

## Working with minikube and Nagios

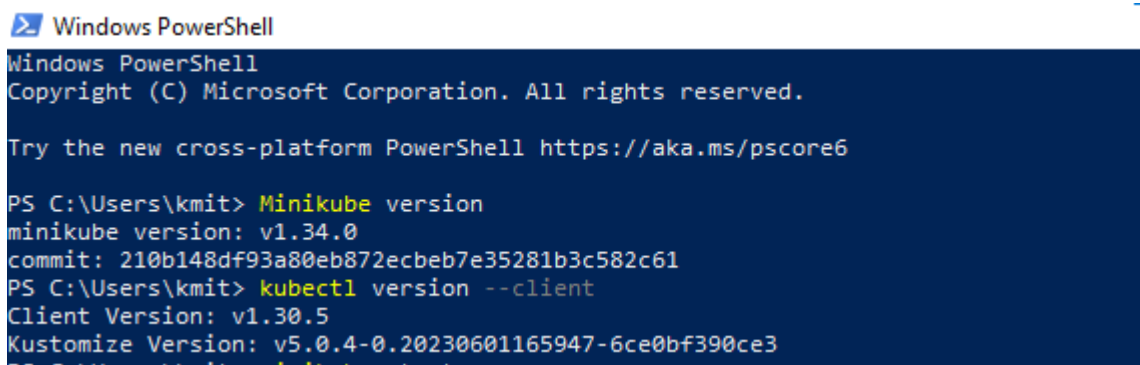
Interact with Minikube

kubectl is a command-line tool used in Kubernetes to interact with and manage Kubernetes clusters.

Once Minikube is running:

Minikube version

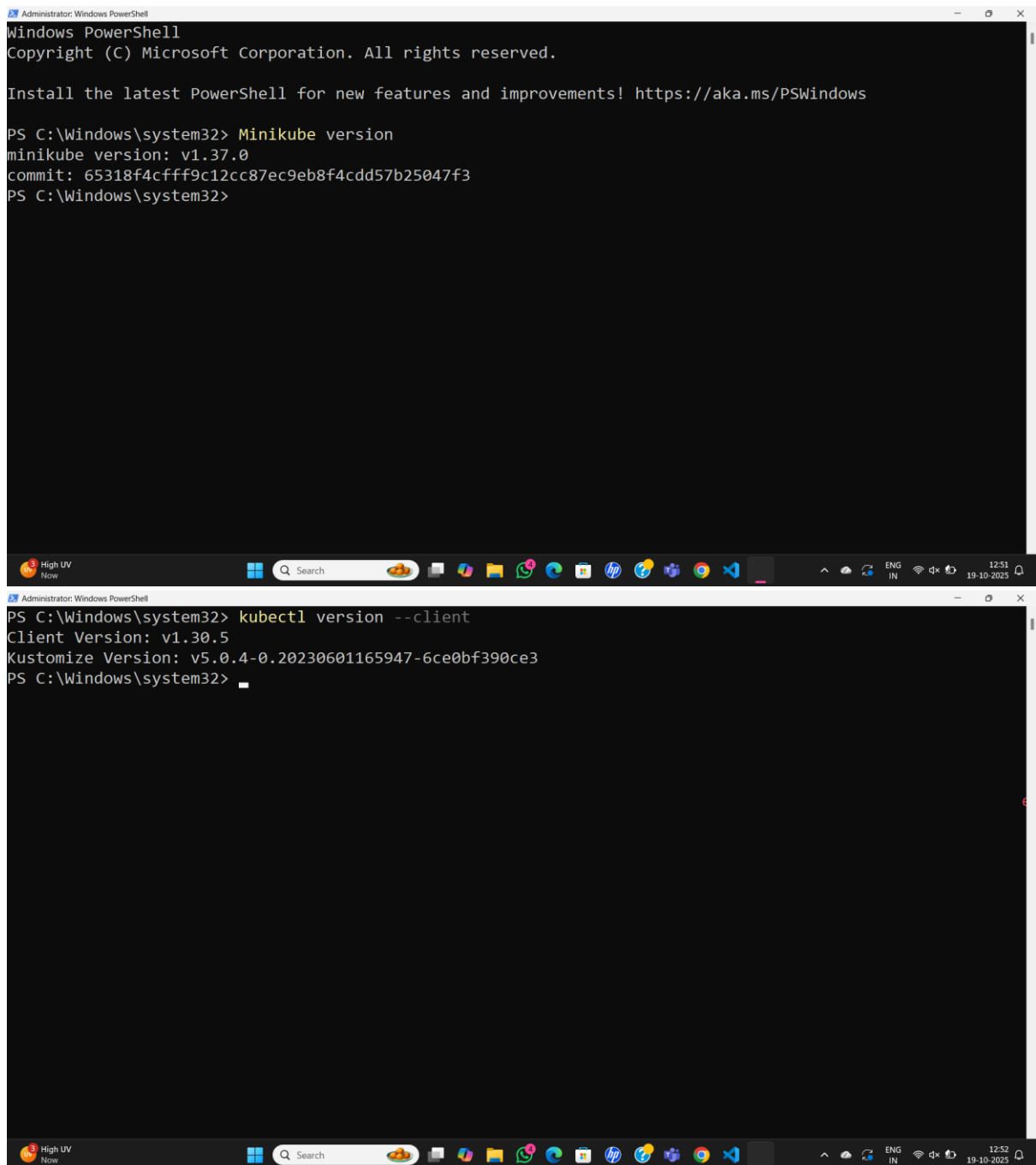
kubectl version --client



```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\kmit> Minikube version
minikube version: v1.34.0
commit: 210b148df93a80eb872ecbeb7e35281b3c582c61
PS C:\Users\kmit> kubectl version --client
Client Version: v1.30.5
Kustomize Version: v5.0.4-0.20230601165947-6ce0bf390ce3
```



