Quantum®

Scalar EDLM

Maintain Healthy Media for Long-Term Data Preservation

It's no secret that the amount of data being generated and retained by organizations continues to grow. Not only is the volume of data growing, but so is the length of time that organizations are retaining their data. Since tape technology has the lowest storage TCO, tape libraries are widely used for the long-term preservation of data.

DATA AVAILABILITY

With large volumes of data being stored for years and much of it not being touched, it's important to know the data will be available when needed. Whether archiving primary data, retaining data for regulatory compliance, or copying data for disaster recovery, it's critical to monitor the tape cartridges when stored for long periods to ensure they remain healthy and the data remains available.

EDLM

Scalar® Extended Data Life Management (EDLM) is an optional licensed feature that proactively checks the health of data on tape cartridges. EDLM is very easy to use, as user-defined policies automate the data integrity scanning process that runs entirely in the background without interruption of production processes. EDLM enables a set-and-forget operation to ensure the health of inactive data during long-term storage over multiple years.

SCANNING POLICIES

The user-defined policies are simple to configure using the intuitive library user interface. Scanning policies can be event based, such as whenever a tape is exported or imported to/from the library. Policies can also be time based, or a combination of both event and time based. Additionally, there are three levels of scanning available, enabling users to tune the automated health checks to meet their specific requirements.

STORNEXT INTEGRATION

For unstructured data use cases where a Scalar tape library or StorNext® AEL Archive is deployed with StorNext Storage Manager, if EDLM identifies a suspect tape, StorNext will automatically migrate the data to a new tape and update its database to reflect the new file locations. For other applications, EDLM will send a notification of suspect tapes based on policies for administrators to take action, such as make a new tape copy.

FEATURES & BENEFITS

Automated Media Health Checks
Maintain healthy media for years, ensuring data is available when needed.

Integrated Management
Save administration time by configuring and managing EDLM from the library interface.

Reduced Adminstration Time
Policy-based scanning enables set-and-forget operation as media scans are based on user-defined policies to meet their requirements.

Three Scanning Options
Enable fine-tuning of scanning processes to meet user needs.

Background Operation
Operates entirely in the background, with dedicated scanning tape drives, ensuring there is no impact on production operations.

StorNext Integration
When deployed with Quantum StorNext, data on suspect tapes is automatically copied to new tapes, creating a self-healing archive.

> **LEARN MORE:**
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GENERAL

Library Support:[1]	Scalar i6000, Scalar i6, Scalar i500
	StorNext AEL6000, StorNext AEL6, StorNext AEL500
Media Support:[2]	LTO-3, LTO-4, LTO-5, LTO-6, LTO-7

(1) Scalar libraries require purchase of an optional EDLM license; StorNext AEL Archives include the EDLM license.
(2) Requires the purchase of appropriate LTO generation EDLM scanning drives. Scalar i6 and StorNext AEL6 do not support LTO-3 media.

SCANNING POLICIES

Quick Scan:	Does not scan the tape. Evaluates data from the cartridge memory (CM) only. A quick scan takes **less than one minute** per tape.
Normal Scan:	Evaluates the CM and scans selected portions of the tape, focusing on areas most likely to indicate problems. A normal scan can take **20 minutes** per tape. This time should remain the same regardless of the LTO media generation being scanned.
Full Scan:	Evaluates the CM and scans the entire tape. The time it takes to complete a full scan varies based on the generation of the LTO media. The table below provides the time it takes to complete a full scan on LTO media.

Time to Complete a Full Scan

Media	Native Throughput (MB/sec)	Native Capacity (GB)	Native Max Scan Time (Hours)
LTO-7	300	6,000	5.6
LTO-6	160	2,500	4.3
LTO-5	140	1,500	3.0
LTO-4	120	800	1.9
LTO-3	80	400	1.4

The scanning times listed in the table assume that the tapes are full of data. EDLM scans the portion of tape with data. If the tapes are less than full, the time it takes to complete a full scan will be similarly reduced.
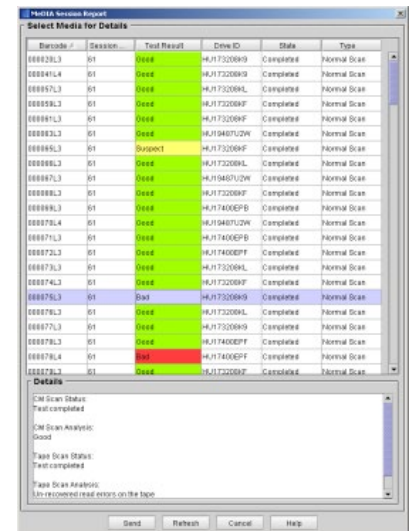
STORNEXT INTEGRATION

When deployed with StorNext, an automated copy policy is available. When selected, this policy automatically requests StorNext Storage Manager to copy all data from a suspect tape to another tape. StorNext then updates the location of all files to the new tape.

ABOUT QUANTUM

Quantum is a leading expert in scale-out tiered storage, archive, and data protection, providing solutions for capturing, sharing, and preserving digital assets over the entire data lifecycle. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to address their most demanding data workflow challenges. Quantum's end-to-end, tiered storage foundation enables customers to maximize the value of their data by making it accessible whenever and wherever needed, retaining it indefinitely and reducing total cost and complexity. See how at **www.quantum.com/customerstories**.

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