

Course Outline



Course Name: Huawei Certified Associate Cloud Computing V5.5

Course Code: HW-HCIA-CLCO

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Novice	Cloud	Theoretic teaching + Hands-on practice	Huawei Learning Vouchers

Introduction

The HCIA Cloud Computing v4 course is a Huawei vendor specific certification that covers Huawei's best practices to enable delegates to start the road toward working and implementing cloud strategies utilizing Huawei Cloud Engine Hardware. It covers the introduction of Cloud Computing, Computing virtualization across several vendors as well as open-source platforms. It covers basic skills in Linux, networking, network virtualization, storage and distributed storage strategies used in a Huawei Cloud Computing Solution.

Target Audience

This course is intended for those who hope to become cloud computing engineers, those who hope to obtain the HCIA-Cloud certificate, operators and maintainers, administrators, planners, and designers.

Prerequisites

Before attending this course, delegates must:

- Be familiar with basic knowledge of IT.
- Be familiar with basic knowledge of PC operating systems.

Course Objectives

Upon completion of this course, delegates should be familiar with the following:

- Describe what cloud computing is.
- Describe the history of cloud computing.
- List a few use cases of cloud computing.
- Describe the characteristics of cloud computing.
- Describe what virtualization is.
- Understand the differences between virtualization and cloud computing.
- Understand KVM technology.
- Design and deploy Huawei's FusionCompute virtualization solution and FusionAccess desktop solution.

Course Content

Part 1: Pre-Course Content

Module 1: Server Basics

- Introduction to Servers
 - What Is a Server?
 - Server Development History
 - Server Types
 - Server Hardware
- Key Server Technologies
 - BMC
 - BIOS

Module 2: Storage Technology Basics

- Storage Basics
 - Definition of Storage
 - History of Storage
 - Mainstream Disk Types
 - Storage Networking Types
 - Storage Forms
- Key Storage Technologies
 - RAID Technologies
 - Storage Protocol

Module 3: Network Technology Basics

- IP Address Basics
- Introduction to Network Technologies
 - Network Basics
 - Network Reference Model and Data Encapsulation
 - Introduction to Common Protocols
- Switching Basics
 - Ethernet Switching Basics
 - VLAN Basics
 - VLAN Basic Configuration
- Routing Basics
 - Basic Routing Principles
 - Static and Default Routes

Module 4: Operating System Basics

- Operating System Basics
 - Definition
 - Components of an OS
 - Different Types of OSs
- Linux Basics
 - Introduction to Linux
 - Introduction to openEuler
 - Introduction to File Systems on openEuler
 - Basic openEuler Operations
 - Basic Knowledge of Linux Commands
 - Basic openEuler Commands
 - Text Processing on openEuler
 - Network Management on openEuler

Part 1: Course Content

Module 1: Cloud Computing Basics

- IT Basics
 - What Is IT?
 - Challenges to Traditional IT
 - IT Development Trend
- About Cloud Computing
 - A Timeline of Computer History
 - A Timeline of Virtualization History
 - Definition of Cloud Computing
 - Development of Cloud Computing
 - Features of Cloud Computing
 - Cloud Computing Services and Deployment
- Mainstream Cloud Computing Vendors and Representative Technologies

Module 2: Virtualization

- Overview
 - Virtualization
 - Mainstream Virtualization Technologies

Module 3: Huawei Virtualization Platform

- FusionCompute Product Introduction
 - FusionCompute Virtualization Suite
 - FusionCompute Product Positioning and Architecture
 - FusionCompute Functions
- FusionCompute Planning and Deployment
 - Planning and Design
 - Installation Preparation and Process

Module 4: Huawei Virtualization Platform Management and Usage

- Introduction to FusionCompute Compute Virtualization
 - Concepts Related to Compute Virtualization
 - FusionCompute Compute Virtualization Features
- Introduction to FusionCompute Storage Virtualization
 - Concepts Related to Storage Virtualization
 - FusionCompute Storage Virtualization Features
- Introduction to FusionCompute Network Virtualization
 - Concepts Related to Network Virtualization
 - FusionCompute Network Virtualization Features
- FusionCompute Virtualization Platform Management
 - Cluster Resource Management
 - Maintenance Management
 - Configuration Management

Module 5: Overview of FusionAccess

- Overview of FusionAccess
- Introduction to FusionAccess Components
- Introduction to HDP
- Introduction to FusionAccess Application Scenarios

Module 6: FusionAccess Planning and Deployment

- FusionAccess Deployment Scheme
 - FusionAccess Deployment Scheme Overview
 - Introduction to Windows AD
 - AD, DNS, and DHCP Installation Plan
- FusionAccess Installation
- FusionAccess Initial Configuration

Module 7: FusionAccess Service Provisioning

- Service Encapsulation
- Template Creation
- Virtual Desktop Provisioning

Module 8: FusionAccess Features and Management

- Policy Management
- Service Adjustment
- Routine O&M

Module 9: Cloud Computing Trends

- OpenStack Overview
- Overview of Emerging Technologies
 - Edge Computing
 - Blockchain
 - Cloud Native
 - Artificial Intelligence

ASSOCIATED CERTIFICATIONS & EXAM

Capabilities to be certified

Have a good command of cloud computing basics, virtualization, and virtual desktops. Be able to use virtualization and virtual desktop technologies for cloud computing deployment and O&M.

Target Audience

People who are interested in cloud computing.

Prerequisites

None.

Exam

Exam Code	Certification Exam
H13-511	HCIA-Cloud Computing