



XStream EFS 200



High-performance Shared Scale-out Storage for Small-to-Medium Sized Media Operations

EFS 200 Media Production Storage

XStream EFS 200 is scale-out shared storage that delivers the benefits of EditShare File System-based storage in a size that meets the capacity and budget requirements of collaboration teams and smaller media shops. 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 24TB node or a fully expanded 960TB 8-node cluster, the EFS 200 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 XStream EFS 200 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 that eliminate switch-related single points of failure.

In multi-node EFS 200 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 200 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 200 separates it from other storage solutions. In addition to providing an ultra-reliable, ultra-scalable high performance storage, it includes powerful applications to address the most common video production requirements.

XStream EFS 200 is equipped with *Flow production asset management* to provide file-based ingest, logging, cataloging, searching, cuts-only editing and drag and drop to Final Cut Pro, Adobe Premier and other NLE applications as well as provide web-based access via AirFlow and remote editing via Flow Story.

Ark Media Archive is also bundled with the EFS 200. 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 XStream EFS storage family, the EFS 200 never requires maintenance windows for tasks like defragmentation, storage expansion or software updates.

EditShare Connect is client software that enables collaboration between project members. 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 200 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 200 Scalability

An XStream EFS 200 offers nearly unlimited scalability. A single master node will support the addition of 2 additional storage nodes. Further expansion, up to 8 total storage nodes, 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 200 can be added to any existing ESA server group

EFS 200 Storage Nodes



EFS Metadata



Flow PAM



Ark



Fully expanded XStream EFS 200 storage production platform



XStream EFS 200 Front



XStream EFS 200 Rear

XStream EFS 200 Product Information

MODELS AND OPTIONS

All-in-One Master Server 2U Server with 12 HDD select 24, 48, 64, 96 or 120TB raw capacity
 Select standard dual 10G RJ-45 or optional dual 10G SPF+ or dual 40G QSFP+ NIC
 Includes Flow Media Asset Management application, 5/1 Flow/Flow ingest licenses, ARK Media Archiving application

Storage Server 2U Server with 12 HDD
 Select 24TB, 48TB, 64TB, 96TB and 120TB Raw Capacity
 Select standard dual 10G RJ-45 or optional dual 10G SPF+ or dual 40G QSFP+ NIC

HARDWARE SPECIFICATION

- Next-generation 3U Chassis with 28" tool-less slide rail and covers
- Motherboard with powerful 6 core CPU optimized for I/O intensive applications
- 64 GB DDR4 - 2400MHz ECC High Speed RAM¹
- Mirrored 512GB SSD OS drives, hot-swappable, rear-accessible
- 12Gb/s Hardware RAID Controller and standard RAID 6 protection
- 16 enterprise-grade HDDs in 2, 4, 6, 8 or 10TB capacities
- Hot-swappable Power Supplies, Fans, Media and OS drives
- Dual port 10GbE Network Card

SOFTWARE SPECIFICATION

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

Technical Specifications

ELECTRICAL

Input Voltage	100-260 VAC
Input Frequency	50/60 Hz
Power Consumption	188W/290W peak

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

THERMAL EMISSIONS

Typical Thermal Output	641 BTU/hr
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DIMENSIONS

Height/Width/Depth	89/483/699 mm 19/3.5/27.5 in
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WEIGHTS

Shipping Weight	29.7 kg / 65.5 lb
Racked (no HDD)	16.5 kg / 36.5 lb
Racked (12 HDD installed)	23.5 kg / 52.0 lb

¹ 32GB RAM in XSTREAM EFS 200 Storage nodes

v1.0.0 - All specifications are subject to change at any time without notification.