

1 Training Programs List

Training Program	Duration (working days)	Class Number	Class Type	Max Class Size	Program Level	Training Location
IDC Solution						
IDC Solution Overview Training	2	1	Closed Class	12	II	On-site
IDC Core Technologies Training	2	1	Closed Class	12	II	On-site
IDC Infrastructure Administration Training	4	1	Closed Class	12	II	On-site
IDC Design and Planning Fundamental Training	5	1	Closed Class	12	III	On-site
IDC Solution Overview Training(WBT)	0.5	1	Closed Class	12	II	On-site
IDC Service Solution Overview Training	1	1	Closed Class	12	III	On-site
IDC Service Solution Overview Training(WBT)	1H	1	Closed Class	12	III	On-site
IDC Integration Solution Training	2	1	Closed Class	12	III	On-site
ManageOne Solution Deployment and Management Training	2	1	Closed Class	12	II	On-site
DC ² Solution Overview Training	1	1	Closed Class	12	II	On-site
Data Center Disaster Recovery Solution Overview Training	1	1	Closed Class	12	II	On-site
Storage Technology						
Storage Technology Foundation Training	1	1	Closed Class	12	II	On-site
T SeriesV1 (22T/26T/55T/56T/58T/68T) Storage Array Deployment and Management Training	4	1	Closed Class	12	II	On-site
T SeriesV2 (55T/56T/58T/68T) Storage System Deployment and Management Training	4	1	Closed Class	12	II	On-site
T SeriesV3 (55T/56T/58T/68T) Storage System Deployment and Management Training	4	1	Closed Class	12	II	On-site
OceanStor 18500/18800 High-end Storage System Deployment and	4	1	Closed Class	12	II	On-site

Training Program	Duration (working days)	Class Number	Class Type	Max Class Size	Program Level	Training Location
Management Training						
SNS Series (SNS2124/SNS2224/SNS2248) FC Switch Product Deployment and Management Training	1	1	Closed Class	12	II	On-site
Dorado2100 G2/5100 SSD Storage System Deployment and Management Training	2	1	Closed Class	12	II	On-site
VIS6000T Series Virtual Storage Gateway System Deployment and Management Training	3	1	Closed Class	12	II	On-site
N8500 V2 Clustered NAS System Deployment and Management Training	3	1	Closed Class	12	II	On-site
OceanStor 9000 Storage System Deployment and Management Training	3	1	Closed Class	12	II	On-site
CloudStor(9000E/9000E/CSS/CSE) Cloud Storage Deployment and Management Training	4	1	Closed Class	12	II	On-site
VTL6900 Virtual Tape Library System Deployment and Management Training	3	1	Closed Class	12	II	On-site
Simpana Operation and Maintenance Training	1	1	Closed Class	12	II	On-site
UDS Mass Storage Deployment and Management Training	4	1	Closed Class	12	II	On-site
Server Technology						
RH Series Rack Server Deployment and Management Training	2	1	Closed Class	12	II	On-site
E6000 Series Blade Server Deployment and Management Training	2	1	Closed Class	12	II	On-site
E9000 Series Blade Server Deployment and Management Training	2	1	Closed Class	12	II	On-site
Cloud Solution						
HUAWEI Cloud Solution Training	1	1	Closed Class	12	II	On-site
Desktop Cloud Solution(R3) Deployment and Management	3	1	Closed Class	12	II	On-site

Training Program	Duration (working days)	Class Number	Class Type	Max Class Size	Program Level	Training Location
Training						
FusionCube Solution Deployment and Management Training	3	1	Closed Class	12	II	On-site
FusionSphere Solution Deployment and Management Training	3	1	Closed Class	12	II	On-site
FusionInsight Solution Deployment and Management Training	2	1	Closed Class	12	II	On-site
IT Network& security						
IDC CloudEngine Series Switch Administration Training	10	1	Closed Class	12	II	On-site
IDC NE Series Router Administration Training	10	1	Closed Class	12	II	On-site
IDC Eudemon 1000E/200E Firewall Administration Training	6	1	Closed Class	12	II	On-site
IDC Eudemon 8000E Firewal Administration Training	6	1	Closed Class	12	II	On-site
IDC DDoS Solution Administration Training	1	1	Closed Class	12	III	On-site
IDC NIP Administration Training	3	1	Closed Class	12	II	On-site
IDC SIG9800 Administration Training	2	1	Closed Class	12	II	On-site

2 Training Program(s) Description

2.1 IDC Solution

2.1.1 IDC Solution Overview Training

Training Path

IDC Solution Overview		
ODC15	Lecture	2d

Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with IDC Familiar with IT and general network

Objectives

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

- Describe IDC system architecture
- Describe IDC infrastructure concepts and equipments
- Describe IDC network features and related concepts
- Describe IDC Computing and Storage system features and related concepts
- Describe IDC Security system features and related concepts
- Describe IDC Disaster Recovery and Backup system features and related concepts
- Describe IDC Operation and Management system

Training Content

ODC15 IDC Solution Overview

- Overview and Trend of Data Center
 - What is IDC?
 - IDC Marketing Analysis and Technology Innovation
 - IDC architecture
- Data Center Network Solution
 - Network Hierarchical Design Network Zone Design
 - IDC Network Basic Technology
 - A General Introduction of Network Equipment
- Data Center Compute and Storage Solution
 - IDC Computing Overview
 - IDC Storage Overview
 - IDC virtualization Overview
 - A General Introduction of Computing and Storage Equipment
- Data Center Security Solution

- Infrastructure Security
- Network Security
- Cabinet Security
- Application Security
- Virtualization Security
- Data Security
- User Security
- Security Administration
- A General Introduction of Security Equipment
- Data Center Disaster Recovery Solution
 - Application Disaster Recovery Solution
 - Data Disaster Recovery Solution
 - Medium Disaster Recovery Solution
 - Data Backup Solution
- Data Center Management System
 - IDC Service Management and Operation features
 - IDC Management and maintenance features

Duration

2 working days

Class Size

Min 1, Max 12

2.1.2 IDC Core Technologies Training

Training Path

IDC Core Technology		
ODC16	Lecture	2d

Target Audience

Device Operating and maintenance staff

Prerequisites

- Familiar with IT and general network

Objectives

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

- Describe cloud computing key features
- Describe computing virtualization technology features and concepts
- Describe VMs principal
- Describe network virtualization technology features and concept

- Describe stack technology principal
- Describe Virtual System principal
- Describe TRILL protocol principal
- Describe cloud storage technology features and concepts
- Describe FCoE principal
- Describe cloud security architecture
- Describe data backup technology concepts
- Describe data center disaster recovery and backup solution key technology

Training Content

ODC16 IDC Core Technology

- Data Center Core Technologies-Cloud Computing
 - History and Background of Cloud Computing
 - Cloud Computing Concepts and Characteristics
 - Benefits of Cloud Computing.
 - Cloud Computing Use Cases
 - Trend and Evolution of Cloud Computing
- Data Center Core Technologies-Virtualization
 - Server Virtualization.
 - Network Virtualization.
 - iStack Technology
 - Virtual System (VS)Technology Principal
 - TRILL Protocol
- Data Center Core Technologies-Cloud Storage
 - Cloud Storage Technology Principal
 - Cloud Storage Feature
 - Cloud Storage Application Scenarios
- Data Center Core Technologies-Network Technologies
 - FCoE Technology Principal
 - FCoE Application Scenarios
- Data Center Core Technologies-Security
 - Threats to Cloud Computing Security
 - Cloud Computing Security Architecture
 - Huawei Cloud Computing Security Solution
 - Infrastructure Security
 - Network Security
 - Virtualization Security
 - Management Security
 - Data Security
- Data Center Core Technologies-Disaster Recovery and Migration
 - Data Protection Technology Overview

- Disaster Recovery and Backup Technology
- Disaster Recovery and Backup Application Scenarios

Duration

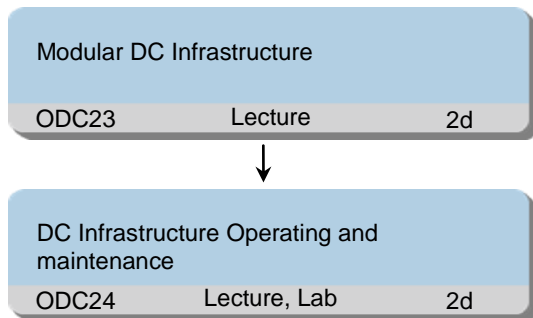
2 working days

Class Size

Min 1, Max 12

2.1.3 IDC Infrastructure Administration Training

Training Path



Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with IT and Network Fundamental
- Be familiar with IDC Infrastructure Fundamental
- Be familiar with IDC Infrastructure Operating and maintenance Fundamental

Objectives

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

- Describe DC Infrastructure new technology and development trend
- Describe DC Infrastructure features and related concepts
- Describe DC Infrastructure design principle
- Describe DC Infrastructure Intelligent Monitoring System features
- Describe DC infrastructure management system features
- Describe DC infrastructure management system hardware features
- Describe DC infrastructure management system software features
- Describe DC infrastructure management system networking mode
- Describe DC infrastructure management system functions
- Grasp DC infrastructure management system configuration and operation
- Grasp DC infrastructure management and daily maintenance

Training Content

ODC23 Modular DC Infrastructure

- Data Center Infrastructure Development trend
 - What is Data Center?
 - DC Infrastructure development trend
 - DC Infrastructure Solution Architecture Overview
 - DC Infrastructure new technology
 - DC Infrastructure design principle
- Modular Data Center Infrastructure Introduction
 - Modular DC Infrastructure Design Principles and Value
 - Modular DC Infrastructure features
 - Cabinet System features
 - Aisle Containment Structure
 - Power Supply and Distribution System
 - Refrigeration System
 - Intelligent Monitoring System Cabling System
 - Fire Extinguishing System
 - Lightning Protection System
- Modular Data Center Infrastructure Intelligent Monitoring System Introduction
 - Intelligent Monitoring System function Overview
- Modular Data Center Infrastructure Case Introduction and Visit(Optional)
 - Modular DC Infrastructure Success Stories Introduce
 - Huawei Modular DC Infrastructure Visit

ODC24 DC Infrastructure Operating and maintenance

- Data Center Infrastructure Management System Overview
 - Infrastructure Management System positioning and Functions
 - Infrastructure Management System application Scenarios
 - Infrastructure Management System networking Mode
 - Infrastructure Management System Features
- Data Center Infrastructure Management System Product Introduction
 - Infrastructure Management System Server Configuration
 - Infrastructure Management System Hardware Structure
 - Infrastructure Management System Software Structure
- Data Center Infrastructure Management System Functions and Configuration
 - System Management and Configuration
 - Resource Management and Configuration
 - View Management and Configuration
 - Fault Management and Configuration
 - Performance Management and Configuration
 - Report Management and Configuration
 - PUE analysis and Configuration

- Work List Management and Configuration

Duration

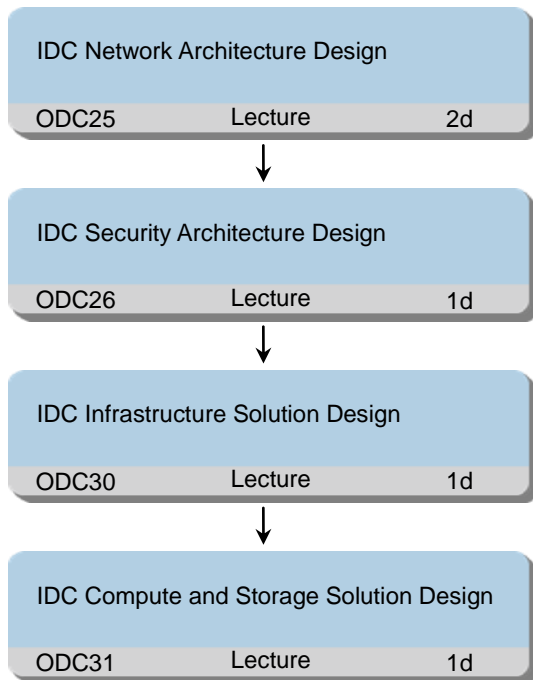
4 working days

Class Size

Min 1, Max 12

2.1.4 IDC Design and Planning Fundamental Training

Training Path



Target Audience

Design and planning staff

Prerequisites

- Familiar with IT and General Network
- Familiar with Security Fundamental
- Familiar with the IT system architecture
- Familiar with storage and SAN system technology
- Familiar with backup and disaster recovery basic knowledge and experience

Objectives

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

- Describe IDC network architecture
- Describe IDC network layered design principle

- Describe IDC network functional-area partition principle
- Describe IDC network plane design principle
- Describe the basic concepts of storage virtualization.
- describe the basic concepts of cloud storage.
- Describe the intercommunication of multiple IDC design principle
- Describe the IDC network application acceleration design principle
- Describe the cloud computing IDC network solution
- Describe IDC Network products requirement and features
- Describe IDC security architecture design principle
- Describe IDC security design solution
- Describe IDC security threats and protection solution
- Describe IDC infrastructure security solution
- Describe IDC network layer security solution
- Describe IDC host and application security
- Describe IDC user security policy and security management
- Describe IDC intrusion detection mechanism and access control policy

Training Content

ODC25 IDC Network Architecture Design

- Data Center Network Architecture Solution Overview
 - IDC Network Architecture
 - IDC Network Trend
 - IDC Network Solution Overview
- Data Center Network Architecture Design
 - IDC Network Architecture Design
 - IDC Network Layered Design
 - IDC Network Functional-Area Partition Design
 - IDC Network Plane Design
 - IDC Network Service Planning
 - Intercommunication of Multiple IDC Design
- Data Center Network Application Acceleration Solution Design
 - IDC Load Balance Solution
 - IDC Application Acceleration Solution
 - IDC NetStream flow monitor Solution
- Huawei Cloud Fabric Data Center Network Solution
 - The Challenges of the Cloud Computing IDC network
 - Huawei Cloud Fabric DC Network Solution
 - Huawei CloudEngine Products Introduction

ODC26 IDC Security Architecture Design

- Data Center Security Architecture Design
 - IDC Security Problems and Protection Solution
 - Security Trend

- IDC Security Analysis and Protection Solution
- The importance of IDC Security
- IDC Security Architecture
- IDC Hierarchical Security Design
- Infrastructure Security
- Network Security
- Host and Virtualization Security
- Application Security
- Data Security
- User Security Management
- Operating and maintenance Security and Account Management
- Security Policy Configuration Principle
- Minimum Authorized Principle
- Service Relevance Principle
- Maximum Policy Principle
- IDC Functional-Area Security Deployment
- IDC Security Solution Features
- IDC Security Products Introduction

ODC30 IDC Infrastructure Solution Design

- Data Center Infrastructure Solution Design
 - Data Center Infrastructure Design Principal
 - Data Center Infrastructure Design Method
 - Data Center Cabinet Solution
 - Data Center Power Supply System Solution
 - Data Center Cooling System Solution
 - Data Center Fire Suppression System Solution
 - Data Center Integrated Wiring System Solution
 - Data Center Integrated Management Solution
 - Data Center Lightning Protection and Grounding System

ODC31 IDC Compute and Storage Solution Design

- Data Center Compute and Storage Solution Design
 - Data Center Compute Solution Design Principal
 - Data Center Compute Solution Design Method
 - Data Center Storage Solution Design Principal
 - Data Center Compute Solution Design Method

Duration

5 working days

Class Size

Min 1, Max 12

2.1.5 IDC Solution Overview Training(WBT)

Training Path

IDC Solution Overview(WBT)		
ODC28	Lecture	0.5d

Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with IDC Familiar with IT and general network

Objectives

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

- Describe IDC system architecture
- Describe IDC infrastructure concepts and equipments
- Describe IDC network features and related concepts
- Describe IDC Computing and Storage system features and related concepts
- Describe IDC Security system features and related concepts
- Describe IDC Disaster Recovery and Backup system features and related concepts
- Describe IDC Operation and Management system

Training Content

ODC28 IDC Solution Overview(WBT)

- Overview and Trend of Data Center(WBT)
 - What is IDC?
 - IDC Marketing Analysis and Technology Innovation
 - IDC architecture
- Data Center Network Solution(WBT)
 - Network Hierarchical Design Network Zone Design
 - IDC Network Basic Technology
 - A General Introduction of Network Equipment
- Data Center Compute and Storage Solution(WBT)
 - IDC Computing Overview
 - IDC Storage Overview
 - IDC virtualization Overview
 - A General Introduction of Computing and Storage Equipment
- Data Center Security Solution(WBT)
 - Infrastructure Security
 - Network Security
 - Cabinet Security

- Application Security
- Virtualization Security
- Data Security
- User Security
- Security Administration
- A General Introduction of Security Equipment
- Data Center Disaster Recovery Solution(WBT)
 - Application Disaster Recovery Solution
 - Data Disaster Recovery Solution
 - Medium Disaster Recovery Solution
 - Data Backup Solution
- Data Center Management System(WBT)
 - IDC Service Management and Operation features
 - IDC Management and maintenance features

Duration

0.5 working day

Class Size

Min 1, Max 12

2.1.6 IDC Service Solution Overview Training

Training Path

IDC Service Solution Overview Training		
ODC29	Lecture	1d

Target Audience

Data Center Administrator

Prerequisites

- Be familiar with IDC Familiar with IT and general network

Objectives

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

- Describe data center Service Overview
- Describe data center Service Model
- Describe data center Service Architecture
- Describe data center Service Operating Model

Training Content

ODC29 IDC Service Solution Overview Training

- IDC Service Solution Overview Training
 - Data Center Service Overview
 - Data Center Service Model
 - Data Center Service Architecture
 - Data Center Service Operating Model

Duration

1 working day

Class Size

Min 1, Max 12

2.1.7 IDC Service Solution Overview Training (WBT)

Training Path

IDC Service Solution Overview Training (WBT)		
ODC29	Lecture	1H

Target Audience

Data Center Administrator

Prerequisites

- Be familiar with IDC Familiar with IT and general network

Objectives

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

- Describe data center Service Overview
- Describe data center Service Model
- Describe data center Service Architecture
- Describe data center Service Operating Model

