Huawei OceanStor Dorado Storage Administration 18000 V6

Course Overview

This course provides participants with the knowledge and skills necessary to effectively manage, configure, and maintain the Huawei OceanStor Dorado 18000 V6 storage system. The training covers key administrative tasks, system architecture, performance optimization, disaster recovery, and hands-on labs to ensure participants can apply their knowledge in real-world scenarios.

Course Duration

- 5 Days

Target Audience

- Storage Administrators
- System Engineers
- Data Center Engineers
- IT Professionals responsible for storage management and optimization

Prerequisites

- Basic understanding of storage concepts
- Experience with networked storage solutions
- Familiarity with SAN (Storage Area Networks) and NAS (Network Attached Storage)

Day 1: Introduction to Huawei OceanStor Dorado 18000 V6

- **Module 1: Overview of Huawei OceanStor Dorado Series**
  - Introduction to the Huawei storage portfolio
  - Key features and benefits of OceanStor Dorado 18000 V6
  - Architecture and components
  - Performance and reliability highlights
- **Module 2: Hardware Components and Architecture**
  - Controllers, disks, and enclosures
  - NVMe-based SSDs and storage tiers
  - Redundancy and fault-tolerance mechanisms
- **Module 3: Initial Setup and Configuration**
  - Installation procedures and best practices
  - Physical connections and cabling
  - Powering on and system initialization
  - Web-based management interfaces (DeviceManager)

Practical Lab:

- Initial system setup, cabling, and accessing the management interface

Day 2: Storage Management and Configuration

- **Module 4: Storage Pool and LUN Management**
  - Creating and managing storage pools
  - Thin provisioning and deduplication
  - Creating and managing LUNs
  - LUN mapping and access control
- **Module 5: Snapshot and Clone Operations**

    - Creating and managing snapshots
    - Performing storage cloning for data replication
    - Use cases for data protection and backup
- **Module 6: RAID Configuration and Management**
    - RAID levels supported by Dorado 18000 V6
    - RAID group creation and configuration
    - Monitoring RAID status and recovery

Practical Lab:

- Storage pool and LUN configuration, snapshot creation, and RAID management

Day 3: Advanced Features and Performance Optimization

- **Module 7: Quality of Service (QoS)**
    - Introduction to QoS policies
    - Setting up QoS rules for performance optimization
    - Monitoring and adjusting QoS in real-time
- **Module 8: Smart Features**
    - SmartMigration, SmartCompression, SmartDeduplication
    - Data migration and storage tiering strategies
- **Module 9: Performance Tuning**
    - Monitoring system performance metrics
    - Tuning the system for optimal performance
    - Identifying and resolving performance bottlenecks

Practical Lab:

- Configuring QoS, enabling smart features, and performance monitoring

Day 4: Data Protection, Disaster Recovery, and Backup

- **Module 10: Backup and Restore Mechanisms**
    - Backup strategies and planning
    - Data restoration from snapshots and clones
- **Module 11: Disaster Recovery Solutions**
    - Implementing disaster recovery with OceanStor Dorado
    - Overview of HyperMetro, HyperReplication, and HyperClone
    - Configuring replication between primary and backup storage
- **Module 12: Multi-Tenant Security and Data Isolation**
    - Configuring and managing storage for multiple tenants
    - Data isolation and security best practices

Practical Lab:

- Configuring disaster recovery, backup policies, and data replication

Day 5: System Monitoring, Troubleshooting, and Maintenance

- **Module 13: System Monitoring and Alerts**
    - Using Huawei DeviceManager for monitoring
    - Configuring alerts and notifications
    - Performance analysis and reporting
- **Module 14: Troubleshooting Common Issues**

    - Diagnosing hardware and software failures
    - Analyzing logs and system events
    - Troubleshooting connectivity and performance issues
- **Module 15: Maintenance and Firmware Upgrades**
    - Upgrading firmware and software components
    - Scheduled maintenance tasks
    - Best practices for ensuring system uptime and reliability

Practical Lab:

- Firmware upgrade, system monitoring, and troubleshooting exercises

Final Assessment and Q&A

- Review key concepts
- Hands-on practical exam covering administration tasks
- Open forum for questions and additional clarifications