



```
ubuntu@ip-172-31-22-139:~$ sudo apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1343 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1562 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [237 kB]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [297 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [1702 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [286 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1074 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [245 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [22.1 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [49.7 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [12.1 kB]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [472 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [67.1 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [11.0 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
```

```
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [28.4 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.2 kB]
Get:29 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1670 kB]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [280 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [853 kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [163 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.8 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [37.2 kB]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7588 B]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [260 B]
Fetched 30.7 MB in 5s (5681 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
43 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-22-139:~$ sudo apt install docker
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  wmdocker
The following NEW packages will be installed:
  docker wmdocker
0 upgraded, 2 newly installed, 0 to remove and 43 not upgraded.
Need to get 14.3 kB of archives.
After this operation, 58.4 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 wmdocker amd64 1.5-2 [13.0 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 docker all 1.5-2 [1316 B]
```

```
ubuntu@ip-172-31-22-139:~$ sudo apt install docker.io
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 wmdocker amd64 1.5-2 [13.0 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 docker all 1.5-2 [1316 B]
Fetched 14.3 kB in 0s (679 kB/s)
Selecting previously unselected package wmdocker.
(Reading database ... 65273 files and directories currently installed.)
Preparing to unpack .../wmdocker_1.5-2_amd64.deb ...
Unpacking wmdocker (1.5-2) ...
Selecting previously unselected package docker.
Preparing to unpack .../archives/docker_1.5-2_all.deb ...
Unpacking docker (1.5-2) ...
Setting up wmdocker (1.5-2) ...
Setting up docker (1.5-2) ...
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-22-139:~$ systemctl start docker
Command 'systemctl' not found, did you mean:
  command 'systemctl' from deb systemd (249.11-0ubuntu3.11)
  command 'systemctl' from deb systemctl (1.4.4181-1.1)
Try: sudo apt install <deb name>
ubuntu@ip-172-31-22-139:~$ docker ps
Command 'docker' not found, but can be installed with:
```

```
ubuntu@ip-172-31-22-139:~$ sudo apt install docker.io
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 dnsmasq-base pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools cgroupfs-mount | cgroup-lite debootstrap docker-doc
  rinse zfs-fuse | zfsutils
The following NEW packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base docker.io pigz runc
  ubuntu-fan
0 upgraded, 8 newly installed, 0 to remove and 43 not upgraded.
Need to get 69.8 MB of archives.
After this operation, 267 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 pigz
amd64 2.6-1 [63.6 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 bridge-u
tils amd64 1.7-1ubuntu3 [34.4 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64
runc amd64 1.1.7-0ubuntu1~22.04.2 [4267 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64
containerd amd64 1.7.2-0ubuntu1~22.04.1 [36.0 MB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64
dns-root-data all 2023112702~ubuntu0.22.04.1 [5136 B]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64
dnsmasq-base amd64 2.90-0ubuntu0.22.04.1 [374 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe am
d64 docker.io amd64 24.0.5-0ubuntu1~22.04.1 [28.9 MB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 ubun
tu-fan all 0.12.16 [35.2 kB]
Fetched 69.8 MB in 1s (48.7 MB/s)
```

```
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 ubun
tu-fan all 0.12.16 [35.2 kB]
Fetched 69.8 MB in 1s (48.7 MB/s)
Preconfiguring packages ...
Selecting previously unselected package pigz.
(Reading database ... 65283 files and directories currently installed.)
Preparing to unpack .../0-pigz_2.6-1_amd64.deb ...
Unpacking pigz (2.6-1) ...
Selecting previously unselected package bridge-utils.
Preparing to unpack .../1-bridge-utils_1.7-1ubuntu3_amd64.deb ...
Unpacking bridge-utils (1.7-1ubuntu3) ...
Selecting previously unselected package runc.
Preparing to unpack .../2-runc_1.1.7-0ubuntu1~22.04.2_amd64.deb ...
