DOCKER

Install Link:

https://docs.docker.com/desktop/setup/install/windows-install/

Install Docker Desktop on Windows

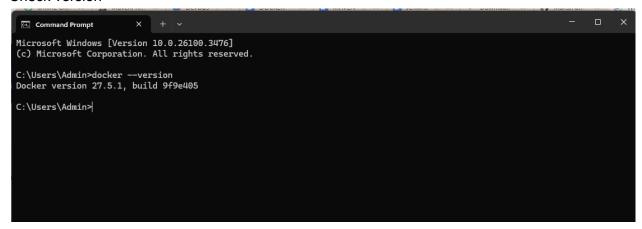
Docker Desktop terms

Commercial use of Docker Desktop in larger enterprises (more than 250 employees OR more than \$10 million USD in annual revenue) requires a <u>paid subscription</u> ☑.

This page contains the download URL, information about system requirements, and instructions on how to install Docker Desktop for Windows.

Docker Desktop for Windows - x86_64

Check version



C:\Users\Admin>docker version

Client:

 Version:
 27.5.1

 API version:
 1.47

 Go version:
 gol.22.11

 Git commit:
 9f9e405

Built: Wed Jan 22 13:41:44 2025

OS/Arch: windows/amd64
Context: desktop-linux

Server: Docker Desktop 4.38.0 (181591)

Engine:

Version: 27.5.1

API version: 1.47 (minimum version 1.24)

Go version: go1.22.11 Git commit: 4c9b3b0

Built: Wed Jan 22 13:41:17 2025

OS/Arch: linux/amd64

Experimental: false

containerd:

Version: 1.7.25

GitCommit: bcc810d6b9066471b0b6fa75f557a15a1cbf31bb

runc:

Version: 1.1.12

GitCommit: v1.1.12-0-g51d5e946

docker-init:

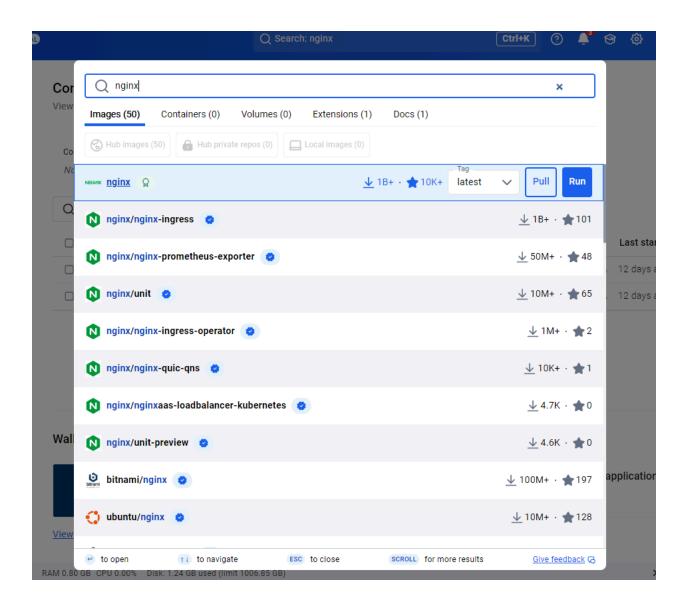
Version: 0.19.0 GitCommit: de40ad0

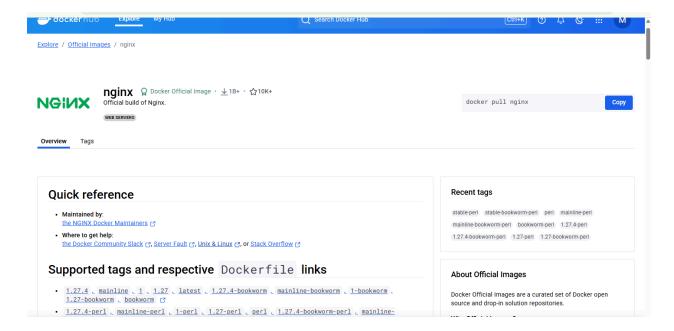
C:\Users\Admin>

C:\Users\Admin>docker images

CREATED REPOSITORY IMAGE ID TAG SIZE <none> 0e6313ea470f 10 days ago 117MB <none> ubuntu latest 72297848456d 8 weeks ago 117MB hello-world latest 7e1a4e2d11e2 2 months ago 20.4kB

C:\Users\Admin>





Docker images

```
C:\Users\Admin>docker images
REPOSITORY
              TAG
                         IMAGE ID
                                        CREATED
                                                        SIZE
<none>
              <none>
                         0e6313ea470f
                                        11 days ago
                                                        117MB
                         72297848456d
ubuntu
              latest
                                        2 months ago
                                                        117MB
hello-world
              latest
                         7e1a4e2d11e2
                                        2 months ago
                                                        20.4kB
C:\Users\Admin>
```

