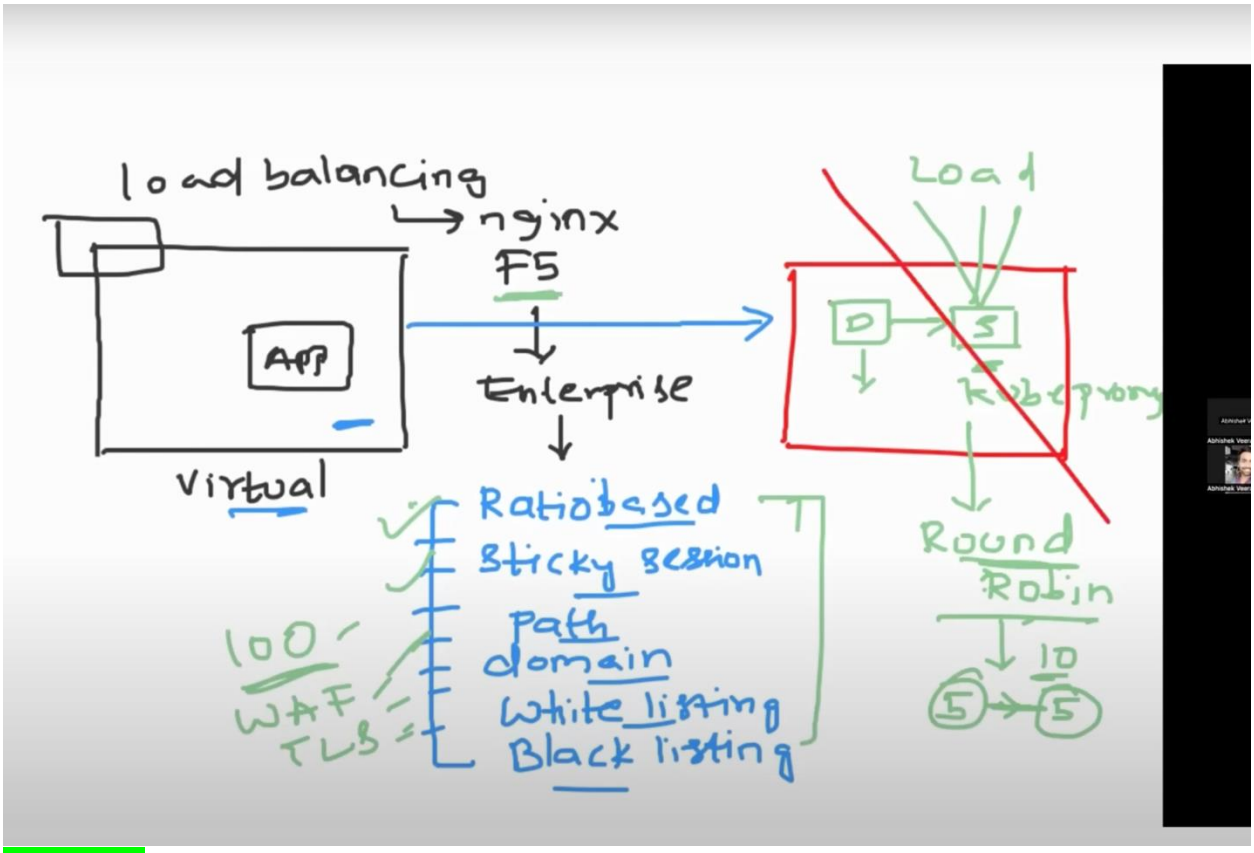
Ingress in Kubernetes.



Problem 1. ELA & TLS, STICK , PATH BASED.