Unpacking runc (1.1.7-0ubuntu1~22.04.2) ...
Selecting previously unselected package containerd.
Preparing to unpack .../3-containerd_1.7.2-0ubuntu1~22.04.1_amd64.deb ...
Unpacking containerd (1.7.2-0ubuntu1~22.04.1) ...
Selecting previously unselected package dns-root-data.
Preparing to unpack .../4-dns-root-data_2023112702~ubuntu0.22.04.1_all.deb ...
Unpacking dns-root-data (2023112702~ubuntu0.22.04.1) ...
Selecting previously unselected package dnsmasq-base.
Preparing to unpack .../5-dnsmasq-base_2.90-0ubuntu0.22.04.1_amd64.deb ...
Unpacking dnsmasq-base (2.90-0ubuntu0.22.04.1) ...
Selecting previously unselected package docker.io.
Preparing to unpack .../6-docker.io_24.0.5-0ubuntu1~22.04.1_amd64.deb ...
Unpacking docker.io (24.0.5-0ubuntu1~22.04.1) ...
Selecting previously unselected package ubuntu-fan.
Preparing to unpack .../7-ubuntu-fan_0.12.16_all.deb ...
Unpacking ubuntu-fan (0.12.16) ...
Setting up dnsmasq-base (2.90-0ubuntu0.22.04.1) ...
Setting up runc (1.1.7-0ubuntu1~22.04.2) ...
Setting up dns-root-data (2023112702~ubuntu0.22.04.1) ...
Setting up bridge-utils (1.7-1ubuntu3) ...
```

```
Setting up dns-root-data (2023112702~ubuntu0.22.04.1) ...
Setting up bridge-utils (1.7-1ubuntu3) ...
Setting up pigz (2.6-1) ...
Setting up containerd (1.7.2-0ubuntu1~22.04.1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service
→ /lib/systemd/system/containerd.service.
Setting up ubuntu-fan (0.12.16) ...
Created symlink /etc/systemd/system/multi-user.target.wants/ubuntu-fan.service
→ /lib/systemd/system/ubuntu-fan.service.
Setting up docker.io (24.0.5-0ubuntu1~22.04.1) ...
Adding group 'docker' (GID 122) ...
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.
Processing triggers for dbus (1.12.20-2ubuntu4.1) ...
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-22-139:~$ systemctl start docker
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to start 'docker.service'.
```

```
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to start 'docker.service'.
Authenticating as: Ubuntu (ubuntu)
Password:
ubuntu@ip-172-31-22-139:~$ sudo systemctl start docker
ubuntu@ip-172-31-22-139:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor prese
   Active: active (running) since Mon 2024-04-15 13:45:53 UTC; 1min 4s ago
   TriggeredBy: ● docker.socket
     Docs: https://docs.docker.com
    Main PID: 2366 (dockerd)
      Tasks: 8
     Memory: 25.4M
        CPU: 285ms
    CGroup: /system.slice/docker.service
            └─2366 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/co

Apr 15 13:45:52 ip-172-31-22-139 systemd[1]: Starting Docker Application Cont
Apr 15 13:45:52 ip-172-31-22-139 dockerd[2366]: time="2024-04-15T13:45:52.297>
Apr 15 13:45:52 ip-172-31-22-139 dockerd[2366]: time="2024-04-15T13:45:52.299>
Apr 15 13:45:52 ip-172-31-22-139 dockerd[2366]: time="2024-04-15T13:45:52.475>
Apr 15 13:45:53 ip-172-31-22-139 dockerd[2366]: time="2024-04-15T13:45:53.034>
Apr 15 13:45:53 ip-172-31-22-139 dockerd[2366]: time="2024-04-15T13:45:53.058>
Apr 15 13:45:53 ip-172-31-22-139 dockerd[2366]: time="2024-04-15T13:45:53.058>
lines 1-19
ubuntu@ip-172-31-22-139:~$ ls
ubuntu@ip-172-31-22-139:~$ vim index.html
ubuntu@ip-172-31-22-139:~$ sudo docker httpd
docker: 'httpd' is not a docker command.