Docker ps

-l, -a

```
C:\Users\Admin>docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
C:\Users\Admin>
```

```
C:\Users\Admin>docker ps
CONTAINER ID IMAGE
                        COMMAND
                                  CREATED STATUS
                                                      PORTS
                                                                NAMES
C:\Users\Admin>docker ps -l
CONTAINER ID IMAGE
                        COMMAND
                                      CREATED
                                                     STATUS
                                                                               PORTS
                                                                                         NAMES
9ff1e64cd5a3
                                                     Exited (137) 11 days ago
                         "/bin/bash"
                                                                                         agitated_mcclintock
                                      11 days ago
              ubuntu
C:\Users\Admin>docker ps
CONTAINER ID
              IMAGE
                         COMMAND
                                      CREATED
                                                     STATUS
                                                                               PORTS
                                                    Exited (137) 11 days ago
                                                                                         agitated_mcclintock
9ff1e64cd5a3
                         "/bin/bash"
              ubuntu
                                      11 days ago
                         "/bin/bash"
9921b72254e1
                                                     Exited (0) 11 days ago
              ubuntu
                                      11 days ago
                                                                                          serene_bose
```

```
C:\Users\Admin>docker ps
                                                                           -a
COMMAND
CONTAINER ID IMAGE
                                                                                                                                                       CREATED
                                                                                                                                                                                                           STATUS
                                                                                                                                                                                                                                                                                               PORTS
                                                                                                                                                                                                                                                                                                                              NAMES
                                                                                                                                                                                                         Exited (0) 20 seconds ago
Exited (137) 11 days ago
Exited (0) 11 days ago
                                                                             "/docker-entrypoint..."
 06a56096940a
                                                                                                                                                       26 seconds ago
                                                                                                                                                                                                                                                                                                                              keen solomon
                                             nginx
 9ff1e64cd5a3
                                                                                                                                                        11 days ago
                                                                                                                                                                                                                                                                                                                              agitated_mcclintock
                                            ubuntu
                                                                            "/bin/bash"
 9921b72254e1
                                             ubuntu
                                                                            "/bin/bash"
                                                                                                                                                        11 days ago
                                                                                                                                                                                                                                                                                                                              serene_bose
2025/03/29 06:10:55 [notice] 1#1: worker process 34 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 35 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 37 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 39 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: signal 29 (SIGIO) received 2025/03/29 06:10:55 [notice] 1#1: signal 17 (SIGCHLD) received from 37 2025/03/29 06:10:55 [notice] 1#1: signal 17 (SIGCHLD) received from 32 2025/03/29 06:10:55 [notice] 1#1: worker process 29 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 32 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 32 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: signal 29 (SIGIO) received 2025/03/29 06:10:55 [notice] 1#1: signal 17 (SIGCHLD) received from 36 2025/03/29 06:10:55 [notice] 1#1: worker process 36 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 36 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 40 exited with code 0 2025/03/29 06:10:55 [notice] 1#1: worker process 40 exited with code 0
C:\Users\Admin>docker ps -a
                                                                                                                                                                                  STATUS
Exited (0) 20 seconds ago
Exited (137) 11 days ago
Exited (0) 11 days ago
CONTAINER ID IMAGE
06a56096940a nginx
9ffle64cd5a3 ubuntu
                                                                  COMMAND
"/docker-entrypoint..."
"/bin/bash"
                                                                                                                                     CREATED
                                                                                                                                                                                                                                                              DORTS
                                                                                                                                                                                                                                                                                         NAMES
                                                                                                                                     26 seconds ago
11 days ago
11 days ago
                                                                                                                                                                                                                                                                                         keen_solomon
agitated_mcclintock
serene_bose
C:\Users\Admin>docker stop 06a56096940a
C:\Users\Admin>docker ps -a
CONTAINER ID IMAGE COMMAND
06a56096940a nginx "/docker
9ff1e64cd5a3 ubuntu "/bin/ba
                                                                                                                                                                                STATUS
Exited (0) 2 minutes ago
Exited (137) 11 days ago
Exited (0) 11 days ago
                                                                                                                                     CREATED
                                                                                                                                                                                                                                                         PORTS
                                                                                                                                                                                                                                                                                    NAMES
                                                                   "/docker-entrypoint..."
"/bin/bash"
                                                                                                                                      2 minutes ago
11 days ago
11 days ago
                                                                                                                                                                                                                                                                                    keen_solomon
agitated_mcclintock
 9921h7225#e1
                                       ubuntu
                                                                    "/bin/bash"
C:\Users\Admin>docker images
REPOSITORY TAG IMAGE ID
<none> <none> 0e6313ea470f
                                                                                                      11 days ago
7 weeks ago
2 months ago
2 months ago
                                                                                                                                                117MB
279MB
117MB
                                      latest
                                                                 124b44bfc9cc
72297848456d
                                      latest
 ubuntu
hello-world
                                     latest
                                                                 7e1a4e2d11e2
                                                                                                                                                20.4kB
```

