

Docker installation

- 1) `sudo apt-get remove docker-engine docker.io`
- 2) `sudo apt-get update`
- 3) `sudo apt install docker.io`
- 4) `sudo snap install docker`
- 5) `sudo docker run hello-world`
- 6) `sudo docker ps`
- 7) `sudo docker ps -a`
- 8) `sudo docker images`
- 9) `sudo docker pull mysql`
- 10) `sudo docker run -d -p0.0.0.0:80:80 mysql:latest`
- 11) `sudo docker run -it --name sl mysql /bin/bash`
- 12) `sudo docker start sl`
- 13) `sudo docker ps`
- 14) `sudo docker stop sl`
- 15) `sudo docker kill sl`
- 16) `sudo docker ps`
- 17) `sudo docker image rm -f image mysql`
- 18) `sudo docker ps -a`

```
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dona@dona-VirtualBox: ~

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

dona@dona-VirtualBox:~$ sudo apt-get remove docker-engine docker.io
[sudo] password for dona:
Reading package lists... Done
Building dependency tree
Reading state information... Done
Package 'docker.io' is not installed, so not removed
E: Unable to locate package docker-engine
dona@dona-VirtualBox:~$ sudo apt-get update
0% [Connecting to in.archive.ubuntu.com] [Waiting for headGet:1 http://security
.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal InRelease [265 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal/main amd64 Packages [970 kB]
Get:6 http://security.ubuntu.com/ubuntu focal-security/main i386 Packages [432
kB]
Get:7 http://in.archive.ubuntu.com/ubuntu focal/main i386 Packages [718 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu focal/main Translation-en [506 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu focal/main amd64 DEP-11 Metadata [494
kB]
Get:10 http://in.archive.ubuntu.com/ubuntu focal/main DEP-11 48x48 Icons [98.4
kB]
Get:11 http://in.archive.ubuntu.com/ubuntu focal/main DEP-11 64x64 Icons [163 k
B]
Get:12 http://in.archive.ubuntu.com/ubuntu focal/main DEP-11 64x64@2 Icons [15.
8 kB]

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is denied
dona@dona-VirtualBox:~$ sudo docker pull mysql
Using default tag: latest
latest: Pulling from library/mysql
c32ce6654453: Pull complete
415d08ee031a: Pull complete
7a38fec2542f: Pull complete
352881ee8fe9: Pull complete
b8e20da291b6: Pull complete
66c2a8cc1999: Pull complete
d3a3a8e49878: Pull complete
e33a48832bec: Pull complete
410b942b8b28: Pull complete
d5323c9dd265: Pull complete
3212737f31c0: Pull complete
d0032d4b0dc5: Pull complete
Digest: sha256:a0805d37d4d298bd61e0dfa61f0ddf6f4680b453fa25d7aad420485a62417eab
Status: Downloaded newer image for mysql:latest
docker.io/library/mysql:latest
dona@dona-VirtualBox:~$ sudo docker run -d -p0.0.0:80:80 mysql:latest
docker: Invalid ip address: 0.0.0.
See 'docker run --help'.
dona@dona-VirtualBox:~$ sudo docker run -it --name sl mysql/bin/bash
Unable to find image 'mysql/bin/bash:latest' locally
docker: Error response from daemon: pull access denied for mysql/bin/bash, repo
sitory does not exist or may require 'docker login': denied: requested access t
o the resource is denied.
See 'docker run --help'.
dona@dona-VirtualBox:~$ sudo docker start sl
```

```
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dona@dona-VirtualBox: ~

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/

dona@dona-VirtualBox:~$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
dona@dona-VirtualBox:~$ sudo docker ps -a
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
2729d54aa9c0   hello-world   "/hello"   33 seconds ago   Exited (0) 32 seconds ago   exciting_dijkstra
dona@dona-VirtualBox:~$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
hello-world    latest   feb5d9fea6a5   7 months ago   13.3kB
dona@dona-VirtualBox:~$ sudo docker pull install
Using default tag: latest

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Adding group docker (GID 134) ...
Done.
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /lib/systemd/system/docker.socket.
Setting up git (1:2.25.1-1ubuntu3.4) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for systemd (245.4-4ubuntu3.15) ...
dona@dona-VirtualBox:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:80f31da1ac7b312ba29d65080fddf797dd76acfb870e677f390d5acba9741b17
Status: Downloaded newer image for hello-world:latest

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

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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.
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   to your terminal.

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

