

Kubernetes and Cloud Native Associate (KCNA) Exam Curriculum

A Cloud Native Computing Foundation (CNCF) Publication

cncf.io



This document provides the curriculum outline of the Knowledge, Skills and Abilities that a Kubernetes and Cloud Native Associate (KCNA) can be expected to demonstrate.

KCNA Curriculum

46% - Kubernetes Fundamentals

- Kubernetes Resources
- Kubernetes Architecture
- Kubernetes API
- Containers
- Scheduling

22% - Container Orchestration

- Container Orchestration Fundamentals
- Runtime
- Security
- Networking
- Service Mesh
- Storage

16% - Cloud Native Architecture

- Cloud Native Architecture Fundamentals
- Autoscaling
- Serverless
- Community and Governance
- Personas
- Open Standards

8% - Cloud Native Observability

- Telemetry & Observability
- Prometheus
- Cost Management

8% - Cloud Native Application Delivery

- Application Delivery Fundamentals
- GitOps
- CI/CD



Cloud native computing uses an open source software stack to deploy applications as microservices, packaging each part into its own container, and dynamically orchestrating those containers to optimize resource utilization. The Cloud Native Computing Foundation (CNCF) hosts critical components of those software stacks including Kubernetes, Fluentd, Linkerd, Prometheus, OpenTracing and gRPC; brings together the industry's top developers, end users, and vendors; and serves as a neutral home for collaboration. CNCF is part of The Linux Foundation, a nonprofit organization. For more information about CNCF, please visit: <https://cncf.io/>.