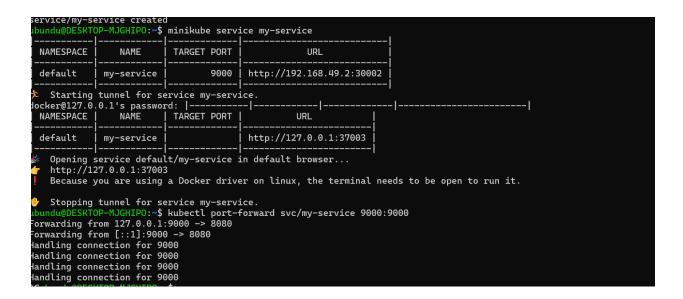# JAVA APPLICATION MINIKUBE DEPLOYMENT

DEPLOYMENT.YML

apiVersion: apps/v1

kind: Deployment

metadata:

 name: my-deploy

 labels:

  name: my-deploy

```yaml
spec:
  replicas: 1
  selector:
    matchLabels:
      apptype: web-backend
  strategy:
    type: RollingUpdate
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image: nithya216/image1:latest
        ports:
        - containerPort: 9000

---

apiVersion: v1
kind: Service
metadata:
  name: my-service
  labels:
```
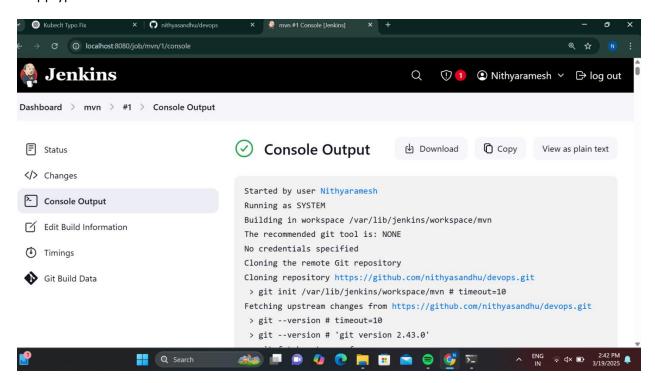
```yaml
  app: my-service

spec:

 type: NodePort

 ports:

  - port: 9000

   targetPort: 8080

   nodePort: 30002

 selector:

  apptype: web-backend
```

```
^Cubundu@DESKTOP-MJGHIPO:~$ cat deploy.yml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-deploy
  labels:
    name: my-deploy
spec:
  replicas: 1
  selector:
    matchLabels:
      apptype: web-backend
  strategy:
    type: RollingUpdate
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image: nithya216/image1:latest
        ports:
        - containerPort: 9000

---

apiVersion: v1
kind: Service
metadata:
  name: my-service
  labels:
    app: my-service
```
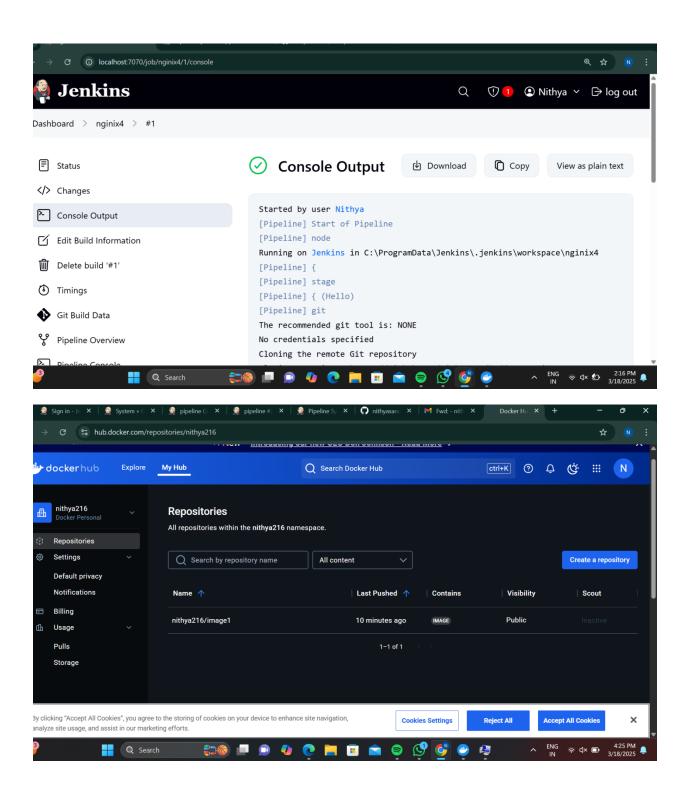
```
Setting up grafana (11.5.2) ...
info: Selecting UID from range 100 to 999 ...

info: Adding system user 'grafana' (UID 107) ...
info: Adding new user 'grafana' (UID 107) with group 'grafana' ...
info: Not creating home directory '/usr/share/grafana'.
### NOT starting on installation, please execute the following statements to configure grafana to start automatically using
systemd
 sudo /bin/systemctl daemon-reload
 sudo /bin/systemctl enable grafana-server
### You can start grafana-server by executing
 sudo /bin/systemctl start grafana-server
Processing triggers for man-db (2.12.0-4build2) ...
Synchronizing state of grafana-server.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable grafana-server
Created symlink /etc/systemd/system/multi-user.target.wants/grafana-server.service → /usr/lib/systemd/system/grafana-server.
service.
● grafana-server.service - Grafana instance
     Loaded: loaded (/usr/lib/systemd/system/grafana-server>
     Active: active (running) since Sat 2025-03-22 08:29:35>
       Docs: http://docs.grafana.org
   Main PID: 35977 ((grafana))
      Tasks: 1 (limit: 9337)
     Memory: 256.0K ()
     CGroup: /system.slice/grafana-server.service
             └─35977 "(grafana)"

Mar 22 08:29:35 DESKTOP-MJGHIPO systemd[1]: Started grafana>
ubundu@DESKTOP-MJGHIPO:~/prometheus-2.47.1.linux-amd64$ █
```

```
ubundu@DESKTOP-MJGHIPO:~$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

ubundu@DESKTOP-MJGHIPO:~$ sudo useradd \
    --system \
    --no-create-home \
    --shell /bin/false prometheus
[sudo] password for ubundu:
