

Created a Kubernetes cluster:

The screenshot shows the Google Cloud Platform console with the Kubernetes Engine section selected. The 'Clusters' tab is active, displaying a list of clusters. The first cluster, 'pe-training-cluster', is highlighted. It is located in 'us-east1-b' with a size of 2 nodes, 2 vCPUs, and 3.40 GB of memory. The second cluster, 'us-central1-sample-composer-0f4425fd-gke', is also visible, located in 'us-central1-a' with a size of 3 nodes, 3 vCPUs, and 11.25 GB of memory. Both clusters show a 'Pods unschedulable' status. The console also includes a sidebar with navigation options like Clusters, Workloads, Services & Ingress, Applications, Configuration, and Storage.

Name	Location	Cluster size	Total cores	Total memory	Notifications	Labels
pe-training-cluster	us-east1-b	2	2 vCPUs	3.40 GB	Pods unschedulable	name: pe-project
us-central1-sample-composer-0f4425fd-gke	us-central1-a	3	3 vCPUs	11.25 GB	Pods unschedulable	goog-compo...: sample-com...

The screenshot shows the Google Cloud Platform console with the details of the 'pe-training-cluster' displayed. The 'Clusters' tab is active, and the 'Details' view for the 'pe-training-cluster' is shown. The cluster is located in 'us-east1-b' with a size of 2 nodes. The 'Master zone' is 'us-east1-b', and the 'Node zones' are 'us-east1-b'. The 'Network' is 'default'. Below the details, there is a terminal window showing the output of the 'kubectl version' command. The output indicates that the client version is 'v1.12.9-gke.7' and the server version is 'v1.12.8-gke.10'.

```
Client Version: version.Info{Major:"1", Minor:"12", GitVersion:"v1.12.9-gke.7", GitCommit:"b6001a5d99c235723fc19342d347eee4394f2005", GitTreeState:"clean", BuildDate:"2019-06-24T19:27:39Z", GoVersion:"go1.10.8b4", Compiler:"gc", Platform:"linux/amd64"}
Server Version: version.Info{Major:"1", Minor:"12", GitVersion:"v1.12.8-gke.10", GitCommit:"f53039cc1e5295eed20909a4f10fb6ad99461e37", GitTreeState:"clean", BuildDate:"2019-06-19T20:48:40Z", GoVersion:"go1.10.8b4", Compiler:"gc", Platform:"linux/amd64"}
```

Activities Google Chrome Wed 19:11

https://console.cloud.google.com/kubernetes/clusters/details/us-east1-b/pe-training-cluster?project=pe-training&tab=details&persistent_volumes_tablesize=508...

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Google Cloud Platform Training

(pe-training) x +

GNU nano 2.7.4 File: deployment.yaml Modified

```
apiVersion: extensions/v1beta1
kind: Deployment
metadata:
  name: nginx-deployment-vishal2
spec:
  replicas: 3
  minReadySeconds: 15
  strategy:
    type: RollingUpdate
    rollingUpdate:
      maxUnavailable: 1
      maxSurge: 1
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
        - image: nginx
          imagePullPolicy: Always
          name: flask
          ports:
            - containerPort: 8080
```

AG Get Help AX Exit AC Write Out AW Where Is AK Cut Text AO Justify AC Cur Pos AY Prev Page M-V First Line M-W WhereIs Next M-M Mark Text M-M Last Line M-M To Bracket M-M Copy Text

Activities Google Chrome Wed 19:13

https://console.cloud.google.com/kubernetes/clusters/details/us-east1-b/pe-training-cluster?project=pe-training&tab=details&persistent_volumes_tablesize=508...

