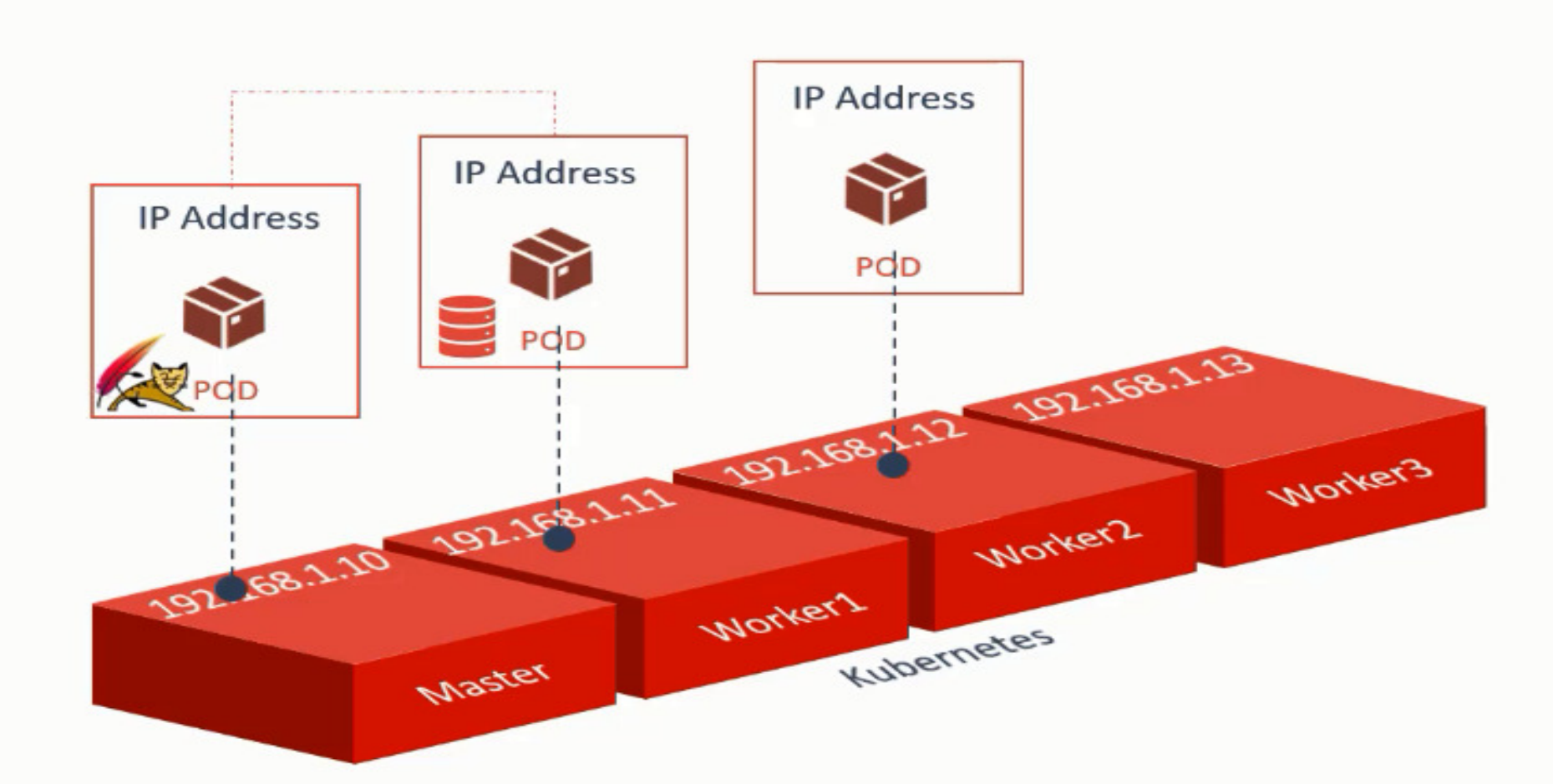
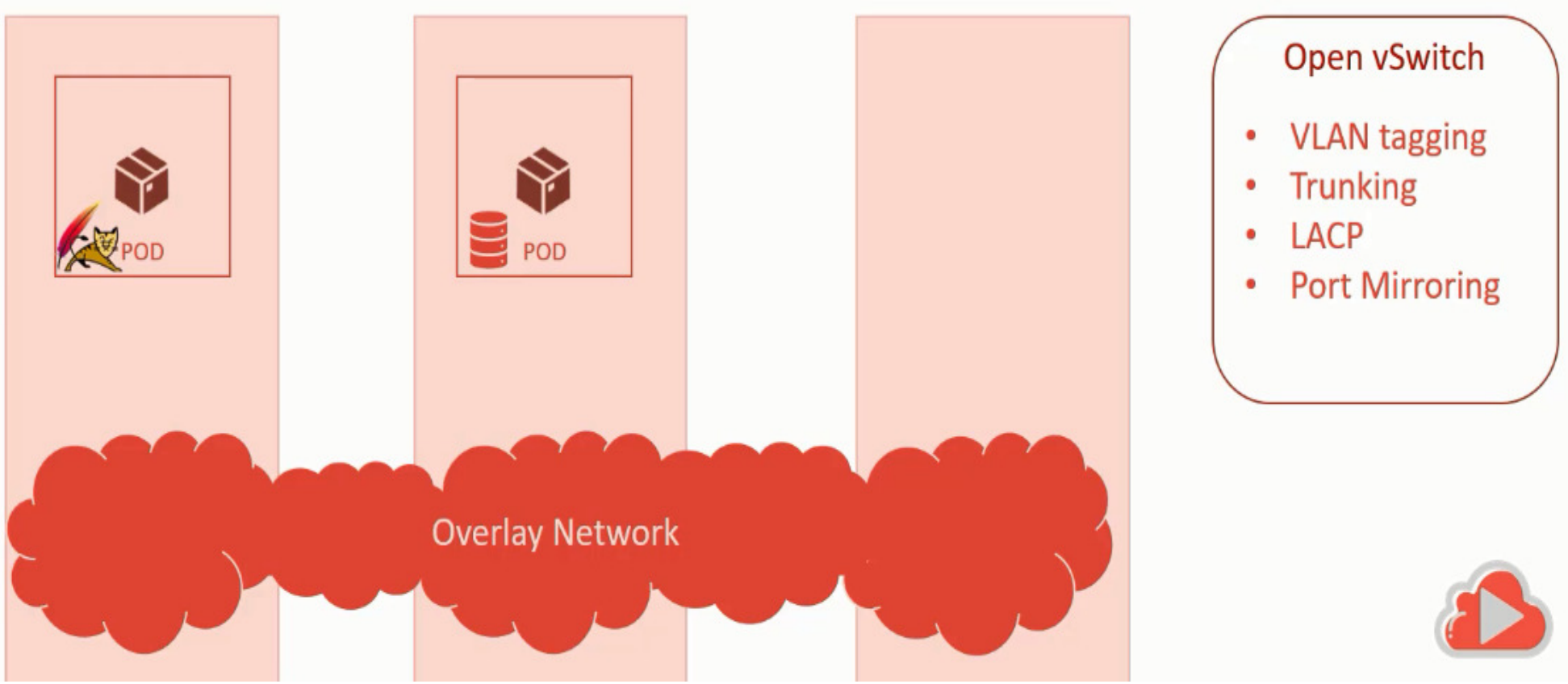
