23rd june

ELB(elastic load balancer)
Service in kubernetes
Threshold:{when cpu and ram reach to it's maximum level}

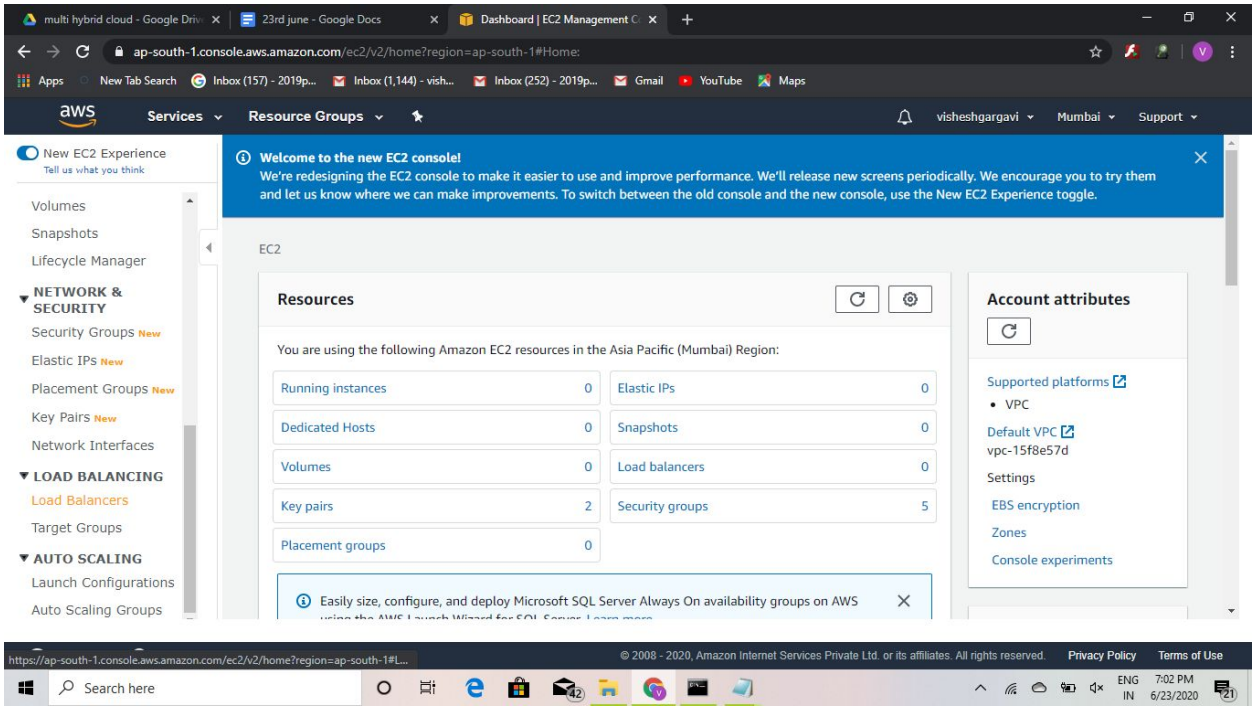
C:\Windows\system32>kubectl get service

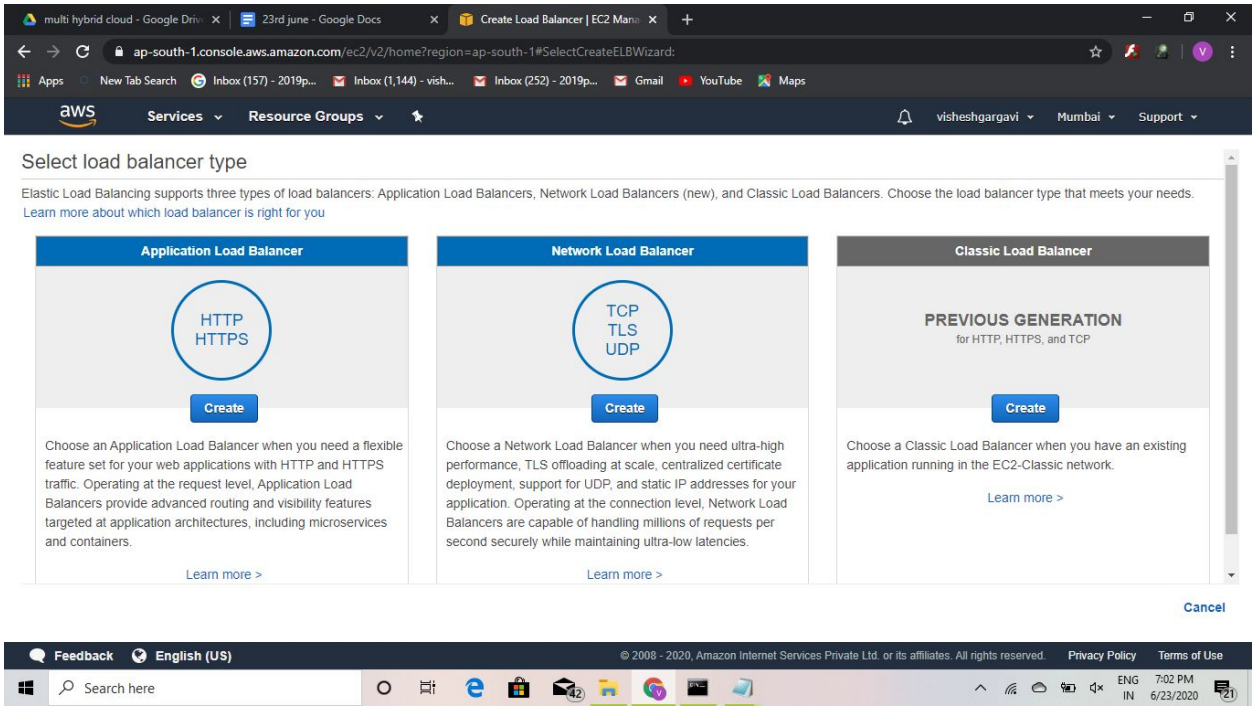
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 4h7m