The image consists of two screenshots of a Windows PowerShell terminal window. The top screenshot shows the command `Minikube version` being executed, which returns the version `v1.37.0` and a commit hash. The bottom screenshot shows the command `kubectl version --client` being executed, which returns the client version `v1.30.5` and the kustomize version `v5.0.4-0.20230601165947-6ce0bf390ce3`. Both screenshots show the Windows taskbar at the bottom with various application icons and system tray information.

```
Administrator: Windows PowerShell
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Windows\system32> Minikube version
minikube version: v1.37.0
commit: 65318f4cfff9c12cc87ec9eb8f4cdd57b25047f3
PS C:\Windows\system32>

PS C:\Windows\system32> kubectl version --client
Client Version: v1.30.5
Kustomize Version: v5.0.4-0.20230601165947-6ce0bf390ce3
PS C:\Windows\system32>
```

## Minikube Automation Steps

### Step 1: Start Minikube Cluster

- Open your terminal and run the command:

`minikube start`

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Windows\system32> minikube start
* minikube v1.34.0 on Microsoft Windows 10 Pro 10.0.19045.6332 Build 19045.6332
* minikube 1.37.0 is available! Download it: https://github.com/kubernetes/minikube/releases/tag/v1.37.0
* To disable this notice, run: 'minikube config set WantUpdateNotification false'

* Automatically selected the hyperv driver. Other choices: virtualbox, ssh
* Downloading VM boot image ...
  > minikube-v1.34.0-amd64.iso: 65 B / 65 B [-----] 100.00% 3 p/s 0s
  > minikube-v1.34.0-amd64.iso: 333.55 MiB / 333.55 MiB 100.00% 5.89 MiB p/
* Starting "minikube" primary control-plane node in "minikube" cluster
* Creating hyperv VM (CPUs=2, Memory=2200MB, Disk=20000MB) ...
! Failing to connect to https://registry.k8s.io/ from both inside the minikube VM and host machine
* To pull new external images, you may need to configure a proxy: https://minikube.sigs.k8s.io/docs/reference/networking/proxy/
* Preparing Kubernetes v1.31.0 on Docker 27.2.0 ...
  - 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>

Administrator: Windows PowerShell
>>
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

NAME      STATUS   ROLES    AGE   VERSION
minikube  Ready    control-plane  72s   v1.34.0
PS C:\Windows\system32> minikube start
* minikube v1.37.0 on Microsoft Windows 11 Home Single Language 10.0.22631.4460 Build 22631.4460
* Using the docker driver based on existing profile
* Starting "minikube" primary control-plane node in "minikube" cluster
* Pulling base image v0.0.48 ...
* Updating the running docker "minikube" container ...
! Failing to connect to https://registry.k8s.io/ from inside the minikube container
* To pull new external images, you may need to configure a proxy: https://minikube.sigs.k8s.io/docs/reference/networking/proxy/
* Preparing Kubernetes v1.34.0 on Docker 28.4.0 ...
* Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner, default-storageclass

! C:\Program Files\Docker\Docker\resources\bin\kubectl.exe is version 1.30.5, which may have incompatibilities with Kubernetes 1.34.0.
  - Want kubectl v1.34.0? Try 'minikube kubectl -- get pods -A'
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
PS C:\Windows\system32>
```

## Step 2: Create and Manage Deployment

### 1. create\_application

- Command:

```
kubectl create deployment mynginx --image=nginx
```

- Verify the deployment using: Kubernetes responds by showing you a list that includes the names of your deployment groups

```
kubectl get deployments
```

```

PS C:\Windows\system32>
PS C:\Windows\system32> kubectl create deployment mynginx --image=nginx
deployment.apps/mynginx created
PS C:\Windows\system32> kubectl get deployments
NAME      READY   UP-TO-DATE   AVAILABLE   AGE
mynginx   1/1     1            1           59s
PS C:\Windows\system32> kubectl expose deployment mynginx --type=NodePort --port=80 --target-port=80
service/mynginx exposed

```

- kubectl get pods
- kubectl describe pods

```

PS C:\Users\kmit> kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
mynginx-79bb8756c7-628n1           1/1     Running   0           60s
PS C:\Users\kmit> kubectl describe pods
Name:                               mynginx-79bb8756c7-628n1
Namespace:                          default
Priority:                             0
Service Account:                     default
Node:                                minikube/192.168.49.2
Start Time:                          Tue, 14 Oct 2025 11:14:19 +0530
Labels:                              app=mynginx
                                      pod-template-hash=79bb8756c7
Annotations:                          <none>
Status:                              Running
IP:                                  10.244.0.6
IPs:
  IP:                                10.244.0.6
Controlled By:                       ReplicaSet/mynginx-79bb8756c7
Containers:
  nginx:
    Container ID:                     docker://005cbc65a23c07baffb6d0918f5d984ec64526aafb77cecd1abb50b86c26766
    Image:                             nginx
    Image ID:                         docker-pullable://nginx@sha256:3b7732505933ca591ce4a6d860cb713ad96a3176b82f7979a8dfa9973486a0d6
    Port:                             <none>
    Host Port:                         <none>
    State:                             Running
      Started:                         Tue, 14 Oct 2025 11:14:56 +0530
    Ready:                             True
    Restart Count:                     0
    Environment:                       <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-9rg79 (ro)
Conditions:
  Type                               Status
  PodReadyToStartContainers          True
  Initialized                         True
  Ready                              True
  ContainersReady                    True
  PodScheduled                       True
Volumes:
  kube-api-access-9rg79:
    Type:                             Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds:            3607
    ConfigMapName:                     kube-root-ca.crt
    ConfigMapOptional:                 <nil>
    DownwardAPI:                      true
QoS Class:                           BestEffort
Node-Selectors:                       <none>

```

```

Volumes:
  kube-api-access-9rg79:
    Type:                             Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds:            3607
    ConfigMapName:                     kube-root-ca.crt
    ConfigMapOptional:                 <nil>
    DownwardAPI:                      true
QoS Class:                           BestEffort
Node-Selectors:                       <none>
Tolerations:                          node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                                      node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
  Type     Reason      Age   From          Message
  ----     -
  Normal   Scheduled   80s   default-scheduler   Successfully assigned default/mynginx-79bb8756c7-628n1 to minikube
  Normal   Pulling     78s   kubelet          Pulling image "nginx"
  Normal   Pulled      44s   kubelet          Successfully pulled image "nginx" in 33.289s (33.291s including waiting). Image size: 159974475 bytes.
  Normal   Created     43s   kubelet          Created container nginx
  Normal   Started     43s   kubelet          Started container nginx

```

## 2. Expose Deployment as a Service:

- Command:

```
kubectl expose deployment mynginx --type=NodePort --port=80 --target-port=80
```

## Step 3: Scale the Deployment

Command: Scales the Nginx deployment to 4 replicas (pods).

