



# StorageTek Tape Libraries Essentials

Version: 6.0

[Total Questions: 70]

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### **Question No : 1**

Which of the items are reports available from SLC regarding partitioning on an SL500?

- A. Cartridge Cell and Media Summary
- B. Host Connections Summary
- C. Orphaned Cartridge Report
- **D.** Partition Summary
- E. Partition Details
- F. All of the above

### **Answer: F**

**Explanation:** Partitions—Reports include:

Partitions—Reports—Cartridge Cell and Media Summary

- Partitions—Reports—Host Connections Summary
- Partitions—Reports—Orphaned Cartridge Report
- Partitions—Reports—Partition Details
- Partitions—Reports—Partition Summary

Reference: StorageTek SL500 Modular Library System, Partition Report Screens

### **Question No : 2**

What ACSLS command would change a cap priority?

A. set cap priority 5 0, 0, 1
B. define cap priority 5 0,0,1
C. change cap priority 5 0, 0, 1
D. lock cap priority 5 0, 0, 1

### **Answer: A**

**Explanation:** A: The set cap priority command sets a CAP's automatic selection priority. Format

set cap priority cap\_priority cap\_id Reference: StorageTek ACSLS, Automated Cartridge System Library Software , set cap priority

### **Question No: 3**

Using ACSLS, how would you delete a tape pool?

- A. Set scr off and delete the pool
- B. Remove all data tapes and delete the pool
- C. Delete pool 0 and all empty pools will delete automatically
- D. Remove all volumes from the pool and then delete it

#### Answer: A

**Explanation:** Use the delete pool command to delete empty scratch pools. If a pool contains scratch cartridges, you must reassign these cartridges to another pool before deleting the first pool. If a scratch cartridge is mounted, it becomes a data cartridge but remains in its scratch pool. Use the set scratch off command to reassign the data cartridge to the common pool.

Reference: StorageTek ACSLS, Automated Cartridge System Library Software , delete pool

### **Question No: 4**

Which connectivity option is available only in an SL8500 library complex?

- A. single TCP/IP connectivity
- B. dual TCP/IP connectivity
- **C.** multi TCP/IP connectivity

### Answer: B

**Explanation:** The SL8500 library uses TCP/IP protocol over an Ethernet physical interface to manage

and communicate with the library. This interface enables both enterprise-level (HSC) and open system platforms (ACSLS) to connect to and communicate with the SL8500.

There are two separate Ethernet connections on the HBC card for host to library communications—Ports 2A and 2B.

\* Port 2A provides the Dual TCP/IP host connection—this is an optional feature for SL8500 libraries..

\* Port 2B provides the primary connection for host communications—this is the

standard connection for SL8500 libraries.

Reference: StorageTek StreamLine SL8500, modular library system, Host Interfaces

### **Question No: 5**

Where are the messages written when a pool gets below the low water mark?

- A. acsss\_event.log
- **B.** pool\_error.log
- C. hardware\_event.log
- D. Doesn't write an error message

### **Answer: A**

### Explanation: low\_water\_mark

is the low volume warning threshold. If the scratch cartridge count falls below this threshold, ACSLS logs a warning message in the event log. Valid values are 0 to 231-1. The default is 0.

Note: The ACSLS event log is the first stop for useful information in the event of problems with your library operation. This log contains information about library events, status changes, and errors. All sub-components within ACSLS will report events to the acsss\_event.log by sending messages to a process called the event logger. The standard event log, which is automatically created when ACSLS is installed, is contained in the file \$ACS\_HOME/log/acsss\_event.log and where \$ACS\_HOME is usually /export/home/ACSSS/.

Reference: StorageTek ACSLS, Automated Cartridge System Library Software , define pool

### **Question No: 6**

On the SL8500, which is the best option when combining workloads that span more than one rail?

- A. using the middle two rails for active enters and ejects
- B. using rails that are adjacent to each other within the same SL8500
- C. using the top rail for extra archival space and any other rail for active data
- **D.** using the top rail for active enters and ejects and any other rail for archival space

# Answer: C

Explanation: If you are not able to assign workloads to a single rail, consider:

\* Using rails that are adjacent to each other. This provides a shorter distance for the pass-thru operation.

\* Combining rails vertically rather than horizontally

Reference: StorageTek SL8500 Modular Library System, Best Practises, Dedicating Rails

# **Question No:7**

The System Detail SLC screen displays health indicators for which four devices in an SL3000?

- A. Rotational and AFM CAPs
- B. Drives
- C. Media
- **D.** Power supplies
- E. Robot(s)

# Answer: A,B,D,E

**Explanation:** The SL Console screen displays health indicators for each of the following devices:

\*Library

- \* Rotational and AEM CAPs (A)
- \* Drives (B)
- \* Power supplies (D)
- \* Robot(s) (E)
- \* AEM safety doors

Please reference the figure below.

