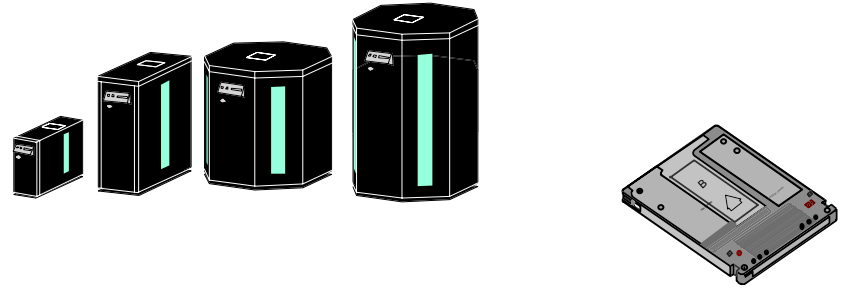


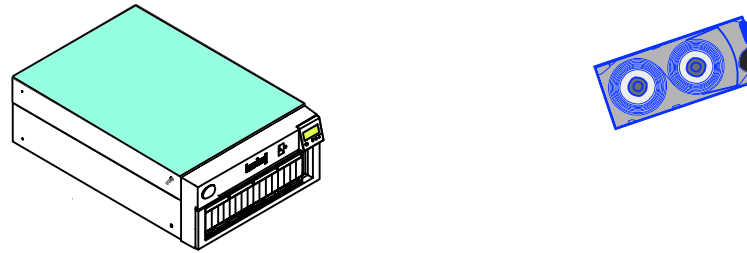
R

emovable



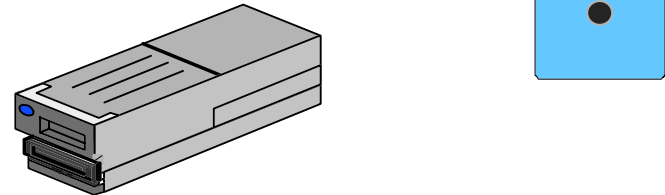
M

edia



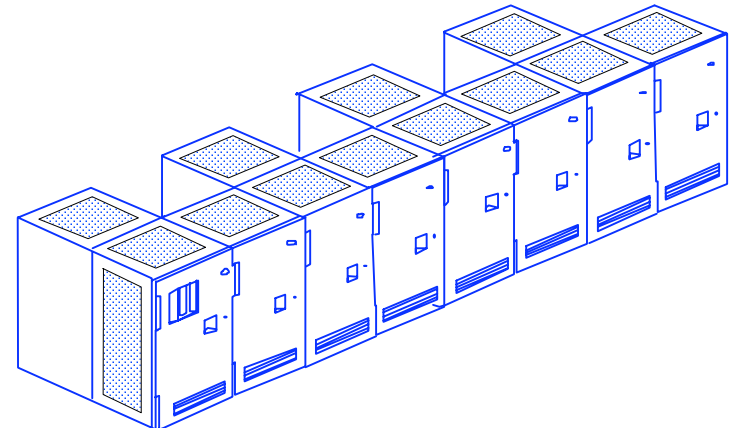
S

torage

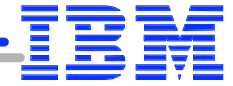


S

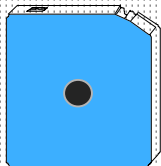
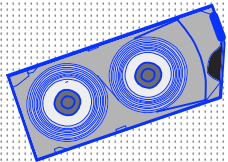
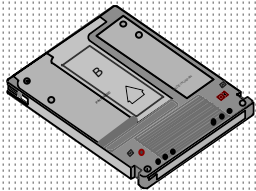
olutions



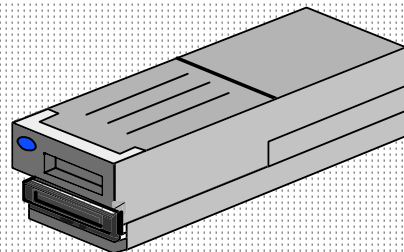
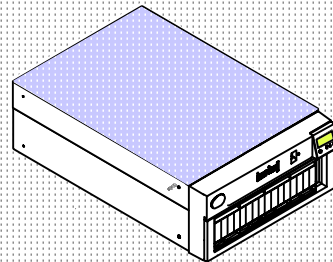
Elements of a Removable Media Solution



