```
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

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

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]
```

```
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:~$ sistemctl start docker
Command 'sistemctl' 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'.
```
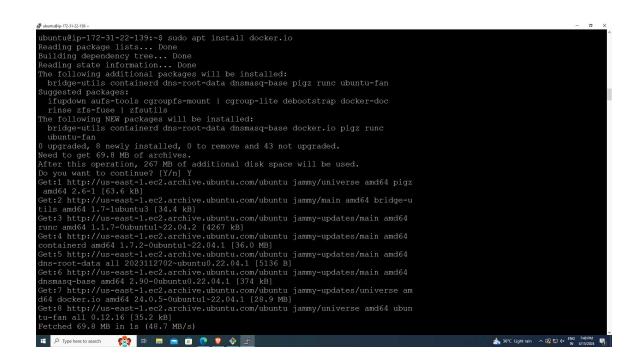
```
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ===
Authentication is required to start 'docker.service'.
Authenticating as: Ubuntu (ubuntu)
Password:
ubuntu@ip-172-31-22-139:~$ sudo systemctl start docker
ubuntu@ip-172-31-22-139:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
     Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor pres>
     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 run --name jeetu -d -p 80:80 httpd
457f5cddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946
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:~$ sudo docker inspect jeetu
[
    {
        "Id": "457f5cddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946",
        "Created": "2024-04-15T14:10:29.424291988Z",
        "Path": "httpd-foreground",
        "Args": [],
        "State": {
            "Status": "running",
            "Running": true,
            "Paused": false,
            "Restarting": false,
            "OOMKilled": false,
            "Dead": false,
            "Pid": 3059,
            "ExitCode": 0,
            "Error": "",
            "StartedAt": "2024-04-15T14:10:29.918094367Z",
            "FinishedAt": "0001-01-01T00:00:00Z"
        },
        "Image": "sha256:fa0099f1c09d7d1dc852123c9456a23436df95715812df3db8b960ef6609e288",
        "ResolvConfPath": "/var/lib/docker/containers/457f5cddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946
/resolv.conf",
        "HostnamePath": "/var/lib/docker/containers/457f5cddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946/h
ostname",
        "HostsPath": "/var/lib/docker/containers/457f5cddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946/host
s",
        "LogPath": "/var/lib/docker/containers/457f5cddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946/457f5c
ddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946-json.log",
```

s",
        "LogPath": "/var/lib/docker/containers/457f5cddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946/457f5c
ddd916bb96dba44f8c27dcb3e01178e963a9be32a295d60b56f3383946-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": "80"
                    }
                ]
            },
            "RestartPolicy": {
                "Name": "no",
                "MaximumRetryCount": 0
            },
            "AutoRemove": false,
            "VolumeDriver": "",

            "AutoRemove": false,
            "VolumeDriver": "",
            "VolumesFrom": null,
            "ConsoleSize": [
                33,
                118
            ],
            "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": "",

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ubuntu@ip-172-31-22-139:~

            "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",

ubuntu@ip-172-31-22-139:~

            "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/c36b8d678d8fd5d91349c8ea5d7f89a07f6c3bdea662dbc6b45ae3ee99bec82c
-init/diff:/var/lib/docker/overlay2/0c4a6544dad4fe8bb5e430f1254f5a8e89bc8ec3c95d2b1c5855ae3d850df74d/diff:/var/lib/doc
ker/overlay2/311e06f403a5549b66db5025b1e5646d6f9a7da47d678f2173235945936ba9ff/diff:/var/lib/docker/overlay2/66b8c3827c
82cab801644d99572e42b373a2b9ec52085fc03aa52e6b6951b79c/diff:/var/lib/docker/overlay2/d2c0da65b9389cffff40468cdca1e2b1a
9ef8fb25f6563d0befa7adfc1effd1f/diff:/var/lib/docker/overlay2/0f2bf82b073b7ff4a4e86831bddeac31cd6931908e520e11f2ab8d17
5c63fc11/diff:/var/lib/docker/overlay2/c3c194d063b90f238edb0f184bd66959402433f2c4881e115bcd81ba12893b65/diff",
                "MergedDir": "/var/lib/docker/overlay2/c36b8d678d8fd5d91349c8ea5d7f89a07f6c3bdea662dbc6b45ae3ee99bec82
c/merged",
                "UpperDir": "/var/lib/docker/overlay2/c36b8d678d8fd5d91349c8ea5d7f89a07f6c3bdea662dbc6b45ae3ee99bec82c
/diff",