See 'docker --help'
ubuntu@ip-172-31-22-139:~$ sudo docker pull httpd
Using default tag: latest
```

```
ubuntu@ip-172-31-22-139:~$ sudo docker pull httpd
Using default tag: latest
latest: Pulling from library/httpd
13808c22b207: Pull complete
6e9a8835eae4: Pull complete
4f4fb700ef54: Pull complete
b927d001db70: Pull complete
559cc51378ed: Pull complete
d2b091e65160: Pull complete
Digest: sha256:73b2e9e2861bcfe682b9a67d83433b6a6b36176459134aa25ec711058075fd4
7
Status: Downloaded newer image for httpd:latest
docker.io/library/httpd:latest
ubuntu@ip-172-31-22-139:~$ sudo docker run --name jeetu -d -p 8000:80 httpd
162b9f9daadc203ece195f34aa469c587f8f7eb3ef9adcefe8dd65107632812
ubuntu@ip-172-31-22-139:~$ sudo docker cp index.html jeetu:/usr/local/apache2/
htdocs
Successfully copied 2.05kB to jeetu:/usr/local/apache2/htdocs
ubuntu@ip-172-31-22-139:~$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:
///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker.sock/v1.24/container
s/json": dial unix /var/run/docker.sock: connect: permission denied
ubuntu@ip-172-31-22-139:~$ sudo apt install docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker.io is already the newest version (24.0.5-0ubuntu1~22.04.1).
0 upgraded, 0 newly installed, 0 to remove and 43 not upgraded.
ubuntu@ip-172-31-22-139:~$ sudo docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS
AMES          162b9f9daadc  httpd                  "httpd-foreground"   3 minutes ago  Up 3 minutes  0.0.0.0:8000->80/tcp, :::8000->80/tcp  j
eeetu
```



```
AMES
162b9f9daadc httpd "httpd-foreground" 3 minutes ago Up 3 minutes 0.0.0.0:8000->80/tcp, :::8000->80/tcp j
eetu
ubuntu@ip-172-31-22-139:~$ curl localhost:80
curl: (7) Failed to connect to localhost port 80 after 0 ms: Connection refused
ubuntu@ip-172-31-22-139:~$ curl localhost:8000
welcom to HPCSA
ubuntu@ip-172-31-22-139:~$ history
1 sudo apt update
2 sudo apt install docker
3 systemctl start docker
4 docker ps
5 systemctl start docker
6 sudo systemctl start docker
7 systemctl start docker
8 system status docker.service
9 systemctl status docker
10 sudo yum install docker.io
11 sudo apt install docker.io
12 systemctl start docker
13 sudo systemctl start docker
14 sudo systemctl status docker
15 ls
16 vim index.html
17 sudo docker httpd
18 sudo docker pull httpd
19 sudo docker run --name jeetu -d -p 8000:80 httpd
20 sudo docker cp index.html jeetu:/usr/local/apache2/htdocs
21 docker ps
22 sudo apt install docker.io
23 sudo docker ps
24*
25 curl localhost:8000
```

```
25 curl localhost:8000
26 history
ubuntu@ip-172-31-22-139:~$ docker inspect jeetu
[]
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Frun%2Fdocker.sock/v1.24/containers/jeetu/json": dial unix /var/run/docker.sock: connect: permission denied
ubuntu@ip-172-31-22-139:~$ sudo docker inspect jeetu
[
  {
    "Id": "162b9f9daadcc203ece195f34aa469c587f8f7eb3ef9adcefe8dd65107632812",
    "Created": "2024-04-15T13:52:02.919461306Z",
    "Path": "httpd-foreground",