```
kubectl scale deployment mynginx --replicas=4
```

```
kubectl get service mynginx
```

## Step 4: Access the Nginx App

### 1. Using Port Forwarding:

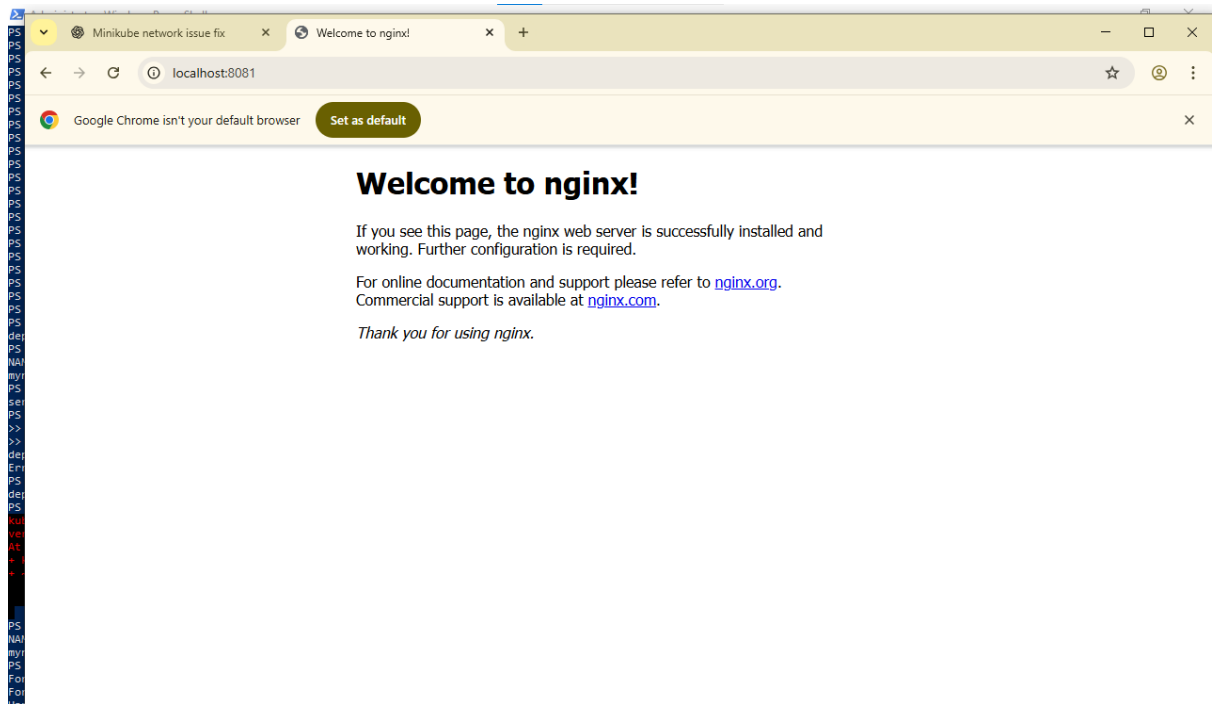
- Command:

```
kubectl port-forward svc/mynginx 8081:80
```

- Access the app via <http://localhost:8081>.

```
PS C:\Windows\system32> kubectl scale deployment mynginx --replicas=4
deployment.apps/mynginx scaled
```

```
PS C:\Windows\system32> kubectl get service mynginx
NAME      TYPE        CLUSTER-IP    EXTERNAL-IP  PORT(S)          AGE
mynginx   NodePort    10.100.169.198 <none>       80:31167/TCP     106s
PS C:\Windows\system32> kubectl port-forward svc/mynginx 8081:80
Forwarding from 127.0.0.1:8081 -> 80
Forwarding from [::1]:8081 -> 80
Handling connection for 8081
Handling connection for 8081
```



- Open the minikube dashboard

## Minikube dashboard

```
PS C:\Windows\system32> Minikube dashboard
* Enabling dashboard ...
  - Using image docker.io/kubernetesui/dashboard:v2.7.0
  - Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
* Some dashboard features require the metrics-server addon. To enable all features please run:
    minikube addons enable metrics-server
* Verifying dashboard health ...
* Launching proxy ...
* Verifying proxy health ...
* Opening http://127.0.0.1:50490/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...
```

127.0.0.1:50490/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/workloads?namespace=default

Google Chrome isn't your default browser [Set as default](#)

kubernetes default Search

### Workloads

- Workloads N
- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets
- Service
- Ingresses N
- Ingress Classes
- Services N
- Config and Storage
- Config Maps N
- Persistent Volume Claims N
- Secrets N
- Storage Classes
- Cluster
- Cluster Role Bindings

#### Workload Status

The diagram illustrates the relationship between Kubernetes workloads. It features three green circles. The top-left circle is labeled 'Deployments' with 'Running: 1' below it. The top-right circle is labeled 'Pods' with 'Running: 4' below it. The bottom-center circle is labeled 'Replica Sets' with 'Running: 1' below it. A line connects the 'Deployments' circle to the 'Replica Sets' circle, and another line connects the 'Replica Sets' circle to the 'Pods' circle.

Windows taskbar: Type here to search, 28°C, 11:53, 14-10-2025

127.0.0.1:53706/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/deployment?namespace=default

kubernetes default Search

### Workloads > Deployments

- Workloads N
- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets
- Service
- Ingresses N
- Ingress Classes
- Services N
- Config and Storage

#### Deployments

Name	Images	Labels	Pods	Created ↑
mynginx	nginx	app: mynginx	4 / 4	44 minutes ago

Deployments				
Name	Images	Labels	Pods	Created
mynginx	nginx	app: mynginx	4 / 4	44 minutes ago

Pods								
Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	
mynginx-79bb8756c7-586gv	nginx	app: mynginx pod-template-hash: 79bb8756c7	minikube	Running	0	-	-	
mynginx-79bb8756c7-74cxp	nginx	app: mynginx pod-template-hash: 79bb8756c7	minikube	Running	0	-	-	
mynginx-79bb8756c7-xl9f4	nginx	app: mynginx pod-template-hash: 79bb8756c7	minikube	Running	0	-	-	
mynginx-79bb8756c7-lbhuj	nginx	app: mynginx pod-template-hash: 79bb8756c7	minikube	Running	0	-	-	

Replica Sets				
Name	Images	Labels	Pods	Created ↑
mynginx-79bb8756c7	nginx	app: mynginx pod-template-hash: 79bb8756c7	4 / 4	45 minutes ago

## Nagios Automation Steps

### Step 1: Pull the Nagios Docker Image

- Open a terminal and run:

