Advanced HCP Terraform

Duration: 3 Days Course Code: 8H503G

Overview:

This instructor-led course provides in-depth comprehensive knowledge of HCP Terraform and Packer.

The course is designed for operators and developers of HCP Terraform or Terraform Enterprise who will be engaged in deploying applications using Infrastructure as Code (IaC) and infrastructure deployment patterns. The HCP Terraform concepts and workflows apply to self-hosted Terraform Enterprise installations and usage. This course utilizes lecture and hands-on workshop content to teach best practices and recommended patterns. Each day includes dedicated Question & Answer time for attendees to work with the Course Instructor directly.

Updated 22/04/2026

Target Audience:

The target audience for the course are Cloud SRE's, DevOps Engineers, Sys Admins, SecOps, Application Teams, and similar roles that would benefit from knowing how to use HCP Terraform Enterprise to deploy and manage infrastructure as code.

Objectives:

- **After this course participants should be able to:**
- Gain comprehensive knowledge of HCP Terraform and best practices for usage in Infrastructure as Code (IaC)
- Understand advanced HCP Terraform features and best practices for their usage
- Understand how to use Terraform modules and the Private Registry
- Understand how to use Packer for creating machine images
- Understand infrastructure deployment patterns and automation
- Use course tools to develop and deploy applications in an automated deployment pipeline using IaC
- Course assumes familiarity with HashiCorp Configuration Language (HCL), how to write Terraform, basic Git usage, and basic Terraform Provider concepts

Prerequisites:

Successful completion of the Terraform Foundations Course, or basic familiarity with HashiCorp Configuration Language (HCL) including how to write Terraform code is recommended. Familiarity with AWS, Azure, or another cloud provider, an understanding of basic Git usage, and basic Terraform Provider concepts is also valuable for attendees of this course.

Testing and Certification

None

Follow-on-Courses:

None

Content:

Day 1

- Terraform Fundamentals Review
- Terraform Providers, State, Workspaces, ; Variables
- VCS Workflow ; Role Based Access Control
- Projects, Teams, ; Workspaces
- Terraform Providers, Registry, ; Agents

Day 2

- Terraform Modules
- Terraform Versioning ; Module development
- Health Assessments ; Run Tasks
- Landing Zones
- Sentinel

Day 3

- Packer ; the Packer CLI
- Packer HCL for images as code
- Integrating HCP Terraform and HCP Packer in a deployment pipeline

Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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