Praveen Madupu
Mb: +91 98661 30093
Sr. Database Administrator

Detailed overview of the **AWS Certified DevOps Engineer – Professional** certification, followed by a practical **7-day learning plan** to guide your preparation efficiently:

AWS Certified DevOps Engineer – Professional (DOP-C02) — In Detail

Certification Overview

- **Level**: Professional
- **Exam Duration**: 180 minutes (3 hours)
- **Number & Format of Questions**: 75 questions—multiple choice and multiple response
- **Cost**: USD 300
  (Amazon Web Services, Inc.)

This certification validates advanced skills in provisioning, operating, and managing AWS environments, particularly focusing on continuous delivery, automation, security, and reliability in distributed systems. It's meant for professionals with a strong DevOps background.
(Amazon Web Services, Inc.)

Recommended Experience

To take this exam, AWS expects you to have:

- **2+ years** of experience provisioning, operating, and managing AWS environments
- Experience with **software development**, **scripting**, and **highly automated infrastructure**
- Familiarity with **CI/CD**, **security controls**, **monitoring**, and **governance**
  (Amazon Web Services, Inc.)

Exam Domains & Weightings

According to the DOP-C02 (Professional) exam outline:

Domain	Weight	Focus Areas
SDLC Automation	22%	CI/CD processes: CodePipeline, CodeBuild, CodeDeploy, artifacts, automated testing
Configuration Management & Infrastructure as Code (IaC)	17%	CloudFormation, Systems Manager, OpsWorks, reusable infra templates
Resilient Cloud Solutions	15–16%	High availability, multi-AZ/multi-account setups, disaster recovery
Monitoring & Logging	15%	CloudWatch, CloudTrail, X-Ray, alerting and observability
Incident & Event Response	14%	Automated response, event handling, failure recovery
Security & Compliance	16–17%	IAM, least privilege, encryption, audit logging, governance
(Towards The Cloud, CyberPanel, certmates.com, Spacelift)		

Key Technical Topics

To succeed, you should master:

- **CI/CD Pipelines** (CodeCommit, CodePipeline, CodeBuild, CodeDeploy)
- **Artifact Management** (CodeArtifact, ECR, S3)
- **Deployment Strategies**: Blue/green, canary, immutable deployments, across ECS, Lambda, EC2
- **IaC Tools**: CloudFormation, OpsWorks, Systems Manager
- **Resilience**: Multi-AZ, multi-region, backups, DR strategies
- **Monitoring & Logging**: CloudWatch metrics/logs, CloudTrail, X-Ray
- **Incident Response**: Alarms, events, automation via Lambda or Systems Manager
- **Security & Governance**: IAM best practices, secrets management, encryption, auditing (Spacelift, testpreptraining.com)

Insights from the Field

Many certified professionals emphasize scenario-based questions requiring multiple AWS services to solve a problem:
"This test has so many long-winded questions and lots of scenarios that require the use of 2 or more services…"
(Reddit)
Commonly recommended resources include:

- **Stephane Maarek's Udemy course** (hands-on focused)
- **Tutorials Dojo practice exams**
- **AWS Exam Readiness digital course** (Reddit)

7-Day Learning Plan — AWS DevOps Engineer Professional

Assuming you can dedicate around **4–5 hours a day**, here's a structured plan:

Day 1 – Exam Foundations & SDLC Automation

- Study the **exam guide** and domain structure
- Review **CI/CD pipeline fundamentals** with CodeCommit, CodePipeline, CodeBuild, CodeDeploy
- Lab: Build a simple pipeline with automated testing and deployment

Day 2 – Advanced CI/CD & Artifact Management

- Deep dive into **artifact handling** (CodeArtifact, ECR, S3), plus build strategies
- Explore **immutable** and **blue/green** deployment patterns
- Lab: Create an immutable deployment pipeline leveraging CodeDeploy strategies

Day 3 – IaC & Configuration Management

- Learn services such as **CloudFormation**, **OpsWorks**, and **Systems Manager**
- Study IaC best practices and reusable templates
- Lab: Deploy a multi-tier stack using CloudFormation and automate config with Systems Manager

Day 4 – Resiliency, High Availability & DR

- Understand **multi-AZ / multi-region architectures** and DR strategies
- Lab: Implement a high-availability architecture across AZs (e.g., auto-scaling and failover mechanisms)

Day 5 – Monitoring, Logging & Incident Response

- Master CloudWatch, CloudTrail, X-Ray and alerting workflows
- Learn automated incident responses (e.g., CloudWatch alarms invoking Lambdas or SSM)
- Lab: Set up a monitoring solution with triggered auto-remediation actions