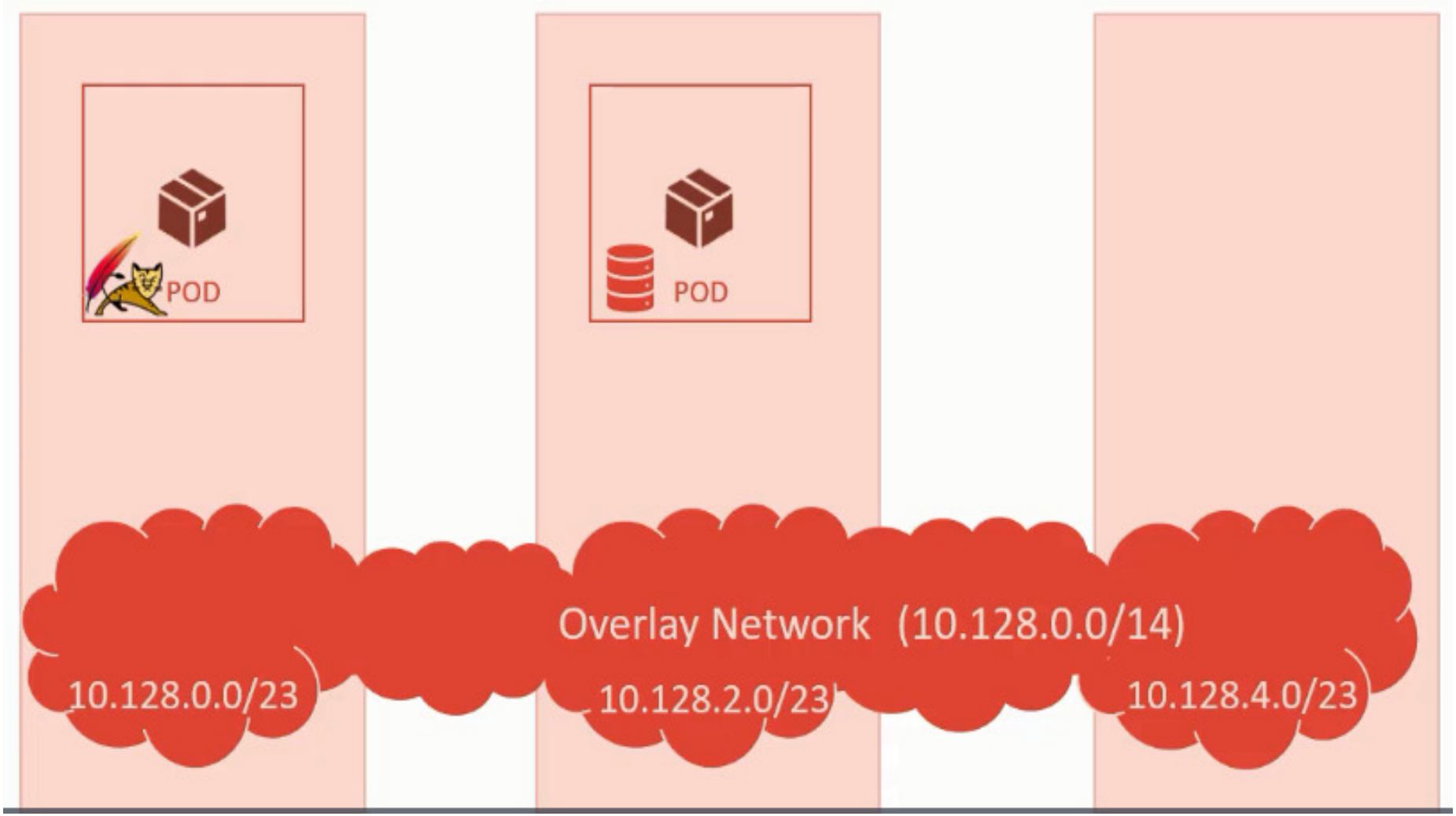
OpenShift Networking