Training Content

ODC29 IDC Service Solution Overview Training (WBT)

- IDC Service Solution Overview Training
 - Data Center Service Overview
 - Data Center Service Model
 - Data Center Service Architecture
 - Data Center Service Operating Model

Duration

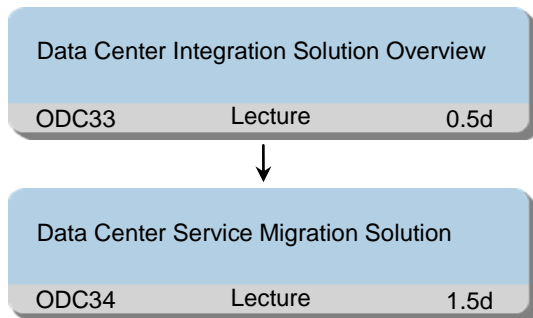
1 H

Class Size

Min 1, Max 12

2.1.8 IDC Integration Solution Training

Training Path



Target Audience

Design and planning staff

Prerequisites

- Be familiar with IDC Familiar with IT and general network

Objectives

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

- Describe Data Center Integration Risk Identification
- Describe Data Center Integration Risk Analysis
- Describe Data Center System Migration Identification
- Describe Describe Data Center System Migration Design
- Describe Data Center System Migration Acceptance
- Describe Data Center Oracle Database Migration Identification
- Describe Data Center Oracle Database Migration Design
- Describe Data Center Oracle Database Migration Acceptance
- Describe Data Center SAN Storage Migration Identification
- Describe Data Center SAN Storage Migration Design
- Describe Data Center SAN Storage Migration Acceptance

Training Content

ODC33 Data Center Integration Solution Overview

- Data Center Integration Solution Overview
 - Data Center Integration Risk
 - Data Center Integration Risk Identification

- Data Center Integration Risk Analysis
- Data Center Business Association Analysis

ODC34 Data Center Service Migration Solution

- Data Center System Migration Solution
 - Data Center System Information Collection
 - Data Center System Migration Identification
 - Data Center System Migration Design
 - Data Center System Migration Drilling
 - Data Center System Migration Cutover
 - Data Center System Migration Acceptance
- Data Center Oracle Database Migration Solution
 - Data Center Oracle Database Information Collection
 - Data Center Oracle Database Migration Identification
 - Data Center Oracle Database Migration Design
 - Data Center Oracle Database Migration Drilling
 - Data Center Oracle Database Migration Cutover
 - Data Center Oracle Database Migration Acceptance
- Data Center SAN Storage Migration Solution
 - Data Center SAN Storage Information Collection
 - Data Center SAN Storage Migration Identification
 - Data Center SAN Storage Migration Design
 - Data Center SAN Storage Migration Drilling
 - Data Center SAN Storage Migration Cutover
 - Data Center SAN Storage Migration Acceptance

Duration

2 working days

Class Size

Min 1, Max 12

2.1.9 ManageOne Solution Deployment and Management Training

Training Path

ManageOne Solution Deployment and Management	
ODC12Lecture, Hands-on exercise	2d

Target Audience

Operators and Maintainers
 Administrators
 Planners and Designers

Prerequisites

- Know about DC solution
- Familiar with DC operation and maintenance knowledge
- Familiar with DC business knowledge

Objectives

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

- Describe the overall architecture of the ManageOne solution
- Describe the installation and deployment of the ManageOne solution
- Describe the basic features of the ManageOne solution
- Describe the operation and maintenance of ManageOne solution
- Describe the business features and functions of ManageOne solution

Training Content

ODC12 Service Shared Manage Center Deployment and Management

- DC SSMC Introduction
 - DC SSMC Project Background
 - DC SSMC System Plan Vision
 - DC SSMC Logical Architecture
 - DC SSMC Network Topology
 - DC SSMC System Position
 - DC SSMC Service Module Partition
 - DC SSMC Operation Service Overview
 - DC SSMC Maintenance Service Overview
 - DC SSMC User Role and Application Scenario
- ManageOne Solution Introduction
 - Date Center Management Development and Chanllenges
 - Huawei Data Center Management Solution
 - Success Case
- ManageOne Solution Operation and Maintenance Introduction
 - Operation and Maintenance Overview
 - Service Assurance(SA) Software Architecture
 - SA Function Modules and Features
 - SA deep integration with SSMC(Service Shared Management Center)
- ManageOne Solution Business Introduction
 - Business Overview
 - Administrators Usage Introduction
 - Introduce the Usage of Business Manager
 - Introduce the Usage of enterprise administrators
 - End-User Usage Introduction
 - Introduce the usage of individual customers
- ManageOne ITIL(Information Technology Infrastructure Library) Introduction

- ITIL Solution Introduction
- ITIL Install Procedure of the Components
- ITIL Process Introduction

Duration

2 working days

Class Size

Min 1, Max 12

2.1.10 Data Center Disaster Recovery Solution Overview Training

Training Path

Data Center Disaster Recovery Solution Overview Training		
ODC14	Lecture	1d

Target Audience

Operators and Maintainers
 Administrators
 Planners and Designers

Objectives

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

- Description of DC disaster recovery subsystem basic concepts and related devices
- Description of DC disaster recovery requirement analysis
- Description of DC disaster recovery solution design principles, processes and methods
- Master DC disaster recovery design method, case and key technology
- Master of disaster recovery production center design
- Master of disaster recovery backup center design
- Master of disaster recovery system link design
- Master of disaster recovery system service connection
- Master of principles, processes and methods of Huawei DR solution

Training Content

- Data Center Disaster Recovery Solution Overview
 - The data and business development brings the IT system requirements
 - The disaster recovery technology trend
 - The disaster recovery business value to customers
 - The current status, issues/risks analysis
 - The customer service objective
 - The service classification principle
 - The service recovery requirements
 - The disaster recovery level

- Data Center Disaster Recovery Solution Design
 - DR solution overall goal
 - DR solution design principle
 - DR solution risk assessment
 - DR solution system architecture introduction
 - DR solution networking introduction
 - DR solution choice and feasibility analysis
 - Key technologies
 - OceanStor VIS6000 product introduction
 - OceanStor T serial product introduction
 - OceanStor HDP3500E product introduction
 - CommVault Simpana product introduction
 - Symantec NetBackup product introduction
 - Symantec SFHA/DR product introduction

Duration

1 working days

Class Size

Min 1, Max 12

2.1.11 DC² Solution Overview Training

Training Path

DC ² Solution Overview Training		
ODC14	Lecture	1d

Target Audience

Operators and maintainers

Administrators

Planners and designers

Prerequisites

- Be familiar with PC operating system
- Know basic knowledge of datacom
- Know basic knowledge of server
- Know basic knowledge of storage

Objectives

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

- Describe DC² solution
- Describe DC² DCaaS feature

- Describe DC² unified management feature
- Describe DC² SDN feature
- Describe DC² DR feature
- Describe DC² security feature
- Describe DC² component

Training Content

OCL13 DC² Solution

- DC² solution introduction
 - The definition of DC² solution
 - The key feature of DC²
- DC² solution architecture introduction
 - The component of DC²
 - The logic architecture of DC²
- DC² VDC feature
 - VDC Concept
 - VDC Resource Management
 - VDC Service Catalog Management
 - VDC Self-Maintenance
- DC² vAPP feature
 - vAPP Quickly Deployment
 - vAPP Elastic Stretchable
 - vAPP Template
- DC² IaaS Service
 - Virtual Computing Service
 - Storage Service
 - Network Service
- DC² unified management feature
 - Multiple Resource Pool Management
 - Operation Management
 - Maintenance Management
- DC² SDN feature
 - Network Service Automation Feature
 - VxLAN
 - Virtual Network Topology Feature
 - Networking Mode
 - Supported SDN Controller
- DC² DR Feature
 - VM DR
 - Physical Machine DR
 - Centralized Backup

- DC² Security Feature
 - Network Security
 - Host Security
 - Data Security

Duration

1 working day

Class Size

Min 1, max 12

2.2 Storage Technology

2.2.1 Storage Technology Foundation Training

Training Path

Storage Technology Foundation		
OST01	Lecture	1d

Target Audience

Operators and Maintainers

Prerequisites

- Know computer basal knowledge
- Know OS basal knowledge

Objectives

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

- Know storage system and network basal concept, structure and component
- Know RAID basal concept, data constructing, common RAID principle, feature and different RAID application scenario
- Know FC-SAN and IP-SAN basal knowledge and key technology
- Know NAS system basal structure and concept
- Master multipath technology and host connection basal technology and application
- Understand Huawei all series storage product feature and main application

Training Content

OST01 Storage Technology Foundation

- Module 1-Storage basal knowledge
 - Information storage media
 - Information storage system

- Host server system
- Data backup technology
- Disaster tolerance technology
- Module 2- RAID technology and application
 - RAID basal concept and technology principle
 - RAID technology and application
 - RAID feature and different application scenario
 - RAID and LUN
- Module 3-Storage network technology and application
 - Storage system technology
 - FC-SAN technology
 - IP-SAN technology
 - FC-SAN and IP-SAN integration
 - NAS technology
 - Host multipath technology
 - FC switch/HBA/FC
- Module 4-Huawei storage product and solution
 - SAN storage product and application
 - Storage server product and application
 - NAS product function and application
 - Disaster tolerance product and application
 - Cloud storage system and application

Duration

1 working day

Class Size

Min 1, Max 12

2.2.2 T seriesV1 (22T/26T/55T/56T/58T/68T) Storage Array Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers
Managers
Planners and Designers

Prerequisites

- Know PC OS
- Know basal computer knowledge
- Know basal storage technology

Objectives

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

- Describe T series product position
- Describe T series product structure
- Describe T series product hardware configuration and component
- Describe T series product software structure and component
- Describe T series product main features and typical application scenario
- Understand T series storage plan and design target
- Understand T series storage plan rule
- Understand T series storage plan method
- Master storage system hardware installation
- Master storage system device cabling
- Master storage system power on sequence
- Master device configuration
- Master basal operation configuration
- Master T series product management
- Master T series product license using
- Master T series product basal application configuration
- Master T series product performance stat. function using
- Master T series product upgrade
- Know T series product common fault disposal
- Master T series product fault disposal process
- Describe UltraPath product request and product position
- Know UltraPath product main function feature
- Know UltraPath product application scenario and deployment scheme
- Know Snapshot definition, principle and configuration process
- Know LUN Copy definition, principle, configuration process
- Know Remote replication definition, principle, configuration process
- Know Smart Cache definition, principle, configuration process
- Describe Split Mirror definition, principle, configuration process
- Describe Thin Provisioning configuration feature request
- Know Thin Provisioning configuration feature and using
- Know Thin Provisioning configuration feature application scenario
- Describe Dynamic RAID Group Expansion principle, configuration

Training Content

OST11 S22T/S26T/S55T/S56T/S58T/S68T Storage Array Product Introduction

- T series product position and structure
- T series product hardware introduction
 - T series hardware configuration
 - T series hardware component
 - T series hardware component
- T series product software introduction
 - T series software function

- T series software component
- T series main features and application scenario

OST12 S22T/S26T/S55T/S56T/S58T/S68T Storage Array Plan and Design

- T series storage plan and design
 - T series SAN plan rule and process
 - Host Plan
 - Network Plan
 - Storage Plan
 - Plan Case

OST13 S22T/S26T/S55T/S56T/S58T/S68T Storage Array Installation and Configuration

- Hardware installation and cabling
 - Device installation
 - Device cabling
 - Device power on
- T series storage configuration
 - Product summarization
 - Device configuration
 - Basal operation configuration
- UltraPath synopsis
 - Implementation principle
 - Main function
 - Typical networking mode
 - Version introduction
- UltraPath for Linux installation, configuration and upgrade
- UltraPath for Windows installation, configuration and upgrade
- UltraPath for Operating system installation, configuration and upgrade

OST14 S22T/S26T/S55T/S56T/S58T/S68T Storage Array Routine Maintenance

- Product management
- License using
- Product basal application configuration
- Performance stat. using
- Product upgrade

OST15 S22T/S26T/S55T/S56T/S58T/S68T Storage Array Troubleshooting

- Common fault introduction
- Fault disposal method and process
- Case study

OST16 S22T/S26T/S55T/S56T/S58T/S68T Storage Array Advanced Function

- Snapshot principle and application
 - Snapshot summarization
 - Snapshot principle
 - Snapshot sort

- Snapshot configuration
 - Snapshot application scenario
- LUN Copy principle and application
 - LUN Copy summarization
 - LUN Copy principle
 - LUN Copy sort
 - LUN Copy configuration
 - LUN Copy application scenario
- Remote replication principle and application
 - Remote replication summarization
 - Remote replication principle
 - Remote replication sort
 - Remote replication configuration
 - Remote replication application scenario
- Smart Cache principle and application
 - Smart Cache summarization
 - Smart Cache principle
 - Smart Cache application scenario
 - Smart Cache configuration
- Split Mirror principle and application
 - Split Mirror summarization
 - Split Mirror principle
 - Split Mirror sort
 - Split Mirror configuration
 - Split Mirror application scenario
- Thin Provisioning configuration principle and application
 - Thin Provisioning configuration summarization
 - Thin Provisioning configuration principle
 - Thin Provisioning configuration deployment
 - Thin Provisioning configuration application scenario
- Dynamic RAID Group Expansion principle and application
 - Dynamic RAID Group Expansion introduction
 - Dynamic RAID Group Expansion principle
 - Dynamic RAID Group Expansion configuration
 - Dynamic RAID Group Expansion application scenario

Duration

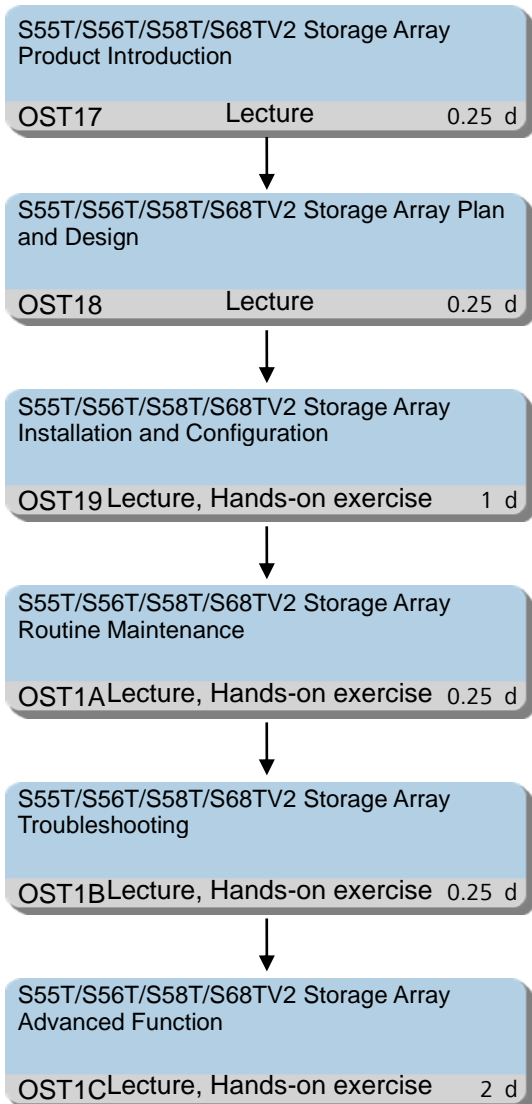
4 working days

Class Size

Min 1, Max 12

2.2.3 T seriesV2 (55T/56T/58T/68T) Storage System Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers
Managers
Planners and Designers

Prerequisites

- Know PC OS
- Know basal computer knowledge
- Know basal storage technology

Objectives

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

- Describe T series V2 product position

- Describe T series V2 product structure
- Describe T series V2 product hardware configuration and component
- Describe T series V2 product software structure and component
- Know T series V2 product hardware installation plan
- Know T series V2 product deployment and configuration plan
- Master T series V2 product hardware installation
- Master T series V2 product basal operation configuration
- Describe storage pool basal principle
- Describe Disk reconstruction, Partial reconstruction, Recovery reconstruction
- Describe Pre-copy and Equalization
- Reconstruction performance analysis
- Storage pool configuration
- Know T series V2 product maintenance tool using
- Master T series V2 product routine maintenance method
- Know T series V2 product upgrade process and precaution
- Know T series V2 product common fault disposal
- Master T series V2 product fault disposal process
- Describe SmartTier principle, key technology, deployment and configuration
- Describe SmartThin principle, key technology, plan, deployment and configuration
- Describe SmartQoS principle, key technology, plan, deployment and configuration
- Know Virtual snapshot definition, principle and configuration process
- Know LUN Copy definition, principle and configuration process
- Know Remote replication definition, principle and configuration process
- Describe Split Mirror definition, principle and configuration process
- Describe clone principle, technology and configuration process

Training Content

OST17 S55T/S56T/S58T/S68TV2 Storage Array Product Introduction

- T series product position and structure
- T series product hardware introduction
 - T series hardware configuration
 - T series hardware component
 - T series hardware component
- T series product software introduction
 - T series software function
 - T series software component
 - T series main feature

OST18 S55T/S56T/S58T/S68TV2 Storage Array Plan and Design

- T series storage hardware installation plan
 - Cabinet space plan
 - Expansion plan
 - Data plan

- T series storage application (software) deployment plan introduction
 - Basal operation plan process
 - Capacity plan
 - Storage pool plan
 - LUN R/W policy summarization
 - iSCSI CHAP plan
 - User plan

OST19 S55T/S56T/S58T/S68T V2 Storage Array Installation and Configuration

- Hardware installation and cabling
 - Device installation
 - Device cabling
 - Device power on
- Basal operation configuration
 - Pool disk selection process
 - Disk reconstruction
 - Partial reconstruction
 - Recovery reconstruction
 - Pre-copy
 - Equalization
 - Reconstruction performance analysis
 - Pool ISM basal configuration process