C:\Windows\system32>kubectl get pods

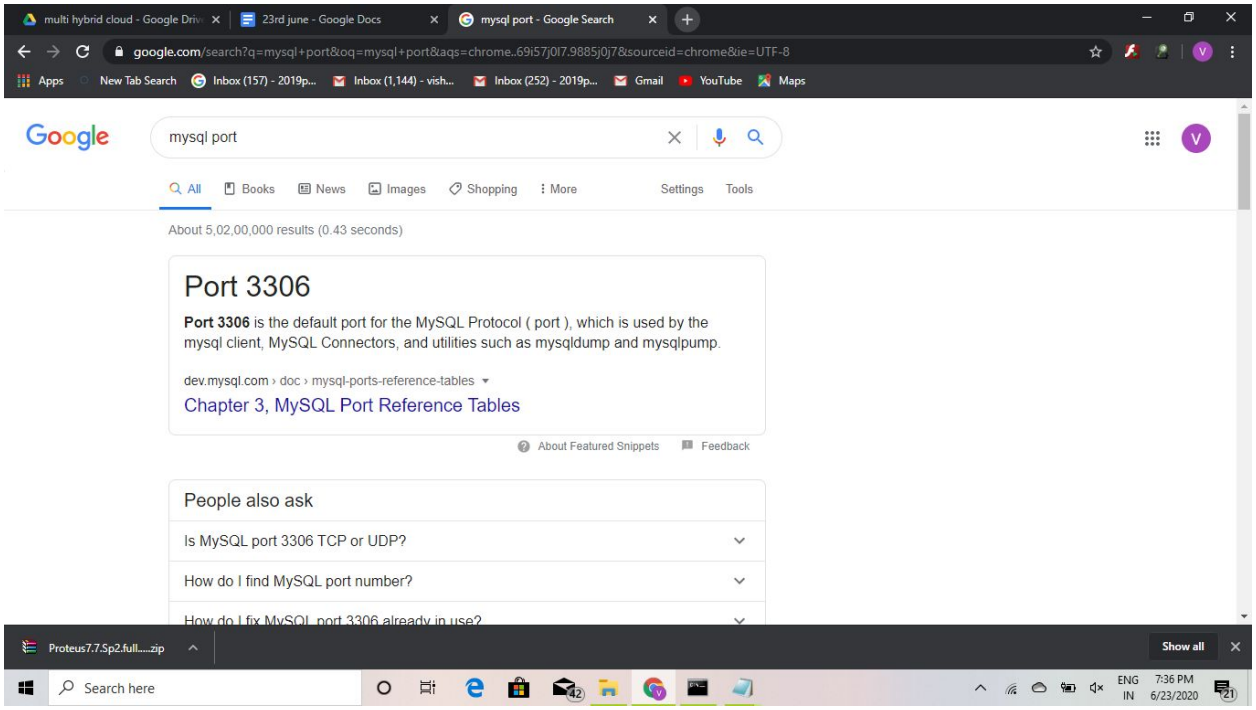
No resources found in default namespace.
> horizontal scaling
> proxy
> backend servers
> frontend servers
> end point(where client hit's ...it is an ip)
> elastic (u can increase or decrease on the basic of load balancing)

