

DEVOPS

ADVANCED

5 DAYS

Infrastructure as Code with AWS CloudFormation

Build a strong foundation in Infrastructure as Code using AWS CloudFormation by understanding core concepts, template structure, and best practices. Learn how to author, parameterize, deploy, and manage CloudFormation templates while handling resource dependencies and updates across environments.

Why CloudFormation?

Consistency and reliability

IAC enables you to define your infrastructure as code. This consistency ensures that your infrastructure is deployed in a reliable and predictable manner across different environments, reducing the risk of configuration errors or inconsistencies.

Simplified resource management

CloudFormation provides a single, centralized way to manage and orchestrate your AWS resources. This simplifies resource management and ensures your infrastructure is correctly configured and maintained.

Efficiency and scalability

With IAC and CloudFormation, you can automate the provisioning and management of your infrastructure. This automation eliminates manual intervention and reduces the time and effort required to deploy or update resources.

What you'll be able to do

- ✓ Grasp the fundamental concepts of IAC, including the benefits, principles, and best practices associated with managing infrastructure as code.
- ✓ Familiarize participants with the CloudFormation template syntax, its structure, and the various resource types and properties available.
- ✓ Learn how to parameterize templates effectively, allowing for customization and flexibility in different environments or configurations.
- ✓ Help participants understand how to handle dependencies between resources
- ✓ Provide participants with hands-on experience in authoring CloudFormation templates
- ✓ Train participants on the deployment and update workflows with CloudFormation.

Who this is for

- Cloud Architects
- DevOps Engineers
- System Administrators
- Software Developers
- Solution Architects
- IT Consultants

Curriculum

01 IaC Foundations

- Apply iac foundations with CloudFormation in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

02 CloudFormation Basics

- Apply cloudformation basics with CloudFormation in practical DevOps workflows
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03 Templates and Authoring

- Apply templates and authoring with CloudFormation in practical DevOps workflows
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04 Parameters and Customization

- Apply parameters and customization with CloudFormation in practical DevOps workflows
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05 Resources and Dependencies

- Apply resources and dependencies with CloudFormation in practical DevOps workflows
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06 Stack Updates and Rollbacks

- Apply stack updates and rollbacks with CloudFormation in practical DevOps workflows
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07 Testing and Validation

- Apply testing and validation with CloudFormation in practical DevOps workflows
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08 HA Architecture Patterns

- Apply ha architecture patterns with CloudFormation in practical DevOps workflows
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09 Security and Governance

- Apply security and governance with CloudFormation in practical DevOps workflows
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10 Advanced Concepts

- Apply advanced concepts with CloudFormation in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
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11 DevOps Integration

- Apply devops integration with CloudFormation in practical DevOps workflows
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12 Best Practices

- Apply best practices with CloudFormation in practical DevOps workflows
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