

See "man sudo_root" for details.

```
ubuntu@ip-172-31-29-219:~$ sudo apt-get update
Hit:1 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:7 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:8 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:9 http://us-west-2.ec2.archive.ubuntu.com/ubuntu_noble/multiverse_amd64 Packages [269 kB]
Get:10 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:11 http://us-west-2.ec2.archive.ubuntu.com/ubuntu.noble/multiverse amd64 Components [35.0 kB]
Get:12 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
Get:13 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [991 kB]
Get:14 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [219 kB]
Get:15 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Get:16 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [13.5 kB]
Get:17 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1052 kB]
Get:18 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [265 kB]
Get:19 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [367 kB]
Get:20 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [26.0 kB]
Get:21 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [892 kB]
Get:22 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [182 kB]
Get:23 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:24 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [492 B]
Get:25 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [21.5 kB]
Get:26 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [4788 B]
Get:27 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:28 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [592 B]
Get:29 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [39.1 kB]
Get:30 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/main Translation-en [8676 B]
Get:31 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7064 B]
Get:32 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [272 B]
Get:33 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [26.4 kB]
Get:34 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [16.3 kB]
Get:35 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [15.8 kB]
Get:36 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1304 B]
Get:37 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:38 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:39 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:40 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:41 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [741 kB]
```

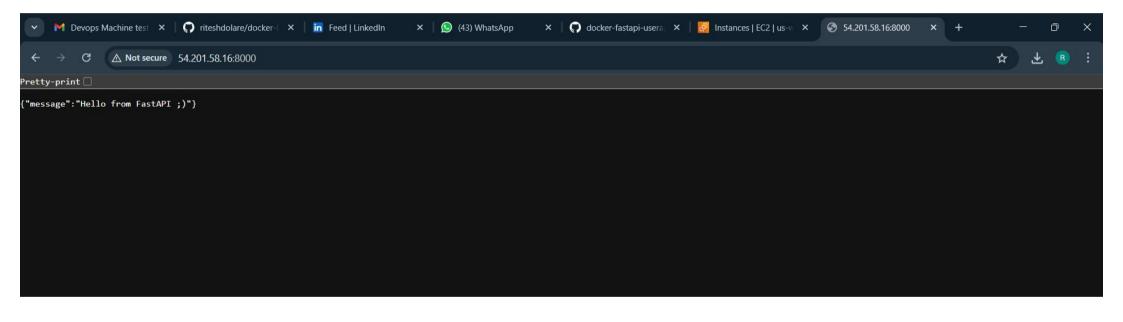
■ ubuntu@ip-172-31-29-219: ~ × o Reading package lists... Done ubuntu@ip-172-31-29-219:~\$ sudo apt-get install docker.io -y Reading package lists... Done Building dependency tree... Done Reading state information... Done The following additional packages will be installed: bridge-utils containerd dns-root-data dnsmasg-base pigz runc ubuntu-fan Suggested packages: ifupdown aufs-tools cgroupfs-mount | cgroup-lite debootstrap docker-buildx docker-compose-v2 docker-doc rinse zfs-fuse | zfsutils The following NEW packages will be installed: bridge-utils containerd dns-root-data dnsmasg-base docker.io pigz runc ubuntu-fan 0 upgraded. 8 newly installed. 0 to remove and 59 not upgraded. Need to get 78.6 MB of archives. After this operation, 302 MB of additional disk space will be used. Get:1 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB] Get:2 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/main amd64 bridge-utils amd64 1.7.1-1ubuntu2 [33.9 kB] Get:3 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 runc amd64 1.1.12-0ubuntu3.1 [8599 kB] Get:4 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 containerd amd64 1.7.24-0ubuntu1~24.04.2 [37.0 MB] Get:5 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 dns-root-data all 2024071801~ubuntu0.24.04.1 [5918 B] Get:6 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/main amd64 dnsmasg-base amd64 2.90-2build2 [375 kB] Get:7 http://us-west-2.ec2.archive.ubuntu.com/ubuntu_noble-updates/universe_amd64_docker.io_amd64_26.1.3-0ubuntu1~24.04.1 [32.4 MB] Get:8 http://us-west-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 ubuntu-fan all 0.12.16 [35.2 kB] Fetched 78.6 MB in 1s (86.7 MB/s) Preconfiguring packages ... Selecting previously unselected package pigz. (Reading database ... 70560 files and directories currently installed.) Preparing to unpack .../0-pigz_2.8-1_amd64.deb ... Unpacking pigz (2.8-1) ... Selecting previously unselected package bridge-utils. Preparing to unpack .../1-bridge-utils_1.7.1-1ubuntu2_amd64.deb ... Unpacking bridge-utils (1.7.1-1ubuntu2) ... Selecting previously unselected package runc. Preparing to unpack .../2-runc_1.1.12-0ubuntu3.1_amd64.deb ... Unpacking runc (1.1.12-Oubuntu3.1) ... Selecting previously unselected package containerd. Preparing to unpack .../3-containerd_1.7.24-Oubuntu1~24.04.2_amd64.deb ... Unpacking containerd (1.7.24-Oubuntu1~24.04.2) ... Selecting previously unselected package dns-root-data.