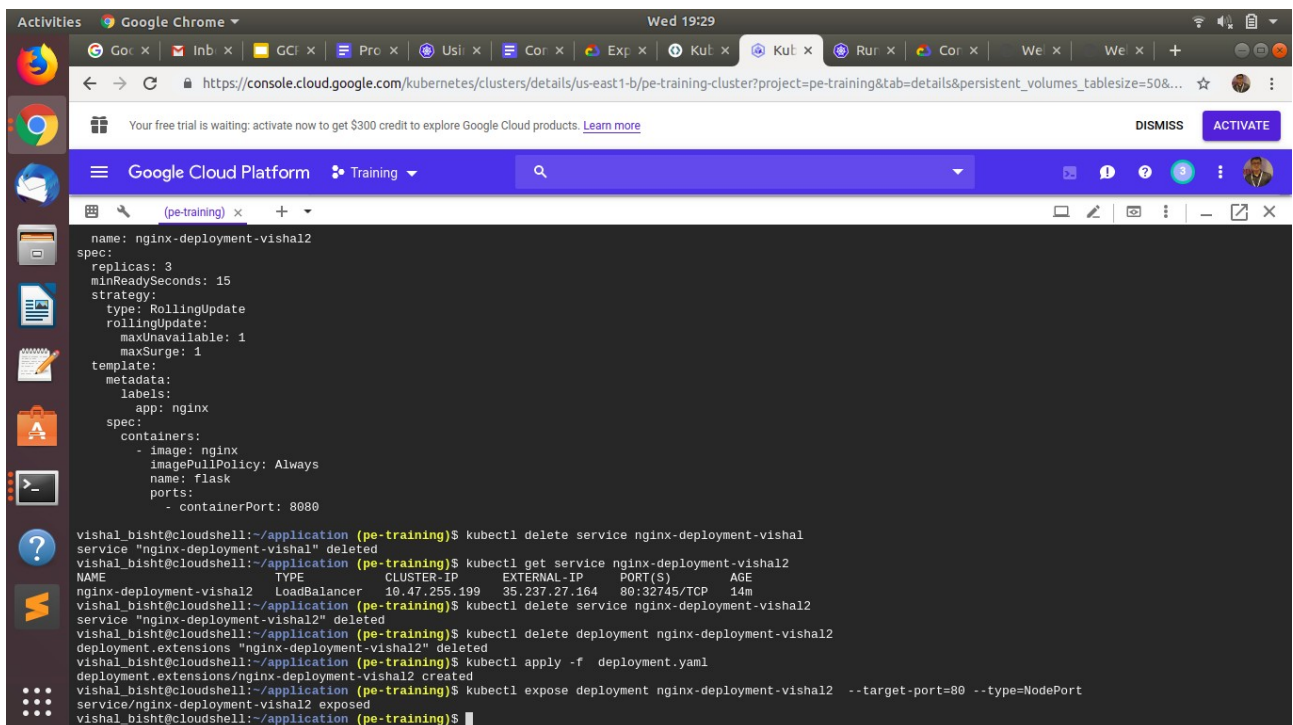
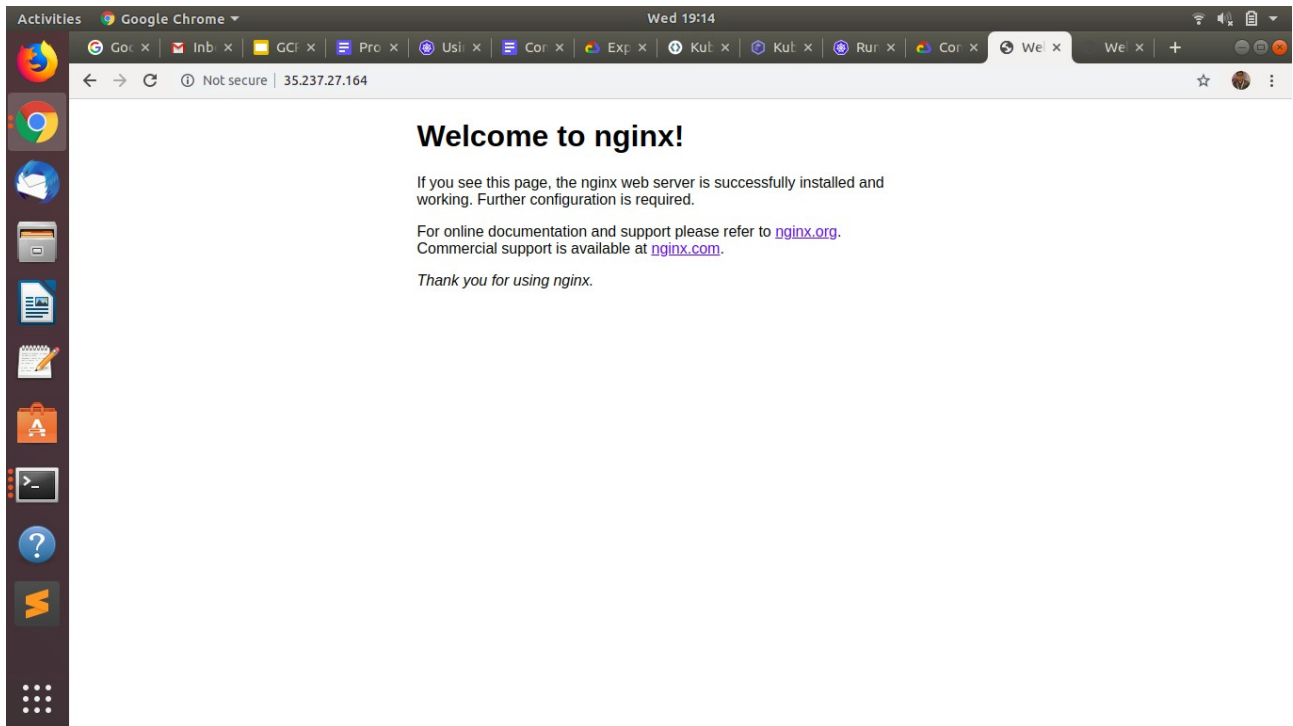
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Google Cloud Platform Training