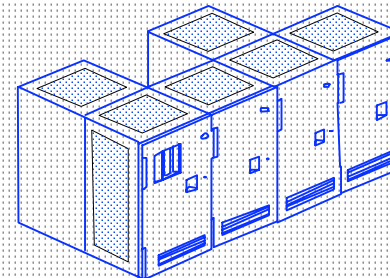
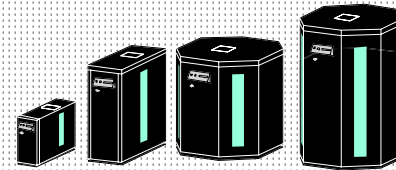
Media



Drives



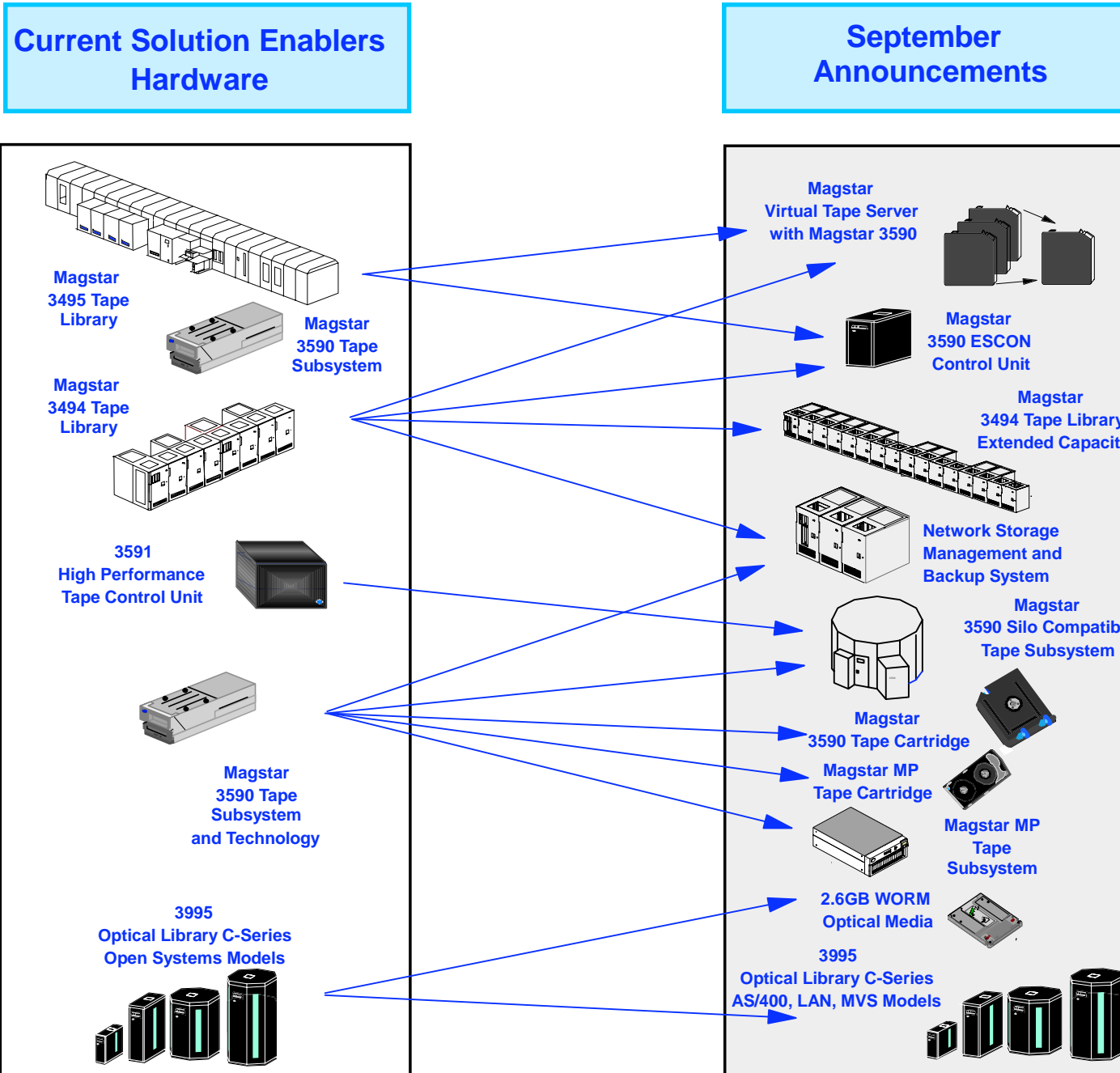
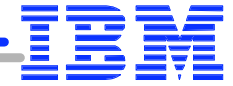
Automation