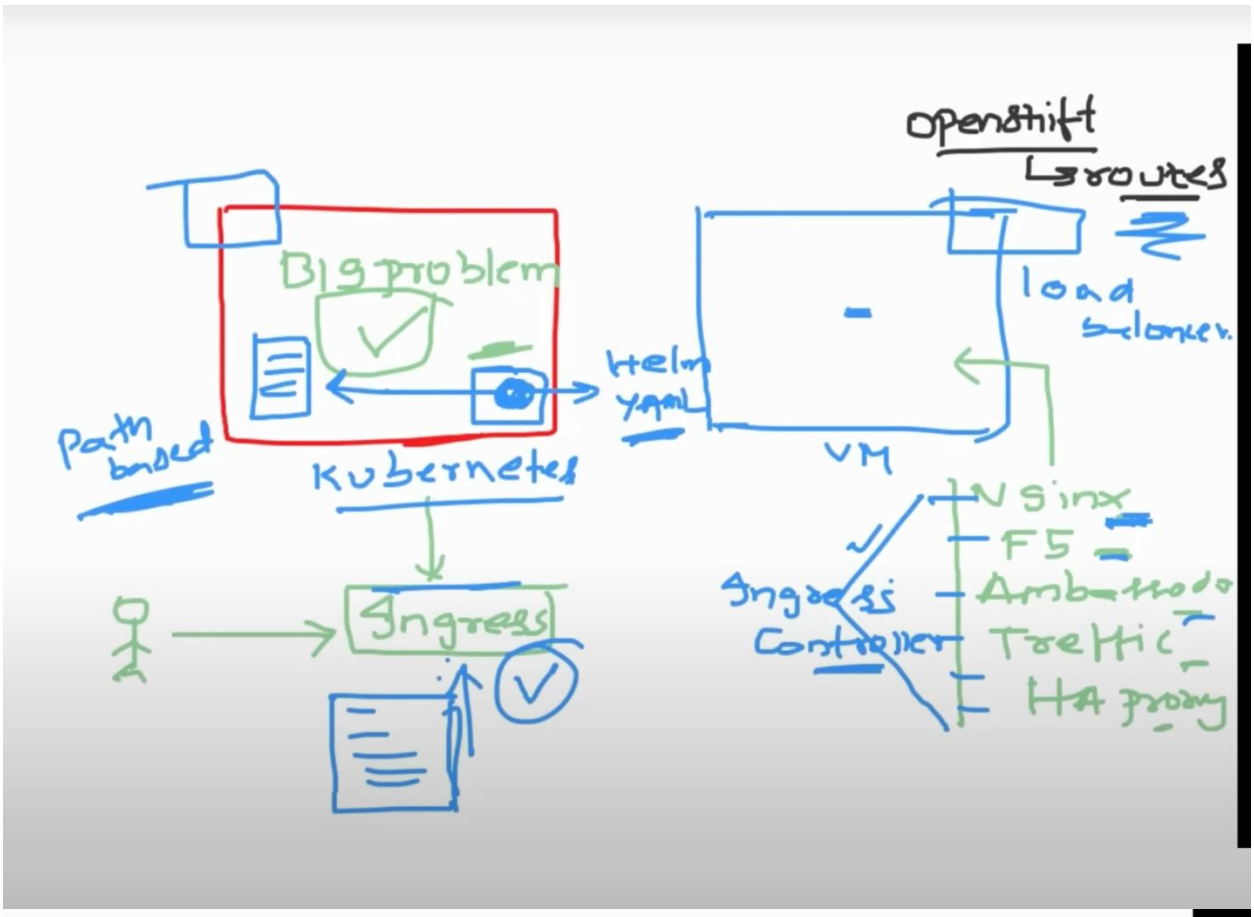
In old days people using the physical machines to deploy the VM. They write n number of rules in their load balancer.

