# **Minikube Installation On Ubuntu Server**

### **Step 1: Update Your System**

Ensure your system is up to date by running:

sudo apt update && sudo apt upgrade -y

### **Step 2: Install Dependencies**

Minikube requires a hypervisor to run Kubernetes. You can use KVM, VirtualBox, or other supported hypervisors. For simplicity, this guide uses VirtualBox.

**1.Install VirtualBox:**

sudo apt install -y virtualbox virtualbox-ext-pack

**2. Install conntrack package:**

Minikube requires the conntrack package, which you can install using:

sudo apt install -y conntrack

### **Step 3: Install Minikube**

**1.Download the Minikube binary:**

Visit the Minikube releases page or use the following command to download the latest version:

curl -LO <https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64>

**2. Install the Minikube binary:**

Move the downloaded binary to /usr/local/bin and make it executable:

sudo install minikube-linux-amd64 /usr/local/bin/minikube

### **Step 4: Install kubectl**

kubectl is the command-line tool for interacting with Kubernetes clusters.

**1. Download kubectl:**

curl -LO [https://dl.k8s.io/release/$(curl -s https://storage.googleapis.com/kubernetes-release/release/stable.txt)/bin/linux/amd64/kubectl](https://dl.k8s.io/release/$(curl%20-s%20https://storage.googleapis.com/kubernetes-release/release/stable.txt)/bin/linux/amd64/kubectl)

**2**.**Install kubectl:**

Move the binary to /usr/local/bin and make it executable:

chmod +x kubectl

sudo mv kubectl /usr/local/bin/

**Step 5. Create a Non-Root User for Minikube**

**1.Create a New User:**

sudo adduser minikube-user

sudo usermod -aG sudo minikube-user

**2. Switch to the New User:**

su - minikube-user

**Step 6. Install Docker:**

sudo apt-get update

sudo apt-get install -y docker.io

sudo usermod -aG docker $USER

newgrp docker

**Start Minikube with the docker Driver:**

minikube start --driver=docker

**#Check the status of minikube by using below commands**

minikube status

kubectl get nodes