    "Args": [],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 2711,
      "ExitCode": 0,
      "Error": "",
      "StartedAt": "2024-04-15T13:52:04.093698069Z",
      "FinishedAt": "0001-01-01T00:00:00Z"
    },
    "Image": "sha256:fa0099f1c09d7d1dc852123c9456a23436df95715812df3db8b960ef6609e288",
    "ResolvConfPath": "/var/lib/docker/containers/162b9f9daadcc203ece195f34aa469c587f8f7eb3ef9adcefe8dd65107632812/resolv.conf",
    "HostnamePath": "/var/lib/docker/containers/162b9f9daadcc203ece195f34aa469c587f8f7eb3ef9adcefe8dd65107632812/hostname",
    "HostsPath": "/var/lib/docker/containers/162b9f9daadcc203ece195f34aa469c587f8f7eb3ef9adcefe8dd65107632812/hosts"
  }
]
```

```
s",
  "LogPath": "/var/lib/docker/containers/162b9f9daadcc203ece195f34aa469c587f8f7eb3ef9adcefe8dd65107632812/162b9f9daadcc203ece195f34aa469c587f8f7eb3ef9adcefe8dd65107632812-json.log",
  "Name": "/jeetu",
  "RestartCount": 0,
  "Driver": "overlay2",
  "Platform": "linux",
  "MountLabel": "",
  "ProcessLabel": "",
  "AppArmorProfile": "docker-default",
  "ExecIDs": null,
  "HostConfig": {
    "Binds": null,
    "ContainerIDFile": "",
    "LogConfig": {
      "Type": "json-file",
      "Config": {}
    },
    "NetworkMode": "default",
    "PortBindings": {
      "80/tcp": [
        {
          "HostIp": "",
          "HostPort": "8000"
        }
      ]
    },
    "RestartPolicy": {
      "Name": "no",
      "MaximumRetryCount": 0
    },
    "AutoRemove": false,
    "VolumeDriver": "",

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```

    "AutoRemove": false,
    "VolumeDriver": "",
    "VolumesFrom": null,
    "ConsoleSize": [
      20,
      78
    ],
    "CapAdd": null,
    "CapDrop": null,
    "CgroupnsMode": "private",
    "Dns": [],
    "DnsOptions": [],
    "DnsSearch": [],
    "ExtraHosts": null,
    "GroupAdd": null,
    "IpcMode": "private",
    "Cgroup": "",
    "Links": null,
    "OomScoreAdj": 0,
    "PidMode": "",
    "Privileged": false,
    "PublishAllPorts": false,
    "ReadonlyRootfs": false,
    "SecurityOpt": null,
    "UTSMode": "",
    "UsernsMode": "",
    "ShmSize": 67108864,
    "Runtime": "runc",
    "Isolation": "",
    "CpuShares": 0,
    "Memory": 0,
    "NanoCpus": 0,
    "CgroupParent": "",

```

```
ubuntu@ip-172-31-22-138 ~$ cat /etc/docker/daemon.json
{
  "CpuShares": 0,
  "Memory": 0,
  "NanoCpus": 0,
  "CgroupParent": "",
  "BlkioWeight": 0,
  "BlkioWeightDevice": [],
  "BlkioDeviceReadBps": [],
  "BlkioDeviceWriteBps": [],
  "BlkioDeviceReadIops": [],
  "BlkioDeviceWriteIops": [],
  "CpuPeriod": 0,
  "CpuQuota": 0,
  "CpuRealtimePeriod": 0,
  "CpuRealtimeRuntime": 0,
  "CpusetCpus": "",
  "CpusetMems": "",
  "Devices": [],
  "DeviceCgroupRules": null,
  "DeviceRequests": null,
  "MemoryReservation": 0,
  "MemorySwap": 0,
  "MemorySwappiness": null,
  "OomKillDisable": null,
  "PidsLimit": null,
  "Ulimits": null,
  "CpuCount": 0,
  "CpuPercent": 0,
  "IOMaximumIops": 0,
  "IOMaximumBandwidth": 0,
  "MaskedPaths": [
    "/proc/asound",
    "/proc/acpi",
    "/proc/kcore",
