**Installation of Docker via Desktop**, Virtual Machine, or Cloud Instance (AWS, Azure, GCP, etc). Screenshot of download and installation.

Use Docker to spin up a **CentOS, Ubuntu Desktop/Server, and a Kali Container**. Screenshot showing your successful pull and run of CentOS and Kali Containers running in Docker.

Complete and thorough documentation of all your steps taken to successfully complete download, installation, and configuration.
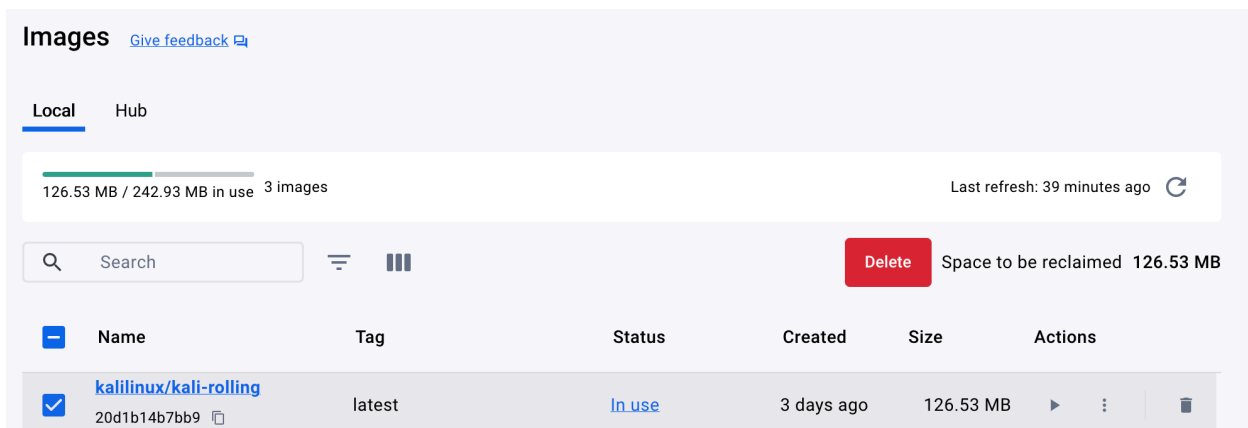
Docker Install Documentation:

1. Download dmg installer from https://docs.docker.com/desktop/install/mac-install/.

2. Finished install wizard by installing using recommended settings.
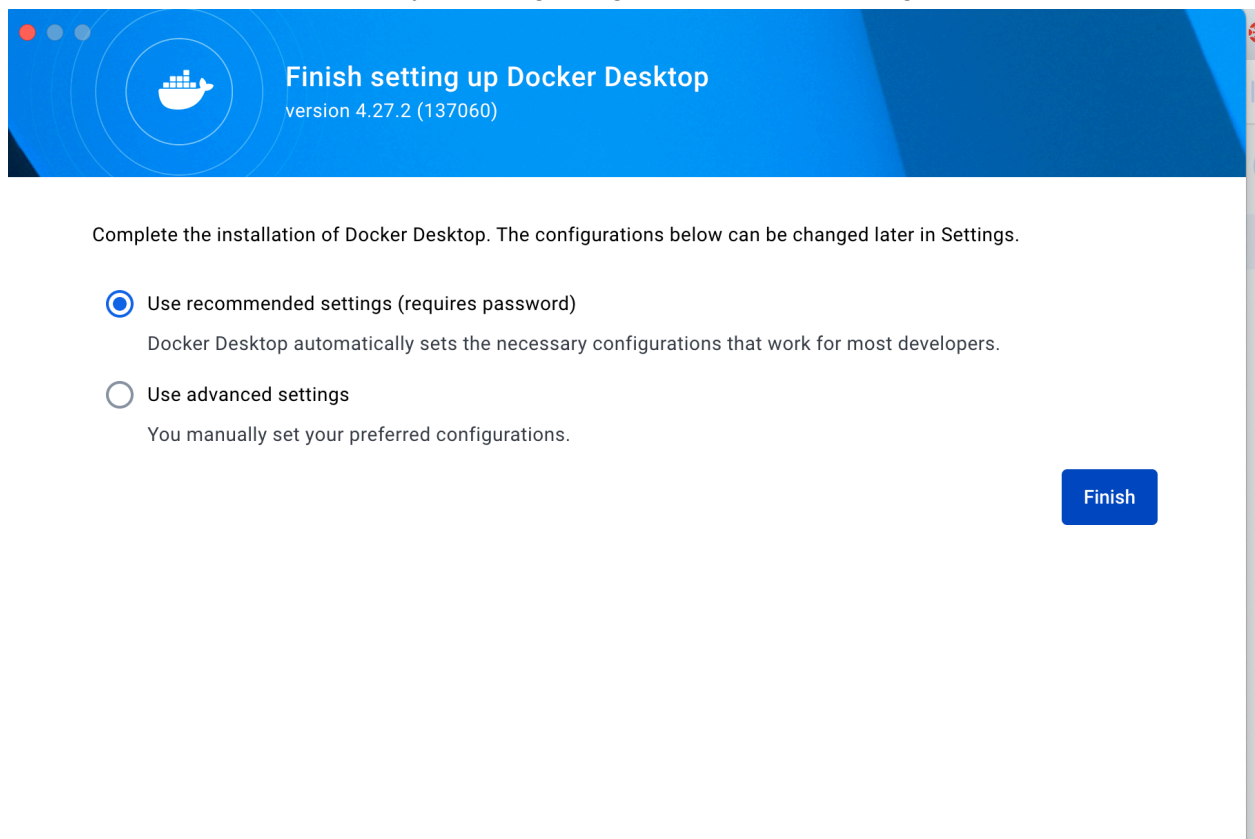
3. Created a directory in my macbook terminal called kalidocker and move to the directory.
   a. (mkdir kalidocker)
   b. (cd kalidocker)