OST1A S55T/S56T/S58T/S68TV2 Storage Array Routine Maintenance

- Maintenance tool introduction
- Routine maintenance introduction
 - Information collection method
 - Status check method
 - Log component and analysis method
 - Fault stat. method
- Version upgrade introduction

OST1B S55T/S56T/S58T/S68TV2 Storage Array Troubleshooting

- Common fault introduction
- Fault disposal method and process
- Case study

OST1C S55T/S56T/S58T/S68TV2 Storage Array Advanced Function

- SmartTier principle and application
 - T series V2 SmartTier principle
 - T series V2 SmartTier key technology
 - T series V2 SmartTier application deployment and configuration
- SmartThin principle and application
 - T series V2 SmartThin function key technology
 - T series V2 SmartThin function application plan

- T series V2 SmartThin function application deployment and configuration
 - T series V2 SmartThin function fault disposal
- SmartQoS principle and application
 - T series V2 SmartQoS function principle
 - T series V2 SmartQoS function key technology
 - T series V2 SmartQoS function application plan
 - T series V2 SmartQoS function application deployment and configuration
- Virtual snapshot principle and application
 - Virtual snapshot summarization
 - Virtual snapshot principle
 - Virtual snapshot sort
 - Virtual snapshot configuration
 - Virtual snapshot application scenario
- LUN Copy principle and application
 - LUN Copy summarization
 - LUN Copy principle
 - LUN Copy sort
 - LUN Copy configuration
 - LUN Copy application scenario
- Remote replication principle and application
 - Remote replication summarization
 - Remote replication principle
 - Remote replication sort
 - Remote replication configuration
 - Remote replication application scenario
- Split Mirror principle and application
 - Split Mirror summarization
 - Split Mirror principle
 - Split Mirror sort
 - Split Mirror configuration
 - Split Mirror application scenario
- Clone principle and application
 - Clone principle
 - Clone function key technology
 - Clone application plan
 - Clone application deployment and configuration
 - Clone fault disposal
- Dynamic RAID Group Expansion principle and application
 - Dynamic RAID Group Expansion introduction
 - Dynamic RAID Group Expansion principle
 - Dynamic RAID Group Expansion configuration

- Dynamic RAID Group Expansion application scenario

Duration

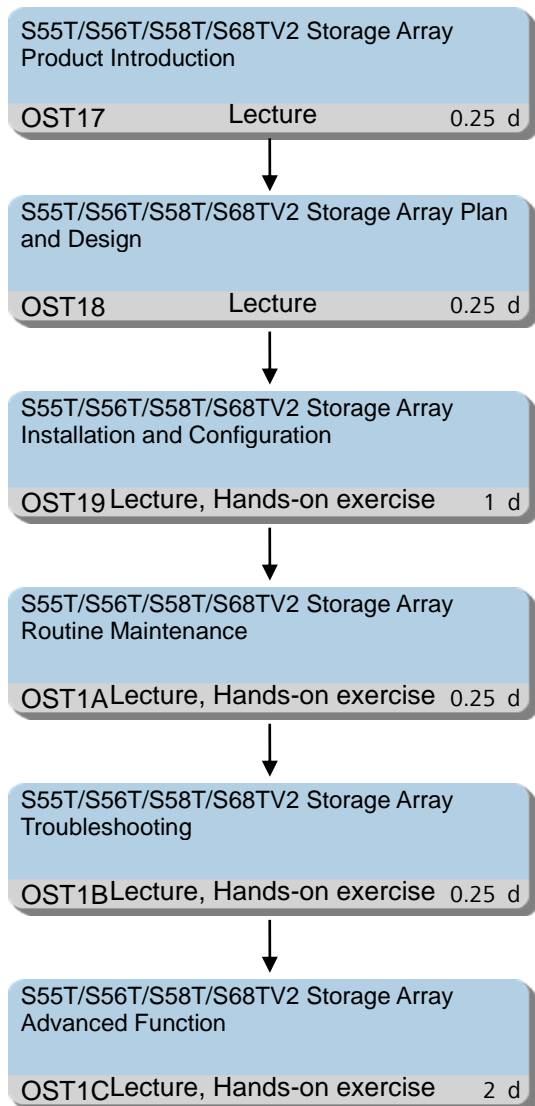
4 working days

Class Size

Min 1, Max 12

2.2.4 T seriesV3 (55T/56T/58T/68T) Storage System Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers

Managers

Planners and Designers

Prerequisites

- Know PC OS
- Know basal computer knowledge
- Know basal storage technology

Objectives

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

- Describe T series V3 product position
- Describe T series V3 product structure
- Describe T series V3 product hardware configuration and component
- Describe T series V3 product software structure and component
- Know T series V3 product hardware installation plan
- Know T series V3 product deployment and configuration plan
- Master T series V3 product hardware installation
- Master T series V3 product basal operation configuration
- Describe storage pool basal principle
- Describe Disk reconstruction, Partial reconstruction, Recovery reconstruction
- Describe Pre-copy and Equalization
- Reconstruction performance analysis
- Storage pool configuration
- Know T series V3 product maintenance tool using
- Master T series V3 product routine maintenance method
- Know T series V3 product upgrade process and precaution
- Know T series V3 product common fault disposal
- Master T series V3 product fault disposal process
- Describe SmartTier principle, key technology, deployment and configuration
- Describe SmartThin principle, key technology, plan, deployment and configuration
- Describe SmartQoS principle, key technology, plan, deployment and configuration
- Know Virtual snapshot definition, principle and configuration process
- Know LUN Copy definition, principle and configuration process
- Know Remote replication definition, principle and configuration process
- Describe Split Mirror definition, principle and configuration process
- Describe clone principle, technology and configuration process

Training Content

OST17 S55T/S56T/S58T/S68TV3 Storage Array Product Introduction

- T series product position and structure
- T series product hardware introduction
 - T series hardware configuration
 - T series hardware component
 - T series hardware component
- T series product software introduction

- T series software function
- T series software component
- T series main feature

OST18 S55T/S56T/S58T/S68TV3 Storage Array Plan and Design

- T series storage hardware installation plan
 - Cabinet space plan
 - Expansion plan
 - Data plan
- T series storage application (software) deployment plan introduction
 - Basal operation plan process
 - Capacity plan
 - Storage pool plan
 - LUN R/W policy summarization
 - iSCSI CHAP plan
 - User plan

OST19 S55T/S56T/S58T/S68T V3 Storage Array Installation and Configuration

- Hardware installation and cabling
 - Device installation
 - Device cabling
 - Device power on
- Basal operation configuration
 - Pool disk selection process
 - Disk reconstruction
 - Partial reconstruction
 - Recovery reconstruction
 - Pre-copy
 - Equalization
 - Reconstruction performance analysis
 - Pool ISM basal configuration process

OST1A S55T/S56T/S58T/S68TV3 Storage Array Routine Maintenance

- Maintenance tool introduction
- Routine maintenance introduction
 - Information collection method
 - Status check method
 - Log component and analysis method
 - Fault stat. method
- Version upgrade introduction

OST1B S55T/S56T/S58T/S68TV3 Storage Array Troubleshooting

- Common fault introduction
- Fault disposal method and process
- Case study

OST1C S55T/S56T/S58T/S68TV3 Storage Array Advanced Function

- SmartTier principle and application
 - T series V3 SmartTier principle
 - T series V3 SmartTier key technology
 - T series V3 SmartTier application deployment and configuration
- SmartThin principle and application
 - T series V3 SmartThin function key technology
 - T series V3 SmartThin function application plan
 - T series V3 SmartThin function application deployment and configuration
 - T series V3 SmartThin function fault disposal
- SmartQoS principle and application
 - T series V3 SmartQoS function principle
 - T series V3 SmartQoS function key technology
 - T series V3 SmartQoS function application plan
 - T series V3 SmartQoS function application deployment and configuration
- Virtual snapshot principle and application
 - Virtual snapshot summarization
 - Virtual snapshot principle
 - Virtual snapshot sort
 - Virtual snapshot configuration
 - Virtual snapshot application scenario
- LUN Copy principle and application
 - LUN Copy summarization
 - LUN Copy principle
 - LUN Copy sort
 - LUN Copy configuration
 - LUN Copy application scenario
- Remote replication principle and application
 - Remote replication summarization
 - Remote replication principle
 - Remote replication sort
 - Remote replication configuration
 - Remote replication application scenario
- Split Mirror principle and application
 - Split Mirror summarization
 - Split Mirror principle
 - Split Mirror sort
 - Split Mirror configuration
 - Split Mirror application scenario
- Clone principle and application
 - Clone principle

- Clone function key technology
- Clone application plan
- Clone application deployment and configuration
- Clone fault disposal
- Dynamic RAID Group Expansion principle and application
 - Dynamic RAID Group Expansion introduction
 - Dynamic RAID Group Expansion principle
 - Dynamic RAID Group Expansion configuration
 - Dynamic RAID Group Expansion application scenario

Duration

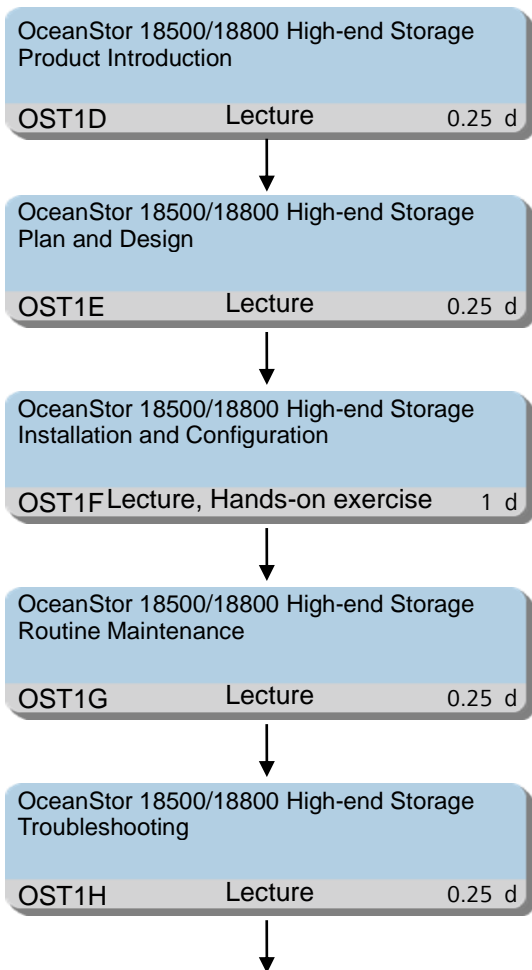
4 working days

Class Size

Min 1, Max 12

2.2.5 OceanStor 18500/18800 High-end Storage System Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers

Managers

Planners and Designers

Prerequisites

- Know PC OS
- Know basal computer knowledge
- Know basal storage technology

Objectives

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

- Describe OceanStor 18500/18800 product position
- Describe OceanStor 18500/18800 product structure
- Describe OceanStor 18500/18800 product hardware configuration and component
- Describe OceanStor 18500/18800 product software structure and component
- Know OceanStor 18500/18800 product hardware installation plan
- Know OceanStor 18500/18800 product deployment and configuration plan
- Master OceanStor 18500/18800 product hardware installation
- Master OceanStor 18500/18800 product basal operation configuration
- Know OceanStor 18500/18800 product maintenance tool using
- Master OceanStor 18500/18800 product routine maintenance method
- Know OceanStor 18500/18800 product upgrade process and precaution
- Know OceanStor 18500/18800 product common fault disposal
- Master OceanStor 18500/18800 product fault disposal process
- Describe storage pool basal principle
- Describe Disk reconstruction, Partial reconstruction, Recovery reconstruction
- Describe Pre-copy and Equalization
- Reconstruction performance analysis
- Storage pool configuration
- Describe SmartTier principle, key technology, deployment and configuration
- Describe SmartThin principle, key technology, plan, deployment and configuration
- Describe SmartQoS principle, key technology, plan, deployment and configuration
- Know Virtual snapshot definition, principle and configuration process
- Know LUN Copy definition, principle and configuration process
- Know Remote replication definition, principle and configuration process
- Describe Split Mirror definition, principle and configuration process
- Describe clone principle, technology and configuration process

Training Content

OST1D OceanStor 18500/18800 High-end Storage Product Introduction

- OceanStor 18500/18800 product position and structure
- OceanStor 18500/18800 product hardware introduction
 - OceanStor 18500/18800 hardware configuration
 - OceanStor 18500/18800 hardware component
 - OceanStor 18500/18800 hardware component
- OceanStor 18500/18800 product software introduction
 - OceanStor 18500/18800 software function
 - OceanStor 18500/18800 software component
 - OceanStor 18500/18800 main feature

OST1E OceanStor 18500/18800 High-end Storage Plan and Design

- OceanStor 18500/18800 storage hardware installation plan
 - Cabinet space plan
 - Expansion plan
 - Data plan
- OceanStor 18500/18800 storage application(software) deployment plan introduction
 - Basal operation plan process
 - Capacity plan
 - Storage pool plan
 - LUN R/W policy summarization
 - iSCSI CHAP plan
 - User plan

OST1F OceanStor 18500/18800 High-end Storage Installation and Configuration

- Hardware installation and cabling
 - Device installation
 - Device cabling
 - Device power on
- Basal operation configuration

OST1G OceanStor 18500/18800 High-end Storage Routine Maintenance

- Maintenance tool introduction
- Routine maintenance introduction
 - Information collection method
 - Status check method
 - Log component and analysis method
 - Fault stat. method
- Version upgrade introduction

OST1H OceanStor 18500/18800 High-end Storage Troubleshooting

- Common fault introduction
- Fault disposal method and process
- Case study

OST1I OceanStor 18500/18800 High-end Storage Advanced Function

- SmartTier principle and application
 - SmartTier principle
 - SmartTier key technology
 - SmartTier application deployment and configuration
- SmartThin principle and application
 - SmartThin function key technology
 - SmartThin function application plan
 - SmartThin function application deployment and configuration
 - SmartThin function fault disposal
- SmartQoS principle and application
 - SmartQoS function principle
 - SmartQoS function key technology
 - SmartQoS function application plan
 - SmartQoS function application deployment and configuration
- Virtual snapshot principle and application
 - Virtual snapshot summarization
 - Virtual snapshot principle
 - Virtual snapshot sort
 - Virtual snapshot configuration
 - Virtual snapshot application scenario
- LUN Copy principle and application
 - LUN Copy summarization
 - LUN Copy principle
 - LUN Copy sort
 - LUN Copy configuration
 - LUN Copy application scenario
- Remote replication principle and application
 - Remote replication summarization
 - Remote replication principle
 - Remote replication sort
 - Remote replication configuration
 - Remote replication application scenario
- Split Mirror principle and application
 - Split Mirror summarization
 - Split Mirror principle
 - Split Mirror sort
 - Split Mirror configuration
 - Split Mirror application scenario
- Clone principle and application
 - Clone principle

- Clone function key technology
- Clone application plan
- Clone application deployment and configuration
- Clone fault disposal
- Dynamic RAID Group Expansion principle and application
 - Dynamic RAID Group Expansion introduction
 - Dynamic RAID Group Expansion principle
 - Dynamic RAID Group Expansion configuration
 - Dynamic RAID Group Expansion application scenario

Duration

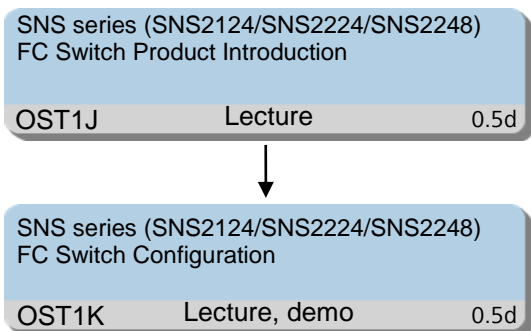
4 working days

Class Size

Min 1, Max 12

2.2.6 SNS series (SNS2124/SNS2224/SNS2248) FC Switch Product Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers

Prerequisites

- Know PC OS
- Know basal computer knowledge
- Know basal storage technology

Objectives

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

- Master SNS2124/SNS2224/SNS2248 structure
- Master SNS2124/SNS2224/SNS2248 configuration

Training Content

OST1J SNS series (SNS2124/SNS2224/SNS2248) FC Switch Product Introduction

- Switch hardware/software structure

- SNS2124/SNS2224/SNS2248 hardware/software structure introduction
 - SNS2124/SNS2224/SNS2248 Long-Distance Transmission Technology
- OST1K SNS series (SNS2124/SNS2224/SNS2248) FC Switch Configuration
- SNS2124/SNS2224/SNS2248 FC switch configuration and maintenance
 - Hardware Installation
 - Software Configuration
 - Switch Maintenance

Duration

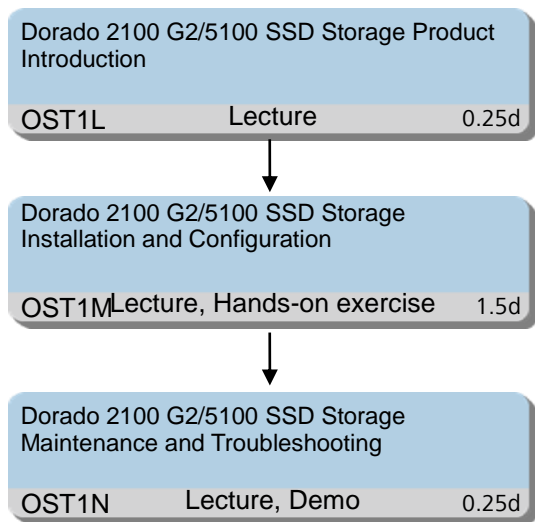
1 working day

Class Size

Min 1, Max 12

2.2.7 Dorado 2100 G2/5100 SSD Storage System Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers
Managers

Prerequisites

- Know PC OS
- Know basal computer knowledge
- Know basal storage technology

Objectives

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

- Describe Dorado2100 G2/5000 product position
- Know Dorado2100 G2/5000 product hardware/software structure component
- Know Dorado2100 G2/5000 product main function feature

