Docker task

05 November 2025   15:22

Docker Installation

Install Docker on your local system (Windows, macOS, or Linux).Verify installation by running:docker --version docker info

```
^C^C[root@localhost ~]# yum remove docker docker-client docker-client-latest docker-common docker-latest docker-latest-logrotate dock
er-logrotate docker-engine
No match for argument: docker
No match for argument: docker-client
No match for argument: docker-client-latest
No match for argument: docker-common
No match for argument: docker-latest
No match for argument: docker-latest-logrotate
No match for argument: docker-logrotate
No match for argument: docker-engine
No packages marked for removal.
Dependencies resolved.
Nothing to do.
Complete!
```

```
[root@localhost ~]# yum install -y yum-utils device-mapper-persistent-data lvm2
Last metadata expiration check: 0:01:49 ago on Wednesday 05 November 2025 02:04:54 PM.
Package yum-utils-4.3.0-23.el9.noarch is already installed.
Package device-mapper-persistent-data-1.1.0-1.el9.x86_64 is already installed.
Package lvm2-9:2.03.32-2.el9.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
```

```
[root@localhost ~]# yum-config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo
Adding repo from: https://download.docker.com/linux/centos/docker-ce.repo
[root@localhost ~]# yum list docker-ce --showduplicates | sort -r
Installed Packages
docker-ce.x86_64              3:28.5.1-1.el9              docker-ce-stable
docker-ce.x86_64              3:28.5.1-1.el9              @docker-ce-stable
docker-ce.x86_64              3:28.5.0-1.el9              docker-ce-stable
docker-ce.x86_64              3:28.4.0-1.el9              docker-ce-stable
```

```
[root@localhost ~]# yum install -y docker-ce docker-ce-cli containerd.io docker-compose-plugin
Last metadata expiration check: 0:00:20 ago on Wednesday 05 November 2025 02:07:17 PM.
Package docker-ce-3:28.5.1-1.el9.x86_64 is already installed.
Package docker-ce-cli-1:28.5.1-1.el9.x86_64 is already installed.
Package containerd.io-1.7.28-1.el9.x86_64 is already installed.
Package docker-compose-plugin-2.40.3-1.el9.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
```

```
[root@localhost ~]# systemctl start docker
[root@localhost ~]# systemctl status docker
● docker.service - Docker Application Container Engine
     Loaded: loaded (/usr/lib/systemd/system/docker.service; disabled; preset: disabled)
     Active: active (running) since Wed 2025-11-05 14:08:12 IST; 18s ago
TriggeredBy: ● docker.socket
       Docs: https://docs.docker.com
   Main PID: 4565 (dockerd)
      Tasks: 10
     Memory: 23.8M (peak: 25.8M)
        CPU: 1.910s
     CGroup: /system.slice/docker.service
             └─4565 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
```

```
docker --version
Client: Docker Engine - Community
 Version:           28.5.1
```

```
[root@localhost ~]# docker system info
Client: Docker Engine - Community
 Version:    28.5.1
 Context:    default
 Debug Mode: false
 Plugins:
  buildx: Docker Buildx (Docker Inc.)
    Version:  v0.29.1
    Path:     /usr/libexec/docker/cli-plugins/docker-buildx
  compose: Docker Compose (Docker Inc.)
    Version:  v2.40.3
    Path:     /usr/libexec/docker/cli-plugins/docker-compose
```