NATING(networking adding transformation)
PATing(post address transformation)

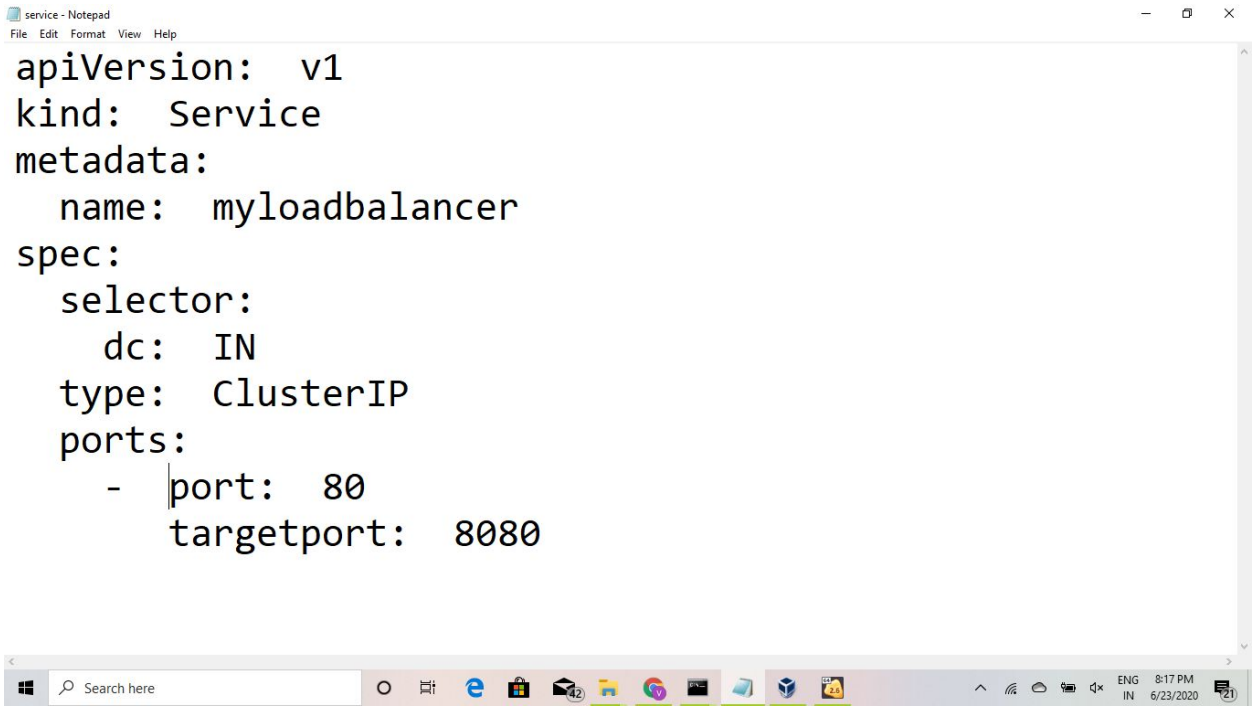




> nodeport
> clusterip
> loadbalancer
Service worked inside ur cluster
Expose
For outside connectivity we have to create nodeport



