EditShare®

Backup
and Archiving

Backup and Archive Seamlessly Integrated with EditShare Storage and Flow Asset Management

Whether you need to keep a backup copy of your media and project files, or you want to permanently archive onto lower-cost and more energy efficient storage, there is an Ark Disk or Ark Tape solution for you.

Ark Tape provides an integrated solution for customers who want to have a safe copy of their media that can be easily transported off-site, or for those who want an easy and energy-efficient solution for archiving media and projects from their EditShare storage systems. Designed for EditShare's own tape libraries and compatible with LTO tape libraries from manufacturers such as HP, Quantum, and SpectraLogic, Ark Tape facilitates creation of any number of "Tape Pools" – for example, one for an entire organization, one for each customer or project, or separate pools for on-site and off-site. Easily copy or migrate media and related files from "online" to "offline" storage , verify backed up data, and receive notifications when transfers are completed.

Ark Disk is based on hard disks that are spinning all the time – offering the advantage of high-speed performance for backup, archiving, and restoration tasks. With Ark Disk, your nearline media is always just seconds away. And in a crisis situation where your main EditShare shared storage system has been damaged, you can activate Ark Disk storage to complete mission critical work while the primary storage is being repaired.

Whichever Ark product you choose, they're managed by the same intuitive user interface, allowing you to easily mix Ark Tape and Ark Disk systems in the same facility. And when you combine any Ark product together

with Flow Browse, you gain the ability to view proxy files of all archived clips and restore individual clips from the archive using the familiar Flow Browse interface.

Feature Highlights

SINGLE, UNIFIED USER INTERFACE
One clear, streamlined application lets you control backup, archiving, and restoration for both Ark Disk and Ark Tape. Because Ark is "EditShare Storage Aware", you see a listing of all your EditShare Media Spaces and Project Spaces in the Ark User Interface, allowing you to easily define which spaces to include in an Ark Job.

SCHEDULED OR MANUAL JOBS
Run Ark Jobs automatically at preset times – monthly, weekly, daily, even many times a day – or run Jobs on demand.

FLOW INTEGRATION
Whenever media files are sent to Ark, a proxy file is automatically created in Flow so that you can later view and search archived content in Flow Browse.

INDIVIDUAL FILE RESTORATION
Using the Flow Browse interface, you can select and preview the exact files you want to restore, and choose the destination EditShare Spaces where you want to put the files.

MIGRATION BETWEEN DISK AND TAPE
If you have Ark Disk and Ark Tape, you can configure Ark Jobs to copy files from Ark Disk to Ark Tape - a convenient way to migrate files from "online" to "nearline" to "offline".

ARK MASTER SOFTWARE ADMINISTRATION

▶ Install wizard for automatic configuration

▶ Clear and streamlined user interface (UI) designed for video workflows and aware of all EditShare storage locations

▶ Manage both disk and tape activities from the same UI

▶ Create scheduled jobs or run individual jobs manually

▶ Repeat jobs hourly, daily, weekly, or monthly

▶ Backup/archive direct from EditShare media spaces and project spaces

▶ Supports execution of multiple simultaneous jobs

▶ 'Pre-flight' check system to ensure jobs will run as scheduled

▶ Progress indicator with file count and estimated time to completion

▶ Full job completion reporting including file lists

▶ Variable bandwidth limits can be scheduled to avoid compromising the performance of online storage

▶ Complete archive and backup tools including LTO tape management

▶ Create multiple tape pools for different projects or for multiple repositories

▶ Restore EditShare Spaces, selected files, or all files to the exact state they were in when any Ark Tape Job was run

▶ Support for out-of-library tapes

▶ Supports multiple Ark Disk servers

▶ Supports all file types, with individual file restoration of media from mainstream NLE systems such as Avid, Final Cut Pro, Lightworks, and Premiere Pro

SPECIAL FEATURES WHEN USED WITH EDITSHARE FLOW

▶ Proxy video files are automatically created for all media copied to Ark, enabling browse, search, and viewing of all clips stored on Ark

▶ The status of all clips is shown in Flow Browse: online, archived, online + archived, or offline

▶ Authorized users can restore individual clips from within the Flow Browse application

▶ The media space restore destination can be chosen by the user from within the Flow Browse client

▶ Users can delete individual media files from Ark Disk

▶ Users can partially restore clips archived on Ark Disk based on marking 'in' and 'out' points

▶ Users can get an instant visual indication of which parts of a clip have already been restored.

