禪

# [illegible]

[illegible]. [illegible]
(VM) [illegible]
[illegible]. [illegible]
[illegible]. [illegible]
[illegible]. [illegible] Docker Inc.
[illegible]. [illegible]
API [illegible]. [illegible] ([illegible]) [illegible]
[illegible]
[illegible]. [illegible]
[illegible]. [illegible]. [illegible]
[illegible] Apache [illegible].

## [illegible]

[illegible]. [illegible]
[illegible] 12.08 [illegible]
[illegible] 16.04 [illegible].

## [illegible]

[illegible]:

```
$ sudo apt-get install --install-recommends linux-generic-hwe-16.04
```

[illegible]:

```
$ sudo reboot
```

[illegible]:

```
$ sudo apt-get update
```

```
$ sudo apt-get upgrade
```

## [illegible]

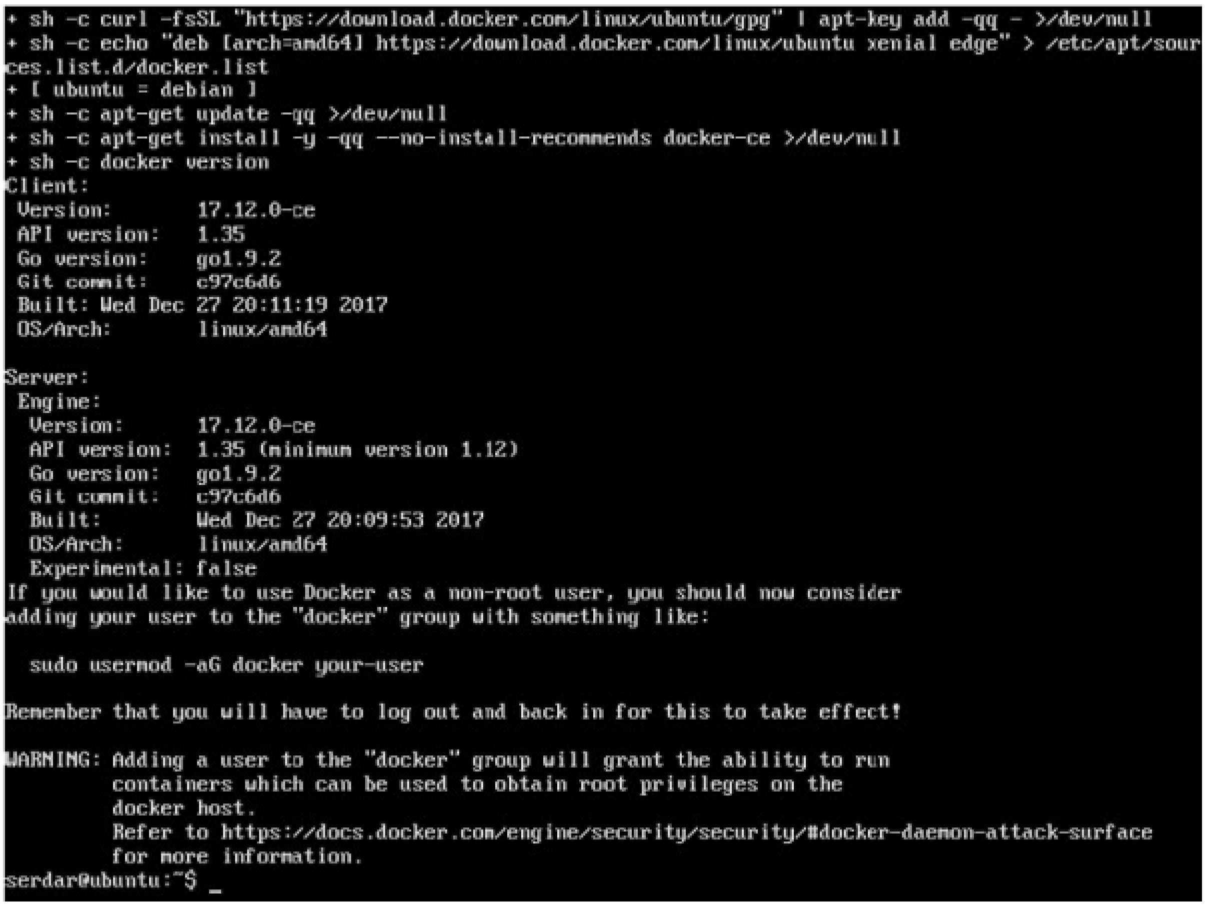
[illegible] Raspbian [illegible] CentOS [illegible] Shell [illegible] get.docker.com [illegible]. [illegible] Curl [illegible]. [illegible] Curl [illegible]:

