

```
root@ip-172-31-46-175/etc/httpd/conf.d
listen 1234
```

```
Select root@ip-172-31-46-175/etc/httpd/conf.d
22 yum install httpd -y
23 cd /etc/httpd/conf.d/
24 ls
25 vim kanna.conf
26 history
[root@ip-172-31-46-175 conf.d]#

19 minikube start --driver=docker
```

```
Select root@ip-172-31-46-175/etc/httpd/conf.d
22 yum install httpd -y
23 cd /etc/httpd/conf.d/
24 ls
25 vim kanna.conf
26 history
27* systemctl restart httpdsystemctl status httpd.service"
28 systemctl start httpd
29 systemctl status httpd.service
30 yum install httpd -y
31 systemctl status httpd.service
32 systemctl start httpd
33 journalctl -xau httpd.service
34 netstat -tnlp
35 rm kanna.conf
36 ls
37 systemctl start httpd
38 systemctl status httpd.service
39 vim kanna.conf
40 systemctl restart httpd.service
41 setenforce 0
42 systemctl restart httpd.service
43 history
[root@ip-172-31-46-175 conf.d]#
```

```
Select root@ip-172-31-46-175/etc/httpd/conf.d
32 systemctl start httpd
33 journalctl -xau httpd.service
34 netstat -tnlp
35 rm kanna.conf
36 ls
37 systemctl start httpd
38 systemctl status httpd.service
39 vim kanna.conf
40 systemctl restart httpd.service
41 setenforce 0
42 systemctl restart httpd.service
43 history
[root@ip-172-31-46-175 conf.d]# !34
netstat -tnlp
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN      978/sshd: /usr/sbin
tcp6       0      0 :::80                  :::*                    LISTEN      2289/httpd
tcp6       0      0 :::22                  :::*                    LISTEN      978/sshd: /usr/sbin
tcp6       0      0 :::1234                 :::*                    LISTEN      2289/httpd
[root@ip-172-31-46-175 conf.d]#
```

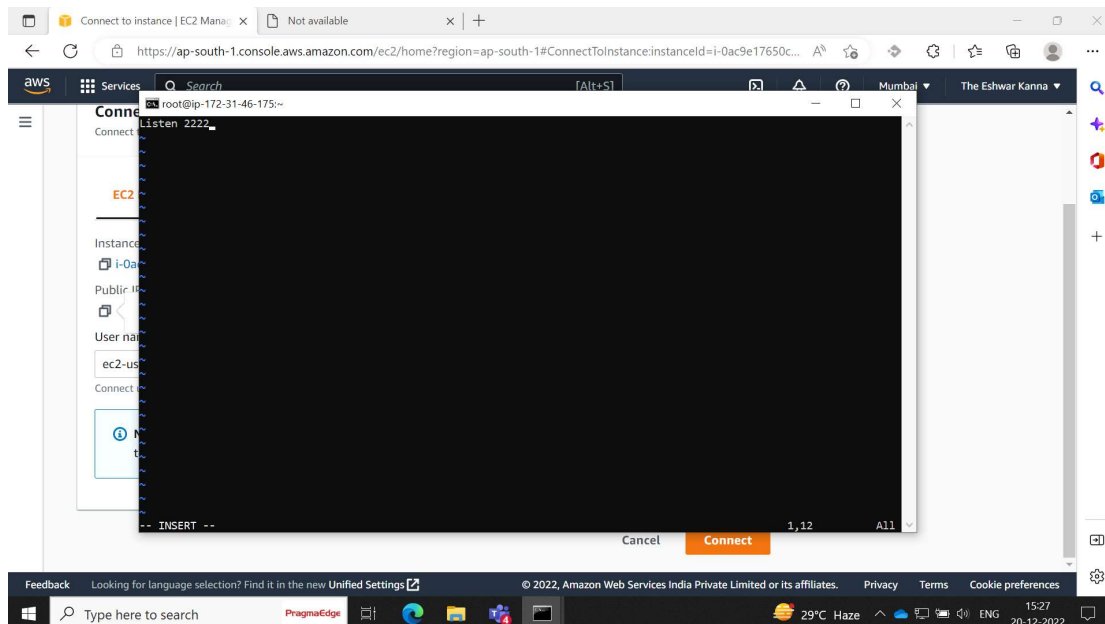
```
Select root@ip-172-31-46-175:/var/www/html

TX packets 0   bytes 0 (0.0 B)
TX errors 0   dropped 0 overruns 0   carrier 0   collisions 0

[root@ip-172-31-46-175 html]# curl http://192.168.49.1/kanna.html
welcome to kanna
[root@ip-172-31-46-175 html]# curl http://192.168.49.1:80/kanna.html
welcome to kanna
[root@ip-172-31-46-175 html]# curl http://192.168.49.1:1234/kanna.html
welcome to kanna
[root@ip-172-31-46-175 html]#
```

```
ec2-user@ip-172-31-46-175:~$ kubectl get cm
NAME          DATA   AGE
kube-root-ca.crt  1      22h
[ec2-user@ip-172-31-46-175 ~]$
```

```
@mydeploy-7696bd86cd-ftq66/etc/httpd/conf.d
[ec2-user@ip-172-31-46-175 ~]$ kubectl get cm
NAME          DATA      AGE
kube-root-ca.crt 1          22h
[ec2-user@ip-172-31-46-175 ~]$ kubectl create deploy mydeploy --image=vimal13/apache-webserver-php
deployment.apps/mydeploy created
[ec2-user@ip-172-31-46-175 ~]$ kubectl get deploy
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
mydeploy      0/1     1            0           6s
[ec2-user@ip-172-31-46-175 ~]$ kubectl get po
NAME          READY   STATUS    RESTARTS   AGE
mydeploy-7696bd86cd-ftq66 1/1     Running   0          24s
[ec2-user@ip-172-31-46-175 ~]$ kubectl exec -it pod/mydeploy-7696bd86cd-ftq66 -- sh
sh-4.2# ^C
sh-4.2# exit
exit
command terminated with exit code 130