Working with Docker Images

Search for the official Ubuntu image on Docker Hub.Pull it to your local system using docker pull.List all available images using:docker images

```
[root@localhost ~]# docker search ubuntu
NAME                          DESCRIPTION                                    STARS    OFFICIAL
ubuntu                        Ubuntu is a Debian-based Linux operating sys…  17718    [OK]
ubuntu/squid                  Squid is a caching proxy for the Web. Long-t…  119
ubuntu/nginx                  Nginx, a high-performance reverse proxy & we…  133
ubuntu/cortex                 Cortex provides storage for Prometheus. Long…  4
ubuntu/kafka                  Apache Kafka, a distributed event streaming …  56
ubuntu/apache2                Apache, a secure & extensible open-source HT…  97
ubuntu/prometheus             Prometheus is a systems and service monitori…  75
ubuntu/bind9                  BIND 9 is a very flexible, full-featured DNS…  116
ubuntu/jre                    Chiseled Java runtime based on Ubuntu. Long-…  23
ubuntu/postgres               PostgreSQL is an open source object-relation…  42
ubuntu/zookeeper              ZooKeeper maintains configuration informatio…  14
ubuntu/mysql                  MySQL open source fast, stable, multi-thread…  71
ubuntu/dotnet-aspnet          Chiselled Ubuntu runtime image for ASP.NET a…  26
ubuntu/redis                  Redis, an open source key-value store. Long-…  24
ubuntu/python                 A chiselled Ubuntu rock with the Python runt…  28
ubuntu/dotnet-deps            Chiselled Ubuntu for self-contained .NET & A…  16
ubuntu/grafana                Grafana, a feature rich metrics dashboard & …  12
ubuntu/dotnet-runtime         Chiselled Ubuntu runtime image for .NET apps…  22
ubuntu/memcached              Memcached, in-memory keyvalue store for smal…  6
ubuntu/cassandra              Cassandra, an open source NoSQL distributed …  3
ubuntu/prometheus-alertmanager  Alertmanager handles client alerts from Prom…  10
ubuntu/mlflow                 MLFlow: for managing the machine learning li…  6
ubuntu/telegraf               Telegraf collects, processes, aggregates & w…  4
ubuntu/chiselled-jre          [MOVED TO ubuntu/jre] Chiselled JRE: distrol…  3
ubuntu/grafana-agent          Ubuntu ROCK for Grafana Agent, an open-sourc…  0
[root@localhost ~]# docker pull ubuntu
Using default tag: latest
```

```
[root@localhost ~]# docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
4b3ffd8ccb52: Pull complete
Digest: sha256:66460d557b25769b102175144d538d88219c077c678a49af4afca6fbfc1b5252
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest
```

```
[root@localhost ~]# docker images
REPOSITORY      TAG       IMAGE ID       CREATED        SIZE
ubuntu          latest    97bed23a3497   4 weeks ago    78.1MB
hello-world     latest    1b44b5a3e06a   2 months ago   10.1kB
```

3. Creating a Docker Container
Run a container using the Ubuntu image.Execute a command inside the container:echo "Hello, Docker!"

```
[root@localhost ~]# docker run -it ubuntu bash
root@f56c84709670:/# echo "Hello, Docker!"
Hello, Docker!
root@f56c84709670:/# exit
exit
```

```
[root@localhost ~]# docker ps -a
CONTAINER ID   IMAGE         COMMAND    CREATED          STATUS                    PORTS     NAMES
f56c84709670   ubuntu        "bash"     5 minutes ago    Exited (0) 5 minutes ago            boring_mendel
a29b356068a4   hello-world   "/hello"   16 minutes ago   Exited (0) 16 minutes ago          distracted_mestorf
0d283fe150ec   hello-world   "/hello"   16 minutes ago   Exited (0) 16 minutes ago          zen_allen
```

4. Inspect Container (Created State)

Verify that the Ubuntu container is in the "created" state.

```
[root@localhost ~]# docker container create ubuntu
9cc948c91bcc71d8abb07eb70711b60752a0a97d209706bfc12396fa4de3bc2d
[root@localhost ~]# docker ps -a
CONTAINER ID   IMAGE         COMMAND       CREATED         STATUS      PORTS     NAMES
9cc948c91bcc   ubuntu        "/bin/bash"   13 seconds ago  Created               objective_pascal
```

5. Run Container (Running State)

Execute the Ubuntu container and confirm it's in the "running" state.

```
[root@localhost ~]# docker ps -a
CONTAINER ID   IMAGE      COMMAND       CREATED           STATUS                   PORTS     NAMES
060bc70c9d4e   ubuntu     "/bin/bash"   About a minute ago Exited (0) 9 seconds ago          lucid_curran
9cc948c91bcc   ubuntu     "/bin/bash"   2 minutes ago     Created                           objective_pascal
```