    "/proc/keys",
    "/proc/latency_stats",
    "/proc/timer_list",
    "/proc/timer_stats",
    "/proc/sched_debug",
    "/proc/scsi",
    "/sys/firmware"
  ],
  "ReadonlyPaths": [
    "/proc/bus",
    "/proc/fs",
    "/proc/irq",
    "/proc/sys",
    "/proc/sysrq-trigger"
  ],
  "GraphDriver": {
    "Data": {
      "LowerDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72",
      "MergedDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72/merged",
      "UpperDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72/diff",
      "WorkDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72/diff"
    }
  }
}
```

```
ubuntu@ip-172-31-22-138 ~$ cat /etc/docker/daemon.json
{
  "MaskedPaths": [
    "/proc/asound",
    "/proc/acpi",
    "/proc/kcore",
    "/proc/keys",
    "/proc/latency_stats",
    "/proc/timer_list",
    "/proc/timer_stats",
    "/proc/sched_debug",
    "/proc/scsi",
    "/sys/firmware"
  ],
  "ReadonlyPaths": [
    "/proc/bus",
    "/proc/fs",
    "/proc/irq",
    "/proc/sys",
    "/proc/sysrq-trigger"
  ],
  "GraphDriver": {
    "Data": {
      "LowerDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72",
      "MergedDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72/merged",
      "UpperDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72/diff",
      "WorkDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72/diff"
    }
  }
}
```



```

    "UpperDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72",
    "WorkDir": "/var/lib/docker/overlay2/d11f7e9e95c6eb1a67991614de78803feeb9d3a93d0dac15c988a4b0bf6a1c72/",
    "Name": "overlay2"
  },
  "Mounts": [],
  "Config": {
    "Hostname": "162b9f9daadc",
    "Domainname": "",
    "User": "",
    "AttachStdin": false,
    "AttachStdout": false,
    "AttachStderr": false,
    "ExposedPorts": {
      "80/tcp": {}
    },
    "TTY": false,
    "OpenStdin": false,
    "StdinOnce": false,
    "Env": [
      "PATH=/usr/local/apache2/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin",
      "HTTPD_PREFIX=/usr/local/apache2",
      "HTTPD_VERSION=2.4.59",
      "HTTPD_SHA256=ec51501ec480284ff52f637258135d333230a7d229c3afa6f6c2f9040e321323",
      "HTTPD_PATCHES="
    ],
    "Cmd": [
      "httpd-foreground"
    ],
    "Image": "httpd",
    "Volumes": null,
  },
  "NetworkSettings": {
    "Bridge": "",
    "SandboxID": "8f643d4309eee2ffa998e03f176cb6ce6ee347e198d5e0bf020ffdd61fdc20e5",
    "HairpinMode": false,
    "LinkLocalIPv6Address": "",
    "LinkLocalIPv6PrefixLen": 0,
    "Ports": {
      "80/tcp": [
        {
          "HostIp": "0.0.0.0",
          "HostPort": "8000"
        },
        {
          "HostIp": "::",
          "HostPort": "8000"
        }
      ]
    },
    "SandboxKey": "/var/run/docker/netns/8f643d4309ee",
    "SecondaryIPAddresses": null,
    "SecondaryIPv6Addresses": null,
    "EndpointID": "ca7202453da96a059671a541921238fb7c94798aed475db90b8ad9435f5e1790",
    "Gateway": "172.17.0.1",
    "GlobalIPv6Address": "",
  },
  "Labels": {}
}
```

```

