



TSMcluster®



**eXstor Library and
Media Manager
eLMM**

Derived from IBM TSLM



eXstor Tools for
IBM Storage Protect

eXstor
20 Jahre

eXstor Overview

Based in Sinsheim (Germany)

Founded in 2005

IBM Partner since 2005

Focused on IBM disk, tape, storage software

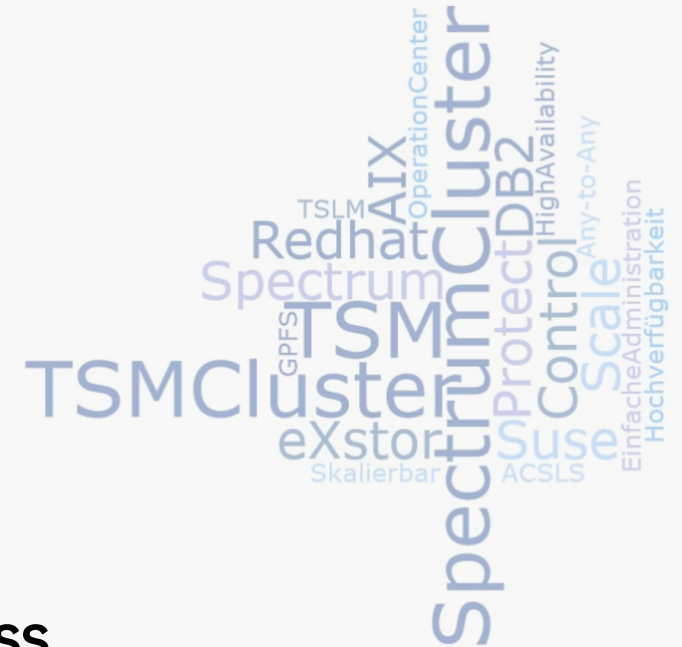


About: Bruno Friess

Started in 1996 with ADSM ATS at IBM in Mainz

3 redbooks, 38 certifications, IBM Champion

Founded eXstor in 2005



Revised replacement product information: IBM Tape System Library Manager software 1.4

Published: 30 January 2024 AD24-0294 Software

Overview

Withdrawal Announcement [924-0077](#), dated January 23, 2024, did not include the appropriate replacement product information.

