

```
master x slave1 x slave2 x + v
ubuntu@ip-172-31-28-252:~$ |

ubuntu@ip-172-31-28-252:~$ sudo nano apache-deployment.yaml
ubuntu@ip-172-31-28-252:~$ kubectl apply -f apache-deployment.yaml
deployment.apps/apache-deployment created
service/apache-service created
ubuntu@ip-172-31-28-252:~$ |
```

```
master x slave1 x slave2 x + v
ubuntu@ip-172-31-28-252:~$ sudo nano apache-deployment.yaml
ubuntu@ip-172-31-28-252:~$ kubectl apply -f apache-deployment.yaml
deployment.apps/apache-deployment created
service/apache-service created
ubuntu@ip-172-31-28-252:~$ git clone https://github.com/hshar/website.git
Cloning into 'website'...
remote: Enumerating objects: 8, done.
remote: Total 8 (delta 0), reused 0 (delta 0), pack-reused 8 (from 1)
Receiving objects: 100% (8/8), 82.69 KiB | 10.34 MiB/s, done.
Resolving deltas: 100% (1/1), done.
ubuntu@ip-172-31-28-252:~$ ls
apache-deployment.yaml  website
ubuntu@ip-172-31-28-252:~$ cd website
ubuntu@ip-172-31-28-252:~/website$ |

6c4c763d22d0: Waiting
denied: requested access to the resource is denied
ubuntu@ip-172-31-28-252:~/website$ sudo docker push venkatesh1503/custom-website:v1
The push refers to repository [docker.io/venkatesh1503/custom-website]
037bf78fa489: Preparing
b8a02ae2749f: Preparing
9cdc1e0b4a5: Preparing
ed62fe425167: Preparing
5f70bf18a086: Preparing
c5595525172f: Waiting
6c4c763d22d0: Waiting
denied: requested access to the resource is denied
ubuntu@ip-172-31-28-252:~/website$ sudo docker login -u venkatesh1503

Info → A Personal Access Token (PAT) can be used instead.
To create a PAT, visit https://app.docker.com/settings

Password:

WARNING! Your credentials are stored unencrypted in '/root/.docker/config.json'.
Configure a credential helper to remove this warning. See
https://docs.docker.com/go/credential-store/

Login Succeeded
ubuntu@ip-172-31-28-252:~/website$ sudo docker push venkatesh1503/custom-website:v1
The push refers to repository [docker.io/venkatesh1503/custom-website]
037bf78fa489: Pushed
b8a02ae2749f: Pushed
9cdc1e0b4a5: Pushed
ed62fe425167: Pushed
5f70bf18a086: Mounted from calico/cni
c5595525172f: Pushed
6c4c763d22d0: Pushed
v1: digest: sha256:3e683da729d56f51794f9e94b10481327b7d7e6fa39bc1e40347fc0a6f614d96 size: 1782
ubuntu@ip-172-31-28-252:~/website$ sudo nano custom-deployment.yaml
ubuntu@ip-172-31-28-252:~/website$ kubectl apply -f custom-deployment.yaml
deployment.apps/custom-deployment created
service/custom-service created
ubuntu@ip-172-31-28-252:~/website$ |
```

```
master x slave1 x slave2
ubuntu@ip-172-31-28-252:~/website$ kubectl apply -f ingress.yaml
ingress.networking.k8s.io/ventura-ingress created
ubuntu@ip-172-31-28-252:~/website$ cd
ubuntu@ip-172-31-28-252:~$ kubectl get nodes
NAME                STATUS    ROLES    AGE   VERSION
ip-172-31-19-2      Ready    <none>    52m   v1.29.15
ip-172-31-21-55     Ready    <none>    52m   v1.29.15
ip-172-31-28-252    Ready    control-plane 61m   v1.29.15
ubuntu@ip-172-31-28-252:~$ kubectl get pods
NAME                READY    STATUS    RESTARTS   AGE
apache-deployment-784dcc968c-pg892  1/1      Running   0           25m
apache-deployment-784dcc968c-s7ddj  1/1      Running   0           25m
custom-deployment-5bdc7dc695-jpnt8  1/1      Running   0           5m1s
custom-deployment-5bdc7dc695-s5csj  1/1      Running   0           5m1s
ubuntu@ip-172-31-28-252:~$ kubectl get deployment
NAME                READY    UP-TO-DATE    AVAILABLE    AGE
apache-deployment  2/2      2              2             26m
custom-deployment  2/2      2              2             5m19s
ubuntu@ip-172-31-28-252:~$ kubectl get services
NAME                TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
apache-service      ClusterIP   10.101.139.59  <none>          80/TCP     26m
custom-service      ClusterIP   10.101.75.32  <none>          80/TCP     5m32s
kubernetes          ClusterIP   10.96.0.1     <none>          443/TCP    61m
ubuntu@ip-172-31-28-252:~$ kubectl get ingress
Command 'kubectl' not found, did you mean:
  Command 'kubectl' from snap kubectl (1.32.4)
See 'snap info <snapname>' for additional versions.
ubuntu@ip-172-31-28-252:~$ kubectl get ingress
NAME                CLASS    HOSTS          ADDRESS    PORTS    AGE
ventura-ingress     nginx    172.31.21.55   80         2m4s
ubuntu@ip-172-31-28-252:~$ kubectl get service -o wide
NAME                TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE    SELECTOR
apache-service      ClusterIP   10.101.139.59  <none>          80/TCP     27m   app=apache
custom-service      ClusterIP   10.101.75.32  <none>          80/TCP     7m14s  app=custom
kubernetes          ClusterIP   10.96.0.1     <none>          443/TCP    63m   <none>
ubuntu@ip-172-31-28-252:~$ kubectl get svc -n
error: flag needs an argument: 'n' in -n
See 'kubectl get --help' for usage.
ubuntu@ip-172-31-28-252:~$
ubuntu@ip-172-31-28-252:~$ doctl image ls
Command 'doctl' not found, did you mean:
  Command 'doctl' from snap doctl (27.5.1)
  Command 'doctl' from deb docker.io (26.1.3-0ubuntu1-22.04.1)
  Command 'doctl' from deb podman-docker (3.4.4+ds1-1ubuntu1.22.04.3)
See 'snap info <snapname>' for additional versions.
ubuntu@ip-172-31-28-252:~$ sudo docker ls
docker: unknown command: docker ls

Run 'docker --help' for more information
ubuntu@ip-172-31-28-252:~$ |

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```

