

Terraform With GCP

Duration: 4 Days(32 hours)

Hands-On-Format: This hands-on class is approximately 70/30 lab to lecture ratio, combining demos, examples and practical.

Module 1: Getting started and setting up Labs

- Introduction to Terraform
- Terraform vs other IAC tools
- Advantages of terraform
- Installation of Terraform
- Choosing Right IDE for terraform configuration development
- Connect Terraform with GCP
- GCP authentication
- Google CLI

Module 2: Building infrastructure with Terraform

- Understanding Providers
- Terraform init
- Resource creation using Terraform
- Terraform plan and apply
- Terraform Destroy
- Current and Desired state

Module 3: Configurations in terraform

- State file
- Provider Versioning
- Dependency Lock File
- Terraform format
- Terraform validate

Module 4: Modify configuration files in terraform

- Output in terraform
- Attributes
- Variables in terraform
- Data types

- Count
- For_each
- Conditional expression

Module 5: Functions and logs in terraform

- Terraform functions
- Locals
- Debugging in terraform
- Load order in terraform
- Tainting resources
- Terraform graph

Module 6: Manage infrastructure with terraform

- Data Sources
- Provisioners
- Terraform import
- Workspace in terraform

Module 7: Terraform Advance

- Modules
- Module sources
- Remote state management
- GIT
- Terraform Cloud