

EMC DISK LIBRARY FOR MAINFRAME

Integrated solution for all tape use cases

ESSENTIALS

Solution for all mainframe use cases

- Satisfies all tape workloads including batch and backup
- Works seamlessly with mainframe applications
- Supports primary and deduplication storage concurrently

Improved performance and scalability

- Process batch, backup, and restores faster
- Access tape data at disk speeds
- Reduce CPU utilization
- Scale performance and storage as needed

Multisite disaster recovery

- Replicate all or part of your tape data
- Eliminate channel extension equipment
- Perform simple and reliable end-to-end DR testing

World-class support and services

- Connect EMC
- EMC Secure Remote Support (ESRS)
- EMC Global Services

A major challenge in the area of mainframe batch processing, DFHSM and backup is the growth of information throughout the enterprise; some estimates say this can be as high as 60 percent per year. While tape has always provided inexpensive storage for batch, backups, disaster recovery, and long-term archives, it does present a number of challenges. Today's data centers face demand for better service-level agreements (SLAs), shorter backup and restore operations, and less complex and less costly tape management processes. Eliminating the risk of missing information due to lost or damaged tapes is a must.

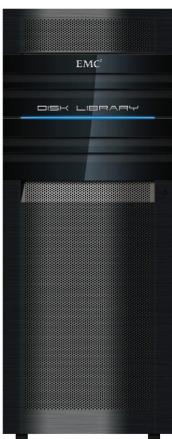
The EMC® Disk Library for mainframe is available in two configurations. The EMC DLm6000 is the EMC flagship mainframe solution in terms of scalability and performance. The EMC DLm120 is designed for users that have less need for massive scalability, or who do not require deduplication storage. The DLm6000 addresses the challenges of the enterprise data center and delivers industry-leading performance and availability to mainframe tape operations. Disk Library for mainframe combines RAID 6 protected disk storage, hot-standby disks, tape emulation, hardware compression, and the ability to combine both primary and deduplication storage in the same system to meet enterprise mainframe data center requirements. All are essential capabilities to provide your enterprise with a high-capacity and performance-oriented mainframe storage solution in the smallest possible footprint.

MANAGE ALL MAINFRAME TAPE USE CASES

In addition to traditional backup and recovery, mainframe tape is used for production batch applications, fixed-content archival, and DFHSM migration that extends online storage of information, billing records, and call center data for example. In many cases, competing vendors require multiple tape subsystems to meet all tape processing needs. Disk Library for mainframe supports all of the common mainframe tape use case workloads in a single platform.

Disk Library for mainframe connects directly to the mainframe host via FICON channels and it appears to the mainframe operating system as 3480/3490/3590 tape drives. All tape commands are supported by the DLm6000 and DLm120 and respond as physical tape drives. This means existing work processes, tape management systems, and applications can run without any modifications.

Unlike other solutions, Disk Library for mainframe offers concurrent support for both primary and deduplication storage within the same platform. Tape data can be directed to the appropriate storage based on its intended use. For example, backup operations can be directed to deduplication storage where the data footprint will be minimized, significantly reducing storage and replication costs. Unique data types, such as DFHSM migration, can be directed to primary storage and will be available for near-instantaneous recalls.



System	Usable Capacity	Virtual Tape Engines
Dm120	9.5 – 96.5 TB ^{1,2}	1-2
Dm6000	40 TB – 5.7 PB ^{3,4}	2-6

¹ Before compression

² Scalable in increments of 9.5 TB

³ Scalable in increments of 40 TB

⁴ Logical capacity

PERFORMANCE AND SCALABILITY

Volumes of data continue to increase while batch windows are shrinking and backup windows and recovery time objectives continue to decrease. Disk Library for mainframe provides a significant advantage over tape by eliminating physical tape mounts, robotic movements, tape rewinds, and drive contention. Batch and backup operations that took hours can now finish in minutes. The EMC Disk Library for mainframe provides throughput of up to 2 GB/s, or over 7.2 TB/hr.

The Dm6000 or Dm120 store each volser as an individual file on spinning disk and only use as much space as required, eliminating the need for tape stacking. As a result, when the tape management system issues a mount request, it is typically satisfied within seconds. This feature is ideal for recall operations such as accessing fixed-content data or DFHSM recalls. With Disk Library for mainframe, the retrieval time of information is reduced from minutes via tape to just seconds via disk.

Disk Library for mainframe can help reduce CPU utilization by redirecting DFHSM workloads from tier-1 storage. By leveraging its disk-based performance and compression, you can migrate LO data sets directly to ML2 and avoid ML1 processing, without compromising recall time.

The modular architecture of the Disk Library for mainframe allows FICON channels and storage capacity to be added non-disruptively as processing requirements change. FICON channels can be added (in increments of two) up to the maximum supported in each system. Storage can be added in increments up to the maximum of 5.7 PB of logical storage.

Disk Library for mainframe enables you to share tape drives between 64 active LPARs and SYSPLEX systems without the need for additional tape-sharing software on the mainframe, reducing CPU utilization and avoiding maintenance costs.

MULTISITE DISASTER RECOVERY

The Dm6000 and Dm120 can replicate from one source site to one or two remote sites. Users have the option to replicate part or all of their tape data and choose which data receives priority. Replication is IP based and eliminates the need for channel extension equipment. This is performed at the filesystem level on primary storage and at the folder level on deduplication storage.

Disk Library for mainframe users can perform end-to-end disaster recovery (DR) testing without stopping replication and compromising DR readiness. Disk Library for mainframe can make snapshots or clones of backup data from which DR testing can be performed. Once completed, the copied data can simply be deleted and normal processing continued.

WORLD-CLASS SUPPORT AND SERVICES

EMC maintains a strong and highly visible commitment to protecting your information infrastructure through the 24x7 availability of remote technical support resources and automated secure remote support solutions. The EMC Secure Remote Support (ESRS) gateway provides a secure, IP-based, distributed remote service support solution giving you command, control, and visibility of remote support access.

ConnectEMC simplifies and standardizes the way you can set “call home” or have the Disk Library for mainframe send an email alert to the tape administrator. It is also a method EMC systems use to transport event files—error, informational, configuration, and others—from a service workstation to EMC back-office support systems.

SNMP monitoring allows administrators to easily integrate the Disk Library for mainframe with existing SNMP monitoring tools.

EMC Global Services provides expert planning, implementation, and management services to ensure that your EMC Disk Library for mainframe performs optimally in your environment and exceeds your business objectives. These services include the EMC Design and Implementation Service, which provides expert installation and integration to ensure the success of your implementation and accelerate the business impact of your investment.

CONTACT US

To learn more about the EMC Disk Library for mainframe, contact your local EMC sales representative or authorized value-added reseller, call us at 1-866-464-7381, or visit our website at www.EMC.com.

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