

Terraform with Oracle Cloud

Section	Description
1	Introduction
	Basics of Infrastructure as Code (IaC)
2	Getting Started
	Installing Terraform
	Setting up OCI account
3	Deploying OCI Infra with Terraform
	Authentication and Authorization
	Create User for OCI account
	Launch an OCI Instance using Terraform
	Resource and Providers
	Provider Tiers
	Create GitHub repository through terraform
	Terraform Destroy
	Terraform State files
	TF Provider Versioning
	TF Refresh
	OCI Provider - Authentication
4	Read, Generate, Modify Configurations
	Deploy an OCI instance
	Deploy a compartment, VCN, Subnet
	Configure Route tables, Security Lists and NSGs
	Configure a Loadbalancer
	Basics of attributes
	Cross Resource Attribute
	Output Values
	Terraform Variables
	Variable Definition File
	Variable Definition Precedence
	Data types for variables
	Fetching data from maps and list in Variable
	Count and Count index
	Conditional expressions
	Local values
	Terraform functions
	Data sources
	Debugging in Terraform
	Terraform Format
	Validating Terraform Config files
	Load order and semantics

	Dynamic blocks
	Tainting resources
	Splat xpressions
	Terraform Graph
	Saving TF plan to a file
	TF Output
	TF Settings
	Zipmap function
	Comments in TF
	Resource behaviour and meta arguments
	Meta arguments life cycle
	Data type - SET
	for_each in Terraform
5	Terraform Provisioners
	Types of provisioners
	Implementing Remote-exec provisioners
	Implementing local-exec provisioners
	Creation-Time & Destroy-Time Provisioners
	Failure Behavior for Provisioners
6	Terraform modules and Workspaces
	Understanding DRY principle
	Variables and Terraform Modules
	Using Locals with Modules
	Referencing Module Outputs
	Terraform Registry
	Requirement for Publishing Modules in Terraform Registry
	Terraform Workspace
	Implementing Terraform Workspace
7	Remote State Management
	Integrating with GIT for team management
	Module Sources in Terraform
	Terraform and .gitignore
	Terraform Backends
	Terraform State Management
	Cross- Project Collaboration using Remote State
	Implementing Remote States Connections
8	Terraform Cloud and Enterprise capabilities
	Overview of Terraform Cloud
	Creating Terraform Cloud Account
	Creating Infrastructure with Terraform Cloud
	Overview of Sentinel
	Overview of Remote Backends
	Implementing Remote Backend Operations
	Air Gapped Environments