Software



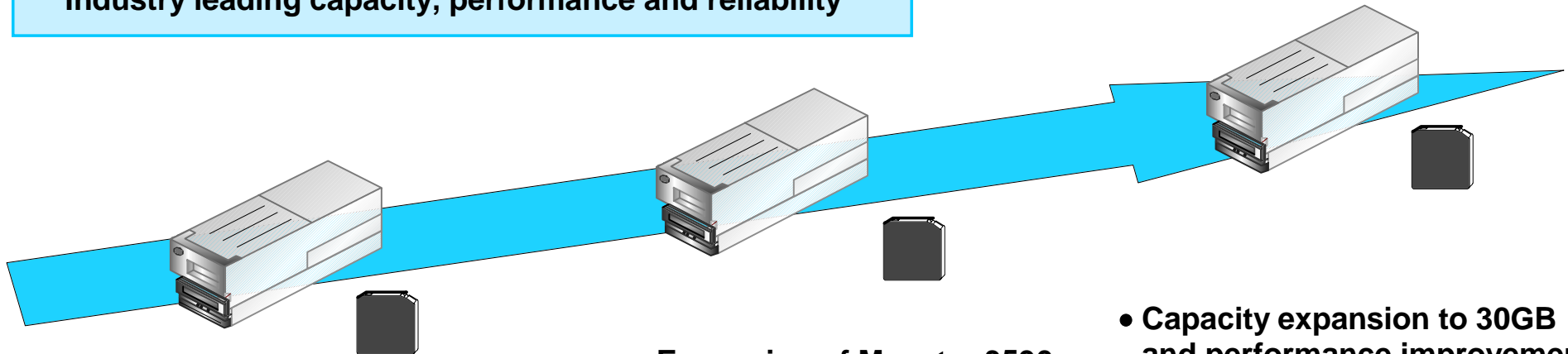
September '96 Product Announcements



Magstar 3590 Tape Subsystem



Industry leading capacity, performance and reliability



- 10 GB and 9MB/sec (uncompressed)

- 100X improvement in data reliability compared to the industry leading 3490E

- Magstar linear recording technology
 - 128 tracks
 - MR head technology
 - Embedded servo tracks
 - metal particle media

- Dramatic reductions in cartridges (50X cartridge capacity of 3480)

- IBM sales and distribution of Magstar 3590 Tape Cartridge media, effective 9/96

- Expansion of Magstar 3590 Tape Cartridge capacity to 20 GB (uncompressed)

- Tape partitioning function

- Additional open systems attachments

- Capacity expansion to 30GB and performance improvement to 15MB/sec (uncompressed)

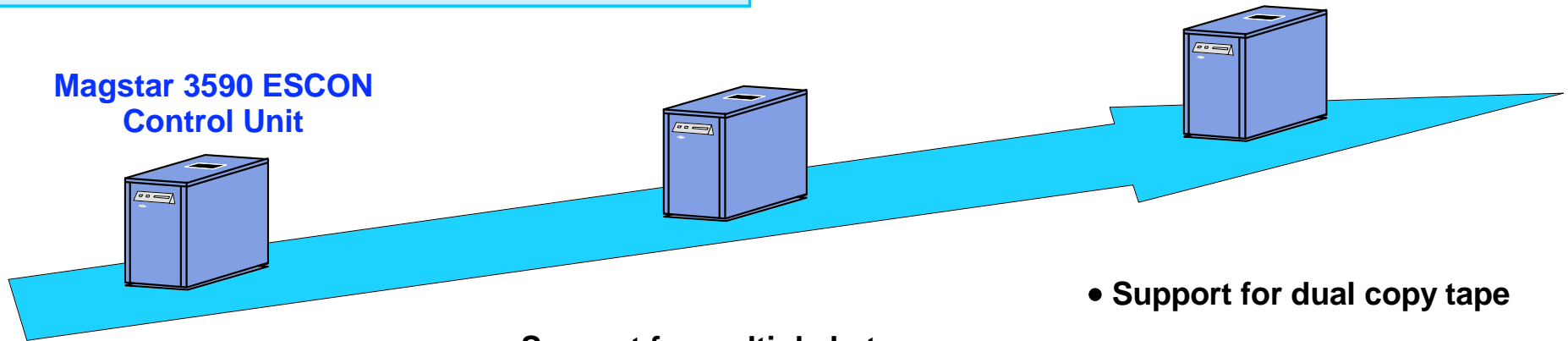
- Serial attachment

Magstar 3590 ESCON Control Unit



Magstar 3590 Attachment for Enterprise Servers

Magstar 3590 ESCON Control Unit



- Model A00 ESCON tape control unit for automated and standalone 3590 tape solutions
- Supports Magstar 3590 in Magstar 3494 and 3495 Tape Libraries
- One or two ESCON channels
- GA 10/96 for one ESCON Channel and 3494 support
- GA 3/97 for two ESCON Channels and 3495 support