DMG: demilatrize zone

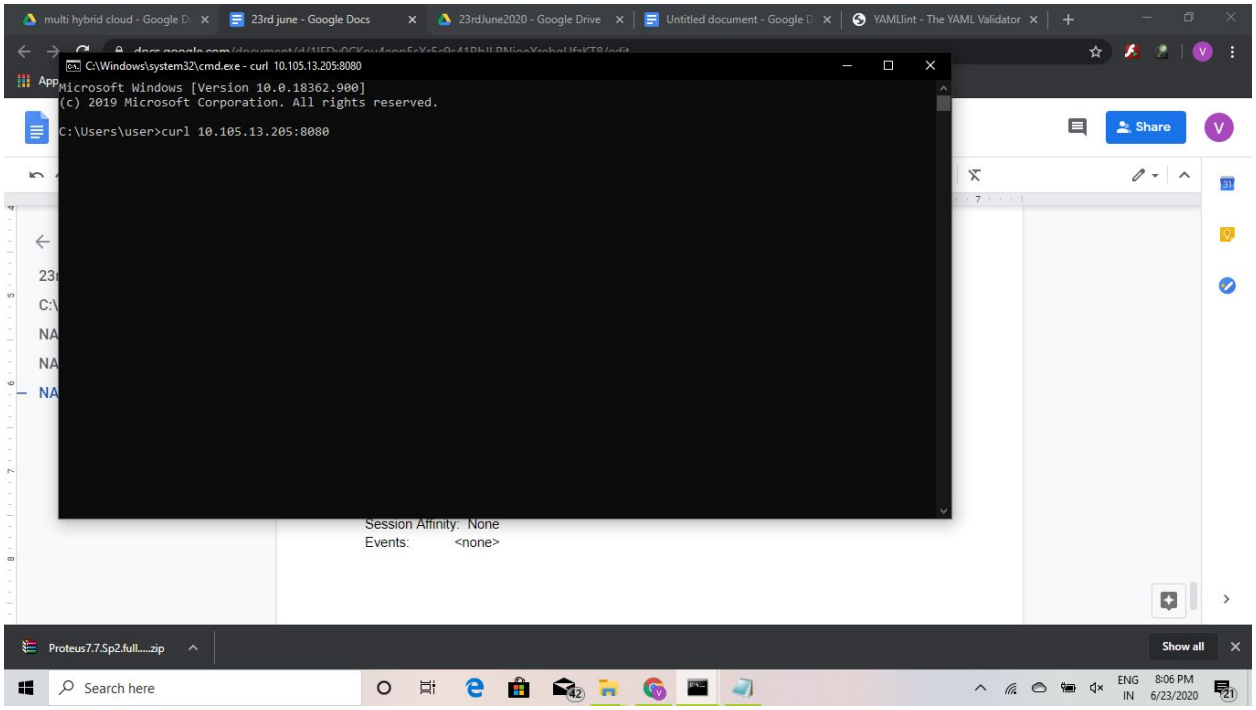


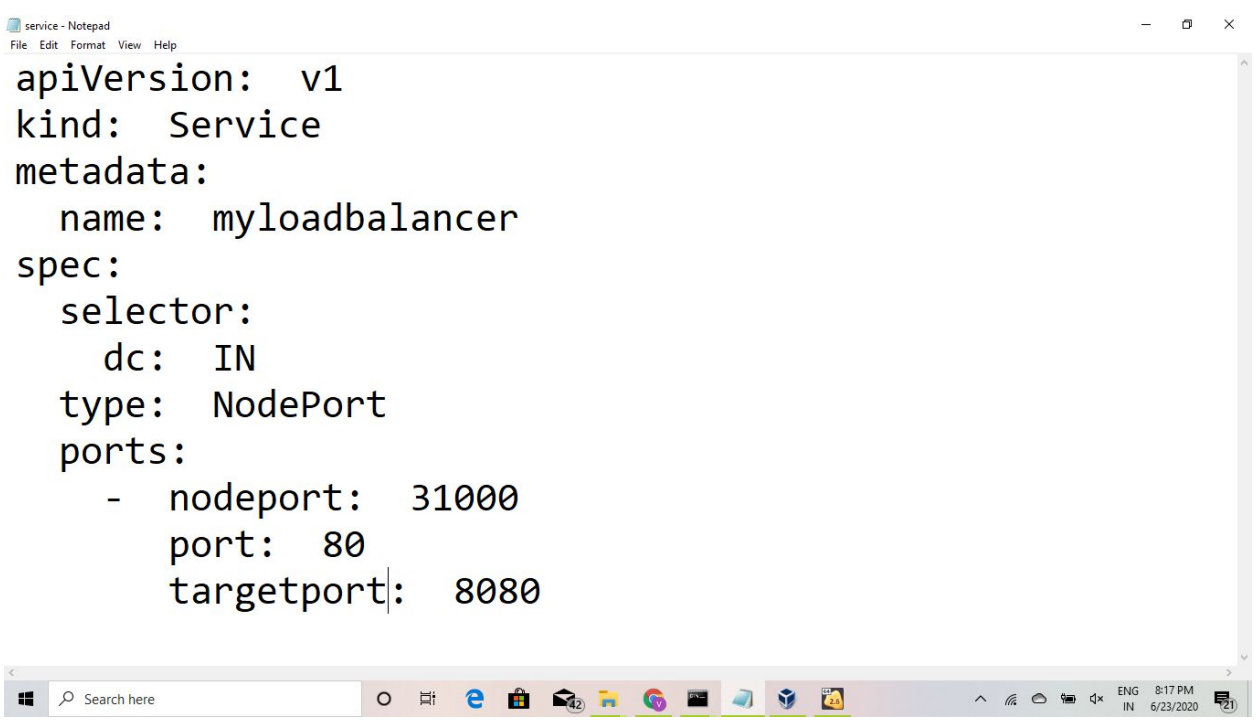
C:\Users\user\Desktop\kube_cloud>kubectl run webpod
--image=vimal13/apache-webserver-php
pod/webpod created

