Advanced Application Management Using Red Hat OpenShift Service Mesh

Mixer - 3scale Mixer Adapter

Module Topics

- Mixer

- 3scale Mixer Adapter

What happened with Mixer?

- Mixer: Istio component for policy checks and telemetry reporting

- Deprecated in Istio 1.5, removed in Istio 1.8

- Replaced with:

  - Telemetry v2

  - Envoy filters and WebAssemby Module extensions

  - Most built in Mixer adapters have not been ported to EnvoyOpenShift

- Service Mesh 2.0:

  - Mixer still present, not enabled by default

  - Required for 3scale Istio integration

3scale Mixer Adapter

- External gRPC adapter
- Enabled and configured in *ServiceMeshControlPlane* CR
- Enforces policies defined in 3scale by Red Hat for traffic flowing through proxied services
- Supports multiple authentication methods:
  - Standard API keys
  - Application identifier and key pairs
  - OpenID: clientId parsed from JWT token
- Configurable caching of Red Hat 3scale API Management API responses
- Exposes Prometheus metrics scraped by OpenShift Service Mesh Prometheus instance

3scale Mixer Adapter

- Requires Mixer policy checks and telemetry reporting

- Mixer enabled in *ServiceMeshControlPlane* CR

```
apiVersion: maistra.io/v2
kind: ServiceMeshControlPlane
metadata:
  name: full-install
[...]
spec:
  [...]
  policy:
    mixer:
      enableChecks: true
    type: Mixer
  telemetry:
    type: Mixer
[...]
```

- 3scale Envoy WASM module scheduled for Service Mesh 2.1

Module Summary

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