AWS Ramp-Up Guide: DevOps Engineer

Become proficient at deploying secure and reliable applications at high velocity on AWS by using version control, infrastructure as code and continuous integration/continuous delivery (CI/CD). This guide can also help prepare you for the AWS Certified DevOps Engineer – Professional certification exam. If you're interested specifically in digital courses and labs to help you develop these skills, explore the DevOps Engineer Learning Plan at explore.skillbuilder.aws. To provide suggestions on Ramp-Up Guides, please contact rampupguides@amazon.com.

Learn the fundamentals of Developer and Operations roles

Learning Resource		Type
AWS Ramp-Up Guide: Developer		Ramp-Up Guide
AWS Ramp-Up Guide: System Operator		Ramp-Up Guide

Step 1: Get started with DevOps on AWS

Learning Resource	Duration	Type
Getting Started with DevOps on AWS	60 minutes	Digital Training
Getting Started with DevOps on AWS	2 hours	Self-paced Lab
Introduction to DevOps on AWS	30 minutes	Whitepaper

Step 2: Learn about development environments

Learning Resource	Duration	Type
AWS SDKs, Toolkits, and more	30 minutes	Webpage
Introduction to AWS Command Line Interface (CLI)	10 minutes	Digital Training
AWS CloudShell – Command-Line Access to AWS Resources	5 minutes	Blog Post
Cloud9 Tutorial	1 hour	Tutorial
AWS Cloud9 Cloud-Based IDE	1 hour	Solution

Step 3: Learn about version control with AWS

Learning Resource	Duration	Type
AWS CodeCommit	10 minutes	Videos

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Working with AWS CodeCommit	40 mins	Self-paced Lab
Working with AWS CodeCommit on Windows	70 mins	Self-paced Lab
Using AWS CodePipeline and AWS CodeStar Connections to deploy from Bitbucket	15 minutes	Blog

Step 4: Learn how to build and manage Infrastructure as Code		
Learning Resource	**Duration**	**Type**
Infrastructure as Code	5 minutes	Whitepaper
Introduction to AWS CloudFormation	45 mins	Self-paced Lab
Creating an Amazon Virtual Private Cloud (VPC) with AWS CloudFormation	1 hour	Self-paced Lab
Launching and Managing a Web Application with AWS CloudFormation	50 mins	Self-paced Lab
Introduction to AWS CloudFormation Designer	40 mins	Self-paced Lab
AWS Cloud Development Kit Primer	90 minutes	Digital Training
AWS Cloud Development Kit (Lab)	2 hours	Self-paced Lab
AWS Cloud Development Kit (Workshop)	4 hours	Workshop
Working with the AWS Cloud Development Kit and AWS Construct Library*	30 minutes	Blog Post
Simplifying Application Building with AWS Solutions Constructs and the AWS CDK	30 minutes	Video

Step 5: Learn about continuous integration on AWS		
Learning Resource	**Duration**	**Type**
Getting started with AWS CodeBuild	1 hour	Tutorial
Build Applications Locally Using AWS CodeBuild	5 minutes	Video
Improve the Quality of Your Java Code Using Amazon CodeGuru Reviewer	6 minutes	Video
Setting up a CI/CD pipeline by integrating Jenkins with AWS CodeBuild and AWS CodeDeploy	30 minutes	Blog

Step 6: Learn to create and manage CI/CD Pipelines		
Learning Resource	**Duration**	**Type**
DevOps Engineering on AWS	3 days	Classroom Training
Advanced Testing Practices using AWS DevOps Tools	2.5 hours	Digital Training
Learn about Amazon CI/CD Practices for Software Development Teams	50 minutes	Video

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Learn how Amazon goes faster with Continuous Delivery	45 minutes	Webpage
Building end-to-end AWS DevSecOps CI/CD pipeline with open source SCA, SAST and DAST tools	1 hour	Blog Post
DevSecOps on AWS workshop	2 hours	Workshop

Step 7: Learn how to automate various deployment types		
Learning Resource	**Duration**	**Type**
Introduction to CodeDeploy	80 minutes	Self-paced Lab
Blue/green and Canary deployments for Amazon EKS and Amazon ECS	90 minutes	Workshop
CI/CD for serverless applications	1 hour	Workshop
CI/CD with AWS Fargate	60 minutes	Workshop
CI/CD Pipeline for AWS CloudFormation templates on AWS	30 minutes	Tutorial

Step 8: Learn about observability		
Learning Resource	**Duration**	**Type**
Observability workshop	2 hours	Workshop
Continuous improvement of code quality with Amazon CodeGuru	30 minutes	Video

Step 9: Learn about DevOps cultural philosophies		
Learning Resource	**Duration**	**Type**
Leadership Session: Developer Tools on AWS	50 minutes	Video
Using a Cloud Center of Excellence (CCOE) to Transform the Entire Enterprise	20 minutes	Blog Post
Driving change and building a high-performance DevOps culture	1 hour	Video

Step 10: Prepare for and take the AWS Certified DevOps Engineer – Professional certification exam		
Learning Resource	**Duration**	**Type**
Exam Readiness: AWS Certified DevOps Engineer - Professional	7 hours	Digital Training
AWS Certified DevOps Engineer - Professional exam	3 hours	Exam

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aws training and certification

Explore additional resources		
Learning Resource	**Description**	**Type**
AWS Training & Certification Learning Library	Continue to learn by exploring our extensive portfolio of free digital training and classroom training. Filter according to your preferences, or find a specific course using the "Search" box.	Explore »
AWS Whitepapers & Guides	Authored by AWS and the AWS community, explore technical whitepapers, technical guides, reference material, and reference architecture diagrams.	Explore »
AWS User Groups	Join and connect with AWS users all over the world to share ideas and learn.	Explore »
AWS Events and Webinars	Connect with, collaborate with, and learn from AWS experts. Key events include AWS.	Explore »
AWS Podcast	Listen and learn about AWS.	Explore »
AWS Blog	Read about the latest launches from AWS Technical Evangelist Jeff Barr and others.	Explore »
AWS Documentation	Search for AWS service guides, API references, tutorials, projects, SDKs, and toolkits.	Explore »
AWS Knowledge Center	Review AWS Support's responses to AWS customers' most frequently asked questions.	Explore »
AWS FAQs	Find answers to common Product and Technical frequently asked questions.	Explore »
AWS Hands-On Tutorials	Get started with 10-minute, step-by-step tutorials to launch your first application.	Explore »
AWS Solutions Library	Use vetted, technical reference implementations designed to help you solve common problems and build faster.	Explore »
AWS YouTube Channel	Explore a wide variety of AWS topics by watching videos created by AWS experts across the world.	Explore »

Duration times are estimated.

AWS Architecture Center	Explore reference architecture diagrams, vetted architecture solutions, Well-Architected best practices, patterns, icons, and more.	Explore »
Amazon's Builders' Library	Learn how Amazon builds and operates software.	Explore »
AWS Twitch Channel	Learn how millions of customers are currently leveraging AWS cloud products and solutions to build sophisticated applications with increased flexibility, scalability and reliability.	Explore »
AWS Twitch for Developers	Join the developer education and community with AWS Live Video.	Explore »
AWS Security Documentation	Configure AWS services to meet your security and compliance objectives.	Explore »

For a training plan customized for your requirements,
contact your AWS Account Manager or contact us **here**

We would love to hear from you.
Provide your feedback on this AWS Ramp-Up Guide **here**

For those learners who have existing Qwiklabs credits or those that want to use Qwiklabs instead of a subscription, you can search for the AWS labs in the Ramp Up Guide **here** and access from Qwiklabs.