- Understand Dorado2100 G2/5000 product typical application case
- Know Dorado2100 G2/5100 product hardware/software installation process
- Know Dorado2100 G2/5100 product basal configuration method
- Know Dorado2100 G2 product routine maintenance operation process
- Know Dorado2100 G2 product upgrade process
- Know Dorado2100 G2 product fault disposal operation

Training Content

OST1L Dorado 2100 G2/5100 SSD Storage Product Introduction

- Product introduction
 - Product position
 - Product hardware introduction
 - Product software introduction
 - Product function feature introduction
 - Typical application case

OST1M Dorado 2100 G2/5100 SSD Storage Installation and Configuration

- Darado2100 G2/5100 product hardware installation
- Darado2100 G2/5100 product basal configuration

OST1N Dorado 2100 G2/5100 SSD Storage Maintenance and Troubleshooting

- Routine maintenance
 - Maintenance route synopsis
 - Running data export
- Version upgrade
 - Upgrade summarization
 - Upgrade process
- Troubleshooting
 - Troubleshooting method
 - Troubleshooting case

Duration

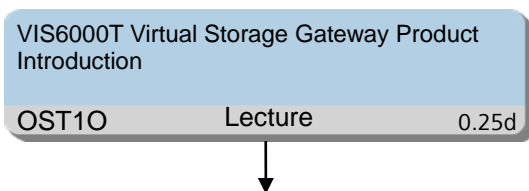
2 working days

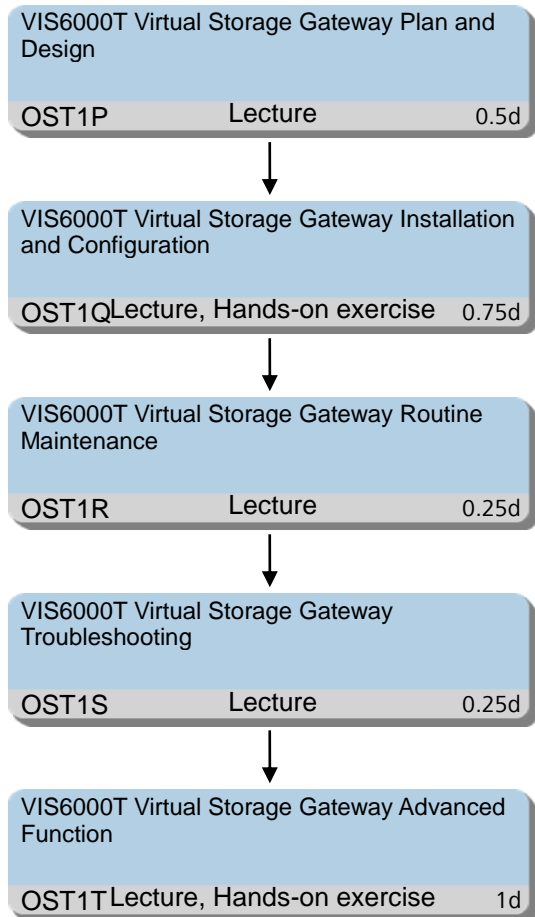
Class Size

Min 1, Max 12

2.2.8 VIS6000T Series Virtual Storage Gateway System Deployment and Management Training

Training Path





Target Audience

Operators and Maintainers
Managers
Planners and Designers

Prerequisites

- Know PC OS
- Know basal computer knowledge
- Know basal storage technology

Objectives

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

- Describe VIS6000T product position
- Know VIS6000T product software/hardware structure component
- Know VIS6000T product main function feature
- Understand VIS6000T product typical application case
- Know VIS6000T product hardware installation/network plan
- Master VIS6000T product hardware/software installation and deployment
- Master VIS6000T product basal function configuration
- Know VIS6000T product maintenance tool

- Know VIS6000T product routine maintenance method
- Master VIS6000T product common fault disposal process
- Know VIS6000T product fault disposal basal principle and method
- Know VIS6000T product replication function principle, key technology, application plan, network and connection
- Master VIS6000T product replication function application deployment and configuration, troubleshooting
- Know VIS6000T product mirror function principle , key technology, application plan, network and connection
- Master VIS6000T product mirror function application deployment and configuration, troubleshooting
- Know VIS6000T product snapshot function principle, key technology, application plan, network and connection
- Master VIS6000T product snapshot function application deployment and configuration, troubleshooting

Training Content

OST1O VIS6000T Virtual Storage Gateway Product Introduction

- Product position
- Software/hardware introduction
 - Hardware introduction
 - Software introduction
- Function feature introduction
- Typical application case

OST1P VIS6000T Virtual Storage Gateway Plan and Design

- Hardware installation plan
 - Cabinet space plan
 - Component connection plan
 - Network plan
- Application deployment plan
 - Storage and network deployment
 - Application software installation environment preparation
 - Application software configuration

OST1Q VIS6000T Virtual Storage Gateway Installation and Configuration

- Hardware installation
 - Internal cabling
 - Host connection
 - Storage connection
- Software installation and deployment
- Basal function configuration
 - Storage virtualization configuration
 - Configuration file export

OST1R VIS6000T Virtual Storage Gateway Routine Maintenance

- Maintenance tool
 - Tool installation
 - Tool using
- Routine maintenance
 - Maintenance route synopsis

- Running data export
- Version upgrade
 - Upgrade summarization
 - Upgrade process

OST1S VIS6000T Virtual Storage Gateway Troubleshooting

- Common fault introduction
- Fault disposal method and process
- Case study

OST1T VIS6000T Virtual Storage Gateway Advanced Function

- VIS6000T replication technology and application
 - VIS6000T product replication function principle
 - VIS6000T product replication function key technology
 - VIS6000T product replication function application plan
 - VIS6000T product replication typical network and connection
 - VIS6000T product replication function application deployment and configuration
 - VIS6000T product replication function troubleshooting
- VIS6000T mirror technology and application
 - VIS6000T product mirror function principle
 - VIS6000T product mirror function key technology
 - VIS6000T product mirror function application plan
 - VIS6000T product mirror typical network and connection
 - VIS6000T product mirror function application deployment and configuration
 - VIS6000T product mirror function troubleshooting
- VIS6000T snapshot technology and application
 - VIS6000T product snapshot function principle
 - VIS6000T product snapshot function key technology
 - VIS6000T product snapshot function application plan
 - VIS6000T product snapshot typical network and connection
 - VIS6000T product snapshot function application deployment and configuration
 - VIS6000T product snapshot function troubleshooting

Duration

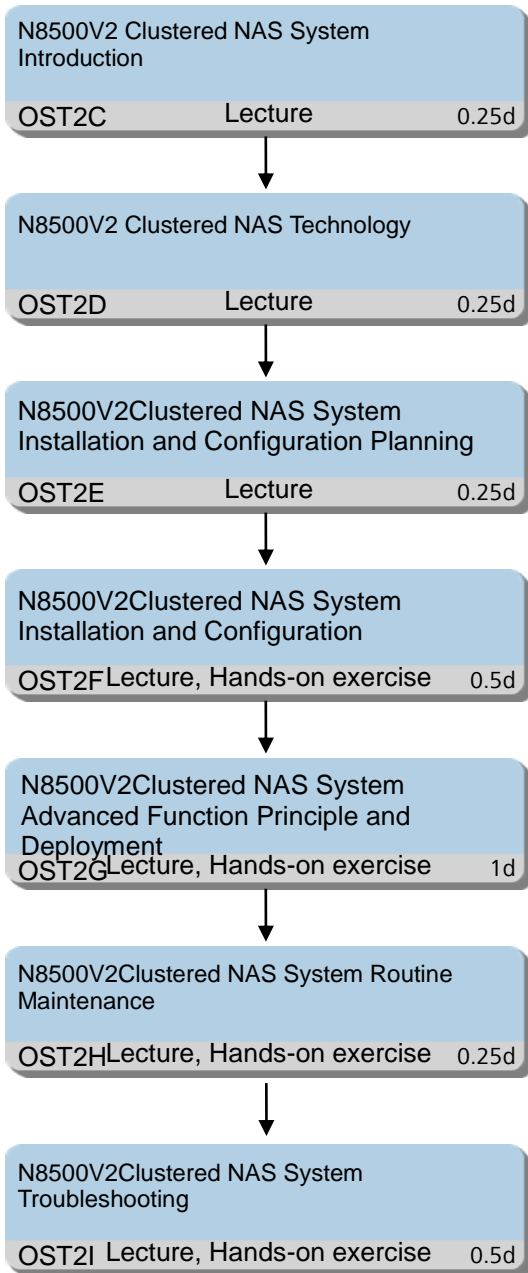
3 working days

Class Size

Min 1, Max 12

2.2.9 N8500V2 Clustered NAS System Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers
Managers
Planners and Designers

Prerequisites

- Know storage foundation
- Know Windows, Linux OS operation
- Know NAS system knowledge

- Know cluster system foundation

Objectives

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

- Describe N8500V2R1 Clustered NAS product type, position, main function, application scenario
- Describe N8500V2R1 clustered NAS NFS, CIFS, DST, replication technology principle
- Be familiar with N8500 product hardware installation planning
- Be familiar with N8500 product deployment and configuration planning
- Be familiar with network and bond mode
- Command N8500V2R1 product hardware installation
- Command N8500V2R1 typical networking
- Command N8500V2R1 deployment tool
- Command N8500V2R1 product file sharing basic operation configuration
- Command N8500V2R1 Backup, DST configuration and application
- Command N8500V2R1 file system snapshot, mirror image, replication principle, configuration and application
- Be familiar with N8500V2R1 maintenance tool method
- Command N8500V2R1 routine maintenance method
- Be familiar with N8500V2R1 upgrade method
- Be familiar with N8500V2R1 product troubleshooting method
- Command N8500V2R1 typical fault case

Training Content

OST2C N8500V2 Clustered NAS System Introduction

- N8500V2R1 product introduction
 - N8500V2R1 product configuration and position
 - N8500V2R1 product function
 - N8500V2R1 product application scenario
 - N8500V2R1 application case

OST2D N8500V2 Clustered NAS Technology

- N8500V2R1 clustered NAS technology
 - N8500V2R1 NFS technology
 - N8500V2R1 CIFS technology
 - N8500V2R1 clustered file system technology
 - N8500V2R1 dynamic storage tiering technology
 - N8500V2R1 file system replication technology

OST2E N8500V2 Clustered NAS System Installation and Configuration Plan

- N8500 hardware installation plan
 - cabinet space plan
 - cascade plan
- N8500 system application deployment plan introduction
 - Basic operation configuration plan process
 - Physical disk space plan

- Logical group plan
- File system plan
- File sharing plan
- Client configuration plan
- N8500 network and bond
 - Bond mode and application
- N8500 plan and performance

OST2F N8500V2 Clustered NAS System Installation and Configuration

- Hardware installation
 - device installation
 - device connection
 - System power-on
- Typical networking and connection
 - Typical networking
 - Physical connection
- N8500 initialization configuration tool
- Basic configuration
 - Physical disk configuration
 - File system configuration
 - Sharing configuration CIFS /NFS/HTTP/FTP sharing configuration
 - Client configuration

OST2G N8500V2 Clustered NAS System Advanced Function Principle and Deployment

- File backup principle and application
 - File backup function technology
 - File backup function application Plan
 - File backup function application deployment and configuration
- DST principle and application
 - DST function technology
 - DST function application plan
 - DST function application deployment and configuration
- File system snapshot principle and application
 - File system snapshot introduction
 - File system snapshot principle
 - File system snapshot class
 - File system snapshot configuration
 - File system application scenario
- File system replication principle and application
 - File system replication introduction
 - File system replication principle
 - File system replication
 - File system replication configuration

- File system replication application scenario
- File system mirror image principle and application
 - File system mirror image introduction
 - File system mirror image principle
 - File system replication class
 - File system mirror image configuration
 - File system mirror image application scenario
- Domain environment application
 - Domain environment application class
 - Domain environment file sharing configuration

OST2H N8500V2 Clustered NAS System Routine Maintenance

- Maintenance tool introduction
- Routine maintenance introduction
 - Information collection method
 - Status checking method
 - Log composing and analysis method
 - Fault checking method
- System version upgrade

OST2I N8500V2 Clustered NAS System Troubleshooting

- Fault introduction
- Troubleshooting method and process
- Case study

Duration

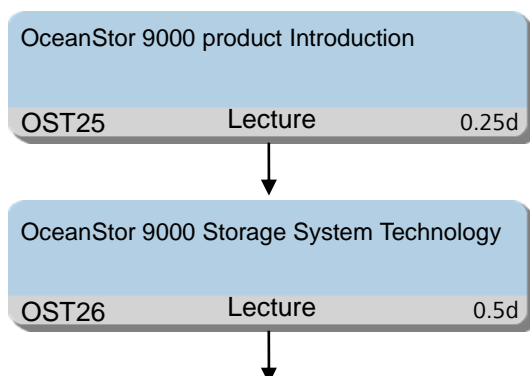
3 working days

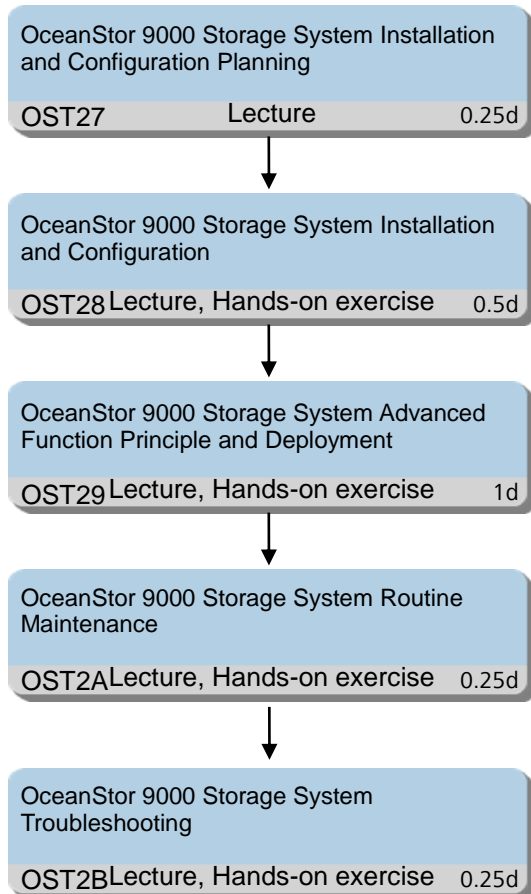
Class Size

Min 1, Max 12

2.2.10 OceanStor 9000 Storage System Deployment and Management Training

Training Path





Target Audience

Operators and Maintainers
Managers
Planners and Designers

Prerequisites

- Know storage foundation
- Know Windows, Linux OS operation
- Know NAS system knowledge
- Know cluster system foundation

Objectives

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

- Describe OceanStor 9000 product, position, main function, application scenario
- Describe OceanStor 9000 user management, AD/LDAP/NIS,NFS,CIFS, Dynamic storage tier principle
- Be familiar with OceanStor 9000 product hardware installation Planning
- Be familiar with OceanStor 9000 product deployment and configuration Planning process and tools
- Command OceanStor 9000 product hardware installation
- Command OceanStor 9000 typical networking
- Command OceanStor 9000 product file sharing configuration
- Command OceanStor 9000 wise link configuration and application

- Command OceanStor 9000 wise tier configuration and application
- Command OceanStor 9000 wise qouta configuration and application
- Be familiar with OceanStor 9000 maintenance tool
- Command OceanStor 9000 routine maintenance method
- Be familiar with OceanStor 9000 upgrade process and notice
- Be familiar with OceanStor 9000 troubleshooting method
- Command OceanStor 9000 troubleshooting case

Training Content

OST25 OceanStor 9000 Storage System Product Introduction

- OceanStor 9000 Storage System product introduction
 - OceanStor 9000 product configuration and position
 - OceanStor 9000 product function
 - OceanStor 9000 product application scenario
 - OceanStor 9000 application case

OST26 OceanStor 9000 Storage System Technology

- OceanStor 9000 Storage System technology
 - OceanStor 9000 Scale-out technology
 - OceanStor 9000 Erasure code technology
 - OceanStor 9000 object storage technology
 - OceanStor 9000 has technology DHT
 - OceanStor 9000 distributed file system technology
 - OceanStor 9000 Clustered technology
 - OceanStor 9000 Wise Tier storage technology

OST27 OceanStor 9000 Storage System Installation and Configuration Plan

- OceanStor 9000 hardware installation Plan
 - Cabinet installation Plan
 - Cascade Plan
 - Networking Plan
- OceanStor 9000 configuration plan
 - Plan flow
 - Physical disk plan
 - Disk group plan
 - File system plan
 - Sharing plan
 - Client plan

OST28 OceanStor 9000 Storage System Installation and Configuration

- Hardware installation
 - Device installation
 - Device connection
 - System power-on
- Network and connection

- Typical networking
- Physical connection
- Basic configuration
 - Physical disk configuration
 - File system configuration
 - File sharing configuration
 - Client configuration

OST29 OceanStor 9000 Storage System Advanced Function Principle and Deployment

- Wise tier principle and application
 - Wisetier function technology
 - Wisetier function application plan
 - Wisetier function application deployment and configuration
- WiseLink principle and application
 - WiseLink introduction
 - WiseLink principle
 - WiseLink configuration
 - WiseLink application scenario
- WiseQouta principle and application
 - WiseQouta introduction
 - WiseQouta principle
 - WiseQouta configuration
 - WiseQouta application scenario

OST2A OceanStor 9000 Storage System Routine Maintenance

- Maintenance tool introduction
- Routine maintenance introduction
 - Information collection method
 - Status checking method
 - Log composing and analysis method
 - Fault checking method
- System version upgrade introduction