[ec2-user@ip-172-31-46-175 ~]$ kubectl exec -it pod/mydeploy-7696bd86cd-ftq66 -- bash
[root@mydeploy-7696bd86cd-ftq66 /]# cd /var/www/html/
[root@mydeploy-7696bd86cd-ftq66 html]# ls
index.php
[root@mydeploy-7696bd86cd-ftq66 html]# cd /etc/httpd/conf.d/
[root@mydeploy-7696bd86cd-ftq66 conf.d]# ls
README autoindex.conf php.conf userdir.conf welcome.conf
[root@mydeploy-7696bd86cd-ftq66 conf.d]#
```



```
root@ip-172-31-46-175~  
[ec2-user@ip-172-31-46-175 ~]$ sudo su -  
Last login: Tue Dec 20 09:23:13 UTC 2022 on pts/0  
[root@ip-172-31-46-175 ~]# vim myweb.txt  
[root@ip-172-31-46-175 ~]#
```

```
ec2-user@ip-172-31-46-175~  
[ec2-user@ip-172-31-46-175 ~]$ kubectl create configmap mywebcm --from-file myweb.txt  
configmap/mywebcm created  
[ec2-user@ip-172-31-46-175 ~]$ kubectl get cm  
NAME          DATA  AGE  
kube-root-ca.crt  1      22h  
mywebcm        1      7s  
[ec2-user@ip-172-31-46-175 ~]$
```

```
ec2-user@ip-172-31-46-175:~$ kubectl describe mywebcm
error: the server doesn't have a resource type "mywebcm"
[ec2-user@ip-172-31-46-175 ~]$ kubectl describe cm mywebcm
Name:         mywebcm
Namespace:    default
Labels:       <none>
Annotations:  <none>

Data
====
myweb.txt:
----
Listen 2222

BinaryData
=====

Events: <none>
[ec2-user@ip-172-31-46-175 ~]$
```

```
ec2-user@ip-172-31-46-175:~$ kubectl describe pod configpod
apiVersion: v1
kind: Pod
metadata:
  name: configpod
spec:
  containers:
  - name: "cmos"
    image: "vimal13/apache-webserver-php"
    volumeMounts:
    - mountPath: /etc/httpd/conf.d/
      name: mycm
  volumes:
  - configMap:
      name: mywebcm
    name: mycm
```

```
Select ec2-user@ip-172-31-46-175~
[ec2-user@ip-172-31-46-175 ~]$ kubectl get cm
NAME          DATA      AGE
kube-root-ca.crt  1          22h
mywebcm        1          17m
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
Error from server (BadRequest): error when creating "pod_config.yml": Pod in version "v1" cannot be handled as a ConfigMap
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
pod/configpod created
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$
```

```
Select ec2-user@ip-172-31-46-175~
[ec2-user@ip-172-31-46-175 ~]$ kubectl get cm
NAME          DATA      AGE
kube-root-ca.crt  1          22h
mywebcm        1          17m
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
Error from server (BadRequest): error when creating "pod_config.yml": Pod in version "v1" cannot be handled as a ConfigMap
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
pod/configpod created
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
configpod      1/1     Running   0           33s
mydeploy-7696bd86cd-ftq66  1/1     Running   0           33m
[ec2-user@ip-172-31-46-175 ~]$
```

```
Select @configpod/etc/httpd/conf.d
[ec2-user@ip-172-31-46-175 ~]$ kubectl get cm
NAME          DATA      AGE
kube-root-ca.crt  1          22h
mywebcm        1          17m
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
Error from server (BadRequest): error when creating "pod_config.yml": Pod in version "v1" cannot be handled as a ConfigMap