6. Launch and Remove HTTP Container
Launch an HTTP container.Verify its state.Remove both the container and its image from your system.

```
[root@localhost ~]# docker run -d -p 8080:80 --name http_container nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
d7ecded7702a: Pull complete
266626526d42: Pull complete
320b0949be89: Pull complete
d921c57c6a81: Pull complete
9def903993e4: Pull complete
52bc359bcbd7: Pull complete
e2f8e296d9df: Pull complete
Digest: sha256:1beed3ca46acebe9d3fb62e9067f03d05d5bfa97a00f30938a0a3580563272ad
Status: Downloaded newer image for nginx:latest
f7158d689a3048b785a8ef0582998cb4b2b5999c28b6377b07c0fe31c21e3e85
```

```
[root@localhost ~]# docker ps
CONTAINER ID   IMAGE    COMMAND                 CREATED          STATUS         PORTS                                         NAMES
f7158d689a30   nginx    "/docker-entrypoint.…"  About a minute ago  Up 57 seconds  0.0.0.0:8080->80/tcp, [::]:8080->80/tcp  http_container
```

```
[root@localhost ~]# docker stop http_container
http_container
```

```
[root@localhost ~]# docker rm http_container
http_container
```

```
[root@localhost ~]# docker rmi nginx:latest
hello-world:latest   nginx:latest        ubuntu:latest
```

7. List Short Container IDs
 Execute a command that displays only the short container IDs.

```
[root@localhost ~]# docker ps -aq
060bc70c9d4e
9cc948c91bcc
f56c84709670
a29b356068a4
0d283fe150ec
```

 Clone & Build Custom Image
Clone the repository: lancachenet/ubuntu-nginx Build a Docker image using the provided Dockerfile. Add relevant tags while building the image.

```
[root@localhost ~]# git clone https://github.com/lancachenet/ubuntu-nginx.git
Cloning into 'ubuntu-nginx'...
remote: Enumerating objects: 149, done.
remote: Counting objects: 100% (57/57), done.
remote: Compressing objects: 100% (36/36), done.
remote: Total 149 (delta 15), reused 41 (delta 11), pack-reused 92 (from 1)
Receiving objects: 100% (149/149), 32.15 KiB | 587.00 KiB/s, done.
Resolving deltas: 100% (30/30), done.
```

```
[root@localhost ~]# ll
total 8
-rw-------. 1 root root 906 Oct 15 18:16 anaconda-ks.cfg
-rw-r--r--. 1 root root  12 Nov  5 12:39 flog.txt
drwxr-xr-x. 3 root root  54 Nov  4 16:56 shell_test
drwxr-xr-x. 5 root root 162 Nov  5 15:07 ubuntu-nginx
[root@localhost ~]# cd ubuntu-nginx/
```

```
[root@localhost ubuntu-nginx]# ll
total 20
-rw-r--r--. 1 root root 1072 Nov  5 15:07 Dockerfile
```

```
[root@localhost ubuntu-nginx]# docker image build -t test-nginx:1.0 .
[+] Building 875.7s (9/9) FINISHED                                                                    docker:default
 => [internal] load build definition from Dockerfile                                                            0.2s
 => => transferring dockerfile: 1.17kB                                                                          0.1s
 => [internal] load metadata for docker.io/lancachenet/ubuntu:latest                                            4.8s
 => [internal] load .dockerignore                                                                               0.2s
 => => transferring context: 2B                                                                                 0.0s
 => [internal] load build context                                                                               0.3s
 => => transferring context: 3.05kB                                                                             0.1s
 => [1/4] FROM docker.io/lancachenet/ubuntu:latest@sha256:4c1538c38fff563e3fe0357ecd4d15b64bb644f918cb17a7ea391cd0b299465b   0.0s
 => CACHED [2/4] COPY overlay/ /                                                                                0.0s
 => [3/4] RUN apt-get update &&     apt-get install -y nginx-full inotify-tools --no-install-recommends &&     apt-get -y cl  868.3s
 => [4/4] RUN     chmod 777 /opt/nginx/startnginx.sh &&     rm /etc/nginx/sites-available/default /etc/nginx/sites-enabled/def  0.7s
 => exporting to image                                                                                          0.4s
 => => exporting layers                                                                                         0.4s
 => => writing image sha256:e24a6710ec36b81da6fa5e808c20f9a5b9f7e82f6f7aca024aa5f10352cfd0c4                     0.0s
 => => naming to docker.io/library/test-nginx:1.0                                                               0.0s

 1 warning found (use docker --debug to expand):
 - MaintainerDeprecated: Maintainer instruction is deprecated in favor of using label (line 2)
```

