

MANAGING AWS INFRASTRUCTURE WITH TERRAFORM

2 Days Classroom
2 Days Live Online

Individual: \$1,950

Group: \$1,750

GSA: \$1,423.50

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COURSE OVERVIEW

The Hashicorp tool suite has found a distinct place in the DevOps community as a fantastic set of solutions for some of the most common DevOps tooling needs and automation use cases. This 2-day engagement focuses on Terraform as a solution for infrastructure management. Led by an expert, your teams will perform real work and establish guidelines for how to integrate and use Terraform for the use cases they need to adopt or progress.

COURSE OUTLINE

Part 1: Infrastructure as Code

1. Motivation for Infrastructure as Code
2. Applying Infrastructure as Code in DevOps
3. Infrastructure as Code principles and best practices
4. Benefits of Infrastructure as Code
5. The case for Terraform

Part 2: Terraform Overview

1. Terraform architecture
2. Terraform configuration language overview
3. Terraform CLI
4. The lifecycle of a configuration
5. Managing configuration state

LAB EXERCISE

- Using the Terraform CLI
- Setting up a Terraform project

Part 3: AWS Resources

1. Resource types
2. Best practices in declaring resources
3. Network resources (VPC, subnet, security group)
4. Compute resources (virtual machine)
5. Storage resources (database)
6. Local values in a configuration
7. Augmenting a configuration with data sources

LAB EXERCISE

- Creating a VPC and subnets
- Adding a virtual machine into your VPC

- Adding a database to your VPC
- Using locals for replicated values
- Using a data source to read external configuration

Part 4: Terraform Programming

1. Data structures (primitives, maps, lists, objects, etc.)
2. Types of expressions to set values
3. Creating multiples of a resource
4. Dynamic blocks
5. Parameterizing a configuration with variables
6. Outputs from a configuration
7. Functions
8. Handling errors

LAB EXERCISE

- Using variables in a configuration
- Getting outputs from a configuration
- Creating a re-sizable cluster of virtual machines
- Creating multiple resources through iteration loops
- Leveraging functions in your code

Part 5: Modules

1. Purpose of modules
2. Module structure and code organization
3. Invoking modules
4. Module sources and versioning
5. Nested modules
6. Publishing modules

[See website for complete outline...](#)

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