C:\Users\user\Desktop\kube_cloud>kubectl get all
NAME READY STATUS RESTARTS AGE

```
pod/webpod   1/1     Running   0          11s

NAME                 TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)   AGE
service/kubernetes   ClusterIP   10.96.0.1    <none>        443/TCP   5h14m
C:\Users\user\Desktop\kube_cloud>kubectl get pods --show-labels
NAME     READY   STATUS    RESTARTS   AGE     LABELS
webpod   1/1     Running   0          3m20s   run=webpod
C:\Users\user\Desktop\kube_cloud>kubectl label pods webpod dc=IN
pod/webpod labeled

C:\Users\user\Desktop\kube_cloud>kubectl get pods --show-labels
NAME     READY   STATUS    RESTARTS   AGE     LABELS
webpod   1/1     Running   0          6m6s    dc=IN,run=webpod
C:\Users\user\Desktop\kube_cloud>kubectl create --validate=false -f service.yml
service/myloadbalancer created

C:\Users\user\Desktop\kube_cloud>
C:\Users\user\Desktop\kube_cloud>kubectl get all
NAME         READY   STATUS    RESTARTS   AGE
pod/webpod   1/1     Running   0          8m51s

NAME                       TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)    AGE
service/kubernetes         ClusterIP   10.96.0.1       <none>        443/TCP    5h22m
service/myloadbalancer     ClusterIP   10.105.13.205   <none>        8080/TCP   5s
C:\Users\user\Desktop\kube_cloud>kubectl get svc
NAME             TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)    AGE
kubernetes       ClusterIP   10.96.0.1       <none>        443/TCP    5h24m
myloadbalancer   ClusterIP   10.105.13.205   <none>        8080/TCP   87s

C:\Users\user\Desktop\kube_cloud>kubectl describe service/myloadbalancer
Name:              myloadbalancer
Namespace:         default
Labels:            <none>
Annotations:       <none>
Selector:          dc=IN
Type:              ClusterIP
IP:                10.105.13.205
Port:              <unset>  8080/TCP
TargetPort:        8080/TCP
Endpoints:         172.17.0.6:8080
Session Affinity:  None
Events:            <none>
```

```
C:\Users\user\Desktop\kube_cloud>kubectl run webpod1
--image=vimal13/apache-webserver-php
pod/webpod1 created

C:\Users\user\Desktop\kube_cloud>kubectl get pods --show-labels
NAME     READY   STATUS    RESTARTS   AGE   LABELS
webpod   1/1     Running   0          11m   dc=IN,run=webpod
webpod1  1/1     Running   0          7s    run=webpod1
C:\Users\user\Desktop\kube_cloud>kubectl label pods webpod1 dc=IN
pod/webpod1 labeled

C:\Users\user\Desktop\kube_cloud>kubectl get pods --show-labels
NAME     READY   STATUS    RESTARTS   AGE   LABELS
webpod   1/1     Running   0          11m   dc=IN,run=webpod
webpod1  1/1     Running   0          52s   dc=IN,run=webpod1

C:\Users\user\Desktop\kube_cloud>kubectl get all
NAME         READY   STATUS    RESTARTS   AGE
pod/webpod   1/1     Running   0          11m
pod/webpod1  1/1     Running   0          61s

NAME                 TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)    AGE
service/kubernetes   ClusterIP   10.96.0.1       <none>        443/TCP    5h25m
service/myloadbalancer   ClusterIP   10.105.13.205   <none>        8080/TCP   3m10s

C:\Users\user\Desktop\kube_cloud>kubectl describe service/myloadbalancer
Name:              myloadbalancer
Namespace:         default
Labels:            <none>
Annotations:       <none>
Selector:          dc=IN
Type:              ClusterIP
IP:                10.105.13.205
Port:              <unset>  8080/TCP
TargetPort:        8080/TCP
Endpoints:         172.17.0.6:8080,172.17.0.7:8080
Session Affinity:  None
Events:            <none>
```





