



Course Outline

Course Name: Huawei Certified Professional Cloud Computing V5.0

Course Code: HW-HCIP-CLCO

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
10 Days	Intermediate	Cloud	Theoretical teaching + Hands- on practice	Huawei Learning Vouchers

Introduction

Upon completion of this course, trainees will have learned the knowledge of open-source OpenStack and basic IaaS services of HUAWEI CLOUD Stack and been able to perform operations and O&M on open-source OpenStack and HUAWEI CLOUD Stack. An understanding of how a cloud operating system management infrastructure is constructed, configuration, management, and a modular understanding of OpenStack applications and principles is also clearly defined. Installing, Configuring and working on the Service Center and Operation Center consoles is achieved, as well as cloud service management, Manage One features and Monitoring. Including Fusion Cloud desktop solution planning and design, installation and deployment, operation and maintenance technologies, best practices and workflows to understand the tools and strategies to Manage, Monitor and Manipulate Huawei's Cloud Desktop Solution using Huawei's Cloud Engine Platforms and Services utilizing Huawei Cloud Engine Hardware and Software. Coupled with an understanding of how cloud resource pools are managed, different deployments of cloud strategies, integration of existing infrastructure, cloud data center architecture, virtualization theory, distributed storage, server virtualization concepts, and operations.

Target Audience

- Become cloud computing engineers.
- Obtain HCIP-Cloud certificates.
- Understand cloud computing product management and maintenance.

Prerequisites

- Servers and PC operating systems
- Networks
- Storage
- Virtualization

Course Objectives

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

- Understand the OpenStack architecture and the working principles and invocation relationships of key OpenStack components.
- Understand the HUAWEI CLOUD Stack architecture and the relationship and differences between HUAWEI CLOUD Stack and open-source OpenStack.
- Have a good command of the principles and usage of basic IaaS services, such as computing, storage, and network services of HUAWEI CLOUD Stack.
- Understand HUAWEI CLOUD Stack operation and O&M concepts, and master HUAWEI CLOUD Stack operation and O&M management methods.

Knowledge to Learn

1. Open-source OpenStack architecture
2. Working principles and invoking relationships of key components
3. HUAWEI CLOUD Stack architecture, relationships and differences between HUAWEI CLOUD Stack and open-source OpenStack
4. Working principles and usage of basic IaaS services, such as HUAWEI CLOUD Stack compute, storage, and network services
5. Concepts and methods of HUAWEI CLOUD Stack operations and O&M

Course Content

HCIP-Cloud Computing V5.0

- OpenStack Architecture
 - OpenStack Overview
 - OpenStack Architecture
 - Introduction to OpenStack Core Services
 - Example of interaction between core OpenStack projects
 - OpenStack GUI Management
 - Horizon Overview
 - Horizon Architecture
 - Introduction to the Horizon GUI
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- OpenStack Authentication Management
 - Keystone Overview
 - Keystone Architecture
 - Keystone Object Model
 - Keystone Working Principle and Process
- OpenStack Image Management
 - Glance Overview
 - Glance Architecture
 - Glance Working Principle and Process
 - Creating a Glance Image
- OpenStack Computing Management
 - Nova Overview
 - Nova Architecture
 - Nova Working Principle and Process
 - Typical Nova Operations
- OpenStack Storage Management
 - OpenStack Storage Overview
 - Cinder: Block Storage
 - Swift: Object Store
- OpenStack Network Management
 - Linux Network Virtualization Foundations
 - Neutron Overview
 - Neutron Concepts
 - Neutron Architecture
 - Typical Neutron Operations and Processes
 - Neutron Network Traffic Analysis
- OpenStack Orchestration Management
 - Heat Overview
 - Heat Architecture
 - Typical Heat Orchestration Scenarios
- OpenStack Metering Management
 - Ceilometer Overview
 - Ceilometer Architecture
 - Ceilometer Data Management
- HUAWEI CLOUD Stack Architecture and Components
 - HUAWEI CLOUD Stack Solution and Architecture
 - HUAWEI CLOUD Stack Components and Public Components
- Service OM Resource Management
 - Service OM Overview
 - Service OM Computing Resource Management
 - Service OM Storage Resource Management
 - Service OM Network Resource Management
- HUAWEI CLOUD Stack Service Overview
 - Introduction to Cloud Service
 - Introduction to HUAWEI CLOUD Stack IaaS Services
 - Cloudification Cases

- Introduction to HUAWEI CLOUD Stack Computing Service
 - HUAWEI CLOUD Stack Basic Computing Service Overview
 - Introduction to HUAWEI CLOUD Stack Computing Service
 - Computing Services Practices
- Introduction to HUAWEI CLOUD Stack Storage Service
 - HUAWEI CLOUD Stack Basic Storage Service Overview
 - Introduction to HUAWEI CLOUD Stack Storage Service
 - Storage Solution Design
- Introduction to HUAWEI CLOUD Stack Network Services
 - HUAWEI CLOUD Stack Network Service Overview
 - Common Network Services on the Cloud
 - Interworking Service
 - Value-added Services
 - Network Solution Design
- HUAWEI CLOUD Stack Operation
 - Operation Overview
 - Resources & Organization
 - Service Supply
 - Metering and Pricing
 - Tenant O&M
 - Multi-cloud Management
- HUAWEI CLOUD Stack O&M
 - O&M Overview
 - O&M Function - Collection and Control Layer
 - O&M Function - Platform Layer
 - O&M Function - O&M Scenario Layer

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to take the HCIP Cloud Computing exam #H13-527

Capabilities to be certified HCIP-Cloud Computing

Exam Content

The HCIP-Cloud Computing V5.0 exam covers knowledge points of open source OpenStack and HUAWEI CLOUD Stack, including the open-source OpenStack architecture, working principles and invoking relationships of key components, and HUAWEI CLOUD Stack architecture, product components, and common components, working principles and usage of basic IaaS services such as HUAWEI CLOUD Stack compute, storage, and network services, HUAWEI CLOUD Stack operations and O&M.

Upon completion of this course, trainees will have learned the knowledge of open-source OpenStack and basic IaaS services of HUAWEI CLOUD Stack, and been able to perform operations and O&M on open source OpenStack and HUAWEI CLOUD Stack.

Exam

Exam Code	Certification Exam
H13-527	HCIP-Cloud Computing