```
docker pull jasonrivers/nagios:latest
```



```

^ Removed all traces of the "minikube" cluster.
PS C:\Windows\system32> docker pull jasonrivers/nagios:latest
latest: Pulling from jasonrivers/nagios
Digest: sha256:2a7c2b20d118ba92b47b69a3901e68dd7664617801b94e560bc4d6564d6ae54
Status: Image is up to date for jasonrivers/nagios:latest
docker.io/jasonrivers/nagios:latest
PS C:\Windows\system32> docker run --name nagiosdemo -p 8888:80 jasonrivers/nagios:latest
docker: Error response from daemon: Ports are not available: exposing port TCP 0.0.0.0:8888 -> 0.0.0.0:0: listen tcp 0.0.0.0:8888: bind: Only one usage of each socket address (prot
ocol/network address/port) is normally permitted.
PS C:\Windows\system32> docker run --name nagiosdemo -p 8899:80 jasonrivers/nagios:latest
docker: Error response from daemon: Conflict. The container name "/nagiosdemo" is already in use by container "1502bd75ba729139176cb5088fc944fb886d8c4d797f5d059fd5f2cfc03ed43". Yo
u have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.
PS C:\Windows\system32> docker run --name nagiosdemo -p 8899:80 jasonrivers/nagios:latest
docker: Error response from daemon: Conflict. The container name "/nagiosdemo" is already in use by container "1502bd75ba729139176cb5088fc944fb886d8c4d797f5d059fd5f2cfc03ed43". Yo
u have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.
PS C:\Windows\system32> docker ps -a
CONTAINER ID        IMAGE               COMMAND                  CREATED              STATUS              PORTS              NAMES
1502bd75ba72        jasonrivers/nagios:latest    "/usr/local/bin/star..." 3 minutes ago       Created            0.0.0.0:5000->5000/tcp    nagiosdemo
b3893fa7a382        new_se-web          "python app.py"           4 weeks ago         Exited (255) 3 weeks ago    5432/tcp              new_se-web-1
593434a22af8        postgres:13         "docker-entrypoint.s..." 4 weeks ago         Exited (255) 3 weeks ago    5432/tcp              new_se-db-1
07297a2b4066        nginx:latest        "/docker-entrypoint..." 4 weeks ago         Exited (255) 3 weeks ago    0.0.0.0:3033->80/tcp    se_lab-web-1
6d93caf02ac6        nginx:latest        "/docker-entrypoint..." 7 weeks ago         Exited (255) 6 weeks ago    0.0.0.0:8089->80/tcp    compose-web-1
848b6be09cf2        postgres:15         "docker-entrypoint.s..." 7 weeks ago         Exited (255) 6 weeks ago    5432/tcp              compose-db-1
f36f184f39c4        redis:alpine        "docker-entrypoint.s..." 7 weeks ago         Exited (255) 6 weeks ago    6379/tcp              compose-redis-1
6591ec4949a5        b00e01ce0620        "docker-entrypoint.s..." 9 months ago        Up 29 minutes       0.0.0.0:8000->80/tcp    exten-wordpress-1
7630d4c64132        mysql:5.7           "docker-entrypoint.s..." 9 months ago        Up 29 minutes       3306/tcp, 33060/tcp    exten-db-1
880f3e741146        jasonrivers/nagios:latest    "/usr/local/bin/star..." 9 months ago        Created            nagiosexam
7629619819ed        jasonrivers/nagios:latest    "/usr/local/bin/star..." 9 months ago        Created            nagios
173f462c7080        jasonrivers/nagios:latest    "/usr/local/bin/star..." 9 months ago        Exited (4) 9 months ago    nagios4
PS C:\Windows\system32> docker rm nagiosdemo
>>
nagiosdemo

```

## Step 2: Run Nagios

- Command:

```
docker run --name nagiosdemo -p 8898:80 jasonrivers/nagios:latest
```

```

^ Removed all traces of the "minikube" cluster.
PS C:\Windows\system32> docker pull jasonrivers/nagios:latest
latest: Pulling from jasonrivers/nagios
Digest: sha256:2a7c2b20d118ba92b47b69a3901e68dd7664617801b94e560bc4d6564d6ae54
Status: Image is up to date for jasonrivers/nagios:latest
docker.io/jasonrivers/nagios:latest
PS C:\Windows\system32> docker run --name nagiosdemo -p 8888:80 jasonrivers/nagios:latest
docker: Error response from daemon: Ports are not available: exposing port TCP 0.0.0.0:8888 -> 0.0.0.0:0: listen tcp 0.0.0.0:8888: bind: Only one usage of each socket address (prot
ocol/network address/port) is normally permitted.
PS C:\Windows\system32> docker run --name nagiosdemo -p 8899:80 jasonrivers/nagios:latest
docker: Error response from daemon: Conflict. The container name "/nagiosdemo" is already in use by container "1502bd75ba729139176cb5088fc944fb886d8c4d797f5d059fd5f2cfc03ed43". Yo
u have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.
PS C:\Windows\system32> docker run --name nagiosdemo -p 8899:80 jasonrivers/nagios:latest
docker: Error response from daemon: Conflict. The container name "/nagiosdemo" is already in use by container "1502bd75ba729139176cb5088fc944fb886d8c4d797f5d059fd5f2cfc03ed43". Yo
u have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.
PS C:\Windows\system32> docker ps -a
CONTAINER ID        IMAGE               COMMAND                  CREATED              STATUS              PORTS              NAMES
1502bd75ba72        jasonrivers/nagios:latest    "/usr/local/bin/star..." 3 minutes ago       Created            0.0.0.0:5000->5000/tcp    nagiosdemo
b3893fa7a382        new_se-web          "python app.py"           4 weeks ago         Exited (255) 3 weeks ago    5432/tcp              new_se-web-1
593434a22af8        postgres:13         "docker-entrypoint.s..." 4 weeks ago         Exited (255) 3 weeks ago    5432/tcp              new_se-db-1
07297a2b4066        nginx:latest        "/docker-entrypoint..." 4 weeks ago         Exited (255) 3 weeks ago    0.0.0.0:3033->80/tcp    se_lab-web-1
6d93caf02ac6        nginx:latest        "/docker-entrypoint..." 7 weeks ago         Exited (255) 6 weeks ago    0.0.0.0:8089->80/tcp    compose-web-1
848b6be09cf2        postgres:15         "docker-entrypoint.s..." 7 weeks ago         Exited (255) 6 weeks ago    5432/tcp              compose-db-1
f36f184f39c4        redis:alpine        "docker-entrypoint.s..." 7 weeks ago         Exited (255) 6 weeks ago    6379/tcp              compose-redis-1
6591ec4949a5        b00e01ce0620        "docker-entrypoint.s..." 9 months ago        Up 29 minutes       0.0.0.0:8000->80/tcp    exten-wordpress-1
7630d4c64132        mysql:5.7           "docker-entrypoint.s..." 9 months ago        Up 29 minutes       3306/tcp, 33060/tcp    exten-db-1
880f3e741146        jasonrivers/nagios:latest    "/usr/local/bin/star..." 9 months ago        Created            nagiosexam
7629619819ed        jasonrivers/nagios:latest    "/usr/local/bin/star..." 9 months ago        Created            nagios
173f462c7080        jasonrivers/nagios:latest    "/usr/local/bin/star..." 9 months ago        Exited (4) 9 months ago    nagios4
PS C:\Windows\system32> docker rm nagiosdemo
>>
nagiosdemo

```