EXPANDABILITY

▶ 'Vertical Scalability': expand a single Ark Disk server via PCI-e expansion. Add up to 10 additional 16-drive Ark Disk Expansion Chassis for maximum capacity of 176 drives per Ark Disk system, or about 616 terabytes of usable RAID 6 protected archive storage

▶ 'Horizontal Scalability': add additional Ark Disk servers via Ark Master software and the Gigabit or 10-Gigabit network

▶ Control multiple Ark Disk servers in a unified storage pool for unlimited archival storage

NETWORKING

▶ Gigabit Ethernet (1 GigE) and 10-Gigabit Ethernet (10 GigE) support, including support for bonded 10 GigE connections

▶ Dual port 1 GigE interface standard

▶ Optional single or dual port 10 GigE network interfaces available in: CX4, 10GBase-T, or SFP+ Fibre (SR/LR/ER/ Direct Attach Cable).

FILE AND OPERATING SYSTEMS

▶ Linux Mandriva 64-bit Server OS

▶ XFS Real-time high performance file system (on media RAID).

Ark Disk server and 48-slot LTO-6 tape library, for a combination of nearline disk-based and energy-saving tape-based archiving

Ark Disk servers are expandable up to 704 terabytes of raw storage.

Ark Gateway server and 24-slot LTO-6 tape library

Ark Product Specifications

SERVER MODELS

Ark Disk Director (3RU) - can also be deployed as a combination Ark Disk Director / Ark Tape Gateway server

Ark Disk Expansion (3RU)

Ark Tape Gateway (2RU)

SERVER HARDWARE

- Intel Quad Core Xeon CPU, Intel chipset
- 12GB DDR3-1333 MHz ECC high-speed RAM
- Mirrored 2.5" 320GB SATA 3 Gb/s OS drives, rear accessible
- 6Gb/s Hardware RAID Controllers with SATA/SAS ports
- 3.5" enterprise-class 7200rpm SATA or SAS 6Gb/s media drives in 1TB, 2TB, or 4TB capacities (16 per Ark Disk Director or Expansion Chassis, 4 per Ark Tape Gateway)
- RAID 6 as standard, configurable to other RAID standards such as RAID 5.

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

ELECTRICAL

Dual universal input	100-260VAC, 50/60Hz
Max power consumption	Ark Disk Director: 450 W
	Ark Disk Expansion: 250 W
	Ark Tape: 225 W
Power supply	Hot swap redundant high-efficiency (1+1 module)
Compliance	RoHS compliant, cNRTLus (cTUVus), CE Mark, FCC Part 15, etc.

ENVIRONMENTAL

Temperature	0°C (32°F) ~ 50°C (122°F)
Humidity	5% ~ 95% non-condensing
Typical Thermal Output	Ark Disk Director: 1200-1500 BTU/hr
	Ark Disk Expansion: 750-850 BTU/hr
	Ark Tape Gateway: 700-800 BTU/hr

DIMENSIONS

(Width x Height x Depth) (All rack-mountable and supplied with rack rails)

Disk Director (3RU)	19x5.25x27.5 in. / 483x134x699 mm
Disk Expansion (3RU)	19x5.25x23.5 in. / 483x134x597 mm
Gateway Server (2RU)	19x3.5x27.5 in. / 483x89x699 mm

MAX SHIPPING WEIGHT

Ark Disk Director	120lbs
Ark Disk Expansion	75lbs
Ark Gateway Server	80lbs

QUALIFIED LTO TAPE LIBRARIES

Models	EditShare 24-, 48-, 72-, and 96-slot libraries powered by HP
	Quantum Scalar series including i40, i80, and i500
	SpectraLogic T50e
	Dell PowerVault
LTO Drive Details	Support for up to 2 LTO tape drives per library
	LTO-6, LTO-5, and LTO-4 support
	Standard 6Gb/sec SAS connectivity to LTO tape drives
	Optional 8Gb/sec fibre channel connectivity

EditShare®

ARK