



HEROTEC
NETWORK PROFESSIONAL TRAINING

Associate - Information Storage and Management Version 4.0

Related Certificate	Associate - Information Storage and Management
Course ID	ISM V4
Exam Code	DEA-1TT4
Audience	IT Professionals
Hours	40 Hrs.

Overview:

A comprehensive understanding of various storage infrastructure components in traditional, virtualized, and software-defined data center environments.

Objectives:

- Strong knowledge of storage-related technologies in an increasingly complex IT environment, which is fast changing with the adoption of third platform technologies (cloud, Big Data, social, and mobile technologies).
- Advanced concepts, technologies, and processes of managing and securing storage.

Outlines:

Lesson 1: Modern Data Center Infrastructure

- Describe the data classification, elements of a data center, key characteristics of a data center, and key technologies driving digital transformation
- Explain the cloud characteristics, cloud service models, and cloud deployment models
- Explain the key characteristics of big data, components of a big data analytics solution, Internet of Things (IoT), machine learning, and artificial intelligence (AI)
- Describe the building blocks of a modern data center
- Describe a compute system, storage, connectivity in a data center, application, and options to build a modern data center

Lesson 2: Storage Networking Technologies

- Describe Storage Area Network (SAN), FC architecture, FC topologies, zoning, and virtualization in FC SAN
- Describe TCP/IP, IP SAN, iSCSI protocol, components, connectivity, addressing, discovery domains, and VLAN
- Explain the components and connectivities of FCIP and FCoE

Lesson 3: Storage Systems

- Explain the components of an intelligent storage system, RAID, erasure coding, data access methods, scale-up and scale-out architectures

- Explain the components of block-based storage system, storage provisioning, and storage tiering mechanisms
- Explain the NAS components and architecture, NAS file sharing methods, and file-level virtualization and tiering
- Describe object-based storage device components, functions, operations, and unified storage architecture
- Describe software-defined storage attributes, architecture, functions of the control plane, software-defined extensibility, and software-defined networking functionalities

Lesson 4: Backup, Archive, and Replication

- Describe the information availability measurements and key fault tolerance techniques
- Explain backup granularity, architecture, backup targets, operations, and backup methods
- Describe data deduplication and data archiving solutions architecture
- Describe replication uses, and replication and migration techniques

Lesson 5: Security and Management

- Describe the information security goals, terminologies, various security domains, and threats to a storage infrastructure
- Explain key security controls to protect the storage infrastructure
- Describe the storage infrastructure management functions and processes

[For more details visit course page](#)

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