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

[illegible] Curl [illegible]:

```
curl -s https://get.docker.com | sudo sh
```

[illegible] 1 [illegible].



```
+ sh -c curl -fsSL "https://download.docker.com/linux/ubuntu/gpg" | apt-key add -qq - >/dev/null
+ sh -c echo "deb [arch=amd64] https://download.docker.com/linux/ubuntu xenial edge" > /etc/apt/sour
ces.list.d/docker.list
+ [ ubuntu = debian ]
+ sh -c apt-get update -qq >/dev/null
+ sh -c apt-get install -y -qq --no-install-recommends docker-ce >/dev/null
+ sh -c docker version
Client:
 Version:       17.12.0-ce
 API version:   1.35
 Go version:    go1.9.2
 Git commit:    c97c6d6
 Built: Wed Dec 27 20:11:19 2017
 OS/Arch:       linux/amd64

Server:
 Engine:
  Version:      17.12.0-ce
  API version:  1.35 (minimum version 1.12)
  Go version:   go1.9.2
  Git commit:   c97c6d6
  Built:        Wed Dec 27 20:09:53 2017
  OS/Arch:      linux/amd64
  Experimental: false
If you would like to use Docker as a non-root user, you should now consider
adding your user to the "docker" group with something like:

  sudo usermod -aG docker your-user

Remember that you will have to log out and back in for this to take effect!

WARNING: Adding a user to the "docker" group will grant the ability to run
         containers which can be used to obtain root privileges on the
         docker host.
         Refer to https://docs.docker.com/engine/security/security/#docker-daemon-attack-surface
         for more information.
serdar@ubuntu:~$ _
```

[illegible] 1. [illegible] Shell

[illegible] Root [illegible]. [illegible].

[illegible]. [illegible]:

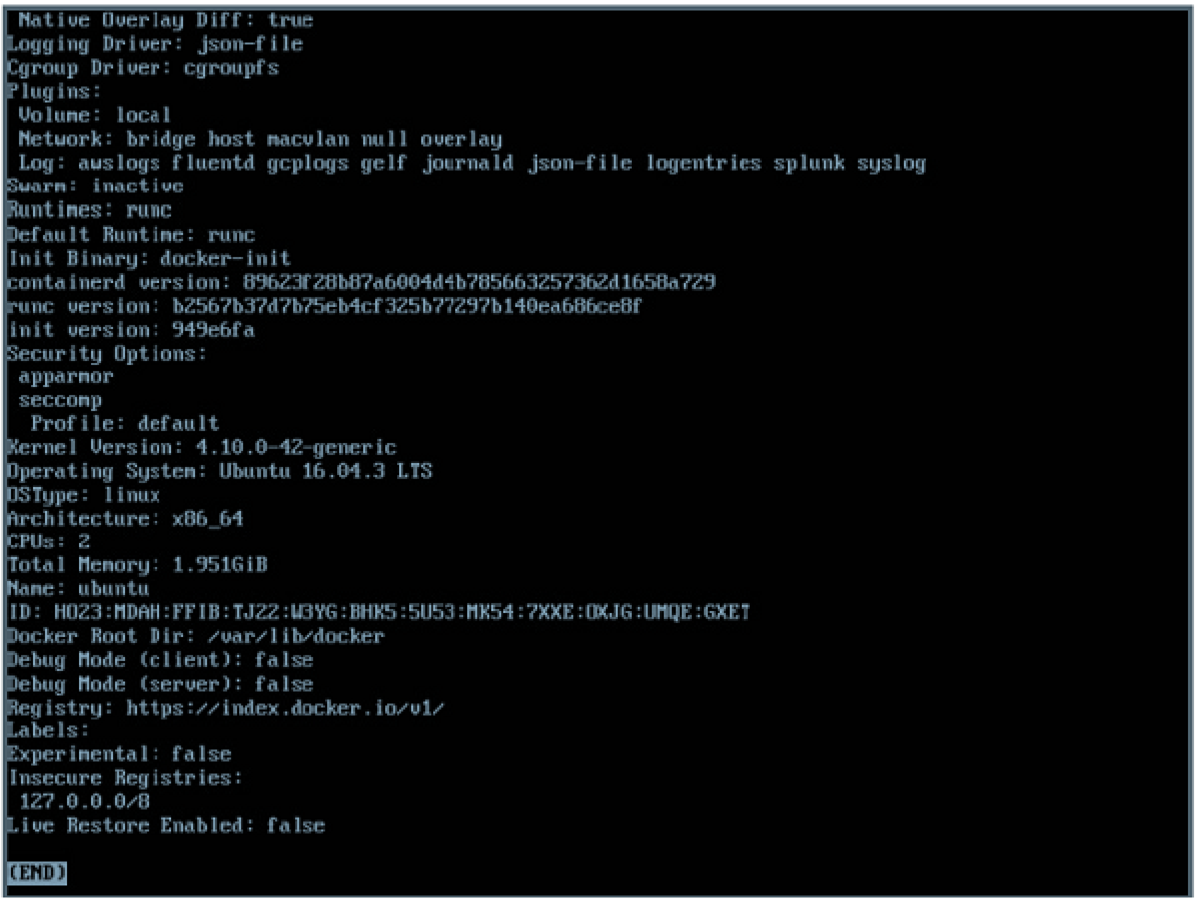
$ sudo docker run -i -t ubuntu /bin/bash

[illegible] Hostname [illegible] Command Prompt [illegible] Root@216b04387924:/# [illegible]. [illegible] Shell [illegible] Exit [illegible].