. Run & Test the Webpage
Run a Docker container using the newly built image.Use the curl command to verify that the webpage is accessible.

```
[root@localhost ubuntu-nginx]# docker images
REPOSITORY      TAG       IMAGE ID       CREATED           SIZE
test-nginx      1.0       e24a6710ec36   About a minute ago   195MB
ubuntu          latest    97bed23a3497   4 weeks ago       78.1MB
hello-world     latest    1b44b5a3e06a   2 months ago      10.1kB
```

```
[root@localhost ubuntu-nginx]# docker run -d -p 8080:80 --name nginx-web test-nginx:1.0
6dc21c4aebba49ed2281116e67223d8bf15b823ac45ddb6af0e1d90dac023936
```

```
[root@localhost ubuntu-nginx]# docker ps
CONTAINER ID   IMAGE           COMMAND              CREATED         STATUS          PORTS                                    N
AMES
6dc21c4aebba   test-nginx:1.0  "/bin/bash -e /init/…"  11 seconds ago  Up 10 seconds   0.0.0.0:8080->80/tcp, [::]:8080->80/tcp   n
ginx-web
```

```
[root@localhost ubuntu-nginx]# curl http://localhost:8080
Welcome to the lancachenet/ubuntu-nginx docker container
```

10. Container Detach & Reattach
Launch an Ubuntu container. Demonstrate the escape sequence (detach).Reattach the container after detaching. Check and note down the container's IP address.

```
[root@localhost ubuntu-nginx]# docker run -it --name myubuntu ubuntu
root@1f9207edc8c7:/# [root@localhost ubuntu-nginx]# docker ps
CONTAINER ID   IMAGE           COMMAND              CREATED         STATUS          PORTS
AMES
1f9207edc8c7   ubuntu          "/bin/bash"          25 seconds ago  Up 25 seconds
yubuntu
```

```
[root@localhost ubuntu-nginx]# docker attach myubuntu
root@1f9207edc8c7:/# apt update -y && apt install iproute2 -y
```

```
root@1f9207edc8c7:/# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: eth0@if9: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether be:2a:0a:49:06:59 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 172.17.0.3/16 brd 172.17.255.255 scope global eth0
       valid_lft forever preferred_lft forever
```

12. Inspect Host Configuration
Use a Docker command to inspect the hostname and the /etc/hosts file of the httpd container.

```
root@1f9207edc8c7:/# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: eth0@if9: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether be:2a:0a:49:06:59 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 172.17.0.3/16 brd 172.17.255.255 scope global eth0
       valid_lft forever preferred_lft forever
```

Monitor Container Stats
Inspect a container created with the lancachenet/ubuntu-nginx image.
Monitor its resource usage and stats using the top command.

```
[root@localhost ~]# docker logs nginx-web
Executing hook /hooks/entrypoint-pre.d/00_asciilogo.sh

  _                    _____            _                       _
 | |                  / ____|          | |                     | |
 | |      __ _ _ __  | |      __ _  ___| |__   ___   _ __   ___| |_
 | |     / _` | '_ \ | |     / _` |/ __| '_ \ / _ \ | '_ \ / _ \ __|
 | |___ | (_| | | | || |____| (_| | (__| | | |  __/_| | | |  __/ |_
 |_____|\__,_|_| |_| \_____|\__,_|\___|_| |_|\___(_)_| |_|\___|\__|


Executing hook /hooks/supervisord-pre.d/20_test_files_setup
Checking if /var/www/ is empty - Directory not empty.. don't touch content
Executing hook /hooks/supervisord-pre.d/21_cleanup_log_files
Cleaning up log files older than 7 days
Starting Supervisord
[root@localhost ~]# docker logs nginx-web2
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2025/11/05 10:50:14 [notice] 1#1: using the "epoll" event method
```

14. Nginx Containers Log Review
Start a new Nginx container.
Review and compare the logs for both Nginx containers

```
[root@localhost ~]# docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED         STATUS         PORTS                                         N
AMES
9ec4dfe89cb5   nginx          "/docker-entrypoint.…"   7 seconds ago   Up 6 seconds   0.0.0.0:8081->80/tcp, [::]:8081->80/tcp   n
ginx-web2
6dc21c4aebba   test-nginx:1.0 "/bin/bash -e /init/…"   24 minutes ago  Up 24 minutes  0.0.0.0:8080->80/tcp, [::]:8080->80/tcp   n
ginx-web
```

```
[root@localhost ~]# docker logs nginx-web2
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2025/11/05 10:50:14 [notice] 1#1: using the "epoll" event method
2025/11/05 10:50:14 [notice] 1#1: nginx/1.29.3
2025/11/05 10:50:14 [notice] 1#1: built by gcc 14.2.0 (Debian 14.2.0-19)
2025/11/05 10:50:14 [notice] 1#1: OS: Linux 5.14.0-624.el9.x86_64
2025/11/05 10:50:14 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1073741816:1073741816
2025/11/05 10:50:14 [notice] 1#1: start worker processes
2025/11/05 10:50:14 [notice] 1#1: start worker process 29
2025/11/05 10:50:14 [notice] 1#1: start worker process 30
2025/11/05 10:50:14 [notice] 1#1: start worker process 31
```