OST2B OceanStor 9000 Storage System Troubleshooting

- Fault introduction
- Troubleshooting method and process
- Case study

Duration

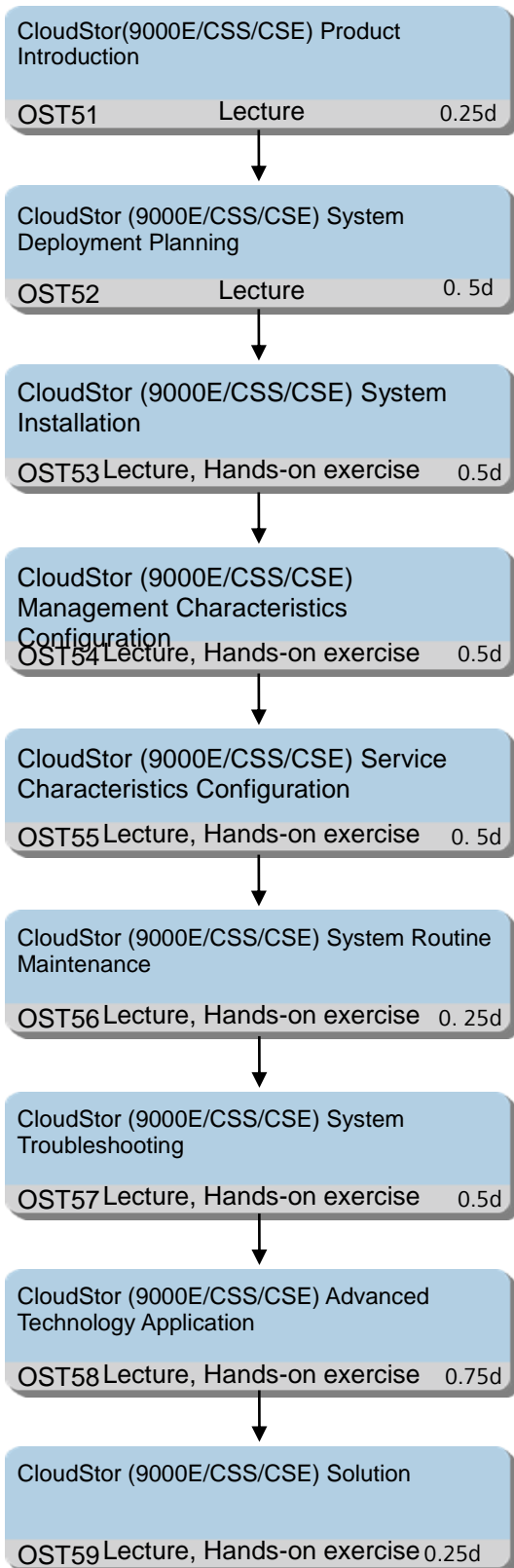
3 working days

Class Size

Min 1, Max 12

2.2.11 CloudStor(9000E/CSS/CSE) Cloud Storage Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers

Managers

Planners and Designers

Prerequisites

- Know Windows、Linux OS knowledge
- Know TCP/IP
- Know storage virtualization knowledge

Objectives

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

- Describe Cloudstor product type, position, hardware, software, application scenario
- Be familiar with 9000E/CSS/CSE product hardware installation planning
- Be familiar with 9000E/CSS/CSE product deployment and configuration planning
- Command 9000E/CSS/CSE product hardware installation
- Command 9000E/CSS/CSE typical networking
- Command 9000E/CSS/CSE system deployment tool
- Command 9000E/CSS/CSE basic operation configuration
- Command 9000E/CSS/CSE management characteristics
- Be familiar with 9000E/CSS/CSE operation and management
- Know 9000E/CSS/CSE service characteristics
- Command 9000E/CSS/CSE service characteristics configuration method and steps
- Be familiar with 9000E/CSS/CSE maintenance tool
- Command 9000E/CSS/CSE routine maintenance method
- Be familiar with 9000E/CSS/CSE maintenance process and notice
- Know fault class, principle of fault location
- Command fault location method, failure criteria
- Be familiar with troubleshooting process
- Know 9000E/CSS/CSE system principle
- Know 9000E/CSS/CSE advanced technology
- Describe Cloudstor main solution
- Be familiar with Cloudstor solution

Training Content

OST51 CloudStor (9000E/CSS/CSE) Product Introduction

- 9000E/CSS/CSE product introduction
 - 9000E/CSS/CSE product configuration and position
 - 9000E/CSS/CSE product hardware and software
 - 9000E/CSS/CSE product application scenario
 - 9000E/CSS/CSE application case

OST52 CloudStor (9000E/CSS/CSE) System Deployment Plan

- 9000E/CSS/CSE hardware installation plan

- Installation plan
- Network plan
- IP address plan
- 9000E/CSS/CSE deployment Plan introduction
 - Basic operation configuration plan process
 - Physical disk resource plan

OST53 CloudStor (9000E/CSS/CSE) System Installation

- Hardware installation
 - Device installation
 - Device connection
 - Device power-on
- Typical networking and connection
 - Typical networking
 - Physical connection
- Software and deployment
 - Preparative before installation
 - Installation process
 - Tool and software needed
 - System deployment
 - Checking after deployment
 - Deployment notice
- Initiation configuration

OST54 CloudStor (9000E/CSS/CSE) Management Characteristics Configuration

- CSS management characteristics configuration
 - Device management
 - Service resource management and monitoring
 - Service management
 - Alarm function
 - User management
 - Performance management
 - Energy saving
 - Deployment and upgrade

OST55 CloudStor (9000E/CSS/CSE) Service Characteristics Configuration

- CSS service characteristics
 - Namespace characteristics and configuration
 - NFS/CIFS service introduction and configuration
 - Deduplication introduction and configuration
 - Data migration and configuration
- CSE service characteristics
 - Service introduction
 - Service division

- Space rental describe
- Self management describe
- Network disk describe
- Online backup describe
- Near-line backup describe

OST56 CloudStor (9000E/CSS/CSE) System Routine Maintenance

- Maintenance tool introduction
 - Function introduction
 - Tool installation
- Routine maintenance introduction
 - Routine inspection
 - Information collection
- System version upgrade

OST57 CloudStor (9000E/CSS/CSE) System Troubleshooting

- 9000E/CSS/CSE troubleshooting
 - Fault class
 - Principle of fault location
 - Fault location method
 - Failure criteria
 - Troubleshooting process
 - Typical case

OST58 CloudStor (9000E/CSS/CSE) Advanced Technology and Application

- CSS file storage mode
 - Metadata and data separation
 - Object storage mode
 - SSD metadata acceleration
 - Metadata HASH find
- CSS redundant data management
 - Erasure Code between nodes
 - Data scan
- CSS file storage space management
 - Data deduplication principle
 - Data deduplication process
 - Data deduplication file write
 - Data deduplication file read
 - Data compression
 - Data migration
- CSE multi-tenant architecture
- CSE multiple instance of metadata

OST59 CloudStor (9000E/CSS/CSE) Solution

- 9000E/CSS/CSE CloudStor solution

- Enterprise data centralized backup scenario
- IPTV application scenario
- Space operation service scenario
- Traditional telecom business platform for cloud integration
- High performance computing (HPC) storage application
- 9000E/CSS/CSE CloudStor solution typical configuration
 - Typical networking
 - Hardware installation
 - Software deployment and configuration
 - Installation checking

Duration

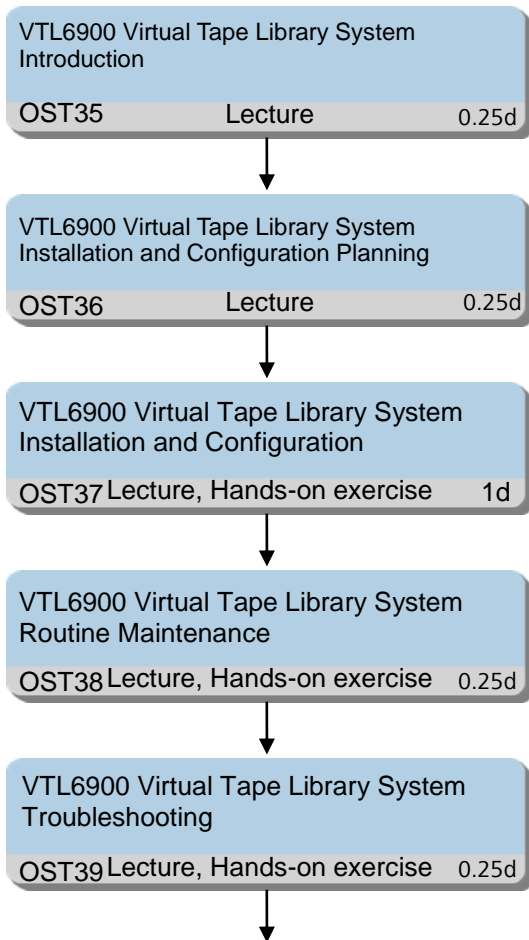
4 working days

Class Size

Min 1, Max 12

2.2.12 VTL6900 Virtual Tape Library System Deployment and Management Training

Training Path



VTL6900 Virtual Tape Library System Advance
Function Principle and Application

OST3A Lecture, Hands-on exercise 1d

Target Audience

Operators and Maintainers
Managers
Planners and Designers

Prerequisites

- Know storage foundation
- Know Windows, Linux OS operation
- Know virtual tape library knowledge
- Know cluster knowledge

Objectives

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

- Describe VTL6900 positioning , architecture , features, application scenarios
- Be familiar with VTL6900 Approaches to deploying and to planning VTL6900 deployment and using configuration tools
- Be familiar approaches and procedure for installing the VTL6900 hardware
- Be familiar with Approaches to installing and deploying the VTL6900
- Be familiar with Approaches to using ISM ServiceTool to finish Daily maintenance tasks
- Be familiar with Approaches to upgrading the VTL6900
- Be familiar with Approaches to locating and handling the VTL6900 faults
- Command VTL6900 clustered mechanism
- Command VTL6900 data deduplication principle and application
- Command VTL6900 Tape Out principle and application
- Command VTL6900 replication principle and application

Training Content

OST35 VTL6900 Virtual Tape Library System Introduction

- VTL6900 product introduction
 - VTL6900 product configuration and position
 - VTL6900 product function
 - VTL6900 product application scenario
 - VTL6900 application case

OST36 VTL6900 Virtual Tape Library System Installation and Configuration Plan

- VTL6900 hardware installation Plan
 - Cabinet space plan
 - Cascade plan
 - Initialization configuration
 - IP address plan

- Network and cable connection
- VTL6900 deployment plan introduction
 - Basic operation configuration plan
 - Physical disk capacity plan
 - Virtual Tape Library plan
 - Virtual tape plan
 - Client plan

OST37 VTL6900 Virtual Tape Library System Installation and Configuration

- Hardware installation and cabling
 - Device installation
 - Device cable connection
 - Device power-on
- Typical networking and connection
 - Typical networking
 - Physical connection
- basic configuration
 - Initialization configuration
 - Physical disk configuration
 - Virtual tape library configuration
 - Client configuration
 - Virtual tape allocation
 - Virtual tape discovery

OST38 VTL6900 Virtual Tape Library System Routine Maintenance

- Maintenance tool introduction
- Routine maintenance introduction
 - Information collection method
 - Status checking method
 - Log composing and analysis method
 - Fault checking method
- System version upgrade introduction

OST39 VTL6900 Virtual Tape Library System Troubleshooting

- Fault introduction
- Troubleshooting method and process
- Case study

OST3A VTL6900 Virtual Tape Library System Advanced Function Principle and Application

- Clustered principle
 - Clustered technology
 - Clustered configuration
- Data deduplication principle and application
 - Data deduplication technology
 - Data deduplication deployment and configuration

- Tape Out principle and application
 - Tape Out principle
 - Tape Out configuration
 - Tape Out application scenario

Duration

3 working days

Class Size

Min 1, Max 12

2.2.13 Simpana Operation and Maintenance Training

Training Path

Simpana Operation and Maintenance Training
OI132 Lecture, Hands-on exercise 1d

Target Audience

The program is intended for operations and administrative personnel responsible for ongoing configuration of Simpana software and troubleshooting.

Prerequisites

- Knowledge of telecommunications
- Knowledge of computer

Objectives

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

- Describe the introductory technical overview of architectural considerations.
- Describe the essential concepts.
- Implement best Practices for user security and management.
- Implement policy configuration and use.
- Describe media and library management.
- Describe job activity and status monitoring.
- Describe installation options for deploying Simpana software..
- Implement Simpana system management.
- Implement Simpana maintenance management.

Duration

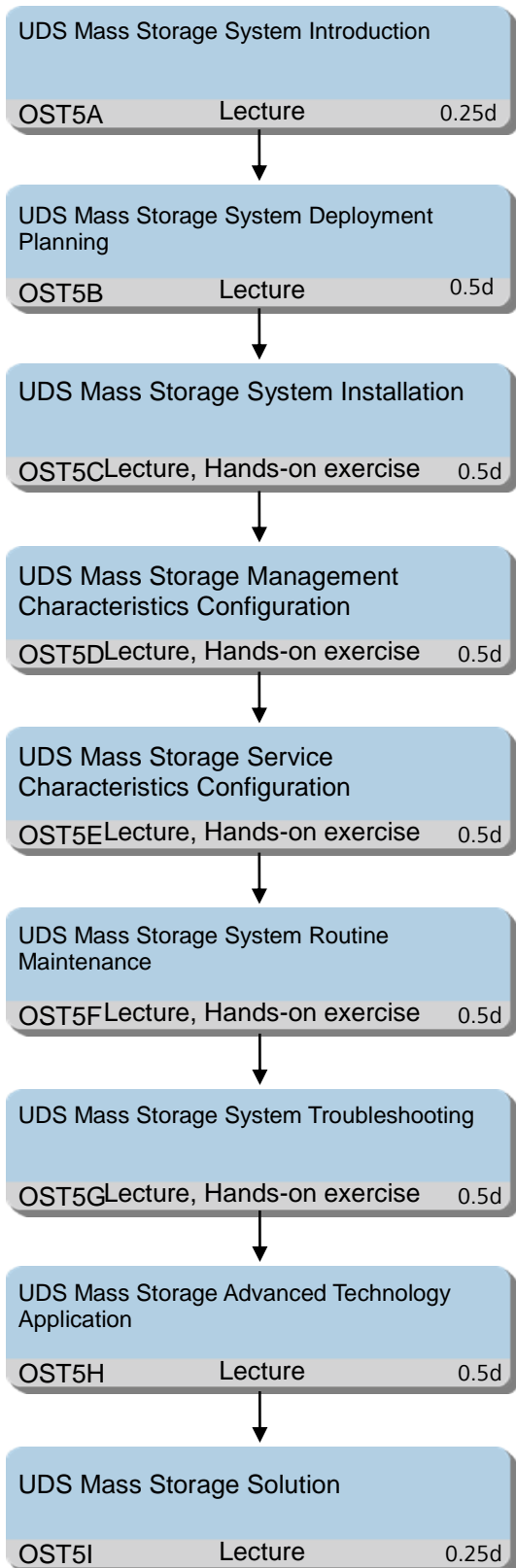
1 working day

Class Size

Max 12

2.2.14 UDS Mass Storage Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers

Managers

Planners and Designers

Prerequisites

- Know Windows、Linux OS knowledge
- Know TCP/IP
- Know storage virtualization knowledge

Objectives

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

- Be familiar with UDS product hardware installation Planning
- Be familiar with UDS product deployment and configuration Planning
- Command UDS hardware installation
- Command UDS typical networking
- Command UDS system deployment tool
- Command UDS basic operation configuration
- Command UDS management characteristics
- Be familiar with UDS operation management
- Know UDS service characteristics
- Command UDS service characteristics configuration method and steps
- Be familiar with UDS maintenance tool
- Command UDS routine maintenance method
- Be familiar with UDS maintenance process and notice
- Know UDS fault class, principle of fault location
- Command UDS fault location method, failure criteria
- Be familiar with UDS troubleshooting process
- Know UDS system principle
- Know UDS advanced technology
- Describe UDS Mass Storage main solution
- Be familiar with UDS Mass Storage solution

Training Content

OST5A UDS Mass Storage System Introduction

- UDS product introduction
 - UDS product configuration and position
 - UDS product hardware and software components
 - UDS product application scenario
 - UDS application case

OST5B UDS Mass Storage System Deployment Plan

- UDS hardware installation Plan
 - Installation plan

- Network plan
- IP address plan
- UDS deployment plan introduction
 - Basic operation configuration plan
 - Physical disk resource plan

OST5C UDS Mass Storage System Installation

- Hardware installation
 - Device installation
 - Device connection
 - System power-on
- Typical networking and connection
 - Typical networking
 - Physical connection
- Software and deployment
 - Preparative before installation
 - Installation process
 - Tool and software needed
 - System deployment
 - Checking after deployment
 - Deployment notice
- Initiation configuration

OST5D UDS Mass Storage Management Characteristics Configuration

- UDS management characteristics
 - Device management
 - Service resource management and monitoring
 - Service management
 - Alarm function
 - User management
 - Performance management
 - Energy saving
 - Deployment and upgrade

OST5E UDS Mass Storage Service Characteristics Configuration

- UDS service characteristics
 - Namespace characteristics and configuration
 - NFS/CIFS service introduction and configuration
 - Deduplication introduction and configuration
 - Data migration and configuration
- UDS service characteristics
 - Service introduction
 - Service division
 - Space rental describe

- Self management describe
- Network disk describe
- Online backup describe
- Near-line backup describe

OST5F UDS Mass Storage System Routine Maintenance

- Maintenance tool introduction
 - Function introduction
 - Tool installation
- Routine maintenance introduction
 - Routine inspection
 - Information collection
- System version upgrade

OST5G UDS Mass Storage System Troubleshooting

- UDS Mass Storage troubleshooting
 - Fault class
 - Principle of fault location
 - Fault location method
 - Failure criteria
 - Troubleshooting process
 - Typical case

OST5H UDS Mass Storage Advanced Technology and Application

- UDS file storage mode
 - metadata and data separation
 - object storage mode
- UDS redundant data management
 - Erasure Code between nodes
 - data scan
- UDS file storage space management
 - Data deduplication principle
 - Data deduplication process
 - Data deduplication file write
 - Data deduplication file read
 - Data compression
 - Data migration

OST5I UDS Mass Storage Solution

- UDS CloudStor solution
- UDS CloudStor solution typical configuration
 - Typical networking
 - Hardware installation
 - System deployment
 - Installation checking

