Ultimate EFS 310 Enterprise Scale-out Storage

The Ultimate EFS 310 is an advanced scale-out shared storage solution designed to meet the performance and capacity demands of the largest post-production and corporate environments. Built on the powerful EditShare File System, it offers a flexible, modular architecture that simplifies scalability—expanding capacity and bandwidth is as easy as adding new storage nodes.The Ultimate EFS 310 delivers double-digit performance improvements over previous generations.

Whether deployed as a 96TB single node or scaled to a 2.8-petabyte cluster, the EFS 310 maintains a unified namespace, streamlining management by eliminating the need to balance workloads or manage multiple user accounts and permissions.

The EFS 310 employs the EFS Native Client, an advanced, multi-threaded driver whose low overhead and latency provide exceptional performance for Windows, OS X, and Linux workstations. Supporting bonded Ethernet ports, the system supports a range of network options from 10GbE to 100GbE.

In multi-node EFS 310 clusters, the EFS Native Client enhances performance by enabling direct data transactions between workstations and all storage nodes, preventing the common "hot spots" with gateway designs found in many NAS clusters. Depending on the number of nodes, the EFS 310 can support XOR parity and multiple COPY protection goals, allowing it to tolerate the failure of one or more storage nodes. Additionally, with XOR goals, Editshare SwiftRead allows workstations to retrieve data from other nodes in the cluster when a storage node is congested or unavailable.

A Complete Post Production Environment

The rich feature set of the EFS 310 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.

Ultimate EFS 310 comes with FLOW Asset Management, offering file-based ingest, logging, cataloging, searching, and sequence editing. It features fully integrated NLE panels for DaVinci Resolve and Adobe Premiere Pro, streamlining the editing process. Additionally, the system includes FLOW Automation, an advanced workflow orchestration engine designed to automate routine tasks and support large-scale media workflows, increasing efficiency across teams.

EditShare FLOW

ARK Media Archive is also bundled with the EFS 310. It permits users to set up automatic tasks to back up critical media assets to LTO-9 tape libraries. ARK is a secure tape-based long-term archiving platform. Additionally, ARK enables users to restore backup directly to the production storage. A proxy of all your archive media is always kept online to restore backup data sets directly to your production storage, or use FLOW to restore individual clips.

EFS Control is a comprehensive application that enables system administrators to manage users, permissions, quotas, workspaces, projects, reporting, and other aspects of system usage.

EditShare Connect is a powerful client software application that allows users to mount EFS media spaces as shared network volumes for seamless collaboration. In addition to providing access to permitted media assets and workstations, it enforces quotas, read and write permissions, and implements project sharing and bin locking.

EditShare Swift Link allows secure, collaborative remote work by transforming on-premise storage into a private cloud. Users can mount media spaces on their remote devices, use FLOW panels to find clips, and the system automatically adjusts for latency to ensure optimal performance.
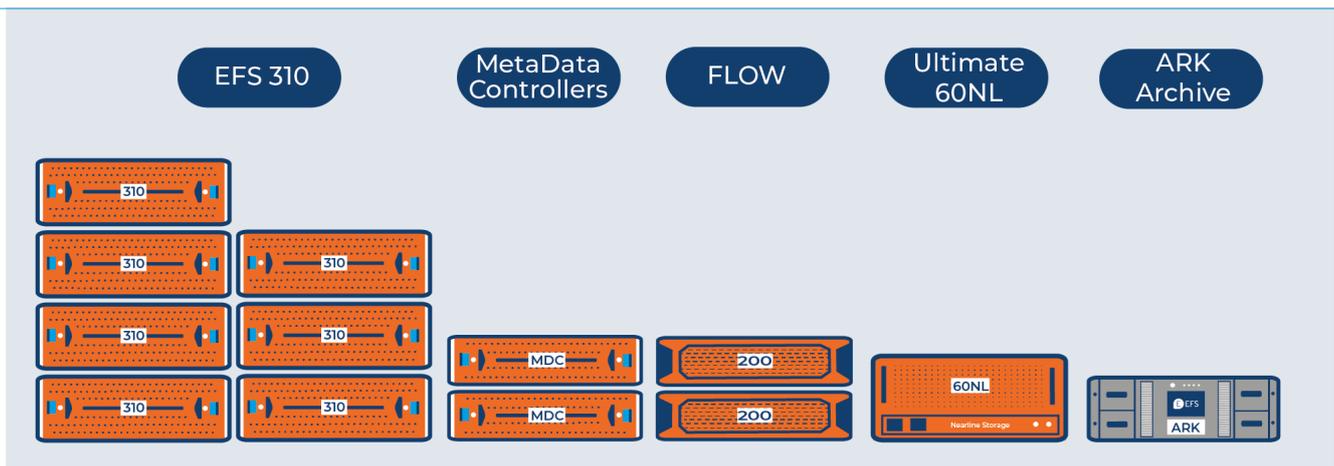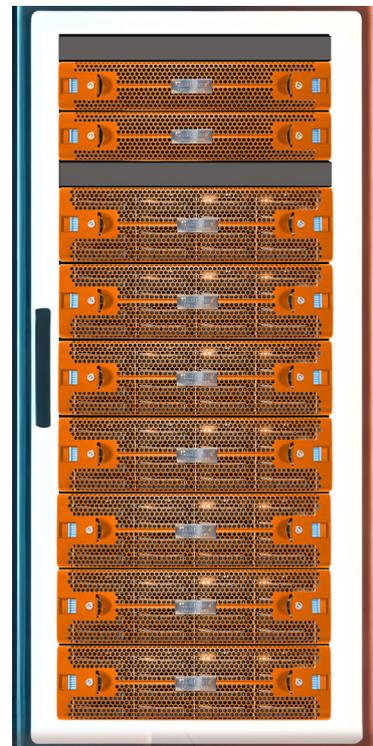
EditShare Swift Sync enables high-speed, secure synchronization of media and projects between EFS nodes in different locations. Shoot on set with the Ultimate Field Unit and sync dailies back to base seamlessly. It's ideal for organizations and broadcasters with regional offices looking to share content across locations easily.

