

## My ISTIO cheat sheet.

(Under Progress)

To determine ingress ip and ports <u>https://istio.io/latest/docs/tasks/traffic-management/ingress/ingress-control/#determining-the-ingress-ip-and-ports</u>

To configure envoy access logs. https://istio.io/latest/docs/tasks/observability/logs/access-log/

To install istio side car.

kubectl label namespace default istio-injection=enabled kubectl get namespace -L istio-injection

To delete all ISTIO resources.

kubectl delete
virtualservice,deployment,service,destinationrule,gateway --all
kubectl delete peerauthentication,authorizationpolicy -n istiosystem --all
kubectl delete
authorizationpolicy,peerauthentication,requestauthentication --all

To access istio ingress gateway using host name in the header.

```
curl http://<ingress-ip>/ -H "Host: simple-web.istioinaction.io"
```

openssl command to checkout the contents of the X.509 certificate of specific workload

```
kubectl -n istioinaction exec deploy/webapp -c istio-proxy \
-- openssl s_client -showcerts \
-connect catalog.istio.svc.cluster.local:80 \
-CAfile /var/run/secrets/istio/root-cert.pem | \
openssl x509 -in /dev/stdin -text -noout
```

To verify the certificate of a specific workload

```
kubectl -n istioinaction exec -it deploy/webapp -c istio-proxy --
/bin/bash

openssl verify -CAfile /var/run/secrets/istio/root-cert.pem
<(openssl s_client -connect catalog.istio.svc.cluster.local:80 -
showcerts 2>/dev/null)
```

Use Fortio application for load testing

```
kubectl apply -f
https://raw.githubusercontent.com/istio/istio/release-
1.11/samples/httpbin/sample-client/fortio-deploy.yaml
export FORTIO_POD=$(kubectl get pods -l app=fortio -o 'jsonpath=
{.items[0].metadata.name}')

kubectl exec "$FORTIO_POD" -c fortio -- /usr/bin/fortio curl -H
"Host: simple-web" 20.43.153.70
kubectl exec "$FORTIO_POD" -c fortio -- /usr/bin/fortio load -H
"Host: simple-web" -quiet -jitter -t 30s -c 1 -qps 1 20.43.153.70
```

Resetting all the stats for the Istio proxy in a workload:

```
kubectl exec -it deploy/web -c istio-proxy -- curl -X POST
localhost:15000/reset_counters
```

To view envoy configuration

kubectl exec -ti deploy/web -c catalog -- curl -s
localhost:15000/config\_dump > /tmp/config\_dump

Open in app  $\nearrow$ 

Get unlimited access









kubectl get destinationrules.networking.istio.io --all-namespaces -o
yaml | grep "host:"

To check the log of the istio-ingressgateway controller for error messages.

```
kubectl logs -n istio-system "$(kubectl get pod -l
istio=ingressgateway \
-n istio-system -o jsonpath='{.items[0].metadata.name}')"
```

## **Basic Terminology**

queue depth
connection vs requests
PassthroughCluster
TLS origination

Istio Service Mesh

