

Docker Commands

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Windows PowerShell
Run 'docker COMMAND --help' for more information on a command.
For more help on how to use Docker, head to https://docs.docker.com/go/guides/

PS C:\Users\ryand\Desktop\sem5\comp3123> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
PS C:\Users\ryand\Desktop\sem5\comp3123> docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
22c1503eb72e   comp3095_group-event-service   "java -jar app.jar"    10 hours ago   Exited (143) 10 minutes ago           event-service
2db437f384b6   comp3095_group-goal-tracking-service   "java -jar app.jar"    10 hours ago   Exited (143) 10 minutes ago           goal-tracking-service
7b8992a9da91   comp3095_group-wellness-resource-service   "java -jar app.jar"    10 hours ago   Exited (143) 10 minutes ago           wellness-resource-service
5d7c082e39a9   postgres:16   "docker-entrypoint.s..." 10 hours ago   Exited (0) 6 hours ago               postgres
5d3f0772688b   mongo:7       "docker-entrypoint.s..." 10 hours ago   Exited (0) 6 hours ago               mongod
82af412a9d7a   redis:7-alpine   "docker-entrypoint.s..." 10 hours ago   Exited (0) 6 hours ago               redis
44cf7456cd6   mongo:latest   "docker-entrypoint.s..." 6 weeks ago    Exited (255) 4 weeks ago             0.0.0.0:27017->27017/tcp comp3095-mongod
58ac3996e4f9   shalchian/notely:latest   "notely"               6 months ago   Exited (2) 6 months ago             adoring_golick
1d18cfabcc52   shalchian/notely:latest   "notely"               6 months ago   Exited (1) 6 months ago             reverent_raman
5bfc3a5cb1    shalchian/notely:latest   "notely"               6 months ago   Created                                quirky_wozniak
360cd1725c0   shalchian/learn-docker:0.2.0   "/bin/learn-docker"    6 months ago   Exited (2) 6 months ago             unruffled_accarthy
c932b3603161   docker/getting-started   "/docker-entrypoint..." 6 months ago   Exited (0) 6 months ago             fervent_hertz
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PS C:\Users\ryand\Desktop\sem5\comp3123> docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/

PS C:\Users\ryand\Desktop\sem5\comp3123>
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Class Exercise 08 - Docker Intro...A-Shahidhan/COMP3123React AppCreateVm-canonicalubuntu-24...

portal.azure.com/#view/HubExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscriptions/%2Fed07965-812b-40c2-93ed-5883acfd0299%2FresourceGroups/%2Fwk10-lab%2Fproviders/%2FMicrosoft.Resources/%2Fdeployments...1014140355@geneerbro...GLOBAL BROWSER COLLAPSE (auto-...

Microsoft AzureSearch resources, services, and docs (G+)

Copilot

Home >CreateVm-canonical.ubuntu-24_04-lts-server-20251107235737 | Overview

Deployment

Search

DeleteCancelRedeployDownloadRefresh

OverviewInputsOutputsTemplate

✓ Your deployment is complete

Deployment name : CreateVm-canonical.ubuntu-24_04-lts-server-20251107235737
Subscription : Azure for Students
Resource group : wk10-lab

Start time : 11/8/2025, 12:02:32 AM
Correlation ID : 64bcef3f-f6f0-4600-baa4-6d3cc2d61fb2

Deployment details

Next steps

Set up auto-shutdown Recommended
Monitor VM health, performance, and network dependencies Recommended
Run a script inside the virtual machine Recommended

Go to resourceCreate another VMScale out your VM

Give feedback
Tell us about your experience with deployment

Cost management

Get notified to stay within your budget and prevent unexpected charges on your bill.
Set up cost alerts >

