

For Developers, Engineers, and DevOps Engineers

Updated August 2020

AWS Training and Certification has created this and other AWS Ramp-Up Guides to help build your knowledge of the AWS Cloud. Each expertly curated guide features free digital training, classroom courses, videos, whitepapers, certifications, and other information you're looking for. To enroll in training and certification exams, and track your progress, visit **aws.training** and set up a free account.

Learn the fundamentals of AWS Cloud		
LEARNING RESOURCE	DURATION	ТҮРЕ
What is Cloud Computing?	10 minutes	Webpage »
Overview of AWS	2 hours	Whitepaper »
Cloud Computing with AWS	10 minutes	Webpage »
AWS Global Infrastructure tool*	15 minutes	Webpage »
AWS Glossary	30 minutes	Webpage »
Job Roles in the Cloud	30 minutes	Digital Training »
AWS Cloud Practitioner Essentials (Second Edition) 6 hours	6 hours	Digital Training »
	Classroom Training »	

Step 1: Dive deeper into AWS Cloud fundamentals, including AWS pricing and cost management		
LEARNING RESOURCE	DURATION	ТҮРЕ
AWS Pricing*	15 minutes	Webpage »
How AWS Pricing Works	45 minutes	Whitepaper »
AWS Well-Architected*	15 minutes	Webpage »
AWS Well-Architected Framework	2 hours	Whitepaper »
Introduction to AWS Billing and Cost Management*	5 minutes	Digital Training »
AWS Shared Responsibility Model	5 minutes	Digital Training »



For Developers, Engineers, and DevOps Engineers

Step 1 continued: Dive deeper into AWS Cloud fundamentals, including AWS pricing and cost management			
LEARNING RESOURCE	DURATION	ТҮРЕ	
Shared Responsibility Model	10 minutes	Webpage »	
AWS Security Best Practices	2 hours	Webpage »	
AWS Security Best Practices*	30 minutes	Blog Post »	
AWS Technical Essentials	1 day	Digital Training »	

Step 2: Learn cloud developer fundamentals		
LEARNING RESOURCE	DURATION	ТҮРЕ
Tools to Build on AWS	30 minutes	Webpage »
Introduction to AWS Elastic Beanstalk	10 minutes	Digital Training »
Getting Started with .NET on AWS*	90 minutes	Digital Training »
Learn how to migrate your ASP.NET app to AWS in minutes!*	30 minutes	Tutorial »
Use Visual Studio, the AWS SDK for .NET, and the AWS Toolkit for .NET to run applications in C#*	4 hours	Hands-On Labs »
Learn the basics of Python on AWS*	90 minutes	Workshop »
Developing on AWS	3 days	Classroom Training »
Practicing Continuous Integration and Continuous Delivery on AWS	1 hour	Whitepaper »
AWS Developer: Building on AWS on edX	18 hours	Digital Training »
AWS Certified Cloud Practitioner certification exam	1.5 hours	Exam »

For Developers, Engineers, and DevOps Engineers



Step 3: Learn all about containers		
LEARNING RESOURCE	DURATION	ТҮРЕ
Getting started with Docker on AWS	45 minutes	Video »
Running Containerized Microservices on AWS	1 hour	Whitepaper »
AWS App2Container – A New Containerizing Tool for Java and .NET Applications*	30 minutes	Blog Post »
Building Containerized Applications on AWS (AWS on Coursera)*	10 hours	Digital Training »
Deep Dive on AWS Fargate: Building Serverless Containers at Scale	40 minutes	Digital Training »
Deep Dive on Container Security	30 minutes	Digital Training »
Deep Dive Into Container Networking - AWS Online Tech Talks	48 minutes	Video »

Step 3.1: Learn about Elastic Container Service (Amazon ECS)			
LEARNING RESOURCE	DURATION	ТҮРЕ	
Amazon Elastic Container Service (ECS) Primer	30 minutes	Training »	
ECS Workshop	2 hours	Workshop »	
Best practices for CI/CD using AWS Fargate and Amazon ECS	60 minutes	Video »	
Docker on Amazon ECS Fargate Using CloudFormation	36 minutes	Video »	
Building CI/CD Pipelines with Jenkins on Amazon ECS	60 minutes	Workshop »	
Building and Deploying Containers Using Amazon Elastic Container Service	1.5 hours	Hands-On Lab »	
AWS Fargate under the hood*	40 minutes	Video »	

aws training and certification

For Developers, Engineers, and DevOps Engineers

Step 3.2: Learn about Elastic Kubernetes Service (Amazon EKS)		
LEARNING RESOURCE	DURATION	ТҮРЕ
Amazon Elastic Container Service for Kubernetes (EKS) Primer	1 hour	Digital Training »
EKS Workshop	2 hours	Workshop »
De-mystifying cluster networking for Amazon EKS Worker nodes*	30 minutes	Blog Post »