```
master x slave1 x slave2
ubuntu@ip-172-31-28-252:~$ ls
apache-deployment.yaml  custom-deployment.yaml  ingress.yaml  website
ubuntu@ip-172-31-28-252:~$ |

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```

```
master x slave1 x slave2 x + v
ubuntu@ip-172-31-28-252:~$ ls
apache-deployment.yaml  custom-deployment.yaml  ingress.yaml  website
ubuntu@ip-172-31-28-252:~$ cd website/
ubuntu@ip-172-31-28-252:~/website$ ls
Dockerfile  images  index.html
ubuntu@ip-172-31-28-252:~/website$ |

master x slave1 x slave2 x + v
ubuntu@ip-172-31-28-252:~$ ls
apache-deployment.yaml  custom-deployment.yaml  ingress.yaml  website
ubuntu@ip-172-31-28-252:~$ cd website/
ubuntu@ip-172-31-28-252:~/website$ ls
Dockerfile  images  index.html
ubuntu@ip-172-31-28-252:~/website$ cd
ubuntu@ip-172-31-28-252:~$ kubectl get nodes
NAME                                STATUS    ROLES    AGE   VERSION
ip-172-31-19-2                      Ready    <none>    71m   v1.29.15
ip-172-31-21-55                     Ready    <none>    71m   v1.29.15
ip-172-31-28-252                    Ready    control-plane 79m   v1.29.15
ubuntu@ip-172-31-28-252:~$ kubectl get pods
NAME                                READY    STATUS    RESTARTS   AGE
apache-deployment-784dcc968c-pg892  1/1      Running   0           44m
apache-deployment-784dcc968c-s7d4j  1/1      Running   0           44m
custom-deployment-5bdc7dc695-jpnt6  1/1      Running   0           24m
custom-deployment-5bdc7dc695-s5csj  1/1      Running   0           24m
ubuntu@ip-172-31-28-252:~$ kubectl get deployment
NAME    READY   UP-TO-DATE   AVAILABLE   AGE
apache-deployment  2/2     2             2           44m
custom-deployment  2/2     2             2           24m
ubuntu@ip-172-31-28-252:~$ kubectl get services
NAME    TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
apache-service  ClusterIP   10.101.130.59  <none>         80/TCP     45m
custom-service  ClusterIP   10.101.75.32   <none>         80/TCP     24m
kubernetes      ClusterIP   10.96.0.1      <none>         443/TCP    80m
ubuntu@ip-172-31-28-252:~$ kubectl get ingress
NAME    CLASS  HOSTS    ADDRESS    PORTS    AGE
ventura-ingress  nginx  *        172.31.21.55  80       28m
ubuntu@ip-172-31-28-252:~$ |
```