```

Error response from daemon: No such container: nagiosdemo
PS C:\Windows\system32> docker run --name nagiosdemo -p 8888:80 jasonrivers/nagios:latest
>
Adding password for user nagiosadmin
chown: warning: '.' should be '': 'nagios.nagios'
Started runsvdir, PID is 13
checking permissions for nagios & nagiosgraph
rsyslogd: [origin software="rsyslogd" swVersion="8.2312.0" x-pid="22" x-info="https://www.rsyslog.com"] start
nagios: Nagios 4.5.7 starting... (PID=20)

Nagios Core 4.5.7
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2024-10-24
License: GPL

Website: https://www.nagios.org
Nagios 4.5.7 starting... (PID=20)
Local time is Tue Oct 14 06:48:16 UTC 2025
nagios: Local time is Tue Oct 14 06:48:16 UTC 2025
nagios: LOG VERSION: 2.0
wproc: Successfully registered manager as @wproc with query handler
nagios: qh: Socket '/opt/nagios/var/rw/nagios.qh' successfully initialized
nagios: qh: core query handler registered
nagios: qh: echo service query handler registered
nagios: qh: help for the query handler registered
nagios: wproc: Successfully registered manager as @wproc with query handler
wproc: Registry request: name=Core Worker 37;pid=37nagios: wproc: Registry request: name=Core Worker 37;pid=37

wproc: Registry request: name=Core Worker 38;pid=38
wproc: Registry request: name=Core Worker 39;pid=39
wproc: Registry request: name=Core Worker 41;pid=41
nagios: wproc: Registry request: name=Core Worker 38;pid=38
nagios: wproc: Registry request: name=Core Worker 39;pid=39
nagios: wproc: Registry request: name=Core Worker 41;pid=41
wproc: Registry request: name=Core Worker 40;pid=40nagios: wproc: Registry request: name=Core Worker 40;pid=40

