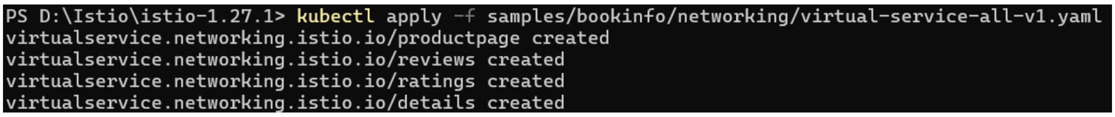
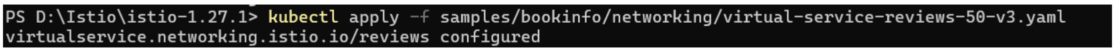
a. **Traffic Shifting**

1. start the bookInfo sample



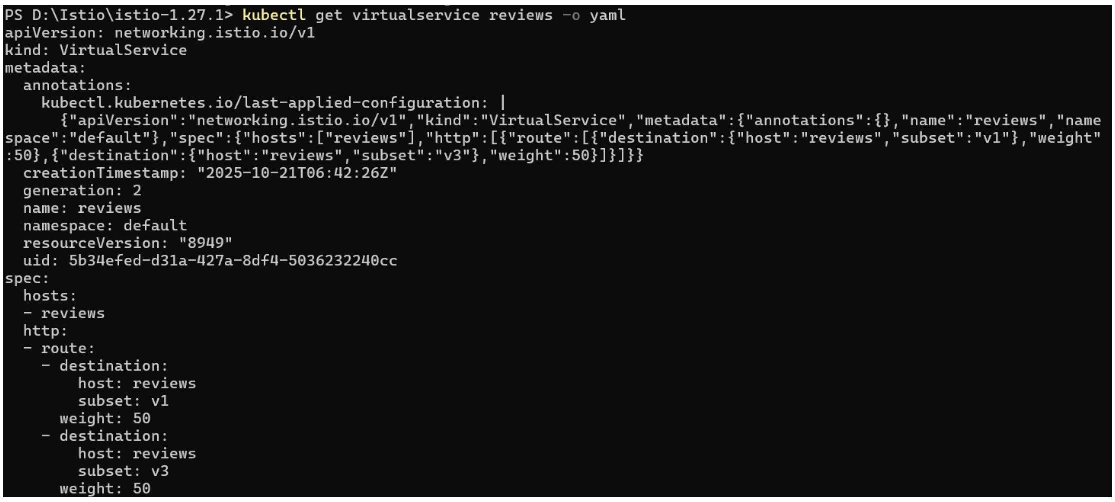
```
PS D:\Istio\istio-1.27.1> kubectl apply -f samples/bookinfo/networking/virtual-service-all-v1.yaml
virtualservice.networking.istio.io/productpage created
virtualservice.networking.istio.io/reviews created
virtualservice.networking.istio.io/ratings created
virtualservice.networking.istio.io/details created
```

2. Transfer 50% of the traffic from reviews:v1 to reviews:v3



```
PS D:\Istio\istio-1.27.1> kubectl apply -f samples/bookinfo/networking/virtual-service-reviews-50-v3.yaml
virtualservice.networking.istio.io/reviews configured
```

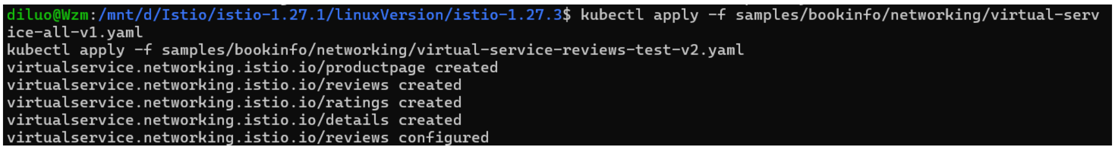
3. Wait a few seconds for the new rules to propagate and then confirm the rule was replaced



```
PS D:\Istio\istio-1.27.1> kubectl get virtualservice reviews -o yaml
apiVersion: networking.istio.io/v1
kind: VirtualService
metadata:
  annotations:
    kubectl.kubernetes.io/last-applied-configuration: |
      {"apiVersion":"networking.istio.io/v1","kind":"VirtualService","metadata":{"annotations":{},"name":"reviews","name
space":"default"},"spec":{"hosts":["reviews"],"http":[{"route":[{"destination":{"host":"reviews","subset":"v1"},"weight"
:50},{"destination":{"host":"reviews","subset":"v3"},"weight":50}]}]}}
  creationTimestamp: "2025-10-21T06:42:26Z"
  generation: 2
  name: reviews
  namespace: default
  resourceVersion: "8949"
  uid: 5b34efed-d31a-427a-8df4-5036232240cc
spec:
  hosts:
  - reviews
  http:
  - route:
    - destination:
        host: reviews
        subset: v1
      weight: 50
    - destination:
        host: reviews
        subset: v3
      weight: 50
```