master

slave1

slave2

```
ubuntu@ip-172-31-28-252:~$ ls
apache-deployment.yaml  custom-deployment.yaml  ingress.yaml  website
ubuntu@ip-172-31-28-252:~$ cd website/
ubuntu@ip-172-31-28-252:~/website$ ls
Dockerfile  images  index.html
ubuntu@ip-172-31-28-252:~/website$ cd
ubuntu@ip-172-31-28-252:~$ kubectl get nodes
NAME                                STATUS    ROLES    AGE   VERSION
ip-172-31-10-2                    Ready    <none>    71m   v1.29.15
ip-172-31-21-55                  Ready    <none>    71m   v1.29.15
ip-172-31-28-252                  Ready    control-plane  79m   v1.29.15
ubuntu@ip-172-31-28-252:~$ kubectl get pods
NAME                                READY    STATUS    RESTARTS   AGE
apache-deployment-784dcc968c-pg892  1/1      Running   0           44m
apache-deployment-784dcc968c-s7ddj  1/1      Running   0           44m
custom-deployment-5bdc7dc695-jpnt8   1/1      Running   0           24m
custom-deployment-5bdc7dc695-s5csj   1/1      Running   0           24m
ubuntu@ip-172-31-28-252:~$ kubectl get deployment
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
apache-deployment  2/2     2             2           44m
custom-deployment  2/2     2             2           24m
ubuntu@ip-172-31-28-252:~$ kubectl get services
NAME      TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
apache-service  ClusterIP   10.101.130.59  <none>         80/TCP     45m
custom-service  ClusterIP   10.101.75.32  <none>         80/TCP     25m
kubernetes      ClusterIP   10.96.0.1      <none>         443/TCP    89m
ubuntu@ip-172-31-28-252:~$ kubectl get ingress
NAME      CLASS  HOSTS          ADDRESS          PORTS    AGE
venkatesh-ingress  nginx  *             172.31.21.55    80       29m
ubuntu@ip-172-31-28-252:~$ kubectl get svc
NAME      TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
apache-service  ClusterIP   10.101.130.59  <none>         80/TCP     46m
custom-service  ClusterIP   10.101.75.32  <none>         80/TCP     25m
kubernetes      ClusterIP   10.96.0.1      <none>         443/TCP    81m
ubuntu@ip-172-31-28-252:~$ kubectl get svc -n ingress-nginx
NAME                        TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
ingress-nginx-controller    NodePort    10.103.231.76  <none>         80:8092/TCP, 443:31548/TCP  76m
ingress-nginx-controller-admission  ClusterIP   10.96.4.244    <none>         443/TCP     76m
ubuntu@ip-172-31-28-252:~$
```

Kubernetes Assignment

Instances | EC2 | us-east

Docker Hub

Personal access tokens

Personal access tokens

IntelliPaat

https://hub.docker.com/repositories/venkatesh1503

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venkatesh1503

Docker Personal

Repositories

Settings

Default privacy

Notifications

Billing

Usage

Pulls

Storage

Repositories

All repositories within the venkatesh1503 namespace.

Search by repository name

All content

Create a repository

Name	Last Pushed	Contains	Visibility	Scout
venkatesh1503/custom-website	5 minutes ago	IMAGE	Public	Inactive
venkatesh1503/myapp1	7 months ago	IMAGE	Public	Inactive
venkatesh1503/assignment3-image	7 months ago	IMAGE	Public	Inactive
venkatesh1503/ubuntu	7 months ago		Public	Inactive

1-4 of 4

https://hub.docker.com/repository/docker/venkatesh1503/custom-website

Search

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venkatesh1503

Docker Personal

Repositories

Settings

Default privacy

Notifications

Billing

Usage

Pulls

Storage

Repositories / custom-website / General

Using 0 of 1 private repositories. [Get more](#)

venkatesh1503/custom-website

Last pushed 29 minutes ago · Repository size: 56.8 MB

[Add a description](#) [Add a category](#)

General

Tags

Image Management BETA

Collaborators

Webhooks

Settings

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
v1		Image	less than 1 day	29 minutes

[See all](#)

Docker commands

To push a new tag to this repository:

```
docker push venkatesh1503/custom-website:tagname
```

[Public view](#)

buildcloud

Build with Docker Build Cloud

Accelerate image build times with access to cloud-based builders and shared cache.

