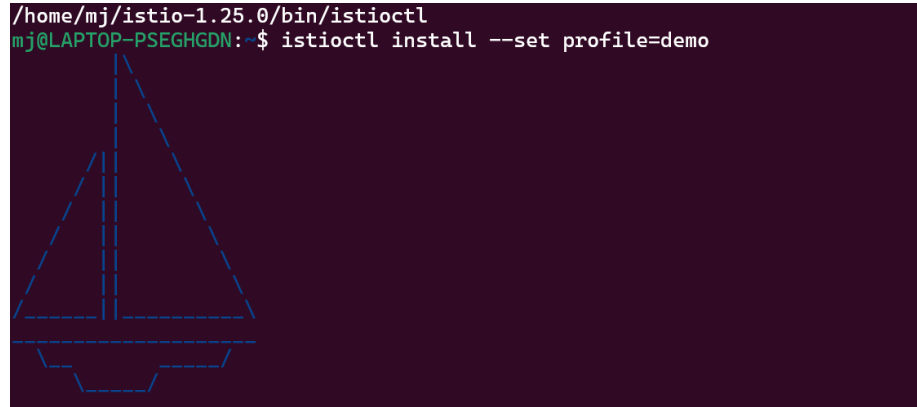# Cloud Lab 4

Michael Cullen

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1 Download and install Istio

```
/home/mj/istio-1.25.0/bin/istioctl
mj@LAPTOP-PSEGHGDN:~$ istioctl install --set profile=demo
```

2 Install the Kubernetes Gateway API CRDs

```
mj@LAPTOP-PSEGHGDN:~/istio-1.25.0$ kubectl get crd gateways.gateway.networking.k8s.io &> /dev/null || { kubectl
kustomize "github.com/kubernetes-sigs/gateway-api/config/crd?ref=v1.2.1" | kubectl apply -f -; }
customresourcedefinition.apiextensions.k8s.io/gatewayclasses.gateway.networking.k8s.io created
customresourcedefinition.apiextensions.k8s.io/gateways.gateway.networking.k8s.io created
customresourcedefinition.apiextensions.k8s.io/grpcroutes.gateway.networking.k8s.io created
customresourcedefinition.apiextensions.k8s.io/httproutes.gateway.networking.k8s.io created
customresourcedefinition.apiextensions.k8s.io/referencegrants.gateway.networking.k8s.io created
```

3 Deploy the sample application

```
mj@LAPTOP-PSEGHGDN:~/istio-1.25.0$ kubectl apply -f samples/bookinfo/platform/kube/bookinfo.yaml
service/details unchanged
serviceaccount/bookinfo-details unchanged
deployment.apps/details-v1 unchanged
service/ratings unchanged
serviceaccount/bookinfo-ratings unchanged
deployment.apps/ratings-v1 unchanged
service/reviews unchanged
serviceaccount/bookinfo-reviews unchanged
deployment.apps/reviews-v1 unchanged
deployment.apps/reviews-v2 unchanged
deployment.apps/reviews-v3 unchanged
service/productpage unchanged
serviceaccount/bookinfo-productpage unchanged
deployment.apps/productpage-v1 unchanged
mj@LAPTOP-PSEGHGDN:~/istio-1.25.0$ kubectl exec "$(kubectl get pod -l app=ratings -o jsonpath='{.items[0].metada
ta.name}')" -c ratings -- curl -sS productpage:9080/productpage | grep -o "<title>.*</title>"
<title>Simple Bookstore App</title>
```

4 Open the application to outside traffic

```
mj@LAPTOP-PSEGHGDN:~/istio-1.25.0$ kubectl apply -f samples/bookinfo/gateway-api/bookinfo-gateway.yaml
gateway.gateway.networking.k8s.io/bookinfo-gateway created
httproute.gateway.networking.k8s.io/bookinfo created
mj@LAPTOP-PSEGHGDN:~/istio-1.25.0$ kubectl annotate gateway bookinfo-gateway networking.istio.io/service-type=Cl
usterIP --namespace=default
gateway.gateway.networking.k8s.io/bookinfo-gateway annotated
mj@LAPTOP-PSEGHGDN:~/istio-1.25.0$ kubectl get gateway
NAME               CLASS   ADDRESS   PROGRAMMED   AGE
bookinfo-gateway   istio             Unknown      17s
mj@LAPTOP-PSEGHGDN:~/istio-1.25.0$
```

5 View the dashboard