Commands

```
PS D:\INFOBELL\Kubernetes\kube-mern> minikube start
😄  minikube v1.30.1 on Microsoft Windows 11 Home Single Language 10.0.22621.1555 Build 22621.1555
✨  Automatically selected the virtualbox driver
💿  Downloading VM boot image ...
    > minikube-v1.30.1-amd64.iso....:  65 B / 65 B [---------] 100.00% ? p/s 0s
💾  Downloading Kubernetes v1.26.3 preload ...
    > preloaded-images-k8s-v18-v1...:  397.02 MiB / 397.02 MiB  100.00% 10.80 M
🔥  Creating virtualbox VM (CPUs=2, Memory=2200MB, Disk=20000MB) ...
🤦  StartHost failed, but will try again: creating host: create: precreate: This computer doesn't have VT-X/AMD-v enabled. Enabling
it in the BIOS is mandatory
🔥  Creating virtualbox VM (CPUs=2, Memory=2200MB, Disk=20000MB) ...
😿  Failed to start virtualbox VM. Running "minikube delete" may fix it: creating host: create: precreate: This computer doesn't hav
e VT-X/AMD-v enabled. Enabling it in the BIOS is mandatory

❌  Exiting due to HOST_VIRT_UNAVAILABLE: Failed to start host: creating host: create: precreate: This computer doesn't have VT-X/AM
D-v enabled. Enabling it in the BIOS is mandatory
💡  Suggestion: Virtualization support is disabled on your computer. If you are running minikube within a VM, try '--driver=docker'.
Otherwise, consult your systems BIOS manual for how to enable virtualization.
🐳  Related issues:
    ▪ https://github.com/kubernetes/minikube/issues/3900
    ▪ https://github.com/kubernetes/minikube/issues/4730

PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl get pod
Unable to connect to the server: dial tcp 127.0.0.1:8080: connectex: No connection could be made because the target machine actively
 refused it.
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl get pod
No resources found in default namespace.
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> minikube version
minikube version: v1.30.1
commit: 08896fd1dc362c097c925146c4a0d0dac715ace0
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl config view
apiVersion: v1
clusters:
- cluster:
    certificate-authority-data: DATA+OMITTED
    server: https://kubernetes.docker.internal:6443
  name: docker-desktop
contexts:
- context:
    cluster: docker-desktop
    user: docker-desktop
  name: docker-desktop
current-context: docker-desktop
kind: Config
preferences: {}
users:
- name: docker-desktop
  user:
    client-certificate-data: REDACTED
    client-key-data: REDACTED
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl get deploy -A
NAMESPACE       NAME      READY    UP-TO-DATE    AVAILABLE    AGE
kube-system     coredns   2/2      2             2            8m50s
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl apply -f secret.yaml
secret/mongo-secret created
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl apply -f mongo-config.yaml
configmap/mongo-config created
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl apply -f mongo-app.yaml
service/mongo-service created
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl apply -f web-app.yaml
The Service "webapp-service" is invalid: spec.ports[0].nodePort: Forbidden: may not be used when `type` is 'ClusterI
P'PS D:\INFOBELL\Kubernetes\kube-mernkubectl apply -f web-app.yaml
service/webapp-service created
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
powershell
powershell
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powershell
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl get secret
NAME            TYPE      DATA    AGE
mongo-secret    Opaque    2       7m30s
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl get configmap
NAME                DATA    AGE
kube-root-ca.crt    1       24m
mongo-config        1       6m55s
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> kubectl get svc
NAME              TYPE        CLUSTER-IP      EXTERNAL-IP    PORT(S)           AGE
kubernetes        ClusterIP   10.96.0.1       <none>         443/TCP           25m
mongo-service     ClusterIP   10.101.167.14   <none>         27017/TCP         6m58s
webapp-service    NodePort    10.111.171.60   <none>         8081:30100/TCP    2m13s
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS C:\windows\system32> minikube delete
* Removed all traces of the "minikube" cluster.
PS C:\windows\system32> minikube ip
* Profile "minikube" not found. Run "minikube profile list" to view all profiles.
  To start a cluster, run: "minikube start"
PS C:\windows\system32> minikube start
>>
* minikube v1.30.1 on Microsoft Windows 11 Home Single Language 10.0.22621.1555 Build 22621.1555
* Automatically selected the docker driver. Other choices: hyperv, virtualbox, ssh
* Using Docker Desktop driver with root privileges
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
    > gcr.io/k8s-minikube/kicbase...:  373.53 MiB / 373.53 MiB  100.00% 6.74 Mi
* Creating docker container (CPUs=2, Memory=2200MB) ...
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
  - 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
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
PS C:\windows\system32>
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**

```
PS D:\INFOBELL\Kubernetes\kube-mern> minikube ip
192.168.49.2
PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

PS D:\INFOBELL\Kubernetes\kube-mern>
```

```
PS D:\INFOBELL\Kubernetes\kube-mern> minikube service list
|-------------|-------------|--------------|-----|
|  NAMESPACE  |    NAME     | TARGET PORT  | URL |
|-------------|-------------|--------------|-----|
| default     | kubernetes  | No node port |     |
| kube-system | kube-dns    | No node port |     |
|-------------|-------------|--------------|-----|
PS D:\INFOBELL\Kubernetes\kube-mern>
```