Step 4: Learn all about serverless fundamentals			
LEARNING RESOURCE	DURATION	ТҮРЕ	
Introduction to Serverless Development*	25 minutes	Digital Training »	
Getting into a Serverless Mindset*	30 minutes	Digital Training »	
AWS Lambda Foundations	1 hour	Digital Training »	
Amazon API Gateway for Serverless Applications	75 minutes	Digital Training »	
Amazon DynamoDB for Serverless Architectures	2 hours	Digital Training »	
Lambda Getting Started	20 minutes	Tutorial »	

Step 4.1: Learn more about serverless including best practices		
LEARNING RESOURCE	DURATION	ТҮРЕ
Getting Started with AWS Lambda and Serverless Computing - AWS Online Tech Talks*	1 hour	Video »
Implementing Microservices on AWS	1 hours	Whitepaper »
Serverless architectural patterns and best practices*	1 hour	Video »
Serverless Architectures with AWS Lambda	1 hour	Whitepaper »



For Developers, Engineers, and DevOps Engineers

Step 4.1 continued: Learn more about serverless including best practices		
LEARNING RESOURCE	DURATION	ТҮРЕ
Optimizing Enterprise Economics with Serverless Architectures	30 minutes	Whitepaper »
Serverless Design with AWS Lambda	4 hours	Hands-On Labs »
AWS Serverless Wild Rydes Workshops: Web Application, Data Processing, DevOps, Image Processing, and Multi Region on GitHub	1 hour	Workshop »
Architecting Serverless Solutions	3 hours	Digital Training »
Innovator Island serverless workshop	2 hours	Workshop »
Innovator Island serverless workshop walkthrough	5 hours	Video »
Build and Deploy APIs with a Serverless CI/CD	45 minutes	Digital Training »
CI/CD for serverless applications	1 hour	Workshop »
Build a Modern Web Application in your preferred language	2 hours	Workshop »
Modernization Workshops with 3rd Party Integration	2 hours	Workshop »
Serverless Application Lens*	2 hours	Whitepaper »
Building microservices with AWS Lambda	1 hour	Video »
AWS Serverless Multi-Tier Architectures	30 minutes	Whitepaper »
Security Overview of AWS Lambda*	1 hour	Whitepaper »
Serverless Streaming Architectures and Best Practices*	1 hour	Whitepaper »
Best practices for organizing larger serverless applications	15 minutes	Blog Post »
Create a near real-time multiplayer game built on AWS	2 hours	Workshop »
Moving to event-driven architectures*	1 hour	Video »
Scalable serverless event-driven applications using Amazon SQS & Lambda*	50 minutes	Video »

For Developers, Engineers, and DevOps Engineers



Step 5: Learn how to build and manage Infrastructure as Code		
LEARNING RESOURCE	DURATION	ТҮРЕ
Infrastructure as Code	1 hour	Whitepaper »
Introduction to AWS CloudFormation	10 minutes	Digital Training »
Introduction to AWS CloudFormation*	45 minutes	Hands-On Lab »
Creating an Amazon Virtual Private Cloud (VPC) with AWS CloudFormation*	1 hour	Hands-On Lab »
Launching and Managing a Web Application with AWS CloudFormation*	2 hours	Hands-On Lab »
Introduction to AWS CloudFormation Designer*	40 minutes	Hands-On Lab »
AWS Cloud Development Kit (CDK)*	4 hours	Workshop »
Working with the AWS Cloud Development Kit and AWS Construct Library*	30 minutes	Blog Post »

Step 6: Learn how mobile and front-end web developers can quickly and easily build secure and scalable full stack applications		
LEARNING RESOURCE	DURATION	ТҮРЕ
Build web and mobile apps with AWS Amplify*	30 minutes	Tutorial »
Build a React Application using AWS Amplify*	50 minutes	Tutorial »