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/diff",
                "WorkDir": "/var/lib/docker/overlay2/c36b8d678d8fd5d91349c8ea5d7f89a07f6c3bdea662dbc6b45ae3ee99bec82c/work"
            },
            "Name": "overlay2"
        },
        "Mounts": [],
        "Config": {
            "Hostname": "457f5cddd916",
            "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,
            "WorkingDir": "/usr/local/apache2",
```

```
            "WorkingDir": "/usr/local/apache2",
            "Entrypoint": null,
            "OnBuild": null,
            "Labels": {},
            "StopSignal": "SIGWINCH"
        },
        "NetworkSettings": {
            "Bridge": "",
            "SandboxID": "8630b619850254086394262b080a7fd235cd3c5f4abb2a96a80cc1db23a1d21c",
            "HairpinMode": false,
            "LinkLocalIPv6Address": "",
            "LinkLocalIPv6PrefixLen": 0,
            "Ports": {
                "80/tcp": [
                    {
                        "HostIp": "0.0.0.0",
                        "HostPort": "80"
                    },
                    {
                        "HostIp": "::",
                        "HostPort": "80"
                    }
                ]
            },
            "SandboxKey": "/var/run/docker/netns/8630b6198502",
            "SecondaryIPAddresses": null,
            "SecondaryIPv6Addresses": null,
            "EndpointID": "dd0b3ff11bdac2fae2f5ffe7b35b53cf8e3db6e8c174843763d31077da83cc6a",
            "Gateway": "172.17.0.1",
            "GlobalIPv6Address": "",
            "GlobalIPv6PrefixLen": 0,
            "IPAddress": "172.17.0.2",
            "IPPrefixLen": 16,
```

```
            "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": "dd0b3ff11bdac2fae2f5ffe7b35b53cf8e3db6e8c174843763d31077da83cc6a",
                    "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 ps
CONTAINER ID   IMAGE     COMMAND             CREATED            STATUS             PORTS
     NAMES
457f5cddd916   httpd     "httpd-foreground"  About a minute ago  Up About a minute  0.0.0.0:80->80/tcp, :::80->80/t
cp    jeetu
ubuntu@ip-172-31-22-139:~$ sudo docker ps
```

```
            "Networks": {
                "bridge": {
                    "IPAMConfig": null,
                    "Links": null,
                    "Aliases": null,
                    "NetworkID": "4ef5eb2d82bf2e484d7ec8f3420b1e94e484ea22b38fd4c242995a4cc7be0ff5",
                    "EndpointID": "dd0b3ff11bdac2fae2f5ffe7b35b53cf8e3db6e8c174843763d31077da83cc6a",
                    "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 ps
CONTAINER ID   IMAGE     COMMAND             CREATED            STATUS             PORTS
     NAMES
457f5cddd916   httpd     "httpd-foreground"  About a minute ago  Up About a minute  0.0.0.0:80->80/tcp, :::80->80/t
cp    jeetu
ubuntu@ip-172-31-22-139:~$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND             CREATED            STATUS        PORTS                                NAM
ES
457f5cddd916   httpd     "httpd-foreground"  18 minutes ago     Up 18 minutes  0.0.0.0:80->80/tcp, :::80->80/tcp    jee
tu
ubuntu@ip-172-31-22-139:~$
```

welcom to HPCSA


```
 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
26  history
27  docker inspect jeetu
28  sudo docker inspect jeetu
29  curl 172.17.0.2:80
30  sudo docker rm jeetu
31  sudo docker stop jeetu
32  sudo docker rm jeetu
33  sudo docker run --name jeetu -d -p 80:80 httpd
34  sudo docker cp index.html jeetu:/usr/local/apache2/htdocs
35  sudo docker inspect jeetu
36  curl 172.17.0.2:80
37  sudo docker ps
38  history
ubuntu@ip-172-31-22-139:~$
```