

# Media Manager & HSM

Fast Archive – Long-Term Archive - Data Mover



# What Is a Media Manager

- A tool to move video contents between different devices
- Moving can include also changing as rewrapping or transcoding
- The data movement policy is applied to get the best compromise between cost and speed

# What is a HSM

- Hierarchical Space Manager
  - HSM optimize you space according to its cost
  - HSM use the less expensive media able to fulfill your request
- An HSM system is a tool to move and optimize video contents between different media
- File move is necessary to save space in video servers and/or in disk libraries
- The data movement policy is applied to get the best compromise between cost and speed

# How Many Archives

A Video system has 4 archive levels:

- Video server memory
  - Access time = 0, ready to run
- Fast Archive
  - Access time = millisecond, ready to run after a few seconds
- Long Term Archive (data tape)
  - Access time 2 minutes, on request, the system automatically downloads video contents into the server
- Standard videotape archive
  - Access time 15 minutes; the tape needs to be found and ingested in the system

Moreover, a browsing system of 'unlimited' capacity is given to browse all the footage

## Traditional Approach

- In a traditional approach you have 4 different systems
  - Automation
  - Media asset management
  - HSM
  - News
- All four systems share the same resources and communicate with a limited interface
- The drawback is that the four systems come from different companies and it is very difficult to make them run together and cooperate

## Etere Approach

- Etere solution consists of a single framework to manage all the network activities
- This approach outdates the concepts of cache and policy
- The system cooperates as a whole, making it easy to trace and retrieve information
- Data are moved according to workflow integrated with all the media management metadata, faster and more efficient

# Media Manager

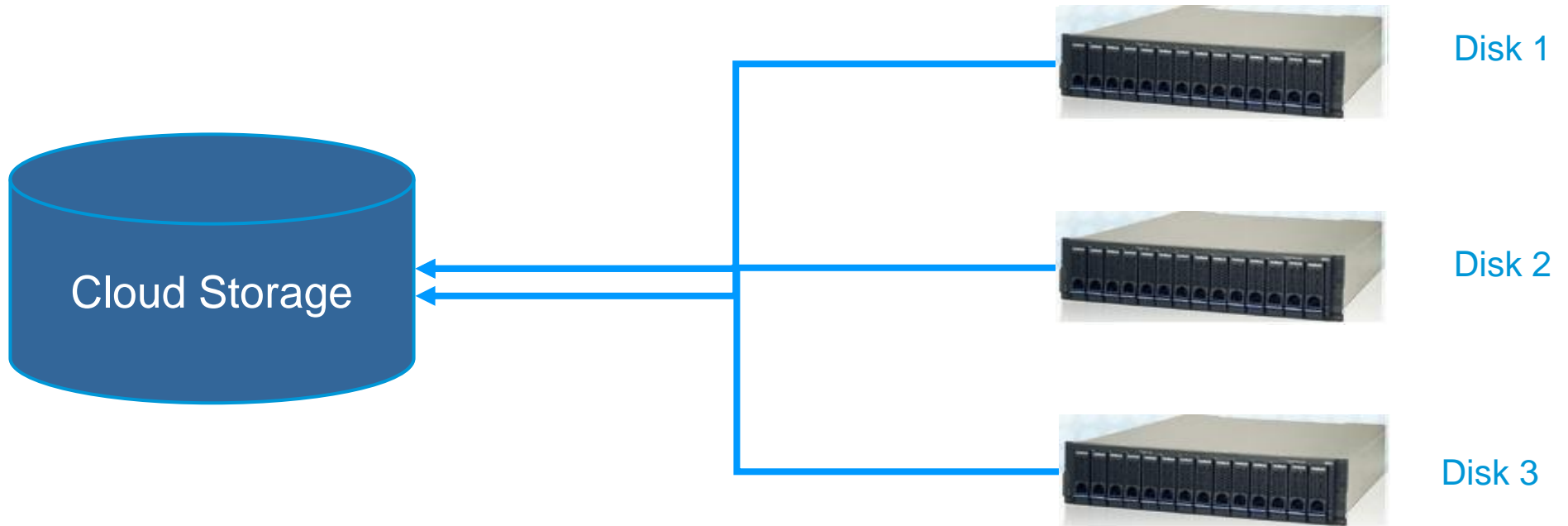


# Cloud Media Management

- The Key of this project was Cloud
- Etere MM create a private Cloud where to store your content
- Cloud devices are logical entities. They can be a group of devices or part of one device or both
- Etere MM automatically controls the available space in the cloud  
Etere MM has a multi-volume management intelligence



