++ Istio on EKS ++

» curl -L https://istio.io/downloadIstio | sh -

» export PATH="$PATH:/Users/ajay/istio-1.9.2/bin"
» istioctl x precheck
» istioctl version

» eksctl create cluster --name tp-cluster-1 --node 2 --node-type ms.large
--managed --region us-east-1
» kubectl get nodes | » kubectl get pods --all-namespaces

NS	NAME
istio-system	istio-egressgateway
istio-system	istio-ingressgateway
istio-system	istiod-5

» cd istio-1.9.2
» export PATH=$PWD/bin:$PATH
» istioctl install --set profile=demo -y
» kubectl label namespace default istio-injection=enabled
label

» kubectl apply -f samples/bookinfo/platform/kube/bookinfo.yaml

↳ get the pods name using the metadata
↳ kubectl exec "$(kubectl get pod -l app=ratings -o jsonpath='{.items[0].metadata.name}')"
-c ratings -- curl -sS productpage:9080/productpage
| grep -o "<title>.*</title>"

in ratings container doing curl in productpage

→

> kubectl apply -f samples/bookinfo/networking/bookinfo-gateway.yaml

```
apiVersion: networking.istio.io/v1alpha3
kind: Gateway
metadata:
  name: bookinfo-gateway
spec:
  selector:
    istio: ingressgateway # use istio default controller
  servers:
  - port:
      number: 80
      name: http
      protocol: HTTP
    hosts:
    - "*"
---
apiVersion: networking.istio.io/v1alpha3
kind: VirtualService
metadata:
  name: bookinfo
spec:
  hosts:
  - "*"
  gateways:
  - bookinfo-gateway
  http:
  - match:
    - uri:
        exact: /productpage
    - uri:
        prefix: /static
    - uri:
        exact: /login
    - uri:
        exact: /logout
    - uri:
        prefix: /api/v1/products
    route:
    - destination:
        host: productpage  <- service name
        port:
          number: 9080  <- service pod number
```

» Kubectl get gateway
» Kubectl get vs ← virtual service

» istioctl analyze ← check if there is any issue in terms of accessing your applications
↳ No validation issues found when analyzing namespace: default

// Determining the ingress IP and ports
↳ kubectl get svc istio-ingressgateway -n istio-system

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	AGE	PORT(S)
istio-ingressgateway	LoadBalancer	—	---elb.amazonaws.com (elastic load balancer)	—	—

export GATEWAY_URL=$INGRESS_HOST:$INGRES_PORT

View the dashboard
istio integrates with several different telemetry applications. These can help you gain an understanding of the structure of your service mesh.

» Kubectl apply -f samples/addons
» Kubectl rollout status deployment/kiali -n istio-system
» istioctl dashboard kiali => will open kiali in browser
» istioctl dashboard jaeger