C:\Users\Admin>docker ps --help Usage: docker ps [OPTIONS] List containers Aliases: docker container ls, docker container list, docker container ps, docker ps Options: -a, --all Show all containers (default shows just running) -f, --filter filter Filter output based on conditions provided --format string Format output using a custom template: 'table': Print output in table format with column headers (default) 'table TEMPLATE': Print output in table format using the given Go template 'json': Print in JSON format 'TEMPLATE': Print output using the given Go template. Refer to https://docs.docker.com/go/formatting/ for more information about formatting output with templates -n, --last int Show n last created containers (includes all states) (default -1) -l, --latest Show the latest created container (includes all states) Don't truncate output --no-trunc -q, --quiet Only display container IDs -s, --size Display total file sizes







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 nainx.org. Commercial support is available at nginx.com

Thank you for using nginx.

C:\Users\Admin>docker run -d -p4000:80 -p3000:80 nginx b1eba25be2d882d078fd66a22e68a0deea68c090e99671026fab70d7b1150153

C:\Users\Admin>

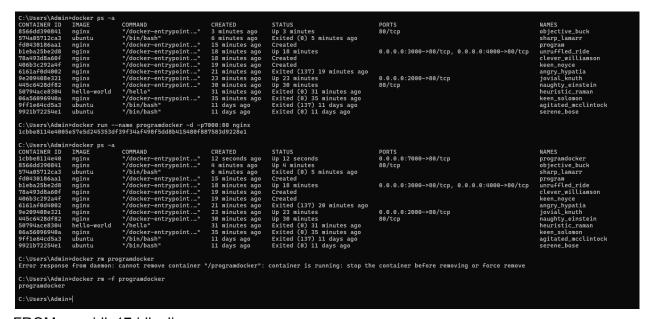




Welcome to nginx!

For online documentation and support please refer to $\underline{nginx.org}.$ Commercial support is available at $\underline{nginx.com}.$

Thank you for using nginx.



FROM openjdk:17-jdk-slim WORKDIR/app COPY target/*.jar app.jar EXPOSE 8080 ENTRYPOINT ["java","-jar", "app-jar"]

Build App

```
Command Prompt
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Admin> cd C:\simple-java-maven-app
C:\simple-java-maven-app>mvn clean package
[INFO] Scanning for projects...
[INFO]
                                          -< com.mycompany.app:my-app >--
[INFO] Building my-app 1.0-SNAPSHOT
[INFO] from pom.xml
[INFO]
                                                      ---[ jar ]--
[INFO] --- clean:3.2.0:clean (default-clean) @ my-app ---
[INFO] Deleting C:\simple-java-maven-app\target
[INFO] --- enforcer:3.5.0:enforce (enforce-maven) @ my-app ---
[INFO] Rule 0: org.apache.maven.enforcer.rules.version.RequireMavenVersion passed
[INFO] Rule 1: org.apache.maven.enforcer.rules.version.RequireJavaVersion passed
[INFO] --- resources:3.3.1:resources (default-resources) @ my-app ---
[INFO] skip non existing resourceDirectory C:\simple-java-maven-app\src\main\resources
[INFO]
[INFO] --- compiler:3.14.0:compile (default-compile) @ my-app ---
[INFO] Recompiling the module because of changed source code.
[INFO] Compiling 1 source file with javac [debug release 17] to target\classes
[INFO]
[INFO] --- resources:3.3.1:testResources (default-testResources) @ my-app ---
[INFO] skip non existing resourceDirectory C:\simple-java-maven-app\src\test\resources
```