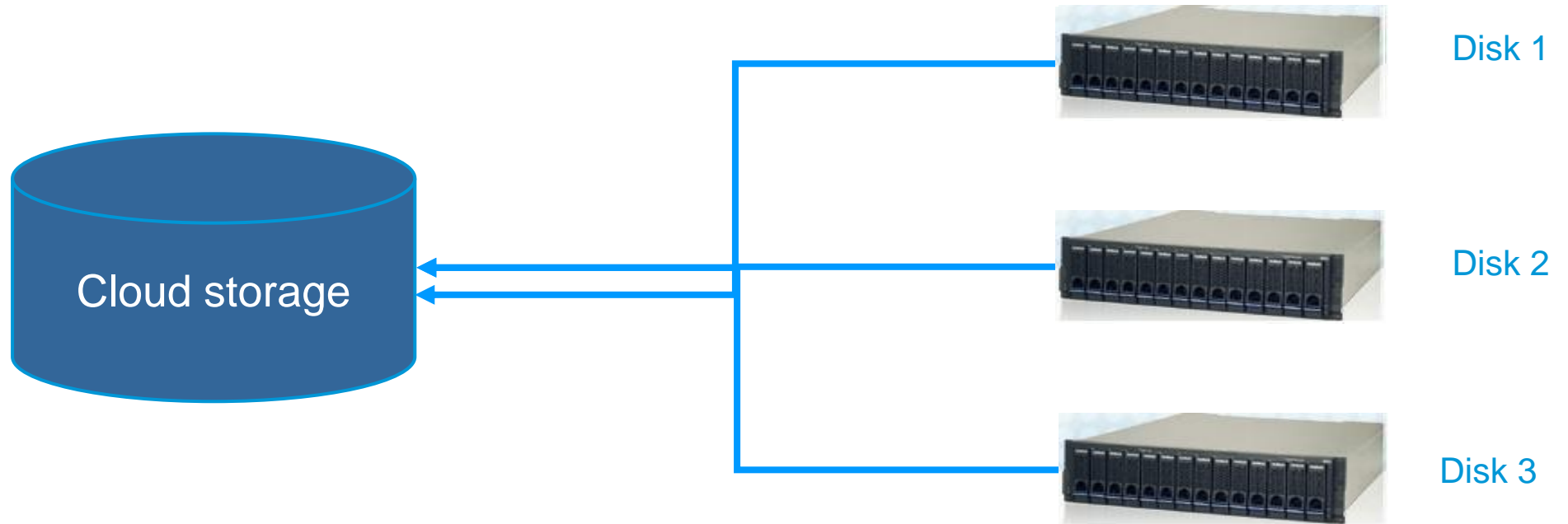
## Cloud Devices



## Join Devices

- One metadvice join multiple physical devices
- Files are spread out in the metadvice by Etere MM
- You can add disk to the metadvice without changing the archiving workflow