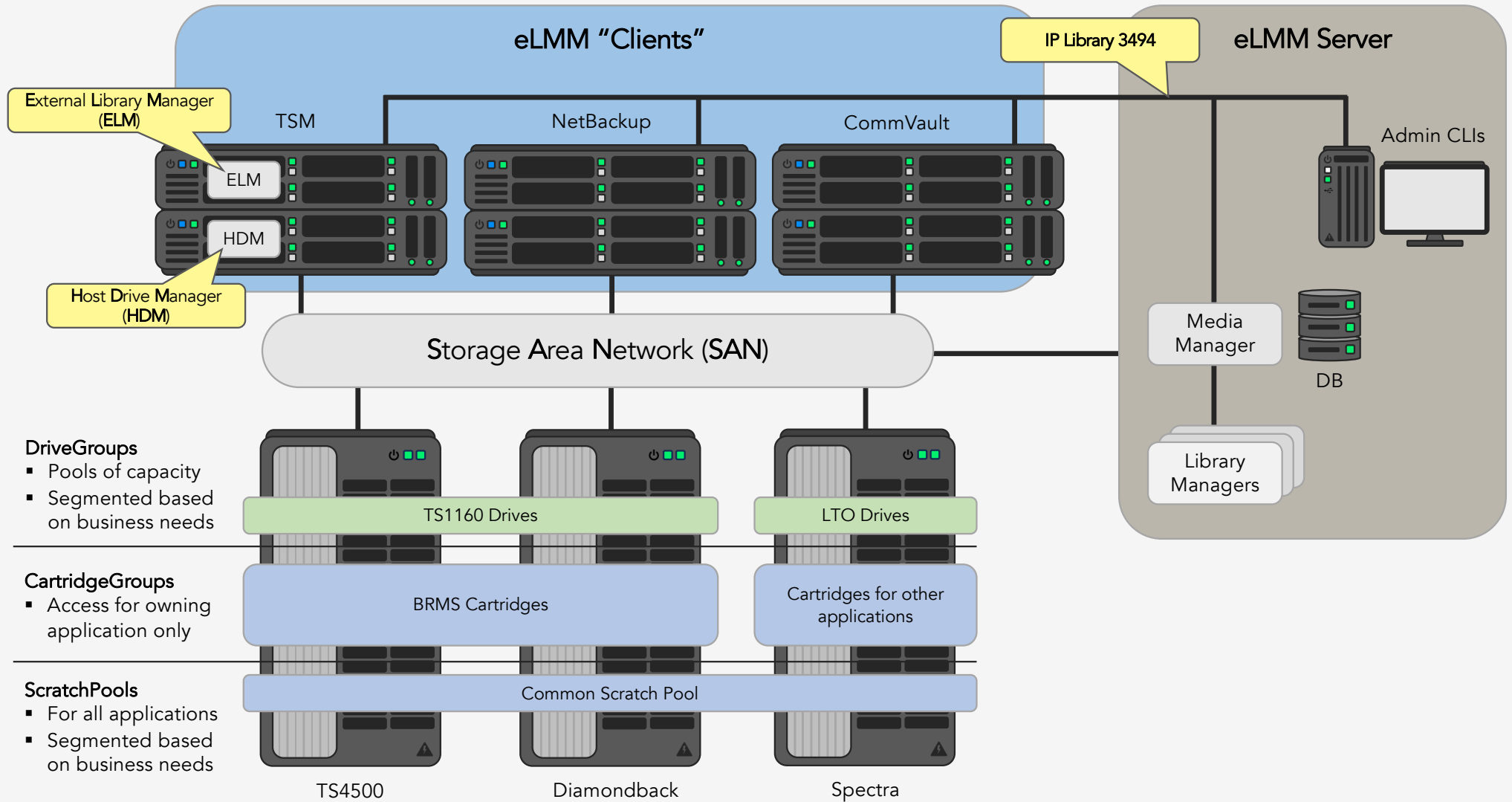
The replacement product for IBM Tape System Library Manager software 1.4 (5639-HAA) is eXstor Library & Media Manager (eLMM).

Description

IBM Tape System Library Manager (TSLM) is a software product which provides a resource management layer between applications such as IBM Storage Protect and the tape library hardware. Effective April 30, 2024 IBM will withdraw from marketing the IBM Tape System Library Manager (TSLM). Effective July 31, 2024, IBM will discontinue support for all currently supported versions and releases of TSLM.

To help protect our TSLM customers install base, IBM is pleased to announce a new formed partnership with [eXstor](#). eXstor has announced the release of their new offering called eXstor Library & Media Manager (eLMM) that is derived from IBM's Tape System Library Manager (TSLM).

- eLMM provides a resource management layer between applications such as ISP and the tape library hardware
- eLMM provides consolidated tape media management services / [library sharing](#)
 - Centralized repository, access control and administration
 - Policy-based drive and cartridge allocation and [media-lifecycle management](#)
 - Advanced resource utilization reporting and auditing
 - Security features to permit or prevent application access to tapes
- Management beyond physical library boundaries with intelligent [path failover](#)
 - Access multiple TS3500s, TS4300, TS4500s and IBM Diamondback as a single library image
 - All non-IBM libraries (Spectra, Quantum, BDT...)
 - Path failover for any drive or library
- 3494 Emulation Option on top of an attached IBM tape library

