

# Mainframe Appliance for Storage

The Solution is simple.

with EMC Centera Support

The *Mainframe Appliance for Storage (MAS)* is the latest innovation from Bus-Tech to help you manage your constantly growing storage requirements.

The *Mainframe Appliance for Storage* is a System/390 controller supporting ESCON attachment to the mainframe and Gigabit Ethernet, Fibre Channel or Ultra SCSI connection to open-system storage devices. The MAS emulates up to 32 IBM 3480 virtual tape drives per ESCON channel and utilizes a "tape-on-disk" technique to read and write mainframe tape data onto open-system storage devices. Using tape virtualization provides the ability to implement total tape automation.

## SUPPORT FOR EMC CENTERA

### IBM ESCON Enabled

The *Mainframe Appliance for Storage* implements IBM's ESCON Enabler Technology, providing compatibility to IBM's ESCON channel.

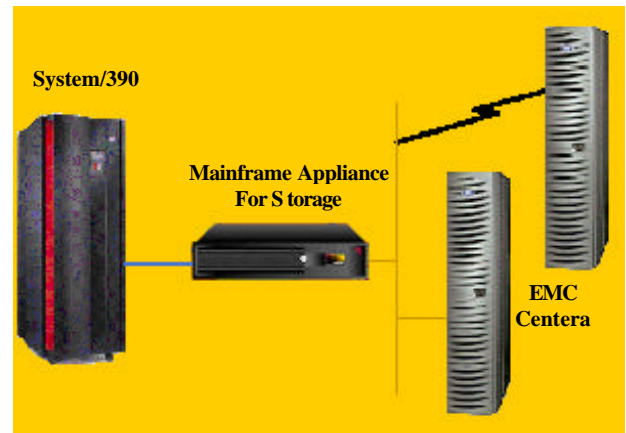
MAS includes support for EMC's Centera Application Program Interface (API). Using this API the MAS seamlessly reads and writes mainframe tape volumes as content addressable objects on Centera; EMC's highly-scalable content addressable storage device.

## IMMEDIATE AVAILABILITY OF DATA

Contention for tape drives and resource "pend" times are a thing of the past. With data stored on Centera, tape mount requests are satisfied instantly, without operator intervention.

## DESIGNED FOR SCALABILITY

MAS with Centera support provides several features allowing the solution to scale based on your current and future needs. A single MAS can emulate up to sixty-four (64) 3480 tape drives. Multiple MAS controllers can be configured in a group to provide additional devices and redundancy. Alternate Path Support across two ESCON interfaces provides load-balancing and automatic failover within each controller. IDRC initiated compression reduces the amount of storage required to house tape volumes on Centera. A Fast Locate feature improves the performance for searching large tape files and shortens "first-byte" access times.



## THE PLATFORM

The *Mainframe Appliance for Storage* is designed with many features to insure reliability and to minimize Mean Time Between Repair (MTBR).

The platform comes standard with dual hot-swappable power supplies, hot-swappable fans and extensive platform management capabilities.

In order to minimize MTBR, each system is shipped with mirrored boot disks. In the event of failure, the surviving disk will automatically take over and you will be notified that a disk failure has occurred. With your controller still operational, disk replacement can be planned according to your scheduling needs.

The MAS offers a cost-effective solution to assist data centers in managing the enormous volumes of data that is being generated by today's ebusiness applications.

Future releases of the MAS will support FiCON.

## OPEN-SYSTEM DATABASE SUPPORT

The MAS uses an SQL database to maintain cross-reference information between mainframe tape volumes (VOLSERs) and Centera content addresses. MAS operates as a standard SQL client on the TCP/IP network and can access industry standard SQL database servers.

# Specifications

## Mainframe Appliance for Storage

### Physical Attributes

Rack Mount	Mounts into an EIA Standard 310-D rack
Dimensions	3.5"H (2U) x 16.93"W x 25.51" L
Power Supply	Dual hot-swappable 500W 1 + 0 PFC
Voltage	6.7 Amp at 115v 3.3 Amp at 220v

### Certifications

Emissions	FCC, Part 25, Class A, ICES-003 Class A, CISPR 22, Class A, EN55022, Class A, EN55024 & EN61000-3-2 & 3-3 (complies with 89/336/EEC), VCCI, Class A, RRL, MIC 1997-41 & 1997-42, AS/NZS 3548 (Based on CISPR 22), GOST 29216-91 & 50628-95 and CNS13438, Class A
Safety	UL1950 CSA - 60950 (UL & cUL), EN60950 (complies with 73/23/EEC), IEC60950 (CB Report & Certificate), NEMKO / EMKO – TSE (74-SEC) 207/94, IRAM and GOST R 50377-92

### Operating Environment

Temperature	
Operating	+10°C to +35°C
Storage	-40°C to + 70°C
Humidity (Non-operating)	95% non-condensing at 35°C

### System/390 Environments Supported

IBM	OS/390 version 2.4 and above VSE
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### Ports

Channel (max 2)	IBM Enabled ESCON
Fibre Channel (max 2)	Host Bus Adapter (fibre or copper)
Ultra 320/LVD SCSI	High-density 68 Pin (female)
Ethernet	Dual 10/100/1000 Mbit/sec. Cat 5