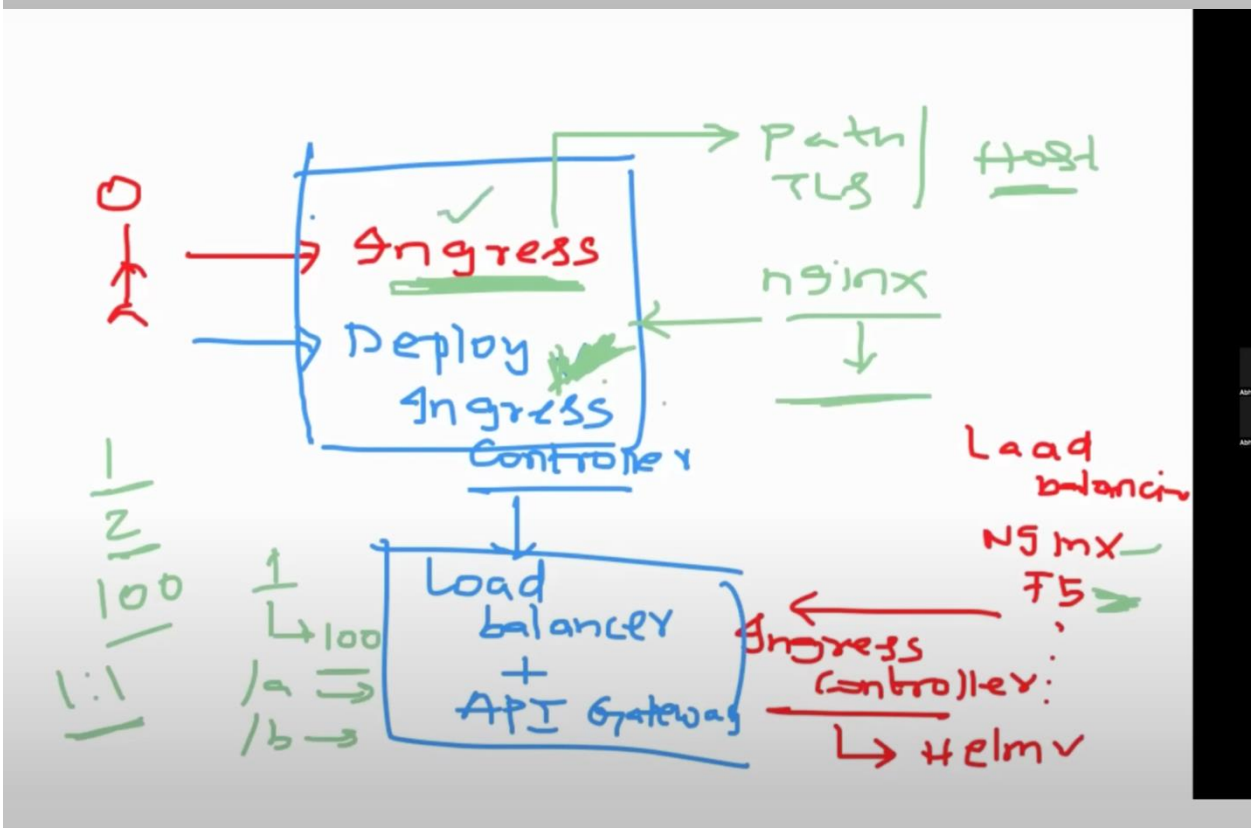
But out service in Kubernetes supports the round robin technique. People are disappointed.

