Installation

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Install using the convenience script

Docker provides a convenience script at https://get.docker.com/ ↗ to install Docker into development environments non-interactively. The convenience script isn't recommended for production environments, but it's useful for creating a provisioning script tailored to your needs. Also refer to the install using the repository steps to learn about installation steps to install using the package repository. The source code for the script is open source, and you can find it in the `docker-install` repository on GitHub ↗.

Always examine scripts downloaded from the internet before running them locally. Before installing, make yourself familiar with potential risks and limitations of the convenience script:

- The script requires `root` or `sudo` privileges to run.

- The script attempts to detect your Linux distribution and version and configure your package management system for you.

- The script doesn't allow you to customize most installation parameters.

- The script installs dependencies and recommendations without asking for confirmation. This may install a large number of packages, depending on the current configuration of your host machine.

- By default, the script installs the latest stable release of Docker, containerd, and runc. When using this script to provision a machine, this may result in unexpected major version upgrades of Docker. Always test

ⓘ Tip: preview script steps before running

You can run the script with the `--dry-run` option to learn what steps the script will run when invoked:

```
$ curl -fsSL https://get.docker.com -o get-docker.sh
$ sudo sh ./get-docker.sh --dry-run
```

https://docs.docker.com/engine/install/ubuntu/

Uninstall Docker Engine

1. Uninstall the Docker Engine, CLI, containerd, and Docker Compose packages:

```
$ sudo apt-get purge docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-co
```

2. Images, containers, volumes, or custom configuration files on your host aren't automatically removed. To delete all images, containers, and volumes:

```
$ sudo rm -rf /var/lib/docker
$ sudo rm -rf /var/lib/containerd
```

You have to delete any edited configuration files manually.

File   Machine   View   Input   Devices   Help

Activities   A Software Updater   Feb 10 15:25

Software Updater

Updated software has been issued since Ubuntu 22.04 was released. Do you want to install it now?

∨ Details of updates

Install or remove	Download
☑ **Security updates**	337,1 MB
☑ ☐ LibreOffice	23,4 MB
› ☑ ▦ LibreOffice Calc	9,4 MB
☑ ▨ LibreOffice Draw	3,2 MB
☑ ▦ LibreOffice Impress	1,4 MB

› Technical description

↧ 520,0 MB will be downloaded.

▯ It's safer to connect the computer to AC power before updating.

Settings...	Remind Me Later	Install Now

Right Ctrl

Activities   Settings   Feb 10 18:03   en

Settings   ≡   **Keyboard**   — ▢ ✕

🌐 Network

🅱 Bluetooth   **Input Sources**
                               Includes keyboard layouts and input methods.
🖥 Background

🖼 Appearance   ⠿ German   ⋮

🔔 Notifications   ⠿ English (US)   ⋮

🔍 Search

🗔 Multitasking   +

⠿ Applications   ⟩   **Input Source Switching**
                               Input sources can be switched using the Super+Space keyboard shortcut.
🔒 Privacy   ⟩   This can be changed in the keyboard shortcut settings.

☁ Online Accounts   🔘 Use the same source for all windows

⌁ Sharing   ⭕ Switch input sources individually for each window

♪ Sound
                               Special Character Entry
🕐 Power   Methods for entering symbols and letter variants using the keyboard.

🖵 Displays   Alternate Characters Key   Layout default ⟩

                               Compose Key   Layout default ⟩

                                                                                    Right Ctrl

curl and sudo

- cURL is a computer software project providing a library (libcurl) and command-line tool (curl) for transferring data using various network protocols. The name stands for "Client for URL".

```
$ curl -fsSL https://get.docker.com -o get-docker.sh
```

- sudo is a program for Unix-like computer operating systems that enables users to run programs with the security privileges of another user, by default the superuser It originally stood for "superuser do", as that was all it did, and it is its most common usage.

```
$ sudo apt-get install curl
```

https://en.wikipedia.org/wiki/Sudo (15.2.2024)
https://en.wikipedia.org/wiki/CURL (15.2.2024)

```
$ curl -fsSL https://get.docker.com -o get-docker.sh
curl not found.
$ sudo apt-get install curl
docker is not in the sudoers file.
$ su -
# usermod -a -G sudo docker
# vi /etc/sudoers
...
docker ALL=(ALL) ALL
$ sudo who am i
[sudo] password for docker:
docker    pts/1           2024-02-10 19:02
$ sudo apt-get install curl
```

Install docker

```
$ curl -fsSL https://get.docker.com -o get-docker.sh
$ ls get-docker.sh
$  . get-docker.sh
$ docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
c1ec31eb5944: Pull complete

Hello from Docker!
$ docker $ docker version
Client: Docker Engine - Community
Version:              25.0.3
$ docker ps
CONTAINER ID  IMAGE   COMMAND   CREATED   STATUS PORTS   NAMES
$ docker images
REPOSITORY      TAG         IMAGE ID        CREATED       SIZE
hello-world     latest      d2c94e258dcb    9 months ago  13.3kB
```
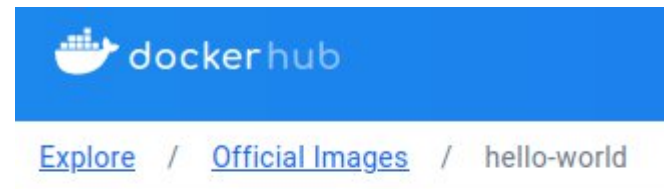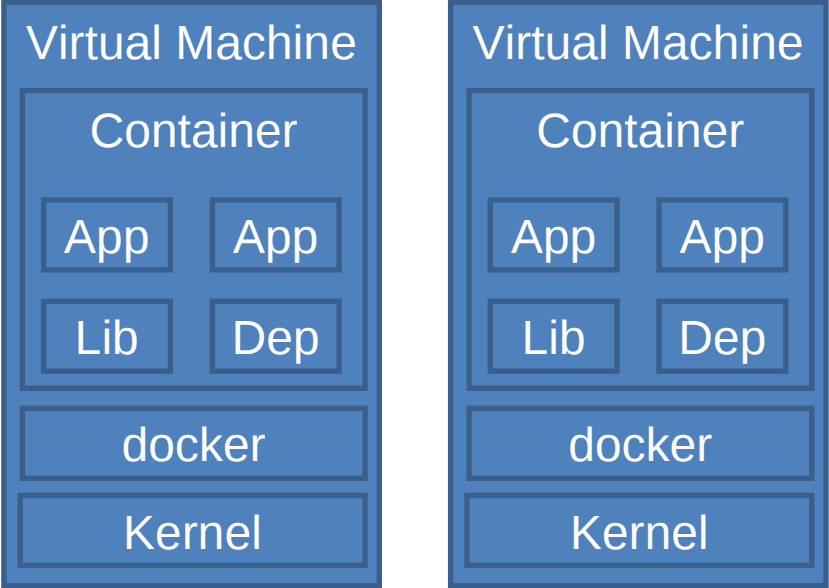

https://docs.docker.com/engine/install/ubuntu/ (10.2.2024))

Architecture

Virtual Machine		Virtual Machine	
Container		**Container**	
App	App	App	App
Lib	Dep	Lib	Dep
docker		docker	
Kernel		Kernel	

Hypervisor
Kernel
Hardware