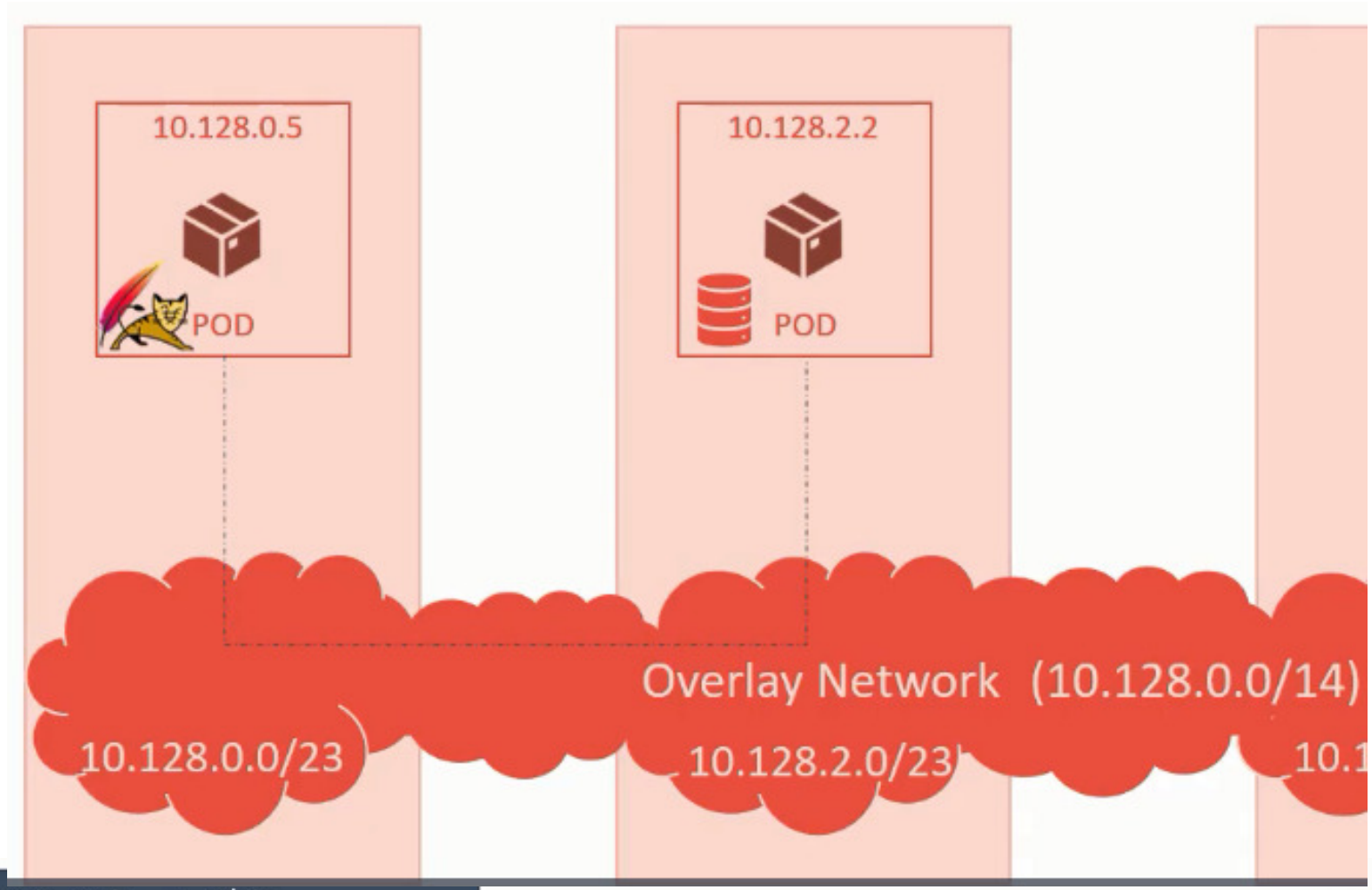
Physical Cluster Connectivity



Virtual Internal Connectivity

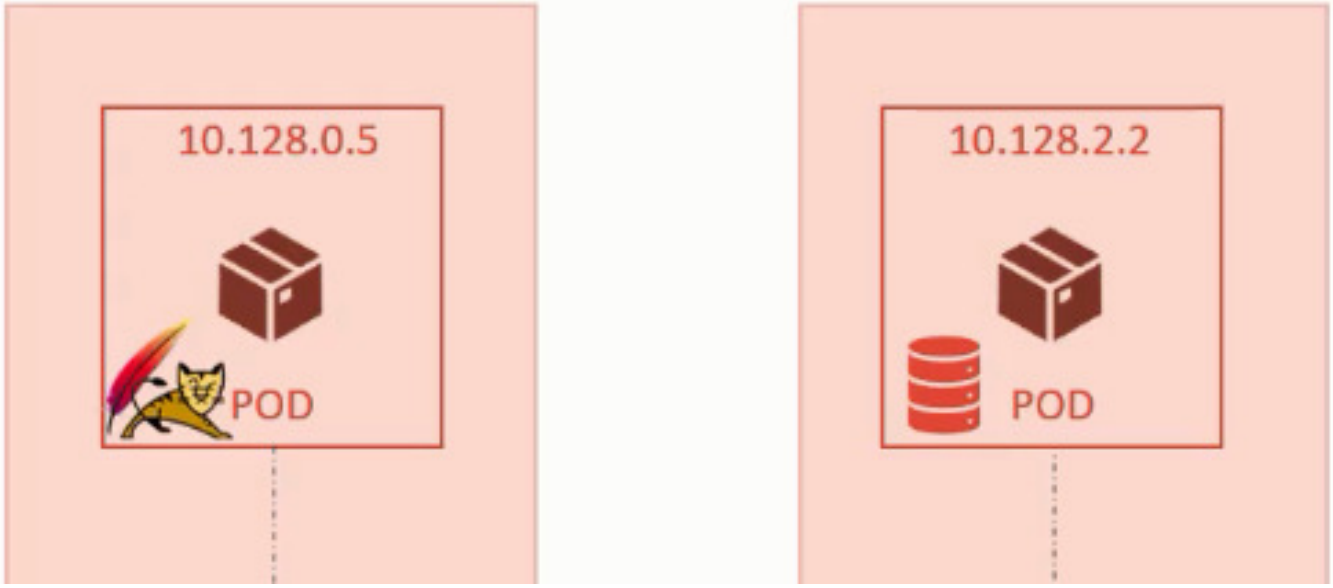


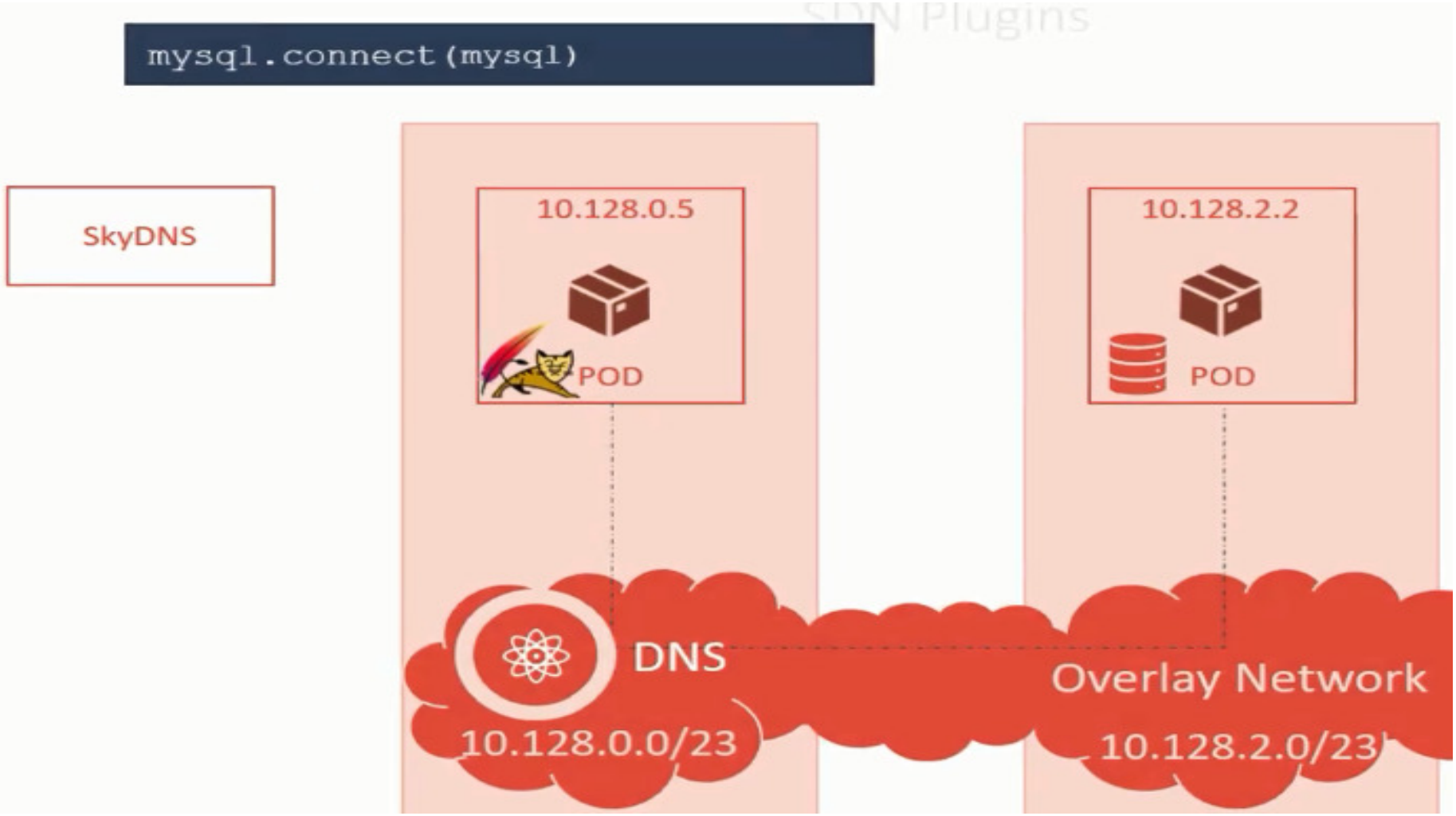

POD
POD
Overlay Network (10.128.0.0/14)
10.128.0.0/23
10.128.2.0/23
10.128.4.0/23



