

# Istio Core Functionality

- Load balancing for HTTP, gRPC, WebSocket, and TCP traffic.
- Granular traffic controls with rich routing rules, retries, failovers, and fault injection.
- Policy layer supporting access controls, rate limits and quotas.
- Automatic metrics, logs, and traces for all traffic within a cluster, including cluster ingress and egress.
- Secure service-to-service communication in a cluster with strong identity-based authentication and authorization.

# Istio Core Components

- Envoy
- Mixer
- Pilot
- Citadel
- Galley