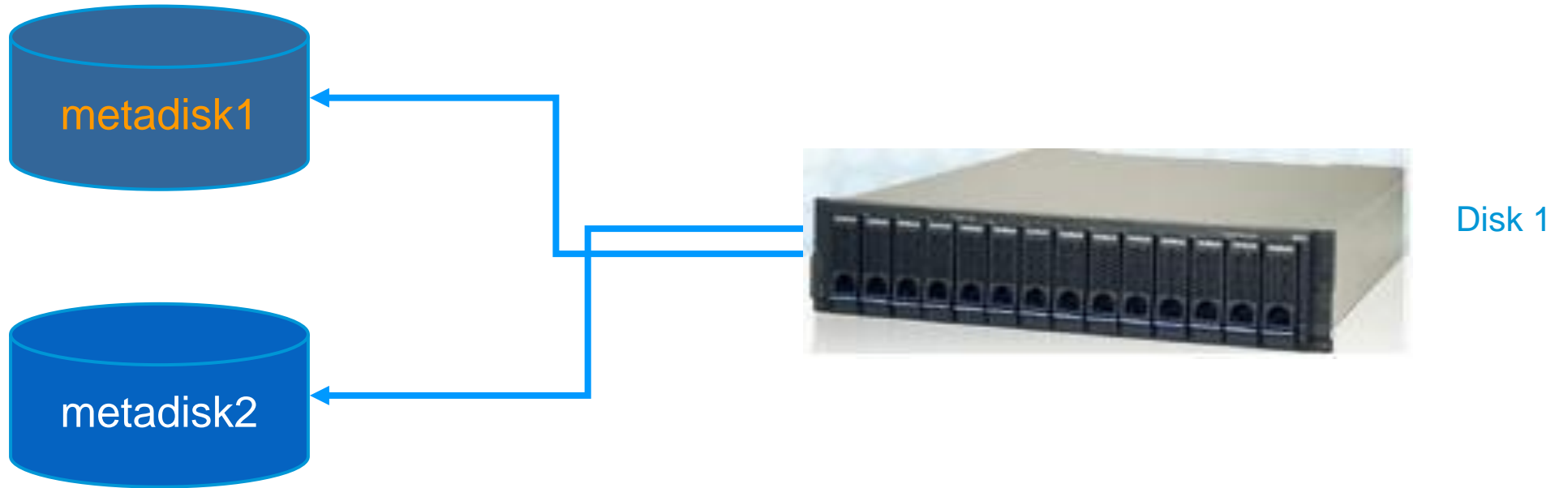
## Join Storages



## Partition Devices

- One metadvice is part of a bigger array
- The logical space is limited using Etere configuration
- You can change the space changing one configuration on Etere, no partition is necessary
- Useful if you wish to divide the spave between promo and commercial for example

# Partition Device



# Space Limit Settings

Maximum space usable by

Maximum space used by

**Cloud-devices**  
Cloud-devices space management

Cloud-devices  
(the space is indicated in hhhh:mm)

ID	Description	Maximum space usable by		Maximum space used by		Media
		Single Assets	Common Assets	Single Assets	Common Assets	
1	System Storage	00000:00	00000:00	00000:00	00000:00	
2	HIRES	00000:00	00000:00	00000:00	00000:00	
3	LOWRES	00000:00	00000:00	00000:00	00013:37	
5	TAPELESS_RECEPTION	00000:00	00000:00	00000:00	00000:00	
6	No Media Pool	00000:00	00000:00	00000:00	00000:00	
7	ETLIBRARYWS2008_DATAPUMP	00000:00	00000:00	00000:00	00005:29	
8	HSM HIRES	00000:00	00000:00	00000:00	00005:28	
14	PROJECT	00000:00	00000:00	00000:00	00000:00	
16	MTX1_SD	00000:00	00000:00	00000:00	00002:16	2MTX
18	MATROX MTX3	00000:00	00000:00	00000:00	00000:46	1MTX