- Support for multiple heterogeneous attachments (ESCON, SCSI, OEMI)
- Performance and functional enhancements
- 3490 emulation
- Support for Magstar MP Tape Subsystem

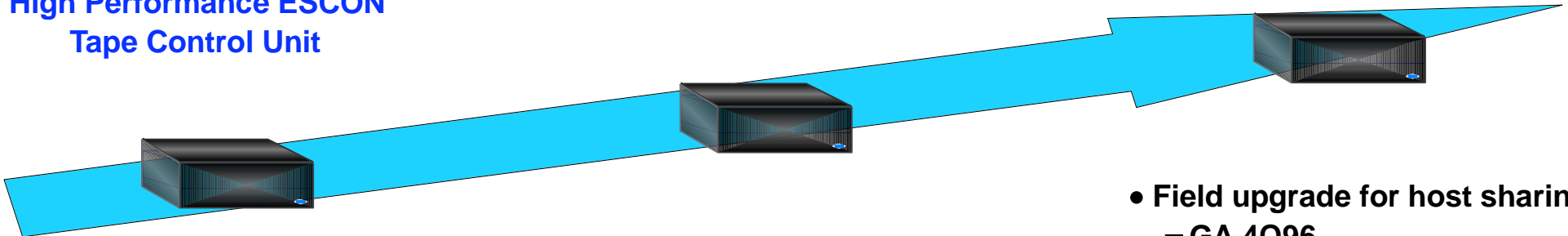
- Support for dual copy tape
- Support for outboard tape copy
- Support for serial attachments (e.g., SSA, FC-AL)

3591 High Performance Tape Control Unit



Magstar 3590 Attachment for Enterprise Servers

3591
High Performance ESCON
Tape Control Unit

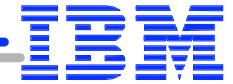


- Attachment of standalone Magstar 3590 Tape Subsystems to ESCON channel - GA 5/96
- Supports one ESCON / SCSI channel path

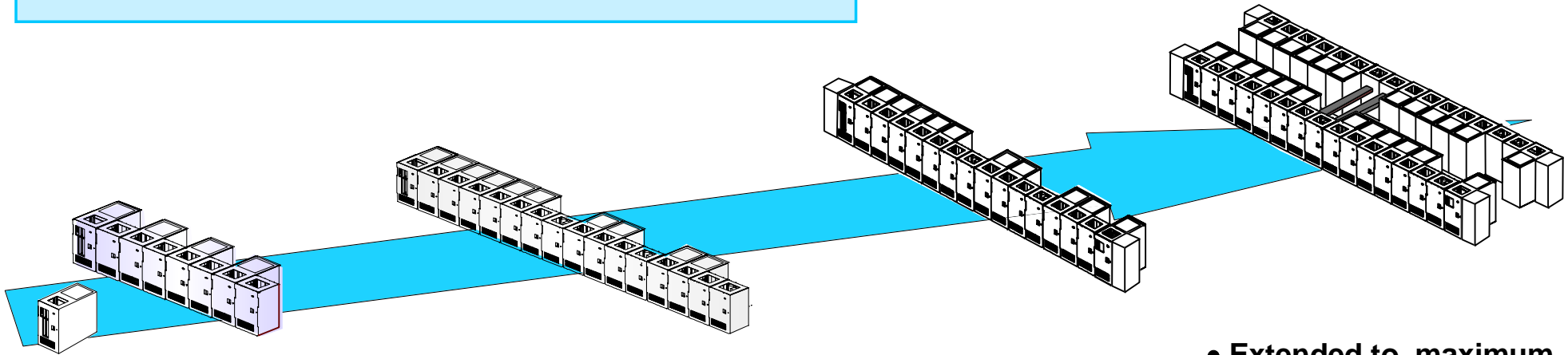
- ESCON attachment for Magstar 3590 Silo Compatible Tape Subsystem - GA 9/96

