

Prometheus Certified Associate (PCA) (Cloud Native Computing Foundation (CNCF))

Learn to monitor systems with Prometheus, from observability concepts and PromQL to instrumentation, alerting and dashboarding.

5

MODULES

26

TOPICS

COURSE OVERVIEW

This course covers core observability concepts including metrics, logs, tracing, service discovery and SLOs, SLAs and SLIs. It then examines Prometheus fundamentals such as system architecture, configuration and scraping, and the data model, before moving into PromQL for selecting, aggregating and operating on time-series data. Further modules address instrumentation and exporters, including client libraries and metric naming, concluding with alerting rules, Alertmanager and dashboarding basics.

WHO THIS COURSE IS FOR

Site Reliability Engineers

DevOps Engineers

Systems Administrators

Monitoring Engineers

Cloud Infrastructure Engineers

LEARNING OBJECTIVES

- Explain core observability concepts such as metrics, logs and tracing
- Compare push and pull models and service discovery approaches
- Describe Prometheus system architecture and scraping configuration
- Identify Prometheus data model elements, labels and exposition format
- Apply PromQL to select, aggregate and operate on time-series data
- Implement instrumentation using client libraries and exporters
- Configure alerting rules and manage them using Alertmanager
- Build dashboards to visualise monitored metrics

5 Modules, 26 Topics

01

Observability Concepts

TOPICS

Metrics · Understand logs and events · Tracing and Spans · Push vs Pull · Service Discovery · Basics of SLOs, SLAs, and SLIs

02

Prometheus Fundamentals

TOPICS

System Architecture · Configuration and Scraping · Understanding Prometheus Limitations · Data Model and Labels · Exposition Format

03

PromQL

TOPICS

Selecting Data · Rates and Derivatives · Aggregating over time · Aggregating over dimensions · Binary operators · Histograms · Timestamp Metrics

04

Instrumentation and Exporters

TOPICS

Client Libraries · Instrumentation · Exporters · Structuring and naming metrics

05

Alerting & Dashboarding

TOPICS

Dashboarding basics · Configuring Alerting rules · Understand and Use Alertmanager · Alerting basics (when, what, and why)

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

Visit koenig-solutions.com

✉ info@koenig-solutions.com