(pe-training) x +

```
strategy:
  type: RollingUpdate
  rollingUpdate:
    maxUnavailable: 1
    maxSurge: 1
template:
  metadata:
    labels:
      app: nginx
  spec:
    containers:
      - image: nginx
        imagePullPolicy: Always
        name: flask
        ports:
          - containerPort: 8080
```

vishal_bisht@cloudshell:~/application (pe-training)\$ kubectl apply -f deployment.yaml
deployment.extensions/nginx-deployment-vishal2 created
vishal_bisht@cloudshell:~/application (pe-training)\$ kubectl expose deployment nginx-deployment-vishal2 --port=80 --target-port=80 --type=LoadBalancer
service/nginx-deployment-vishal2 exposed
vishal_bisht@cloudshell:~/application (pe-training)\$ kubectl get service nginx-deployment-vishal2
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
nginx-deployment-vishal2 LoadBalancer 10.47.255.199 <pending> 80:32745/TCP 9s
vishal_bisht@cloudshell:~/application (pe-training)\$ kubectl get service nginx-deployment-vishal2
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
nginx-deployment-vishal2 LoadBalancer 10.47.255.199 <pending> 80:32745/TCP 27s
vishal_bisht@cloudshell:~/application (pe-training)\$ kubectl get service nginx-deployment-vishal2
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
nginx-deployment-vishal2 LoadBalancer 10.47.255.199 <pending> 80:32745/TCP 37s
vishal_bisht@cloudshell:~/application (pe-training)\$ kubectl get service nginx-deployment-vishal2
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
nginx-deployment-vishal2 LoadBalancer 10.47.255.199 35.237.27.164 80:32745/TCP 49s
vishal_bisht@cloudshell:~/application (pe-training)\$

