

Mainframe Data Library 100S

Delivers a Complete Virtual Tape Library for the IBM Mainframe



Mainframe Data Library 100S (MDL-100S) provides everything you need to deploy a virtual tape library into your existing mainframe environment. MDL-100S is a 2U (3.5 inches high) rack mount controller. Included in the controller are the channel interface(s) to connect to your mainframe's FICON or ESCON channels, Virtuent tape emulation software to emulate 3480, 3490, or 3590 tape drives, and internal storage used to house the virtual tape library.

The base MDL-100S provides a single multi-mode or single-mode FICON interface or a single ESCON interface and emulates up to 32 IBM 3480, 3490, or 3590 tape drives to the IBM mainframe. As the mainframe writes new tape volumes (VOLSERs) to one of the MDL-100S emulated drives, Virtuent software writes a file onto its internal RAID protected storage containing the tape volume's data. Each individual tape volume image is contained in a single file stored on the MDL-100S disk.

The IBM mainframe operating system is unaware that the tape volume has been virtualized and written to disk; rather than written to a physical tape cartridge. Later, when the mainframe needs to retrieve the data, MDL-100S uses the tape volume serial number (VOLSER) to locate the correct file within the virtual tape library and presents the data back to the mainframe in the exact same format that it was written in.

MDL-100S performs data compression on the data before writing it to disk as directed by the IDRC compression indicator passed to the tape drive by the mainframe with each block of data.

MDL-100S can be expanded to support a maximum of 2 FICON interfaces or 2 or 3 ESCON interfaces; increasing throughput and providing alternate path support between the mainframe and the controller. Like all MDL products, MDL-100S provides full support for Multiple Image Facility (MIF), FICON / ESCON directors, and IBM Sysplex.

MDL-100S uses a Redundant Array of Independent Disks (RAID) to provide data protection to system control software and tape data written to the library. Automatic e-mail alerts can be configured to provide notification of errors detected in the RAID subsystem.

MDL-100S provides gigabit Ethernet connectivity to a network supporting administration and control, error alerting, and data replication.

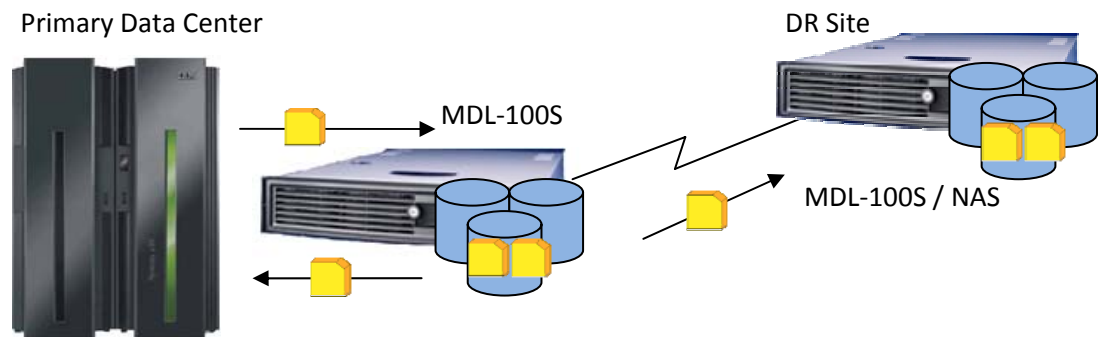


Figure 1. Two MDL-100S systems using Virtuent Replicator

Optional Virtuent Replication software can be added to MDL-100S to allow for periodic replication of the MDL Library to a secondary, backup MDL or to any commercial Network Attached Server (NAS) supporting NFS version 3. See Figure 1.

MDL-100S includes an external Serial Attached SCSI port allowing attachment of an LTO tape autoloader. Optional Virtuent Backup software is available to allow mainframe or time-of-day initiation of backup of the virtual library to LTO-4 tape. See figure 2.

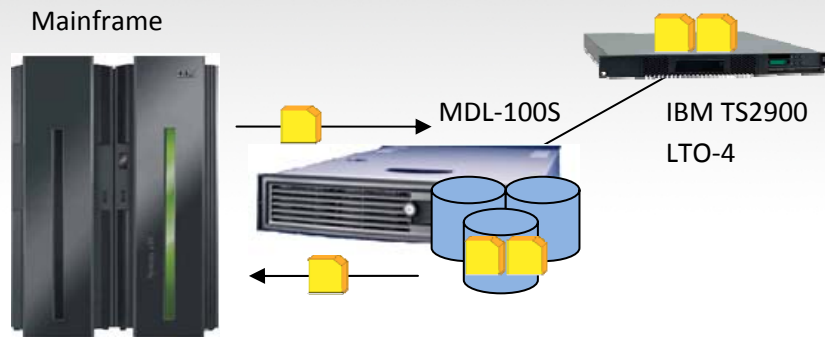


Figure 2. MDL-100S being copied to LTO drives using Virtuent Backup

The Virtuent Mainframe Tape Support option provides a single port fibre channel interface allowing a point-to-point attachment to an IBM 3592 or TS1120 tape drive (see figure 3). The option provides for two different uses of the drive. Tape Direct allows a single mainframe tape device to be mapped directly through the MDL-100S to the physical tape drive. Any tape volume (VOLSER) written to that particular mainframe tape device will be written directly to real tape drive and will not be stored on the MDL-100S internal storage. Export / Import utilities are also provided allowing a single tape volume to be copied between the MDL-100S storage and a physical 3592/TS1120 cartridge.

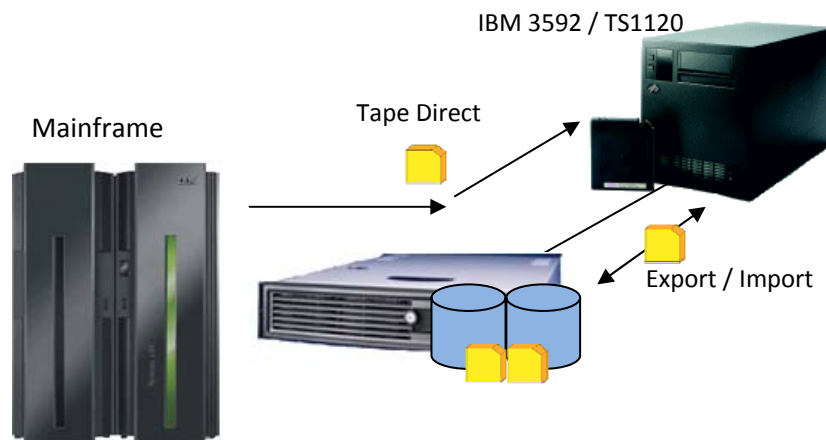


Figure 3. MDL-100S being used with Virtuent Mainframe Tape Support