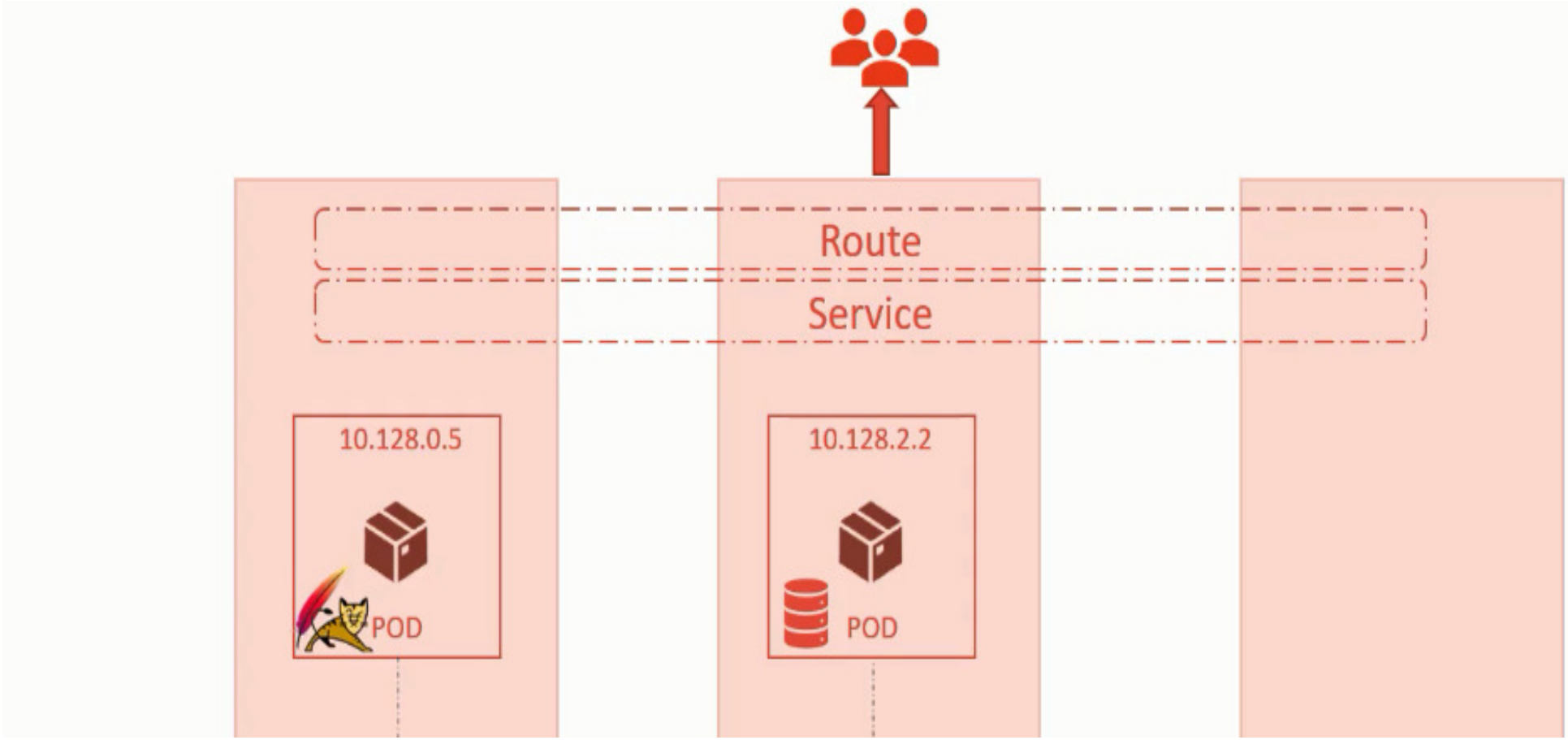

```
> oc get pods -o wide
my-web-app                    1/1       Running     0          2d        10.128.0.5   localhost
my-sql-db                     1/1       Running     0          1d        10.128.2.2   localhost
```