- Field upgrade for host sharing - GA 4Q96

Magstar 3494 Tape Library



Tape automation for multiple computing environments



- Cost-effective, highly reliable, space efficient tape automation solution

- 160 - 3040 Cartridges

- Supports a wide variety of user environments

- Magstar 3590 and 3490E Tape Subsystems (intermixed or separate)

- ESCON with 3590 Tape Subsystem - GA 10/96

- Extended to maximum capacity of 6,240 cartridges and 60TBs uncompressed capacity - GA 1/97

- Magstar Virtual Tape Server with Magstar 3590 - GA 6/97

- High availability models featuring dual accessors and dual library manager options

- Support for Magstar MP Tape Subsystem

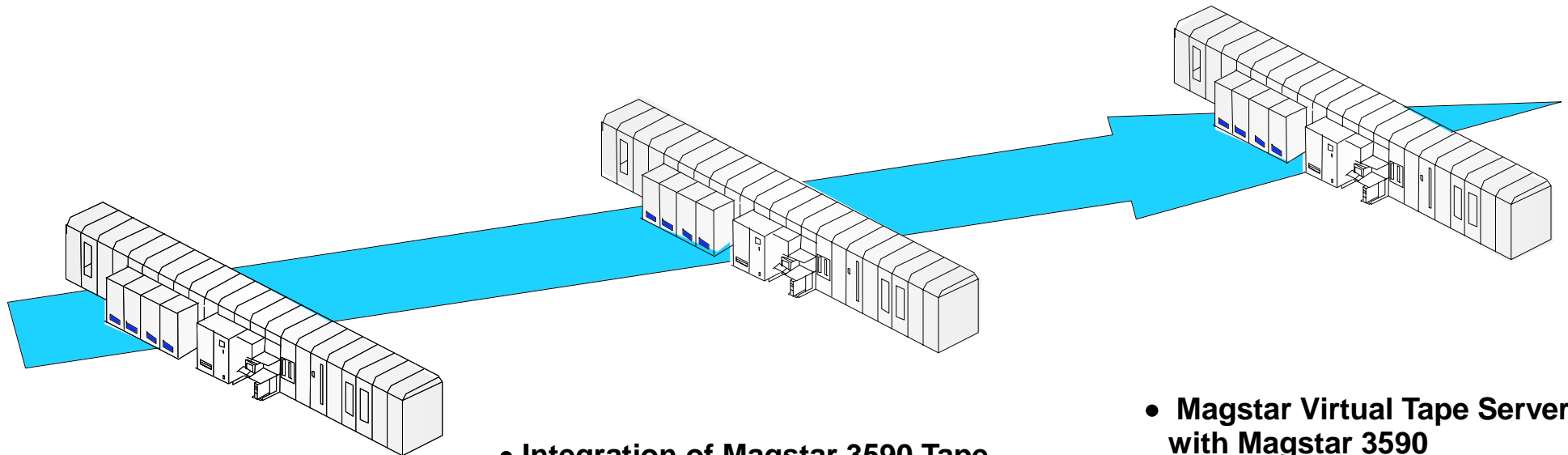
- Extended to maximum capacity of 12,480 cartridges and 250TBs uncompressed capacity (with 20 GB 3590 Magstar cartridges)

- Cartridge pass-through

Magstar 3495 Tape Library



High capacity tape automation for multiple computing environments



- Cost-effective, highly robust tape automation solution
- Scalable from 5,600 to 18,900 cartridges and 2 to 64 tape transports

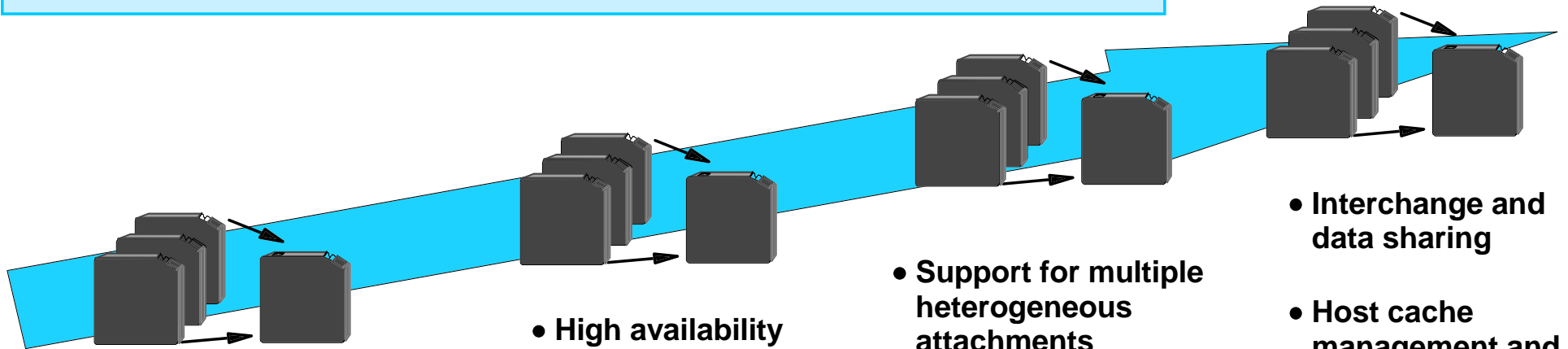
- Integration of Magstar 3590 Tape Subsystem
- Extends storage capacity to 190 TBs of uncompressed capacity
- ESCON attachment via the Magstar 3590 A00 ESCON Tape Control Unit
- GA 3/97

