

DOP-C02: AWS DevOps Engineer – Professional

Automate everything from commit to production on AWS — and prepare for the professional-level DOP-C02 DevOps Engineer exam.

DURATION

3 days · 24 hours

LEVEL

Advanced

CURRICULUM

9 modules · 7 labs

DELIVERYLive online, Onsite,
Corporate

Course overview

DevOps engineers at professional level own the path from code to production and the systems that keep production healthy. They design pipelines that span accounts, codify infrastructure and policy, build observability in from the start and automate the response to incidents. The DOP-C02 exam tests all of this through detailed scenarios, and this three-day course prepares you for both the exam and the role.

Day one covers software development lifecycle automation and configuration management: CodePipeline, CodeBuild and CodeDeploy across multiple accounts, deployment strategies for EC2, containers and Lambda, and infrastructure as code with CloudFormation StackSets and AWS CDK. Day two focuses on resilient cloud solutions and observability, including multi-AZ and multi-Region designs, auto scaling, and the use of CloudWatch, X-Ray and centralised logging to understand behaviour in production.

Day three addresses incident and event response together with security and compliance: event-driven remediation with EventBridge and Systems Manager, automated rollback, policy as code with AWS Config and service control policies, and secrets management across pipelines. Labs build a realistic platform in which a commit flows through testing and approval into a production account and failures are detected and corrected automatically.

The final session reviews exam technique for long, multi-requirement questions. This course is aligned to the DOP-C02 exam and prepares you for it; confirm the current exam guide on the AWS Certification site before booking.

Highlights

- 24 hours of advanced, lab-intensive training
- Multi-account CI/CD pipelines and deployment strategies
- Infrastructure as code with CloudFormation and CDK
- Covers all six DOP-C02 domains
- Incident response and self-healing automation labs

What's included

- Cross-account CI/CD pipeline built in class
- Blue/green, canary and rolling deployments compared
- CloudFormation StackSets and CDK labs
- Centralised logging and tracing
- Automated incident remediation with Systems Manager
- Policy as code with AWS Config
- Scenario-based practice questions
- Course completion certificate from Ace Skills Consulting

Who this course is for

Who should attend

- DevOps and platform engineers working on AWS
- Site reliability engineers
- Developer or CloudOps associate holders progressing to professional level
- Build and release engineers modernising delivery

Prerequisites

- AWS Developer or CloudOps Engineer – Associate, or equivalent experience
- Experience with Git and at least one scripting language
- Hands-on familiarity with CloudFormation or another IaC tool

Detailed curriculum — 3 days, 24 hours, 9 modules, 7 hands-on labs

Day 1 SDLC Automation & Configuration Management

8 hours

1.1 CI/CD on AWS

- CodePipeline structure and cross-account actions
- CodeBuild environments and test reports
- Artifact management with CodeArtifact and ECR
- Pipeline security and approvals

LAB Build a cross-account pipeline with a manual approval stage · 60 min

1.2 Deployment strategies

- In-place, rolling and immutable deployments
- Blue/green for EC2 and ECS
- Canary and linear deployments for Lambda
- Automated rollback triggers

LAB Run a blue/green ECS deployment with CodeDeploy · 45 min

1.3 Infrastructure as code

- CloudFormation nested stacks and custom resources
- StackSets for multi-account rollout
- AWS CDK constructs and testing
- Systems Manager State Manager and Parameter Store

LAB Roll out a baseline stack to multiple accounts with StackSets · 40 min

Day 2 Resilient Solutions, Monitoring & Logging

8 hours

2.1 Resilient cloud solutions

- Multi-AZ and multi-Region patterns
- Auto Scaling lifecycle hooks
- Container platforms: ECS and EKS
- Backup and recovery automation

LAB Add lifecycle hooks and health-based replacement to an Auto Scaling group · 45 min

2.2 Monitoring and logging

- CloudWatch metrics, alarms and anomaly detection
- Centralised logging with subscription filters
- X-Ray and distributed tracing
- Dashboards across accounts

LAB Centralise logs from two accounts and create a metric filter alarm · 50 min

2.3 Observability design

- Choosing signals: metrics, logs and traces
- Service-level objectives
- Synthetic monitoring with CloudWatch Synthetics

Day 3 Incident Response, Security & Exam Readiness

8 hours

3.1 Incident and event response

- EventBridge event patterns
- Incident Manager overview
- Systems Manager Automation runbooks
- Troubleshooting failed deployments

LAB Self-healing: detect and remediate a failing instance automatically · 50 min

3.2 Security and compliance automation

- AWS Config rules and remediation
- Secrets in pipelines
- Service control policies and permission boundaries
- Security Hub and Inspector in pipelines

LAB Enforce encryption with an AWS Config rule and auto-remediation · 35 min

3.3 Exam readiness

- DOP-C02 domain recap
- Multi-requirement question strategy
- Timed practice set with review

Skills and tools

Skills you will build

CodePipeline

CodeBuild

CodeDeploy

AWS CloudFormation

AWS CDK

Deployment strategies

Amazon ECS

Amazon CloudWatch

AWS X-Ray

Systems Manager

AWS Config

Incident response

Policy as code

Tools used in class

AWS CLI

AWS CDK

AWS CloudFormation

Git

Docker

Visual Studio Code

AWS Systems Manager

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	AWS Certified DevOps Engineer – Professional
Exam code	DOP-C02
Questions	75
Duration	180 minutes
Passing score	750 / 1000 (scaled)
Format	Multiple choice, Multiple response
Delivery	Online proctored, Test centre
Validity	3 years
Official page	https://aws.amazon.com/certification/certified-devops-engineer-professional/

Exam skill areas covered

Infrastructure as Code (IaC)

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

Frequently asked questions

Is this course suitable for beginners in DevOps?

No. It assumes you already build pipelines or manage infrastructure on AWS; consider an associate-level course first if you are new.

Do you use Terraform?

The labs use CloudFormation and CDK because the exam focuses on them, but the design principles apply equally to Terraform.

How much time should I spend preparing after the course?

Most learners revise for four to six weeks, focusing on scenario questions and repeating the labs.

Does passing renew my associate certifications?

AWS has historically allowed professional certifications to recertify related associate ones; check the current recertification policy on the AWS site.

Can you run this as a team workshop?

Yes. Corporate batches can design pipelines around your current toolchain and account structure.

Book a batch or talk to an advisor

Course page: aceskillsconsulting.com/course/dop-c02-aws-devops-engineer-professional · Email: info@aceskillsconsulting.com

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