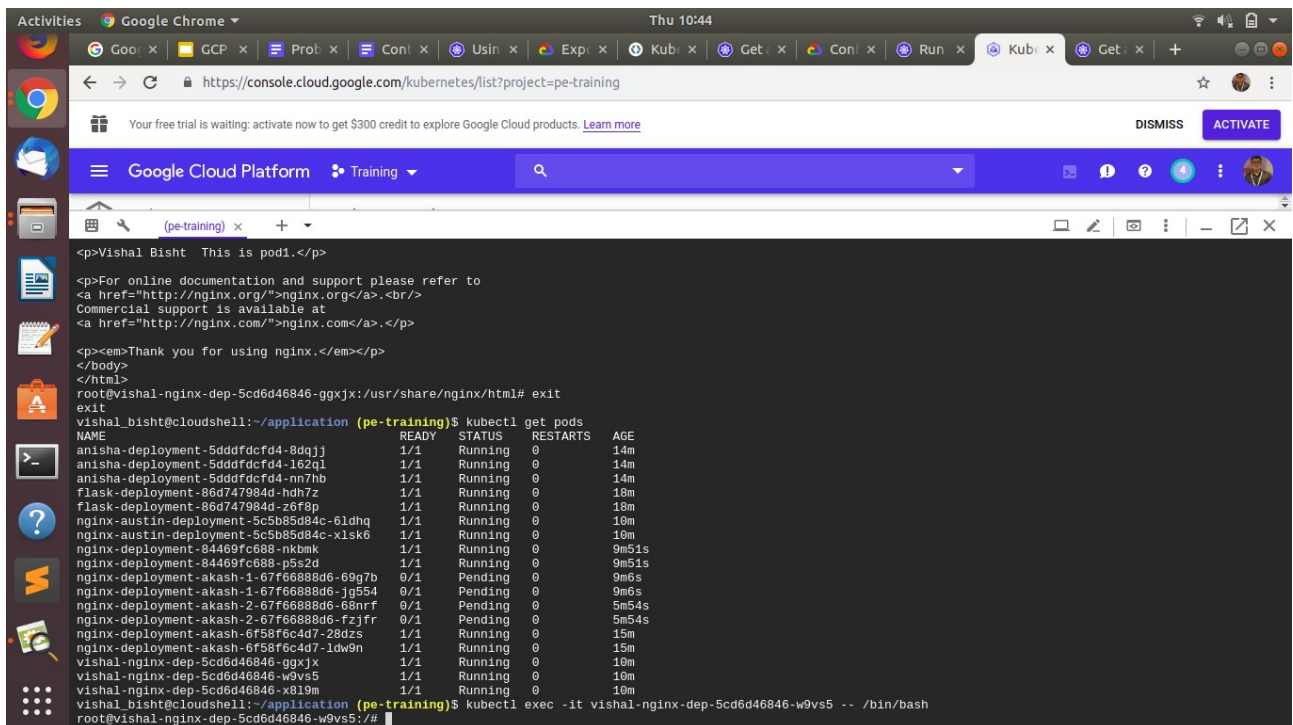
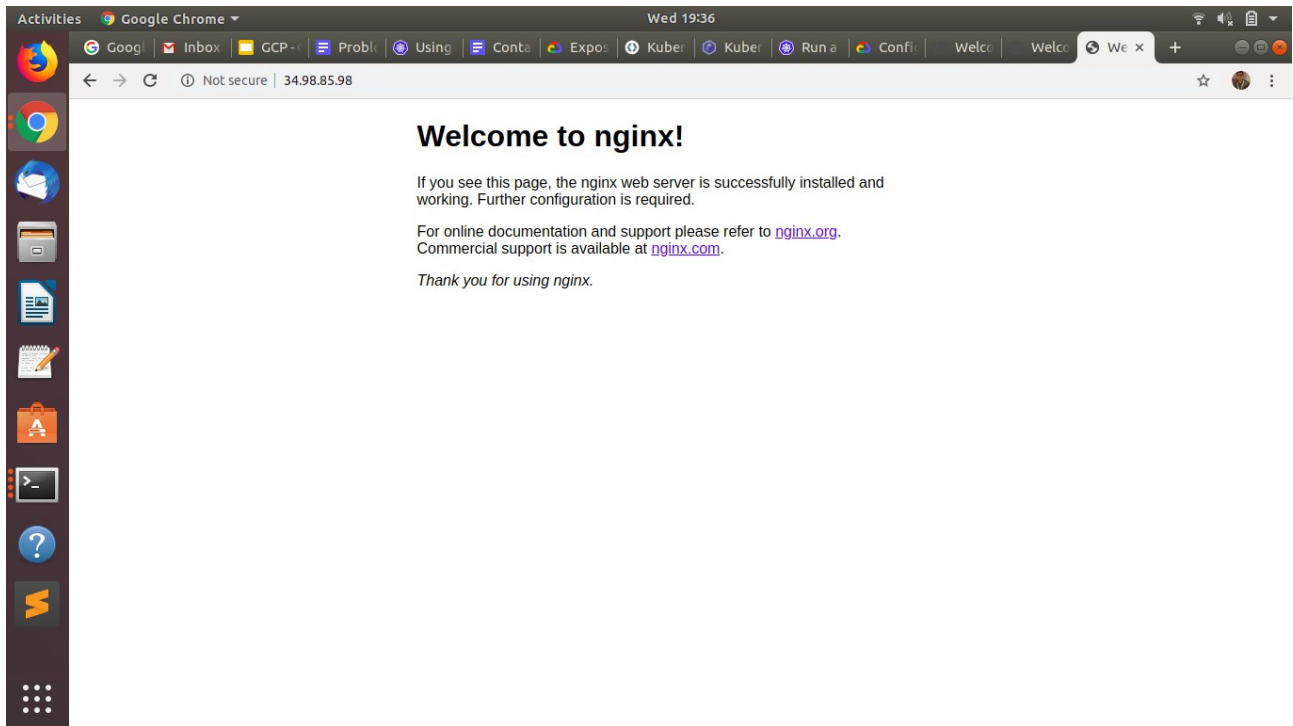


```
Activities Google Chrome Wed 19:32
https://console.cloud.google.com/kubernetes/clusters/details/us-east1-b/pe-training-cluster?project=pe-training&tab=details&persistent_volumes_tablesize=508...
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Google Cloud Platform Training
(pe-training) x +
deployment.extensions/nginx-deployment-vishal2 created
vishal_bisht@cloudshell:~/application (pe-training)$ kubectl expose deployment nginx-deployment-vishal2 --target-port=80 --type=NodePort
service/nginx-deployment-vishal2 exposed
vishal_bisht@cloudshell:~/application (pe-training)$ touch basic-ingress.yaml
vishal_bisht@cloudshell:~/application (pe-training)$ sudo nano basic-ingress.yaml
vishal_bisht@cloudshell:~/application (pe-training)$ kubectl create -f basic-ingress.yaml
ingress.extensions/basic-ingress created
vishal_bisht@cloudshell:~/application (pe-training)$ kubectl get ingress basic-ingress --watch
NAME HOSTS ADDRESS PORTS AGE
basic-ingress * 34.98.85.98 80 16s
basic-ingress * 34.98.85.98 80 46s
basic-ingress * 34.98.85.98 80 47s

^X^vishal_bisht@cloudshell:~/application (pe-training)$ kubectl describe ingress basic-ingress
Name: basic-ingress
Namespace: default
Address: 34.98.85.98
Default backend: nginx:80 (10.44.0.11:80,10.44.0.12:80,10.44.1.7:80)
Rules:
  Host Path Backends
  ----
  nginx:80 (10.44.0.11:80,10.44.0.12:80,10.44.1.7:80)
Annotations:
  ingress.kubernetes.io/backends: ["k8s-be-32568--c02e4dcd60dce58e":"Unknown"]
