

# XStream HT

High performance, scalable storage for collaborative post, broadcast, DI and high-end finishing.



## A heritage of storage innovation

For over a decade EditShare has delivered highly scalable shared storage systems that enable media professionals to deliver outstanding content. With our companion asset management and archiving solutions, EditShare media storage solutions have increased productivity at over 3500 broadcast and media enterprises around the globe.

XStream HT is a highly-scalable, flexible storage solution. The basic building block is the XStream HT Workflow Director, a powerful storage server housing either 16 or 24 hard disk drives in a 3U or 4U chassis, respectively. The XStream HT Expansion Chassis can house 16 hard disk drives in a 3U chassis; up to four can be attached to scale up the Workflow Director. And with the EditShare Extreme Scalable Architecture (ESA) additional Workflow Directors can be added to scale out storage capacity. XStream HT incorporates RAID 6 protection of media files, 1+1 hotswappable power supplies and operating system drives and 1+1+1 fans for impressive reliability in a mid-sized system.

## Storage configurations

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## Media asset management

Flow media asset management platform provides a powerful toolset for the creative control of all files during the production process. From ingest to delivery, Flow will tag, organize and manage your media assets. Flow Automation can handle any repetitive, routine task including transcoding, duplicating and sending confirmation emails and notices. AirFlow, a web-based browse application lets remote users browse, search and download high res or proxy files to support review & approve processes, remote editing or other emerging tasks. For high res workflows, Flow also supports scan and proxy support for 4K and image sequences such as DPX.

## Managing XStream HT storage

EditShare Connect enables XStream HT system administrators to easily manage user accounts and privileges, to establish shared media and project spaces, to define quotas and to perform other system-level tasks. With EditShare Connect, there's no need to interrupt users for minor tasks like adding users or for major tasks such as the addition of an entirely new storage node to an XStream server group.

## Product highlights

### Scalability

The EditShare Extreme Scalable Architecture enables an XStream HT storage server to be expanded by adding a new storage node to the server group. The process of adding nodes is completely transparent to existing users of the system. There is no limit to the number of XStream HT nodes that can be included in an EditShare server group.

### Availability

XStream HT storage systems employ RAID 6 protection against media drive failures and 1+1 power supplies and OS drives and 1+1+1 fans to protect against hardware failures. Power supplies, media drives, OS drives and fans are hotswappable for uninterrupted operation and fast MTTR.

### EditShare project sharing

Project Sharing lets editors draw on the same central pool of media and work concurrently in the same project – freely and safely sharing raw material, bins, and sequences.

### Powerful, easy connectivity

Media-optimized 1 Gigabit Ethernet (GbE) and 10 GbE ports allow XStream HT to deliver large stream counts with simple, ubiquitous, cost-effective networking equipment.

### Realtime collaboration

XStream HT supports Avid Media Composer®, AvidDS, Final Cut Pro, Lightworks, Adobe® Premiere Pro®, Adobe After Effects®, EDIUS, Pro Tools and more.

### No per-seat client licenses

Many shared storage solutions require users to purchase licenses for each client device attached to the system. This can sometimes be a barrier to productivity and always lengthens the recovery time for the investment. Like all other members of the XStream family of media storage products, XStream HT requires no per-seat client licenses.

## XStream administration features

- ▶ Intuitive User Management tool for creating unlimited editor/user accounts.
- ▶ Ability to grant 'limited administration' privileges to editors for common management tasks.
- ▶ Storage Usage tool provides clear overview of space utilization.
- ▶ Active Directory support for unified logins.
- ▶ CSV file import for easy creation of large numbers of users and media spaces.
- ▶ Clean Sweep tool allows quick but controlled deletion by project, user, or media type.
- ▶ Remote Support tool allows activation of live remote desktop for support by EditShare technicians.
- ▶ Notification when space quota levels are being approached.
- ▶ Watch folder file notification service for broadcast playout servers.
- ▶ Daily Health Report indicators of system status, hard drive health, UPS health, space utilization, and more.
- ▶ Remote administration from any Windows, Mac or Linux client.
- ▶ All alerts and information can be emailed automatically to system administration team.
- ▶ Automatic and manual background rebuilding of drives after replacement.
- ▶ Rebuild and verification priority settings.