Add or remove favorites by pressing Ctrl+Shift+F

```

azureuser@20.169.217.99: Permission denied (publickey).
PS C:\Users\ryan\Desktop> ssh -i ubuntu-wk10_key.pem azureuser@20.169.217.99
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1012-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Sat Nov  8 05:10:09 UTC 2025

System load: 0.01          Processes:           114
Usage of /:  5.6% of 28.02GB   Users logged in:    0
Memory usage: 29%            IPv4 address for eth0: 172.16.0.4
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@ubuntu-wk10:~$

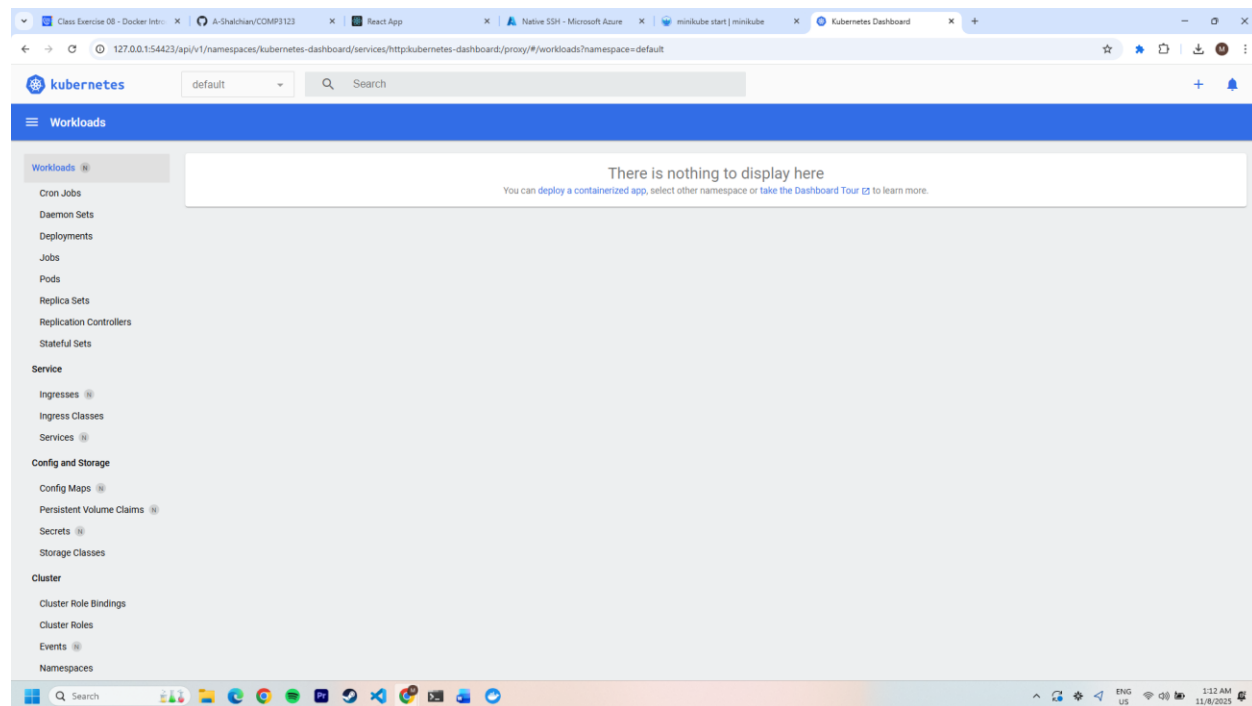
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Last login: Sat Nov  8 05:10:11 2025 from 198.96.87.110
azureuser@ubuntu-wk10:~$ sudo apt install curl wget git -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
curl is already the newest version (8.5.0-2ubuntu10.6).
curl set to manually installed.
wget is already the newest version (1.21.4-1ubuntu4.1).
wget set to manually installed.
git is already the newest version (1:2.43.0-1ubuntu7.3).
git set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 28 not upgraded.
azureuser@ubuntu-wk10:~$ java -version
openjdk version "17.0.16" 2025-07-15
OpenJDK Runtime Environment (build 17.0.16+8-Ubuntu-0ubuntu124.04.1)
OpenJDK 64-Bit Server VM (build 17.0.16+8-Ubuntu-0ubuntu124.04.1, mixed mode, sharing)
azureuser@ubuntu-wk10:~$ |

```

Minikube running



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Windows PowerShell
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PS C:\Users\ryand> minikube version
minikube version: v1.37.0
commit: 65318f4cfff9c12cc87ec9eb8fdcd57b25047f3
PS C:\Users\ryand> minikube start
minikube v1.37.0 on Microsoft Windows 11 Home 10.0.26100.6899 Build 26100.6899
* Automatically selected the docker driver. Other choices: virtualbox, ssh
* Using Docker Desktop driver with root privileges
* Starting "minikube" primary control-plane node in "minikube" cluster
* Pulling base image v0.0.48 ...
* Downloading Kubernetes v1.34.0 preload ...
  > preloaded-images-k8s-v18-v1...: 337.07 MiB / 337.07 MiB 100.00% 13.23 M
  > gcr.io/k8s-minikube/kicbase...: 488.52 MiB / 488.52 MiB 100.00% 9.74 Mi
* Creating docker container (CPUs=2, Memory=4096MB) ...
* 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 ...
* Configuring bridge CNI (Container Networking Interface) ...
* 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 1.29.2, 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:\Users\ryand> minikube dashboard
* Enabling dashboard ...
  * Using image docker.io/kubernetes/dashboard:v2.7.0
  * Using image docker.io/kubernetes/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://127.0.0.1:54423/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...
```

Kubernetes commands

```
Windows PowerShell
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PS C:\Users\ryand> kubectl version
Client Version: v1.29.2
Kustomize Version: v5.0.4-0.20230601165947-6ce0bf390ce3
Server Version: v1.34.0
WARNING: version difference between client (1.29) and server (1.34) exceeds the supported minor version skew of +/-1
PS C:\Users\ryand> kubectl cluster-info
Kubernetes control plane is running at https://127.0.0.1:63651
CoreDNS is running at https://127.0.0.1:63651/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy

To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.
PS C:\Users\ryand> kubectl get namespaces
NAME                STATUS    AGE
default             Active   2m16s
kube-node-lease     Active   2m16s
kube-public         Active   2m16s
kube-system         Active   2m16s
kubernetes-dashboard Active   82s
PS C:\Users\ryand> kubectl get pods
No resources found in default namespace.
PS C:\Users\ryand> kubectl get svc
NAME                TYPE                CLUSTER-IP    EXTERNAL-IP    PORT(S)    AGE
kubernetes          ClusterIP           10.96.0.1      <none>          443/TCP    2m21s
PS C:\Users\ryand> kubectl get deploy
No resources found in default namespace.
PS C:\Users\ryand> kubectl get nodes
NAME                STATUS    ROLES    AGE    VERSION
minikube           Ready    control-plane  2m35s  v1.34.0
PS C:\Users\ryand>
```