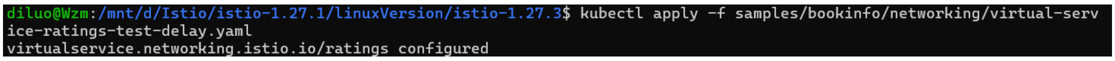
b. Fault Injection

1. initialize virtual services



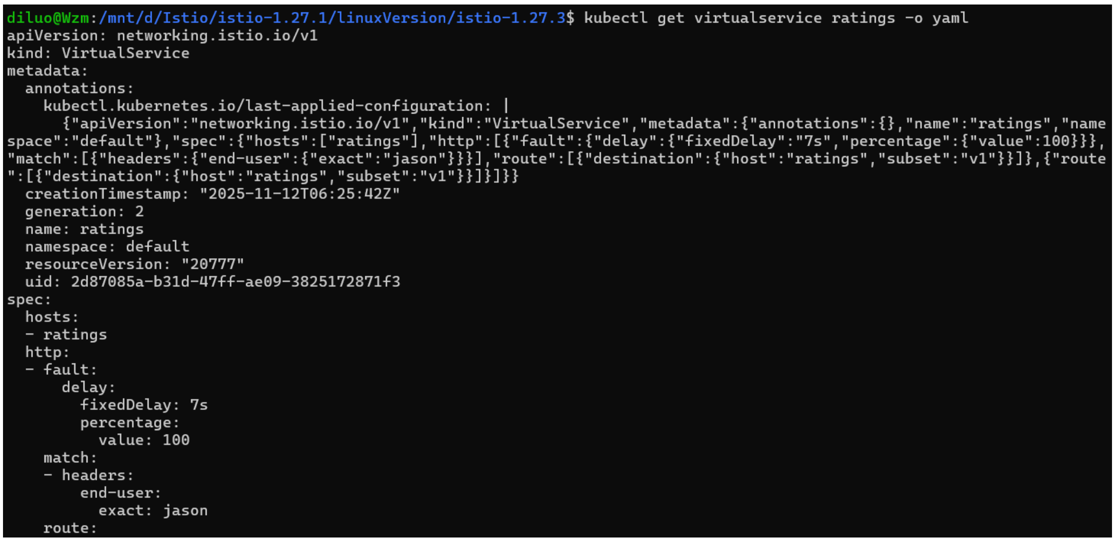
```
diluo@Wzm:/mnt/d/Istio/istio-1.27.1/linuxVersion/istio-1.27.3$ kubectl apply -f samples/bookinfo/networking/virtual-serv
ice-all-v1.yaml
kubectl apply -f samples/bookinfo/networking/virtual-service-reviews-test-v2.yaml
virtualservice.networking.istio.io/productpage created
virtualservice.networking.istio.io/reviews created
virtualservice.networking.istio.io/ratings created
virtualservice.networking.istio.io/details created
virtualservice.networking.istio.io/reviews configured
```

2. create fault injection rule



```
diluo@Wzm:/mnt/d/Istio/istio-1.27.1/linuxVersion/istio-1.27.3$ kubectl apply -f samples/bookinfo/networking/virtual-serv
ice-ratings-test-delay.yaml
virtualservice.networking.istio.io/ratings configured
```

3. confirm the rule



```
diluo@Wzm:/mnt/d/Istio/istio-1.27.1/linuxVersion/istio-1.27.3$ kubectl get virtualservice ratings -o yaml
apiVersion: networking.istio.io/v1
kind: VirtualService
metadata:
  annotations:
    kubectl.kubernetes.io/last-applied-configuration: |
      {"apiVersion":"networking.istio.io/v1","kind":"VirtualService","metadata":{"annotations":{},"name":"ratings","name
space":"default"},"spec":{"hosts":["ratings"],"http":[{"fault":{"delay":{"fixedDelay":"7s","percentage":{"value":100}}},
"match":[{"headers":{"end-user":{"exact":"jason"}}}],"route":[{"destination":{"host":"ratings","subset":"v1"}}]},{"route
":[{"destination":{"host":"ratings","subset":"v1"}}]}]}}
  creationTimestamp: "2025-11-12T06:25:42Z"
  generation: 2
  name: ratings
  namespace: default
  resourceVersion: "20777"
  uid: 2d87085a-b31d-47ff-ae09-3825172871f3
spec:
  hosts:
  - ratings
  http:
  - fault:
      delay:
        fixedDelay: 7s
        percentage:
          value: 100
    match:
    - headers:
        end-user:
          exact: jason
    route:
```