Duration

4 working days

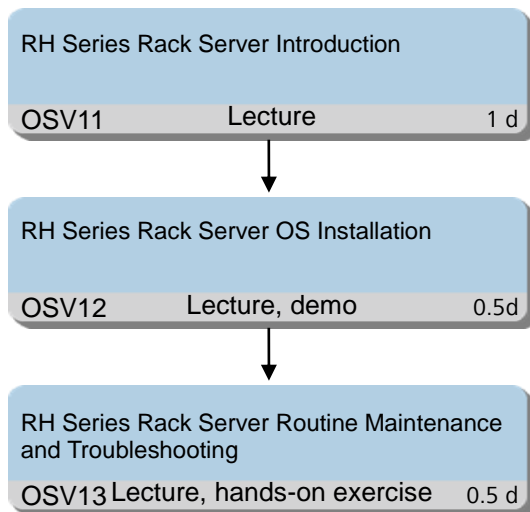
Class Size

Min 1, max 12

2.3 Server Technology

2.4 RH Series Rack Server Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers

Administrators

Prerequisites

- Be familiar with Windows and Linux
- Know basic knowledge of TCP/IP
- Know basic knowledge of server

Objectives

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

- Describe the models, position, main functions and application scenarios of RH series servers
- Master the hardware structure, views, interfaces and hardware installation of RH series servers
- Master BMC configuration of RH series servers
- Master RAID plan and configuration of RH series servers
- Master OS installation method of RH series servers
- Master the steps, methods and cautions of parts replacement of RH series servers
- Master the methods of log collection of RH series servers
- Be familiar with basic troubleshooting methods of RH series servers

Training Content

OSV11 RH Series Rack Server Introduction

- Models, position, main functions and application scenarios of RH series servers
- Hardware structure, views, interfaces and hardware installation of RH series servers

OSV12 RH Series Rack Server OS Installation

- BMC configuration of RH series servers
- RAID plan and configuration of RH series servers
- Master OS installation method of RH series servers

OSV13 RH Series Rack Server Routine Maintenance and Troubleshooting

- Steps, methods and cautions of parts replacement of RH series servers
- Methods of log collection of RH series servers
- Basic troubleshooting methods of RH series servers

Duration

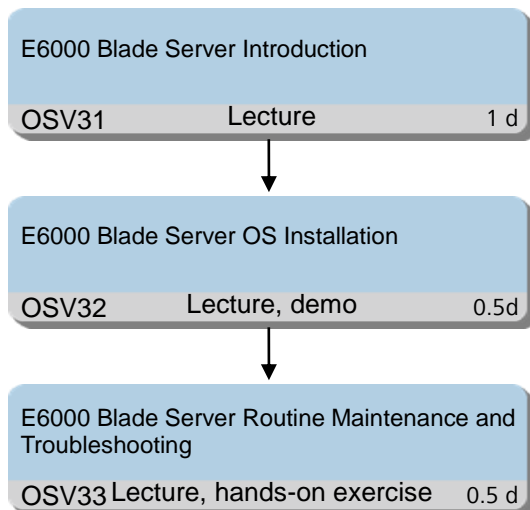
2 working days

Class Size

Min 6, max 12

2.5 E6000 Series Blade Server Deployment and Management Training

Training Path



Target Audience

Operators and Maintainers
Administrators

Prerequisites

- Be familiar with Windows and Linux
- Know basic knowledge of TCP/IP
- Know basic knowledge of server

Objectives

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

- Describe the models, position, main functions and application scenarios of E6000 series servers
- Master the hardware structure, views, interfaces and hardware installation of E6000 series servers
- Master iMana function, management and maintenance of E6000 blade server
- Master RAID plan and configuration of E6000 series servers
- Master OS installation method of E6000 series servers
- Master the steps, methods and cautions of parts replacement of E6000 series servers
- Master the methods of log collection of E6000 series servers
- Be familiar with basic troubleshooting methods of E6000 series servers

Training Content

OSV31 E6000 Blade Server Introduction

- Models, position, main functions and application scenarios of E6000 series servers
- Hardware structure, views, interfaces and hardware installation of E6000 series servers

OSV32 E6000 Blade Server OS Installation

- iMana function, management and maintenance of E6000 blade server
- RAID plan and configuration of E6000 series servers
- OS installation method of E6000 series servers

OSV33 E6000 Blade Server Routine Maintenance and Troubleshooting

- Steps, methods and cautions of parts replacement of E6000 series servers
- Methods of log collection of E6000 series servers
- Basic troubleshooting methods of E6000 series servers

Duration

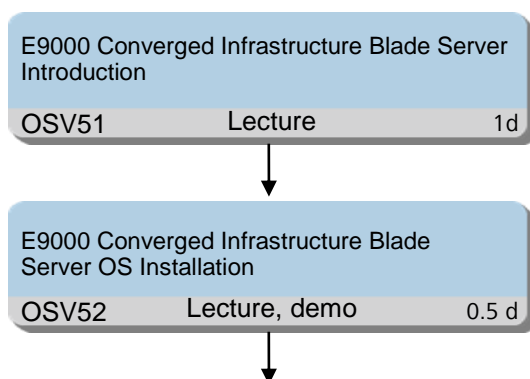
2 working days

Class Size

Min 6, max 12

2.6 E9000 Converged Infrastructure Blade Server Deployment and Management Training

Training Path



E9000 Converged Infrastructure Blade Server
Routine Maintenance and Troubleshooting

OSV53 Lecture, hands-on exercise 0.5 d

Target Audience

Operators and Maintainers
Administrators

Prerequisites

- Be familiar with Windows and Linux
- Know basic knowledge of TCP/IP
- Know basic knowledge of server

Objectives

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

- Describe the models, position, main functions and application scenarios of E9000 Converged Infrastructure Blade Server
- Master the hardware structure, views, interfaces and hardware installation of E9000 Converged Infrastructure Blade Server
- Master BMC function, management and maintenance of E9000 Converged Infrastructure Blade Server
- Master RAID plan and configuration of E9000 Converged Infrastructure Blade Server
- Master OS installation method of E9000 Converged Infrastructure Blade Server
- Master the steps, methods and cautions of parts replacement of E9000 Converged Infrastructure Blade Server
- Master the methods of log collection of E9000 Converged Infrastructure Blade Server
- Be familiar with basic troubleshooting methods of E9000 Converged Infrastructure Blade Server

Training Content

OSV51 E9000 Converged Infrastructure Blade Server Introduction

- Models, position, main functions and application scenarios of E9000 Converged Infrastructure Blade Server
- Hardware structure, views, interfaces and hardware installation of E9000 Converged Infrastructure Blade Server

OSV52 E9000 Converged Infrastructure Blade Server OS Installation

- BMC function, management and maintenance of E9000 Converged Infrastructure Blade Server
- RAID plan and configuration of E9000 Converged Infrastructure Blade Server
- OS installation method of E9000 Converged Infrastructure Blade Server

OSV53 E9000 Converged Infrastructure Blade Server Routine Maintenance and Troubleshooting

- Steps, methods and cautions of parts replacement of E9000 Converged Infrastructure Blade Server
- Methods of log collection of E9000 Converged Infrastructure Blade Server
- Basic troubleshooting methods of E9000 Converged Infrastructure Blade Server

Duration

2 working days

Class Size

Min 6, max 12

2.7 Cloud Solution

2.7.1 HUAWEI Cloud Solution Overview Training

Training Path

Cloud Solution Overview		
OU220	Lecture	1d

Target Audience

This program is intended for the personnel who are interested in Cloud.

Prerequisites

None

Objectives

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

- Understand the evolution and benefits of Cloud.
- Describe the network of Cloud.
- Describe the system architecture of Cloud.
- Describe the hardware and software of Cloud.
- Explain the services features running in Cloud platform.

Training Content

- HUAWEI Cloud Solution Overview
 - Cloud computing evolution and characteristics introduction
 - HUAWEI cloud solution Overview
 - HUAWEI cloud solution network
 - HUAWEI cloud solution system architecture
 - HUAWEI cloud solution business characteristics

Duration

1 working day

Class Size

Max 12

2.7.2 Desktop Cloud Solution(R3) Deployment and Management Training

Training Path

Desktop Cloud Solution(R3) Deployment and Management

OCL15 Lecture, hands-on exercise 3 d

Target Audience

Operators and maintainers

Administrators

Planners and designers

Prerequisites

- Be familiar with PC operating system
- Know basic knowledge of datacom
- Know basic knowledge of server
- Know basic knowledge of storage

Objectives

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

- Describe the application scenario of Cloud Computing
- Describe the key features of Cloud Computing
- Describe the concept and technology of virtual machine
- Describe the concept and technology of virtual network
- Describe the concept and technology of virtual storage
- Describe the basic concept of storage
- Describe the protocol of storage
- Describe the RAID function of storage
- Describe the backup and redundancy technology of storage
- Describe the structure and configuration of server
- Describe the structure and configuration of storage
- Describe the structure of FusionSphere
- Describe the components and functions of FusionSphere
- Describe the installation of FusionSphere
- Describe the routine operations and maintenance of FusionSphere
- Describe the structure of FusionAccess
- Describe the components and functions of FusionAccess
- Describe the installation of FusionAccess
- Describe the routine operations and maintenance of FusionAccess
- Describe the image creation procedure
- Describe the creation and assignment of VM
- Describe the configuration of TC

Training Content

OCL12 Desktop Cloud Solution Deployment and Management

- Cloud computing foundations
 - The background of cloud computing
 - The concept and features of cloud computing
 - The value of cloud computing
 - The applications of cloud computing
 - The evolution of cloud computing
- Cloud computing technology -- virtualization
 - Virtualization introduction
 - Virtual machine technology
 - Virtual network technology
 - Virtual storage technology
 - VM management technology
- Cloud computing technology -- storage
 - Storage introduction
 - RAID technology
 - Backup and redundancy technology
- Server product introduction
 - Server product introduction
 - Functions of management module
 - RAID configuration
 - Supported OSs
- Storage product introduction
 - Storage product introduction
 - Functions and features
 - System connections
 - Configurations and maintenance
- FusionSphere introduction
 - FusionSphere introduction
 - FusionSphere components
 - FusionSphere functions and features
- FusionSphere installation
 - Introduction
 - Network configuration
 - Deployment principles
 - Data plan
 - Installation procedure
- FusionSphere operations and maintenance
 - System introduction
 - VM management

- Routine operations and maintenance
- FusionAccess introduction
 - FusionAccess introduction
 - FusionAccess structure and components
 - FusionAccess service process
- FusionAccess installation
 - FusionAccess introduction
 - FusionAccess deployment
 - FusionAccess installation
- FusionAccess operations and maintenance
 - Desktop Cloud Service and Maintenance System introduction
 - Functions of Desktop Cloud Service and Maintenance System
- User VM image creation
 - Image introduction
 - Environment requirements of image creation
 - Procedure of image creation
- TC introduction
 - TC introduction
 - TC operations

Duration

3 working days

Class Size

Min 1, max 12

2.7.3 FusionCube Solution Deployment and Management Training

Training Path

FusionCube Solution Deployment and Management

OCL13 Lecture, hands-on exercise 3 d

Target Audience

- Operators and maintainers
- Administrators
- Planners and designers

Prerequisites

- Be familiar with PC operating system
- Know basic knowledge of datacom
- Know basic knowledge of server
- Know basic knowledge of storage

Objectives

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

- Describe FusionCube solution
- Describe the structure and functions of FusionCube
- Describe the structure and functions of FusionStorage
- Describe the security solution of FusionCube
- Describe the hardware structure of FusionCube
- Describe the feature of dynamic resource adjust
- Describe the feature of distributed switches
- Describe the feature of access control based on roles
- Describe the feature of memory multiplexing
- Describe the feature of data backup and recovery
- Describe the feature of integrated resource management
- Describe the feature of VM snapshot
- Describe the feature of elastic application
- Describe the feature of application automatic deployment
- Describe the feature of automatic thin provisioning
- FusionManager installation and configuration
- FusionStorage installation and configuration
- FusionCube upgrade patch introduction
- FusionCube routine maintenance
- FusionCube troubleshooting

Training Content

OCL13 FusionCube Solution Deployment and management

- FusionCube solution introduction
 - The value of FusionCube
 - The structure of FusionCube
 - FusionCube series products
 - The main functions of FusionCube
 - FusionManager structure
 - FusionManager introduction
 - FusionManager structure
 - FusionManager functions and features
 - FusionStorage structure
 - FusionStorage principles
 - FusionStorage functions
 - FusionStorage advantages
 - FusionStorage application scenarios
 - FusionStorage operations and maintenance
 - FusionCube security solution introduction
 - Security architecture
-

- Access security
 - Data security
 - Network security
 - Virtualization security
 - Management security
 - Infrastructure security
 - Physical security
- FusionCube hardware introduction
 - Overview
 - Components introduction
 - Internal connections
 - Project deployment
- Access control based on roles of FusionCube
 - The concept and key technologies of access control based on roles
 - Unified certification
 - Privilege control
 - Joint with 3rd party
 - Domain management of resources
 - Operation log audit
- Integrated resource management of FusionCube
 - Integrated resource management introduction
 - Equipment management
 - Resource pool management
 - Resource cluster management
 - Virtual machine management
- Memory multiplexing of FusionCube
 - Policy of memory multiplexing
 - Method of memory multiplexing
- Data backup and recovery of FusionCube
 - Concept of virtual machine backup
 - Content of virtual machine backup
 - Solution of virtual machine backup
- Virtual machine snapshot of FusionCube
 - Full snapshot
 - Incremental snapshot
 - Memory snapshot
- Distributed switches of FusionCube
 - Application scenarios and values
 - Distributed switches technology principles
 - Distributed switches operations
- Dynamic resource adjust of FusionCube

- Customer requirements
 - Dynamic resource adjust principles
 - Dynamic resource adjust operations
- Application automatic deployment of FusionCube
 - Application automatic deployment principles
 - Application automatic deployment operations
- Elastic application of FusionCube
 - Elastic application principles
 - Elastic application configurations
- Automatic thin provisioning of FusionCube
 - Automatic thin provisioning advantages
 - Automatic thin provisioning principles
 - Automatic thin provisioning configurations and operations
- FusionCube operations and maintenance
 - FusionCube maintenance operations
 - FusionCube information collection

Duration

3 working days

Class Size

Min 1, max 12

2.7.4 FusionSphere Solution Deployment and Management Training

Training Path

FusionSphere Solution Deployment and Management

OCL14 Lecture, hands-on exercise 3 d

Target Audience

Operators and maintainers
 Administrators
 Planners and designers

Prerequisites

- Be familiar with PC operating system
- Know basic knowledge of datacom
- Know basic knowledge of server
- Know basic knowledge of storage

Objectives

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

- Describe FusionSphere solution

- Describe FusionSphere installation procedure
- Describe FusionSphere virtualized computing feature
- Describe FusionSphere virtualized storage feature
- Describe FusionSphere virtualized network feature
- Describe elastic load balance feature
- Describe elastic computing feature
- Describe VPC feature
- Describe data backup and recovery feature
- Describe FusionCompute structure and functions
- Describe FusionCompute routine operations and maintenance
- Describe FusionCompute upgrade procedure

Training Content

OCL13 FusionSphere Solution Deployment and Management

- FusionSphere solution introduction
 - The value of FusionSphere solution
 - The structure of FusionSphere
 - FusionSphere series products
 - The main functions of FusionSphere
- FusionSphere installation
 - FusionSphere installation principles
 - FusionSphere installation method
- FusionCompute structure and principles
 - FusionCompute structure introduction
 - FusionCompute features introduction
- FusionCompute operations and maintenance
 - FusionCompute maintenance operations
 - FusionCompute information collection
- FusionSphere virtualized computing feature
 - CPU QoS
 - Dynamic resource adjust
 - USB device simulation
 - Remote CD-ROM mount
- FusionSphere virtualized storage feature
 - Storage model
 - Virtualized storage principles
 - Virtualized storage feature introduction
- FusionSphere virtualized network feature
 - Application scenarios and values
 - Distributed switches principles
 - Distributed switches operations
- FusionSphere elastic load balance

- Elastic load balance principles
- Elastic load balance functions and features
- Elastic load balance application scenarios
- Elastic load balance configurations
- FusionSphere elastic computing
 - Elastic computing
 - Virtualized node and service cluster
 - Image and image server
 - Simple VPC
 - Multi NICs
 - Security Group
 - Virtual machine
 - User volume
 - Elastic IP and NAT
 - VNC login
- FusionSphere VPC
 - VPC feature
 - VPC configuration procedure
- FusionSphere disaster recovery
 - The value of disaster recovery
 - VM backup solution
 - Active-active disaster recovery solution

Duration

3 working days

Class Size

Min 1, max 12

2.7.5 FusionInsight Solution Deployment and Management Training

Training Path

FusionInsight Solution Deployment and Management

OCL14 Lecture, hands-on exercise 2d

Target Audience

- Operators and maintainers
- Administrators
- Planners and designers

Prerequisites

- Be familiar with PC operating system

- Know basic knowledge of datacom
- Know basic knowledge of server
- Know basic knowledge of storage

Objectives

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

- Describe FusionInsight solution
- Describe FusionInsight basic technology of HDFS
- Describe FusionInsight basic technology of MapReduce
- Describe FusionInsight basic technology of Hive
- Describe FusionInsight basic technology of HBase
- Describe FusionInsight basic technology of Loader
- Describe FusionInsight integration design
- Describe FusionInsight installation and deployment
- Describe FusionInsight routine maintenance

Training Content

OCL13 FusionInsight Solution Deployment and Management

01-FusionInsight HD Product Description

- Introduction to the FusionInsight HD Enterprise Edition
- FusionInsight HD Features
- FusionInsight HD Application Development

02-FusionInsight HD Basic Technology-HDFS

- HDFS Functions and Architecture
- HDFS Parameter Configuration
- HDFS Development

