

# Storage Networking Design

## Course Description



### Course Number

MR-1CP-DCASND

### Delivery Method

Instructor Led

### Duration

5 Days



This course material supports the  
EMC Proven Professional Program



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### Overview

Storage Networking Design course covers a range of storage networking technologies, processes, and best practices for planning, architecting, and deploying storage networking solutions—including within a virtualized environment. This course builds on the technology concepts and principles learned in the Information Storage and Management (ISM) course (prerequisite) and enable participants to apply their knowledge to real-world scenarios. Lectures and workshop style case studies provide a thorough exposure to Storage Networking requirement analysis, business value justification, and technology design considerations. It also provides an overview on processes and practices for Storage Networking project implementation and testing.

### Audience

This course is intended for:

- Experienced IT professionals who are responsible for architecting information infrastructure solutions
- IT professionals who have foundational knowledge on storage technologies and want to build their career in the storage industry
- Individuals who are seeking the EMC Proven™ Professional Data Center Architect (EMCDCA) Storage Networking Design Specialist Certification (Exam E20-016)

### Prerequisite Knowledge/Skills

To understand the content and successfully complete this course, the student must have

- An EMC Information Storage Associate (EMCISA) certification
- A good understanding of the computer architecture, operating systems networking, and databases

### Course Objectives

Upon successful completion of this course, participants should be able to:

- Understand the requirements, and business value justification of a Storage Networking solution
- Describe technology components, considerations, and best practices for designing a Storage Networking Solution with SAN, NAS, and IP-SAN technologies in a classic data center environment
- Describe the design considerations for virtualized storage infrastructure and detail Cloud Computing technology
- Describe the design considerations at host and storage system
- Describe the implementation planning and test procedure for a Storage Networking project

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### Topics Covered

This course is organized into Sections, Modules, and Lessons. The following sections are covered in this course:

#### Section 1: Analysis and Planning for Architecting Storage Networking Solution

- Requirement and business value analysis
- Gathering requirements by classifying applications
- Case studies on business value analysis

#### Section 2: Storage Network Design Considerations

- Fibre Channel Storage Area Network
- Network Attached Storage
- Hybrid (iSCSI, FCIP, FCoE) Storage Networking technologies
- Design for storage virtualization and Cloud Computing
- Case studies on designing FC SAN and NAS solutions

#### Section 3: Host and Storage System Design Considerations

- Design considerations and best practices for Host system
- Design considerations and best practices for Storage system
- Storage design for Database (Oracle) and Email (MS Exchange 2010) applications
- Case studies on designing storage solution for MS Exchange 2010 environment

#### Section 4: Implementation Planning and Test Procedure for a Storage Networking Project

- Analysis and Planning for Storage Networking Project Implementation
- Test Procedure for a Storage Networking Project

### Case Studies and Concepts in Practice (EMC Product Examples)

The technologies and solutions described in the course are reinforced with EMC product examples and design best practices. Realistic case studies enable the participant to design the most appropriate solution for given sets of criteria.

### Assessments

Assessments validate the student's understanding of the subject learned. This course includes self assessment quizzes at the end of each section.