ID	Description	Single Assets	Common Assets	Media
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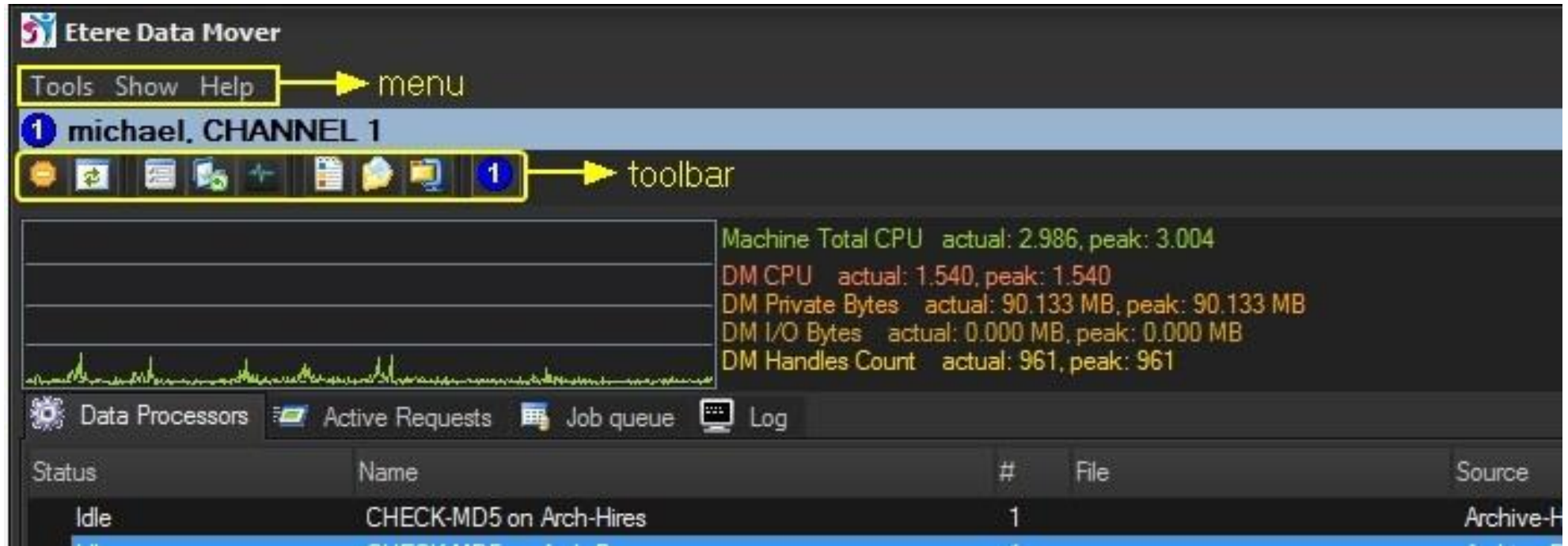
Maximum usable space  
From single assets per station  
00000:00  
From assets common to other stations  
00000:00

Color the maximum space used with...  
In case it exceeds the limit  
In case 90% is reached

## Free To Design

- Etere media manager allows you a free design of the system
- Choose the logicameta devices as your convenience
- Choose the physicmeta devices as the best price/performances in the market
- Join them together using Etere Media Manager
- Create your workflow to use them as your wish

# Load Balancing



Status	Name	File	Source
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# Cloud Storage Capabilities

- Load balancing
  - Multiple data mover sharing the same job
- Space aggregation
- Lan and Wan transfer
  - FTP Active
  - FTP Passive
  - FTP Server to Server
  - NTFS-NFS
  - UDP file transfer
  - S3 protocol
- All those features allow you to use standard IT storage instead of special solutions

