

Terraform Fundamentals

The Terraform Fundamentals course demonstrates the flexibility and power of the Terraform provisioning system. In this course developers will learn how to express infrastructure across multiple teams within an enterprise. Additionally, the course dives into how to leverage Terraform to audit infrastructure information programmatically and enable change management as well as deploy reusable and consistent infrastructure. Using real world examples, learn how Terraform can be used to manage AWS applications as small as a few EC2 instances or as large as multi-regional application.

Productivity Objectives:

After this course, you will be able to:

- Read and build Terraform projects
- Utilize reusable Terraform patterns
- Leverage security best practices for Terraform
- Automate instance provisioning pipelines with Packer

Course Outline:

In the Introduction to Terraform training course you'll learn:

- Day 1:
 - Introduction to Terraform
 - Why Terraform?
 - Who uses it? Who is it built for?
 - Project Structure
 - Hashicorp Configuration Language Syntax
 - Commands
 - Resources
 - Data Sources
 - Variables
 - Providers
 - State / Remote State (backends)
 - Reuse Patterns in Terraform
 - Outputs

- Modules
 - Best practices for nesting modules
 - Understanding Inputs/Outputs
 - Keeping Terraform in Sync With Resources
 - Configuration drift
 - Drift use cases
 - Refresh command
 - Importing existing resources
- Day 2:
 - Security and Terraform
 - Built-in Functions and Interpolation
 - Building Infrastructure with Terraform
 - Configuration management vs provisioning
 - Providers
 - Tainting
 - Files
 - Error handling and debugging in Terraform
 - Challenge Round / Mastery Exercises