wproc: Registry request: name=Core Worker 42;pid=42
nagios: wproc: Registry request: name=Core Worker 42;pid=42
Successfully launched command file worker with pid 50
nagios: Successfully launched command file worker with pid 50
postfix/master[26]: daemon started -- version 3.8.6, configuration /etc/postfix
nagios: SERVICE ALERT: localhost;Current Load;WARNING;SOFT;1;WARNING - load average: 3.16, 3.16, 3.08

```

### Step 3: Access Nagios Dashboard

- Open your browser and navigate to:

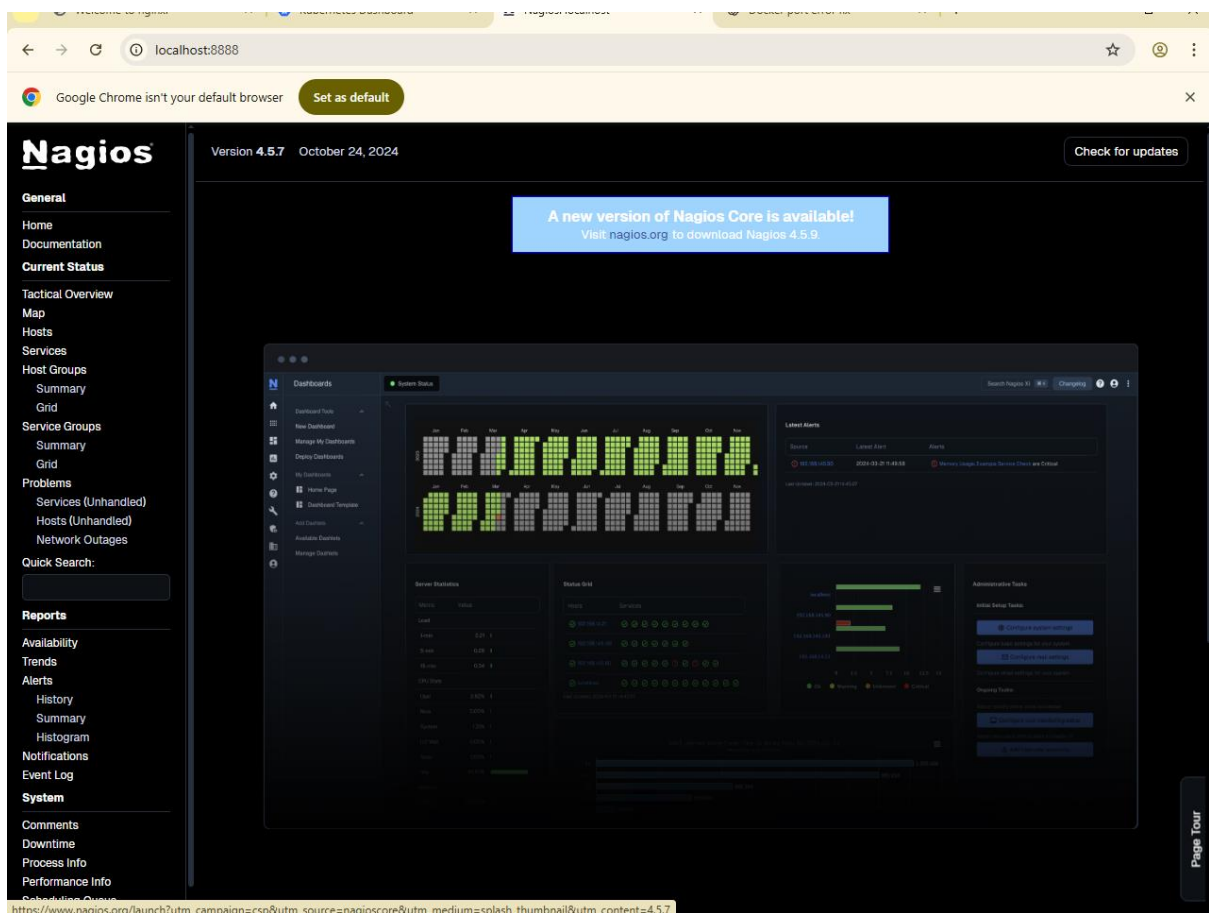
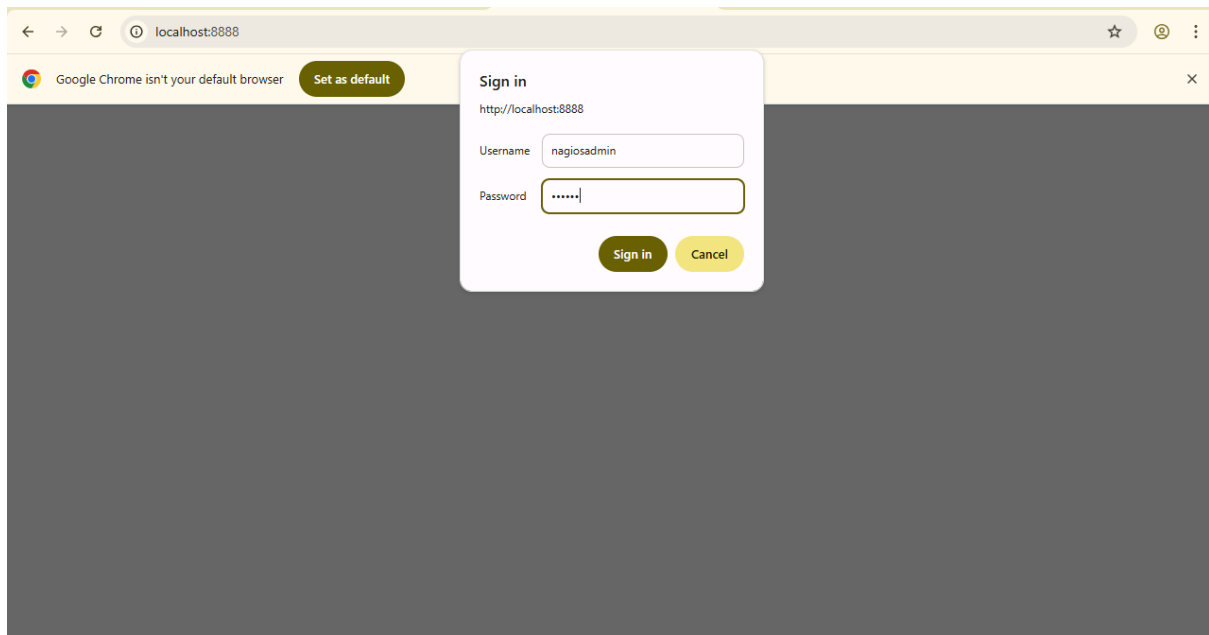
`http://localhost:8888`

- **Login Credentials:**

- Username: nagiosadmin
- Password: nagios

- Once logged in, explore:

- Hosts: View systems being monitored.
- Services: Check tasks being monitored (e.g., CPU usage).
- Alerts: Access recent notifications.



[https://www.nagios.org/launch?utm\\_campaign=csp&utm\\_source=nagioscore&utm\\_medium=splash\\_thumbnail&utm\\_content=4.5.7](https://www.nagios.org/launch?utm_campaign=csp&utm_source=nagioscore&utm_medium=splash_thumbnail&utm_content=4.5.7)

Google Chrome isn't your default browser

Set as default

Nagios

General

Home

Documentation

Current Status

Tactical Overview

Map

Hosts

Services

Host Groups

Summary

Grid

Service Groups

Summary

Grid

Problems

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Hosts (Unhandled)

Network Outages

Quick Search:

Reports

Availability

Trends

Alerts

History

Summary

Histogram

Notifications

Event Log

System

Comments

Downtime

Process Info

Performance Info

Scheduling Queue

Current Network Status

Last Updated: Tue Oct 14 06:52:47 UTC 2025

Updated every 90 seconds

Nagios® Core™ 4.5.7 - www.nagios.org

Logged in as nagiosadmin

View Service Status Detail For All Host Groups

View Status Overview For All Host Groups

View Status Summary For All Host Groups

View Status Grid For All Host Groups

Host Status Totals

Up Down Unreachable Pending

1 0 0 0

All Problems All Types

0 1

Service Status Totals

Ok Warning Unknown Critical Pending

5 1 0 0 1

All Problems All Types

1 7

Host Status Details For All Host Groups

Limit Results: 100

Host	Status	Last Check	Duration	Status Information
localhost	UP	10-14-2025 06:50:24	0d 0h 4m 30s	PING OK - Packet loss = 0%, RTA = 0.08 ms

Results 1 - 1 of 1 Matching Hosts

Google Chrome isn't your default browser

Set as default

Nagios

General

Home

Documentation

Current Status

Tactical Overview

Map

Hosts

Services

Host Groups

Summary

Grid

Service Groups

Summary

Grid

Problems

Services (Unhandled)

Hosts (Unhandled)

Network Outages

Quick Search:

Reports

Availability

Trends

Alerts

History

Summary

Histogram

Notifications

Event Log

System

Comments

Downtime

Process Info

Performance Info

Scheduling Queue

Alert History

Last Updated: Tue Oct 14 06:53:49 UTC 2025

Nagios® Core™ 4.5.7 - www.nagios.org

Logged in as nagiosadmin

View Status Detail For All Hosts

View Notifications For All Hosts

Latest

Archive

All Hosts and Services

Log File Navigation

Tue Oct 14 00:00:00 UTC 2025

to

Present.

File: /opt/nagios/var/nagios.log

State type options:

All state types

History detail level for all hosts:

All alerts

☐ Hide Flapping Alerts

☐ Hide Downtime Alerts

☐ Hide Process Messages

☐ Older Entries First

Update

October 14, 2025 06:00

[1] [10-14-2025 06:53:24] SERVICE ALERT: localhost:HTTP;WARNING;HARD;4;HTTP WARNING: HTTP/11 401 Unauthorized - 695 bytes in 0.000 second response time

[1] [10-14-2025 06:52:24] SERVICE ALERT: localhost:HTTP;WARNING;SOFT;3;HTTP WARNING: HTTP/11 401 Unauthorized - 695 bytes in 0.002 second response time

[1] [10-14-2025 06:51:24] SERVICE ALERT: localhost:HTTP;WARNING;SOFT;2;HTTP WARNING: HTTP/11 401 Unauthorized - 695 bytes in 0.001 second response time

[1] [10-14-2025 06:50:58] SERVICE ALERT: localhost:Current Load;OK;SOFT;3;OK - load average: 2.40, 2.88, 2.99

[1] [10-14-2025 06:50:24] SERVICE ALERT: localhost:HTTP;WARNING;SOFT;1;HTTP WARNING: HTTP/11 401 Unauthorized - 695 bytes in 0.001 second response time