Day 6 – Security, Governance & Compliance

- Study IAM, secrets, encryption, and audit practices
- Tools like KMS, Secrets Manager, security in pipeline builds
- Lab: Secure a CI/CD workflow with encrypted parameters, least-privilege IAM, and audit logs

Day 7 – Practice Exam & Final Review

- Take a **full-length practice test** (AWS official or trusted provider)
- Review mistakes and revisit weak areas
- Skim relevant **AWS whitepapers** (e.g., Well-Architected Framework, DevOps guidelines)
- Aim for consistent **≥ 80%** to be exam-ready

Summary Checklist

- **Day 1**: Exam overview & pipeline basics
- **Day 2**: CI/CD advanced & deployment strategies
- **Day 3**: IaC and configuration management
- **Day 4**: Resiliency & DR
- **Day 5**: Observability & incident response
- **Day 6**: Security & governance
- **Day 7**: Practice exam and final polish

7-day focused study checklist for the **AWS Certified DevOps Engineer – Professional (DOP-C02)** exam.
This is a tough certification (professional level), but with a structured plan, you can cover the key topics in one week — assuming you already have hands-on experience with AWS and CI/CD tools.
Here's a **7-Day Study Checklist** designed for intense preparation:

🗓️ 7-Day AWS DevOps Engineer – Professional Study Plan

Day 1 – Exam Overview & CI/CD Foundations

🔷 **Understand the Exam Blueprint**

- Read the AWS DOP-C02 Exam Guide
- Understand the 6 domains:
  - SDLC Automation (22%)
  - Configuration Management & IaC (17%)
  - Resilient Cloud Solutions (15%)
  - Monitoring & Logging (15%)
  - Incident & Event Response (14%)
  - Security & Compliance Automation (17%)

🔷 **Key Services to Review**

- **CodeCommit, CodeBuild, CodeDeploy, CodePipeline**
- **CloudFormation & CDK basics**
- **Elastic Beanstalk for deployments**
- **Git & CI/CD workflows (branching, triggers, approvals)**

📌 **Hands-On:**

- Create a simple **CodePipeline** with CodeCommit → CodeBuild → CodeDeploy to EC2.

Day 2 – Infrastructure as Code & Configuration Management

🔷 **CloudFormation & CDK**

- StackSets, ChangeSets, Nested Stacks
- Parameters, Mappings, Conditions, Outputs
- Drift detection and rollback

🔷 **Configuration Management**

- **Systems Manager (SSM):** Parameter Store, State Manager, Patch Manager, Run Command
- **OpsWorks & Chef/Puppet basics**

📌 **Hands-On:**

- Deploy an EC2 + ALB setup with CloudFormation
- Store environment configs in **SSM Parameter Store**
- Patch EC2 using **Patch Manager**

Day 3 – Monitoring, Logging & Observability

🔷 **CloudWatch**

- Metrics, Logs, Alarms, Composite Alarms
- CloudWatch Logs Insights
- Dashboards and Cross-Account Monitoring

🔷 **X-Ray**

- Tracing microservices & analyzing latency

🔷 **AWS Config & CloudTrail**

- Resource compliance checks
- Detecting drift and security misconfigurations

📌 **Hands-On:**

- Create CloudWatch alarm that triggers SNS
- Run CloudWatch Logs Insights queries
- Enable AWS Config rules for compliance

Day 4 – Security & Compliance Automation

🔷 **IAM Best Practices**

- Cross-account roles, Permissions boundaries, SCPs
- Identity Center (SSO), Secrets Manager, KMS

🔷 **Compliance Automation**

- GuardDuty, Security Hub, Inspector, Macie
- Automating remediation with EventBridge + Lambda

📌 **Hands-On:**

- Enable **GuardDuty** in multi-account setup
- Automate remediation for public S3 bucket (via EventBridge + Lambda)

Day 5 – High Availability & Resiliency

🔷 **Resilient Architectures**

- Multi-AZ, Multi-Region deployments
- Auto Scaling (EC2, ECS, DynamoDB, Aurora)
- Blue/Green & Canary Deployments
- Elastic Load Balancing (ALB/NLB)

🔷 **Disaster Recovery**

- RTO/RPO strategies: Backup & Restore, Pilot Light, Warm Standby, Multi-Site Active/Active

📌 **Hands-On:**

- Deploy Blue/Green with **CodeDeploy**
- Configure Auto Scaling Group with lifecycle hooks

Day 6 – Incident & Event Response

🔷 **Incident Automation**

- EventBridge event patterns
- Step Functions for automated response workflows
- CloudWatch alarms → Systems Manager Automation Documents (SSM Docs)