4. Ran the following commands on the terminal CLI:
   a. docker pull docker.io/kalilinux/kali-rolling (to pull kali image to docker desktop)

```
hint:   git branch -m <name>
Initialized empty Git repository in /Users/me/kalidocker/.git/
me@ms-MacBook-Air kalidocker % docker pull kalilinux/kali-rolling
Using default tag: latest
latest: Pulling from kalilinux/kali-rolling
b8db5b66eb9d: Extracting  39.55MB/54.98MB
```

Images Give feedback

Local   Hub

126.53 MB / 242.93 MB in use 3 images   Last refresh: 39 minutes ago

Search						Delete	Space to be reclaimed 126.53 MB

	Name	Tag	Status	Created	Size	Actions
☑	kalilinux/kali-rolling 20d1b14b7bb9	latest	In use	3 days ago	126.53 MB	▶ ⋮ 🗑

   b. docker run --tty --interactive kalilinux/kali-rolling (to create and run a new container with kali image)
   c. apt update && apt -y install kali-linux-headless (update kali packages/install missing items on new container)

5. Created and moved to a directory for my ubuntu docker image & container.

```
me@ms-MacBook-Air ~ % mkdir ubuntudocker
me@ms-MacBook-Air ~ % cd ubuntudocker
me@ms-MacBook-Air ubuntudocker %
```

6. Ran: docker pull ubuntu to pull ubuntu image to docker
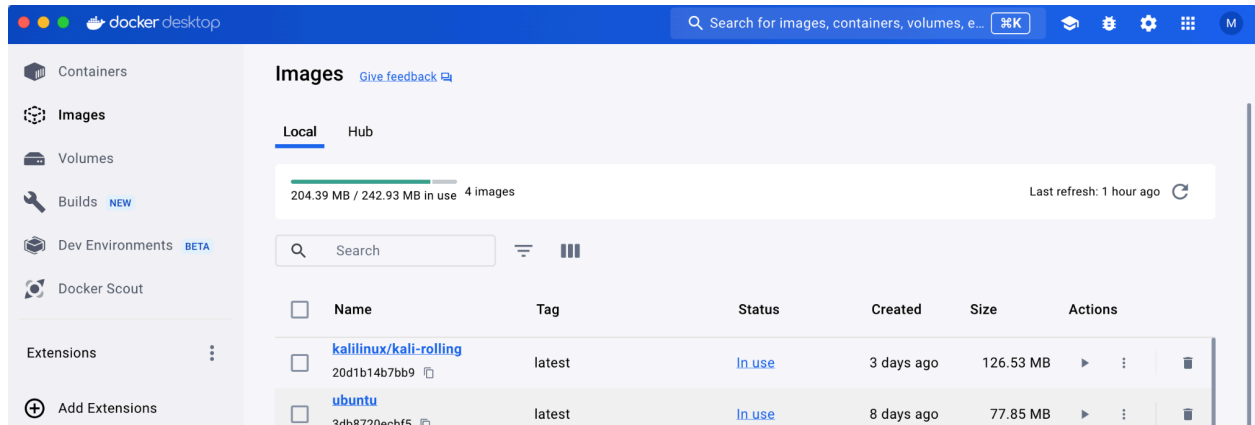
7. Ran: docker run ubuntu to create and run container using image.

	Name	Image	Status
☐	**ubuntudesktop** acd5522faf04	**ubuntu**	Running

```
me@ms-MacBook-Air ubuntudocker % docker ps
CONTAINER ID   IMAGE     COMMAND        CREATED            STATUS          PORTS      NAMES
acd5522faf04   ubuntu    "/bin/bash"    About a minute ago Up 37 seconds              relaxed_allen
me@ms-MacBook-Air ubuntudocker % docker container rename relaxed_allen ubuntudesktop
me@ms-MacBook-Air ubuntudocker % docker ps
CONTAINER ID   IMAGE     COMMAND        CREATED         STATUS        PORTS      NAMES
acd5522faf04   ubuntu    "/bin/bash"    7 hours ago     Up 7 hours               ubuntudesktop
```

docker ps shows the ubuntu container up and running via terminal CLI also used docker rename to rename the container.

8. Created and moved to a directory for my centos docker image & container.
   a. mkdir centos
   b. cd centos

9. Ran docker pull centos:latest to pull centos image to docker.

```
me@ms-MacBook-Air centos % docker pull centos:latest
latest: Pulling from library/centos
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Image is up to date for centos:latest
docker.io/library/centos:latest

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview centos:latest
```

10. Ran docker run -i centos:latest to create and run container using centos image.

```
me@ms-MacBook-Air centos % docker run -i centos:latest
```



```
me@ms-MacBook-Air centos % docker ps
CONTAINER ID   IMAGE           COMMAND       CREATED             STATUS              PORTS       NAMES
d70f0b468269   centos:latest   "/bin/bash"   About a minute ago  Up About a minute               heuristic_tharp
me@ms-MacBook-Air centos % docker container rename heuristic_tharp centos
me@ms-MacBook-Air centos % dockerps
zsh: command not found: dockerps
me@ms-MacBook-Air centos % docker ps
CONTAINER ID   IMAGE           COMMAND       CREATED             STATUS              PORTS       NAMES
d70f0b468269   centos:latest   "/bin/bash"   About a minute ago  Up About a minute               centos
me@ms-MacBook-Air centos %
```

docker ps shows the centos container up and running via terminal CLI also used docker rename to rename the container.

All images pulled to Docker Desktop and three containers running Kali, Ubuntu, and CentOS images.