



SNIA Qualified Storage Sales Professional Exam Description & Preparation Guide

Tasks/Knowledge/Skills & Abilities - This credential signifies that the candidate can describe and position basic storage technologies within a customer environment. Candidates will have the sales skills to understand the customer business and make broad-based recommendations to meet the customer needs in conjunction with a more technical sales engineer or storage architect.

Test Parameters

- ✓ The delivery channel for this test is the Prometric testing centers worldwide.
- ✓ The exam format is multiple-choice with multiple-responses where appropriate and noted.
- ✓ The maximum testing time allowed for the exam is 90 minutes
- ✓ The exam language is currently English.

Prerequisite Exam

- ✓ None

Passing Score: 65%

Number of Exam Items: 40

SNIA Qualified Storage Sales Professional (SQSSP) - Topics to Study

Please note there will NOT be exam items corresponding to EVERY topic. However, the exam items will be drawn from this blueprint and study material. We are only showing information relevant to this exam.

1. Defining and Identifying Storage Technology Basics (25%)

- 1.1 Explain the difference between file level storage (traditional NAS) and block level storage (DAS and SAN)
 - ✓ compare to a general purpose file server (e.g., UNIX/Linux or Windows)
 - ✓ NAS appliance vs. NAS Gateway
 - ✓ customer situation that would illustrate NAS, DAS, SAN
 - ✓ file access
 - ✓ data sharing
 - ✓ new NAS - full distributed services (file, block, and other)
 - ✓ concurrent use
- 1.2 Describe strengths and weaknesses of NAS, SAN, DAS
 - ✓ cost vs. value to the customer

- ✓ reliability of each
 - ✓ performance factors
 - ✓ data sharing
 - ✓ questions to ask the customer to help you scope their needs
- 1.3 Explain the attributes of a storage subsystems
- ✓ hard disk drives, tape drives , SCSI, ATA
 - ✓ benefits and limitations of cache
 - ✓ capability and use of RAID, JBOD
 - ✓ mirroring and parity-based RAID and why it matters
 - ✓ customer situation that would illustrate which customer applications would benefit from specific attributes
- 1.4 Compare and contrast SATA, SAS, and Fibre Channel solutions
- ✓ cost to the customer
 - ✓ performance factors
 - ✓ reliability of each
 - ✓ scalability
 - ✓ ESCON and it's highend market
 - ✓ questions to ask the customer to help you scope their needs
 - ✓ customer situation that would illustrate which customer applications would benefit from each type of solution
- 1.6 Explain Solid State Drive (SSD) and which customer situations SSD would be appropriate
- 1.7 Describe performance and operating characteristics of Tiered Storage
- ✓ content addressable storage (CAS)
 - ✓ differences between Tiers for online storage
 - ✓ differences between primary and secondary storage
 - ✓ locations of storage (online, nearline, offline)
 - ✓ questions to ask the customer to help you scope their needs
 - ✓ customer situation that would illustrate which customer applications would benefit from each type of solution
- 1.8 Describe the SNIA Shared Storage Model
- ✓ relevance to customer environment and solution
- 1.9 Recognize customer need for storage management software solutions
- ✓ features and benefits of device manager and storage network management software tools
 - ✓ customer situation that would illustrate what the benefits of SNIA's SMI-S would be for end users and vendors
 - ✓ differences between SMI-S and SNMP and what that means to the customer environment
- 1.10 Explain basic Networking Concepts
- ✓ Bit Rate, Bandwidth, Latency & Throughput & Network Topologies
 - ✓ InfiniBand, PCI, PCI-X and PCIe
- 1.11 Recognize emerging technologies and concepts
- ✓ cloud
 - ✓ green
 - ✓ Identify the layers and components of each layer)

2. Recognizing Opportunities for IP iSCSI Storage Networking Solutions (10%)

2.1 Describe iSCSI Storage Networking solution

- ✓ Ethernet Switches, IP Routers, TCP/IP Offload Engines (TOE)
- ✓ internet Fibre Channel Protocol (iFCP), Fibre Channel over IP (FCIP), internet Storage Name Services (iSNS)
- ✓ cost to the customer
- ✓ performance factors
- ✓ reliability of each
- ✓ scalability
- ✓ security
- ✓ questions to ask the customer to help you scope their needs
- ✓ customer situation that would illustrate which customer would benefit from IP Storage Networking solution

3. Recognizing Opportunities for Fibre Channel Storage Networking Solutions (15%)

3.1 Describe the features and benefits of an FC Storage Networking solution

- ✓ questions to ask the customer to help you scope their needs
- ✓ customer situation that would illustrate which customer would benefit from FC Storage Networking solution

3.2 Recognize components and explain the functions of each component of a Fibre Channel solution

- ✓ HBA
- ✓ Switch
- ✓ Director
- ✓ zoning
- ✓ LUNs
- ✓ Loop Switches, FC Bridges, Routers, Gateways & the Unified Data Center Fabric

3.3 Describe FC SAN topologies (point-to-point, arbitrated loop, fabric) and the business uses of each

- ✓ cost to the customer
- ✓ performance factors
- ✓ scalability
- ✓ customer situations that would illustrate why each topology would be a good fit to the customer need

3.4 Explain Virtual fabrics in the context of what the customer need

3.5 List protocols that are supported in a Fibre Channel SAN

3.6 Explain Fibre Channel over Ethernet (FCoE)

- ✓ benefit of this solution

3.7 Compare IP Storage Networking solution to a Fibre Channel Storage Networking solution

- ✓ appropriate use of both
- ✓ customer pain points related to each
- ✓ scalability
- ✓ questions to ask the customer to help you scope their needs

4. Defining Storage Virtualization Concepts and Opportunities (20%)

- 4.1 Describe the features, function and benefits of storage virtualization
 - ✓ host virtualization/ "going green"
 - ✓ block virtualization
 - ✓ device virtualization (e.g., disk, tape)
 - ✓ file system virtualization
 - ✓ questions to ask the customer to help you scope their needs
 - ✓ customer situations that would illustrate a need for storage virtualization
- 4.2 Compare storage virtualization approaches (host, network, storage device)
 - ✓ heterogeneous/homogenous
 - ✓ flexibility
 - ✓ performance factors
- 4.3 Describe features and benefits of storage pools (dynamic/thin provisioning)

5. Defining Data Management Concepts and Opportunities (10%)

- 5.1 Defining Data Management Concepts and Opportunities
 - ✓ reasons to classify data (availability, cost, performance, compliance)
 - ✓ policy-based management capabilities and review process
 - ✓ advantages to the customer of using this process
- 5.2 Data Security

6. Recognizing Backup/Recovery and Business Continuity Opportunities (20%)

- 6.1 Explain the types of Backup and (Disaster) Recovery and reasons that a customer would use each
 - ✓ Continuous Data Protection (CDP),
 - ✓ Data De-Duplication
 - ✓ off-line, on-line, image
 - ✓ RPO/RTO
 - ✓ full, incremental, differential (cumulative-incremental)
 - ✓ networked - LAN-based, LAN-Free backup, server-less
 - ✓ point-in-time copies
 - ✓ replication, remote replication
 - ✓ snapshots
 - ✓ full mirror copy
 - ✓ tape and virtual tape libraries
 - ✓ customer situations that would illustrate why each type would be a good fit to the customer need
 - ✓ questions to ask the customer to help you scope their needs
- 6.2 Describe business continuity concepts and what they mean to a customer
 - ✓ availability
 - ✓ redundancy
 - ✓ automatic failover
 - ✓ customer situations that would illustrate why customer should be concerned about this
 - ✓ questions to ask the customer to help you scope their needs