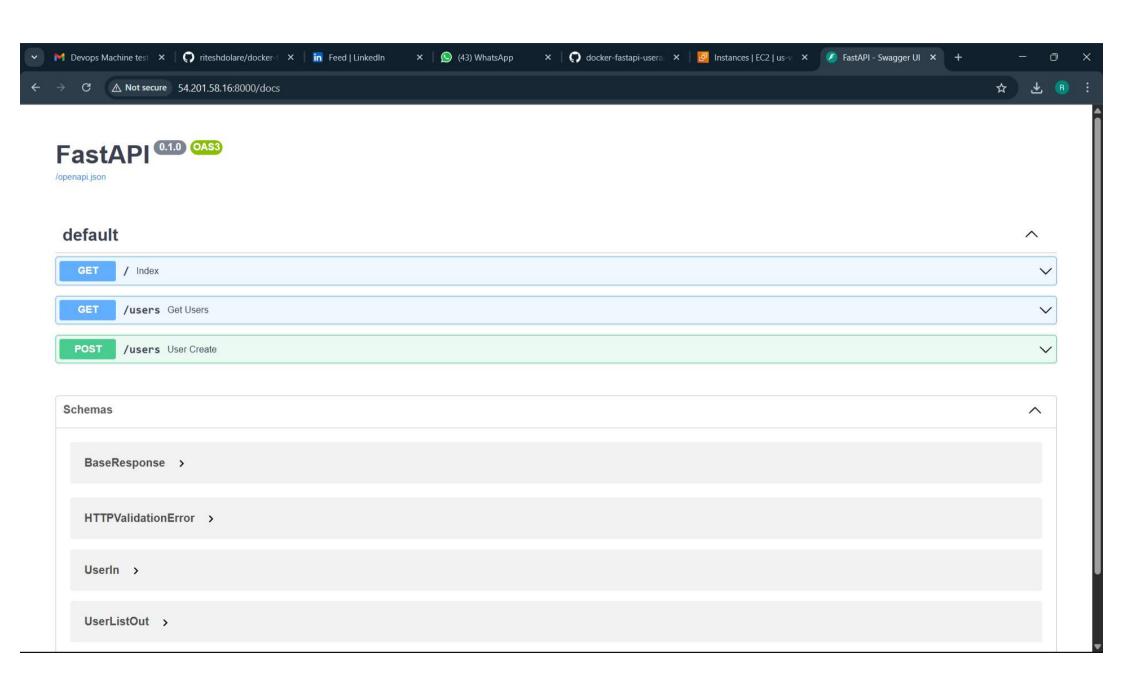
Preparing to unpack .../4-dns-root-data_2024071801~ubuntu0.24.04.1_all.deb ...

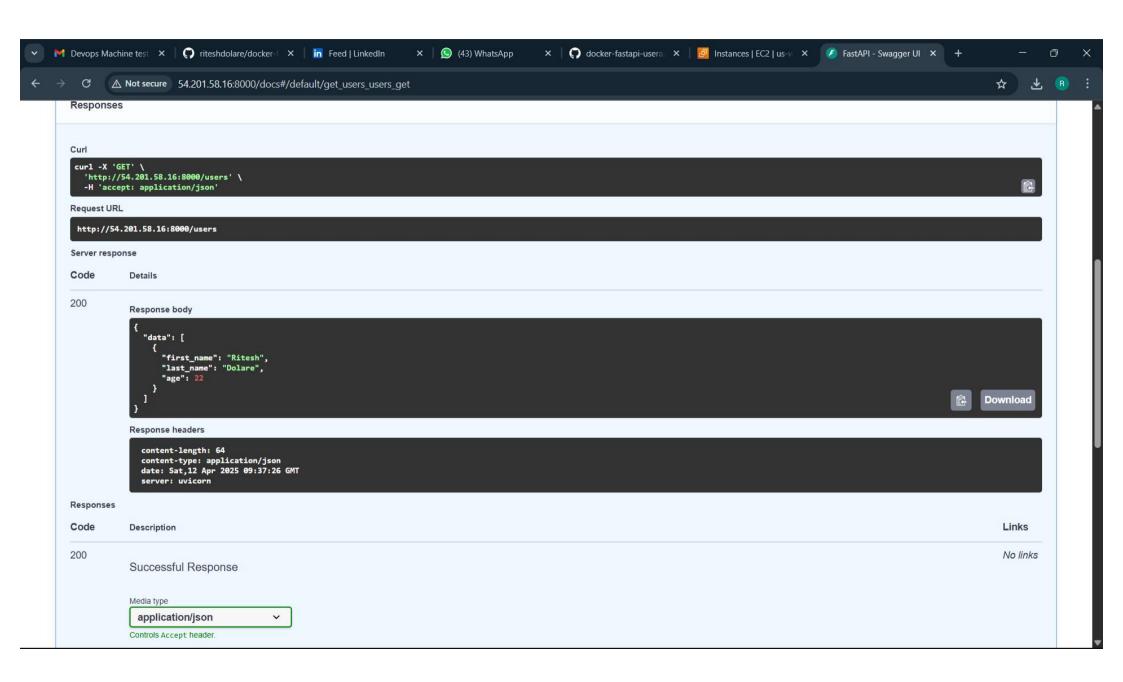
Unpacking dns-root-data (2024071801~ubuntu0.24.04.1) ... Selecting previously unselected package dnsmasg-base.