03-FusionInsight HD Basic Technology-MapReduce

- MapReduce Functions and Architecture
- YARN Resource Management and Task Scheduling
- MapReduce Development Interfaces
- Examples

04-FusionInsight HD Basic Technology-Hive

- Hive Functions and Architecture
- Hive Application Scenarios
- Hive Key Process
- Hive Development Interfaces

05-FusionInsight HD Basic Technology-HBase

- HBase Principle Overview
- HBase Data Model
- Hbase Write Process
- Hbase Read Process
- HBase Advanced Topics

06-FusionInsight HD Basic Technology-Loader

- Introduction to Loader
- Loader Implementation Principles
- Loader Features

07-FusionInsight HD Integration Design

- Cluster Networking Design
- Cluster Node Deployment Plan
- Cluster Disk Plan
- Design Cases

08-FusionInsight HD Installation and Deployment

- Preparations for Installation
- Software Installation and Deployment
- Verifying the Installation

09-FusionInsight HD Routine Maintenance

- Maintenance Tool
- Daily Maintenance
- Version Upgrade

Duration

2 working days

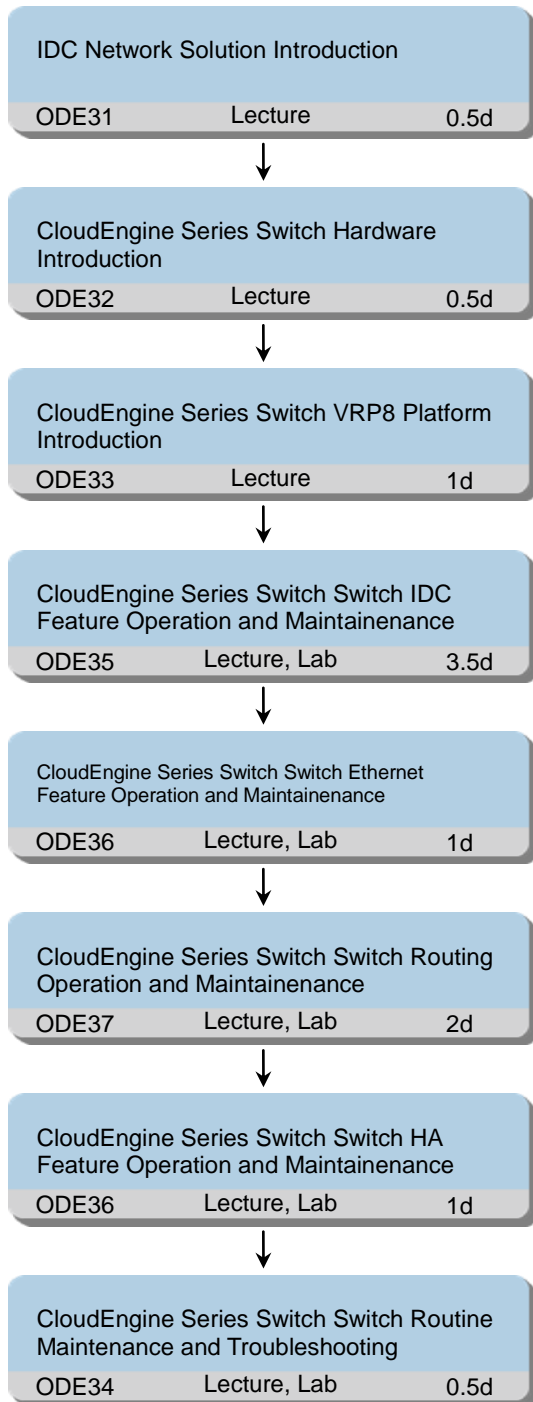
Class Size

Min 1, max 12

2.8 IT Network& security

2.8.1 IDC CloudEngine Series Switch Administration Training

Training Path



Target Audience

Device Operating and maintenance staff

Prerequisites

- A general familiarity with data communication network and general network equipment
- A general understanding of relative network protocols

Objectives

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

- Describe data center network solution structure
- Describe data center network solution highlight
- Describe CE switches application scenarios
- Describe CE switches hardware structure
- Describe CE switches software feature
- Understand CE switches typical network
- Describe VRP8 system structure
- Describe VRP8 system feature
- Describe VRP8 service feature
- Describe the background of TRILL
- Describe the basic concept of TRILL
- Describe the protocol mechanism of TRILL
- Describe the data forwarding of TRILL network
- Describe the application of TRILL in modern network
- Configure TRILL protocol
- Describe the stack technology realization on CE switch
- Differentiate the difference of stack on TOR and CE12800 switch
- List the procedure of configuration of stack on TOR switch
- List the procedure of configuration of stack on CE switches
- Describe background of VS technology
- Describe the realization of VS technology
- Describe the principle of VS technology
- Describe the basic configuration of VS on CE switch
- Describe the background of VM virtual migration
- Describe the technologies for VM virtual migration
- Describe the procedure of realization of VM virtual migration
- Describe the solution of Huawei nCenter network implementation
- Describe FC SAN network basic architecture
- Describe FCOE network basic architecture
- Describe the FCOE implementation of related technologies
- Describe DCB function technical principle
- Describe the application in data center network of FCOE
- Know what VLAN is
- Know concepts about VLAN
- Know the mechanism and configuration of communication between VLANs

- Know the mechanism and configuration of VLAN aggregation
- Know the mechanism and configuration of VLAN mapping
- Understand functions of QinQ
- Understand how QinQ is implemented
- Understand how selective QinQ is implemented
- Configure QinQ and selective QinQ on CE series switches
- Understand trunk implementation
- Understand trunk forwarding
- Learn about LACP
- Configure link aggregation
- Describe IP routing process
- Describe each field of IP routing table
- Configure static route on switches
- Understand the principle of OSPF
- Configure OSPF on switches
- Describe the meanings and functions of BGP configuration parameters.
- Configure BGP on a network that consists of CE12800
- Analyze and handle common faults that occur during BGP configuration on CE12800
- Describe basic concepts of IP QoS
- Describe Diff-Serv model
- Describe the principle of IP QoS
- Describe the classed-based QoS
- Describe basic concepts of VRRP
- Describe the principle of VRRP
- Configure QoS
- View device status
- Perform routine maintenance on CE12800
- Perform troubleshooting on CE12800

Training Content

ODE31 IDC Network Solution Introduction

- Data Center Network Solution Introduction
 - Overview of data center network
 - Development of data center network
 - Huawei data center network solution

ODE32 CloudEngine Series Switch Hardware Introduction

- CloudEngine12800 Series Switch Hardware Introduction
 - CE 12800 series switches hardware architecture
 - CE 12800 series switches boards and modules
- CloudEngine5800/6800 Series Switch Hardware Introduction
 - CE 5800/6800 series switches hardware architecture
 - CE 5800/6800 series switches boards and modules

ODE33 CloudEngine Series Switch VRP8 Platform Introduction

- CloudEngine Series Switch VRP8 Platform Introduction
 - Development of VRP and background of VRP8
 - VRP8 features
 - VRP8 basic operation

ODE35 CloudEngine Series Switch Switch IDC Feature Operation and Maintenance

- CloudEngine Series Switch TRILL Feature Operation and Maintenance
 - TRILL technology overview
 - TRILL protocol mechanism
 - TRILL network data forwarding TRILL application in network
 - TRILL basic configuration
- CloudEngine Series Switch iStack Feature Operation and Maintenance
 - Stack technology overview
 - The procedure to realize stack
 - The common applications of stack
 - Stack system data forwarding and failure switchover
 - Stack system basic configuration
- CloudEngine Series Switch VirtualSystem Feature Operation and Maintenance
 - The background of VS
 - VS technology overview
 - VS technology principle
 - VS basic configuration
 - VS applications in network
- CloudEngine Series Switch nCenter Virtual perception Feature Introduction
 - Background of VM virtual migration
 - Technologies for VM virtual migration
 - Procedure of VM virtual migration realization
 - nCenter virtual perception implementation solution
- CloudEngine Series Switch FCoE Feature Introduction
 - FIP Snooping configuration
 - DCB function configuration

ODE36 CloudEngine Series Switch Switch Ethernet Feature Operation and Maintenance

- CloudEngine Series Switch VLAN Feature Operation and Maintenance
 - VLAN basic overview
 - VLAN Aggregation overview and configuration
 - VLAN Mapping overview and configuration
 - VLAN configure practice
- CloudEngine Series Switch Link-Aggregation Feature Operation and Maintenance
 - Eth-trunk overview
 - Link aggregation protocol LACP
 - Link aggregation configuration practice on CE series switch

ODE37 CloudEngine Series Switch Switch Routing Operation and Maintenance

- CloudEngine Series Switch OSPF Feature Operation and Maintenance
 - IP routing overview
 - Static Routing
 - OSPF protocol overview
 - OSPF basic overview
 - OSPF routing calculation
 - OSPF configuration practice on CE series switch
- CloudEngine Series Switch IS-IS Feature Operation and Maintenance
 - IS-IS protocol overview
 - IS-IS basic overview
 - IS-IS routing calculation
 - IS-IS configuration practice on CE series switch
- CloudEngine Series Switch Route Selection and Control Operation and Maintenance
 - BGP overview
 - BGP route transfer process
 - BGP path control and selection
 - BGP configuration on CE series switch

ODE36 CloudEngine Series Switch Switch HA Feature Operation and Maintenance

- CloudEngine Series Switch VRRP Operation and Maintenance
 - VRRP overview
 - VRRP configuration
 - VRRP configuration practice on CE series switch
- CloudEngine Series Switch MSTP Operation and Maintenance
 - STP overview
 - MSTP overview
 - MSTP Configuration
 - MSTP configuration practice on CE series switch

ODE34 CloudEngine Series Switch Switch Routine Maintenance and Troubleshooting

- CloudEngine Series Switch Switch field Routine Maintenance
 - The contents of maintenance
 - The precautions of maintenance
 - The parts replacement of TOR switch
 - The parts replacement of CE switches

Duration

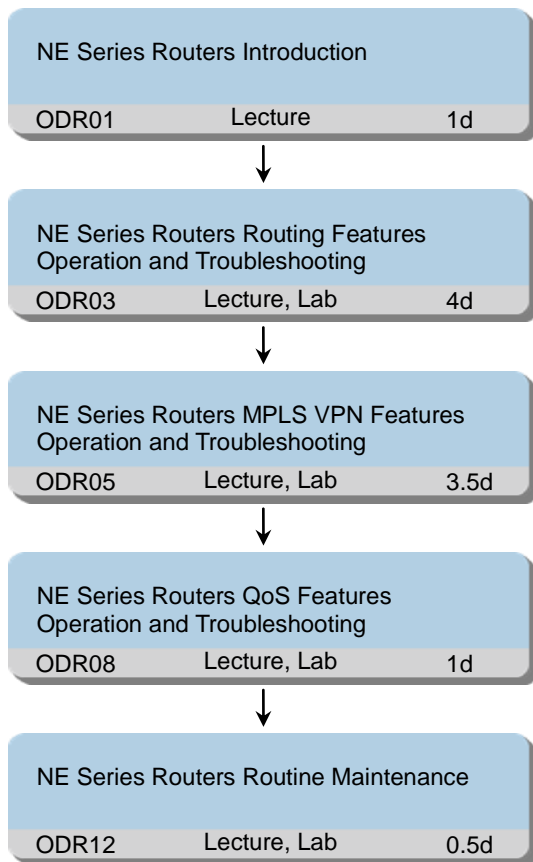
10 working days

Class Size

Min 1, Max 12

2.8.2 IDC NE Series Router Administration Training

Training Path



Target Audience

Device Operating and maintenance staff

Prerequisites

- At least one year of experience in the operation and maintenance of data communication equipment
- A general understanding of data communication

Objectives

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

- Describe NE series routers hardware structure
- Describe NE series routers board types and functions
- Identify NE series routers board types
- Judge the status of NE series routers board by indicators
- Describe NE series routers network positioning and application scenarios
- Describe NE series routers common features and highlights
- Describe the meanings and functions of OSPF configuration parameters
- Configure OSPF on a network that consists of NE series routers
- Analyze and handle common faults that occur during OSPF configuration on NE series routers

- Describe the meanings and functions of IS-IS configuration parameters
- Configure IS-IS on a network that consists of NE series routers
- Analyze and handle common faults that occur during IS-IS configuration on NE series routers
- Describe the meanings and functions of BGP configuration parameters
- Configure BGP on a network that consists of NE series routers
- Analyze and handle common faults that occur during BGP configuration on NE series routers
- Choose correct route selection tools according to different route selection and control scenarios
- Properly configure route selection and control on a network consisting of NE series routers
- Describe the flow of locating an OSPF neighbor relationship establishment fault
- List common OSPF configuration errors
- Analyze and handle OSPF neighbor relationship establishment faults on a network consisting of NE series routers
- Describe the flow of locating an IS-IS neighbor relationship establishment fault
- List common IS-IS configuration errors
- Analyze and handle IS-IS neighbor relationship establishment faults on a network consisting of NE series routers
- Describe the flow of handling BGP neighbor relationship establishment faults
- List common BGP configuration errors
- Analyze and handle BGP neighbor relationship establishment faults in a network which be made of NE series routers
- Describe the meanings and functions of MPLS configuration parameters
- Configure MPLS on a network that consists of NE series routers
- Describe the meaning and functions of each parameter involved in configuration of BGP MPLS VPN
- Configure BGP MPLS VPN on a network that consists of NE routers
- Select suitable MPLS L2 VPN implementation modes for different MPLS L2 VPN application
- Configure MPLS L2 VPN on a network that consists of NE series routers
- Master the VPLS implementation principle
- Configure VPLS on a network that consists of NE routers
- Describe configuration steps of BGP MPLS VPN
- List common errors in BGP MPLS VPN configuration
- Analyze and rectify the fault that BGP MPLS VPN users cannot visit each other on an NE router network
- Describe key technologies of QoS
- Configure QoS on a network that consists of NE series routers, and describe the meaning and function of each parameter involved in QoS configuration
- Analyze and handle common faults during QoS configuration on NE series routers
- Distinguish the board status on MPU, SRU, LPU, SFU, power module and fan module based on the indicators on the boards
- Perform routine maintenance to check the operation status of NE device by using commands
- Describe the procedure and method for troubleshooting when boards cannot be registered

Training Content

ODR01 NE Series Routers Introduction

- NE5000E Products Hardware Introduction Manual
 - NE5000E cluster hardware
 - NE5000E cluster line chassis hardware
 - NE5000E boards
- NE8040E Products Hardware Introduction Manual
 - NE80E/40E chassis structure
 - NE80E/40E board types and functions
 - NE80E/40E board indicators and functions
- NE40E-X Products Hardware Introduction Manual
 - NE40E-X chassis structure
 - NE40E-X board types and functions
 - NE40E-X board indicators and functions
- NE5000E-X16 Products Hardware Introduction Manual
 - NE5000E-X16 chassis structure
 - NE5000E-X16 board types and functions
 - NE5000E-X16 board indicators and functions
- NE5000E80E40E Products Features Overview Manual
 - NE5000E/80E/40E network positioning and applications
 - NE5000E/80E/40E routing features
 - NE5000E/80E/40E service features
 - NE5000E/80E/40E QoS features
 - NE5000E/80E/40E HA features
 - NE5000E/80E/40E IPv6 features

ODR03 NE Series Routers Routing Features Operation and Troubleshooting

- Configure OSPF on NE Series Routers Manual
 - OSPF overview and basic concepts
 - Basic procedure of OSPF route calculation
 - OSPF configuration, configuration verification, and configuration troubleshooting
- Configure IS-IS on NE Series Routers Manual
 - IS-IS overview and basic concepts
 - Basic procedure of IS-IS route calculation
 - IS-IS configuration, configuration verification, and configuration troubleshooting
- Configure BGP on NE Series Routers Manual
 - BGP overview
 - BGP route transfer process
 - BGP path control and selection
 - BGP configuration on NE series routers
- Configure Route Selection and Control on NE Series Routers Manual
 - Route selection and control tools
 - Mechanism of implementing route selection and control
 - Configuring route selection and control on a network consisting of NE series routers

- Troubleshooting of OSPF Configuration on NE Series Routers Manual
 - Flow of locating an OSPF neighbor relationship establishment fault
 - Common faults in OSPF neighbor relationship establishment
 - OSPF configuration, configuration verification, and configuration troubleshooting
- Troubleshooting of IS-IS Configuration on NE Series Routers Manual
 - ISIS neighbor relationship setup troubleshooting process
 - Common troubles of ISIS neighbor relationship setup
 - ISIS configuration, result verification and common troubleshooting
- Troubleshooting of BGP Configuration on NE Series Routers Manual
 - BGP peer setup troubleshooting process
 - Common troubles of BGP peer relationship setup
 - BGP configuration, result verification and common troubleshooting

ODR05 NE Series Routers MPLS VPN Features Operation and Troubleshooting

- NE Series Routers MPLS Configuration Manual
 - MPLS overview and basic concepts
 - Process of MPLS label distribution protocol (LDP) session establishment
 - MPLS configuration on NE series routers
- NE Series Routers BGP MPLS VPN Configuration Manual
 - Overview and implementation principles of the BGP MPLS VPN technology
 - Configuration of BGP MPLS VPN on NE routers
- NE Series Routers MPLS L2 VPN Configuration Manual
 - MPLS L2 VPN implementation mode
 - MPLS L2 VPN configuration on NE series routers
- NE Series Routers VPLS Configuration Manual
 - VPLS implementation
 - Configuration of VPLS on NE routers
- NE Series Routers MPLS VPN Troubleshooting
 - BGP MPLS VPN troubleshooting process
 - Common troubles of BGP MPLS VPN
 - Handling of common faults in configuration and verification of BGP MPLS VPN

ODR08 NE Series Routers QoS Features Operation and Troubleshooting

- NE Series Routers QoS Configuration Manual
 - QoS overview
 - QoS implementation
 - Class-based QoS
 - Configuration of QoS on NE series routers

ODR12 NE Series Routers Routine Maintenance

- NE Series Routers Routine Maintenance Manual
 - Routine maintenance items introduction
 - Daily routine maintenance guidelines

