

# Consul

## Course Outline

- Introduction
  - Introduction to Consul
  - Service Discovery Introduction
  - Network Mesh Introduction
- Installation
  - Local Development Environment
  - HA Production environment
    - On VMs
    - On Kubernetes
  - Multi Datacenter setup
- Operation
  - Backup & Restore
  - Monitoring of Consul
  - Consul management using Terraform
- Usage
  - Service Discovery
    - Service Registration
    - Service Discovery
    - Service Health Checks
    - Consul as Prometheus Service Discovery
    - Consul DNS
  - Key / Value Store
    - Consul as distributed KV store
    - Service configuration using KV
    - Feature flags
  - Network Mesh
    - Mesh Routing
    - Envoy Proxy
    - ACLs & Traffic control
    - Blue Green deployments
  - Securing Consul
    - TLS
    - ACLs
    - Consul + Vault
- Consul & Kubernetes
  - Installation
  - Kubernetes Integration
  - Service mesh in Kubernetes