

TERRAFORM INFRASTRUCTURE CODE FLOW

Complete Dependencies & Resource Creation Order

1. CONFIGURATION LAYER

terraform.tfvars - Environment Values
variables.tf - Type Definitions
provider.tf - Authentication

2. ORCHESTRATION

Module Dependencies & Variable Distribution

NETWORK

VPC Network
Subnets
Cloud Router
Cloud NAT

NETWORK RES

google_compute_network
google_compute_subnetwork

SECURITY

Firewall Rules
SSH Access
HTTP/HTTPS
Internal Traffic

SECURITY RES

google_compute_firewall
SSH/HTTP Rules

IAM

Service Accounts
IAM Bindings
Workload Identity
GitHub Provider

IAM RES

google_service_account
workload_identity_pool

COMPUTE

VM Instances
Boot Disks
Network Interface
Shielded VM

COMPUTE RES

google_compute_instance
Boot Disk Config

5. OUTPUTS

Complete Infrastructure (VPC, Firewall, IAM, Compute)

EXECUTION ORDER

1. Provider → 2. Network → 3. Security
4. IAM → 5. Compute → 6. Outputs
Total Time: 3-5 minutes | Resources: 15+

KEY INFORMATION

Dependencies: Network → Security, IAM → Compute
Cost: ~\$18-24/month | Region: us-central1
Project: praxis-gear-483220-k4

Suraj Kumar
Terraform Specialist