15. System Events & Filters
Examine Docker system events filtered by:
Specific date, and
The last 30 minutes.
Apply two filters simultaneously using name and event.

```
[root@localhost ~]# docker events
^C[root@localhost ~]docker events --since "2025-11-05T00:00:00" --until "2025-11-05T23:59:59"9
2025-11-05T15:52:13.748396517+05:30 image tag sha256:e24a6710ec36b81da6fa5e808c20f9a5b9f7e82f6f7aca024aa5f10352cfd0c4 (maintainer=Lan
Cache.Net Team <team@lancache.net>, name=test-nginx:1.0, org.opencontainers.image.ref.name=ubuntu, org.opencontainers.image.version=2
4.04)
2025-11-05T15:52:13.787629292+05:30 image create sha256:e24a6710ec36b81da6fa5e808c20f9a5b9f7e82f6f7aca024aa5f10352cfd0c4 (maintainer=
LanCache.Net Team <team@lancache.net>, name=sha256:e24a6710ec36b81da6fa5e808c20f9a5b9f7e82f6f7aca024aa5f10352cfd0c4, org.opencontaine
rs.image.ref.name=ubuntu, org.opencontainers.image.version=24.04)
2025-11-05T15:55:22.073767511+05:30 container create 6dc21c4aebba49ed2281116e67223d8bf15b823ac45ddb6af0e1d90dac023936 (image=test-ngi
```

```
[root@localhost ~]# docker events --filter "name=nginx-web" --filter "event=start"
^C[root@localhost ~]docker events --since 1h --filter "name=nginx-web" --filter "event=stop"p
^C[root@localhost ~]docker run -it --name cloud-ubuntu --hostname cloudethix.com ubuntu
root@cloudethix:/# hostname
cloudethix.com
```

```
[root@localhost ~]# docker ps -a
CONTAINER ID   IMAGE        COMMAND               CREATED         STATUS                 PORTS
               NAMES
cfa5873e3e2e   ubuntu       "/bin/bash"           29 seconds ago  Exited (0) 6 seconds ago
               cloud-ubuntu
9ec4dfe89cb5   nginx        "/docker-entrypoint.…" 8 minutes ago   Up 8 minutes           0.0.0.0:8081->80/tcp, [::]:8081
->80/tcp   nginx-web2
1f9207edc8c7   ubuntu       "/bin/bash"           28 minutes ago  Exited (0) 17 minutes ago
               myubuntu
```

16. Custom Hostname & Logs
Create an Ubuntu container with:
A meaningful name, and
Hostname set to cloudethix.com.
Stop or kill the container.
Check its exit code and review its logs for details.

```
root@cloudethix:/# hostname
cloudethix.com
root@cloudethix:/# exit
exit
```

