

Chapter 6 A Local Single-Node Kubernetes Cluster

- Minikube
 - builds all its infrastructure as long as a Type-2 Hypervisor (VirtualBox, etc.) is installed
 - invokes the Hypervisor to create a single VM which then hosts a single-node K8 cluster
- Prereq setup:
 - [Install and Set Up kubectl - Kubernetes](#)
 - [Downloads - Oracle VM VirtualBox](#)
 - Alternatives: (linux) KVM, (macOS) HyperKit, VMware Fusion, (Windows) Hyper-V
 - VT-x/AMD-v virtualization must be enabled on the local workstation in BIOS
- Install VirtualBox (bionic Ubuntu 18.04)

```
$ sudo bash -c 'echo "deb https://download.virtualbox.org/virtualbox/debian
bionic contrib" >> /etc/apt/sources.list'
$ wget -q https://www.virtualbox.org/download/oracle_vbox_2016.asc -O- | sudo
apt-key add -
$ sudo apt-get update
$ sudo apt-get install -y virtualbox-6.0
```

- Install Minikube
- Start && check status && stop Minikube

```
minikube start
```

```
minikube start --vm-driver=virtualbox
```

```
minikube config set vm-driver virtualbox
```

(make VB the default driver)

```
minikube status
```

```
minikube stop
```