  },
  "Image": "httpd",
  "Volumes": null,
  "WorkingDir": "/usr/local/apache2",
  "Entrypoint": null,
  "OnBuild": null,
  "Labels": {},
  "StopSignal": "SIGWINCH"
},
"NetworkSettings": {
  "Bridge": "",
  "SandboxID": "8f643d4309eee2ffa998e03f176cb6ce6ee347e198d5e0bf020ffdd61fdc20e5",
  "HairpinMode": false,
  "LinkLocalIPv6Address": "",
  "LinkLocalIPv6PrefixLen": 0,
  "Ports": {
    "80/tcp": [
      {
        "HostIp": "0.0.0.0",
        "HostPort": "8000"
      },
      {
        "HostIp": "::",
        "HostPort": "8000"
      }
    ]
  },
  "SandboxKey": "/var/run/docker/netns/8f643d4309ee",
  "SecondaryIPAddresses": null,
  "SecondaryIPv6Addresses": null,
  "EndpointID": "ca7202453da96a059671a541921238fb7c94798aed475db90b8ad9435f5e1790",
  "Gateway": "172.17.0.1",
  "GlobalIPv6Address": "",
}
```

```
ubuntu@ip-172-31-22-139:~$ cat /etc/docker/daemon.json
{
  "EndpointID": "ca7202453da96a059671a541921238fb7c94798aed475db90b8ad9435f5e1790",
  "Gateway": "172.17.0.1",
  "GlobalIPv6Address": "",
  "GlobalIPv6PrefixLen": 0,
  "IPAddress": "172.17.0.2",
  "IPPrefixLen": 16,
  "IPv6Gateway": "",
  "MacAddress": "02:42:ac:11:00:02",
  "Networks": {
    "bridge": {
      "IPAMConfig": null,
      "Links": null,
      "Aliases": null,
      "NetworkID": "4ef5eb2d82bf2e484d7ec8f3420b1e94e484ea22b38fd4c242995a4cc7be0ff5",
      "EndpointID": "ca7202453da96a059671a541921238fb7c94798aed475db90b8ad9435f5e1790",
      "Gateway": "172.17.0.1",
      "IPAddress": "172.17.0.2",
      "IPPrefixLen": 16,
      "IPv6Gateway": "",
      "GlobalIPv6Address": "",
      "GlobalIPv6PrefixLen": 0,
      "MacAddress": "02:42:ac:11:00:02",
      "DriverOpts": null
    }
  }
}
ubuntu@ip-172-31-22-139:~$ curl 172.17.0.2:80
welcom to HPCSA
ubuntu@ip-172-31-22-139:~$ sudo docker rm jeetu
Error response from daemon: You cannot remove a running container 162b9f9daadcc203ece195f34aa469c587f8f7eb3ef9adcefe8d
d65107632812. Stop the container before attempting removal or force remove
```

```
ubuntu@ip-172-31-22-139:~$ docker ps
AMES
162b9f9daadc httpd "httpd-foreground" 3 minutes ago Up 3 minutes 0.0.0.0:8000->80/tcp, :::8000->80/tcp j
eetu
ubuntu@ip-172-31-22-139:~$ curl localhost:80
curl: (7) Failed to connect to localhost port 80 after 0 ms: Connection refused
ubuntu@ip-172-31-22-139:~$ curl localhost:8000
welcom to HPCSA
ubuntu@ip-172-31-22-139:~$ history
1 sudo apt update
2 sudo apt install docker
3 systemctl start docker
4 docker ps
5 systemctl start docker
6 sudo systemctl start docker
7 systemctl start docker
8 system status docker.service
9 systemctl status docker
10 sudo yum install docker.io
11 sudo apt install docker.io
12 systemctl start docker
13 sudo systemctl start docker
14 sudo systemctl status docker
15 ls
16 vim index.html
17 sudo docker httpd
18 sudo docker pull httpd
19 sudo docker run --name jeetu -d -p 8000:80 httpd
20 sudo docker cp index.html jeetu:/usr/local/apache2/htdocs
21 docker ps
22 sudo apt install docker.io
23 sudo docker ps
24*
25 curl localhost:8000
```