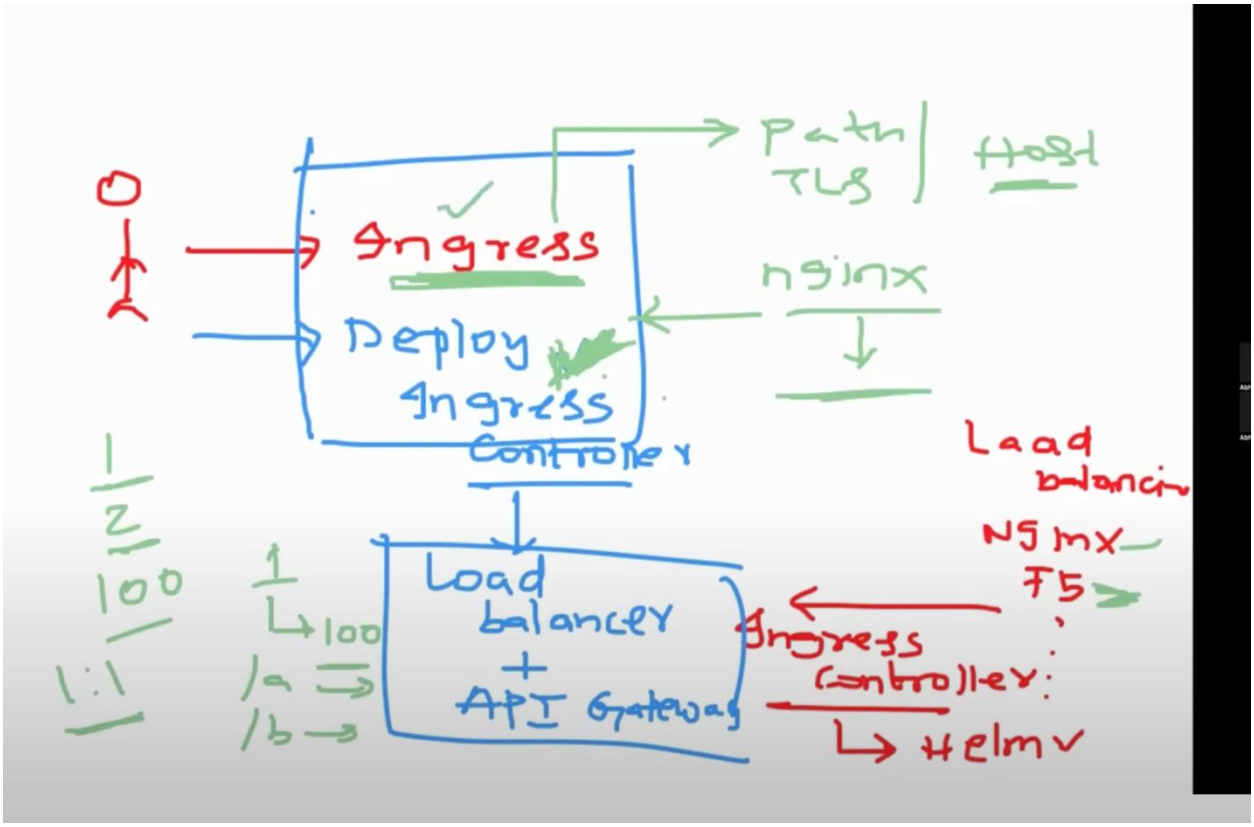
So, ingress comes into the picture.

Problem 2.
2 load balancer mode.

If we are huge company. We have 100 of micro service. The we need 100 static elastic ip address. Cloud provider is charging the huge amount is second issue with load balancer in service.


Openshift
routes
Big problem
load balancer
Helm yaml
Path based
Kubernetes
VM
Ingress
Nginx
F5
Ingress Controller
Traefic
HA proxy


Path
TLS
Host
Ingress
nginx
Deploy Ingress Controller
Load balancer
NGINX
F5
Ingress Controller:
helm
Load balancer
+
API Gateway
1
2
100
1:1
1
100
/a
/b



Ingress will solve the ELS and the STATIC IP problems.

Step 1:

Create the ingress.yml file.

```
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: tls-example-ingress
spec:
  tls:
  - hosts:
      - https-example.foo.com
    secretName: testsecret-tls
  rules:
  - host: https-example.foo.com
    http:
      paths:
      - path: /
        pathType: Prefix
```

```
    backend:
      service:
        name: service1(this must be the service name)
        port:
          number: 80
```

save it.

Then apply the below command.

Kubectl apply -f ingress.yml

Kubectl get ingress

Step 2:

Install the ingress controller in the minikube or respective cluster.

I am installing the nginx controller in minikube.

Using bleow commonds.

```
minikube addons enable ingress
```

but in production we use EKS or openshift.