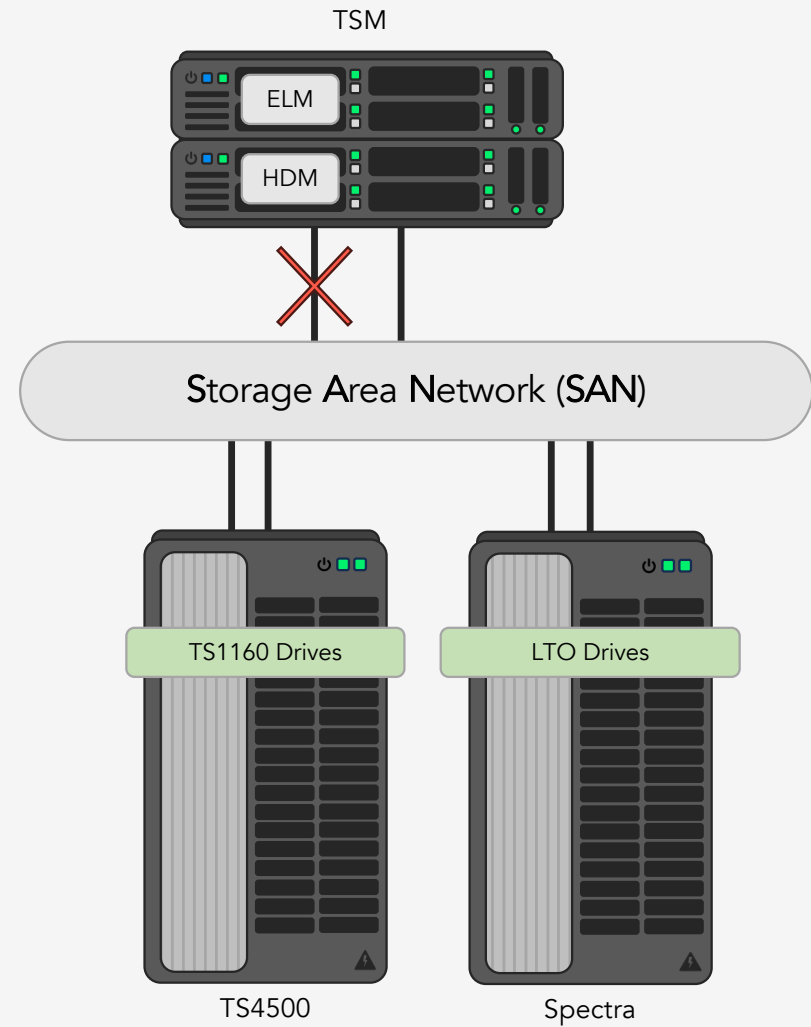


- Control and data path failover
- You can order this with your TS4500, TS4300
- With eLMM the path failover is included with all vendors!
- eLMM uses the HDM agent to scan available drives and their S/N