🔷 **GameDay Scenarios**

- Simulate EC2 failure & Auto Healing
- Rollback failed deployments automatically

📌 **Hands-On:**

- Automate EC2 reboot on CPU threshold
- Trigger rollback on CodeDeploy failure

Praveen Madupu
Mb: +91 98661 30093
Sr. Database Administrator

Day 7 – Practice Tests & Review

🔷 **Review & Final Prep**

- Go over **Whitepapers**:
  - AWS Well-Architected Framework
  - DevOps on AWS
  - Infrastructure as Code
- Focus on weak domains from Days 1-6

🔷 **Practice Tests**

- Do at least **2 full-length practice exams**
- Review **every wrong answer** — understand why

📌 **Recommended Practice Sources**

- **Tutorials Dojo / Jon Bonso practice exams**
- **AWS Official Sample Questions**
- **Whizlabs / ExamPro mocks**

✅ **Quick Tips**

- **Focus on Scenario-Based Thinking:** The exam is 75% scenario questions. Think about *automation first* solutions.
- **Know Tradeoffs:** For each service, know when NOT to use it (e.g., why use CodeDeploy over Elastic Beanstalk).
- **Hands-On is King:** Build and break things in a sandbox account — the exam tests real-world problem solving.

Day-by-Day AWS DevOps Engineer – Professional Study Checklist in a clean, trackable **table format** so you can mark off each task as you finish.

🗓️ **7-Day AWS DevOps Engineer – Professional Study Checklist**

Day	Topics & Services	Hands-On Tasks	Status ✅
Day 1	**Exam Overview & CI/CD Foundations** • Read AWS DOP-C02 Exam Guide • Review 6 domains & weightage • Deep dive into CodeCommit, CodeBuild, CodeDeploy, CodePipeline • Elastic Beanstalk deployment basics • Git branching & CI/CD workflow best practices	🔧 Build a CodePipeline with CodeCommit → CodeBuild → CodeDeploy (EC2 deployment)	☐
Day 2	**Infrastructure as Code & Config Management** • CloudFormation: StackSets, ChangeSets, Nested Stacks • Parameters, Conditions, Drift Detection • CDK basics • AWS Systems Manager (SSM): Parameter Store, Run Command, Patch Manager • OpsWorks (Chef/Puppet) basics	🔧 Deploy EC2 + ALB via CloudFormation 🔧 Store app config in Parameter Store 🔧 Patch EC2 using Patch Manager	☐
Day 3	**Monitoring, Logging & Observability** • CloudWatch: Metrics, Logs, Alarms, Dashboards • CloudWatch Logs Insights queries • X-Ray for tracing microservices • AWS Config rules, drift detection • CloudTrail event logging & auditing	🔧 Create a CloudWatch Alarm → SNS notification 🔧 Run Logs Insights query 🔧 Enable AWS Config rules and review compliance results	☐
Day 4	**Security & Compliance Automation** • IAM roles, Permission Boundaries, SCPs • Identity Center (SSO) • Secrets Manager, KMS encryption • GuardDuty, Security Hub, Inspector, Macie • Automate remediation via EventBridge + Lambda	🔧 Enable GuardDuty and Security Hub 🔧 Create EventBridge + Lambda to auto-remediate public S3 bucket	☐
Day 5	**High Availability & Resiliency** • Multi-AZ, Multi-Region architecture patterns • Auto Scaling groups, lifecycle hooks • Blue/Green & Canary deployments • ALB vs NLB trade-offs • Disaster recovery strategies (RTO/RPO)	🔧 Deploy Blue/Green deployment with CodeDeploy 🔧 Configure ASG with lifecycle hooks & health checks	☐

Praveen Madupu
Mb: +91 98661 30093
Sr. Database Administrator

Day	Topics & Services	Hands-On Tasks	Status ✅
Day 6	**Incident & Event Response** • EventBridge event patterns & routing • Step Functions workflows • SSM Automation Documents • Automate rollback on failure • GameDay-style fault injection	🔧 Automate EC2 reboot when CPU > threshold 🔧 Trigger CodeDeploy rollback on failure	☐
Day 7	**Full Review & Practice Tests** • Review AWS Whitepapers: Well-Architected, DevOps on AWS, IaC • Review weak domains from Days 1-6 • Take 2 practice exams (Tutorials Dojo, ExamPro, or AWS official) • Analyze every incorrect answer	🔧 Do 2 full-length timed practice tests 🔧 Focus on weak areas & revisit notes	☐

✅ **Usage:**

- **Print this table** or keep it digital in Notion/Excel/Google Sheets.
- ✅ **Tick the Status column** as you complete each task.
- Spend **4-5 hours/day** minimum for this to work in just 7 days.