

Certified Cloud Native Platform Engineering Associate (CNPA) Exam Curriculum

A Cloud Native Computing Foundation (CNCF) Publication

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COMPUTING FOUNDATION

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

CNPA Curriculum

36% - Platform Engineering Core Fundamentals

- Declarative Resource Management
- DevOps Practices in Platform Engineering
- Application Environments and Infrastructure Concepts
- Platform Architecture and Capabilities
- Platform Engineering Goals, Objectives, and Approaches
- Continuous Integration Fundamentals
- Continuous Delivery and GitOps

20% - Platform Observability, Security, and Conformance

- Observability Fundamentals: Traces, Metrics, Logs, and Events
- Secure Service Communication
- Policy Engines for Platform Governance
- Kubernetes Security Essentials
- Security in CI/CD Pipelines

16% - Continuous Delivery & Platform Engineering

- Continuous Integration Pipelines Overview
- Incident Response in Platform Engineering
- CI/CD Relationship Fundamentals
- GitOps Basics and Workflows
- GitOps for Application Environments

12% - Platform APIs and Provisioning Infrastructure

- Kubernetes Reconciliation Loop
- APIs for Self-Service Platforms (CRDs)
- Infrastructure Provisioning with Kubernetes
- Kubernetes Operator Pattern for Integration

8% - IDPs and Developer Experience

- Simplified Access to Platform Capabilities
- API-Driven Service Catalogs
- Developer Portals for Platform Adoption
- AI/ML in Platform Automation

8% - Measuring your Platform

- Platform Efficiency and Team Productivity
- DORA Metrics for Platform Initiatives



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/>.