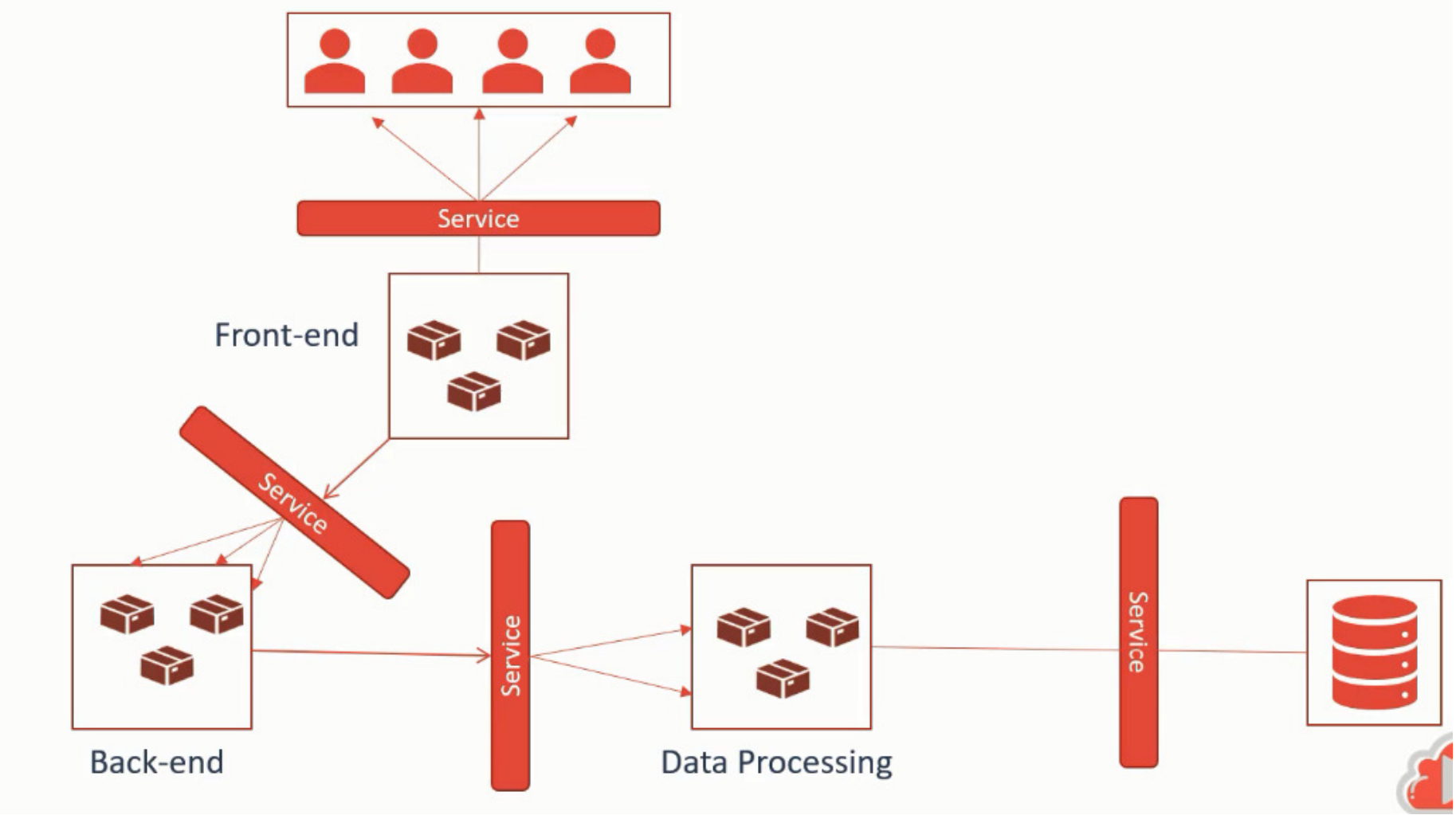
```
mysql.connect(    10.128.2.2    )
```




mysql.connect(mysql)
SkyDNS
10.128.0.5
POD
10.128.2.2
POD
DNS
10.128.0.0/23
Overlay Network
10.128.2.0/23