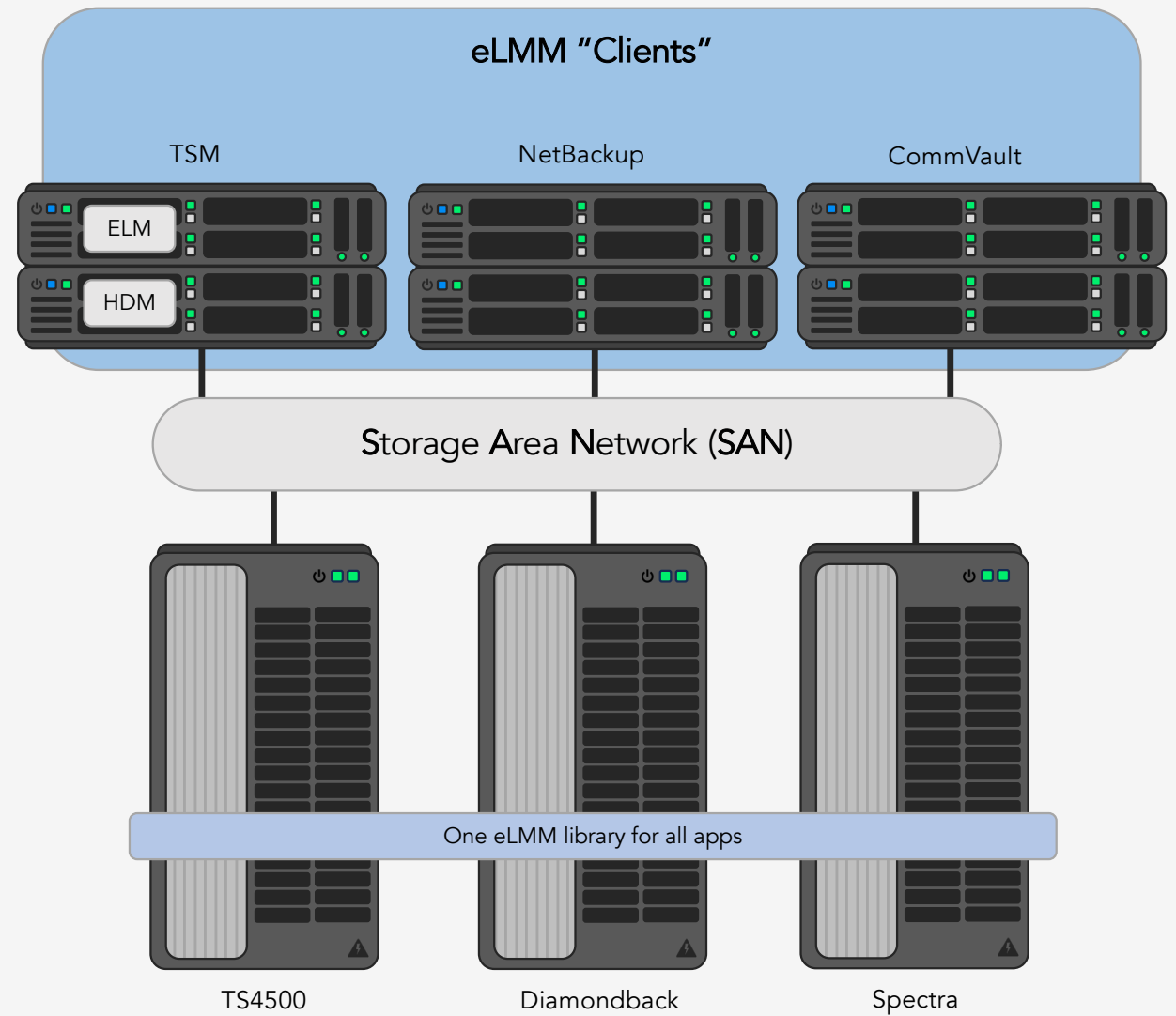
AIX

`/dev/rmt12`
`/dev/rmt17`
`/dev/rmt24`
`/dev/rmt31`

} IBM LTO8, S/N 4ARS6781