17. Container Management Operations
Create and start an Ubuntu container with a random name, then rename it to Ubuntu01.
Launch another container named Ubuntu02.
Check the hostname for both containers.
Perform the following:
Pause and unpause Ubuntu02.
Stop, start, and restart Ubuntu01.
Inspect stats and system events for both.
Finally, kill and delete the containers, ensuring all created directories are removed.

```
[root@localhost ~]# docker run -dit ubuntu_new
Unable to find image 'ubuntu_new:latest' locally
docker: Error response from daemon: pull access denied for ubuntu_new, repository does not exist or may require 'docker login': denie
d: requested access to the resource is denied
```

```
[root@localhost ~]# docker run -dit ubuntu
a8d9682e2853e59ca781a74a513d37d31717a4cfb40cfe35060b29a3dca313c3
[root@localhost ~]# docker pds
docker: unknown command: docker pds

Run 'docker --help' for more information
[root@localhost ~]# docker ps
CONTAINER ID   IMAGE           COMMAND              CREATED         STATUS          PORTS                                              N
AMES
a8d9682e2853   ubuntu          "/bin/bash"          9 seconds ago   Up 8 seconds                                                       n
ifty_cohen
9ec4dfe89cb5   nginx           "/docker-entrypoint.…"   11 minutes ago   Up 11 minutes   0.0.0.0:8081->80/tcp, [::]:8081->80/tcp   n
ginx-web2
6dc21c4aebba   test-nginx:1.0  "/bin/bash -e /init/…"   36 minutes ago   Up 35 minutes   0.0.0.0:8080->80/tcp, [::]:8080->80/tcp   n
ginx-web
```

```
[root@localhost ~]# docker rename nifty_cohen Ubuntu01
[root@localhost ~]# docker ps -a
CONTAINER ID   IMAGE           COMMAND              CREATED           STATUS             PORTS               
               NAMES
a8d9682e2853   ubuntu          "/bin/bash"          About a minute ago   Up About a minute
               Ubuntu01
```

```
cfa5873e3e2e   ubuntu          "/bin/bash"          5 minutes ago     Exited (0) 4 minutes ago
               cloud-ubuntu
9ec4dfe89cb5   nginx           "/docker-entrypoint.…"   12 minutes ago    Up 12 minutes              0.0.0.0
8081->80/tcp   nginx-web2
1f9207edc8c7   ubuntu          "/bin/bash"          33 minutes ago    Exited (0) 21 minutes ago
               myubuntu
6dc21c4aebba   test-nginx:1.0  "/bin/bash -e /init/…"   37 minutes ago    Up 37 minutes              0.0.0.0
8080->80/tcp   nginx-web
060bc70c9d4e   ubuntu          "/bin/bash"          2 hours ago       Exited (127) 2 hours ago
               lucid_curran
9cc948c91bcc   ubuntu          "/bin/bash"          2 hours ago       Created
               objective_pascal
f56c84709670   ubuntu          "bash"               2 hours ago       Exited (0) 2 hours ago
               boring_mendel
a29b356068a4   hello-world     "/hello"             2 hours ago       Exited (0) 2 hours ago
               distracted_mestorf
0d283fe150ec   hello-world     "/hello"             2 hours ago       Exited (0) 2 hours ago
               zen_allen
[root@localhost ~]# docker run -dit --name Ubuntu02 ubuntu
e58126069d14127153bea0649510d6718a5a7a3d4fff39895a619c1f23d627ca
[root@localhost ~]# docker exec -it Ubuntu01 hostname
a8d9682e2853
[root@localhost ~]# docker exec -it Ubuntu02 hostname
e58126069d14
[root@localhost ~]# docker pause Ubuntu0
Error response from daemon: No such container: Ubuntu0
[root@localhost ~]# docker pause Ubuntu01
Ubuntu01
[root@localhost ~]# docker ps
CONTAINER ID   IMAGE           COMMAND              CREATED           STATUS             PORTS
         NAMES
e58126069d14   ubuntu          "/bin/bash"          57 seconds ago    Up 56 seconds
         Ubuntu02
a8d9682e2853   ubuntu          "/bin/bash"          3 minutes ago     Up 3 minutes (Paused)
```

```
[root@localhost ~]# docker unpause Ubuntu01
Ubuntu01
[root@localhost ~]# docker stop Ubuntu01
Ubuntu01
[root@localhost ~]# docker ps
CONTAINER ID   IMAGE        COMMAND                CREATED          STATUS          PORTS                                          N
AMES
e58126069d14   ubuntu       "/bin/bash"            2 minutes ago    Up 2 minutes                                                   U
buntu02
9ec4dfe89cb5   nginx        "/docker-entrypoint.…" 15 minutes ago   Up 15 minutes   0.0.0.0:8081->80/tcp, [::]:8081->80/tcp        n
ginx-web2
```

```
[root@localhost ~]# docker start Ubuntu01
Ubuntu01
[root@localhost ~]# docker ps
CONTAINER ID   IMAGE        COMMAND                CREATED          STATUS          PORTS
AMES
e58126069d14   ubuntu       "/bin/bash"            2 minutes ago    Up 2 minutes
buntu02
CONTAINER ID   NAME         CPU %     MEM USAGE / LIMIT   MEM %     NET I/O   BLOCK I/O   PIDS
a8d9682e2853   Ubuntu01     --        -- / --             --        --        --          --
e58126069d14   Ubuntu02     --        -- / --             --        --        --          --
```

18. DockerHub Repository Setup
Create a DockerHub account.
Set up a repository with a meaningful name.