Virtual External Connectivity




Service
Front-end
Service
Service
Service
Back-end
Data Processing

Service

172.30.85.124

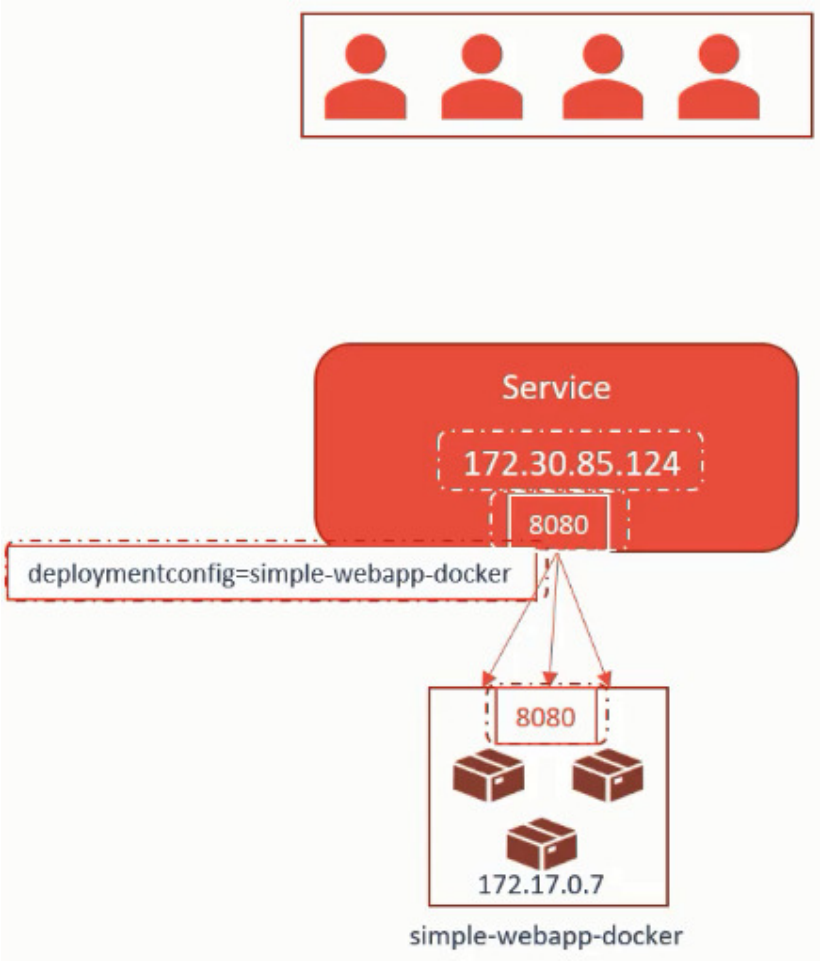
simple-webapp-docker

Services Learn More

Filter by label

Name	Cluster IP
simple-webapp-docker	172.30.85.124

Linking Service to Pod



simple-webapp-docker created 2 days ago

app simple-webapp-docker

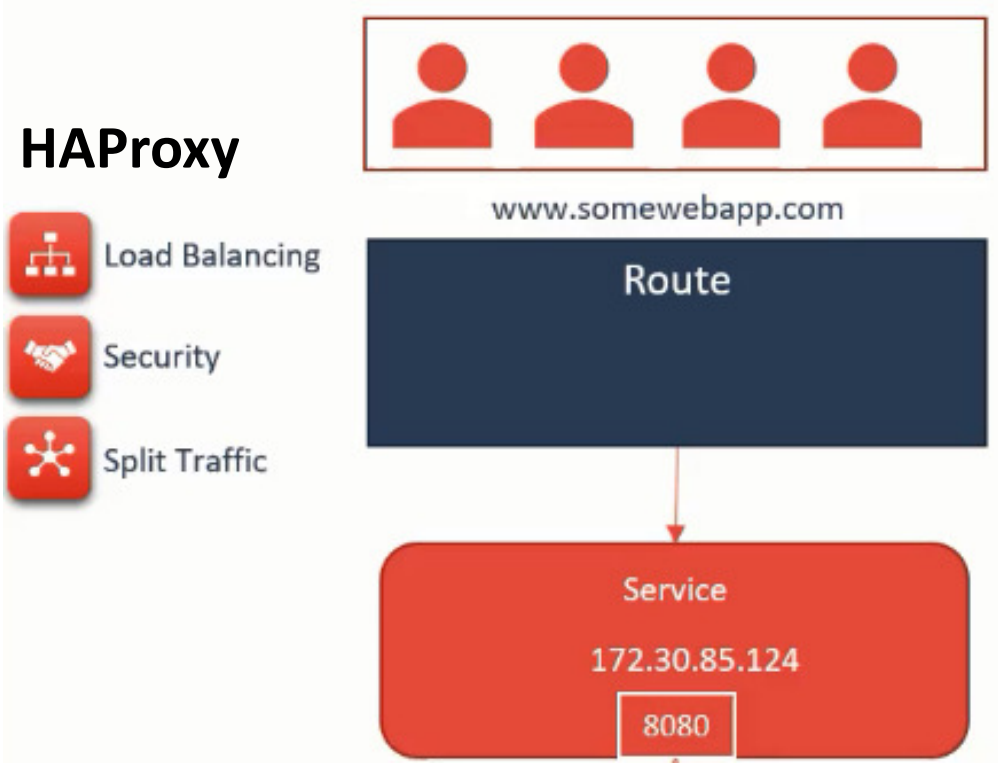
Details Events

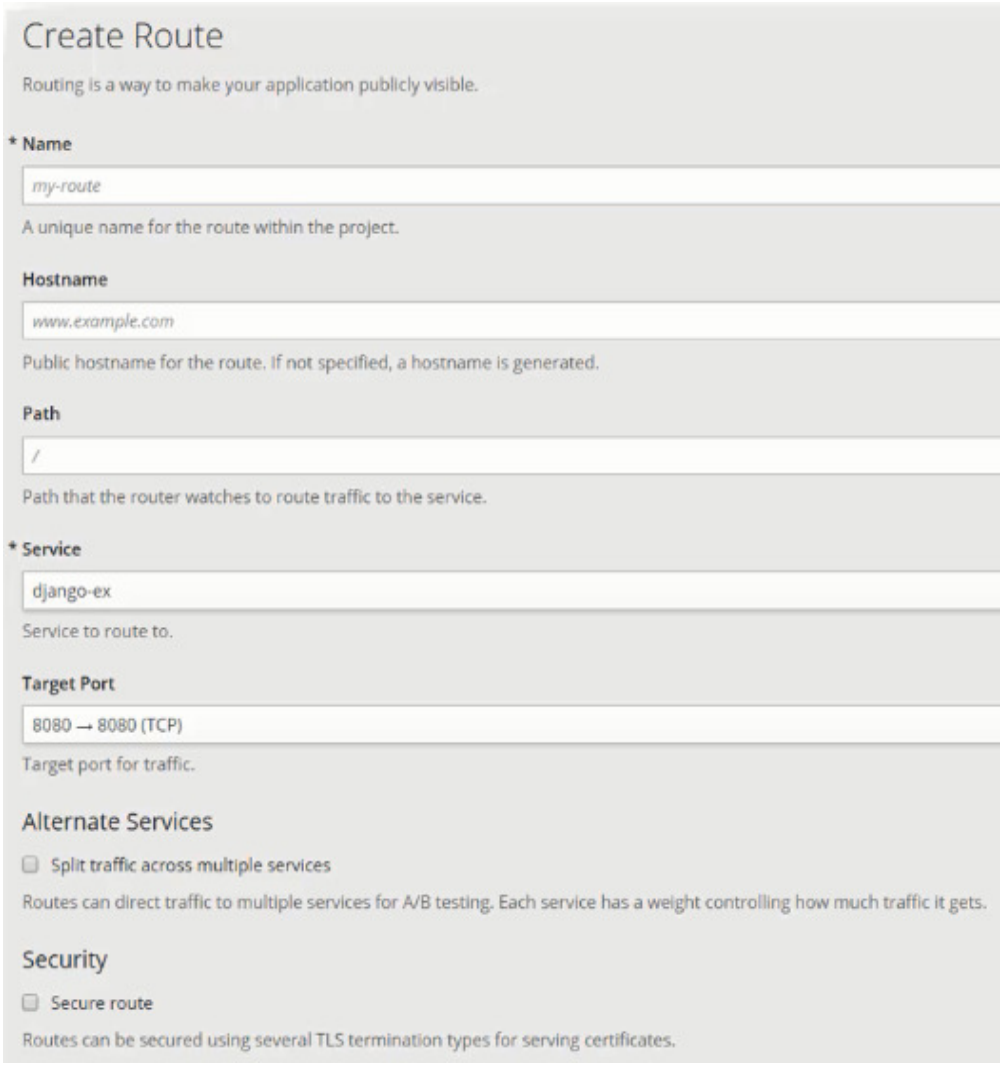
Selectors:	deployment=simple-webapp-docker
Type:	ClusterIP
IP:	172.30.85.124
Hostname:	simple-webapp-docker.test-project.svc
Session affinity:	None