- Magstar Virtual Tape Server with Magstar 3590
- GA 9/97

Magstar Virtual Tape Server



Revolutionary advance in tape processing, providing dramatic cost reductions



- Automatically exploits capacity of Magstar 3590 Tape Subsystem
- Reduces number of required tape drives, cartridges and libraries
- Operates with existing host software support via 3490E device emulation
- Coexists with Magstar 3590 and 3490E subsystems within the Magstar 3494 and 3495 Tape Libraries
- Entry and high capacity models
- 3494 GA 6/97, 3495 GA 9/97

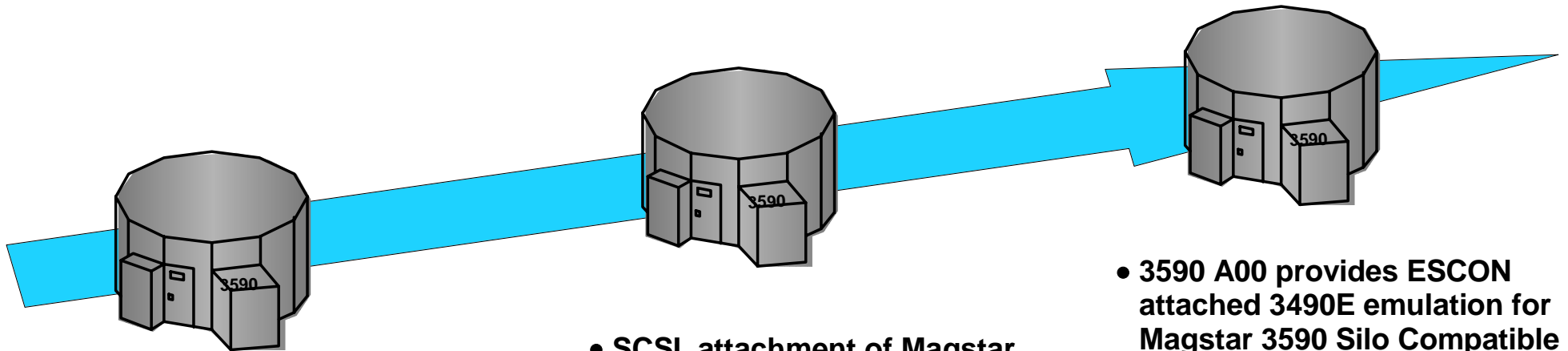
- High availability and performance enhancements
- Support for multiple Virtual Tape Servers per library
- Import and export function
- Upgrade capability from entry to high capacity model

- Support for multiple heterogeneous attachments – ESCON, SCSI, OEMI
- Support for Magstar MP Tape Subsystems
- Concurrent maintenance
- AS/400 and VSE support
- Automatic migration of 18 and 36 track data cartridges

- Interchange and data sharing
- Host cache management and host mirror copy control
- Outboard data mover and SMS

Magstar 3590 Silo Compatible Tape Subsystem

Magstar 3590 capacity, performance, and reliability for StorageTek™ silos



- ESCON attachment of Magstar 3590 Tape Subsystem to StorageTek 4410 and 9310 Automated Cartridge Systems

- Dramatic capacity, performance and data reliability benefits

- Coexists with most existing combinations of StorageTek Cartridge Tape Subsystems

- Compatible with current Storage Tek MVS silo software

- GA 9/96

- SCSI attachment of Magstar 3590 Tape Subsystem to StorageTek 4410 and 9310 Automated Cartridge Systems

- 3590 A00 provides ESCON attached 3490E emulation for Magstar 3590 Silo Compatible Tape Subsystem
- Additional ESCON channels