

CompTIA Cloud Essentials+ Certification (Exam CV0-002)

Overview

In this course, you will learn how to implement, maintain, and deliver cloud technologies including network, storage, and virtualization technologies to create cloud solutions.

Target Audience

This course is designed for IT professionals who wish to develop cloud computing skills to enable them to move IT workloads to the cloud and integrate products and services from different providers and industries. Their focus is to ensure that cloud deployments are secure, that automation and orchestration are used effectively to bring business value from the cloud, and that costs are controlled through effective management of cloud vendors.

This course is also designed for students who are preparing to take the CompTIA Cloud+ certification exam CV0-002, or who plan to use Cloud+ as the foundation for more advanced cloud certifications or career roles.

Course Objectives

In this course, you will deploy, test, secure, manage, optimize, and troubleshoot a cloud solution.

You will:

- Prepare to deploy cloud solutions
- Deploy a pilot project
- Test a pilot project deployment
- Design a secure network for cloud deployment
- Determine CPU and memory sizing for cloud deployments
- Determine storage requirements for cloud deployments
- Plan Identity and Access Management for cloud deployments
- Analyze workload characteristics to ensure successful migration to the cloud
- Secure systems to meet access requirements
- Maintain cloud systems
- Implement backup, restore, and business continuity measures
- Analyze cloud systems for required performance
- Analyze cloud systems for anomalies and growth forecasting
- Troubleshoot deployment, capacity, automation, and orchestration issues
- Troubleshoot connectivity issues
- Troubleshoot security issues

Course Outline

1 - Preparing to Deploy Cloud Solutions

Describe Interaction of Cloud Components and Services
Describe Interaction of Non-cloud Components and Services
Evaluate Existing Components and Services for Cloud Deployment
Evaluate Automation and Orchestration Options
Prepare for Cloud Deployment

2 - Deploying a Pilot Project

Manage Change in a Pilot Project
Execute Cloud Deployment Workflow
Complete Post-Deployment Configuration

3 - Testing Pilot Project Deployments

Identify Cloud Service Components for Testing
Test for High Availability and Accessibility
Perform Deployment Load Testing
Analyze Test Results

4 - Designing a Secure and Compliant Cloud Infrastructure

Design Cloud Infrastructure for Security
Determine Organizational Compliance Needs

5 - Designing and Implementing a Secure Cloud Environment

Design Virtual Network for Cloud Deployment
Determine Network Access Requirements
Secure Networks for Cloud Interaction
Manage Cloud Component Security
Implement Security Technologies

6 - Planning Identity and Access Management for Cloud Deployments

Determine Identity Management and Authentication Technologies
Plan Account Management Policies for the Network and Systems
Control Access to Cloud Objects
Provision Accounts

7 - Determining CPU and Memory Sizing for Cloud Deployments

Determine CPU Size for Cloud Deployment
Determine Memory Size for Cloud Deployment

8 - Determining Storage Requirements for Cloud Deployments

- Determine Storage Technology Requirements
- Select Storage Options for Deployment
- Determine Storage Access and Provisioning Requirements
- Determine Storage Security Options

9 - Analyzing Workload Characteristics to Ensure Successful Migration

- Determine the Type of Cloud Deployment to Perform
- Manage Virtual Machine and Container Migration
- Manage Network, Storage, and Data Migration

10 - Maintaining Cloud Systems

- Patch Cloud Systems
- Design and Implement Automation and Orchestration for Maintenance

11 - Implementing Backup, Restore, Disaster Recovery, and Business Continuity Measures

- Back Up and Restore Cloud Data
- Implement Disaster Recovery Plans
- Implement Business Continuity Plans

12 - Analyzing Cloud Systems for Performance

- Monitor Cloud Systems to Measure Performance
- Optimize Cloud Systems to Meet Performance Criteria

13 - Analyzing Cloud Systems for Anomalies and Growth Forecasting

- Monitor for Anomalies and Resource Needs
- Plan for Capacity
- Create Reports on Cloud System Metrics

14 - Troubleshooting Deployment, Capacity, Automation, and Orchestration Issues

- Troubleshoot Deployment Issues
- Troubleshoot Capacity Issues
- Troubleshoot Automation and Orchestration Issues

15 - Troubleshooting Connectivity Issues

- Identify Connectivity Issues
- Troubleshoot Connectivity Issues

16 - Troubleshooting Security Issues

Troubleshoot Identity and Access Issues

Troubleshoot Attacks

Troubleshoot Other Security Issues

Related Courses, Certifications, Exams

- CV0-002 - CompTIA Cloud+
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