Traffic

Route		Service Port		Target Port
simple-webapp-docker	→	8080/TCP (8080-tcp)	→	8080

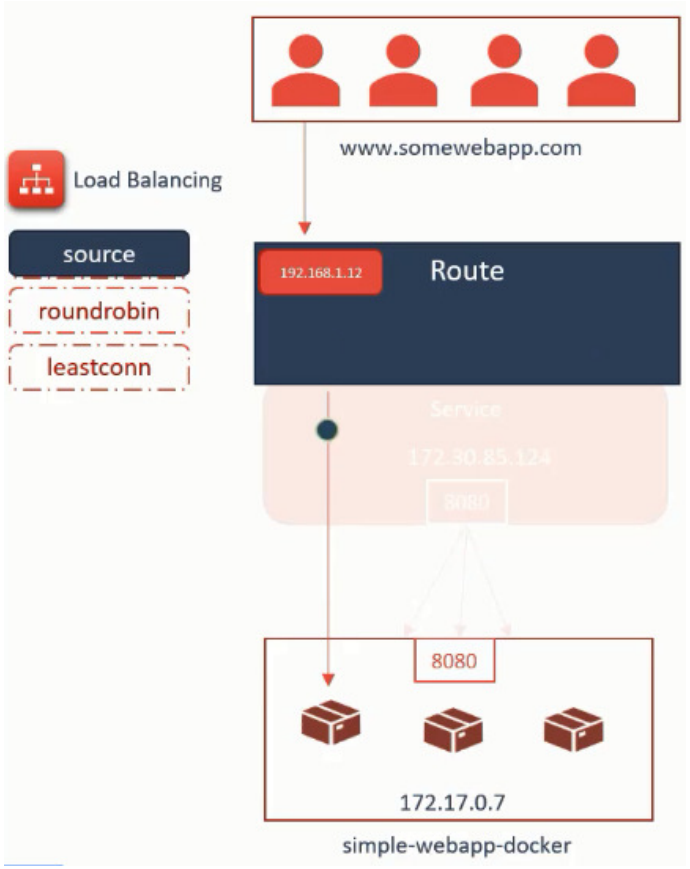
Route

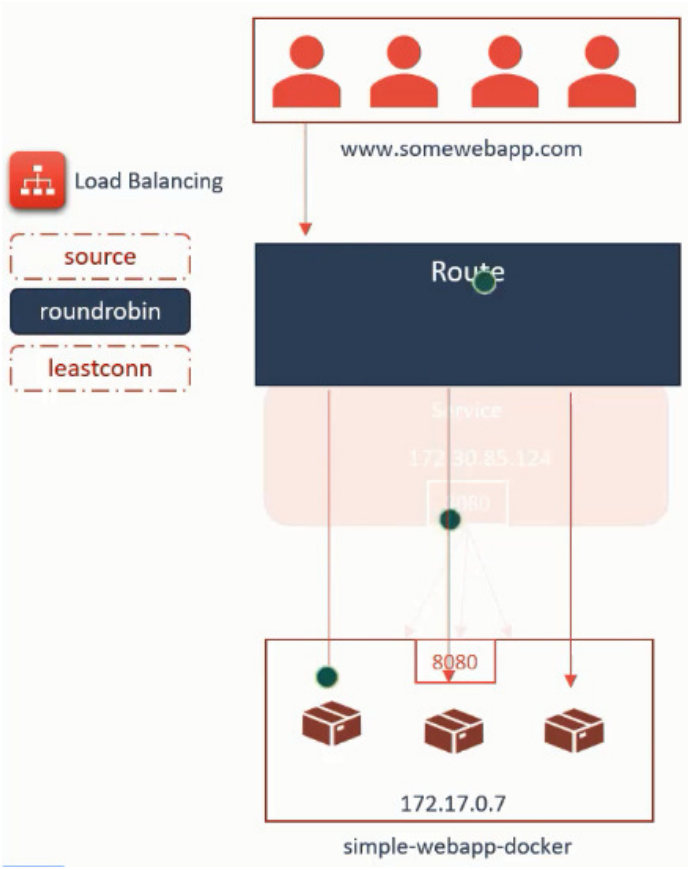

HAProxy
Load Balancing
Security
Split Traffic
www.somewebapp.com
Route
Service
172.30.85.124
8080