[illegible]:

$ sudo docker info

[illegible] Docker Info [illegible]. [illegible] 2 [illegible].



```
 Native Overlay Diff: true
Logging Driver: json-file
Cgroup Driver: cgroupfs
Plugins:
 Volume: local
 Network: bridge host macvlan null overlay
 Log: awslogs fluentd gcplogs gelf journald json-file logentries splunk syslog
Swarm: inactive
Runtimes: runc
Default Runtime: runc
Init Binary: docker-init
containerd version: 89623f28b87a6004d4b785663257362d1658a729
runc version: b2567b37d7b75eb4cf325b77297b140ea686ce8f
init version: 949e6fa
Security Options:
 apparmor
 seccomp
  Profile: default
Kernel Version: 4.10.0-42-generic
Operating System: Ubuntu 16.04.3 LTS
OSType: linux
Architecture: x86_64
CPUs: 2
Total Memory: 1.951GiB
Name: ubuntu
ID: HO23:MDAH:FFIB:TJ22:W3YG:BHK5:5U53:MK54:7XXE:OXJG:UMQE:GXET
Docker Root Dir: /var/lib/docker
Debug Mode (client): false
Debug Mode (server): false
Registry: https://index.docker.io/v1/
Labels:
Experimental: false
Insecure Registries:
 127.0.0.0/8
Live Restore Enabled: false

(END)
```

[illegible] .2 [illegible] Docker Info [illegible]

[illegible] UFW [illegible].

## [illegible]

[illegible] Docker Ps [illegible]:

# This command will show ALL containers on the system

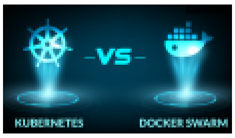
$ sudo docker ps -a

# This will show only RUNNING containers

$ sudo docker ps

[illegible] Docker [illegible].

### [illegible]



[illegible]

[illegible]

## [illegible]

[illegible] Shell [illegible]

ubuntu:16.04, ubuntu:xenial-20171201, ubuntu:xenial, ubuntu:latest

[illegible] Docker Pull Ubuntu [illegible] lastest ([illegible]) [illegible] Docker Pull Ubuntu:latest [illegible]

## [illegible]

[illegible] Docker Run [illegible] Docker Commit [illegible]

[illegible] 266 [illegible]

## [illegible]

[illegible] (Apache) [illegible]

## [illegible]

[illegible] Root Shell [illegible]:

```
$ sudo docker run -i -t --name apache_web ubuntu /bin/bash
```

[illegible] Apache_Web [illegible] apt-get [illegible]:

```
root@d7c8f02c3c8c:/# apt-get update
```

```
root@d7c8f02c3c8c:/# apt-get install apache2
```

[illegible] Apt-Get [illegible] Apache2 [illegible] Curl [illegible]:

```
root@d7c8f02c3c8c:/# service apache2 start
```

```
root@d7c8f02c3c8c:/# apt-get install curl
```

```
root@d7c8f02c3c8c:/# curl http://localhost
```

[illegible] HTML [illegible]. [illegible]. [illegible].

## [illegible]

[illegible].
[illegible].

[illegible] smartapache.sh [illegible]:

```
# You might need to first install Nano inside the container

root@d7c8f02c3c8c:/# apt-get install nano

root@d7c8f02c3c8c:/# nano /usr/local/sbin/startapache.sh
```

[illegible] startapache.sh [illegible]:

```
#!/bin/bash

. /etc/apache2/envvars

/usr/sbin/apache2 -D FOREGROUND
```

[illegible]:

```
root@d7c8f02c3c8c:/# chmod +x /usr/local/sbin/startapache.sh
```

## [illegible]

[illegible]:

```
$ sudo docker commit apache_web local:apache_web
```

[illegible].

### [illegible]

[illegible]

[illegible]!

# [illegible]

[illegible]. [illegible]:

- Bridge: [illegible]. Bridge Network [illegible] Host.
- Host: [illegible] host [illegible].
- None: [illegible].

[illegible] Host [illegible]. [illegible]:

```
$ sudo docker run -d -p 8080:80 --name apache local:apache_web /usr/local/sbin/startapache.sh
```

-p [illegible]. [illegible] 8080 [illegible] Host [illegible] 80 [illegible]. –name [illegible].