```
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430 KB]
Fetched 49.8 MB in 4min 8s (201 kB/s)
Reading package lists... Done
dona@dona-VirtualBox:~$ sudo apt install docker.io
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  bridge-utils containerd git git-man liberror-perl pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools btrfs-progs cgroupfs-mount | cgroup-lite debootstrap
  docker-doc rinse zfs-fuse | zfsutils git-daemon-run | git-daemon-sysvinit
  git-doc git-el git-email git-gui gitk gitweb git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  bridge-utils containerd docker.io git git-man liberror-perl pigz runc
  ubuntu-fan
0 upgraded, 9 newly installed, 0 to remove and 177 not upgraded.
Need to get 74.3 MB of archives.
After this operation, 372 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 pigz amd64 2.4-1
[57.4 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal/main amd64 bridge-utils amd64 1
.6-2ubuntu1 [30.5 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 runc amd64 1
.1.0-0ubuntu1~20.04.1 [3,892 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 containerd a
md64 1.5.9-0ubuntu1~20.04.1 [33.0 MB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 docker.i
o amd64 20.10.12-0ubuntu2~20.04.1 [31.8 MB]
Deleted: sha256:ee73d1c3dcb3df64ef1cd84adbbd39c055feb23f8fb7c9f6b716b0530433588
c
Deleted: sha256:823dda8b24627ebb50c789527c36964c16914ff1061422eca9bc494be1166a9
6
Deleted: sha256:ac856325eabcbafe6cefe589df92498eeacf1f741a283faedd9603ed01cc27e
1
Deleted: sha256:f9774446a1968284a82961f2b48526ff6402725f258cbd536ce891afda4c523
9
Deleted: sha256:dcf540992968905f3438e7501a12d0611838e3d3caaa20825d9e6d563f673e6
2
Deleted: sha256:60be3170bc434f37a72650733e6aeded244caca00a3e26e861f34b2cbaa2f92
9
Deleted: sha256:0df6aacada966ced14045a888d90c35add50f5570b7cb2514443c8259b84f7b
0
Deleted: sha256:b2bef848a7a96226ac5ef5b353969b59aac696e1bbf193cb48a93b20bcdcd943
d
Deleted: sha256:b4bab32bc9b5428316c93f55e033d052b99c202fab743399fc6343cd6bbd12f
e
Deleted: sha256:9bd0f840c2881cd90012b2b0333086dcd94d7683bd55bc4ea4a7beb9a96efaf
b
Deleted: sha256:6be90f1a2d3f1eb115203b6adb2ce1014fab9a9f8f1b2afa31343397063603d
3
Error: No such image: image
dona@dona-VirtualBox:~$ sudo docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED          STATUS
PORTS         NAMES
2729d54aa9c0   hello-world    "/hello"                12 minutes ago   Exited (0) 12 minutes
ago            exciting-dijkstra
dona@dona-VirtualBox:~$
```



```
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dona@dona-VirtualBox: ~

dona@dona-VirtualBox:~$ sudo docker run -d -p0.0.0:80:80 mysql:latest
docker: Invalid ip address: 0.0.0.
See 'docker run --help'.
dona@dona-VirtualBox:~$ sudo docker run -it --name sl mysql/bin/bash
Unable to find image 'mysql/bin/bash:latest' locally
docker: Error response from daemon: pull access denied for mysql/bin/bash, repository does not exist or may require 'docker login': denied: requested access to the resource is denied.
See 'docker run --help'.
dona@dona-VirtualBox:~$ sudo docker start sl
Error response from daemon: No such container: sl
Error: failed to start containers: sl
dona@dona-VirtualBox:~$ sudo docker start sll
Error response from daemon: No such container: sll
Error: failed to start containers: sll
dona@dona-VirtualBox:~$ sudo docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
dona@dona-VirtualBox:~$ sudo docker stop sl
Error response from daemon: No such container: sl
dona@dona-VirtualBox:~$ sudo docker kill sl
Error response from daemon: Cannot kill container: sl: No such container: sl
dona@dona-VirtualBox:~$ sudo docker kill sll
Error response from daemon: Cannot kill container: sll: No such container: sll
dona@dona-VirtualBox:~$ sudo docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
dona@dona-VirtualBox:~$ sudo docker image rm -f image mysql
Untagged: mysql:latest
Untagged: mysql@sha256:a0805d37d4d298bd61e0dfa61f0ddf6f4680b453fa25d7aad420485a62417eab
Deleted: sha256:76152ba684402508eb4fb366674385c73e222025d782525d548a6a7d0c0a030f

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