Step 7: Learn about AWS Developer Tools		
LEARNING RESOURCE	DURATION	ТҮРЕ
AWS Development Tools Services Overview	5 minutes	Digital Training »
Introduction to AWS CodeCommit	15 minutes	Digital Training »
Working with AWS CodeCommit	40 minutes	Hands-On Lab »



For Developers, Engineers, and DevOps Engineers

Step 7 continued: Learn about AWS Developer Tools		
LEARNING RESOURCE	DURATION	ТҮРЕ
Working with AWS CodeCommit on Windows	40 minutes	Hands-On Lab »
Introduction to AWS CodeBuild	10 minutes	Digital Training »
Introduction to CodeDeploy	80 minutes	Hands-On Lab »
Introduction to AWS CodePipeline	10 minutes	Digital Training »
Introduction to AWS CodeStar	10 minutes	Digital Training »
Introduction to AWS X-Ray	10 minutes	Digital Training »
DevOps Engineering on AWS	3 days	Digital Training »

Step 8: Prepare for and take the AWS Certified Developer - Associate certification exam		
LEARNING RESOURCE	DURATION	ТҮРЕ
Exam Readiness: AWS Certified Developer – Associate	2 hours	Classroom Training »
	2 110013	Digital Training »
AWS Certified Developer – Associate certification exam	2 hours	Exam »

Step 9: Learn about DevOps the Amazon Way		
LEARNING RESOURCE	DURATION	ТҮРЕ
2019 DevOps at Amazon Fireside Chat	42 minutes	Video »
Learn how Amazon goes faster with Continuous Delivery	45 minutes	Webpage »

For Developers, Engineers, and DevOps Engineers



Step 9 continued: Learn about DevOps the Amazon Way			
LEARNING RESOURCE	DURATION	ТҮРЕ	
Learn about Amazon CI/CD Practices for Software Development Teams	50 minutes	Video »	
Moving to DevOps the Amazon Way	1 hour	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: Learn to create and managed CI/CD Pipelines		
LEARNING RESOURCE	DURATION	ТҮРЕ
Set Up a Ci/CD Pipeline on AWS	1 hour	Tutorial »
Moving to DevOps the Amazon Way	1 hour	Video »
CI/CD for serverless applications	1 hour	Workshop »
CI/CD with AWS Fargate*	60 minutes	Workshop »
AWS Developer: Deploying on AWS on edX	18 hours	Digital Training »
Blue/Green Deployments on AWS	1 hour	Whitepaper »
Blue/green and Canary deployments for Amazon EKS and Amazon ECS*	90 minutes	Workshop »
Leadership Session: Developer Tools on AWS	50 minutes	Video »
CI/CD Pipeline for AWS CloudFormation templates on AWS	30 minutes	Tutorial »





Step 11: Learn to Modernize Your Applications		
LEARNING RESOURCE	DURATION	ТҮРЕ
AWS Developer: Deploying on AWS on edX	18 hours	Digital Training »
Advanced Developing on AWS	3 days	Digital Training »
Jenkins on AWS	1 hour	Whitepaper »
Learn about Git Webhooks	15 minutes	Webpage »
Get hands-on the Git Webhooks with AWS services Quick Start	45 minutes	Workshop »
Accelerating Software Delivery with DevOps	1 hour	Whitepaper »
Advanced instrumenting distributed systems for operational visibility	60 minutes	Webpage »
Developing Machine Learning Applications	2.5 hours	Digital Training »
Development and Test on AWS	20 minutes	Whitepaper »
Increase business value through modernization	1 hour	Video »
Building Modern Applications at AWS	25 minutes	Video »
Modern Application Development on AWS	1 hour	Whitepaper »

Step 12: Prepare for and take the AWS Certified DevOps Engineer — Professional certification exam		
LEARNING RESOURCE	DURATION	ТҮРЕ
Exam Readiness: AWS Certified DevOps Engineer - Professional	7 hours	Classroom Training » Digital Training »
AWS Certified DevOps Engineer - Professional	3 hours	Exam »

For Developers, Engineers, and DevOps Engineers



Updated August 2020

Explore additional resources		
LEARNING RESOURCE	DESCRIPTION	
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 Group	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 »
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