EditShare Guardian is an analytics platform for EFS and FLOW that offers real-time visibility into system operations. It features customizable dashboards and reports, along with advanced search capabilities. The system regularly samples metrics like CPU, memory, and disk space usage. Additionally, monitoring data can be forwarded to third-party SIEM systems like SolarWinds or Splunk for enhanced security monitoring.

EFS Auditing. Global cyber threats have prompted the media industry to adopt stronger security measures. EditShare's EFS storage now includes File Auditing, which tracks all file access, modifications, and user activity in a dedicated audit log. Administrators can analyze these logs in real time to identify errors or potentially malicious behavior.

Scale up to 8 nodes in a single namespace

An EFS 310 cluster can support up to 8 nodes with the addition of an MDC (metadata controller) after 3. Adding dual Metadata controllers allows you to easily set up a fault-tolerant, high-availability, no single-point-of-failure architecture. As the storage scales, so does the total bandwidth, delivering increased throughput. FLOW production nodes can be added to build out the FLOW microservices architecture.

Expanded EFS 310 storage production platform

EFS 310 Front

EFS 310 Rear

EFS 310 Product Information

MODELS AND OPTIONS

3U Node

- 3U Node with 16 enterprise grade HDD
- Select 96TB / 128TB / 192TB / 256TB / 320 / 352 TB raw capacity
- Mirrored SSD OS drives with hardware RAID 1 failover
- Select dual 10G RJ-45 or optional dual 10G SFP+ or dual 40G QSFP+ NIC
- Includes FLOW Asset Management application,10/2 FLOW/FLOW ingest licenses with Automation engine

HARDWARE SPECIFICATION

- Next-generation 3U chassis with 28" tool-less slide rail
- Motherboard with powerful multi-core CPU
- 64 GB DDR5 ECC RAMMirrored 480GB SSD OS drives, hot-swappable, rear-accessible
- PCIe 4.0 Hardware RAID controller with RAID 6 and cache protection module
- Media drive, 16 enterprise-grade 6Gb/s HDDs in 8, 12, 16, 18, 24TB capacities
- Hot-swappable power supplies, fans, media and OS drives
- Standard dual port 10G-BaseT RJ45
- IPMI management port RJ45
- Select dual port 10G-BaseT RJ45, dual port 10G SFP+, Dual port 25G SFP28, 4 port 25 GbE, SFP28, dual port 100 GbE, QSFP56 drives

SOFTWARE SPECIFICATION

- EditShare OS (Ubuntu) 64-bit Operating System
- EFS Native Client driver for Windows, Mac OS and Linux
- Supports Native EFS or SMB, and other protocols

Technical Specifications

ELECTRICAL

Input Voltage	100-240 VAC
Input Frequency	50/60 Hz

ENVIRONMENTAL

Operating Temperature	0°C (32°F) - 50°C (122°F)
Operating Humidity	5% - 95%, non-condensing
Storage Temperature	-20°C (-4°F) - 60°C (140°F)
Storage Humidity	5% - 95%, non-condensing

DIMENSIONS

Width/Height/Depth	432 x 132 x 681 mm 17 x 5.2 x 26.8 in

WEIGHTS

Shipping Weight	40.1 kg / 88.5 lb
Racked (no HDD)	18.3 kg / 40.5 lb
Racked (16 HDD installed)	31.9 kg / 70.5 lb