# ETERE HSM



## Etere HSM

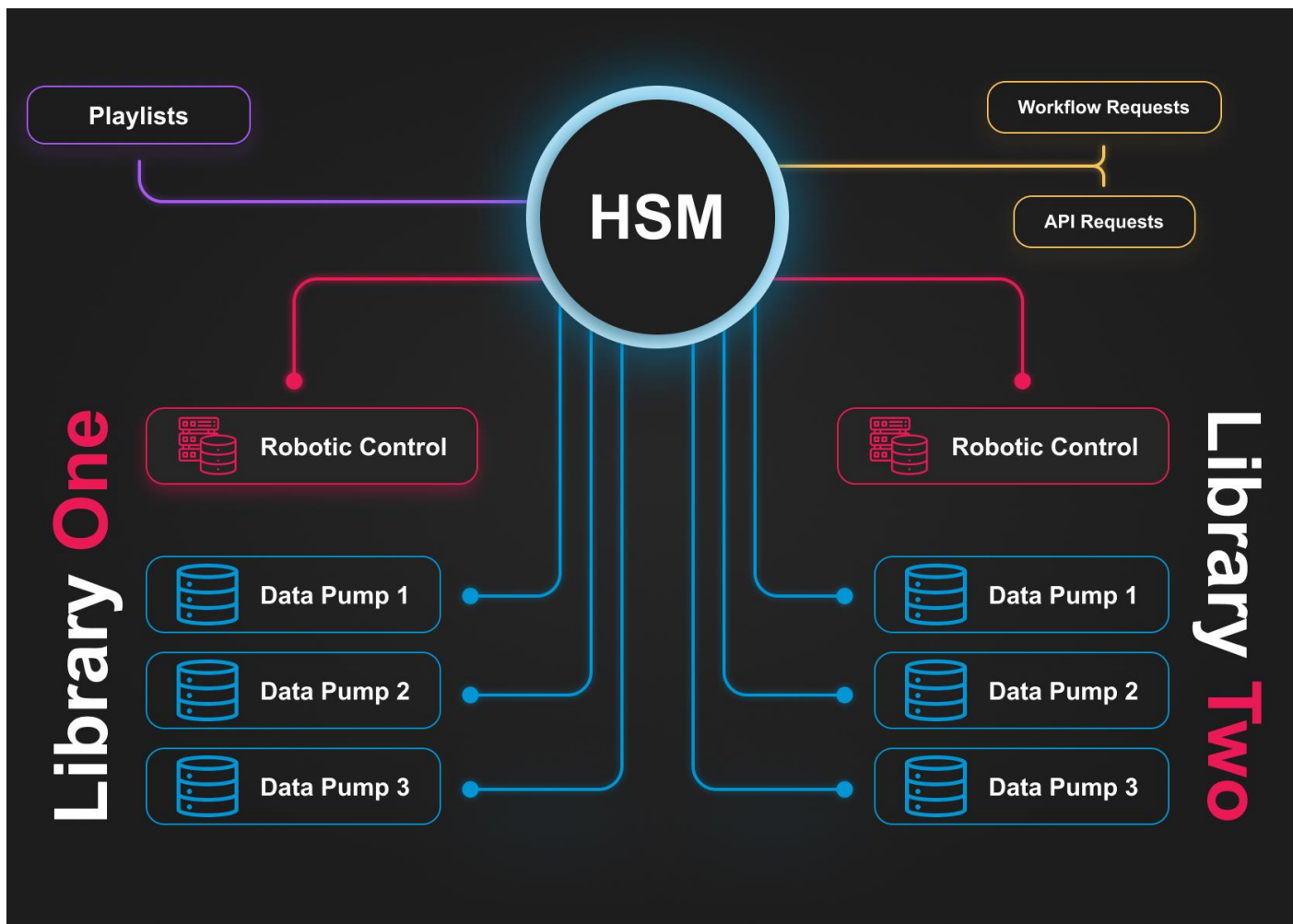
- This system ensures the best performances and integration
- Etere HSM + MM the the only system in the market with an embedded multi-level and multi-rule cache
- Etere HSM intelligent engine ensures the best performances with less HW involvement than that required by Etere competitors
- Etere HSM allows you to design your logical system without limits

## Etere HSM Design

- Etere HSM has a very open design
- Can use as long term archive with all technologies and mix them together
  - LTO libraries
  - ODA libraries
  - Disk archiving
  - Cloud storage

## LTO/ODA Libraries

Etere can join multiple libraries in a single logical system  
Allows multi site archive and Disaster recovery planning  
Include LTO migration between different generation.