[1] [10-14-2025 06:49:58] SERVICE ALERT: localhost:Current Load;WARNING;SOFT;2;WARNING - load average: 2.83, 3.04, 3.04

[1] [10-14-2025 06:48:58] SERVICE ALERT: localhost:Current Load;WARNING;SOFT;1;WARNING - load average: 3.16, 3.16, 3.08

[1] [10-14-2025 06:48:16] Nagios 4.5.7 starting... (PID=20)

## Step 4: Monitoring Host Details

### 1. Navigate to the Host Information Page:

- Select a host from the **Hosts** menu.

### 2. Key Details:

- Host Status: Indicates if the system is UP or DOWN.
- Metrics: View CPU usage, memory status, and network activity.
- Actions: Reschedule checks, disable notifications, or schedule downtime.

The screenshot displays the Nagios web interface in a Google Chrome browser window. The address bar shows 'localhost:8888'. The interface has a dark sidebar on the left with a menu including 'General', 'Current Status', 'Tactical Overview', 'Map', 'Hosts', 'Services', 'Host Groups', 'Service Groups', 'Problems', 'Quick Search', 'Reports', 'Availability', 'Trends', 'Alerts', 'System', 'Comments', 'Downtime', 'Process Info', 'Performance Info', and 'Scheduling Queue'. The main content area is titled 'Host Information' and shows details for the host 'localhost (localhost)'. It includes a 'Host State Information' section with status 'UP', performance data, and various check settings. To the right is a 'Host Commands' section with a list of actions like 'Locate host on map', 'Disable active checks', 'Re-schedule the next check', etc. At the bottom is a 'Host Comments' section with a table for adding and viewing comments. The browser's taskbar at the bottom shows various application icons and the system clock indicating 12:25 on 14-10-2025.

**Nagios**

**Host Information**  
Last Updated: Tue Oct 14 06:55:28 UTC 2025  
Updated every 90 seconds  
Nagios® Core™ 4.5.7 - www.nagios.org  
Logged in as nagiosadmin

View Status Detail For This Host  
View Alert History For This Host  
View Trends For This Host  
View Alert Histogram For This Host  
View Availability Report For This Host  
View Notifications For This Host

Host  
**localhost**  
(localhost)

Member of  
linux-servers

127.0.0.1

**Host State Information**

**Host Status:** **UP** (for 0d 0h 7m 11s)  
**Status Information:** PING OK - Packet loss = 0%, RTA = 0.08 ms  
**Performance Data:** rta=0.077000ms;3000.000000;5000.000000;0.000000 pl=0%;80;100;0  
**Current Attempt:** 1/10 (HARD state)  
**Last Check Time:** 10-14-2025 06:50:24  
**Check Type:** ACTIVE  
**Check Latency / Duration:** 0.000 / 4.095 seconds  
**Next Scheduled Active Check:** 10-14-2025 06:55:24  
**Last State Change:** 10-14-2025 06:48:17  
**Last Notification:** N/A (notification 0)  
**Is This Host Flapping?** **NO** (0.00% state change)  
**In Scheduled Downtime?** **NO**  
**Last Update:** 10-14-2025 06:55:25 ( 0d 0h 0m 3s ago)

**Active Checks:** **ENABLED**  
**Passive Checks:** **ENABLED**  
**Obsessing:** **ENABLED**  
**Notifications:** **ENABLED**  
**Event Handler:** **ENABLED**  
**Flap Detection:** **ENABLED**

**Host Commands**

- Locate host on map
- Disable active checks of this host
- Re-schedule the next check of this host
- Submit passive check result for this host
- Stop accepting passive checks for this host
- Stop obsessing over this host
- Disable notifications for this host
- Send custom host notification
- Schedule downtime for this host
- Schedule downtime for all services on this host
- Disable notifications for all services on this host
- Enable notifications for all services on this host
- Schedule a check of all services on this host
- Disable checks of all services on this host
- Enable checks of all services on this host
- Disable event handler for this host
- Disable flap detection for this host
- Clear flapping state for this host

**Host Comments**

Add a new comment Delete all comments

Entry Time	Author	Comment	Comment ID	Persistent	Type	Expires	Actions
This host has no comments associated with it							

Page Tour

## Step 5: Stop and Remove Nagios

## 1. Stop the Container:

- Command:

