

```
28 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-15-37:~$ curl -o kubectl https://amazon-eks.s3.us-west-2.amazonaws.com/1.19.6/2021-01-05/bin/linux/amd64/kubectl
% Total % Received % Xferd Average Speed Time Time Time Current
100 57.4M 100 57.4M 0 0 5829k 0 0:00:10 0:00:10 --:--:-- 7030k
ubuntu@ip-172-31-15-37:~$
chmod +x ./kubectl
sudo mv ./kubectl /usr/local/bin
kubectl version --short --client
Client Version: v1.19.6-eks-49a6c0
ubuntu@ip-172-31-15-37:~$ sudo apt install docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
bridge-utils containerd dns-root-data dnsmasq-base pigz runc ubuntu-fan
Suggested packages:
ifupdown aufs-tools cgroupfs-mount | cgroup-lite debootstrap docker-doc rinse zfs-fuse | zfsutils
The following NEW packages will be installed:
bridge-utils containerd dns-root-data dnsmasq-base docker.io pigz runc ubuntu-fan
0 upgraded, 8 newly installed, 0 to remove and 28 not upgraded.
Need to get 69.8 MB of archives.
After this operation, 267 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 pigz amd64 2.6-1 [63.6 kB]
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 bridge-utils amd64 1.7-lubuntu3 [34.4 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 runc amd64 1.1.7-0ubuntu1-22.04.2 [4267 kB]
i-0e40e536a6b939013 (minikube)
PublicIPs: 65.2.73.252 PrivateIPs: 172.31.15.37
```

1(installed kubectl and docker)

```
* Starting "minikube" primary control-plane node in "minikube" cluster
* Pulling base image v0.0.44 ...
* Downloading Kubernetes v1.30.0 preload ...
  > preloaded-images-k8s-v18-v1...: 342.90 MiB / 342.90 MiB 100.00% 15.19 M
  > gcr.io/k8s-minikube/kicbase...: 481.58 MiB / 481.58 MiB 100.00% 16.57 M
* Creating docker container (CPUs=2, Memory=2200MB) ...
* Preparing Kubernetes v1.30.0 on Docker 26.1.1 ...
  - Generating certificates and keys ...
  - Booting up control plane ...
  - Configuring RBAC rules ...
* Configuring bridge CNI (Container Networking Interface) ...
* Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner, default-storageclass
! /usr/local/bin/kubectl is version 1.19.6-eks-49a6c0, which may have incompatibilities with Kubernetes 1.30.0.
  - Want kubectl v1.30.0? Try 'minikube kubectl -- get pods -A'
* Done! Kubernetes is now configured to use "minikube" cluster and "default" namespace by default
ubuntu@ip-172-31-15-37:~$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured
ubuntu@ip-172-31-15-37:~$
```

2(installed minikube and checked status)

```
! /usr/local/bin/kubectl is version 1.19.6-eks-49a6c0, which may have incompatibilities with Kubernetes 1.30.0.
- Want kubectl v1.30.0? Try 'minikube kubectl -- get pods -A'
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
ubuntu@ip-172-31-15-37:~$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

ubuntu@ip-172-31-15-37:~$ mkdir namespace
ubuntu@ip-172-31-15-37:~$ ls
namespace
ubuntu@ip-172-31-15-37:~$ cd namespace
ubuntu@ip-172-31-15-37:~/namespace$ nano my-ns.yml
ubuntu@ip-172-31-15-37:~/namespace$ kubectl create -f my-ns.yml
namespace/my-ns created
ubuntu@ip-172-31-15-37:~/namespace$ kubectl get namespace
NAME                STATUS   AGE
default              Active   4m18s
kube-node-lease      Active   4m18s
kube-public           Active   4m18s
kube-system           Active   4m18s
my-ns                 Active   22s
ubuntu@ip-172-31-15-37:~/namespace$
```

i-0e40e536a6b939013 (minikube)
PublicIPs: 65.2.73.252 PrivateIPs: 172.31.15.37

3(created a namespace and listed namespaces)

```
GNU nano 6.2 my-ns.yml
apiVersion: v1
kind: Namespace
metadata:
  name: my-ns
```

i-0e40e536a6b939013 (minikube)
PublicIPs: 65.2.73.252 PrivateIPs: 172.31.15.37

4(script for namespace)

```
ubuntu@ip-172-31-15-37:~/namespace$ minikube stop
stopping node "minikube" ...
Powering off "minikube" via SSH ...
1 node stopped.
```

5(stoped minikube)

