# **Minikube Installation on Linux**

Minikube is a tool that makes Kubernetes run locally. It runs a single node cluster inside a VM. its the fastest way to run Kubernetes cluster mainly used for practicing and studying purpose.

Create EC2 Instance with **Ubuntu AMI** and **t2.large** Processor

## **Install Kubectl on Linux**

curl -LO https://storage.googleapis.com/kubernetes-release/release/`curl -s [https://storage.googleapis.com/kubernetes-release/release/stable.txt`/bin/linux/amd64/kubectl](https://storage.googleapis.com/kubernetes-release/release/stable.txt%60/bin/linux/amd64/kubectl)

chmod +x ./kubectl

sudo mv ./kubectl /usr/local/bin/kubectl

kubectl version --client

## **Install Docker**

sudo apt-get update && sudo apt-get install docker.io -y

## **Install Minikube**

curl -Lo minikube https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64 && chmod +x minikube

sudo mkdir -p /usr/local/bin/

sudo install minikube /usr/local/bin/

sudo apt install conntrack

minikube version

sudo -i

## **Build and Install cri-dockerid**

git clone https://github.com/Mirantis/cri-dockerd.git

# Run these commands as root

###Install GO###

wget <https://storage.googleapis.com/golang/getgo/installer_linux>

chmod +x ./installer\_linux

./installer\_linux

source ~/.bash\_profile

cd cri-dockerd

mkdir bin

go get && go build -o bin/cri-dockerd

mkdir -p /usr/local/bin

install -o root -g root -m 0755 bin/cri-dockerd /usr/local/bin/cri-dockerd

cp -a packaging/systemd/\* /etc/systemd/system

sed -i -e 's,/usr/bin/cri-dockerd,/usr/local/bin/cri-dockerd,' /etc/systemd/system/cri-docker.service

systemctl daemon-reload

systemctl enable cri-docker.service

systemctl enable --now cri-docker.socket

## **Build and Install crictl**

VERSION="v1.24.1"

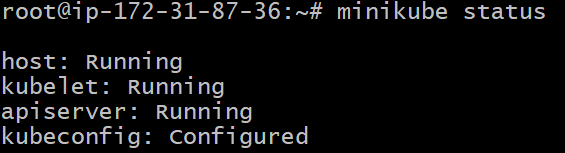
wget https://github.com/kubernetes-sigs/cri-tools/releases/download/$VERSION/crictl-$VERSION-linux-amd64.tar.gz

sudo tar zxvf crictl-$VERSION-linux-amd64.tar.gz -C /usr/local/bin

rm -f crictl-$VERSION-linux-amd64.tar.gz

minikube start --vm-driver=none

minikube status



T2.large instance type pricing

[EC2 On-Demand Instance Pricing – Amazon Web Services](https://aws.amazon.com/ec2/pricing/on-demand/)

| **Instance name** | **On-Demand hourly rate** | **vCPU** | **Memory** | **Storage** | **Network performance** |
| --- | --- | --- | --- | --- | --- |
| t2.nano | $0.0058 | 1 | 0.5 GiB | EBS Only | Low |
| t2.micro | $0.0116 | 1 | 1 GiB | EBS Only | Low to Moderate |
| t2.small | $0.023 | 1 | 2 GiB | EBS Only | Low to Moderate |
| t2.medium | $0.0464 | 2 | 4 GiB | EBS Only | Low to Moderate |
| t2.large | $0.0928 | 2 | 8 GiB | EBS Only | Low to Moderate |
| t2.xlarge | $0.1856 | 4 | 16 GiB | EBS Only | Moderate |
| t2.2xlarge | $0.3712 | 8 | 32 GiB | EBS Only | Moderate |

References

[Releases · kubernetes/minikube (github.com)](https://github.com/kubernetes/minikube/releases)

[Mirantis/cri-dockerd (github.com)](https://github.com/Mirantis/cri-dockerd#build-and-install)

[sudo crictl: not found if installed to a directory outside of sudoers secure\_path · Issue #5547 · kubernetes/minikube (github.com)](https://github.com/kubernetes/minikube/issues/5547)