  ingress.kubernetes.io/forwarding-rule: k8s-fw-default-basic-ingress--c02e4dcd60dce58e
  ingress.kubernetes.io/target-proxy: k8s-tp-default-basic-ingress--c02e4dcd60dce58e
  ingress.kubernetes.io/url-map: k8s-um-default-basic-ingress--c02e4dcd60dce58e
Events:
  Type Reason Age From Message
  ----
  Normal ADD 60s loadbalancer-controller default/basic-ingress
  Normal CREATE 14s loadbalancer-controller ip: 34.98.85.98
vishal_bisht@cloudshell:~/application (pe-training)$
```

```
Activities Google Chrome Wed 19:34
https://console.cloud.google.com/kubernetes/clusters/details/us-east1-b/pe-training-cluster?project=pe-training&tab=details&persistent_volumes_tablesize=508...
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Google Cloud Platform Training
(pe-training) x +
vishal_bisht@cloudshell:~/application (pe-training)$ touch basic-ingress.yaml
vishal_bisht@cloudshell:~/application (pe-training)$ sudo nano basic-ingress.yaml
vishal_bisht@cloudshell:~/application (pe-training)$ kubectl create -f basic-ingress.yaml
ingress.extensions/basic-ingress created
vishal_bisht@cloudshell:~/application (pe-training)$ kubectl get ingress basic-ingress --watch
NAME HOSTS ADDRESS PORTS AGE
basic-ingress * 34.98.85.98 80 16s
basic-ingress * 34.98.85.98 80 46s
basic-ingress * 34.98.85.98 80 47s

^X^vishal_bisht@cloudshell:~/application (pe-training)$ kubectl describe ingress basic-ingress
Name: basic-ingress
Namespace: default
Address: 34.98.85.98
Default backend: nginx:80 (10.44.0.11:80,10.44.0.12:80,10.44.1.7:80)
Rules:
  Host Path Backends
  ----
  nginx:80 (10.44.0.11:80,10.44.0.12:80,10.44.1.7:80)