Docker Build Cloud executes builds on optimally-dimensioned cloud infrastructure with dedicated per-organization isolation.

Get faster builds through shared caching across your team, native multi-platform support, and encrypted data transfer - all without managing infrastructure.

Search

Search Docker Hub

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V

Kubernetes Assignment

Instances | EC2 | us-east

venkatesh1503/custom

Personal access tokens

Personal access tokens

IntelliPaat

Not secure | 54.163.43.18:30926/custom

Hello world!

Search

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Kubernetes: Assignment

Instances | EC2 | us-east-

venkatesh1503/custom-

Personal access tokens |

Personal access tokens |

54.163.43.18:30926/apache

Not secure

54.163.43.18:30926/apache

DevOps

A1

Other favorites

It works!

Search

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master

slave1

slave2

```
ubuntu@ip-172-31-28-252:~$ ls
apache-deployment.yaml  custom-deployment.yaml  ingress.yaml  website
ubuntu@ip-172-31-28-252:~$ cd website/
ubuntu@ip-172-31-28-252:~/website$ ls
Dockerfile  images  index.html
ubuntu@ip-172-31-28-252:~/website$ cd
ubuntu@ip-172-31-28-252:~$ kubectl get nodes
NAME                                STATUS    ROLES    AGE   VERSION
ip-172-31-19-2                     Ready    <none>    71m   v1.29.15
ip-172-31-21-55                     Ready    <none>    71m   v1.29.15
ip-172-31-28-252                     Ready    control-plane  79m   v1.29.15
ubuntu@ip-172-31-28-252:~$ kubectl get pods
NAME                                READY    STATUS    RESTARTS   AGE
apache-deployment-784dcc968c-pg892  1/1      Running    0           44m
apache-deployment-784dcc968c-s7ddj  1/1      Running    0           44m
custom-deployment-5bdc7dc695-jpnt6  1/1      Running    0           24m
custom-deployment-5bdc7dc695-s5csj  1/1      Running    0           24m
ubuntu@ip-172-31-28-252:~$ kubectl get deployment
NAME    READY   UP-TO-DATE   AVAILABLE   AGE
apache-deployment  2/2     2             2           44m
custom-deployment  2/2     2             2           24m
ubuntu@ip-172-31-28-252:~$ kubectl get services
NAME                                TYPE    CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
apache-service                      ClusterIP  10.101.130.59  <none>          80/TCP      45m
custom-service                      ClusterIP  10.101.75.32   <none>          80/TCP      24m
kubernetes                          ClusterIP  10.96.0.1       <none>          443/TCP     80m
ubuntu@ip-172-31-28-252:~$ kubectl get ingress
NAME    CLASS  HOSTS          ADDRESS          PORTS    AGE
ventura-ingress  nginx  *             172.31.21.55     80       28m
ubuntu@ip-172-31-28-252:~$ kubectl get svc
NAME                                TYPE    CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
apache-service                      ClusterIP  10.101.130.59  <none>          80/TCP      46m
custom-service                      ClusterIP  10.101.75.32   <none>          80/TCP      25m
kubernetes                          ClusterIP  10.96.0.1       <none>          443/TCP     81m
ubuntu@ip-172-31-28-252:~$ kubectl get svc -n ingress-nginx
NAME                                TYPE    CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
ingress-nginx-controller            NodePort  10.193.231.76  <none>          80:30926/TCP,443:31548/TCP  76m
ingress-nginx-controller-admission  ClusterIP  10.96.4.244    <none>          443/TCP     76m
ubuntu@ip-172-31-28-252:~$ kubectl delete deployment apache-deployment custom-deployment
deployment.apps "apache-deployment" deleted
deployment.apps "custom-deployment" deleted
ubuntu@ip-172-31-28-252:~$ kubectl delete services apache-service custom-service
service "apache-service" deleted
service "custom-service" deleted
ubuntu@ip-172-31-28-252:~$ kubectl delete ingress ventura-ingress
ingress.networking.k8s.io "ventura-ingress" deleted
ubuntu@ip-172-31-28-252:~$
```

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