Duration

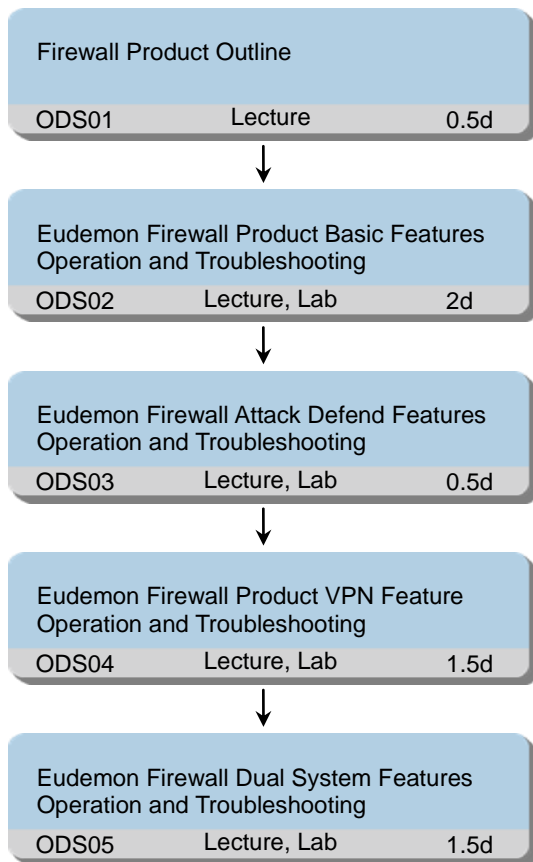
10 working days

Class Size

Min 1, Max 12

2.8.3 IDC Eudemon 1000E/200E Firewall Administration Training

Training Path



Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with data communications network elementary knowledge
- Having a general knowledge of TCP/IP basics

Objectives

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

- Describe Eudemon full series firewall product hardware feature
- Describe Eudemon full series firewall product software feature
- Describe Eudemon full series firewall product hardware feature
- Describe Eudemon full series firewall product software feature
- Describe Eudemon Firewall basic function features
- Describe Eudemon Firewall NAT service feature
- Configure Eudemon Firewall basic function features
- Configure Eudemon Firewall NAT service feature
- Describe Eudemon Firewall attack defend service features

- Configure Eudemon Firewall attack defend service features
- Describe Eudemon Firewall L2TP service feature
- Describe Eudemon Firewall GRE service feature
- Describe Eudemon Firewall IP-Sec service feature
- Configure Eudemon Firewall L2TP service feature
- Configure Eudemon Firewall GRE service feature
- Configure Eudemon Firewall IP-Sec service feature
- Describe Eudemon Firewall dual system service features
- Configure Eudemon Firewall dual system service features

Training Content

ODS01 Firewall Product Outline

- Eudemon1000E-X Series Firewall Product Introduction Manual
 - Eudemon1000E-X product network orientation
 - Eudemon1000E-X product shape and hardware
 - Eudemon1000E-X product function features
 - Eudemon1000E-X product networking
- Eudemon8000E Series Firewall Product Introduction Manual
 - Eudemon8000E product network orientation
 - Eudemon8000E product shape and hardware
 - Eudemon8000E product function features
 - Eudemon8000E product networking
- Eudemon200E Series Firewall Product Introduction Manual
 - Eudemon200E product network orientation
 - Eudemon200E product shape and hardware
 - Eudemon200E product function features
 - Eudemon200E product networking

ODS02 Eudemon Firewall Product Basic Features Operation and Troubleshooting

- Eudemon Firewall Basic Function Features and Configurations Manual
 - Principle of Security zone
 - Principle of Priority
 - Principle of ASPF
 - Principle of Blacklist
 - Principle of port-mapping
 - Principle of virtual firewall
 - Basic security zone exercise
 - Port mapping, load balancing, Virtual firewall
- Eudemon Firewall NAT Function Features and Configurations Manual
 - Principle of Basic NAT
 - Principle of Port NAT
 - Principle of NAT Server
 - Principle of Policy NAT

- Principle of Bi-directional NAT
- Principle of Within zone NAT
- Principle of NAT multi-instance
- Principle of Destination NAT
- Basic NAT configuration
- NAT Server configuration
- Bi-directional NAT configuration
- Inzone NAT configuration
- Destination NAT configuration
- Eudemon Firewall Routing Maintenance Manual
 - Eudemon Firewall Routing Maintenance

ODS03 Eudemon Firewall Attack Defend Features Operation and Troubleshooting

- Eudemon Firewall Attack Defend Features and Configurations Manual
 - Principle of Fagggle、Smurf、Land、TCP flood attack
 - Principle of illegal packet of attacks: IP-Fragment、TCP-Flag、Ping-of-Death
 - Principle of Scanning attacks: IP-Sweep、Port-Scan
 - Land attack exercise
 - TCP flood attack exercise
 - Port scanning attack exercise

ODS04 Eudemon Firewall Product VPN Feature Operation and Troubleshooting

- Eudemon Firewall IP-Sec Feature and Configuration Manual
 - Principle of IP-Sec
 - Configuration of IP-Sec on firewall
 - Exercise of IP-Sec
- Eudemon Firewall GRE Feature and Configuration Manual
 - Eudemon Firewall GRE Feature and Configuration
 - Exercise of GRE
- Eudemon L2TP Feature and Configuration Manual
 - Principle of L2TP
 - Configuration of L2TP on firewall
 - Exercise of L2TP

ODS05 Eudemon Firewall Dual System Features Operation and Troubleshooting

- Eudemon Firewall Dual System and Configuration Manual
 - Principle of VRRP
 - Principle of VGMP
 - Principle of HRP
 - Configuration of Route mode master/backup
 - Configuration of Route mode Load sharing
 - Route mode master/backup configuration
 - Route mode load sharing configuration
 - Composite mode master/backup configuration

Duration

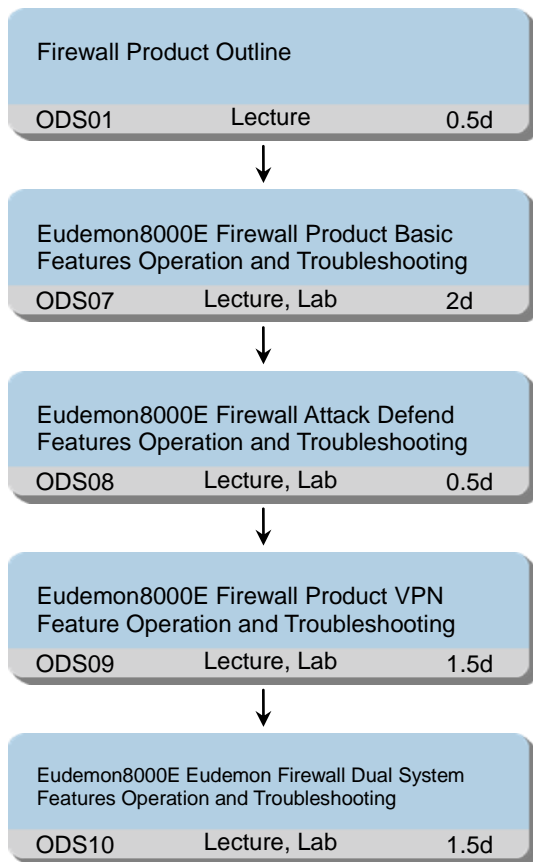
6 working days

Class Size

Min 1, Max 12

2.8.4 IDC Eudemon 8000E Firewall Administration Training

Training Path



Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with data communications network elementary knowledge
- Be familiar with network security elementary knowledge
- Be familiar with Firewall elementary knowledge

Objectives

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

- Describe Eudemon full series firewall product hardware feature
- Describe Eudemon full series firewall product software feature
- Describe Eudemon full series firewall product hardware feature
- Describe Eudemon full series firewall product software feature
- Describe Eudemon Firewall basic function features
- Describe Eudemon Firewall NAT service feature
- Configure Eudemon Firewall basic function features
- Configure Eudemon Firewall NAT service feature

- Describe Eudemon Firewall attack defend service features
- Configure Eudemon Firewall attack defend service features
- Describe Eudemon Firewall L2TP service feature
- Describe Eudemon Firewall GRE service feature
- Describe Eudemon Firewall IP-Sec service feature
- Configure Eudemon Firewall L2TP service feature
- Configure Eudemon Firewall GRE service feature
- Configure Eudemon Firewall IP-Sec service feature
- Describe Eudemon Firewall dual system service features
- Configure Eudemon Firewall dual system service features

Training Content

ODS01 Firewall Product Outline

- Eudemon1000E-X Series Firewall Product Introduction Manual
 - Eudemon1000E-X product network orientation
 - Eudemon1000E-X product shape and hardware
 - Eudemon1000E-X product function features
 - Eudemon1000E-X product networking
- Eudemon8000E Series Firewall Product Introduction Manual
 - Eudemon8000E product network orientation
 - Eudemon8000E product shape and hardware
 - Eudemon8000E product function features
 - Eudemon8000E product networking
- Eudemon200E Series Firewall Product Introduction Manual
 - Eudemon200E product network orientation
 - Eudemon200E product shape and hardware
 - Eudemon200E product function features
 - Eudemon200E product networking

ODS07 Eudemon8000E Firewall Product Basic Features Operation and Troubleshooting

- Eudemon8000E Firewall Basic Function Features and Configurations
 - Principle of Security zone
 - Principle of Priority
 - Principle of ASPF
 - Principle of Blacklist
 - Principle of port-mapping
 - Principle of virtual firewall
- Eudemon8000E Firewall NAT Function Features and Configurations
 - Principle of Basic NAT
 - Principle of Port NAT
 - Principle of NAT Server
 - Principle of Policy NAT
 - Principle of Bi-directional NAT

- Principle of Within zone NAT
 - Principle of NAT multi-instance
 - Principle of Destination NAT
- Eudemon8000E Firewall Basic Function Features Practice Guide
 - Basic security zone exercise
 - Port mapping、load balancing、Virtual firewall and WEB management configuration
- Eudemon8000E Firewall NAT Practice Guide
 - Basic NAT configuration
 - NAT Server configuration
 - Bi-directional NAT configuration
 - Inzone NAT configuration
 - Destination NAT configuration

ODS08 Eudemon8000E Firewall Attack Defend Features Operation and Troubleshooting

- Eudemon8000E Firewall Attack Defend Features and Configurations
 - Principle of Faggle、Smurf、Land、TCP flood attack
 - Principle of illegal packet of attacks: IP-Fragment、TCP-Flag、Ping-of-Death
 - Principle of Scanning attacks: IP-Sweep、Port-Scan
- Eudemon8000E Firewall Attack Defend Practice Guide
 - Land attack exercise
 - TCP flood attack exercise
 - Port scanning attack exercise

ODS09 Eudemon8000E Firewall Product VPN Feature Operation and Troubleshooting

- Eudemon8000E Firewall L2TP Feature and Configuration
 - Principle of L2TP
 - Configuration of L2TP on firewall
- Eudemon8000E Firewall GRE Feature and Configuration
 - Eudemon Firewall GRE Feature and Configuration
- Eudemon8000E Firewall IP-Sec Feature and Configuration
 - Principle of IP-Sec
 - Configuration of IP-Sec on firewall
- Eudemon8000E Firewall IP-VPN Service Practice Guide
 - Exercise of L2TP
 - Exercise of GRE
 - Exercise of IP-Sec

ODS10 Eudemon8000E Eudemon Firewall Dual System Features Operation and Troubleshooting

- Eudemon8000E Firewall Dual System and Configuration
 - Principle of VRRP
 - Principle of VGMP
 - Principle of HRP
 - Configuration of Route mode master/backup
 - Configuration of Route mode Load sharing

- Eudemon8000E Firewall Dual System Practice Guide
 - Route mode master/backup configuration
 - Route mode load sharing configuration
 - Composite mode master/backup configuration

Duration

6 working days

Class Size

Min 1, Max 12

2.8.5 IDC DDoS Solution Administration Training

Training Path

Firewall Product DDoS Feature Operation and Troubleshooting		
ODS16	Lecture	1d

Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with data communications network elementary knowledge
- Be familiar with network security elementary knowledge
- Be familiar with Firewall elementary knowledge

Objectives

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

- Describe E8000E series firewall product
- Describe E8000E series firewall DDoS defence service feature
- Configure E8000E series firewall DDoS defence service feature

Training Content

ODS16 Firewall Product DDoS Feature Operation and Troubleshooting

- E8000E Series Firewall DDoS Defence and Configuration
 - Principle of DDoS
 - Technology used on firewall to defend DDoS
 - Configuration of DDoS defend on firewall

Duration

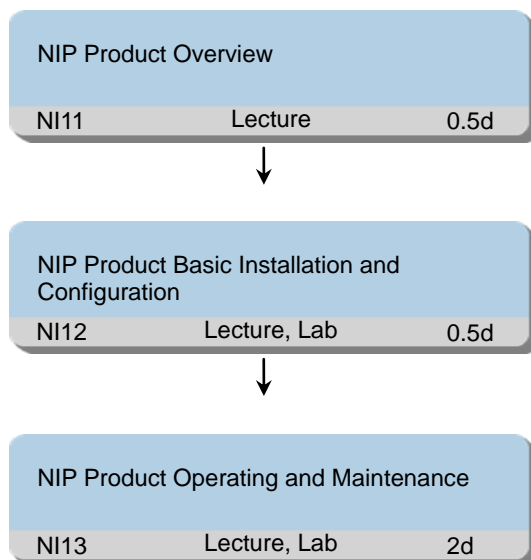
1 working day

Class Size

Min 1, Max 12

2.8.6 IDC NIP Administration Training

Training Path



Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with PC operation system
- Be familiar with network security elementary knowledge
- Be familiar with Firewall elementary knowledge

Objectives

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

- Understand the NIP IPS/IDS Device
- Understand the hardware of NIP IPS/IDS Device
- Understand the software Function of IPS/IDS Device
- Understand the hardware architecture of NIP Device
- Understand the hardware specifications of NIP Device
- Understand the hardware main component of NIP Device
- Understand the software architecture of NIP
- Understand the software application scenario of NIP Device
- Understand the hardware installation of NIP Device
- Understand the physical environment of NIP Device
- Understand the basic configuration of NIP Device

- Understand NIP fault analysis flow
- Understand device status
- Understand device log information
- Understand system clock configuration
- Be familiar with NIP products troubleshooting
- Be familiar with NIP products Operating and maintenance
- Understand NIP products patches administration

Training Content

NI11 NIP Product Overview

- NIP Product Introduction
 - NIP Introduction
 - IPS/IDS Hardware Overview
 - IPS/IDS Software Overview
 - NIP Hardware Architecture Introduction
 - NIP Software Architecture Introduction NIP Hardware Specifications Introduction
 - NIP Software Architecture Introduction NIP Hardware Main Component Introduction
 - NIP Software Architecture Introduction
- NIP Product Function, Feature and Application Scenarios
 - NIP Product Feature Introduction
 - NIP Product Application Scenarios

NI12 NIP Product Basic Installation and Configuration

- NIP Product Basic Installation and Configuration
 - Physical Environment Requirement NIP Device
 - NIP Device Hardware Installation Introduction

NI13 NIP Product Operating and Maintenance

- NIP Product Deployment Application Security and Configuration
 - NIP Application Security Service Introduction
 - NIP Application Security Service Deployment
 - NIP Application Security Service Configuration
- NIP Product Traffic Security Feature and Configuration
 - NIP Traffic Security Service Introduction
 - NIP Traffic Security Service Deployment
 - NIP Traffic Security Service Configuration
- NIP Product Service Deployment and Function
 - NIP Service Introduction
 - NIP Service Deployment
 - NIP Service Configuration
- NIP Product Maintenance and Troubleshooting

- Querying Device Status
- Examine Device logs
- Configuration System clock
- Patches Management support and Application
- Configuration of Patches Management
- Patches Management and Application Example
- Fault Analysis Roadmap
- Fault Analysis Roadmap of NIP Device
- Fault scenario solved cases
- NIP Manager Service Configuration and Network Monitor
 - NIP Manager Service Configuration
 - NIP Manager Network Monitor Introduction

Duration

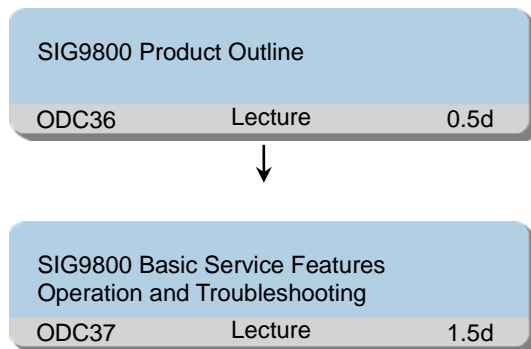
3 working days

Class Size

Min 1, Max 12

2.8.7 IDC SIG9800 Administration Training

Training Path



Target Audience

Device Operating and maintenance staff

Prerequisites

- Be familiar with IDC Familiar with IT and general network

Objectives

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

- Describe SIG9800 product hardware and features
- Describe SIG9800 basic function features
- Describe SIG9800 traffic monitor service feature
- Describe SIG9800 URL monitor service feature
- Configure SIG9800 service

Training Content

ODC36 SIG9800 Product Outline

- SIG9800 Series Product Overview
 - Outline of service gateway
 - Hardware introduction of SIG9800
 - Networking of SIG9800
 - Function features of SIG9800

ODC37 SIG9800 Basic Service Features Operation and Troubleshooting

- SIG9800 Hardware Description
 - Outline of service gateway
 - Hardware introduction of SIG9800
 - Networking of SIG9800
 - Function features of SIG9800
- Hardware Introduction SIG9800 Architecture
 - System architecture Introduction
- SIG9800 Traffic Services
 - Introduction of traffic monitor
 - Technical principle of flow detection, service detection
- SIG9800 Security Service
 - Security service introduction
- SIG9800 Mirroring and Diversion
 - Mirroring and diversion introduction

Duration

2 working days

Class Size

Min 1, Max 12