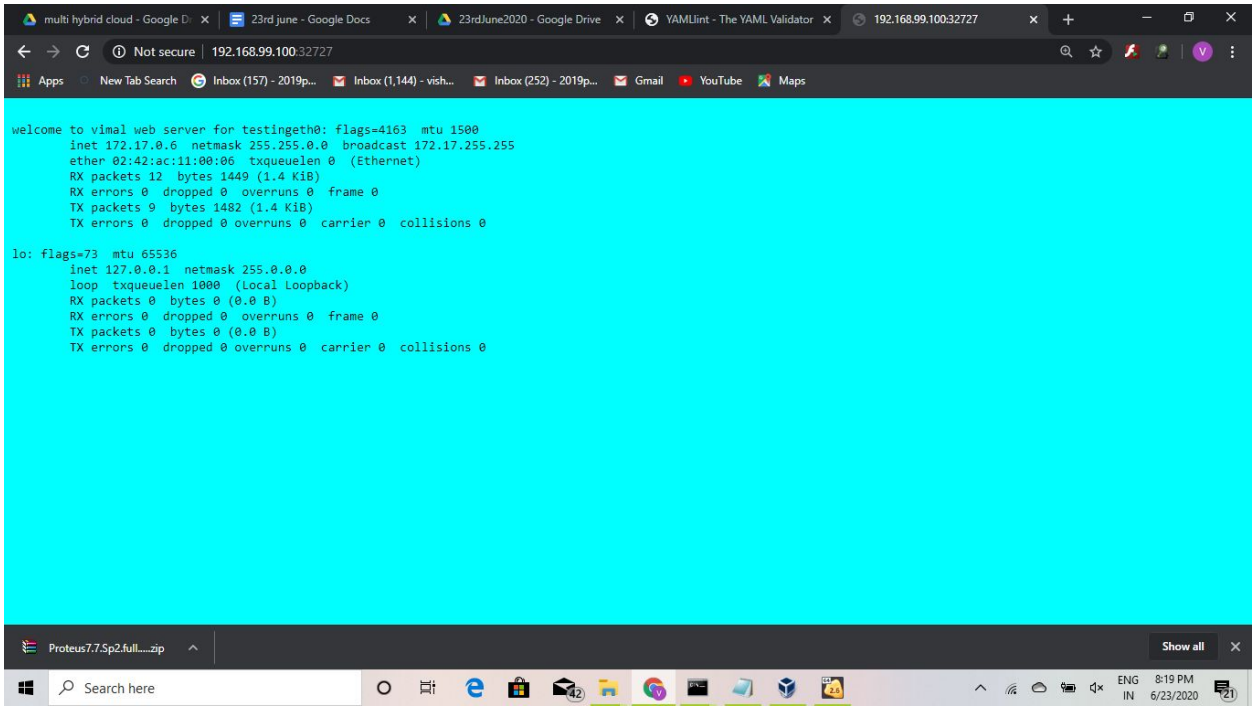
C:\Users\user\Desktop\kube_cloud>minikube service myloadbalancer --url
http://192.168.99.100:32727

