

CV0-004: CompTIA Cloud+

Operate and secure cloud infrastructure across providers, and prepare for the CompTIA Cloud+ CV0-004 exam.

DURATION

5 days · 40 hours

LEVEL

Intermediate

CURRICULUM

14 modules · 7 labs

DELIVERY

Live online, Onsite,
Corporate

Course overview

Most organisations now run workloads across more than one cloud as well as on premises, and they need engineers who understand the underlying concepts rather than a single provider's console. CompTIA Cloud+ validates that vendor-neutral skill set. This five-day course prepares you for the CV0-004 exam and gives you practical experience deploying and operating cloud resources.

Day one covers cloud architecture: service and deployment models, shared responsibility, storage and network design, and cost considerations. Day two moves to deployment, including migrations, provisioning compute, storage and networks, and working with containers. Day three is about operations: monitoring, logging, scaling, backup, disaster recovery and life-cycle management. Day four focuses on security, from identity and access to encryption, compliance and vulnerability management, and also introduces DevOps fundamentals such as infrastructure as code, source control and pipelines. Day five covers troubleshooting deployment, network, security and performance issues, followed by exam preparation.

Labs are carried out in a public cloud environment, with concepts explained so they transfer to other providers. You will deploy a small web application with a database, write a basic infrastructure-as-code template, configure monitoring and alerts, set up backups, and resolve a series of injected faults.

This course is aligned to the CompTIA Cloud+ CV0-004 exam. Confirm the current objectives and voucher price on the CompTIA website before booking.

Highlights

- 40 hours of live, trainer-led sessions
- Covers all six CV0-004 domains
- Hands-on labs in a public cloud environment
- Infrastructure as code and CI/CD basics
- Troubleshooting scenarios and mock exam

What's included

- Trainer with multi-cloud operations experience
- Plan aligned to the six CV0-004 domains
- Hands-on labs in a real cloud environment
- Infrastructure as code and pipeline basics
- Monitoring, backup and disaster recovery exercises
- Troubleshooting scenarios and mock exam
- Course completion certificate from Ace Skills Consulting

Who this course is for

Who should attend

- System and network administrators moving to cloud
- Cloud operations and support engineers
- Infrastructure engineers working in hybrid environments
- Network+ or Linux+ holders progressing to cloud

Prerequisites

- Two or more years of IT experience in systems or networking is recommended
- Networking knowledge at CompTIA Network+ level
- Basic familiarity with Linux or Windows server administration

Detailed curriculum — 5 days, 40 hours, 14 modules, 7 hands-on labs

Day 1 Cloud Architecture

8 hours

1.1 Cloud models

- Service models: IaaS, PaaS, SaaS
- Shared responsibility model
- Public, private, hybrid and multi-cloud

1.2 Design considerations

- Compute, storage and network design
- Cost and licensing considerations
- High availability and scaling design

1.3 Storage and networking

- Block, file and object storage
- Load balancing and DNS
- Virtual networks and subnets

LAB Design a resilient architecture for a web application · 45 min

Day 2 Deployment

8 hours

2.1 Migration

- Migration strategies
- Data migration methods
- Assessing workloads

2.2 Provisioning resources

- Virtual machines and images
- Templates and automation
- Storage and network provisioning

LAB Deploy a two-tier application in the cloud · 60 min

2.3 Containers and serverless

- Container concepts and registries
- Serverless functions
- Orchestration basics

LAB Run a containerised service · 40 min

Day 3 Operations

8 hours

3.1 Monitoring and logging

- Metrics, logs and events
- Capacity planning
- Dashboards and alerting

LAB Configure monitoring and alerts · 40 min

3.2 Scaling and optimisation

- Horizontal and vertical scaling
- Cost optimisation and right-sizing
- Auto scaling

3.3 Backup and recovery

- Backup types and schedules
- RPO and RTO
- Disaster recovery strategies

LAB Set up backups and test a restore · 40 min

Day 4 Security and DevOps Fundamentals

8 hours

4.1 Identity and access

- Identity federation and SSO
- Secrets management
- Least privilege and roles

4.2 Data and network security

- Encryption at rest and in transit
- Compliance and audit requirements
- Security groups and firewalls
- Vulnerability management

4.3 DevOps fundamentals

- Source control with Git
- CI/CD pipelines
- Infrastructure as code
- Configuration management

LAB Deploy resources with an infrastructure-as-code template · 50 min

Day 5 Troubleshooting and Exam Readiness

8 hours

5.1 Troubleshooting

- Troubleshooting methodology
- Network and connectivity issues
- Deployment and configuration issues
- Security and performance issues

LAB Resolve injected faults in a cloud environment · 60 min

5.2 Exam readiness

- Performance-based question practice
- Study plan
- Mock exam and review

Skills and tools

Skills you will build

Cloud architecture

Cloud deployment

Cloud migration

Virtual networking

Cloud storage

Containers

Monitoring and logging

Auto scaling

Backup and DR

Cloud security

IAM

Infrastructure as code

CI/CD basics

Troubleshooting

Tools used in class

AWS Management Console

Terraform

Git

Docker

Linux command line

Certification exam

This course is aligned to the exam below and prepares you for it. The exam itself is booked and taken with the vendor.

Exam **CompTIA Cloud+**

Exam code	CV0-004
Questions	Up to 90
Duration	90 minutes
Passing score	750 / 900
Format	Multiple choice, Performance-based / lab
Delivery	Online proctored, Test centre
Validity	3 years (renewable through CompTIA continuing education)
Official page	https://www.comptia.org/certifications/cloud

Exam skill areas covered

Cloud Architecture
Networking Fundamentals

Exam details are pending verification. Confirm the current exam code, format and fee on the official vendor page before booking.

Frequently asked questions

Which cloud provider do the labs use?

Labs use one public cloud provider for consistency, but every concept is explained in vendor-neutral terms so it transfers to others.

Should I take Cloud+ or a provider certification?

Cloud+ suits roles that span several providers or hybrid estates. If your work is on one provider, its associate certification is a natural next step after Cloud+.

Is the exam voucher included?

Only when the batch shows the "Exam voucher included" badge. Otherwise you buy the voucher directly from CompTIA.

Do I need coding skills?

No. Infrastructure-as-code examples are explained line by line, and basic scripting familiarity is enough.

Book a batch or talk to an advisor

Course page: aceskillsconsulting.com/course/cv0-004-comptia-cloud-plus · Email: info@aceskillsconsulting.com

Chennai office

Guindy, Chennai, Tamil Nadu

Delhi office

B-95, Old Post Office Street, Shakarpur
New Delhi 110092
Office: 98180 12523

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