Huawei Certified ICT Associate- Storage

Course Objectives

On completion of this program, the participants will be able to:

- Understand definitions of information and data.
- Understand development trends of data storage products.
- Understand functions and components of controller enclosures and disk enclosures.
- Understand concepts of scale-up and scale-out, as well as related cables and interface modules.
- Understand working principles of RAID 2.0+.
- Understand dynamic RAID and RAID-TP.
- Understand common protocols used in storage systems.
- Understand working principles and characteristics of different protocols.
- Understand storage network architecture evolution.
- Understand storage networking technology evolution.
- Be familiar with the features and positioning of storage products.
- Understand DeviceManager, CLI, and UltraPath storage system management tools.
- Understand service characteristics, implementation principles, and application scenarios of resource tuning technologies.
- Understand service characteristics, implementation principles, and application scenarios of data protection technologies.
- Be familiar with common storage system O&M management tools and typical O&M processes.

Audience

- Personnel who want to become storage engineers
- Personnel who want to obtain HCIA-Storage v5.0 certification

Prerequisites

- Basic knowledge of IT technologies and networks

Course Outline

Storage Technology Trends
- Data and Information
- Data Storage

- Development of Storage Technologies
  - Storage Architecture
  - Storage Media
  - Interface Protocols
- Development Trend of Storage Products

Basic Storage Technologies
- Intelligent Data Storage System
- Intelligent Data Storage Components
  - Controller enclosure
  - Disk enclosure
  - Expansion module
  - Disk
    - HDD
    - SSD
  - Interface module
- Storage system Expansion Methods
- RAID Technologies
  - Traditional RAID
  - RAID 2.0+
  - Other RAID Technologies
- Common Storage Protocols
  - SAN Protocols
    - SCSI and SAS
    - iSCSI and FC
    - PCIe and NVMe
    - RDMA and RoCE
  - NAS Protocols
    - File system
    - CIFS, NFS and Cross-Protocol Access
    - HTTP, FTP and NDMP
  - Object and HDFS Storage Protocols
    - Object Storage Protocol
    - HDFS Storage Protocol
- Storage Network Architecture
  - DAS
  - NAS
  - SAN
    - IP SAN Technologies
    - FC SAN Technologies
    - Comparison Between IP SAN and FC SAN
- Distributed Architecture

Huawei Intelligent Storage Products and Features
- Huawei Intelligent Storage Products
  - Panorama
  - All-Flash Storage
  - Hybrid Flash Storage

- o   Scale-Out Storage
- o   Hyper-Converged Storage
- o   Backup Storage

Storage System Operation Management
- Storage Management Overview
- Storage Management Tools
- Basic Management Operations

Storage Resource Tuning Technologies and Applications
- SmartThin
- SmartTier&SmartCache
- SmartAcceleration
- SmartQoS
- SmartDedupe&SmartCompression
- SmartVirtualization
- SmartMigration

Storage Data Protection Technologies and Applications
- HyperSnap
- HyperClone
- HyperCDP
    - o   LUN HyperCDP
    - o   File System HyperCDP
- HyperLock

Storage System O&M Management
- O&M Overview
- O&M Tools
- O&M Scenarios

Associated Certifications

HCIA- Storage (Huawei Certified ICT Associate- Storage)

Course Duration

5 days