FIGURE 6-1 SL Console Health Status Indicators

Tools Help System Detail		Apply Refresh
<ul> <li>Library:1,0,0,0,0</li> <li>CAP Folder:1,0,0,0,0</li> <li>Orive Folder:1,0,0,0,0</li> <li>Power Supply Folder:1,0,0,0,0</li> <li>Robot Folder:1,0,0,0,0</li> </ul>	Library Status Properties A General Status Module State	uto Clean HLI FC-SCSI
	Transition Request Health State Device State Access State Left Access Door Right Access Door Partition State	-select-transition-
	Host Interface Host Interface Type	Non-Partitioned scsi
Comm Status		"UserID: admin 🛛 Cibrary

Reference: StorageTek SL3000 Modular Library System, User's Guide , Library and Device Status

### **Question No: 8**

Which four statements are true for an SL8500?

**A.** Partitioned LSMs will not recognize other LSMs, within the library unless they are in the same partition.

**B.** The elevator operationisunder the control of the library controller when CAP operations are issued.

C. CAPS can either be shared or dedicated resources for partitions.

**D.** All drives, storage slots, and cartridges within a partition are solely owned by that host or host group.

**E.** While duplicate VOLSERs are supported by the library, ACSLS does not support duplicate VOLSRs unless they are in different partitions and the duplicate VOLSERs are on different ACLs servers.

### Answer: B,C,D,E

### **Explanation:**

B:Elevator operation is under the control of the library controller when CAP operations are issued. The library controller uses the elevators and HandBots to access the entire capacity of the CAPs for enters and ejects without regard for the partitions.

Note: Elevators provide vertical pass-thru operations between rails within the same library. Both elevators are located in the front of the library between the front access doors and the Service Safety Door. Each of the four rails share the two elevators.

C: Partitions share the ownership of the CAPs. That is, if one host/partition has CAP A reserved, a different host/partition can have CAP B reserved, or one host/partition can have both CAPs reserved.

D: Elevators, robots, and CAPs are shared resources and—each partition can fully use shared resources for cartridge movement, enter, and eject operations. All drives, storage slots and cartridges within a partition are solely owned by that host or host group.

E: Duplicate VOLSERs are supported by the library; however, ACSLS and HSC do not, unless:

\*The duplicate VOLSERs are in different partitions.

\* With HSC managed partitions, the duplicate VOLSERs are in different control data sets.

\* With ACSLS managed partitions, the duplicate VOLSERs are managed by different ACSLS servers.

Note. volume serial numbers (VOLSERs)

Reference; StorageTek SL8500 Modular Library System, Best Practises, Guidelines

### **Question No: 9**

Which SL500 report displays the current map of physical drive slot relationship to its physical address (iib, module, row) and drive serial number?

- A. Library Utilization
- B. Drive Utilization
- C. Drive Mapping
- D. Drive Distribution

### Answer: C

**Explanation:** The Current Drive Mapping report lists the library internal address and drive serial

number currently assigned to each physical drive slot in the library.

Reference: StorageTek SL500 Modular Library System, Users Guide, Display Current Drive Mappings

### **Question No : 10**

Partitioning allows the SL3000 library to be divided for use by multiple\_\_\_\_\_.

- A. Power Supplies
- **B.** Storage Cells
- C. Hosts
- D. Drives

### Answer: C

**Explanation:** Library resources (cells, drives, and CAPs) are allocated to a partition for exclusive use by that partition. Storage cells, CAPs, and tape drives allocated to a partition can be used only by the hosts assigned to that partition.

Storage cells, CAPs, and drives not allocated to, reserved for or associated with any partition cannot be accessed by any hosts.

Reference: StorageTek SL3000 Modular Library System, User's Guide, Partitioning Concepts and Features

### **Question No: 11**

Which three rules apply when the SL3000 library controller automatically adds cells to active storage regions?

A. Cell activation starts in the left upper rear of the active storage region and moves to the

right lower front

**B.** Cell activation starts with the cells closest to the drives and moves out equally from right to left and top to bottom

**C.** All cells within a column are activated from top to bottom before moving to the next column

D. Columns within a panel are activated from left to right

# Answer: A,C,D

### Explanation: Cell Activation Rules

The library controller uses the following rules when adding cells to active storage regions:

\* Cell activation starts in the left upper rear of the active storage region and moves to the right lower front.

\* All cells within a column are activated from top to bottom before moving to the next column.

\* Columns within a panel are activated from left to right.

Reference: StorageTek SL3000 Modular Library System, User's Guide, Cell Activation Rules

# **Question No : 12**

Which three growth features can be installed nondisruptively to the SL8500?

