing ESA server group.

- Hot-swappable Power Supplies, Fans, Media, and OS drives
- 4 x 1 Gb ports included
- 10GBASE-T, 10 GbE SFP+, 10/25G SFP28, and 100/50/40G QSFP28 NIC options available

Software Specification

- Ubuntu 64-bit Operating System
- EFS Native Client driver for Windows, Mac
- OS and LINUX
- Supports SMB and FTP protocols

EFS 300 Front

EFS 300 Rear

Technical Specifications

Electrical

Input Voltage	100-240 VAC
Input Frequency	50-60 Hz
Power Consumption	500 W

Environmental

Operating Temperature	10°C (50°F) - 35°C (95°F)
Operating Humidity	8% - 90%, non-condensing
Storage Temperature	-30°C (-22°F) - 60°C (140°F)
Storage Humidity	5% - 95%, non-condensing

Thermal Emissions

Typical Thermal Output	1902 BTU/hr (557 W)

Dimensions

Height/Width/Depth	8.73 x 44.54 x 73.02 cm 3.44 x 17.54 x 28.75 in
Shipping Dimensions	27.00 x 60.02 x 96.85 cm 10.63 x 23.63 x 38.13 in

Weights

Shipping Weight	24.5 kg (54 lbs)

EditShare®