useradd: user 'prometheus' already exists
ubundu@DESKTOP-MJGHIPO:~$ wget https://github.com/prometheus/prometheus/releases/do
d64.tar.gz
tar -xvf prometheus-2.47.1.linux-amd64.tar.gz
sudo mkdir -p /data /etc/prometheus
cd prometheus-2.47.1.linux-amd64/
sudo mv prometheus promtool /usr/local/bin/
sudo mv consoles/ console_libraries/ /etc/prometheus/
sudo mv prometheus.yml /etc/prometheus/prometheus.yml
sudo chown -R prometheus:prometheus /etc/prometheus/ /data/
--2025-03-22 08:20:55--  https://github.com/prometheus/prometheus/releases/downloac
r.gz
Resolving github.com (github.com)... 20.207.73.82
Connecting to github.com (github.com)|20.207.73.82|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-2e6
82fd743?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F
X-Amz-Date=20250322T082056Z&X-Amz-Expires=300&X-Amz-Signature=8b1e12d49cf5eced2941f
```

```
Resolving github.com (github.com)... 20.207.73.82
Connecting to github.com (github.com)|20.207.73.82|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-2e65be/6838921/2f9b7b37-63a0-428b-adb5-02944
82fd743?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20250322%2Fus-east-1%2Fs3%2Faws4_request&
X-Amz-Date=20250322T082056Z&X-Amz-Expires=300&X-Amz-Signature=8b1e12d49cf5eced2941f037205aea81a07d8b2204e2e8fb1d193395c96d2b
e2&X-Amz-SignedHeaders=host&response-content-disposition=attachment%3B%20filename%3Dprometheus-2.47.1.linux-amd64.tar.gz&res
ponse-content-type=application%2Foctet-stream [following]
--2025-03-22 08:20:55--  https://objects.githubusercontent.com/github-production-release-asset-2e65be/6838921/2f9b7b37-63a0-
428b-adb5-0294482fd743?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20250322%2Fus-east-1%2Fs3%
2Faws4_request&X-Amz-Date=20250322T082056Z&X-Amz-Expires=300&X-Amz-Signature=8b1e12d49cf5eced2941f037205aea81a07d8b2204e2e8f
b1d193395c96d2be2&X-Amz-SignedHeaders=host&response-content-disposition=attachment%3B%20filename%3Dprometheus-2.47.1.linux-a
md64.tar.gz&response-content-type=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com)... 185.199.108.133, 185.199.110.133, 185.199.109.133
...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)|185.199.108.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 95713066 (91M) [application/octet-stream]
Saving to: 'prometheus-2.47.1.linux-amd64.tar.gz'

prometheus-2.4 100%[====>]  91.28M  4.54MB/s    in 33s

2025-03-22 08:21:29 (2.80 MB/s) - 'prometheus-2.47.1.linux-amd64.tar.gz' saved [95713066/95713066]

prometheus-2.47.1.linux-amd64/
prometheus-2.47.1.linux-amd64/LICENSE
prometheus-2.47.1.linux-amd64/NOTICE
prometheus-2.47.1.linux-amd64/prometheus.yml
prometheus-2.47.1.linux-amd64/consoles/
prometheus-2.47.1.linux-amd64/consoles/prometheus.html
prometheus-2.47.1.linux-amd64/consoles/prometheus-overview.html
```