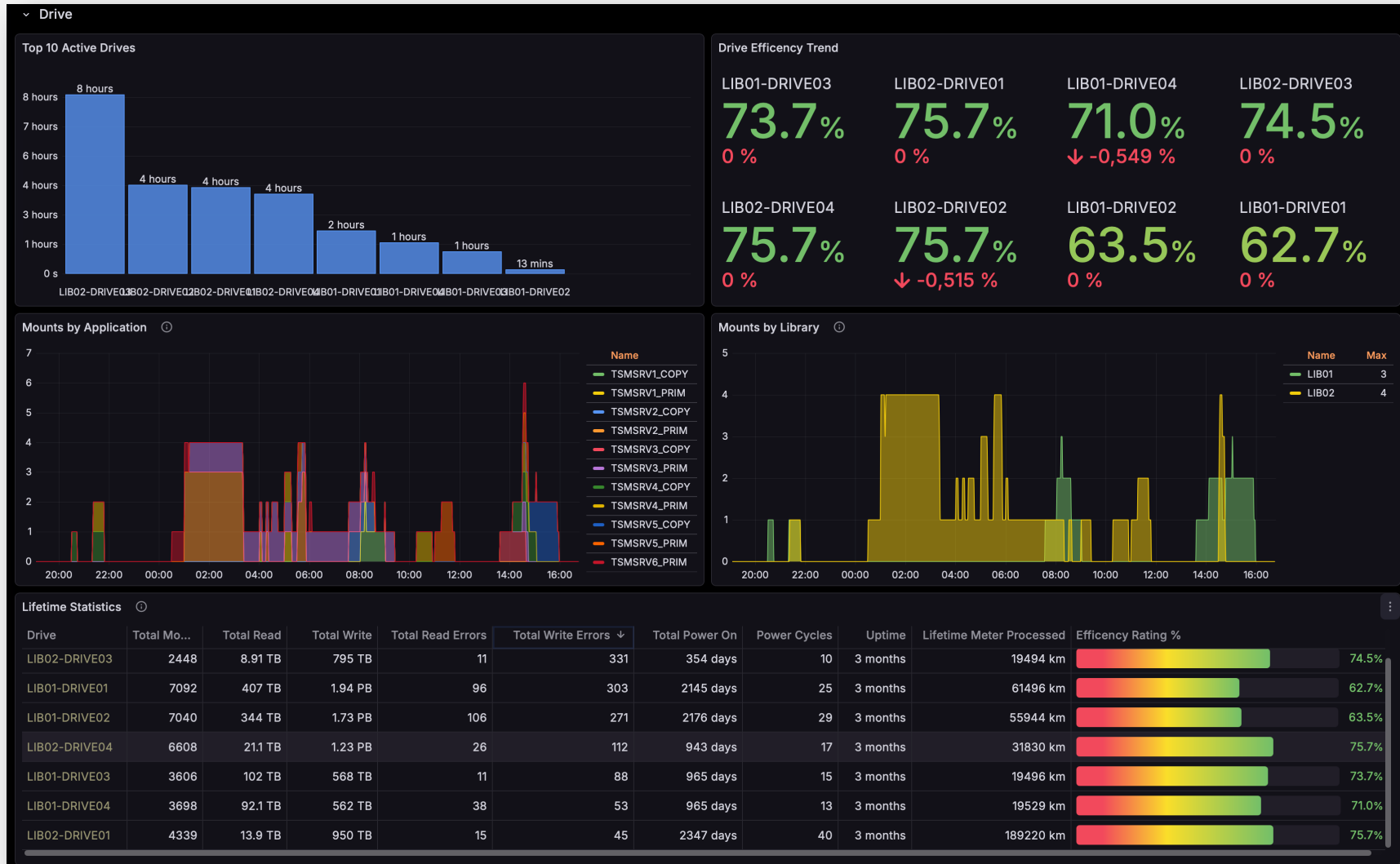


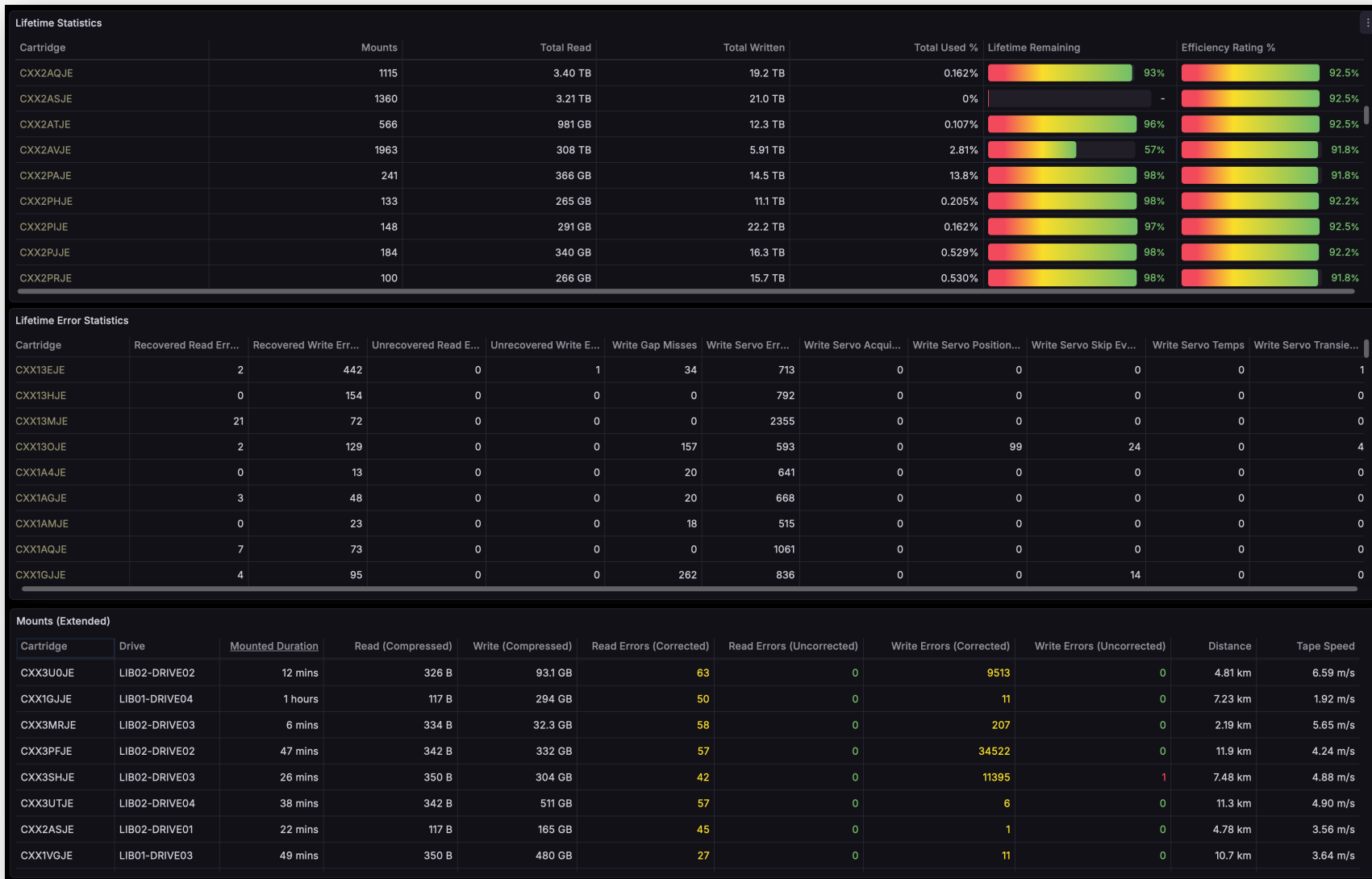
- “Normally” each app gets one lib
 - TSM has its TS4500
 - BRMS hat its TS4300
 - Commvault gets the new Spectra....
- With eLMM you have one logical lib for all
- Drives, Tapes, Libs can be changed while all apps are working