```
docker stop nagiosdemo
```

## 2. Delete the Container:

- Command:

```
docker rm nagiosdemo
```

## 3. Remove the Image (Optional):

- List images:

```
docker images
```

- Delete the Nagios image:

```
docker rmijasonrivers/nagios:latest
```

4. Observe the docker containers in DockerHub, we can see the latest Nagios Installed running on port:8888

```
ok: down: syslogd: 1s, normally up, want up
ok: down: nscd: 0s, normally up
ok: down: rsyslog: 1s, normally up
ok: down: postfix: 0s, normally up
PS C:\Windows\system32> docker stop nagiosdemo
nagiosdemo
PS C:\Windows\system32> docker rm nagiosdemo
nagiosdemo
PS C:\Windows\system32> docker images
REPOSITORY              TAG                IMAGE ID           CREATED            SIZE
new_se-web               latest             cf340b1e5283      5 weeks ago       1.22GB
mongo                    latest             6ca2791ceecce     8 weeks ago       200MB
budarajumadhurika/redis1 latest             9275ee683979      8 weeks ago       200MB
redisnew                 latest             987c376c7276      8 weeks ago       100MB
redis                    alpine            bc51cf4f1fe0      2 months ago      629MB
postgres                 15                aedabd10a05c      2 months ago      620MB
nginx                    latest            33e00bc7ca9e      2 months ago      279MB
wordpress                latest            c5f075fe71c9      2 months ago      1.04GB
ubuntu                   latest            7c06e91f61fa      2 months ago      117MB
<none>                   <none>            b06e01ce0620      10 months ago     994MB
jasonrivers/nagios       latest            2a7c2b20d118      11 months ago     1.36GB
docker/desktop-kubernetes kubernetes-v1.30.5-cni-v1.4.0-critools-v1.29.0-cri-dockerd-v0.3.11-1-debian 7a7b02256c8d      12 months ago     625MB
registry.k8s.io/kube-apiserver v1.30.5          7746ea55ad74      13 months ago     153MB
registry.k8s.io/kube-scheduler v1.30.5          62c91756a3c9      13 months ago     84.6MB
registry.k8s.io/kube-controller-manager v1.30.5          bbd15d257294      13 months ago     146MB
registry.k8s.io/kube-proxy v1.30.5          fa20f91153b9      13 months ago     118MB
gcr.io/k8s-minikube/kicbase v0.0.45          e7c9bc3bc515      13 months ago     1.81GB
gcr.io/k8s-minikube/kicbase <none>            81df28859520      13 months ago     1.81GB
registry.k8s.io/coredns/coredns v1.11.3          9caab8f6238b      14 months ago     85.1MB
registry.k8s.io/etcd v2.0              44a8e24dcbba      20 months ago     211MB
mysql                    5.7               4bc6bc963e6d      22 months ago     689MB
docker/desktop-vpnkit-controller dc331cb22850be0cdd97c84a9cfecaf44a1afb6e 7ecf567ea070      2 years ago       47MB
registry.k8s.io/pause 3.9               7031c1b28338      3 years ago       1.07MB
docker/desktop-storage-provisioner v2.0             115d77efe6e2      4 years ago       59.2MB
registry.k8s.io/etcd 3.5.15-0         a6dc63e0ebcf      55 years ago      56.9MB
PS C:\Windows\system32> docker rmijasonrivers/nagios:latest
docker: 'rmijasonrivers/nagios:latest' is not a docker command.
See 'docker --help'
PS C:\Windows\system32>
```

1. Your Pod keeps restarting repeatedly. What will you do?

**ANS:** Check the pod logs using `kubectl logs <pod-name>`, review the events with `kubectl describe pod <pod-name>`, check resource limits (CPU/memory), and verify readiness and liveness probes.

2. A Kubernetes pod is stuck in a "Pending" state. What could be the possible reasons, and how would you troubleshoot it?

**ANS:** Possible causes: insufficient resources, unschedulable nodes, or affinity issues. Troubleshoot with `kubectl describe pod <pod-name>` to check events, node capacity, and scheduling issues.

3. How would you debug a failed deployment in Kubernetes?

**ANS:** Use `kubectl describe deployment <deployment-name>`, check pod logs (`kubectl logs <pod-name>`), and check events (`kubectl get events`). Look for issues in replicas, resources, or probes.

4. You have a Kubernetes Deployment with multiple replicas, and some pods are failing health checks. How would you identify the root cause and fix it?

**ANS:** Identify the cause by checking the pod's logs (`kubectl logs <pod-name>`), reviewing the health check configuration, and verifying pod resource consumption. Adjust resources or fix health check configurations.

5. How do you roll back a faulty deployment?

**ANS:** Use `kubectl rollout undo deployment/<deployment-name>` to rollback to the previous version.

6. How do you debug a running Pod?

**ANS:** Use `kubectl logs <pod-name>`, check the pod status with `kubectl describe pod <pod-name>`, and inspect events (`kubectl get events`).

7. You need to expose a local service externally. How to do?

**ANS:** Use `kubectl expose pod <pod-name> --type=LoadBalancer` or create a service of type NodePort or LoadBalancer to expose the service externally.

8. How to start and stop Nagios

**ANS:**

- **Start:** sudo systemctl start nagios
- **Stop:** sudo systemctl stop nagios

9. You installed Nagios but the web interface shows “*Unable to connect to Nagios process*”. How to resolve this?

**ANS:** Ensure Nagios is running (sudo systemctl status nagios), check Nagios configuration (/usr/local/nagios/etc/nagios.cfg), and restart Nagios (sudo systemctl restart nagios).

10. You added a new host in Nagios, but it’s not appearing on the web interface.how to check?

**ANS:** Ensure the configuration file for the new host is correct, and reload Nagios with sudo systemctl reload nagios. Check Nagios logs for errors.

11. How can you check whether Nagios is running properly?

**ANS:** Use sudo systemctl status nagios to verify if the service is active and running.

12. How do you view Nagios logs in real-time

**ANS:** Use tail -f /usr/local/nagios/var/nagios.log to view logs in real-time.

13. What are the advantages of using Nagios?

**ANS:** Provides comprehensive monitoring for networks, servers, and applications; customizable alerts; robust community support; highly extensible with plugins.