- A. Capacity on Demand
- B. Pass thru Ports
- **C.** Cartridge Expansion Frames
- D. Another Library

# Answer: A,B,C

**Explanation:** A: The SL3000 library includes RealTimeGrowth and Capacity on Demand features.

Installation of additional activated capacity results in minimal disruption to library operations. Once verified by the library controller, the additional storage cells are available immediately. You do not need to reboot the library.

B: RealTime Growth capability

The capability to add pass-thru ports dynamically while the library is operating.

Reference: StorageTek StreamLine SL8500, modular library system, User's Guide

### **Question No: 13**

Which three are benefits of StorageTek's centerline architecture in the SL3000?

- A. Non-disruptive growth
- **B.** Improved performance
- C. Fewer AC power drops
- **D.** Balanced floors pace utilization

### Answer: A,B,C

**Explanation:** The SL3000 modular design uses CenterLine technology to help balance the work load and improve the performance of the library. The left side of the base module serves as the centerline. You can add other modules to the left and right of the base module.

B: The SL3000's unique Centerline Architecture cuts robot travel time by one-third to one-half, and alleviates dual robot contention to improve cartridge-to-drive performance by up to 50%.

C: Reduce footprint and power consumption while improving performance up to 50 percent with Centerline Architecture, which places the drive bays in the middle of the library

### **Question No : 14**

Which action is not likely to improve the performance of the SL3000?

- A. Implementing dual robots will usually give the biggest performance increase.
- **B.** Configure your SL3000 as symmetrically as possible.
- C. At dismount, always place the cartridge back in the storage cell it was moved from.

**D.** If you do not have a large number of drives, place them in alternating columns where possible

**E.** Try to place frequently used cartridges near the drives.

#### Answer: D

Reference: StorageTek SL3000 Modular Library System, User's Guide

### **Question No: 15**

When planning for partitioning the SL8500, which is NOT an assessment question?

- A. How many partitions will there be in the library?
- B. Is this a new or existing installation?
- C. How many cartridges, free slots, and tape drives are needed for each partition?
- D. How many CAP slots are needed for each partition?

### Answer: D

**Explanation:** All HandBots and CAPs in the library are shared resources which cannot be assigned

exclusively to one partition.

### **Question No : 16**

Which feature contributes most to improved performance and higher library availability with the SL8500?

- A. Redundant Control Cards
- **B.** Partitioning
- C. Redundant CAPs
- D. Redundant Robots

#### Answer: B

### **Question No : 17**

Which three scenarios would be more optimal for logical partitioning than physical partitioning?

A. Customer would like to partition an SL8500 complex into smaller partitions.

**B.** Customer would like to partition an SL8500 or an SL3000 into more partitions than physical partitioning allows.

**C.** Customer would like to partition an SL3000 into two partitions, one for mainframe and one for open systems.

**D.** Customer would prefer multiple partitions to be controlled by VOLSER than physical address.

### Answer: C

### **Question No: 18**

When mapping tape application workloads to the SL8500 rails, a maximum of one workload assigned to each rail.

- A. True
- B. False

### Answer: B

**Explanation:** The SL8500 is not just another library. Each SL8500 has four separate rails or Library

Storage Modules (LSMs) that work together in parallel.

There can also be two robots

operating concurrently on each rail. This architecture offers extremely flexible and scalable configurations that can simplify automated tape applications.

Instead of distributing cartridges and tape drives evenly across all the rails, look at it from a business perspective and logically configure each individual rail to meet your specific needs and business requirements. Allocate separate tape application workloads to specific LSMs (rails).

Reference: StorageTek SL8500 Modular Library System, Best Practises, Configuring the Library for Performance

### **Question No : 19**

On the SL3000, if you convert two Cartridge Expansion Modules to two Parking Expansion

Modules, how many slots will you lose?

**A.** 312**B.** 440**C.** 516**D.** 620

### Answer: D

**Explanation:** The optional Cartridge Expansion Module (CEM) provides additional storage cell capacity and growth for cartridges only.

Each CEM adds up to 620 data cartridge physical storage cells.

Note: The optional Parking Expansion Modules (PEMs) provide additional storage cell capacity and growth, as well as space for a redundant TallBot to be "parked." The parking space makes the three outer-most columns of storage cells on the front and rear walls inaccessible. The inaccessible cells can be left out of the module, or they can be installed to allow later conversion of the PEM to a CEM. PEMs do not include tape drives. PEMs are only used with the Dual Robotics feature, and they are always installed in pairs. They must be the last modules on the right and left sides of the library series.

# **Question No: 20**

What ACSLS command would you use to enter a volser (WHY200) into the library with manual caps?

A. Enter WHY200 0, 0, 0
B. Set cap auto WHY200
C. Unlock cap 0, 0, 0
D. Enter 0, 0, 0

# Answer: B

### Explanation:

Note: volume serial number (volser) A synonym for external label identifier.