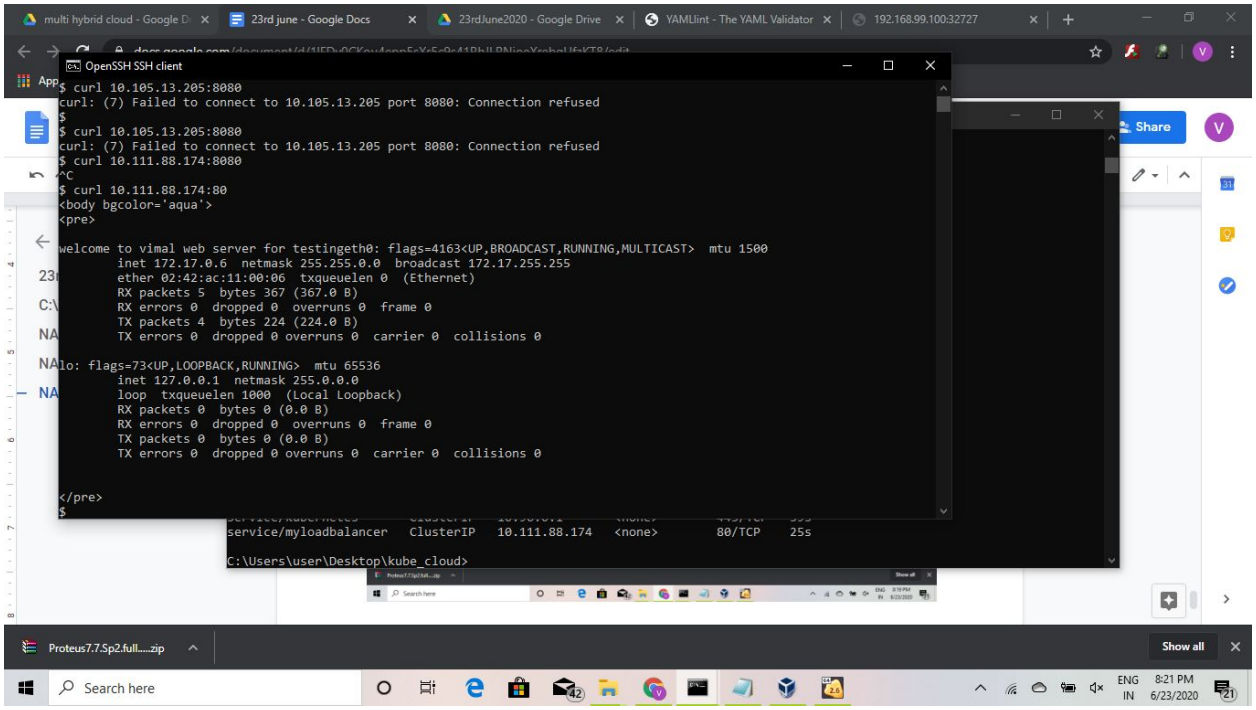
C:\Users\user\Desktop\kube_cloud>curl http://192.168.99.100:32727
<body bgcolor='aqua'>
<pre>