Preparing to unpack .../5-dnsmasg-base_2.90-2build2_amd64.deb ...

```
ubuntu@ip-172-31-29-219: ~/ X
                                                                                                                                                     o
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ ls
README.md app requirements.txt
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ vim Dockerfile
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ vim docker-compose.yml
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ sudo docker-compose up --build
sudo: docker-compose: command not found
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ # 1. Download the Docker Compose binary
sudo curl -L "https://github.com/docker/compose/releases/latest/download/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
# 2. Make it executable
sudo chmod +x /usr/local/bin/docker-compose
# 3. Verify installation
docker-compose --version
  % Total
             % Received % Xferd Average Speed
                                                Time
                                                        Time
                                                                 Time Current
                                Dload Upload
                                                Total
                                                        Spent
                                                                 Left Speed
                             0
                                    0
                                           0 --:--:-- --:--:--
  1 70.2M
            1 866k
                             0
                                1039k
                                             0:01:09 --:--: 0:01:09 103 37 70.2M
                                                                                      37 26.5M
                                                                                                         0 14.5M
                                                                                                                       0 0:00:04 0:00:01 0:00:03 25.100
70.2M 100 70.2M
                   0
                          0 31.1M
                                       0 0:00:02 0:00:02 --:-- 48.8M
Docker Compose version v2.35.0
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ sudo docker-compose up --build
WARN[0000] /home/ubuntu/docker-fastapi-test/docker-compose.vml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential
 confusion
Compose can now delegate builds to bake for better performance.
 To do so, set COMPOSE_BAKE=true.
[+] Building 29.0s (11/11) FINISHED
                                                                                                                                           docker:default
```







```
ubuntu@ip-172-31-29-219: ~/ ×
                                                                                                                                                         o
[+] Running 3/3

√fastapi-app

 ✓Network docker-fastapi-test default

✓Container docker-fastapi-test-fastapi-app-1 Created
Attaching to fastapi-app-1
fastapi-app-1
                 INFO:
                           Started server process [1]
fastapi-app-1
                 INFO:
                           Waiting for application startup.
fastapi-app-1
                           Application startup complete.
                 TNFO:
fastapi-app-1
                 INFO:
                           Uvicorn running on http://0.0.0.0:8000 (Press CTRL+C to quit)
fastapi-app-1
                           152.56.16.144:54517 - "GET /docs HTTP/1.1" 200 OK
                 INFO:
                 INFO:
fastapi-app-1
                           152.56.16.144:54517 - "GET /openapi.ison HTTP/1.1" 200 OK
fastapi-app-1
                 INFO:
                           152.56.16.144:54516 - "GET / HTTP/1.1" 200 OK
                           152.56.16.144:54516 - "GET /favicon.ico HTTP/1.1" 404 Not Found
fastapi-app-1
                 INFO:
fastapi-app-1
                 INFO:
                           152.56.16.144:54518 - "GET /docs HTTP/1.1" 200 OK
fastapi-app-1
                 INFO:
                           152.56.16.144:54518 - "GET /openapi.ison HTTP/1.1" 200 OK
fastapi-app-1
                 INFO:
                           152.56.16.144:54547 - "GET / HTTP/1.1" 200 OK
fastapi-app-1
                 INFO:
                           152.56.16.144:54564 - "GET / HTTP/1.1" 200 OK
fastapi-app-1
                 INFO:
                           152.56.16.144:54585 - "GET /users HTTP/1.1" 200 OK
fastapi-app-1
                 INFO:
                           152.56.16.144:54595 - "POST /users HTTP/1.1" 200 OK
fastapi-app-1
                INFO:
                           152.56.16.144:54596 - "GET /users HTTP/1.1" 200 OK
Gracefully stopping... (press Ctrl+C again to force)
 ✓Container docker-fastapi-test-fastapi-app-1 Stopped
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ sudo docker-compose down
WARN[0000] /home/ubuntu/docker-fastapi-test/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential
 confusion
[+] Running 2/2

√Container docker-fastapi-test-fastapi-app-1 Removed

 ✓Network docker-fastapi-test_default
                                                Removed
ubuntu@ip-172-31-29-219:~/docker-fastapi-test$ sudo docker-compose up
WARN[0000] /home/ubuntu/docker-fastapi-test/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential
 confusion
[+] Running 2/2
 ✓Network docker-fastapi-test_default
                                                Created

✓Container docker-fastapi-test-fastapi-app-1 Created
Attaching to fastapi-app-1
fastapi-app-1
                 INFO:
                           Started server process [1]
fastapi-app-1
                           Waiting for application startup.
                 INFO:
fastapi-app-1
                 INFO:
                           Application startup complete.
fastapi-app-1
                 INFO:
                           Uvicorn running on http://0.0.0.0:8000 (Press CTRL+C to quit)
```

