



**Vendor:** Network Appliance

**Exam Code:** NS0-502

**Exam Name:** NetApp Certified Implementation  
Engineer-SAN & Virtualization

**Version:** DEMO

1. Click the Exhibit button.

```
ISCSI: iswta,  
Authentication failed  
for initiator  
<nodename>
```

You see the following error on the storage controller's console or messages file.

What is the most likely cause for this error?

- A. portal group misconfiguration
- B. iSCSI CHAP misconfiguration
- C. iSNS misconfiguration
- D. IPsec misconfiguration

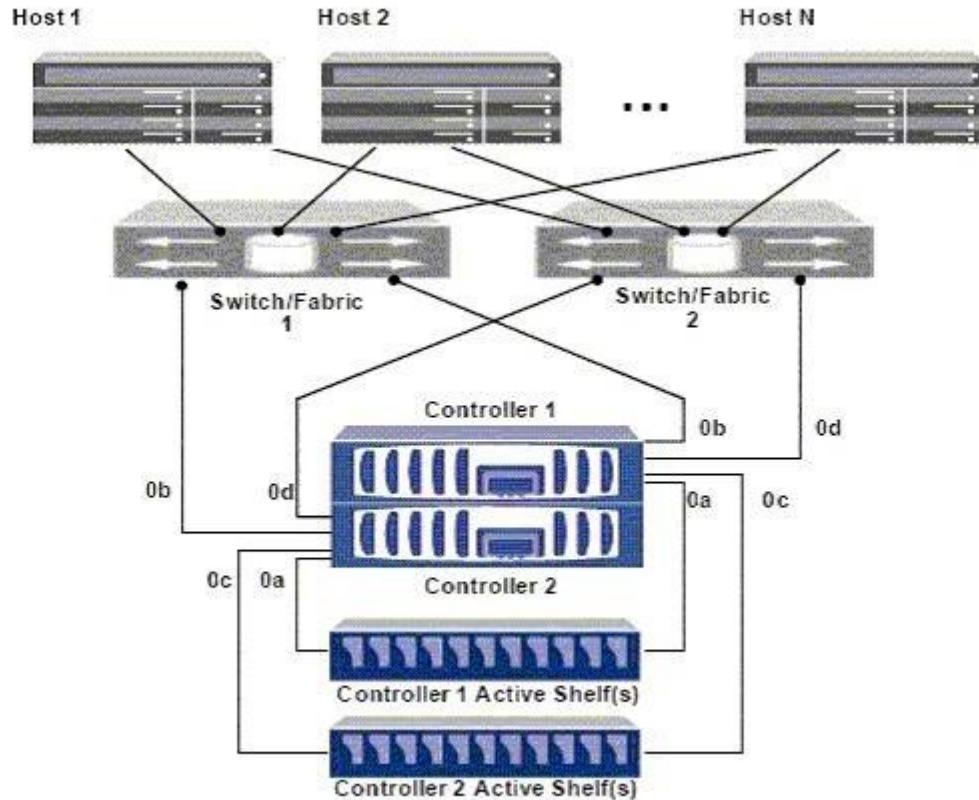
**Answer: B**

2. What would you use to share a data LUN among multiple servers where each server has simultaneous write access?

- A. host-based BootBIOS
- B. host-based multipathing
- C. host-based volume manager
- D. host-based clustered file system

**Answer: D**

3. Click the Exhibit button.



In the diagram shown, a portset is created on controller 1 with the command: controller1>portset create -f ntapportset 0b. This portset is bound to the igroup with all the initiators in it.

How many paths can host 1 see to a LUN on controller 1?

- A. six paths
- B. four paths
- C. eight paths
- D. two paths

**Answer: D**

4. What are three relevant perfstat counters to check for unaligned I/O that do not fall on the WAFL boundary? (Choose three.)

- A. wp.partial\_write
- B. vvol\_read.io\_valid
- C. read/write\_align\_histo.XX
- D. read/write\_partial\_blocks.XX
- E. xinode content misses

**Answer: ACD**

5. Click the Exhibit Button

Guarantee	= none
LUN Reservation	= on
Fractional_reserve	= 0%
Snap_reserve	= 0%
Auto_delete	= volume
Auto_grow	= off
Try_first	= snap_delete

The table highlights the space management policy that is defined for a particular flexvol, acmevol. Based on the information provided in the table, which action will the storage controller take when it runs out of space in the volume?