C:\simple-java-maven-app>rename DockerFile.txt DockerFile

C:\simple-java-maven-app>docker build -t simple-java-maven-app

```
Command Prompt
ERROR: failed to solve: dockerfile parse error on line 2: unknown instruction: WORKDIR/app
C:\simple-java-maven-app>docker build -t simple-java-maven-app .
[+] Building 185.1s (9/9) FINISHED
                                                                                                   docker:desktop-linux
=> [internal] load build definition from Dockerfile
                                                                                                                   0.0s
=> => transferring dockerfile: 155B
                                                                                                                   0.0s
=> [internal] load metadata for docker.io/library/openjdk:17-jdk-slim
                                                                                                                   2.6s
=> [auth] library/openjdk:pull token for registry-1.docker.io
                                                                                                                   0.0s
=> [internal] load .dockerignore
=> => transferring context: 2B
                                                                                                                   0.0s
=> [1/3] FROM docker.io/library/openjdk:17-jdk-slim@sha256:aaa3b3cb27e3e520b8f116863d0580c438ed55ecfa0bc126b41 182.0s
=> => sha256:6ce99fdf16e86bd02f6ad66a0e1334878528b5a4b54878850a76e0c98a7a27d56 187.90MB / 187.90MB
=> => sha256:1fe172e4850f03bb45d41a20174112bc119fbfec42a650edbbd8491aee32e3c3 31.38MB / 31.38MB
                                                                                                                 180.5s
                                                                                                                 63.5s
=> extracting sha256:1fe172e4850f03bb45d41a20174112bc119fbfec42a650edbbd8491aee32e3c3
                                                                                                                  0.7s
=> extracting sha256:44d3aa8d076675d49d85180b0ced9daef210fe4fdff4bdbb422b9cf384e591d0
                                                                                                                   0.1s
=> => extracting sha256:6ce99fdf16e86bd02f6ad66a0e1334878528b5a4b5487850a76e0c08a7a27d56
                                                                                                                   1.4s
=> [internal] load build context
                                                                                                                   0.1s
=> => transferring context: 2.83kB
                                                                                                                   0.1s
=> [2/3] WORKDIR /app
=> [3/3] COPY target/*.jar app.jar
                                                                                                                   0.1s
                                                                                                                   0.0s
=> exporting to image
                                                                                                                   0.25
=> => exporting layers
                                                                                                                   0.1s
=> => exporting manifest sha256:e686eea6062053c2210d4f437b1d1ed8cb151a24989958d32f26eb8f2ba65e3e
                                                                                                                   0.0s
=> => exporting config sha256:1d3c170bf323f42f9c6cc31bf8e3f4dca3fbb9c53f175542a43f48e627dcd5f8
                                                                                                                   0.0s
=> exporting attestation manifest sha256:9478ad0cd68caeafa2796c4bc8a8ed3eaa9abe916ab946e877e3783efb8d0969
                                                                                                                   0.0s
=> exporting manifest list sha256:15d4dff8a5dabf9b4dad64b5af9131ab8555867<u>b7c484480a2fd7a5f58640ce6</u>
                                                                                                                   0.0s
=> => naming to docker.io/library/simple-java-maven-app:latest
                                                                                                                   0.0s
=> => unpacking to docker.io/library/simple-java-maven-app:latest
                                                                                                                   0.0s
C:\simple-java-maven-app>
```

```
C:\simple-java-maven-app>docker login
Authenticating with existing credentials...
Loain Succeeded
C:\simple-java-maven-app>docker tag simple-java-maven-app mansi2004patil/simple-java-maven-app:latest
C:\simple-java-maven-app>docker images
REPOSITORY
                                          TAG
                                                    IMAGE ID
                                                                    CREATED
                                                                                     SIZE
simple-java-maven-app
mansi2004patil/simple-java-maven-app
                                          latest
                                                    15d4dff8a5da
                                                                    4 minutes ago
                                                                                     642MB
                                                                    4 minutes ago
                                          latest
                                                    15d4dff8a5da
                                                                                     642MB
                                                    0e6313ea470f
                                                                    4 weeks ago
                                                                                     117MB
<none>
                                          <none>
                                                    124b44bfc9cc
                                                                    2 months ago
nainx
                                          latest
                                                                                     279MB
                                                                    2 months ago
                                                    72297848456d
                                                                                     117MB
ubuntu
                                          latest
hello-world
                                          latest
                                                    7e1a4e2d11e2
                                                                    2 months ago
                                                                                     20.4kB
C:\simple-java-maven-app>
```

```
C:\simple-java-maven-app>docker push mansi2004patil/simple-java-maven-app:latest
The push refers to repository [docker.io/mansi2004patil/simple-java-maven-app]
52b912cd6ad6: Pushed
1bc67afcad18: Pushed
44d3aa8d0766: Pushed
6ce99fdf16e8: Pushed
6ce99fdf16e8: Pushed
1fe172e4850f: Pushed
1fe172e4850f: Pushed
latest: digest: sha256:15d4dff8a5dabf9b4dad64b5af9131ab8555867b7c484480a2fd7a5f58640ce6 size: 856
C:\simple-java-maven-app>
```