## Client support

- ▶ EditShare Connect tool: mounts users' authorized media and project shares and manages administration tools.
- ▶ EditShare Project Browser: for managing shared projects (metadata) for tight collaboration.
- ▶ Real-time project sharing: Avid, Apple Final Cut Pro7, Apple Final Cut Pro X, Adobe Premiere Pro and Lightworks - project sharing with sequence and bin locking.
- ▶ Real-time collaboration: Avid Media Composer®, Avid DS, Final Cut Pro, Lightworks, Premiere Pro®, Adobe After Effects®, EDIUS, Smoke, Resolve, Digital Vision, Pro Tools and more on standard EditShare media spaces.
- ▶ Mac OS X 10.6 - 10.10, Windows 8/7, and Linux client platform support.
- ▶ Supports SMB, AFP client network protocols; NFS also available.
- ▶ No per-seat client licenses.
- ▶ File-level locking/protection for perfect video workflow and sharing.
- ▶ Support for direct capture and play from EditShare media spaces in Pro Tools v10 or higher.

- ▶ System can be managed from any workstation on the EditShare network.
- ▶ Server can support unlimited number of clients (subject to bandwidth limitations of network and HDD).

## Expandability

- ▶ Additional XStream HT storage nodes can be added and easily administered using EditShare Extreme Scalable Architecture (ESA).
- ▶ Virtually unlimited storage size and number of simultaneous users is therefore possible.

## File and operating systems

- ▶ Ubuntu 64-bit Server OS.
- ▶ XFS Real-time high performance file system (on media RAID).

## Networking

- ▶ Gigabit Ethernet (1 GigE) and 10 Gigabit Ethernet (10 GigE) support.
- ▶ Dual port 1 GbE and dual port 10 Gbe (10GBaseT or CX4 copper) included standard.
- ▶ Bonded connections to switch, connect to one or multiple switches, or direct connect to workstations in selected switchless configurations.
- ▶ Optional single or dual port 10GigE network interfaces: SFP+ Fibre (SR/LR/ER/Direct Attach Cable), CX4, or 10GBASE-T.

## Performance

- ▶ 7200rpm SATA or SAS drives over 700 MB/sec multi-stream performance per 16-drive chassis.
- ▶ 15000rpm SAS drives over 1200 MB/sec multi-stream performance per 16-drive chassis.
- ▶ Supports resolutions up to 2K DPX, multi-cam compressed HD, and support for all other NLE resolutions.



XStream HT - Workflow Director - 3U



XStream HT - Workflow Director - 4U

## XStream HT Product Specifications

### SERVER MODELS

<b>Workflow Director – 3U</b>	<b>Rack mountable 3U server with 16 HDD</b>
<b>Workflow Director – 4U</b>	<b>Rack mountable 4U server with 24 HDD</b>
<b>Expansion Chassis - 3U</b>	<b>PCI-e connected rack mountable chassis with 16 HDD.</b> Up to 4 Expansion Chassis can be connected to one Workflow Director

### WORKFLOW DIRECTOR HARDWARE

- 3U or 4U Chassis
- X10 motherboard, Intel 6-core XEON CPU, 3.3 GHZ clock, Intel chipset
- 32 GB DDR4 - 2133 MHz ECC High Speed RAM
- Mirrored 2.5" 320 GB SATA 3 Gb/s OS drives, rear accessible
- 6Gb/s Hardware RAID Controller
- RAID6 standard
- 16 or 24 media drives
- Redundant Power Supplies, Fans and OS drives

### EXPANSION CHASSIS HARDWARE

- 3U Chassis
- 6 Gb/s Hardware RAID controller
- RAID 6 standard
- 16 media drives
- Redundant power supplies and fans

### ELECTRICAL

Input Voltage	100-240VAC	
Input Frequency	50/60 Hz	
Power Consumption	Workflow Directors (3U & 4U)	450W
Power Consumption	Expansion Chassis	250W

### ENVIRONMENTAL

Temperature	0°C (32°F) ~ 50°C (122°F)	
Operating Humidity	5% - 95% non-condensing	
Storage Humidity	5% - 95% non-condensing	
Typical Thermal Output	Workflow Directors (3U & 4U)	1535 BTU/hr
Typical Thermal Output	Expansion Chassis	853 BTU/hr

### DIMENSIONS (width x height x depth)

3U Workflow Director	483 x 134 x 699 mm	19.0 x 5.25 x 27.5 in
4U Workflow Director	483 x 178 x 699 mm	19.0 x 7.0 x 27.5 in
Expansion Chassis	483 x 134 x 597 mm	19.0 x 5.25 x 23.5 in

### WEIGHTS

Shipping Weight Workflow Director	55.0 kg / 120 lb
Shipping Weight Expansion Chassis	34 kg / 75.0 lb