COURSE OUTLINE

HW-STOR

HCIA-STORAGE

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Foundation	Storage	Instructor Led	NA

INTRODUCTION

HCIA-Storage introduces how storage supports the development and application of new IT frontier technologies (such as AI, big data, cloud computing). It further elaborates the key roles of storage in the entire IT development. A more general and systematic explanation of the storage knowledge will be made to simplify some of the repetitive, outdated, or actually less-used technologies and solutions, so that the overall storage knowledge is more forward-looking and practical. The content of this course includes but is not limited to the following parts: Storage cutting-edge technology and trends, storage application technologies in AI, big data and cloud computing, storage ecosystem introduction, business continuity solution, storage system routine maintenance and troubleshooting in data center.

AUDIENCE PROFILE

This course is intended for any IT professional with either no understanding or a moderate understanding of storage technologies, who wishes to further their understanding of storage and certify within the Huawei spectrum.

PREREQUISITES

None

COURSE OBJECTIVES

In this course, delegates will build an understanding of storage technologies and then learn how to do basic configuration on Huawei storage systems. The key areas covered in this course are as follows:

- Latest Storage Technologies and Trends
- Storage Technologies for AI, Big Data and Cloud
- ICT architecture
- Architecture of Storage Systems
- Introduction to Common Storage Protocols
- Storage Network Technologies
- Storage Reliability Technologies
- Common Advanced Storage Technologies
- Overview of Business Continuity Solutions
- Backup Solutions and Its Applications
- Disaster Recovery Technology and Its Applications
- Introduction to Data Centre
- Data Centre Storage Management
- Operation and Maintenance of Data Centre Storages

COURSE CONTENT

Lesson 1: Latest Storage Technologies and Trends

- Understand the definition of storage
- Understand the development history of storage technologies
- Understand the evolution of storage technologies and its development trends;
- Learn about Huawei Storage Products and Solutions.

Lesson 2: Storage Technologies for AI, and Big Data

- Understand the development trends of ICT.
- Understand Cloud, Big Data and AI.
- Learn about storage technologies and its application in the Cloud.
- Learn about storage technologies and its application in AI and Big Data.

Lesson 3: ICT Architecture

- Describe the differences between data and information.

- Understand information lifecycle management.
- Understand the definition of ICT, its architecture and knowledge of its components.

Lesson 4: Architecture of Storage Systems
- Understand the common storage system architectures.
- Grasp the concepts of common storage components.
- Understand the Huawei storage products.

Lesson 5: Introduction to Common Storage Protocols
- Describe the definitions of common storage protocols.
- Understand the technical principles of common storage protocols.
- Understand the application scenarios of common storage protocols.

Lesson 6: Storage Network Technologies
- Describe the characteristics of DAS, NAS and SAN storage network technologies.
- Differentiate between the advantages and disadvantages of DAS, NAS, and SAN storage network technologies.

Lesson 7: Storage Reliability Technologies
- Describe the concepts, principles and types of RAID technologies.
- Describe the principles of RAID 2.0+ technologies.
- Understand the Multipathing technologies of hosts.
- Understand the technologies implemented for ensuring the reliability of hard disk.

Lesson 8: Common Advanced Storage Technologies
- Understand the principles, configuration process and application scenarios of SmartThin technology.
- Understand the principles, configuration process and application scenarios of SmartTier technology.
- Understand the principles, configuration process and application scenarios of SmartQoS technology.
- Understand the principles, configuration process and application scenarios of SmartPartition technology.
- Understand the principles, configuration process and application scenarios of SmartQuota technology.

Lesson 9: Overview of Business Continuity Solutions
- Understand the importance and the challenges faced by business continuity.
- Understand the definition of business continuity, standards and the relationship between the costs and risks in ensuring business continuity.
- Understand the common solutions for business continuity.
- Understand the panorama of Huawei business continuity solutions.

Lesson 10: Backup Solutions and its Applications
- Describe the related technologies of Storage Backup Solutions within the Datacentre.
- Understand the technical differences of Backup and Disaster Recovery solutions.
- Learn how to deploy a Backup Solution through application cases.

Lesson 11: Disaster Recovery Technology and Its Applications
- Describe the concepts and importance of Disaster Recovery.
- Differentiate the Advantages and Disadvantages of common Disaster Recovery solutions.
- Understand the technical principles of Disaster Recovery solutions.
- Learn how to deploy a Disaster Recovery solution through case study of typical application of Disaster Recovery Solution.

Lesson 12: Introduction to Data Centre
- Understand the history of Data Centre
- Familiar with the basic components and modules of the Data Centre
- Understand the evolution and current trends of cloud Data Centres.

Lesson 13: Data Centre Storage Management
- Describe the initial operations and configuration of the storage system in the data centre.
- Describe the configuration process of the block storage services, its application scenario including the disk domain, storage pool allocation configuration and how the host and application servers accesses the storage volumes.
- Describe the configuration process and application scenario of file services, including the application scenario and configuration methods of CIFS and NFS**.**

Lesson 14: Operation and Maintenance of Data Centre Storages
- Describe the work scope of Datacentre Storage Administrators.
- Describe the routine maintenance items and the maintenance methods for Datacentre Storage Systems.
- Describe the content of daily management items for Datacentre Storage Systems.
- Describe the functions and application scenario of the common O&M tools used on Datacentre Storage System

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the H13-611-ENU HCIA-Storage V4.0 exam