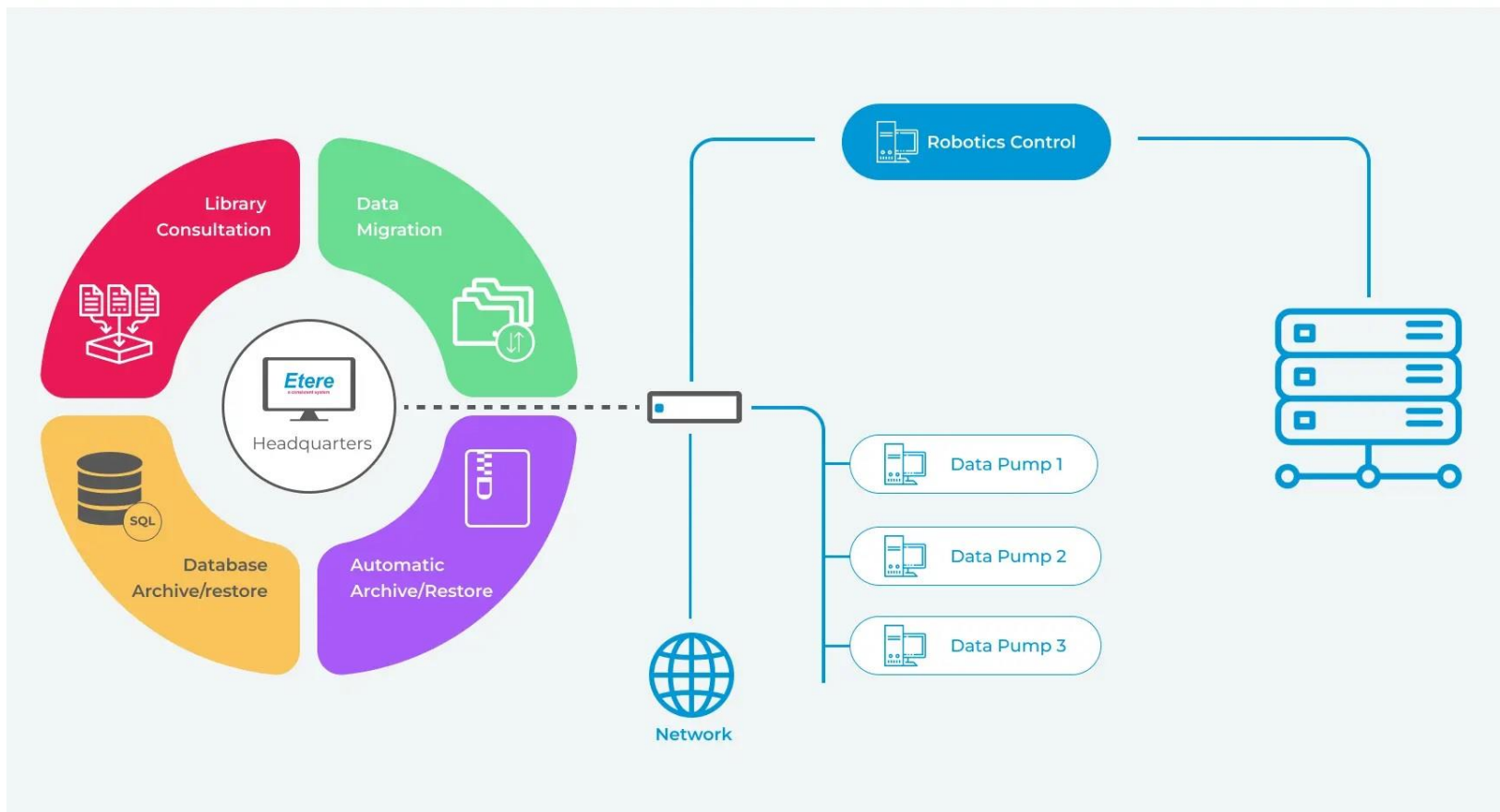


## Etere Cloud HSM LTO Features

- Optimized for broadcast use, archives long term media and restores as fast as it's possible
- Each drive can be assigned as R/W according to timeslots in the day and the week
- Online and offline tape management
- SMPTE 2034 (AXF) archive format for long life
- LTFS format as a free option
- Background defragmentation
- Dynamic media pools
- Integrated tape migration
- Touch function to test file integrity periodically
- Conforming to Open Archival Information System (or OAIS) procedures