- A. It will try deleting Snapshot copies first to reclaim space before trying to grow the volume.
- B. It will grow the volume before deleting Snapshot copies.
- C. It will only try deleting Snapshot copies to reclaim space and will not grow the volume.
- D. It is irrelevant since fractional\_reserve is 0%.

**Answer: C**

6. Which utility on Windows 2003 and Windows 2008 can be used to collect information about firmware and driver versions for an Emulex LP1xxxx/LPe1xxx HBA?

- A. EMutil
- B. SANutil
- C. fcp config
- D. SANsurfer
- E. HBAnywhere

**Answer: E**

7. Which utility on Solaris 10 can be used to collect information about firmware and driver versions for an Emulex LP1xxxx/LPe1xxxx HBA?

- A. EMutil
- B. SANutil
- C. hbainfo
- D. SANsurfer
- E. HBAnywhere

**Answer: E**

8. Which utility on Solaris 10 can be used to collect information about firmware and driver versions for a Qlogic QLxxxx/QLExxxx HBA?

- A. EMutil
- B. SANutil
- C. cfgadmin
- D. SANsurfer
- E. HBAnywhere

**Answer: D**

9. An organization currently has a NetApp Fibre Channel block-based solution. With limited budget and resources, they want to create a new disaster recovery site that utilizes a NetApp solution.

What would the optimal solution include?

- A. SnapMover and Fibre Channel at the disaster recovery site for all hosts
- B. SnapMirror and iSCSI at the disaster recovery site for all hosts
- C. Fibre Channel at both locations using ftp to replicate storage
- D. MetroCluster and NAS

**Answer: B**

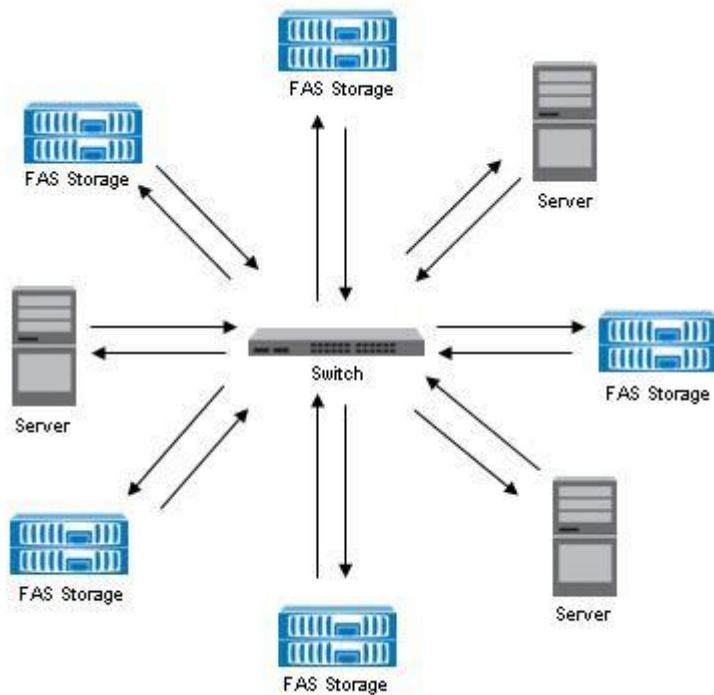
10. A company has a Fibre Channel environment and wants to connect a new host in a remote data center using 50/125um OM2 multi-mode fiber cable and needs to support 2 Gb speeds.

What is the maximum distance of the cable run supported in this situation?

- A. 50/125um OM2 multi-mode fiber cable supports up to 500 meters at 2 Gb.
- B. 50/125um OM2 multi-mode fiber cable supports up to 10000 meters at 2 Gb.
- C. 50/125um OM2 multi-mode fiber cable supports up to 150 meters at 2 Gb.
- D. 50/125um OM2 multi-mode fiber cable supports up to 300 meters at 2 Gb.

**Answer: D**

11. Click the Exhibit button.



Given the information provided in the diagram, what is the appropriate FC topology?