Annotations:
  ingress.kubernetes.io/backends: ["k8s-be-32568--c02e4dcd60dce58e":"Unknown"]
  ingress.kubernetes.io/forwarding-rule: k8s-fw-default-basic-ingress--c02e4dcd60dce58e
  ingress.kubernetes.io/target-proxy: k8s-tp-default-basic-ingress--c02e4dcd60dce58e
  ingress.kubernetes.io/url-map: k8s-um-default-basic-ingress--c02e4dcd60dce58e
Events:
  Type Reason Age From Message
  ----
  Normal ADD 60s loadbalancer-controller default/basic-ingress
  Normal CREATE 14s loadbalancer-controller ip: 34.98.85.98
vishal_bisht@cloudshell:~/application (pe-training)$ kubectl get ingress basic-ingress
NAME HOSTS ADDRESS PORTS AGE
basic-ingress * 34.98.85.98 80 94s
vishal_bisht@cloudshell:~/application (pe-training)$ kubectl get ingress basic-ingress
```

Activities Google Chrome Thu 10:43

Go: x GCP: x Prob: x Cont: x Usin: x Exp: x Kub: x Get: x Con: x Run: x Kub: x Get: x +

← → ↻ https://console.cloud.google.com/kubernetes/list?project=pe-training ☆ ⚙

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Google Cloud Platform Training

(pe-training) x +

GNU nano 2.2.6 File: index.html Modified

```
<!DOCTYPE html>
<html>
<head>
<title>Vishal 1!</title>
<style>
  body {
    width: 35em;
    margin: 0 auto;
    font-family: Tahoma, Verdana, Arial, sans-serif;
  }
</style>
</head>
<body>
<h1>Welcome to Page 1!</h1>
<p>Vishal Bisht This is pod1.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
</body>
</html>
```

AG Get Help AX Exit AG WriteOut AJ Justify AR Read File AW Where Is AY Prev Page AV Next Page AK Cut Text AU UnCut Text AG Cur. Pos AT To Spell

