Certified GitOps Associate (CGOA) Exam Curriculum

kubernetes

CLOUD NATIVE
COMPUTING FOUNDATION

Certified GitOps Associate (CGOA) Exam Curriculum

This document provides the curriculum outline of the Knowledge, Skills and Abilities that a Certified GitOps Associate (CGOA) can be expected to demonstrate.

CGOA Curriculum

20% - GitOps Terminology

- Continuous
- Declarative Description
- Desired State
- State Drift
- State Reconciliation
- GitOps Managed Software System
- State Store
- Feedback Loop
- Rollback

30% - GitOps Principles

- Declarative
- Versioned and Immutable
- Pulled Automatically
- Continuously Reconciled

16% - Related Practices

- Configuration as Code (CaC)
- Infrastructure as Code (IaC)
- DevOps and DevSecOps
- CI and CD

20% - GitOps Patterns

- Deployment and Release Patterns
- Progressive Delivery Patterns
- Pull vs. Event-driven
- Architecture patterns (in-cluster and external reconciler, state store management, etc.)

14% - Tooling

- Manifest Format and Packaging
- State Store Systems (Git and alternatives)
- Reconciliation Engines (ArgoCD, Flux, and alternatives)
- Interoperability with Notifications, Observability, and Continuous Integration Tools

kubernetes

CLOUD NATIVE
COMPUTING FOUNDATION

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/.