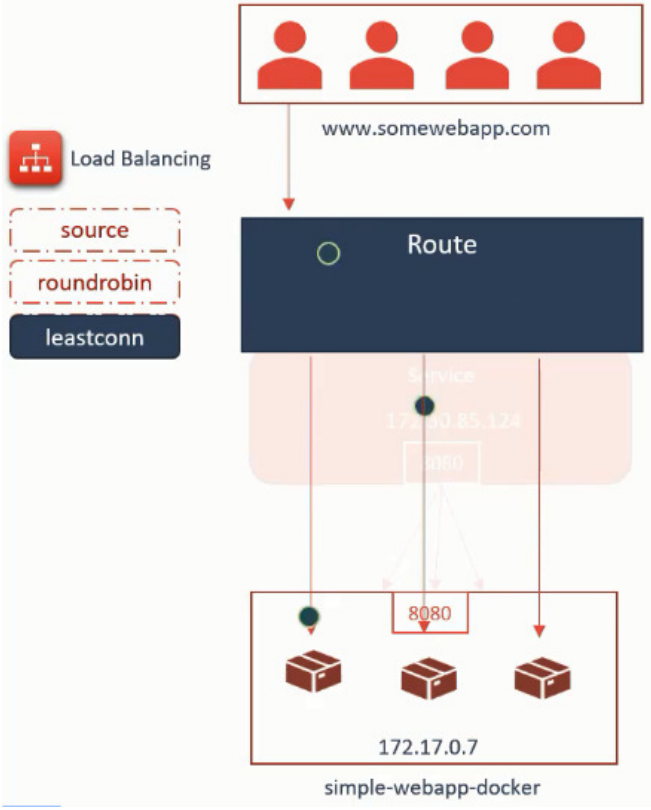

Create Route
Routing is a way to make your application publicly visible.
* Name
my-route
A unique name for the route within the project.
Hostname
www.example.com
Public hostname for the route. If not specified, a hostname is generated.
Path
/
Path that the router watches to route traffic to the service.
* Service
django-ex
Service to route to.
Target Port
8080 → 8080 (TCP)
Target port for traffic.
Alternate Services
Split traffic across multiple services
Routes can direct traffic to multiple services for A/B testing. Each service has a weight controlling how much traffic it gets.
Security
Secure route
Routes can be secured using several TLS termination types for serving certificates.

Route Load Balancing Strategy

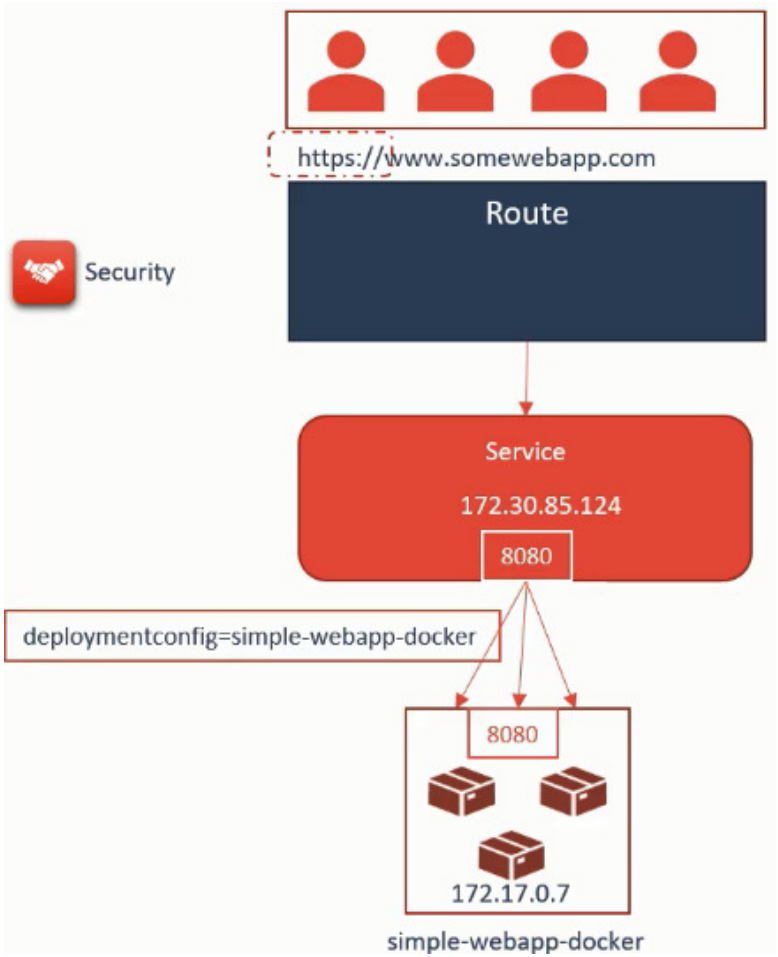
Route Load Balancing Strategy

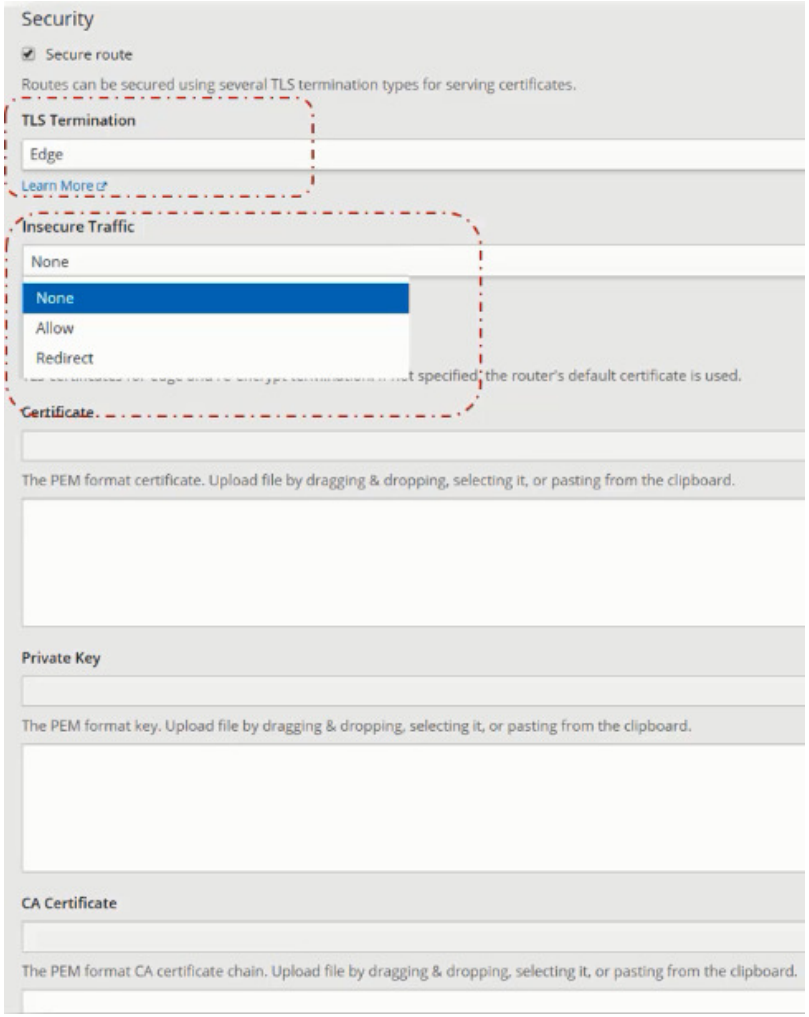






Secure Route





Split Traffic