[illegible] TCP [illegible] Docker Ps [illegible]. [illegible] Docker Port [illegible]:

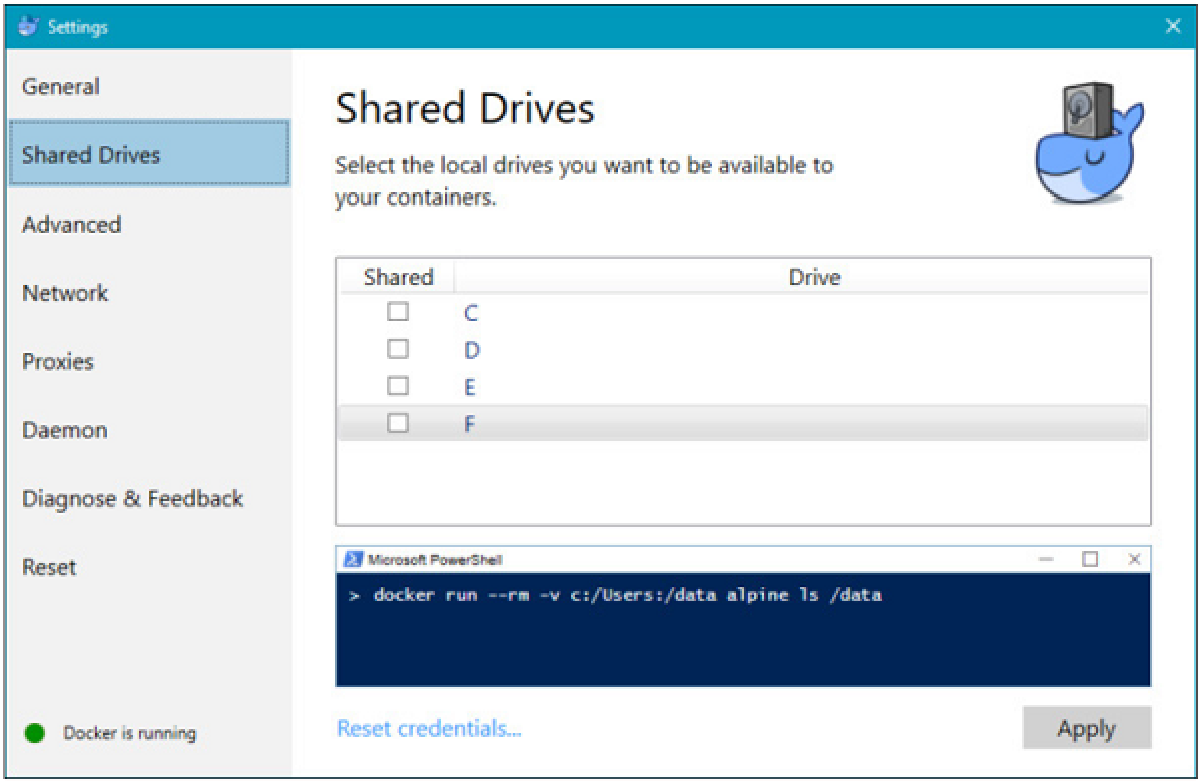
```
$ sudo docker port apache 80

0.0.0.0:8080
```

# [illegible]

[illegible] Mac [illegible] ([illegible]) [illegible]. [illegible]. [illegible]. [illegible]. [illegible] Xhyve [illegible] Hyper-V [illegible].

[illegible] (3[illegible]). [illegible] CPU [illegible].



## Shared Drives

Select the local drives you want to be available to your containers.

| Shared | Drive |
|---|---|
| ☐ | C |
| ☐ | D |
| ☐ | E |
| ☐ | F |

```
> docker run --rm -v c:/Users:/data alpine ls /data
```

[illegible].3 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] host

[illegible]:
[illegible] [illegible]
[illegible] [illegible]:
[illegible] [illegible]
[illegible] [illegible]:
12:20 - 20/05/1398
[illegible]:
[illegible] - [illegible] [illegible] - [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] - Docher - [illegible] [illegible] [illegible]

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[illegible]
[illegible]: https://www.shabakeh-mag.com/networking-technology/15719/%D8%A2%D9%85%D9%88%D8%B2%D8%B4-%DA%A9%D8%A7%D8%B1-%D8%A8%D8%A7-%D8%AF%D8%A7%DA%A9%D8%B1-%D8%A7%D8%B2-%D8%B4%D8%B1%D9%88%D8%B9-%DA%A9%D8%A7%D8%B1-%D8%A8%D8%A7-%D8%AF%D8%A7%DA%A9%D8%B1-%D8%AA%D8%A7-%D9%85%D8%A8%D8%A7%D8%AD%D8%AB-%D8%B4%D8%A8%DA%A9%D9%87%E2%80%8C%D8%A7%DB%8C