- A. point-to-point
- B. switched fabric
- C. arbitrated loop
- D. ring

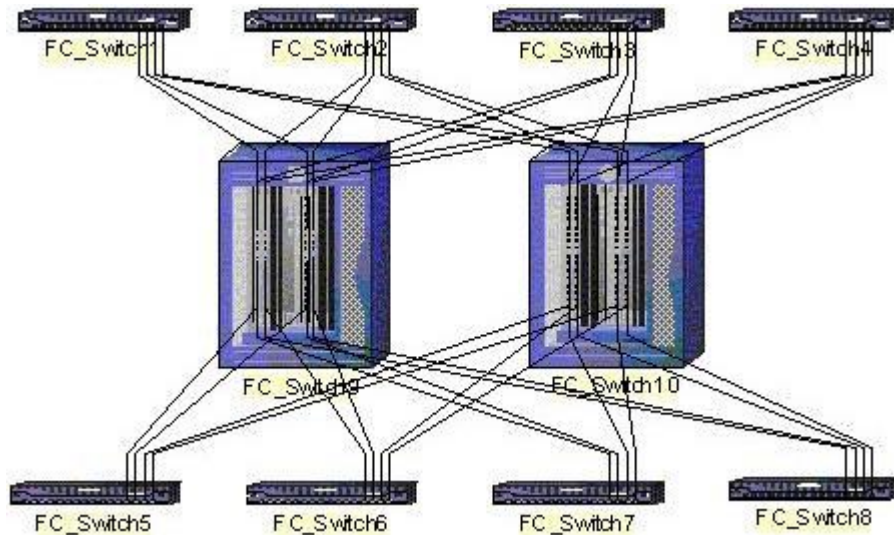
**Answer: B**

12. Which FC SAN topology provides the best performance and scalability?

- A. cascade
- B. core-edge
- C. full mesh
- D. partial mesh

**Answer: B**

13. Click the Exhibit button.

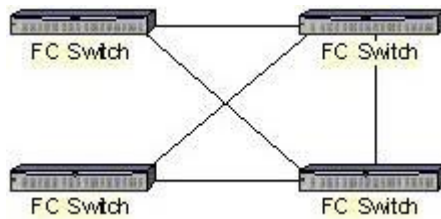


Based on the diagram shown, what is the appropriate FC switch topology?

- A. full mesh
- B. core-edge
- C. full cascade
- D. partial mesh

**Answer: B**

14. Click the Exhibit button.



Based on the diagram shown, what is the appropriate FC switch topology?

- A. core-edge
- B. full mesh
- C. partial mesh
- D. partial cascade

**Answer: C**

15. A 200-GB LUN is created in an empty 500-GB volume with the volume guarantee option set to Volume. LUN reservation is enabled and the fractional reserve is set to 100 and scheduled snapshots are disabled.

Directly after LUN creation, what is the maximum free space available in the volume?

- A. 200 GB
- B. 300 GB
- C. 400 GB
- D. 500 GB

**Answer: B**

16. A 100-GB thinly provisioned LUN is allocated to a Windows host. 100 GB of data is written into the LUN. The current capacity utilization on the disk array as well as the host is 100%. 50 GB of data is deleted from the LUN. Space reclaimer has NOT been run.

What is the current capacity utilization on both the host and the disk array?

- A. 50% on the host, 100% on the disk array
- B. 100% on the host, 50% on the disk array
- C. 50% on the host, 50% on the disk array
- D. 100% on the host, 100% on the disk array

**Answer:** A

17. A customer has a four-node SUN cluster configuration. Each node has two, dual-ported HBAs.

What is the minimum number of igroups that need to be created to map a LUN to the cluster?

- A. 1
- B. 2
- C. 4
- D. 8

**Answer:** A

18. Zoning by World Wide Port Name (WWPN) is deployed and a host HBA is replaced. Which zone change needs to be made?

- A. No changes are necessary.
- B. The zone configuration should be changed to include the port to which the HBA is connected.
- C. The zone configuration should be changed to include the WWPN of the new HBA; the old WWPN will be automatically dropped.
- D. The zone configuration should be changed to include the WWPN of the new HBA and to remove the WWPN of the old HBA.

**Answer:** D

19. Which three protocols can be used for communications between a host running SnapDrive for Windows and the NetApp Storage Controllers? (Choose three.)

- A. http:
- B. https:
- C. ftp:
- D. RPC
- E. ssh

**Answer:** ABD

20. Any newly installed system with Data ONTAP 7.3.1 supports which cfmodes?

- A. dual\_fabric only
- B. single\_image
- C. partner

D. mixed

**Answer: B**