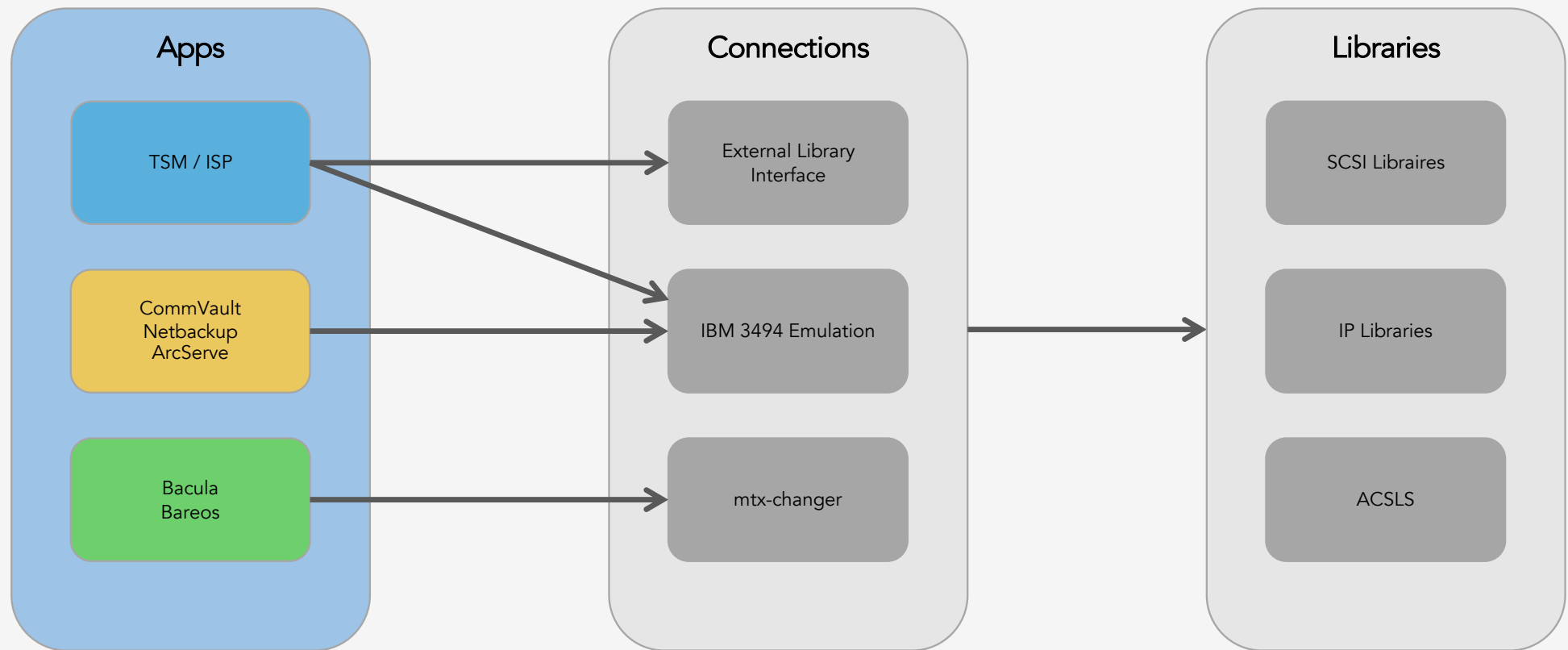


TSM Library Sharing		eLMM
Example: <i>4 x TS4500 Tape Library (in two datacenters)</i> <i>48 TS1160 tape drives per library (a total of 192 tape drives)</i> <i>16 TSM Server with access to all tape drives via 2 I/O paths (no storage agents)</i>		
SAN persistent naming, SAN path/failover	↔	Not necessary, this is done dynamically
TSM libs, drives and $4 \times 48 \times 16 \times 2 = 6144$ paths	↔	One lib, 192 drives, 16 paths (automatic via audit) 1. def library ts4500 libtype=external 2. def path tsm01 ts4500 srct=server destt=libr externalm=/opt/eLMM/client/tsm/elm
Failed drives? Tapes in drives?	↔	Easy dismount of tape while TSM instance is down
Add/remove/replace a drive = a lot to do	↔	One command to add/replace/remove a drive
In any error condition: An audit library is necessary. This is very complicated, because an audit is only possible, when there is no mount!!!	↔	An audit can be started at any time. Even if there are mounts.
Each TSM instance or STA has the same rights	↔	Policy based media access, prioritization, security
Different apps needs logical partitions	↔	- One partition for different apps, shared scratch pool, shared ressources - It is easy to use one partition for TSM, BRMS, CommVault, ArcServe, NetBackup..... - Tapes can be strictly separated
- Limited amount of statistical data about tapes - Data from within TSM and from the library itself (API)	↔	eLMM has more than 300 informations about the tapes (read directly from drive and the chip-in-cartridge)









- eLMM is compatible with IBM Tivoli Storage Manager / IBM Storage Protect V6.3 to V8.2
- All apps which are supporting the IP Library interface (IBM 3494 or IEEE standard)
 - BRMS, Commvault, SEP Sesam, Dell Networker, NetBackup...
- IBM System Storage TS3500, TS4300, TS4500 Tape Library and IBM Diamondback
- All non-IBM Libraries (Spectra, Quantum, BDT...)
- IBM Linear Tape Open (LTO) Ultrium drives (LTO3 to [LTO10](#))
- IBM Enterprise Tape drives (TS1120 to TS1160) and the [new TS1170](#)
- Supported OS are AIX, RHEL, SLES and Windows (Client only)

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