welcome to vimal web server for testingeth0:
flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
        inet 172.17.0.6 netmask 255.255.0.0 broadcast 172.17.255.255
        ether 02:42:ac:11:00:06 txqueuelen 0 (Ethernet)
        RX packets 4 bytes 300 (300.0 B)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 3 bytes 162 (162.0 B)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
        inet 127.0.0.1 netmask 255.0.0.0
        loop txqueuelen 1000 (Local Loopback)
        RX packets 0 bytes 0 (0.0 B)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 0 bytes 0 (0.0 B)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

</pre>


multi hybrid cloud - Google Dr
23rd june - Google Docs
23rdJune2020 - Google Drive
YAMLlint - The YAML Validator
192.168.99.100:32727
Not secure | 192.168.99.100:32727
Apps
New Tab Search
Inbox (157) - 2019p...
Inbox (1,144) - vish...
Inbox (252) - 2019p...
Gmail
YouTube
Maps
welcome to vimal web server for testingeth0: flags=4163 mtu 1500
inet 172.17.0.6 netmask 255.255.0.0 broadcast 172.17.255.255
ether 02:42:ac:11:00:06 txqueuelen 0 (Ethernet)
RX packets 12 bytes 1449 (1.4 KiB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 9 bytes 1482 (1.4 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
lo: flags=73 mtu 65536
inet 127.0.0.1 netmask 255.0.0.0
loop txqueuelen 1000 (Local Loopback)
RX packets 0 bytes 0 (0.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 0 bytes 0 (0.0 B)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
Proteus7.7.Sp2.full.....zip
Show all
Search here
ENG
IN
8:19 PM
6/23/2020


OpenSSH SSH client
$ curl 10.105.13.205:8080
curl: (7) Failed to connect to 10.105.13.205 port 8080: Connection refused
$
$ curl 10.105.13.205:8080
curl: (7) Failed to connect to 10.105.13.205 port 8080: Connection refused
$ curl 10.111.88.174:8080
^C
$ curl 10.111.88.174:80
<body bgcolor='aqua'>
<pre>
welcome to vimal web server for testingeth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 172.17.0.6 netmask 255.255.0.0 broadcast 172.17.255.255
ether 02:42:ac:11:00:06 txqueuelen 0 (Ethernet)
RX packets 5 bytes 367 (367.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 4 bytes 224 (224.0 B)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
inet 127.0.0.1 netmask 255.0.0.0
loop txqueuelen 1000 (Local Loopback)
RX packets 0 bytes 0 (0.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 0 bytes 0 (0.0 B)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
</pre>
$
service/myloadbalancer ClusterIP 10.111.88.174 <none> 80/TCP 25s
C:\Users\user\Desktop\kube_cloud>
Share
Proteus7.7.Sp2.full.....zip
Show all
Search here
ENG
IN
8:21 PM
6/23/2020