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
pod/configpod created
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
configpod     1/1     Running   0           33s
mydeploy-7696bd86cd-ftq66  1/1     Running   0           33m
[ec2-user@ip-172-31-46-175 ~]$ kubectl exec -it pod/configpod -- bash
[root@configpod /]# cd /etc/httpd/conf.d/
[root@configpod conf.d]# ls
myweb.txt
[root@configpod conf.d]#
```

```
Select @configpod/etc/httpd/conf.d
Error from server (BadRequest): error when creating "pod_config.yml": Pod in version "v1" cannot be handled as a ConfigMap
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
pod/configpod created
[ec2-user@ip-172-31-46-175 ~]$ sudo vim pod_config.yml
[ec2-user@ip-172-31-46-175 ~]$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
configpod     1/1     Running   0           33s
mydeploy-7696bd86cd-ftq66  1/1     Running   0           33m
[ec2-user@ip-172-31-46-175 ~]$ kubectl exec -it pod/configpod -- bash
[root@configpod /]# cd /etc/httpd/conf.d/
[root@configpod conf.d]# ls
myweb.txt
[root@configpod conf.d]# cat myweb.txt
Listen 2222
[root@configpod conf.d]# this file is created in base os and it is mounted to pod using configMap
```



```
Select @configpod/etc/httpd/conf.d
[ec2-user@ip-172-31-46-175 ~]$ kubectl edit cm mywebcm
configmap/mywebcm edited
[ec2-user@ip-172-31-46-175 ~]$ kubectl get po
NAME                                READY   STATUS    RESTARTS   AGE
configpod                           1/1     Running   0           4m18s
mydeploy-7696bd86cd-ftq66          1/1     Running   0           37m
[ec2-user@ip-172-31-46-175 ~]$ kubectl delete po/configpod
pod "configpod" deleted
[ec2-user@ip-172-31-46-175 ~]$ kubectl get po
NAME                                READY   STATUS    RESTARTS   AGE
mydeploy-7696bd86cd-ftq66          1/1     Running   0           37m
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f pod_config.yml
pod/configpod created
[ec2-user@ip-172-31-46-175 ~]$ kubectl exec -it pod/configpod -- bash
[root@configpod /]# cd /etc/httpd/conf.d/
[root@configpod conf.d]# ls
myweb.txt
[root@configpod conf.d]# cat myweb.txt
Listen 3333
[root@configpod conf.d]#
```

```
ec2-user@ip-172-31-46-175:~
apiVersion: v1
kind: ConfigMap
metadata:
  name: mycm2
data:
  lw.conf:
    listen 1234
    x 5
```

```
Select ec2-user@ip-172-31-46-175:~
====
Events: <none>
[ec2-user@ip-172-31-46-175 ~]$ kubectl describe cm/mycm2
[ec2-user@ip-172-31-46-175 ~]$ vim configmap.yml
[ec2-user@ip-172-31-46-175 ~]$ [ec2-user@ip-172-31-46-175 ~]$
[ec2-user@ip-172-31-46-175 ~]$ kubectl create -f configmap.yml
```

```
Select ec2-user@ip-172-31-46-175:~
[ec2-user@ip-172-31-46-175 ~]$ kubectl get cm
NAME          DATA  AGE
kube-root-ca.crt  1      23h
mycm2          1      85s
mywebcm        1      33m
[ec2-user@ip-172-31-46-175 ~]$ kubectl describe cm/mycm2
Name:         mycm2
Namespace:    default
Labels:       <none>
Annotations:  <none>

Data
====
lw.conf:
----
listen 1234 x 5

BinaryData
====

Events: <none>
[ec2-user@ip-172-31-46-175 ~]$
```