

# SERVICE MESH WITH ISTIO

Level - Essential

## **COTOCUS**

MARCH 29, 2023 COTOCUS LTD. Bangalore, India

TRAINING DATES	TBD
TIME	TBD
TRAINER NAME	RAJESH KUMAR

#### TRAINING AGENDA

#### 1.1 DAY 1:

### 1.1.1 Morning Session:

- Introduction to Service Mesh and Istio
  - What is Service Mesh?
  - Why Istio?
  - Basic architecture of Istio
  - Features of Istio
- Installing Istio
  - Prerequisites
  - Installation options
  - Deploying Istio with Kubernetes

#### 1.1.2 Afternoon Session:

- Configuring Istio
  - Istio control plane
  - Istio data plane
  - Service discovery with Istio
  - Traffic management with Istio
  - Request routing with Istio
  - Traffic shifting with Istio
  - Fault injection with Istio

#### 1.2 DAY 2:

## 1.2.1 Morning Session:

- Security with Istio
  - Authentication with Istio
  - Authorization with Istio
  - Mutual TLS with Istio
  - Istio RBAC
  - Istio mTLS
- Observability with Istio
  - Istio metrics
  - Distributed tracing with Istio
  - Logging with Istio
  - Istio Grafana dashboard

## 1.2.2 Afternoon Session:

- Best practices with Istio

  - Istio deployment strategies Istio configuration management
  - Istio service mesh policies
  - Istio upgrade strategies
- **HANDS-ON EXERCISES AND LABS**