E20-001 Information Storage and Management Exam
Exam Description

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The Information Storage and Management exam is a qualifying examination for the EMC Proven Professional Associate level. This exam requires the successful candidate to be able to describe storage networking technologies such as DAS, SAN, NAS and CAS. In addition, a candidate should be able to describe the key business and technical drivers for storage including information availability and business continuity, storage infrastructure security and management, and storage virtualization technologies. The common themes of this exam are technology requirements, physical and logical elements, host-to-storage interconnection, data protection, and security.

The Information Storage and Management exam focuses on underlying information storage technologies and concepts. A limited number of questions refer to EMC product examples that are used in the training to reinforce the knowledge of general storage technologies and concepts. The successful candidate can employ this knowledge and certification to a wide variety of storage and information technology roles and functions.

EMC provides free practice tests to assess your knowledge in preparation for the exam. Practice tests allow you to become familiar with the topics and question types you will find on the proctored exam. Your results on a practice test offer one indication of how prepared you are for the proctored exam and can highlight topics on which you need to study and train further. A passing score on the practice test does not guarantee a passing score on the certification exam.

Duration
90 minutes
(~65 questions)

Available Languages
English
Japanese

Practice Test
Associate Level –
E20-001

Exam Topics
Topics likely to be covered on this exam include:

- **Storage Systems**
    - Data classification and storage evolution
    - Core elements of a data center infrastructure and their requirements
    - Importance and benefit of ILM strategy
    - Physical and logical components of the host, connectivity and storage, including key protocols & options
    - Components of a disk drive, including their functions, logical constructs of a physical disk and factors affecting disk drives performance
    - Common RAID levels; appropriate RAID levels based on performance & availability considerations
    - Components and benefits of an intelligent storage system

- **Storage Networking Technologies and Virtualization**
    - Direct-Attached Storage (DAS) benefits, limitations and management considerations
    - SCSI architecture and addressing scheme
    - Storage Area Network (SAN) including the benefits, best environment for SAN use, SAN components, topologies, connectivity options and zoning
    - FC protocol stack, addressing, flow control and classes of service
    - Networked-Attached Storage (NAS) including benefits and best environment for NAS use, NAS components, protocols, implementation options and management considerations
    - IP Storage Area Network (IP SAN) including benefits and best environment for IP SAN use, and convergence in the SAN
    - Basic architecture of iSCSI, FCIP and FCoE
    - Content Addressed Storage (CAS) including benefits and best environment for CAS use, CAS elements, and storage and retrieval processes
    - Block level and file level storage virtualization technology and the concepts of virtual provisioning and cloud computing

- **Business Continuity**
    - Business Continuity measurement, terminologies and planning

- o Backup consideration, purposes and granularity
- o Backup methods, architecture topologies and technologies in SAN and NAS environments
- o Local replication: uses, considerations, and Host and Array based local replication technologies
- o Synchronous and asynchronous remote replication, including various host and array based remote replication technologies

- **Storage Security and Management**
  - o Storage security framework and security solutions in various domains
  - o Security implementation in SAN, NAS and IP-SAN networking
  - o Monitoring various storage infrastructure components
  - o Storage management activities, challenges and storage management initiative

Recommended Training

The following curriculum is recommended for candidates preparing to take this exam.

Course Name	Mode	Availability
Information Storage and Management	Instructor-Led	Now
OR		
ISM Section 1: Storage Systems	e-Learning	Now
ISM Section 2: Storage Networking Technologies and Virtualization	e-Learning	Now
ISM Section 3: Business Continuity	e-Learning	Now
ISM Section 4: Storage Security and Management	e-Learning	Now
OR		
Information Storage and Management – Video-ILT	VILT	Jan 2010

Note: These details reflect exam content as of October 30th, 2009.

The Proven Professional Program periodically updates exams to reflect technical currency and relevance. Please check the Proven Professional website regularly for the latest information.