🔍   🛡 ❶   ⊕ Nithyaramesh ⌄   ⤷ log out

✓ **Console Output**   ⤓ Download   ⧉ Copy   View as plain text

```
Started by user Nithyaramesh
Obtained Jenkinsfile from git https://github.com/nithyasandhu/devops.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/simpletomcatapp
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
 > git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/simpletomcatapp/.git # timeout=10
Fetching changes from the remote Git repository
 > git config remote.origin.url https://github.com/nithyasandhu/devops.git # timeout=10
Fetching upstream changes from https://github.com/nithyasandhu/devops.git
 > git --version # timeout=10
 > git --version # 'git version 2.43.0'
 > git fetch --tags --force --progress -- https://github.com/nithyasandhu/devops.git +refs/heads/*:refs/remotes/origin/* #
```

Q Search   ⊞ 💬 📋 🌐 📁 🪟 ✉ 🎵 🌐 📝 ⬛   ^ ENG 📶 🔊 🔋 4:25 PM 🔔
                                                          IN   3/19/2025

localhost:7070/job/nginix4/1/console

Jenkins

Nithya · log out

Dashboard > nginix4 > #1

Status
Changes
Console Output
Edit Build Information
Delete build '#1'
Timings
Git Build Data
Pipeline Overview

Console Output

Download · Copy · View as plain text

```
Started by user Nithya
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\ProgramData\Jenkins\.jenkins\workspace\nginix4
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Hello)
[Pipeline] git
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
```

---

hub.docker.com/repositories/nithya216

dockerhub · Explore · My Hub · Search Docker Hub · ctrl+K

nithya216
Docker Personal

Repositories
Settings
Default privacy
Notifications
Billing
Usage
Pulls
Storage

Repositories

All repositories within the nithya216 namespace.

Search by repository name · All content

Create a repository

Name ↑	Last Pushed ↑	Contains	Visibility	Scout
nithya216/image1	10 minutes ago	IMAGE	Public	Inactive

1–1 of 1

```
🌟  Enabled addons: storage-provisioner, default-storage
🏃  Done! kubectl is now configured to use "minikube" cl
ubundu@DESKTOP-MJGHIPO:~$ minikube start
😄  minikube v1.35.0 on Ubuntu 24.04 (amd64)
✨  Using the docker driver based on existing profile
👍  Starting "minikube" primary control-plane node in "m
🚜  Pulling base image v0.0.46 ...
🏃  Updating the running docker "minikube" container ...
🔥  Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
🔎  Verifying Kubernetes components...
    ▪ Using image gcr.io/k8s-minikube/storage-provisione
🌟  Enabled addons: default-storageclass, storage-provis
🏃  Done! kubectl is now configured to use "minikube" cl
ubundu@DESKTOP-MJGHIPO:~$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

ubundu@DESKTOP-MJGHIPO:~$ kubectl get pod
No resources found in default namespace.
ubundu@DESKTOP-MJGHIPO:~$ kubeclt get deploy
Command 'kubeclt' not found, did you mean:
```

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.