## HIERARCHICAL STORAGE MANAGEMENT

**Etere**  
a consistent system

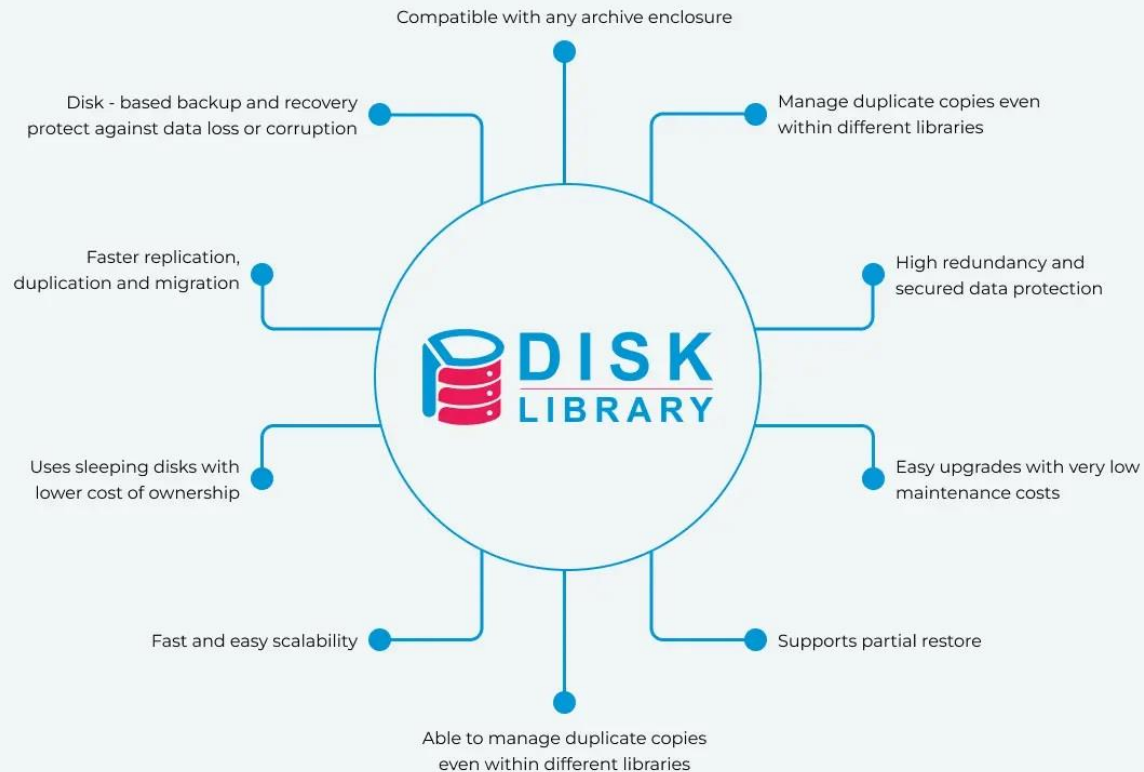


**Etere**  
a consistent system



## ETERE DISK LIBRARY

**Etere**  
a consistent system



**Etere**  
a consistent system

# Why Etere DiskLibrary

- Minimum setup costs
- No LTO drive/ODA drives/Library
- Low power consumption equivalent to LTO
- Easy to upgrade
- 100 times faster
- Similar Footprint
- Mix hardware from multiple vendors
- Good value of money until 2PB



## Why DiskLibrary

- Low setup cost and power consumption compared to LTO
- With current technology, it's cheaper than LTO for capacity up to 2 PB
- Easy to upgrade, mix different generations in the same system
- Off-premise deployments, configurations and upgrades at distributed locations
- Disk capacity doubles over 1.5 years at the same price
- JBODS or MAIDS enclosures are inexpensive and interchangeable
- Unlimited bandwidth
- Maximise the potential of your archive easily

## Etere Hybrid Cloud

- Etere HSM supports Hybrid Cloud
- A mix of public, private cloud and on premise cloud
- A single management console
- Manages storage that uses local & off-site resources
- Multiple storage tiers to mix different storage types
- Move data to the cloud to accommodate workflow-driven demands and dynamic requirements
- Supports a highly agile business

# Thank you

[www.etere.com](http://www.etere.com)

